THE MENGGWA DLA LANGUAGE OF NEW GUINEA

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Abstract

Menggwa Dla is a Papuan language spoken in Sandaun Province of Papua New Guinea and *Kabupaten* Jayapura of Papua Province, Indonesia. Menggwa Dla is a dialect of the Dla language; together with its sister language Anggor (e.g. Litteral 1980), the two languages form the Senagi language family, one of the small Papuan language families found in North-Central New Guinea.

The main text of this thesis is divided into seven chapters. Chapter 1 introduces the linguistic, cultural and political landscapes of the Indonesia-Papua New Guinea border area where the Dla territory is located. Chapter 2 introduces the phonology of Menggwa Dla; described in this chapter are the phonemes, allophonic variations, phonotactics, morpho-phonological processes, stress assignment and intonation of the language. The inventory of phonemes in Menggwa is average for a Papuan language (15 consonants and 5 vowels). The vast majority of syllables come in the shape of V, CV or C_1C_2V where C_2 can be /n/ /r/ /l/ /j/ or /w/. In C_1C_2V syllables, the sonority rises from C_1 to V (§2.2.2). Nevertheless, there are a few words with word-medial consonant sequences like *ft* /ɸt/, *lk* /lk/, *lf* /lɸ/ or *lk* /lk/ where the sonority drops from the first to the second consonant; the first consonant in these sequences is analysed as the coda of the previous syllable (§2.2.3).

Chapter 3 is an overview of the word classes in Menggwa Dla; the morphological, syntactic and semantic properties of the three major word classes (nouns, adjectives and verbs) and the minor word classes are compared in this chapter. Chapter 4 describes the properties of nouns and noun phrases; the person-number-gender categories, noun-phrasal syntax, nominal clitics and personal pronouns are outlined in this chapter. Menggwa Dla has a rich array of case, topic and focus markers which comes in the form of clitics (§4.5). Subject pronouns ('citation pronouns') only mark person (i.e. one for each of the three persons), whereas object and genitive pronouns mark person (including inclusive/exclusive first person), number, and sometimes also gender features (§4.6).

Chapter 5 introduces various morphological and syntactic issues which are common to both independent and dependent clauses: verb stems, verb classes,

cross-referencing, intraclausal syntax, syntactic transitivity and semantic valence. Cross-referencing in Menggwa Dla is complex: there are seven paradigms of subject cross-reference suffixes and four paradigms of object cross-references. Based on their cross-referencing patterns, verbs are classified into one of five verb classes (§5.2). There is often a mismatch between the number of cross-reference suffixes, the semantic valence, and the syntactic transitivity within a clause. There are verbs where the subject cross-reference suffix, or the object suffix, or both the subject and object suffixes are semantically empty ('dummy cross-reference suffixes'; §5.3.2).

Chapter 6 outlines the morphology of independent verbs and copulas. Verbal morphology differs greatly between the three statuses of realis, semi-realis and irrealis; a section is devoted to the morphology for each of the three statuses. Chapter 7 introduces the dependent clauses and verbal noun phrases. Different types of dependent verbs are deverbalised to various degrees: subordinate verbs are the least deverbalised, chain verbs are more deverbalised (but they mark switch-reference (SR), and sometimes also interclausal temporal relations), and non-finite chain verbs even more deverbalised. Further deverbalised than the non-finite chain verbs are the verbal nouns; verbal noun phrases in Menggwa Dla functions somewhat like complement clauses in English.

In younger speakers speech, the function of the chain clause SR system has diverted from the canonical SR system used by older speakers (§7.2.2). For younger speakers, coreferential chain verb forms and disjoint-reference chain verb forms only have their coreferential and disjoint-referential meaning — respectively — when the person-number-gender features of the two subject cross-reference suffixes cannot resolve the referentiality of the two subjects. Otherwise, the coreferential chain verb forms have become the unmarked SR-neutral chain verb forms.

At the end of this thesis are appendix 1, which contains four Menggwa Dla example texts, and appendix 2, which contains tables of cross-reference suffixes, pronouns, copulas and irregular verbs.

Table of contents

Lists of maps, tables and figures

ix

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Abbreviations and conventions

1	first person
2	second person
3	third person
ABL	ablative case
ABSS	abessive case ('without')
ACC	accusative case
ADS	adessive case
ALL	allative case
BEN	benefactive
CHAR	characterisation
CNTR	counterfactual
COM	comitative case
COMPL	completive aspect
COND	condition(al)
CONT	continuous aspect
COP	copula
CR	coreferential
CS	consequence/ consequential
D	'distance' (Imonda; Seiler 1985: 181)
DAT	dative case
DEP	dependent
DER	derivational (Imonda; Seiler 1985: 29-31)
DR	disjoint-referential
DU	dual number
EMPH	pragmatic emphasis
EXCL	(first person) exclusive
F	feminine gender
FOC	focus
FUT	future tense
GEN	genitive case
GER	gerund(ial)
GOAL	goal
INCL	(first person) inclusive
IND	indicative mood
INS	inessive case
INSTR	instrumental case
INTJ	interjection
IO	indirect object
IR	irrealis mood
LOC	locative case
M	masculine gender
MASS	mass undergoer (§5.1.4)
N1	non-first person
NIND	non-indicative mood
NOM	nominative case
NOML	nominalise
NPAST	non-past tense
NFUT	non-future tense

OBJ	object (case)
PART	participle/ participial
PAST	past tense
POST	posterior
POSSB	possible
PL	plural
PRED	predicative
PRES	present tense
PROG	progressive aspect
PROP	proprietive case
PROM	'prominent' (Anggor *-mbo*; Roberts 1980: 74-76)
R	realis mood
REFL	reflexive
RSUMP	(subject) resumptive pronoun (§4.6.3)
SEQ	sequential; interclausal sequentiality
SG	singular number
SIM	simultaneous; interclausal simultaneity
SMR	semi-realis mood
SR	switch-reference
STAT	stative
TOP	topic
TRNS	transitive
TRNSN	transitional aspect (inchoative or completive aspect)

In the Menggwa Dla examples, cross-reference suffixes with the gloss ':O' are object cross-reference suffixes, whereas cross-reference suffixes without the gloss ':O' are subject cross-reference suffixes. For instance, in the verb *ser-iha-hwa* (eat-1SG-PAST) 'I ate', *-iha* (1SG) is the subject cross-reference suffix; in the verb *bi-wu-a-hwa* (hold-N1MPL-3FSG:O-PAST) 'they hold it', *-wu* (-N1MPL) is the subject cross-reference suffix, and *-a* (3FSG:O) is the object cross-reference suffix. See §5.2 on cross-referencing in Menggwa Dla.

Chapter 1   Introduction

This thesis is primarily a description of the phonology, morphology and syntax of the Menggwa dialect of the Dla language, a Papuan language spoken on both sides of the vertical 141°E borderline between Papua New Guinea and Papua Province of Indonesia (also known as *Papua Barat* West Papua)[1] at around 3°40′S, about a hundred kilometres inland from the northern coast. There are two dialects of Dla: Menggwa Dla is the minority dialect, and it is spoken by around 200 people; the majority dialect, which I call Dla proper, has around 1000 speakers. The '×' in map 1.1 below shows the approximate centre point of Dla territory in New Guinea. (see also map 1.2 in §1.2.1 and map 1.14 in §1.4.4).

Map 1.1   Location of Dla territory in New Guinea

Jayapura Regency, Papua, Indonesia (West Papua)

×

Sandaun Province, Papua New Guinea

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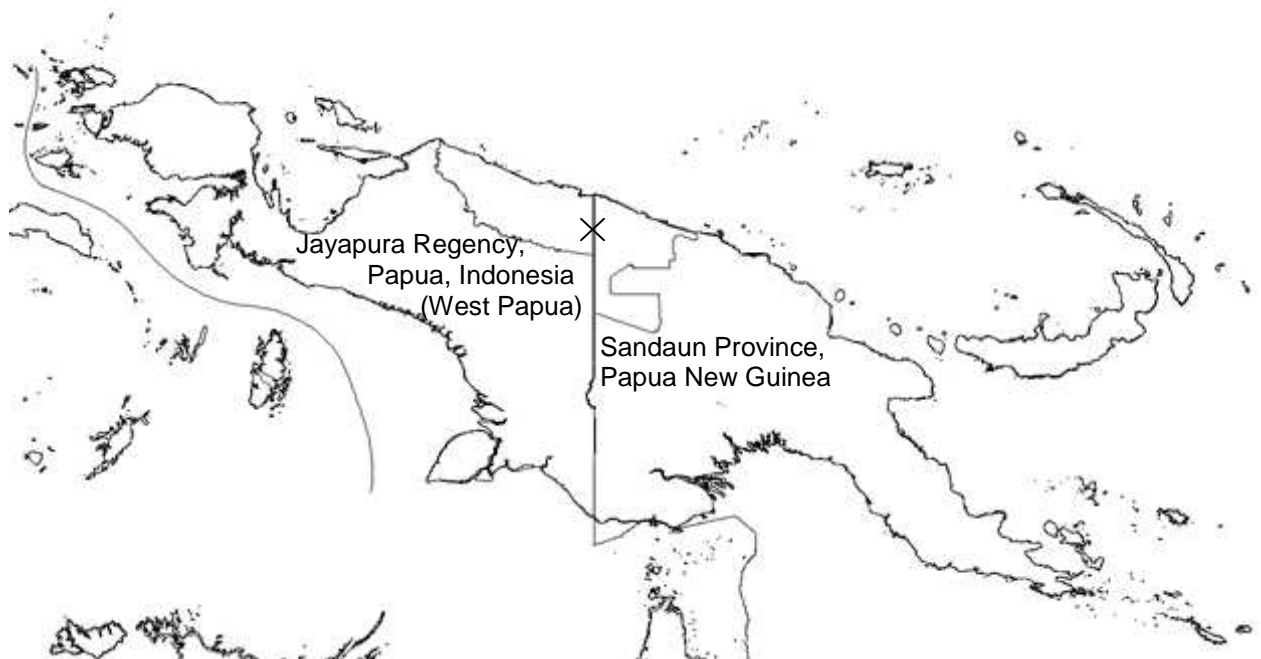
[1] Papua New Guinea is pronounced as ['**pa**pua niu'**gi**ni] in Tok Pisin/ English, while Papua is pronounced as [pa'**pu**a] in Papuan Malay/ Indonesian.

The term 'Papuan languages' — as used by linguists[2] — refers to a group languages spoken in New Guinea and surrounding areas; most languages native to New Guinea are Papuan languages, and there are also some Papuan languages spoken in the Louisiade, Bismarck and Solomon Islands to the east, Torres Strait Islands to the south, and Halmahera and Timor-Alor-Pantar islands to the west. Papuan languages do not form one single genealogically-defined language family; in fact there are many genealogically unrelated language families of various sizes and isolates amongst Papuan languages. The only commonality amongst all these diverse language families and isolates is that they are spoken in the New Guinea areas but are not part of the Austronesian language family. With more than a thousand languages all related genealogically, Austronesian is one of the largest language families in the world in terms of number of languages. On mainland New Guinea, Austronesian languages are found mainly in pockets of coastal areas on the northern coast of New Guinea and on the southern coast of Papuan Tip (the 'bird's tail' in southeastern New Guinea). Otherwise, except Australia and some of the Torres Strait Islands to the south,[3] and pockets of Papuan language to the east and west, areas surrounding New Guinea — as far as Sumatra, *Madagasikara* Madagascar, Taiwan, Marianas, and Hawai'i, *Rapanui* Easter Island and *Aotearoa* New Zealand — are all indigenously settled by Austronesian speakers.

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[2] In Papua New Guinea, the term 'Papuan' usually refers to the people of the southern portion of Papua New Guinea, i.e. the ex-Australian territory of Papua. In Indonesia, *Papua* either refers to the whole of Indonesian New Guinea, or the current Papua province which is the whole of Indonesian New Guinea minus the West Irian Jaya province which was carved out of the original Papua province in 2003. *Bahasa-bahasa Papua* 'Papuan languages' in Indonesian usually refers to the indigenous languages of the whole of Indonesian New Guinea. See §1.2.2-3 for the history and politics of colonial and post-colonial New Guinea.

[3] The western Torres Strait language — Kala Lagaw Ya — is usually classified as a Pama-Nyungan Australian language. The eastern Torres Strait language — Miriam Mir — is usually classified as a Papuan Language of the Eastern Trans Fly family.

New Guinea is the largest island in the tropics (793,000 km^2).[4] New Guinea

has an indigenous population of around 6 million.[5] With more than a thousand

languages spoken in (mainland) New Guinea,[6] New Guinea is one of the most

linguistically-diverse areas on earth. Most languages in New Guinea have no more

than a few thousand speakers. Within New Guinea, North-Central New Guinea

(Donohue & Crowther 2005) — roughly the area north of the highlands around the

141°E international border (§1.4.4) — has the highest level of linguistic diversity; a

lot of the small Papuan families and isolates are found in this area (see map 1.14 in

§1.4.4).[7]

Dla belongs to the Senagi language family, one of the numerous small

language families found in North-Central New Guinea. The Senagi language family

consists of only two members: Dla, and Anggor (R. Litteral 1980), which is spoken

towards the southeast of Dla territory. The genealogical relationship between the

two languages is apparent: sound correspondences are quite regular, case clitics are

similar in both form and function, and the complex sets of subject and object cross-

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[4] The next two larger land masses are *Kalaallit Nunaat* Greenland (2,176,000 km²) and mainland
Australia (7,527,000 km²). The next two smaller land masses are Borneo (725,000 km²) and
Madagasikara Madagascar (587,000 km²).
[5] West Papua has a population of 2,233,530, according to the Indonesian census in year 2000 (*Badan
Pusat Statistik Povinsi Papua*; www.papua.go.id/bps/). Papua New Guinea has a population of 5,190,786
in the census conducted in 2000 (National Statistical Office of Papua New Guinea;
www.spc.int/prism/country/pg/stats/). Minus the population of Manus, West New Britain, East
New Britain, New Ireland and Bougainville (North Solomon) provinces which do not occupy the New
Guinea mainland, the population of the mainland provinces of Papua New Guinea is 4,719,248. There
are no reliable data on the ethnicity of the population; summarising rumoured estimates, the
percentage of indigenous population is more than 95% in Papua New Guinea and around 60% in West
Papua.
[6] Around 800 Papuan and 250 Austronesian languages as listed in Ethnologue (Gordon 2005).
[7] With around thirty Papuan language families (Foley 2000, Ross 2005), thirteen of them are
represented in Sandaun Province of Papua New Guinea and neighbouring *Kabupaten* Jayapura of West
Papua: Trans New Guinea, Sepik, Torricelli, Macro-Skou, Kwomtari, Border, Senagi, Amto-Musian,
Left May, Sentani, Nimboran, Tor-Kwerba, and Lakes Plain. There are also a number of isolates in
this area. In addition, a lot of areas in *Kabupaten* Jayapura are still poorly explored. Another area of
high linguistic-diversity is the lower reach of Sepik and Ramu rivers: there are the Trans New Guinea,
Sepik, Lower Sepik, Ramu, Yuat, Piawi languages, plus the isolate Gapun in this relatively small area.

reference suffixes in Dla and Anggor are near identical (especially considering that documented languages nearby are all poor in verbal cross-referencing; §1.4.4).

The rest of the chapter is organised as follows: salient linguistic features of Menggwa Dla are summarised in §1.1; the geographical environment and the history of the Dla territory since colonisation are discussed in §1.2; published data on the two varieties of Dla and orthographical issues are outlined in §1.3; the Senagi language family, neighbouring languages and the *lingue franche* of Malay and Tok Pisin are discussed in §1.4; some ethnographic notes on Dla people are outlined in §1.5; the fieldwork which this thesis is based on and the collection of data are discussed in §1.6.

1.1   Overview of Menggwa Dla grammar

Menggwa Dla has a phonological inventory of 15 consonants and 5 vowel phonemes (§2.1), which is average for New Guinea. Except the palatal approximant /j/ and the labiodental approximant /w/, the consonants are realised at three places of articulation: bilabial, alveolar and velar (§2.1.3.1-6). At each of the three places of articulation is a voiceless plosive phoneme (/p t k/), a voiced plosive phoneme (/b d g/) and a voiceless fricative phoneme (/ɸ s x/). There is bilabial nasal phoneme /m/ and an alveolar nasal phoneme /n/, but there is no velar nasal phoneme /ŋ/.[8] There are two liquid phonemes in Menggwa Dla: /l/ and /r/ (whereas there is only one liquid phoneme in both Dla proper and Anggor; §1.4.2-3).

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[8] However, [ŋ] occurs as the prenasalised portion of [ᵑg], which is an allophone of /g/ (§2.1.3.2).

There are five vowel phonemes: /i e a ʊ u/ (§2.1.3.7-9). The usual phonetic realisations of /ʊ/ [ʊ] and /u/ [u] in Menggwa Dla overlap to a large degree, and their average realisations are very close. The realisations of /ʊ/ [ʊ] and /u/ [u] are so close in older speakers' speech that most younger speakers have merged /ʊ/ into /u/ in most or all vocabularies.

Syllables most usually have the shape of V, CV or CCV (§2.2.1). In a consonant cluster, the second consonant can be /n/, /r/, /l/, /j/ or /w/ (§2.2.2). Codas of /ɸ/, /l/ or /m/ exist in some exceptional syllables (§2.2.3). There are only six monomorphemic vowel sequences: /ai/, /au/, /ia/, /ʊa/, /ua/ and /ei/ (§2.2.4). Morphophonological transparency in Menggwa Dla is high; morpheme boundaries are only blurred by two morphophonemic rules concerning adjacent vowels: vowel degemination rule (two adjacent identical vowel phonemes become one) and *a-* deletion rule (/a/ is deleted next to /e/; §2.3). Stress placement is fully predictable: primary stress falls on the penultimate syllable of a polysyllabic word, except that verbs have the primary stress within the verb stem (see §2.4.1). Clausal intonations are sensitive to clause type, word boundaries and the existence of certain grammatical affixes; the stress patterns of individual words are disregarded by the clause melody. For instance, in connected speech, a stressed syllable at the beginning of a word may have a lower pitch than a neighbouring unstressed syllable (§2.4.2).

There are three open word classes in Menggwa Dla: nouns, adjectives and verbs (§3.1). Verbs always carry affixes, whereas nouns and adjectives are mostly morphologically simplex (§3.1.1). Words which denote properties are mostly

adjectives, but there are also property verbs and property nouns. Adjectives can modify a head noun in its citation form, but nouns must be attached with a nominal clitic to function as noun modifiers (§3.1.2). There are the following minor word classes: nominal clitics (case clitics, topic clitics, focus clitics; §3.2.1), personal pronouns (§3.2.2), interrogative words (§3.2.3), demonstratives (§3.2.4), quantifiers (§3.2.5), conjunctions (§3.2.6), locative words (§3.2.7), temporal words (§3.2.8), interjections and miscellaneous words which form classes of their own (§3.2.9).

Nouns are classified into one of two grammatical genders: feminine and masculine (§4.1). The gender of a noun is not indicated within the noun phrase; the gender feature of a noun is only realised by cross-reference suffix(es) on verbs and pronouns. Semantics is the only deciding factor in gender assignment. For animates, males are cross-referenced as masculine; females, groups including both sexes, or participants of unknown sex are cross-referenced as feminine. Most inanimate nouns are feminine; there is a small number of nouns which are deemed as 'light in weight' (i.e. gravity defying) and they are masculine, e.g. *hufu* 'sun', *amamo* 'moon', *kapali* 'aircraft', *tu* 'bird'. Nouns are not marked for grammatical number (§4.2).

A noun phrase can be encliticised by a case clitic, and/or a topic or focus clitic (§4.5). Menggwa Dla has a range of semantic case clitics, with the local cases having an internal versus external distinction. A head noun and its modifiers must be contiguous with each other to form a noun phrase. However, within a noun phrase, the word order is basically free (§4.3). Proper names in Menggwa Dla are not morphologically distinguished from common nouns (§4.4).

Personal pronouns are only used for human (or sometimes high animate) referents, and there are different paradigms of personal pronouns (§4.6). There are three 'citation pronouns': *yo* FIRST PERSON, *si* SECOND PERSON and *ai* THIRD PERSON. These three citation pronouns do not mark number and gender features; for instance, *ai* can be translated as 'he', 'she', 'it' or 'they' in English. Citation pronouns are used in isolation or when it is the subject of the clause. In contrast to the citation pronouns, the object and genitive pronouns carry a cross-reference suffix which marks person, number and sometimes gender features. While there are only three citation pronouns, there are as many as fifteen object pronouns and fifteen genitive pronouns. For instance, when referring to two male referents using a pronoun, a citation pronoun *ai* 's/he/it/they' is used when it is the subject, but a (much more feature-specific) object pronoun *aiahafanimbo* 'them two (masculine)' is used when it is the object.

There are five verb classes in Menggwa Dla; verbs are classified into verb classes based on the sets of cross-reference suffixes which the verb can take (§5.2). There are eleven paradigms of cross-reference suffixes in Menggwa Dla, some cross-reference with the subject, and some cross-reference with the object. A verb lexeme may have more than one verb stem form. The basic form of a verb lexeme is called the 'non-finite verb stem'; a lot of verb lexemes also have a separate 'finite verb stem' which is used in finite verb forms (§5.1.1). A small number of verbs have special a 'future finite verb stem' which is used only in future tense (§5.1.2).

Core grammatical relations are organised in an accusative-secundative alignment (subject [S A], object [P R], second object [T]; §5.3.1). Subjects and

objects can be expressed as cross-reference suffixes or (pro)nominals; second objects and oblique relations can only be expressed as nominals (§5.3.2). There are no voice oppositions, and there are also no 'real' valence changing operations in Menggwa Dla (see §5.3.3).

Independent verbs carry cross-reference suffixes (§5.2) and other affixes which indicate tense, mood, status, polarity, and sometimes aspect (§6). There are three tenses: past, present and future. Three statuses are distinguished: realis (§6.1), semi-realis ('certain future'; §6.2) and irrealis (§6.3). Morphology associated with the three statuses is markedly different, especially the way negatives are formed (negativity is independent from status in Menggwa Dla; §6.1.3, §6.2.2, §6.3).

There are three types of dependent clauses in Menggwa Dla: subordinate clauses (§7.1), chain clauses (§7.2) and non-finite chain clauses (§7.3.1). Subordinate verbs are least deverbalised of the three types of dependent verbs; they carry cross-referencing suffixes and a limited set of tense-mood affixes. There are three types of subordinate clauses: relative clauses (§7.1.1), -*hwani* 'if/when' clauses (§7.1.2), and -*hi* simultaneous clauses (§7.1.3); relative clauses exist within noun phrases, and the other subordinate clauses precede their matrix clause.

More deverbalised than subordinate verbs are the chain verbs. Chain verbs carry cross-reference suffixes, but they are basically devoid of tense-mood specifications. Chain clauses (§7.2) are linearly chained together with one independent or subordinate clause at the end of the clause chain, and the chain clauses are dependent on the final independent/ subordinate clause for tense-mood-

status information. Chain verbs are marked for switch-reference (§7.2.2): coreferential (CR) chain verbs indicate that their subject is coreferential with the subject of a following clause in the clause chain, and disjoint-referential (DR) chain verbs indicate that their subject is disjoint-referential with the subject of a following clause in the clause chain. (However, see §7.2.2 on the use of the switch-reference system by younger speakers which is markedly different from the traditional switch-reference system used by older speakers.)

More deverbalised than chain verbs are the non-finite chain verbs. Non-finite chain verbs lack both cross-referencing and tense-mood information. Non-finite chain clauses (§7.3.1) are like an impersonal version of chain clauses; non-finite chain verbs do not carry cross-reference suffixes, and non-finite chain clauses are used when the subject is generic, low in animacy, or low in discourse salience. Non-finite chain clauses are not marked for switch-reference. Nevertheless, it is a requirement that the subject of a non-finite chain clause must be coreferential (or referentially overlapping) with the subject of a following clause.

Even more deverbalised than non-finite chain verbs are the verbal nouns (§7.3.2); they function as grammatical relations and can take certain case clitics.

Intraclausal syntax does not play a large role in Menggwa Dla (§5.4). Clauses are predominantly verb-final; phrases in front of the verb can be scrambled to any order. Sometimes a focused phrase can be placed after the verb.

1.2   The Border and its effects on Menggwa Dla people and language

1.2.1   Geographical location

Dla is one of the nine ethno-linguistic groups which are dissected by the straight-line border between Papua New Guinea and West Papua.[9] The Dla territory is centred around the 141°E borderline [10] and 3°40′S, approximately 100 kilometres inland from the northern coast (see map 1.1 in §1 above, map 1.2 below and map 1.14 in §1.4.4). There are around 300 Dla people on the West Papuan side, including around 60 Menggwa Dla people, and around 900 people on the Papua New Guinean side, including around 140 Menggwa Dla people. In the past more Dla people lived on the West Papuan side; there have been eastward migrations into Papua New Guinea in the 1970s and 1980s due to political unrest in West Papua (§1.2.3). Other than Dla people who reside in their traditional territory, there are also some Dla people residing in nearby towns and cities, especially in the provincial capitals of Jayapura (West Papua) and Vanimo (Papua New Guinea) on the coast. Other than the high schools in Jayapura and Vanimo, a lot of Dla

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[9] There are a number of other indigenous languages spoken near the border, like Wutung (on the northern coast) and Wopkaimin/ Kauwol (the language at Ok Tedi-Tabubil), but their populations are not dissected by the border, i.e. all Wutung and Wopkaimin people traditionally live on the Papua New Guinean side. The nine transborder ethnolinguistic groups which have intimate intratribal crossborder ties are (from north to south) Waris, Waina-Sowanda, Dla, Ngalum, Ninggerum, Yonggum, Boazi, Yey and Kanum (Blaskett 1989: 45; Pula & Jackson *et.al.* 1984: 14, 22).

[10] The border does not actually run through 141°E all the way (see map 1.3 below). From the northern coast near Wutung, the border follows 141°E until it reaches the Fly River, and then follows the river sea-bound (southward) until it reaches 141°01′E, and then along 141°01′E until it reaches the southern coast near the mouth of Bensbach River. The Fly River is a major navigable river in New Guinea. Nearly the entire length of the river lies to the east of 141°E. Nevertheless, a small section of the Fly River between 6°S and 7°S lies to the west of 141°E, which was the official border between British New Guinea (east) and Netherlands New Guinea (west) in the colonial days. The British wanted full access to the Fly River, and Netherlands New Guinea compromised by altering the border to run along the Fly River, and then pushing east the borderline south of the Fly river to 141°01′E. The post-colonial Papua New Guinea and Indonesia acknowledge the same borderline. To the north, a small section of the Sepik River also lies to the west of 141°E between 4°S and 5°S. Nevertheless, no such compromise is being made to the borderline at the two points where Sepik River crosses 141°E; that section of the Sepik River is not navigable.

teenagers go to school in Senggi and Arso in West Papua, and Green River in Papua New Guinea (see map 1.14 in §1.4.4).

There are three major localities with Dla territory: Kamberatoro Mission (3°36′S 141°03′E; 1299 feet) in Papua New Guinea, Amgotro Mission (3°38′S 140°58′E; 1969 feet) in West Papua, and Komando village in West Papua, which was an ex-Dutch border post.[11] People in these three localities speak Dla-proper, the majority dialect. Menggwa Dla — the minority dialect — is spoken in five villages between Kamberatoro Mission and Komando village: Menggau, Wahai, Ambofahwa (also known as Wahai № 2), Wanggurinda (3°34′59″S, 141°01′41″E) in Papua New Guinea, and Menggwal (3°33′53″S, 140°59′04″E) in West Papua. Other Dla proper-speaking villages are (not exhaustive): Tamarbek, Akamari, New Kamberatoro; Old Kamberatoro, 'Border Village', Nimberatoro, Nindebai, Mamamora, Yamamainda, Orkwanda, Lihen in Papua New Guinea; Amgotro, Komando, Indangan, Mongwefi, Buku, Agrinda in West Papua. See map 1.2 below.

On the West Papuan side, Dla territory is located in *Kecamatan* Web (administrative centre: Amgotro) and *Kecamatan* Senggi (administrative centre: Senggi) of *Kabupaten* Jayapura in Papua, Indonesia (Menggwal village is located in *Kecamatan* Senggi).[12] On the Papua New Guinean side, Dla territory is located wholly within Dera Census Division (administrative centre: Kamberatoro) of

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[11] Latitude, Longitude and altitude information on the airstrips (underlined) are from Australian Defence Force (2006). Positional information on other localities is my own data.

[12] A law change in November 2002 (*Undang-undang 26/2002*) carved *Kabupaten* Keerom out of the old *Kabupaten* Jayapura. *Kecamatan* Web and *Kecamatan* Senggi of *Kabupaten* Jayapura became *Distrik* Web and *Distrik* Senggi of *Kabupaten* Keerom. Nevertheless, legal changes in sub-national administrative entities in Indonesia are often not implemented immediately, and most local people have not heard of these new names.

Amanab District of Sandaun (West Sepik) Province, Papua New Guinea. See map

1.3 below.

Map 1.2   Menggwa Dla villages and selected neighbouring localities
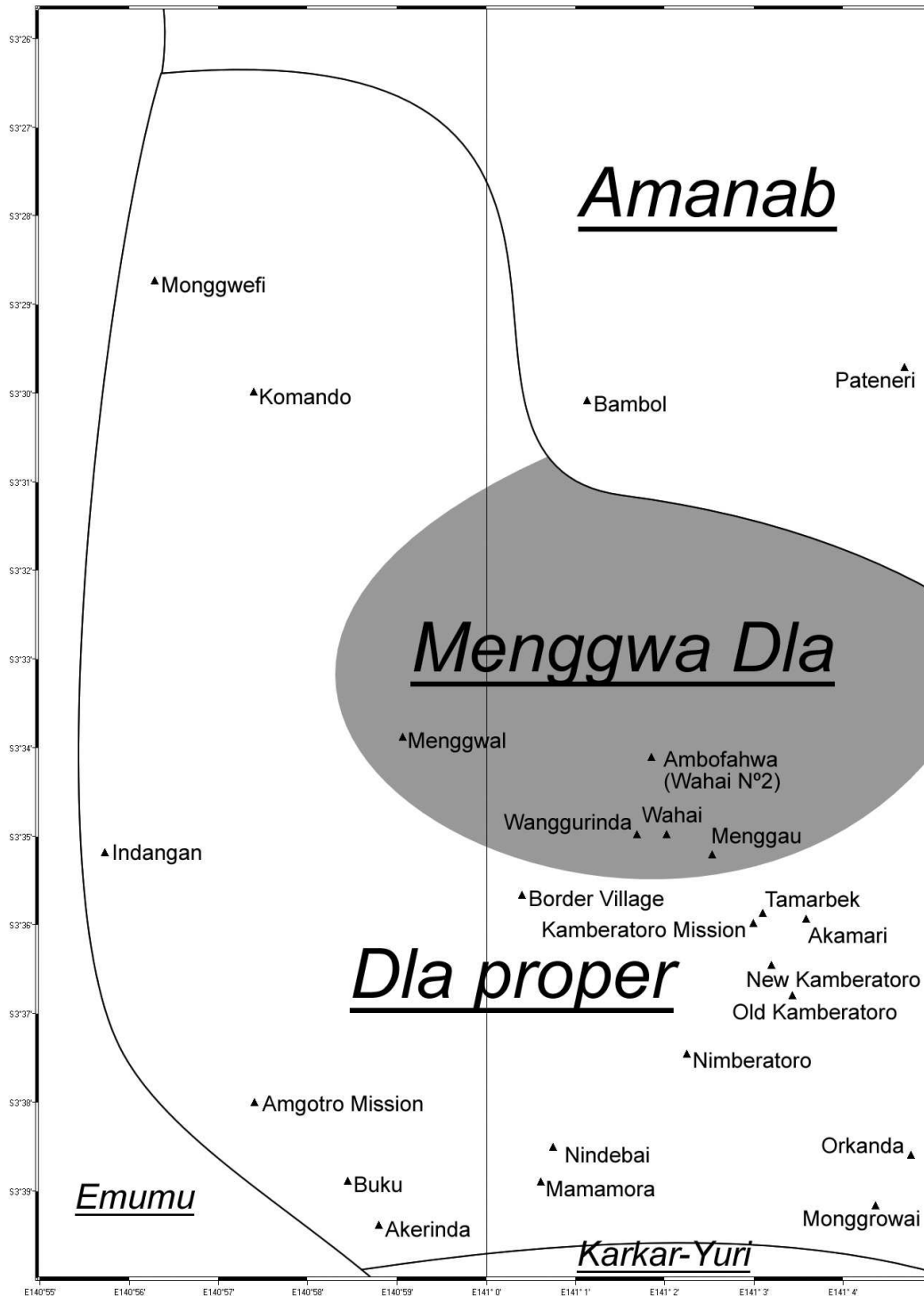
(Based on Galis (1956) and my own data; locations are approximate)

Map 1.3   Border *Kecamatan* in Papua, Indonesia and border Census Divisions

in Papua New Guinea (Blaskett 1989:42)
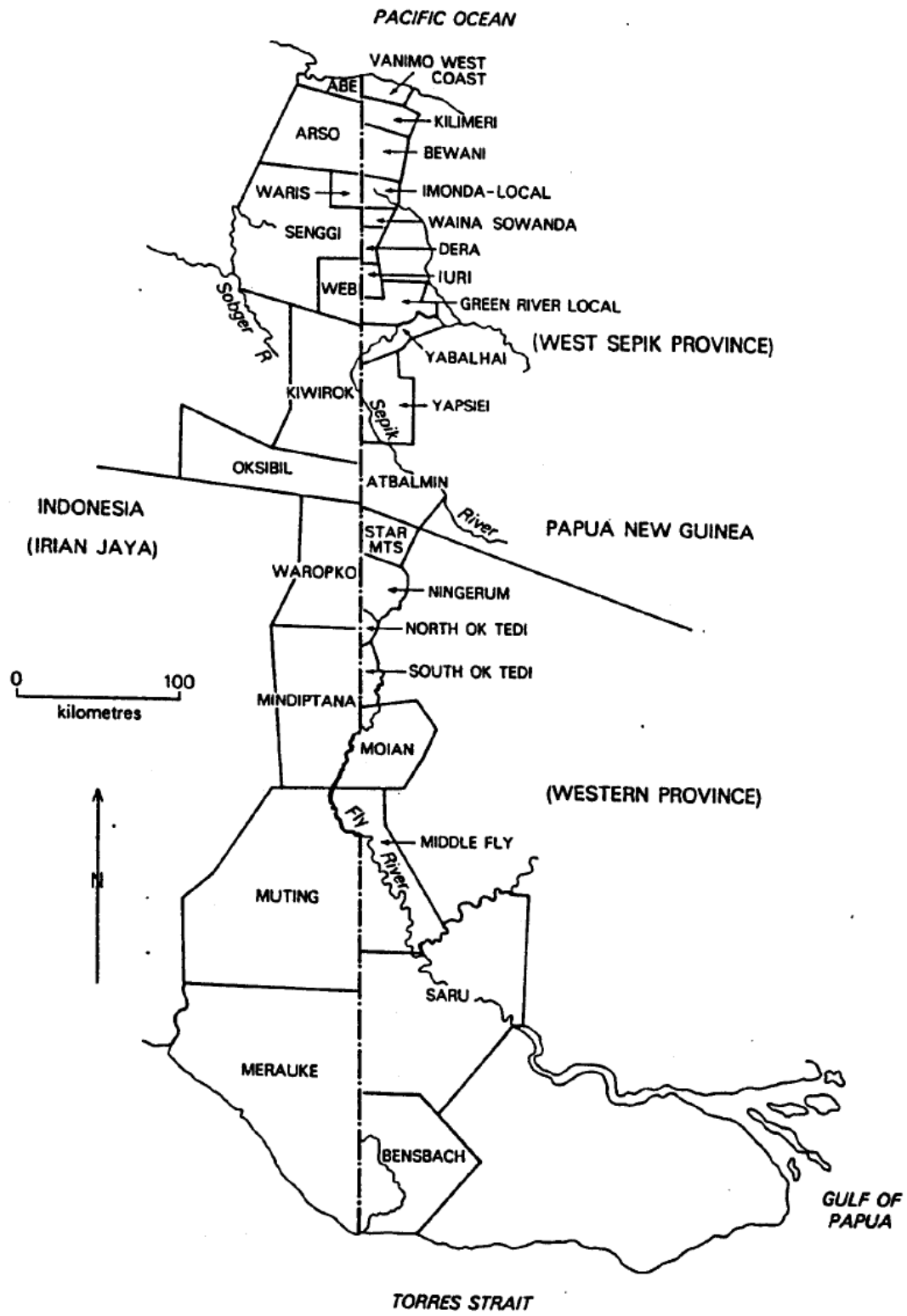
There is no road access in and out of Dla territory. There is an airstrip at Amgotro and Kamberatoro, but the airstrip at Amgotro has apparently been decommissioned due to the dangerous surrounding terrain (in addition to the less-than-safe gradient of the airstrip itself: 5% down south). Two other airstrips near Amgotro are Yuruf (3°56′S 140°56′E) and Ubrub (3°41′S 140°53′E), both within the territory of Emumu language immediately west of Dla territory (there are also some Dla people living in Yuruf). On a Cessna it takes around forty-five minutes to fly from Vanimo to Kamberatoro.

The nearest road access is at Senggi (3°27′S 140°47′E), the administrative centre of *Kecamatan* Senggi; Senggi is currently the southern end of the Jayapura road network. It takes at least one and a half days to walk from Dla territory to Senggi. In Papua New Guinea, there used to be a road between Kamberatoro and Amanab (3°35′S 141°13′E), the administrative centre of Amanab District (that road was not connected to any other road networks). Build in 1960s, the road and the numerous bridges between Kamberatoro and Amanab are no longer serviceable due to disrepair. It takes seven to eight hours for people to walk the path from Amanab to Kamberatoro.

Dla territory lies within the Border Mountains. The Border Mountains are rugged, but not too rugged by New Guinea standards (after all it has not acted as a barrier to human movements). The terrain is thickly forested, and jungle tracks link different villages. It is wettest in December/ January, and driest in August; the airstrips in Dla territory, none of which are sealed, become unsuitable for aircrafts to land in wet season.

There are no navigable rivers anywhere near Dla territory. Dla territory lies in the watershed of Taritatu River and Sepik River, the two major river systems in Northern New Guinea. Most streams in Dla territory flow north- or westward into Keerom and Pauwasi Rivers, which are tributaries of Taritatu River (Taritatu River joins Tariku River downstream to form the Mamberamo River). Only in the southeastern part of Dla territory near the villages of Nimberatoro, Mamamora and Yamamainda do streams flow south- or eastward into Faringi and Green Rivers, which continues southeastward into Anggor territory and eventually joining the Sepik.

1.2.2   The border: colonial and post-colonial history of New Guinea

Modern Dla history and language development revolve around the international border. The first Europeans who visited New Guinea were Portuguese and Spanish sailors in the sixteenth century. Other Europeans followed. In the nineteenth century, three European nations — Netherlands, Germany and Britain — formally colonised New Guinea. In 1828 western New Guinea was claimed by Netherlands via the sultanate of Tidore (the last sultan reigned till 1905, after which Netherlands gradually formally annexed the sultanate and its claim on Western New Guinea). Netherlands New Guinea was governed as part of the Netherlands East Indies, which was based in Batavia (modern day Jakarta). In 1884, Germany and Britain annexed Eastern New Guinea: Germany annexed the north-eastern portion (including islands to the immediate east as far as Bougainville and Nukumanu),[13] and

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[13] Germany's claim to New Guinea also included all of Micronesia to the north except American Guam and Wake Islands, and British Gilbert Islands.

Britain the south-eastern portion. In 1895 the borderline between Netherlands New

Guinea and British New Guinea was set at 141°E,[14] and in 1910 the borderline

between Netherlands New Guinea and German New Guinea was also set at 141°E.

By then much of the interior of New Guinea was still unknown to European

explorers and colonisers. (What we now know as the Highlands of New Guinea was

assumed to be a range of uninhabited mountains by the Europeans, when in fact the

Highlands is the most densely populated part of New Guinea.) The British portion

of New Guinea became the Australian Territory of Papua in 1906.

Map 1.4   New Guinea and environs in 1910
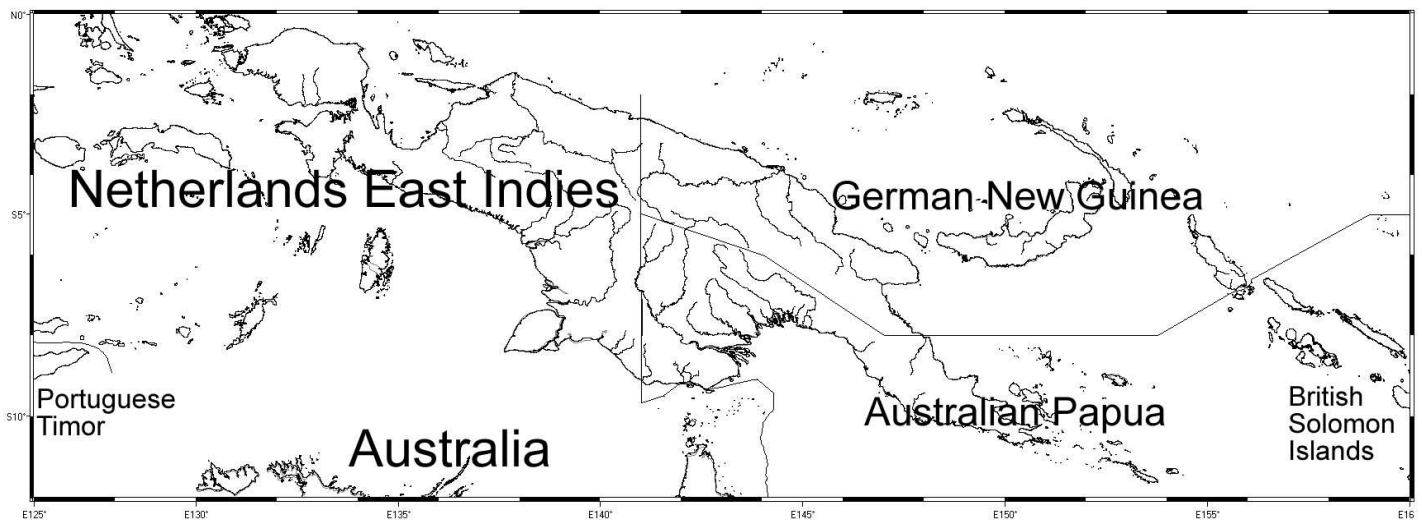
Australia annexed German New Guinea in 1914 at the beginning of the First

World War. The ex-German portion of New Guinea became a League of Nations

Mandate of Australia in 1921,[15] and the United Nations Trust Territory of New

Guinea in 1949, still administered by Australia. The administration of the two

[14] See footnote 10 in §1.2.1.
[15] German Nauru also became a mandate of Australia; all other German Micronesian islands became a mandate of Japan.

Australian portions of eastern New Guinea was combined in 1942. The two Australian portions of New Guinea gained independence in 1975 as one nation: Papua New Guinea. As for Netherlands New Guinea, Dutch East Indies to the west of New Guinea gained independence in 1949 as Indonesia. However, it was not Netherlands' intention for Netherlands New Guinea to be part of the newly independent state of Indonesia. The Dutch administration re-based themselves in Hollandia (present day Jayapura), and Netherlands was preparing for Netherlands New Guinea's eventual independence as *Papua Barat* West Papua. However, through military action and international diplomacy by the Indonesians, the Dutch administration was evicted from West Papua in 1962, West Papua was placed under United Nations administration, and Indonesians gained control of West Papua in 1963. Indonesia officially annexed West Papua in 1969. Through several name changes, Indonesian New Guinea became Irian Jaya Province, and then Papua Province in 2001 (Moore, 2003: 181-182; 195-201). In 2003, the Bird's Head and the 'Bird's Neck' (Bomberai peninsular and neighbouring areas) of the original Papua Province was carved out to form the new Irian Jaya Barat (West Irian Jaya) Province.

1.2.3   Modern Dla history: torn apart by the border and two *lingue franche*

War planes flew over Dla territory during the Pacific War in the 1930s. However, Dla people were not aware of the fighting that occurred in the coastal areas. Dla people's first encounter with non-New Guineans happened in the early 1940s when Australian patrol officers visited the Kamberatoro area.[16] Nevertheless,

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[16] There are no legends of encounter with Malay-speaking people (e.g. bird-of-paradise traders) before their encounter with the Australians.

there were no significant interactions between the Australian authority and Dla people in 1940s and 1950s. In 1950s, Dutch patrol officers and Franciscan missionaries arrived in Dla territory, bringing with them Christianity, a western-style education system and the Malay language, the administrative language of Netherlands New Guinea. Malay loanwords rapidly entered the Dla language (§1.4.1).[17] The portion of Dla territory currently in Papua New Guinea was *de facto* under the jurisdiction of Netherlands New Guinea. For instance, Kamberatoro Mission Station in Papua New Guinea was opened by the Dutch Franciscan missionaries. Other than the Dla enclave, Netherlands New Guinea also administered two other enclaves — Waris and Waina-Sowanda enclaves — to the north of Dla territory which is today within the boundary of Papua New Guinea (van der Veur 1966). (Both Waris and Waina-Soawanda languages belong to the Border language family; §1.4.4). To the south, the Dutch border stations like Mindiptanah and Tanah Merah also asserted strong influence over the border area. In general, the Dutch paid more attention to the development of the border area; this allowed the Dutch to assert more influence over the border region (Blasket 1989: 48).[18] In the past, people of the border region were in general more Dutch-leaning than Australian-leaning; Malay words were rapidly borrowed en mass into a lot of languages of the border region, including Dla.

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[17] In Dutch documents the Dla tribe was referred as *Děra*. In Dla proper, *dla* [d(ɨ)ɭa] means 'name'. In Dutch-Malay orthography, *ě* represents a schwa [ə]; the *ě* in *Děra* is a rendition of the epenthetic vowel in Dla proper, which ranges from [ɨ] to [ə] (§1.4.2). The *r* in *Dera* is a rendition of the liquid phoneme in Dla proper, which is usually realised as an alveolar lateral flap [ɭ].

[18] It is not the case that the Dutch authority did not know the location of the borderline. For instance, the hand-drawn map in Galis (1956) shows correctly which villages fall on which side of the border. Both the Dutch and Australian administrations turned a blind eye to each other patrolling and setting up border posts on the wrong side of the borderline in 1950s.

In early 1960s, Australia started aerial-mapping the border area between Australia New Guinea and Netherlands New Guinea for the purpose of properly demarcating the borderline (Verrier, 1986: 36). In 1962, the Dutch administration left West Papua. In 1963, the Australian authority took over the administration of the Dla enclave, and Kamberatoro Mission Station was transferred to the Australian Passionist missionaries. The Australian administrators and missionaries brought with them Tok Pisin, the dominant *lingua franca* in the Trust Territory of New Guinea, and today one of the three national languages of Papua New Guinea (the other two are English and Hiri Motu). Today, most Dla people are fluent in Tok Pisin. However, Tok Pisin loanwords in Dla are not as phonologically nativised as Malay loanwords, which entered the Dla language earlier (§1.4.1).

Dla people's world was connected to the wider world, and came under the immense pressure of two invasive *lingue franche* of Malay and Tok Pisin within the two decades of 1950s and 1960s. What happened in the 1970s and 80s was even more disastrous to Dla people. In 1964, the political organisation/ militia of OPM (*Organisasi Papua Merdeka* Free Papua Organisation) was established to counter Indonesian rule in West Papua. Fighting between the OPM and TNI (*Tentara Nasional Indonesia* Indonesian National Army) has lead to mass streams of West Papuan civilians seeking refuge in Papua New Guinea in separate incidents during 1970s and 80s. Dla territory was one of the major funnels for refugees from West Papua crossing into Papua New Guinea. Two major incidents happened in May 1978 and February 1984 when 750 refugees and 250 refugees, respectively, crossed the border and sought refuge in Kamberatoro (Carman 1999: 139-141). These refugees, some walked from as far as Baliem Valley (Wamena region) in the

highlands of West Papua, carried with them diseases which wiped out around a fifth of the Dla population, most of them the elderly. Also in the troublesome decades of 1970s and 80s, a lot of Dla people in West Papua migrated eastward into Papua New Guinea.

According to Galis (1956: 14), the *Doeka-Ékor* [Menggwa Dla] speaking villages have a population of 230, and the *Děra* [Dla proper] speaking villages have a population of 1271. Laycock (1973: 49) lists the population of *Duka-Ekor* [Menggwa Dla] as 230, and *Dera* [Dla proper] as 1474. About a fifth of the Dla population died from the diseases brought in by the West Papuan refugees in 1970s and 80s. In 2006, the population of Menggwa Dla speakers is approximately 200, and the population of Dla proper speakers is approximately 1000; around 60 Menggwa Dla speakers live in West Papua, and around 140 Menggwa Dla speakers live in Papua New Guinea.

Other than the human toll, the Dla language is also dying due to the invasiveness of the two *lingue franche*, known as *Malai Fafo* 'Malay language' and *Twaŋgi Fafo* 'White people's language (Tok Pisin)' in Menggwa Dla. Since 1960s nearly all Dla adults, both women and men, have become fluent in Tok Pisin and/ or Malay. (There are also a lot of Dla people with good command of English.) The variety of Malay spoken by Dla people is usually Papuan Malay (e.g. Silzer, 1979; Roosman, 1982; Burung 2005), the Malay dialect spoken natively by a lot of New Guineans, rather than Bahasa Indonesia, the standardised form of Malay which functions as the national language of Indonesia. Most adult Dla people currently living on the West Papuan side know at least some Tok Pisin due to the fact that

most have lived in Papua New Guinea as refugees in the turbulent years of 1970s

and 80s. Conversely, a lot of Dla people on the Papua New Guinean side know at

least some Papuan Malay/ Bahasa Indonesia, either due to Dutch education/

employment in 1950s, or Indonesian education/ employment in West Papua since

1990s (Jayapura has always been more prosperous than Vanimo). These days more

than half of Dla children have Malay and/ or Tok Pisin as their first language(s).

From my observation, young children (those born in 1990s or later) who are

educated in Indonesia have virtually no oral command of Dla, and children who are

educated in Papua New Guinea can usually only manage simple sentences in Dla.

Even Menggwa Dla people born as early as the 1970s are showing signs of attrition

typically associated with language death, some of which include: the merger of /u/

and /ʊ/ (§2.1.7), ignorance of native numerals above three or five (there are twelve

native numerals; §3.2.5), ignorance of most of the object cross-reference suffixes

(using the class II third person feminine singular object (3FSG:O) suffix -a as an all

purpose object suffix; §7.2.2) and the collapse of the switch-reference system

(§7.2.2).

1.3   Orthography and Previous Research on Dla

The only published data on Menggwa Dla is a word list of the *Doeka-Ékor*

[Menggwa Dla] language collected in *Monggowar* [Menggwal] by Galis (1956). A

grammar sketch and word-list of 'Dəra' [Dla proper] is published in Voorhoeve

(1971: 73-77; 99-109) based on Dla proper spoken in Amgotro. My research is also

benefited by Marmion's (2000) grammar sketch of Dla proper as spoken in

Kamberatoro, and Laycock's (n.d.) field notes on Dla proper.

Different linguists differ in their opinion as to whether Menggwa Dla is a separate language or a dialect of Dla. Galis (1955, 1956), Voorhoeve (1971) and Laycock (1973) consider Menggwa Dla a separate language from Dla proper. Voorhoeve (1975) considers *Duka-Ekor* [Menggwa Dla] a dialect of *Dəra* [Dla]. Loving & Bass's language map (1964) indicate that the area around Menggau village speaks a distinct dialect within the *Kamberatoro* [Dla] language. Würm & Hattori's language map (1981) shows *Duka-Ekor* [Menggwa Dla] as a dialect of *Dera* [Dla]. I regard Menggwa Dla and Dla proper dialects of the Dla language as they are mutually intelligible; see §1.4.2 on the relationship between Menggwa Dla and Dla proper.

No orthography has been devised for Menggwa Dla. Nevertheless, most Menggwa Dla people are literate in Malay and/ or Tok Pisin, and Menggwa Dla can be easily rendered using existing Malay or Tok Pisin orthography. There are very few inconsistencies in native speakers' spelling of Menggwa Dla words. In this thesis, I follow the orthographic practise of my language teachers, except that: a) /wa/ [o̯a] is consistently rendered as *<wa>* (some people write word-medial /wa/ [o̯a] as *<oa>*; §2.1.3.6); and b) word medial /g/ [ᵑg] is rendered as *<ŋg>* ([ŋg] is rendered *<ngg>* in Malay orthography, but *<ng>* in Tok Pisin orthography; §2.1.3.2). In addition, a lot of younger people have merged /ʊ/ with /u/, and hence /ʊ/ in older speakers' speech (e.g. *yo* /jʊ/ [jʊ] 'I/ we') is usually spelt as *<u>* by younger speakers (e.g. *yu* /ju/ [ju] 'I/ we'; §2.1.3.7). The graphs used in this thesis and the corresponding phonemes in Menggwa Dla are as follow: /p t k/ *<p t k>*, /b d g/ *<b/mb d g/ng>*, /ɸ s x/ *<f s h>*, /m n/ *<m n>*, /l r/ *<l r>*, /j w/ *<y w>*, and /i e a ʊ u/ *<i e a o u>*. See §2.1 for more information.

As for Dla proper, a SIL (Summer Institute of Linguistics) Alphabet Workshop was held in May 1997 to devise a draft-orthography of Dla proper as spoken in Kamberatoro. The workshop resulted in two manuscripts: *Fafo Nomunda* [Our Language] (SIL 1997a), a book introducing the draft orthography, and *Dla ninda da fafo* [Dla people's stories] (SIL 1997b), a story book written in the draft orthography. In 1992, *Nɨmonɨndalyambo Wando Mafwa Tɨplamo* [The beginning of all things] (BTA 1992), a Dla proper translation of the creation story in the Book of Genesis in the Bible, was published by Bible Translation Association, an organisation related to the Papua New Guinea branch of SIL. The orthography used in BTA (1992) is the same as that in SIL (1997a,b). The graphs used in the SIL orthography and the corresponding phonemes in Dla proper are as follow: / p t k/ *<p t k>*, /b d g/ *<b/mb d/nd g/ng>*, /ɸ x/ *<f h>*, /m n/ *<m n>*, /l/ (lateral flap) *<l>*, /j w/ *<y w>*, /i e a o u/ *<i e a o u>*, and *<ɨ>* represents what I analyse as the epenthetic vowel. Nevertheless, speakers of Dla proper are unsatisfied towards the SIL orthography mainly because of the use of *<ɨ>* 'barred i', which is not found in Malay, Tok Pisin and English orthography.

Written correspondence between Dla people are mainly done in Malay and/ or Tok Pisin. Most Dla people enjoy writing one or two sentences in Dla as a sign of solidarity with the addressee. However, most Dla people do not feel the need to read and write extensively in their native language as they, and everyone they know, have competence in Malay and/ or Tok Pisin. When prompted with the question of why they do not use Dla for written correspondence, most people give responses like

'I know how to write in my language, but it is quicker to write in Malay/ Tok Pisin'.

Most Dla people do not sense the endangerment of their language.

1.4   Languages in North-Central New Guinea

1.4.1   *Lingue Franche*: Malay and Tok Pisin

The vast majority of Dla people are fluent in Malay and/ or Tok Pisin. Out of the two trade languages, Malay had more influence on Dla. This could be attributed to the fact that in the colonial days, Dutch administrators in West New Guinea, who used Malay as a *lingua francha*, paid much attention to the development of the border area, whereas the Australian administrators in East New Guinea neglected the border area until 1960s (for the colonial history of Dla territory see §1.2.3). Languages on the Papua New Guinean side of the border all have at least some Malay loanwords, even for languages spoken comparatively far away from the border, e.g. Imonda (Seiler 1985). Contrastively, Tok Pisin has not made any inroads into West Papua.

Malay is an Austronesian language originally spoken by the Malay people in Sumatra. Through migration and trade, the Malay language is now spoken as a native or non-native language by people all across insular Southeast Asia south of Mindanao and in Malay peninsula. Different forms of the Malay language are spoken natively in areas from New Guinea in the east to Sumatra and Cocos Islands in the west (there is also a Malay Creole spoken further west in Sri Lanka). There are two standardised forms of Malay: *Bahasa Melayu* (BM) and *Bahasa Indonesia*

(BI). BM is the national language of Malaysia, Brunei and Singapore;[19] BI is the

national language of Indonesia. The two standard varieties of Malay are mutually

intelligible.

The form of Malay language with which Dla people have the most contact

with is *Melayu Papua* Papuan Malay (PM) (e.g. Silzer, 1979; Roosman, 1982;

Burung 2005), the form of Papuan Malay spoken by New Guineans (around the

Jayapura area in particular). Papuan Malay loan words were borrowed into the Dla

language together with new things and ideas which were brought into Dla society by

the Dutch missionaries in 1950s. Most Malay loanwords in Menggwa Dla came

through Dla proper. One evidence is that Papuan Malay words with /s/ [s] and /r/ [r]

are rendered as /t/ [t] and /l/ [l] respectively in Menggwa Dla; this is the case

because Menggwa Dla borrowed these Papuan Malay words through Dla proper

which lacks /s/ [s] and /r/ [r] (§1.4.2), and /s/ [s] and /r/ [r] in Malay are rendered as

/t/ [t] and /l/ [l] respectively in Dla proper. An example of this is *bras* 'uncooked

rice' in Papuan Malay versus *blat* 'rice' in Dla proper and *blati* 'rice' in Menggwa

Dla. The following is a list of some Malay loan words in Menggwa Dla. 'Malay'

below refers to words which are common to PM, BM and BI; other varieties of

Malay have not been consulted. Some of these 'Malay' words exist in all varieties

of Malay but may be in common use only in certain varieties. In Malay orthography,

e is [ə] or [e], *ng* is [ŋ] and *ngg* is [ŋg].[20]

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[19] Singapore has four official languages: English, Malay, Chinese and Tamil. Nonetheless, Singapore has only one national language: Malay. For instance, the national anthem *Majulah Singapura* is only in Malay.

[20] There is also the word *aya* 'one's own father' (versus *afila* 'someone else's father') in Menggwa Dla which may or may not be a Malay loanword (*ayah* 'father' in Malay). Forms similar to *aya* are found throughout the Border region (Baron 1983: 39). In the languages surveyed by Baron, the form *ay(X)* for 'father' is found in Skou of the Macro-Skou family on the coast, most languages of the Border and Kwomtari families, some dialects of One and Olo languages of Torricelli family to the east, the two Senagi languages (Dla and Anggor), all documented isolates nearby (Karkar-Yuri, Busa, Yalë

Table 1.5   Some Malay loanwords in Menggwa Dla

lapaŋgani 'airstrip'   Malay: *lapangan* 'field'; *lapangan terbang* 'airport'

kapali 'aircraft'   Malay: *kapal* 'ship' < Tamil கப்பல் *kappal* 'ship'

oto 'car'   PM: *oto* 'car' < Dutch *auto* [ɔːto] 'car'

                                (BI: *mobil* 'car'; BM *kereta* 'car')

toko 'shop'   PM, BI: *toko* 'shop' (BM: *kedai* 'shop')

bli 'buy'   Malay: *beli* 'buy'

glu 'teacher'   Malay: *guru* 'teacher' < Sanskrit: गुरु *guru* 'teacher'[21]

tuhala 'school'   PM: *skoula*/ BM,BI: *sekolah* 'school'

                                < Portuguese: *escola* [iʃˈkɔlɐ] 'school'

twaŋgi 'European'   Malay: *tuan* 'mister'

galamu 'salt'   Malay: *garam* 'salt'

katpi 'cassava'   PM: *kasbi* 'cassava' (BI: *kaspe* 'cassava')

blati 'rice'   PM: *bras* 'rice' (BI, BM: *beras* [bəras] 'uncooked rice')

pitu 'knife'   PM: *pisu* 'knife' (BI, BM: *pisau* 'knife')

palaŋgi 'machete'   Malay: *parang* 'machete'

galiti '(fire) match'   PM: *geret* 'match'(BI: *geret* 'scratch', *geretan* 'match')

ayamu 'chicken'   Malay: *ayam* 'chicken'

wanu 'money'   Malay: *wang* 'money' (BM: *wang*, BI: *uang*)

tirati 'letter'   Malay: *surat* 'letter'

titili 'comb'   Malay: *sisir* 'comb'

tumbaiŋgi 'Mass'   Malay: *sembahyang* 'worship/ pray'

(Nagatman)), Abau in upper Sepik, some dialects of Namie in Yellow River, and Amto of the Amto-Musian family. To the west of Dla, the word for 'father' in Yafi of Pauwasi family is *ap* (Voorhoeve 1971: 101-103). See map 1.6 in §1.4.4 for the locations of these languages.
[21] There are many meanings of *guru* in Sanskrit and Pali, some of which include 'father' and 'spiritual guide'.

ufati 'medicine'   PM: *ubat* 'medicine' (BM: *ubat*, BI: *obat*)

saftu 'Saturday'   Malay: *Sabtu* 'Saturday' < Arabic: السبت *as sabt*

miŋgu 'Sunday'/ 'week'   PM, BI: *Minggu* 'Sunday'/ 'week'

                     < Portuguese: *domingo* [duˈmiŋgu] 'Sunday'

(BM: *minggu* 'week', *ahad* 'Sunday' < Arabic الأحد *al ʔaħad*)[22]

These early Papuan Malay loan words in Menggwa Dla (and their equivalents in Dla Proper) are phonologically totally nativised. Even younger Dla people born in the 70s or later in Papua New Guinea with no knowledge of Papuan Malay/ Bahasa Indonesia use these words when speaking Dla.

There are also newer Bahasa Indonesia loanwords into Dla, but their usage are usually restricted to people who have undergone Indonesian education (which include Dla young people from both sides of the border). These newer words are not nativised phonologically. Some examples of these newer words are *es em a* 'senior high school' (*SMA sekolah menegah atas* 'upper middle school'), *vetsin* 'monosodium glutamate' (< Shanghainese brand name 味精), *korupsi* 'corruption' (< Dutch: *corruptie*). Some of these newer Bahasa Indonesia words break Menggwa Dla phonological rules, like having *s* morpheme-medially and having word-final consonant (e.g. *vetsin*).

Papua New Guinea has three official languages: Tok Pisin, Hiri Motu and English. Tok Pisin is an English-lexifier creole spoken natively by many Papua New Guineans. Tok Pisin was originally only used in the northern part of Papua

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[22] In Menggwa Dla, the other days of the week from Monday to Friday are named after the names of the fingers from the little finger to the thumb; see §4.4.

New Guinea, i.e. the ex-Trust Territory of New Guinea. Nowadays, Tok Pisin is

spoken all throughout northern Papua New Guinea, and spreading rapidly in

southern Papua New Guinea, in the expense of Hiri Motu, a creole lexified from

Motu proper (Motu proper is the indigenous Austronesian language spoken in the

Port Moresby area). Hiri Motu was spread around the ex-Australian territory of

Papua by policemen in ex-Australian Papua who were trained in Port Moresby. Hiri

Motu is currently mainly spoken in Southern Highlands, Gulf, Central and Oro

Provinces in southern Papua New Guinea.

Tok Pisin started its life as an English-lexifier pidgin which is closely related

to Pijin of the Solomon's, Bislama of Vanuatu, Yumpla Tok of the Torres Strait and

various cane-field pidgins historically used in Queensland and Samoa. Tok Pisin

and English were first institutionally taught to Dla people by Australian

administrators who took over the Kamberatoro area in 1963. Since then, through

education and religion, Tok Pisin has dominated lives of Dla people east of the

141°E border. Most Dla people west of the border in West Papua have also been in

Papua New Guinea during the turbulent years of 1970s and 80s, and all of them

have acquired some Tok Pisin. Some of these Dla people from West Papua stayed

in Papua New Guinea, and some went back to West Papua.

In comparison with the earlier Papuan Malay loanwords, there are

comparatively fewer Tok Pisin/ English loan words in Dla. Tok Pisin/ English

loanwords are not as phonologically-nativised as the earlier Papuan Malay

loanwords, but they tend to be a bit more nativised than the newer Bahasa Indonesia

loanwords. Take the example of the Tok Pisin loanword *nesi* 'nurse' (< Tok Pisin:

nes 'nurse'). Menggwa Dla basically prohibits words ending in a consonant (see §2.2.3 for the very rare exceptions), and hence the loanword *nesi* has a vowel inserted at the end of the word. Nevertheless, in native words [s] does not occur morpheme-medially (§2.1.3.4), and no alteration to the *s* consonant in the loanword *nesi* has been made to accommodate this fact. Some other examples of Tok Pisin/ English loanwords are *patulu* 'priest' (< Tok Pisin: *pater* 'priest' < Latin: *pater* 'father'), *ti bi si* 'TBC' ('Traditional Border Crossing/ Crosser'), *tamako* 'axe' (< Tok Pisin: *tamiok* 'axe'), and *moni* 'money' (< Tok Pisin: *moni*/ *mani* 'money').[23]

1.4.2   Dla: Menggwa Dla versus Dla Proper

The two dialects of Dla are mutually-intelligible, albeit Menggwa Dla is not immediately intelligible to unaccustomed Dla proper speakers living further away from the Menggwa Dla villages.[24] Menggwa Dla speakers and Dla Proper speakers nearby are well aware of the differences between the two dialects. However, they do not have names to distinguish the two dialects except using names of the villages where the dialects are spoken, e.g. *Meŋgau-Wahai Fafo* 'Menggau-Wahai Language', *Kamberatoro Fafo* 'Kamberatoro Language'. Dla proper and Menggwa Dla people have a concept that 'they belong to the same tribe, but are different nonetheless'. Menggwa Dla people sometimes consider themselves Dla and claim that they speak Dla. However, at other times they do not consider themselves Dla, and refer to Dla proper language and its speakers using the term 'Dla'. Menggwa Dla people do not have an autonym which refers specifically to Menggwa Dla and its speakers. I have

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[23] There are also the native word *yama* '(shell) money' and the Malay loanword *wanu* 'money' in Menggwa Dla.

[24] Subjectively speaking, the level of mutual intelligibility between Menggwa Dla and Dla Proper is like that between Standard English and Northern English dialects.

chosen the term 'Menggwa Dla' to refer to this dialect of the Dla language: 'Menggwa' is a contraction of the names of the villages where this minority dialect is spoken: **Mengg**au, **Wa**hai (no.1 and no.2), **Wa**nggurinda and **Menggwa**l. Some Menggwa Dla people have also adopted the name 'Menggwa Dla' when referring to their language. None of the Menggwa Dla people whom I have consulted have heard of the term 'Doeka-Ékor' which Galis (1956) uses to refer to what I call Menggwa Dla.

There are apparently no syntactic differences between Menggwa Dla and Dla proper. Grammatical morphemes differ in their phonological shapes in some cases, e.g. the present tense suffix /-bi/ [ᵐbi] in Menggwa Dla (§6.1.1) versus /-bl/ [ᵐbɭə] in Dla proper, but their semantics seem to be the same (more research is needed). The major differences between Menggwa Dla and Dla proper are phonological and lexical.

Menggwa Dla has two more consonant phonemes than Dla proper; the phonemes of /t/, /s/ and /r/ in Menggwa Dla all correspond with /t/ in Dla proper,[25] except that word initial /r/ in Menggwa Dla corresponds with /j/ in Dla proper. In this instance, Menggwa Dla is more conservative; the consonants in Menggwa Dla correspond more closely to Anggor than Dla proper (§1.4.3). The following are some examples of correspondence between /t/, /s/ and /r/ in Menggwa Dla and /t/ in Dla proper.

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[25] Lihen, the eastern most Dla proper-speaking village, has /s/ instead of /t/. Further east of Lihen is the Anggor territory; Anggor has both /s/ and /t/ (§1.4.3).

Table 1.6   Word-medial /r/, /s/, /t/ in Menggwa Dla versus word-medial /t/ in
            Dla proper

	Menggwa Dla			Dla proper			
/r/: /t/	*bara*	/bara/	[bara]	*bata*	/bata/	[bata]	'run'
/r/: /t/	*yari*	/jari/	[jari]	*yat*	/jat/	[jatə]	'sago jelly'
/s, r/: /t, t/	*seru*	/seru/	[seru]	*tat*	/tat/	[tatə]	'eat'
/s/: /t/	*simbu*	/sibu/	[siᵐbu]	*timbu*	/tibu/	[tiᵐbu]	'morning'
/s/: /t/	*sini*	/sini/	[sini]	*tunu*	/tunu/	[tunu]	'sky'
/s/: /t/	*suŋgwani*	/sugwani/	[suⁿg̥ạni]	*tuŋgwan*	/tugwan/	[tuⁿg̥anə]	'sick'
/t/: /t/	*tikyawi*	/tikjawi/	[tikjawi]	*tkawai*	/tkawai/	[təkawɐi]	'small'
/t/: /t/	*tite*	/tite/	[tite]	*tite*	/tite/	[tite]	'bad'

The following are examples of word-initial /r/ (§2.1.3.5) in Menggwa Dla
and the cognates in Dla proper with word-initial /j/.

Table 1.7   Word-initial /r/ in Menggwa Dla versus word-initial /j/ in Dla proper

	Menggwa Dla			Dla proper			
/r/: /j/	*ruhwa*	/ruxwa/	[ruɣoạ]	*yuhwa*	/juxwa/	[juɣoạ]	'down below'
/r/: /j/	*rani*	/rani/	[rani]	*yan*	/jan/	[janə]	discourse demonstrative (§3.2.4)

Word-medial /d/ [ⁿd] in Dla proper corresponds with /l/ in Menggwa Dla. In
this instance, Dla proper is more conservative; /d/ occurs in both morpheme-initial
and morpheme-medial in both Dla proper and Anggor (§1.4.3), whereas /d/ only
occurs morpheme-initial in Menggwa Dla.

Table 1.8   Word-medial /l/ in Menggwa Dla versus word-medial /d/ in Dla

proper

	Menggwa Dla			Dla proper			
/l/: /d/	*sela*	/sela/	[sela]	*tenda*	/teda/	[te^{n}da]	'tail'
/l/: /d/	*gumla*	/gumla/	[gumla]	*gumnda*	/gumda/	[gum^{n}da]	'roof'
/l/: /d/	*wamla*	/wamla/	[o̞amla]	*wamnda*	/wamda/	[o̞am^{n}da]	'betel nut'
/l/: /d/	*barala*	/barala/	[barala]	*batandei*	/batadei/	[bata^{n}dei]	'index finger'
/l/: /d/	*hyemla*	/xjemla/	[xjemla]	*hyemnda*	/xjemda/	[xjem^{n}da]	'bone'
/l/: /d/	*humulu*	/xumulu/	[xumulu]	*humundu*	/xumudu/	[xumu^{n}du]	'sternum'

Both Dla proper and Anggor have a non-phonemic epenthetic vowel. In Dla proper, the epenthetic vowel is realised as a high central vowel [ɨ] in Amgotro in the west and a central vowel [ə] in Kamberatoro in the east. In Anggor, the epenthetic vowel is realised as [ə] (which is different from the high central vowel phoneme /ɨ/ in Anggor). The epenthetic vowel in Dla proper is sometimes optional (e.g. after word final nasals), but when an epenthetic vowel is compulsory (to break up prohibited consonant clusters or after word final consonants with low sonority), the same position is usually filled by /i/, or sometimes /u/ in Menggwa Dla. For instance:

Table 1.9   Word-medial /i/, /u/ in Menggwa Dla versus word-medial Ø in Dla proper

	Menggwa Dla			Dla proper			
/i/: /Ø/	*gihali*	/giхali/	[giɣali]	*ghaⅼ*	/gхaⅼ/	[gəɣaⅼə]	'hungry'
/u/: /Ø/	*hufu*	/xuɸu/	[xuβu]	*hfu*	/xɸu/	[xəɸu]	'sun'
/i/: /Ø/	*imbali*	/ibali/	[ʔiᵐbali]	*imbaⅼ*	/ibaⅼ/	[ʔiᵐbaⅼə]	'thorn'
/i/: /Ø/	*nimi*	/nimi/	[nimi]	*nmai*	/nmai/	[nəmɐi]	'stone'
/i/: /Ø/	*bani*	/bani/	[bani]	*ban*	/ban/	[banə]	'sago'
/i/: /Ø/	*yari*	/jari/	[jari]	*yat*	/jat/	[jatə]	'sago jelly'
/i/: /Ø/	*kwaŋgi*	/kwagi/	[ko̯aŋgi]	*kwaŋg*	/kwag/	[ko̯aŋgə]	'cassowary'

Word-finally, /ai/ in Dla proper corresponds with /i/ in Menggwa Dla (except *hai* /xai/ [xai] 'fire' in both Dla proper and Menggwa Dla), e.g.:

Table 1.10   Word-final /i/ in Menggwa Dla versus word-final /ai/ in Dla proper

	Menggwa Dla			Dla proper			
/i/: /ai/	*nimi*	/nimi/	[nimi]	*nmai*	/nmai/	[nəmɐi]	'stone'
/i/: /ai/	*wi*	/wi/	[wi]	*wai*	/wai/	[wɐi]	'child'
/i/: /ai/	*tikyawi*	/tikjawi/	[tikjawi]	*tkawai*	/tkawai/	[təkawɐi]	'small'

Based on Voorhoeve's seventy-item word list (1971: 99-109), *Amgotro* [Dla Proper] and *Monggowar* [Menggwa Dla] share a 75% cognate rate. Comparing the Kamberatoro Dla proper word list in SIL (1997a) (which I have rechecked with people in Kamberatoro) and my own Menggwa Dla data, there are 85 cognates out of a list of 108 items (cognate rate: 79%). There are slight differences in vocabulary

in all semantic fields including 'basic' semantic fields like numerals (e.g. *imbumamu* 'three' and *laria* 'six' in Menggwa Dla versus *gumu* 'three' and *yati* 'six' in Dla Proper) and body parts (e.g. *damulu* 'nose' in Menggwa Dla versus *gutufu* 'nose' in Dla Proper). The following is a table of selected items showing various forms which are not cognates or words which do not follow the usual sound correspondence rules between Menggwa Dla and Dla proper. Data in the columns titled 'Monggowar (Galis 1956)' and 'Amgotro (Voor. 1971)' are from Galis (1956) and Voorhoeve (1971) respectively; the rest of the data are collected by me. Data presented here are phonetic rather than phonological unless indicated otherwise.

Table 1.11   Some non-cognates and words with irregular sound correspondence
             between Menggwa Dla and Dla proper

	Menggwa Dla		Dla proper		
	Monggowar (Galis 1956)	Menggwal/ Wanggurinda	Amgotro (Voor. 1971)	Amgotro/ Mamamora	Kamberatoro/ Akamari
'big'	buka	buko̜a	eɣandu/ wanara	eɣɨndɨ	ho̜anda
'bird'	tu	tu	du	du	du
'cloud'	jobeli	jaɸlij (/jaɸlei/)	namba	abunu	aɸnu
'dry'	sepale	japala	naɣamnda	namba.la	hwana.la
'fish'	spola	iplo̜a	daβona	daɸna	daɸno̜a
'head'	bapale	babli	boa	A: bo.la/ M: b.loa	bu.lo̜a
'name'	dia	dja	—	d(ɨ).la	d(ə).la
'nose'	damor	damlu	gutubu	gutuɸ	gutuɸu
'sand'	gətia	xutnja	gərəɣə	gɨ.lɨhɨ	gə.ləhə
'skin'	kiaba	xjela	kuera	hwɨ.la	hwe.la
'white'	goŋgwa	xuŋgo̜a	ore	ole	u.li

Lastly, concerning the autonym 'Dla'. The Dla tribe is known by the governments of Indonesia and Papua New Guinea as 'Dera'. The word 'Dera' is a Malay rendition of the Dla Proper word *dla* [dəˌla] 'name'; [ə] is an unstressed epenthetic vowel, and the *<e>* in 'Dera' represents a schwa in Malay orthography (*<e>* represents [ə] in unstressed syllables). In Malay, *Dera* is pronounced [dəˈla]. These days Dla people may also call themselves 'Dera' [ˈdɛɹa] with an anglicised pronunciation following the practise of English-speaking Papua New Guinea officials. Some Dla people call their language *Awe* after the word for 'no' in the language (§3.2.9). It is a common in New Guinean (and also some Australian Aboriginal) societies to name a language after the word for 'no' in that language. Dla people call the language of the neighbouring Amanab people *Awai* based on the same principle: *awai* is 'no' in Amanab language.

1.4.3   Senagi language family: Dla versus Anggor

Dla has one sister language: Anggor. Together Dla and Anggor form the Senagi language family. The Senagi language family is named after the Anggor-speaking village of Senagi; Anggor was referred to as the 'Senagi language' in older Australian government records (similarly, Dla was referred to as the 'Kamberatoro language'; Loving & Bass 1964). Würm (1975) and Voorhoeve (1975) consider the Senagi language family as part of their Trans New Guinea phylum. Ross (2005) tentatively considers Senagi and all surrounding families (except Pauwasi to the west) as not part of the Trans New Guinea family. I currently see no strong evidence of genealogical relationships linking the Senagi family with other language families (see also §1.4.4).

R. Litteral (1980) is an account of discourse features in Anggor; it also includes a small chapter on the phonology and morphosyntax of the language. Other published works on Anggor include R. Litteral (1972, 1981) and S. Litteral (1972, 1981). Anggor is analysed as having the following eighteen consonant phonemes: *p, t, k, b, d, g, mb, nd, ngg* /ŋg/, *f* /ɸ/, *s, h* /x/, *m, n, ng* /ŋ/, *r, w, y* /j/, and the following seven vowel phonemes: *i, e, a, o, u, ü* /ɨ/, *ɨ* /ə/ (R. Litteral 1980: 41-42). More investigation is needed to work out the sound correspondences between Anggor and Dla comprehensively. Nevertheless, the following are some preliminary observations of the phonological features in Anggor in relation to features which differ between Menggwa Dla and Dla proper:

- /ɨ/ in Anggor usually corresponds with the epenthetic vowel in Dla proper (e.g. Anggor: *mbanɨ* [mbanə] 'sago', Dla proper: *ban* [banə] 'sago', Menggwa Dla *bani* [bani] 'sago'). The /ɨ/ vowel in Anggor is probably an epenthetic vowel; other than being very frequent, it is also deleted when followed by a suffix which begins with a vowel. For instance, compare the following two examples (R. Litteral 1980: 152):

1-1.	*nggoafɨ-nɨpeodɨ*	*kus-u*	1-2.	*nggoaf-ambe*	*nɨmar-u*
	village-from	come.down-3MSG		village-in	sit-3MSG
	'he came down from the village'			'he sat down in the village'	

- Anggor has one liquid phoneme like Dla proper, but unlike Menggwa Dla which has two. The phoneme /r/ also seems to be quite rare word-initially in Anggor; /r/ in word initial position in Anggor sometimes corresponds with /r/ in Menggwa Dla, and sometimes /j/ in Menggwa Dla:

Table 1.12   Word-initial /r/in Anggor versus word-initial /r/, /j/ in Menggwa Dla versus word-initial /j/ in Dla proper

Anggor			Menggwa Dla			Dla proper			
ra	/ra/	[ra]	*rani*	/rani/	[rani]	*yan*	/jan/	[janə]	'that'
ro	/ro/	[ro]	*yo*	/jʊ/	[jʊ]	*yo*	/jo/	[jo]	'I'/ 'we'

- However, word-medial /r/ in Anggor corresponds with /l/ in Menggwa Dla and /l/ in Dla proper; word-medial /s/ in Anggor corresponds with word-medial /r/ in Menggwa Dla and /t/ in Dla proper.[26]

Table 1.13   Word-medial /r/, /s/ in Anggor versus word-medial /l/, /r/ in Menggwa Dla versu /l/, /t/ in Dla proper, respectively

Anggor			Menggwa Dla			Dla proper			
yasɨ	/jas/	[jasə]	*yari*	/jari/	[jari]	*yat*	/jat/	[jatə]	'sago jelly'
sesɨ	/ses/	[sesə]	*seru*	/seru/	[seru]	*tat*	/tat/	[tatə]	'eat'
worɨ	/wor/	[worə]	*wuli*	/wuli/	[wuli]	*olo*	/o.lo/	[o.lo]	'house'
warɨ	/war/	[warə]	*wala*	/wala/	[o̯ala]	*wala*	/wa.la/	[o̯a.la]	'hand'

Both Dla and Anggor are predominantly agglutinative and suffixal, although both have some prefixes and discontinuous morphemes. Both languages lack valence changing morphemes. Both languages are predominantly verb final, heavily clause-chaining, and verb-serialising to a smaller extent. The following are examples of serial verb constructions in Anggor and Menggwa Dla.

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[26] I follow the orthographical forms of Anggor as used in R. Litteral (1980); the phonological forms of Anggor are my own interpretation.

Anggor (R. Litteral 1980:60):

1-3. <u>waki</u>-*m-a-rɨ-Ø-rɨ*-<u>mind</u>-*o.*

bear-PAST-IND-TRNS-3FSG-3MSG:O-hold-3FSG

'She bore him.'

Menggwa Dla:

1-4. <u>hwama</u>-*i-Ø*   <u>fa</u>-*i-Ø-hi,*

hang-3MSG-3MSG:O leave-3MSG-3MSG:O-SIM

'While he hang and left him there…' (A)

Most of the nominal clitics (case clitics, focus clitics and topic clitics; §4.5) in Anggor and Dla are clearly cognates. The following is an example of the topic clitics in Anggor and Menggwa Dla (R. Litteral (1980) calls *ana* in Anggor a 'conditional' suffix).

Anggor (R. Litteral 1980:90)

1-5. *Ausɨtɨrariy-ana hifɨ   afɨndɨ saf-an-e.*

Australia-COND ground much very-STAT-3FSG

'Australia is a very large land.'

Menggwa Dla

1-6. *Ostrelia=na   mayana n-o.*

Australia=TOP far   COP:PRES-3FSG

'Australia is far away.'

The following is an example of the object clitics in Anggor and Menggwa
Dla (R. Litteral (1980) calls *mbo* in Anggor a 'prominent' suffix). In ditransitive
clauses, the recipient receives the *mbo* case and the theme is left unmarked in both
Anggor and Dla. (However, all three grammatical relations are cross-referenced in
Anggor, but only the agent and the recipient are cross-referenced in Dla.)

Anggor (R. Litteral 1980: 105):

1-7.   wetao-mbo   sesɨ   sa-ba-pu-du.

     Wetao-PROM food give-2SG-3PL:O-3SG:IO

     'give all the food to Wetao.' [-*pu* (3PL:O) = theme; -*du* (3SG:IO) = recipient]

Menggwa Dla:

1-8.   Wauni=mbo seru   sa-mba-u-Ø.

     Wauni=OBJ   food give-2SG-3SG:O-IMP

     'Give all the food to Wauni.' [-*u* (3SG:O) = recipient]

A lot of semantic case markers are also similar. The following is an example
of the allative case =*na(mbo)* in Menggwa Dla and its cognate -*na(-mbo)* in Anggor.

Anggor (R. Litteral 1980: 114):

1-9.   … nggoafɨ-na-mbo   a-h-efɨ.

      villagle-to-PROM IND-go-1PL

   '… we go to the village.'

Menggwa Dla:

1-10.   *gwafu=nambo pi-efa-hi.*

   village=ALL   go-1PL-PRES:CONT

   'We go to the village.'

The complex sets of verbal and pronominal cross-reference suffixes in

Anggor are similar to those in Dla. Not only are the forms very similar (slightly less

so for the object cross-reference suffixes), the person-number-gender combinations

marked by the cross-reference suffixes are also identical in nearly every single set of

cross-reference suffixes (see appendix A in Litteral 1980 for tables of pronouns and

verbal cross-reference suffixes in Anggor). Both Dla and Anggor have a very small

set of verbs where the formation of future tense involves verb stem alteration (see

§5.1.2):

Anggor (R. Litteral 1980: 70-71):

1-11.   <u>*ses*</u>-*ü.*   1-12.   <u>*ded*</u>-*ü.*

   eat-3MSG 'he ate'   eat:FUT-3MSG 'he will eat'

Menggwa Dla:

1-13.   <u>*ser*</u>-*u-hwa.*   1-14.   <u>*det*</u>-*ya-ah-u-mb-i.*

   eat-3MSG-PAST   eat:FUT-3SG-3-3MSG-SMR:POS-3MSG

   'he ate'   'he will eat'

As seen in the examples above, the major difference between Dla and

Anggor is the marking of tense-aspect-mood-status. Another major difference

between Dla and Anggor are their switch-reference systems (§7.2). In Anggor, past tense indicative mood is indicated by a past tense affix *m* followed by an indicative affix *a/ e/ ay/ ey* (the use of these affixes is not obligatory, as shown in examples 1-11 and 1-12 above). These affixes are either prefixed or suffixed to the verb stem, depending on the class membership of the verb. These *mV* markers in Anggor are cognates with the disjoint-referential (DR) affixes in Menggwa Dla (§7.2); in Menggwa Dla the DR affixes indicate that the subject of its own clause is disjoint-referential ('different person') with the subject of a clause following in the clause chain. The DR affixes in Menggwa Dla come in the phonological shapes of *ma* or *me*; whether they are prefixed or suffixed to the verb stem depends on the class membership of the verb. As far as I know, the prefixal or suffixal position of these *mV* affixes in Anggor and Dla matches in most instances. The following are some examples of the *mV* affixes in Anggor and Menggwa Dla.

Anggor (R. Litteral 1980:54-55):

1-15. **m-a-***sün-u.*

PAST-IND-come.down-3MSG

'He came down.' (*sünɨmbo* 'come down' class II)

1-16. *aranɨ-**m-ey-***u.*

cry-PAST-IND-3MSG

'He cried.' (*aranɨmbo* 'cry' class III)

Menggwa Dla:

1-17. **ma**-*han-u-mbo,*   *alani-Ø-hwa.*

DR-come.down-3MSG-DEP   cry-3MSG-PAST

'He ᵢ came down and he ₖ cried.' (*hanu* 'come down' class IH)

1-18. *alani-**me**-Ø-mbo,*   *han-u-hwa.*

cry-DR-3MSG-DEP   come.down-3MSG-PAST

'He ᵢ cried, and he ₖ came down.' (*alani* 'cry' class I)

Anggor (R. Litteral 1980:54-55):

1-19. *hoe-**m-a**-rɨ-heya-purɨ.*

see-PAST-IND-TRANS-1SG-N1MPL:O

'I saw them (masculine).' (*hoembo* 'see' class V)

1-20. **m-a**-*sa-ga-do.*

PAST-IND-give-3SG-3SG:O

'S/he gave it to him/her.' (*sembo* 'give' class X)

Menggwa Dla:

1-21. *homba-**ma**-hi-ma-mbo,*   *sa-ka-wa-hwa.*

see-DR-1SG-N1MPL:O-DEP   give-3SG-3SG:D-PAST

'I saw them, and s/he gave it to him/her.' (*homba* 'see' class II)

1-22. **ma**-*sa-ka-wa-mbo,*   *homba-hi-ma-hwa.*

DR-give-3SG-3SG:O-DEP   see-1SG-N1MPL:O-PAST

'S/he gave it to him/her, and I saw them.' (*sefi* 'give' class III)

(In contrast, the coreferential (CR) affix in Menggwa Dla is zero (§7.2); the cross-reference suffixes also change from subset A to subset B (see §5.2), e.g. compare the DR chain verb *ma-sa-ka-wa-mbo* in example 1-22 above with the CR chain verb *Ø-sa-ka-u-mbo* in example 1-23 below:

1-23. **Ø**-*sa-ka-u-mbo,*   *homba-i-ma-hwa.*

CR-give-3SG-3SG:O-DEP   see-N1SG-N1MPL:O-PAST

'S/he $_j$ gave it to him/her $_k$, and s/he $_j$ saw them.' (*sefi* 'give' class III))

Dla has a different set of tense-aspect-mood markers, some of which are obviously grammaticalised from the case markers (§4.5; §6). For instance, present tense continuous aspect *-hi* (§6.1.1) is grammaticalised from the adessive case clitic =*hi* (§4.5.3).

Menggwa Dla:

1-24. *numu*=*hi num-u-hi.*

tree=ADS sit-3MSG-PRES:CONT

'He is sitting at the tree.' (*numu* (*num-*) 'cry' class I)

Anggor has a switch-reference system utilising a combination of morphemes already available in the language. The switch-reference markers in Anggor are

portmanteau with morphemes of interclausal simultaneity (SIM) versus sequentiality (SEQ).

coreferential, simultaneous (-*ühɨ*; R. Litteral 1980: 277):

1-25.　…　ro　herɨ-nd-ef-**ühɨ**

　　　　1　dance-FUT-1PL-**SIM**

sɨhambo　hohoanɨmo-nd-embo-i-efɨ.

you　　　think-FUT-PROM-IND-1PL

'… While we are dancing we will be thinking about you.'

coreferential, sequential (-*a m-ay-o-a*; R. Litteral 1980: 277):

1-26.　…　ho-rɨ-heya-nd-**a**　　　　　**m-ay-o-a**

　　　　see-TRAN-1SG-3FSG:O-and PAST-IND-3FSG-and

m-a-hepin-ahɨ.

PAST-IND-amaze-1SG

'… I saw these things for a while and then I was amazed.'

disjoint-referential, simultaneous (-*an-e*; R. Litteral 1980:279):

1-27.　…　nɨmboad-ef-**an-e**

　　　　stand-1PL-**STAT-3FSG**

mamɨ　dokta　ai　sɨf-u …

change　doctor　he　come.up-3MSG

'… while we were standing there the doctor came up …'

The disjoint-referential sequential (DR:SEQ) markers also carry subject anticipatory markers ('interclausal cross-referencing': cross-reference affixes which cross-reference with the subject of the next clause). In some cases there are also object anticipatory markers. In the following example, -amboyo is a disjoint-referential sequential marker; rüri is an auxiliary which carries a subject anticipatory marker -ü (which cross-references with the 3SG subject 'someone' of the next clause) and an object anticipatory marker -ri (which cross-references with the 3MSG object 'pig' of the next clause).

disjoint-referential, sequential (-amboyo; R. Litteral 1980: 276):

1-28. *tüki-m-e-fi-u-a-mbo-y-o*   *r-ü-ri,*

arrive-PAST-IND-CS-3MSG-and-PROM-N:IND-3FSG TRNS-3SG-3MSG:O

ngar-i   safoa-r-i-r-a,

shoot-3SG hit-TRNS-3SG-3MSG:O-and

'He (pig) came up and (someone) shot and hit him [the pig] and…'

1.4.4   Languages in North-Central New Guinea: Senagi's neighbours

North-Central New Guinea is defined in Donohue & Crowther (2005) as the area in New Guinea bounded by the Torricelli Mountains to the east, the Sepik area and the Highlands to the south, and the Lakes Plain area (Taritatu River) and Tor area to the west. The area shown in map 1.14 below corresponds roughly to the North-Central New Guinea area described in Donohue & Crowther (2005). This is the area where a lot of the small Papuan language families and isolates are spoken. The language groups in this region are considered 'small' because the region is surrounded by language families which have much larger geographical spread. The

larger families are Tor-Kwerba family, Lakes-Plain family and Kaure branch of the Trans New Guinea family to the west, the Ok branch and Mek branch of the Trans New Guinea family in the highlands to the south, and languages of the Sepik and Torricelli families to the east.

North-Central New Guinea is the area with the highest level of linguistic diversity within New Guinea, which is itself already highly linguistically-diverse. Not only is there a high level of linguistic diversity in North-Central New Guinea, culturally there is also a lack of homogeny in the region, no large-scale patterns of trade such as in the highlands, and a lack of contact with Austronesian populations. The high level of linguistic diversity in North-Central New Guinea can be attributed to the relative lack of interaction within this region. To the west is the Mamberamo River, and to the south and east is the Sepik River. Extensive trade is conducted along these big navigable rivers. The Highlands to the south is a major valley corridor for migration and the transmission of technology across the east-west backbone of New Guinea. Even the Torricelli Mountains to the east of North-Central New Guinea have major valleys where regular trading is conducted. North-Central New Guinea lacks large navigable rivers and large valleys to encourage sustained interaction between different groups of people (Donohue & Crowther 2005). As a result there are many small language families and isolates which are highly dissimilar to each other in North-Central New Guinea.

Map 1.14   Senagi and neighbouring language families
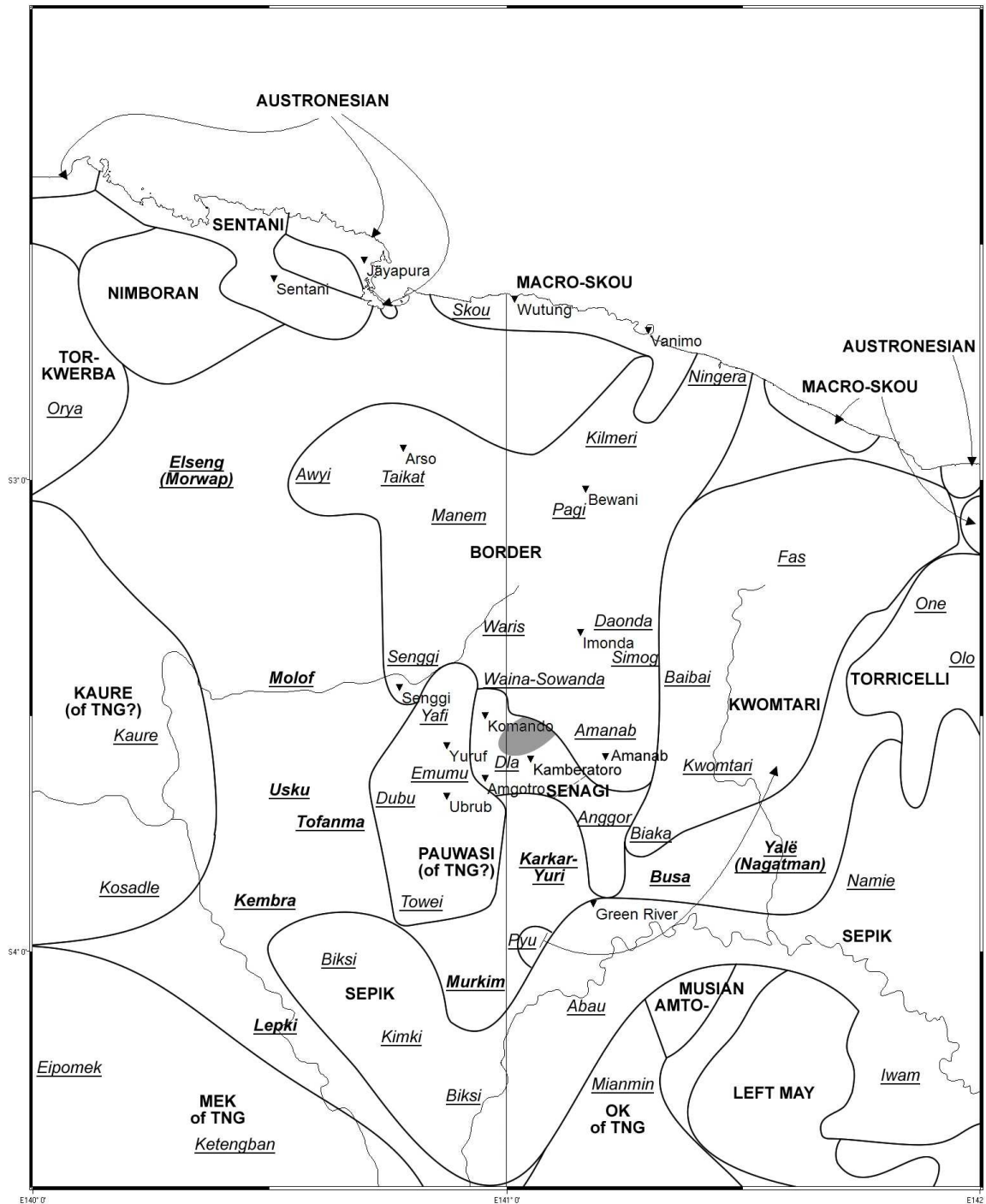
▼ Kamberatoro   Locality

(grey ellipse)   Menggwa Dla territory

Dla   Language

SENAGI   Language family; except **of TNG** = Branch of the Trans New Guinea family

Elseng, Molof, Usku, Tofanma: Isolates? ('sub-phylum level isolates' of TNG phylum in Würm 1975)

Kembra, Lepki, Murkim: Unclassified (Silzer & Clouse 1991; Gordon 2005)

Karkar-Yuri, Busa, Yalë: Isolates

(Compiled from Galis 1956, Loving & Bass 1964, Würm & Hattori 1981, Silzer & Clouse 1991; Gordon 2005, Donohue & Crowther 2005, Ross 2005 and Matthew Dryer p.c.)

Grammatical descriptions of all the languages immediately surrounding Dla and Anggor are available except for the Pauwasi languages to the west. The only data available on the Pauwasi languages is the word list in Galis (1966). There are supposedly four languages belonging to the Pauwasi family: Yafi and Emumu to the west of Dla, and Dubu and Towei to the west of Emumu. For the rest of this subsection, the term 'languages surrounding Dla and Anggor/ Senagi languages' excludes the Pauwasi languages due to lack of data.

One major difference between the Senagi languages and the surrounding languages is that Senagi languages are heavily into clause-chaining whereas the surrounding languages are not, except Karkar-Yuri. All surrounding languages have simple verbal cross-reference systems, typically cross-referencing only with the number of the subject; this contrasts with the Senagi languages which have multiple sets of cross-reference suffixes for both subject and object, marking number, person and sometimes gender features. Comparing with surrounding languages, the Senagi languages have a richer inventory of case markers.

To the north of Dla and Anggor are the languages of the Waris branch of the Border language family. North of Anggor and northeast of Dla is the Amanab language (also known as the Awai language to Dla people), the southern most member of the Border family (e.g. G. Graham 1968, 1980; D. Graham 1969; Minch 1992). Amanab is the language of Amanab Town, the administrative centre of Amanab District of Sandaun Province in Papua New Guinea. To the north of Dla and Amanab is the Waina-Sowanda language. To the north of Waina-Sowanda is Waris (e.g. Brown 1981, 1988). Other languages of the Waris branch include

Manem to the northwest of Waris, Imonda (Seiler 1985), Daonda and Simog to the east of Waris, Senggi to the west of Waina-Sowanda and Punda to the east of Waina-Sowanda.[27] Amanab have five vowels /i e a o u/ and fourteen consonants /p t k b ɡ m n ŋ f s r w j h/ (Minch 1992); Imonda has ten vowels /i e ɛ æ a ɒ ɔ o u ə/ and twelve consonants /p t k b d ɡ m n l f s h/ (Seiler 1985).[28] Both languages mark tense, aspect and mood by suffixes and/ or pre-verbal particles, and verbs only agree with the number of the subject. Dual number of the subject is usually indicated by a prefix to the underived (singular) verb stem, and plural number is most commonly indicated by raising the last vowel of the verb stem (at least for transitive verbs). For instance, in Imonda (Seiler 1985: 82):

Table 1.15   Singular versus plural verb stems in Imonda

singular	plural (derived)	
fe	*fi*	'made, do'
pos	*pus*	'dig out'
la	*læ*	'light fire'
nagla	*naglɛ*	'see'
ɒ	*ɔ*	'speak, talk'
səh	*sih*	'search'

And in Amanab (Minch 1992: 107):

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[27] Seiler (1985) presents arguments for the separation of Imonda from Waris and Punda from Waina-Sowanda. In other publications like Laycock (1973), Imonda and Punda are not considered separate languages.

[28] In Imonda, there is also a trill /r/ phoneme which only occurs in 'sound words' (:11). In addition, in approaching adulthood, young people learn to distinguish /ɨ/ from /i/ and /ʉ/ from /u/ for a small set of words. For example, for children 'put' (plural subject) and 'lie' are both /li/; when approaching adulthood they have to learn that 'put' (plural subject) is /li/ and 'lie' is 'lɨ'. Including these 'adulthood' vowels, Imonda has twelve vowel phonemes (Seiler 1985: 20-21).

Table 1.16   Singular versus plural verb stems in Amanab

singular   plural (derived)

tige	*tigi*	'hit'
faka	*faki*	'put'

The following is an example from Imonda (Seiler 1985: 211).

1-29.   *e-uagl-ual.   iɛf-ia-m   e-uagl-ual-na-ba,   si-nam-fa-iaha-fna.*

DU-go-DU   house-LOC-GOAL DU-go-DU-PAST-TOP night-DER-TOP-die-PROG

si-nam   iaha-na-ba   təla-l   sabeha-na   kowal-e.

night-DER   die-PAST-TOP husband-NOML   magic-INSTR cut-D

toad-m   abɒ   fe-na-ɒ   mugɒ   fe-na-ɒ   mugɒ   defɒ fe.

boys-GOAL simply do-PAST-D completely do-PAST-D completely die   do

'They went. Having gone home, at night she was dying. She having died at night, her husband worked magic. The boys simply did, completely did, completely died.'

The following is an example from Amanab (Minch 1992: 168).

1-30.   *ka ahbru (< ah-bro)   wana-yi   ah-pugu-g*

1   DU-bring here＝LOC DU-arrive-PAST

hiafɛna angwag-m   sihi-nag.

3:GEN   woman-DAT tell-BEN

pe   bro-g   nangu-g, ka bru (< bro)   fahi-g   fefri-g.

down come-PAST see-PAST 1   bring examine-PAST hold-PAST

'We brought (it) here, arrived (and he) told his wife. (She) came down and
saw (the possum), I brought (it) to be examined.'

To the east of Anggor is the Biaka language, which belongs to the Kwomtari
family. The only data available on Biaka seems to be Baron's (1983) survey on the
Kwomtari family. Not a lot can be deduced from that brief survey, but on the whole
there do not seem to be any major similarities between Biaka and Anggor except
typological ones. The following are some examples from Biaka.

1-31. *Sakrami-lo itiɛ(lɛ)*

'Sakrami's house'

1-32.	*nagi*	*toro*	*dofway*		*1-33.*	*kwɔsabru*	*toro*	*inari*
	anger	CHAR	man			copulation	CHAR	woman
	'Man given to anger'					'Woman who sleeps around'		

1-34.	*imikau*	*takaro*		*1-35.*	*amaru*	*itiɛ*
	bush	something			big	house
	'Something of/in the bush'				'a big house'	

1-36.	*Sakrami*	*fwɔri*	*frəβiə*		*1-37.*	*itiɛ-y*	*turuena*
	Sakrami	pig	shot			house-LOC	is
	'Sakrami shot a pig'					'He is in the house'	

1-38.   Sakrami itiɛ-ma   βria   *1-39.   pina-to   toβotia*

Sakrami house-ALL goes   knife-INSTR cut

'Sakrami goes to the house'   'He cut with a knife'

To the south of Anggor along the Sepik River is the territory of the Abau

language (e.g. Laycock 1965, Bailey 1975, Laycock and Z'graggen 1975, Lock &

Lock 1985). Abau is the western-most member of the Upper Sepik branch of the

Sepik language family. Other languages of the Upper Sepik branch include Iwam,

Amal, Chenapian and Wogamusin spoken towards the east (downriver). To the west

of Abau are the little known languages of Biksi/ Yetfa and Kimki in West Papua

which seems to be part of the Sepik family. Abau has a phonemic inventory of /p ɹ

k m n s h j w i ɛ a ɒ o u eʲ aʲ aʷ ɒʷ oʷ/ (Bailey 1975: 8). According to Bailey

(1975), each syllable carries an underlying tone of H (high) or L (low). Through

various complex tone sandhi rules the underlying tones can be surfaced as H, L, HL

(falling) or LH (rising) (Bailey 1975: 32-37).

Tense and aspect are marked by both suffixes and preceding particles, and

verbs only agree with the number of the subject (Laycock and Z'graggen 1975: 742).

A characteristic of the Sepik family languages is having a two-gender noun-class

system (e.g. Foley 2005). Abau also has a two-gender system. Like other Sepik

languages downriver like the Ndu languages, gender is not manifested on the noun

itself. In Abau, gender is manifested in: a) the singular verbal cross-reference

markers (Laycock & Z'graggen 1975: 742); b) the third person singular pronouns

(3MSG *hi(kwe)* versus 3FSG *hɔ(kwe)*); and c) the singular prefixes of case

postpositions which agree with the number and gender of the noun (MSG *s-*, FSG *k-*;

PL *m-*) (Laycock & Z'graggen 1975: 745).[29]

Dla and Anggor also have a two-gender system, which could be diffused

from (or to?) the Sepik language families. However, in the two Senagi languages,

grammatical gender is only manifested in the cross-reference suffixes on verbs and

pronouns. In Abau and many languages in the Sepik area (including lower Sepik),

the number markers exhibit *-m* for plural number and *-f* for dual number (Foley

2005). Traces of the same phenomenon can also be found in Anggor (R. Litteral

1980: 352) and Dla. In Menggwa Dla, *m* is exhibited in non-first person masculine

plural suffixes (N1MPL), and *f* is exhibited in the non-first person **dual** suffixes

(N1MDU and N1FDU) in class I and IH cross-reference suffixes.[30] The following are

the class I and class IH cross-reference suffixes in Menggwa Dla (see also §5.2.1).

Table 1.17　　Class IA/ IHA cross-reference suffixes

SUBJ→	1SG	1DU	1PL	2SG	3MSG	3FSG	**N1MDU**	**N1FDU**	**N1MPL**	N1FPL
IA: V_ C_	*-aha*	*-ehye*	*-efa*	*-afa*	*-Ø* *-u*	*-wa*	***-afa***	***-efye***	***-ma*** ***-uma***	*-wi* *-ei*
IHA: C_	*-iha*	*-yehye*	*-yefa*	*-ufa*	*-u*	*-wa*	***-ufa***	***-yefye***	***-uma***	*-yei*

[29] In addition to the two-gender system, Abau also has another noun-class system which is only manifested in the choice of numerals from one to three (numerals four and above are invariant). Laycock and Z'gragen (1975: 746) record twelve different sets of numerals from one to three which agree with noun-class membership of the noun, and 'further rare classes may still exist in the language' (1975: 746). For instance, class I nouns are all human beings and class II nouns are predominantly animates; the numerals for class I are *prin pris prumni* 'one two three' and the numerals for class II are *kamən krɛs krumni* 'one two three' (1975: 746). Iwam, the next genealogically related language spoken downstream, also has separate two-gender and multiple noun-class systems. Laycock and Z'graggen (1975: 743) record five sets of numerals from one to four in Iwam (numerals five and above are invariant). Both Wogamusin and Chenapian are recorded to have five sets of numerals from one to four. In addition, the numerals in Wogamusin for 'one' in each set of numerals have variants for masculine versus feminine gender. e.g. class III M *bid* 'one' versus class III F *bidin* 'one'; class V M *ŋgwad* 'one' versus class V F *ŋgwed* 'one' (1975: 744).
[30] However, *f* is also exhibited in the 1PL and 2SG class I/IH suffixes.

Table 1.18   Class IB/ IHB cross-reference suffixes

SUBJ→		1SG	1DU	1PL	2SG	3MSG	3FSG	**N1MDU**	**N1FDU**	**N1MPL**	N1FPL
IB:	V_ C_	*-a*	*-ehi*	*-efu*	*-afu*	*-u*	*-o*	***-afani***	***-efi***	***-mu*** ***-umu***	*-wi* *-ei*
IHB:	C_	*-i*	*-yehi*	*-yefu*	*-ufu*	*-u*	*-o*	***-ufani***	***-yefi***	***-umu***	*-yei*

Nevertheless, class I and IH are only two out of five classes of cross-reference suffixes in Menggwa Dla, and none of the other classes exhibit this phenomenon. Cross-linguistically, pronominals also tend to favour a restricted set of phonemes (Nichols 1992). Currently there is not a lot of evidence linking the Senagi languages with other Papuan language families.

To the south of Dla and west of Anggor is the Karkar-Yuri language (e.g. Rigden 1978, 1986a,b; Price 1987), which is an isolate. Karkar-Yuri has complex phonology; it has the following vowel phonemes: /i e ɛ a ɒ ɔ o u ɨ ə ʌ/ (Price 1987: 58) and the following consonant phonemes: /p t k mp nt ŋk m n f s j w ʔ mpw nkw pw fw kw mw kk pp/ (Price 1987:62-63).[31]

In Karkar-Yuri, cross-referencing is only indicated in the final clause of a clause-chain (Rigden 1986a: 15), and cross-referencing is not obligatory. The past tense markers are: *amp* 1SG, *ap* 2SG, *omp* 3SG; *emp* 1DU, *ep* N1DU; *omp* 1PL, *ap* N1PL. For present tense there is an extra *n-* prefix for non-past tense (e.g. 1SG *n-amp*). For future tense, there is an extra future tense suffix before the *n-* non-past prefix which

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[31] /mp nt ŋk/ lose their oral component when they occur word-finally. Word-medially, /p/ and /k/ are voiced. Word-medial voiceless [p] and [k] are analysed as /pp/ and /kk/ underlying.

is sensitive to the number of the subject: SG *na-* (e.g. 1SG:FUT *na-n-amp*), DU *ni-*, PL

mwa-. Karkar-Yuri is the only documented language adjacent to Dla and Anggor

with a switch-reference system. In the switch-reference system in Karkar-Yuri

(Rigden 1986a: 19-20), interclausal coreference of actors is indicated by a zero

morph *Ø* and interclausal disjoint-reference is indicated by the suffix *-nko*. The

disjoint-referential suffix *-nko* is preceded by *e-* for dual actors, *a-* for first person

(singular?) actors and *o-* for non-first person singular and plural actors; an extra *n-* is

prefixed to *e-*, *a-*, or *o-* if the sentence is in present tense.[32] The following is an

example sentence in Karkar-Yuri from Rigden (1986a:19).

1-40. korop n-o-nko   ək   rə

       come NPAST-N1-DR come.down SEQ

      wunɛ   fik nar   fɒnkwek tank

      nearby at transfer.to.this at.thigh sat

      'When she had come, it came down (from the wood rack, its sleeping place)

      and went along and sat near her at her thigh.'

In Roberts' (1997) survey of switch-reference in Papua New Guinea, all

languages with switch-reference systems in mainland Papua New Guinea are

contiguous to each other except the Senagi plus Karkar-Yuri area (Roberts 1997:

118-119). Within Papua New Guinea, they are separated from the nearest switch-

reference language Mianmin of Ok branch of Trans New Guinea family by the Sepik

language Abau to the south. To the west of Dla there are no grammatical data of the

Pauwasi languages; to the southwest the nearest languages with switch reference are

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[32] It is not clear from Rigden (1986a:19) whether *e-* includes first person dual, and is *a* only for first
person singular.

the Mek languages and Dani languages, which lie to the west of the Ok languages. Switch-reference systems are commonly diffused over genetically diverse languages. The phenomenon of switch-reference languages all being contiguous to each other is also attested in Australia (Austin 1981) and North America (Jacobsen 1983).

1.5   Brief ethnographic notes on Dla society

Dla people are hunter-gatherers traditionally. The staple diet is sago (*bani*). Sago starch is either stirred into sago jelly (*yari*) (see *Banila fafo* 'Story of Sago' in appendix 1), or fried into sago pancakes (*bani hyela* (sago skin)). The collecting of sago starch from sago palm is the job of both men and women, but the processing and cooking of sago is usually women's job. Sago starch is basically pure carbohydrate; the amount of other types of nutrients sago starch has is minute. People's diet is supplemented by food acquired in the bush: fruits like breadfruits (*barufu*), mango (*ihu*) and bananas (*tambi*) are collected from trees, small aquatic creatures like fish (*iplwa*) and shrimp *(uti)* are caught from the streams, and larger animals like pigs (*wali*), snakes (*akwani*), cuscuses (*yu*), bandicoots (*hofowali*), flying birds (*tu*) and sometimes cassowaries (*kwaŋgi*) are hunted in the bush (there are no crocodiles in Dla territory). Most families are also involved in garden agriculture. Root crops like cassava (*katpi*), taro (*mawa*), sweet potato (*bufi*), and various types of leaf vegetables (*hwatmali*) are grown in people's gardens (*amni*). Recently there are also trials of rice-growing (rice: *blati*) with reasonable results. There is also small scale domestication of animals like chickens (*ayamu*) and pigs (*wali*).

Unfortunately, with no road access there are no cost-effective ways for people to transport excess products to markets in towns. The majority of people in Dla territory do not participate in the cash economy. On the one hand people want their children to seek education and employment elsewhere to improve their quality of life. On the other hand people who have left seldom come back to live in Dla territory and this results in the loss of language and culture.

Common throughout New Guinea is betel nut chewing. When a New Guinean is learning another New Guinean language, very often it is the vocabularies and phrases related to betel nut chewing which are learnt first (out of necessity). Betel nut chewing creates a mild narcotic effect. Children would start play-chewing betel nut as young as two, and would chew betel nut properly within one or two years of going to primary school.

Unripe betel nut (Menggwa Dla: *wamla*; Dla proper: *wamnda*; Malay: *pinang*; Tok Pisin: *buai*) are collected from betel palm (Areca palm). A betel nut is a bit shorter in length than one's thumb, green, and shaped like an egg. Bet nut is actually a kind of seed rather than a kind of nut: inside the fibrous husk is a small fleshy meat of creamy-white colour. Unlike the practise in South East Asia (including Taiwan and non-Sinitic southern mainland China) where the fleshy meat is dried and diced, in New Guinea people chew the fleshy meat as it is. The meat is chewed, sometimes together with a little bit of husk, together with a small section of mustard (Dla: *wafa*; Malay: *sirih;* Tok Pisin *daka*) dipped in powered lime (Dla: *nitufu*; Malay: *kapur*; Tok Pisin: *kambang*; made from crushed coral or limestone). Some people put the betel meat inside their mouths first, and then the limed mustard.

Other people put the limed mustard within the betel meat and then put the combination into their mouths. The level of salivation increases rapidly, and the saliva turns red. After some chewing the oozes of red saliva are spat out. The red saliva is very staining, and even streets of Jayapura and Port Moresby are stained with betel nut spit. Often unfortunate passers-by or animals are stained with betel nut spit (*hamblu* 'become red' class I) from people spitting irresponsibly. 'Chewing' betel nut is *seru* (*ser-/ det-*) 'eat' (verb class IH), and the following is heard many times in a day.

1-41.   *[wamla/   wafa/   nitufu] sa-mba-i-Ø!*

     [betel.nut/   mustard/   lime]   give-2SG-1SG:O-IMP

     'Give me [betel nut/ mustard/ lime]!'

Traditionally, teenage boys would spend a long period of time (sometimes years) away from home and live in the bush with male relatives to learn hunting skills and men-only ceremonies. No contacts with women would be made during this time. However, with the emphasis on formal education these days, this initiation process has been shortened considerably. Most young men are still keen on the occasional hunting trip (for instance, see *Nimiwami Kaku* 'Hunting in the mountain' in appendix 1). Male cult houses, which Middle and Lower Sepik societies are famous for, are absent in Dla and other Upper Sepik societies. Traditionally villages are headed by an older male person. Clans are patrilineal; Dla society in general is quite male-dominated. Nevertheless, mothers and female elders are respected, and wives are not usually badly treated. Marriages are mostly

monogamous; there are also some polygenious relationships. Families usually live in the same house, but husbands and wives usually sleep in separate rooms.

Dla people have never had major interactions with neighbouring groups. This is typical in North-Central New Guinea, as reflected by the acute linguistic diversity in the area (§1.4.4). Each Menggwa Dla village is inhabited by one clan, but other Dla villages can be inhabited by more than one clan. Traditionally, relationships between villages are lukewarm at best. Relationships are relatively harmonious amongst the Menggau Dla speaking villages. Bow-and-arrow fights happen from time to time between Dla proper speaking villages. After Kamberatoro Mission was built, the mission was sometimes the scene of failed negotiations between villages which sometimes escalated into bow-and-arrow warfare. Traditional bows are not very accurate at shooting long distance, and they are usually not designed to propel the arrow far enough to hit the opposite group of villagers, and arrows typically land in the middle of the mission station or on the mission buildings. Real harm was rarely done, as 'fights' are mostly display of humiliation.

Dla people living in Dla territory have relatively short life expectancy. People die early from malnutrition, malaria or congenital disorders. Heart or kidney failures are a common cause of death even amongst younger people. Traditionally, the idea of natural death does not exist; in people's minds people only die of murder, sorcery, or maltreatment. Someone from another clan has to be blamed for a person's death, and compensation has to be sort from that person's clan.

Like most other New Guineans, Dla people express grief by loud melodious verbal crying, and other non-verbal audio means like banging one's fist or palm on any bang-able surfaces like walls and doors. People would start to congregate at the house of the deceased to express grief together at the first hearing of such grieve-crying. Alternatively, if the person died in hospital in town and the body is being flown back to Dla territory, people would congregate at the airstrip, and would start grieve-crying at the sight of the aircraft. Those who accompany the dead body from town would start grieve-crying when the coffin is carried on board, and would continue grieve-crying the whole way (it takes around forty minutes to fly from Vanimo to Kamberatoro).

These days people wear western type clothing (*hyela* 'skin'; *numu* 'wear' class IIB) like shirts, t-shirts, dresses, shorts, trousers, flip-flops and shoes, which people acquire in towns. In Greater Jayapura and Vanimo people buy clothing in market stalls or supermarkets. In Vanimo people can also acquire assorted second-hand clothing by weight. Traditionally, clothing is minimal: Women wear grass-skirts (*wimu*, *kikifi* 'wear' class II), and men wear penis-gourds (*yamogwamo*; *kafefi* 'wear' class IIB). The type of penis-gourd worn by Dla men is not the same as the big penis-gourds worn in the Highlands in West Papua and far west Papua New Guinea (Sandaun and Western Provinces). In the Highlands, men wear large penis-gourds which are held tightly upward (e.g. Baliem valley) or loosely forward (e.g. Oksapmin) by thick waistbands or thin strings; penis-gourds in the Highlands are either long-thin-conical or wide girth-shorter-cylindrical. From Dla-Anggor territory all the way to the Bewani Mountains to the north, penis-gourds are about the size of one's palm, shaped like a rugby ball, and with a small hole cut at the top

just large enough to fit and to be held on by the glans penis (held inside the foreskin for uncircumcised men). This type of penis-gourd used in North-Central New Guinea is not held onto the torso by any means; the penis-gourd is left hanging down. In certain traditional dance-ceremonies, men thrust their penis-gourds back and forth all the way, hitting their torsos rapidly and repeatedly (and it is painful even to accustomed penises).

1.6   Fieldwork and the collection of data

Five fieldtrips were conducted between August 2002 and November 2005; the time spent in the field amounts to fourteen months accumulatively. The research on Menggwa Dla was conducted with the cooperation of informants living in the Menggwa Dla villages, and also one each in Kamberatoro Mission Station, Vanimo and Jayapura. For comparative purposes, a small amount of research was also done on Dla proper, mainly on the variety spoken in Kamberatoro, Tamarbek and Akamari villages. I have never been to the Dla proper speaking areas in West Papua, as the border area on the Indonesian side is out of bounds for foreigners. However, some encounters and brief elicitation sessions were made with people from Amgotro living in Jayapura and Vanimo; Dla proper spoken in Amgotro is minimally different from Dla proper spoken in Kamberatoro.

A lot of data presented in this thesis were from spontaneous speech of native speakers. A small amount of elicitation was also done, especially for verbal and pronominal paradigms. Some oral texts were recorded digitally and four of them transcribed and presented in this thesis (appendix 1). Unfortunately, due to the lack of electricity (and the comparatively poor quality of Indonesian batteries available in

Jayapura and Vanimo), only a limited amount of recordings were done. Examples cited from texts carry one of the following labels: (A) is from *Amamola Hwafo* 'The Story of the Moon', (B) is from *Banila Hwafo* 'The Story of Sago', (N) is from *Nimi Wami Kaku* 'Hunting on Top of the Mountain', and (S) is from *Saimon Korela Hwafo* 'The Story of Simon Kore' (appendix 1). Other examples may carry a label like (50I) or (80II); this label indicates that the example comes from the spontaneous speech of teacher number I who was born in 1950s/ teacher number II who was born in 1980s. None of my language teachers wanted to be named for the spontaneous speech examples. (All of my language helpers were happy in helping me in learning their language, but all were shy in getting themselves named and recorded.)

Amongst the many Dla people whom I have consulted with, there were six main consultants of Menggwa Dla. I met Donald Yawa (born in 1980) on my first plane ride from Vanimo to Kamberatoro in August 2002. He became my first language teacher. He spoke excellent English, which was of great assistance as my command of Tok Pisin was rudimentary then. My second and third language teachers were David Yawa (born in 1950s, Donald's father) and Simon Kore (born in 1950s). I learnt a great deal from both David and Simon. Unfortunately, Simon, the manager of Kamberatoro Mission Station, died suddenly of acute malaria on Friday 23rd April 2004. Amongst many things that he left on this world was his short oral text which was recorded on 19th April 2004 (*Simon Korela Hwafo* 'The story of Simon Kore, appendix 1), which was yet un-transcribed. I first met Stanis Kore (born in 1970s), Simon Kore's cousin, in Vanimo in August 2004. He was working at the Department of Works depot in Vanimo. I lot of assistance were also given by Andrew Lambuwe and Issac Yawa, both of them born in 1970s. The two

of them were most willing to talk to me only in Menggwa Dla, and they also keenly

translated nearly every sentence I said in Tok Pisin into Menggwa Dla.

Chapter 2   Phonology

Menggwa Dla has a phoneme inventory of fifteen consonants and five vowels, and the phonemes have few allophonic variations (although the phonemic realisation of some phonemes require special attention; §2.1). The vast majority of syllables have the shape of V, CV or CCV; codas are rare and they are highly restricted in Menggwa Dla (§2.2). There are only two morphophonemic rules, both concerning vowels: degemination and *a*-deletion (§2.3). Stress assignment is predictable in Menggwa Dla, but the pitch pattern of a word is usually dominated by clausal intonation, in which case the pitch pattern of a word is independent of the stress pattern of a word (§2.4).

The following conventions are followed in this thesis: underlying phonological forms are enclosed in forward slashes, e.g. /abuxa/; surface phonetic forms are enclosed in square brackets, e.g. [ʔaᵐbuɣa]; orthographic forms in Dla and other languages are italicised, e.g. *ambuha* (shorter orthographic forms may also be put in diamond brackets, e.g. *<a>*, *<mb>*); English glosses are put in quotation marks, e.g. 'cockatoo'.

2.1   Phonemes

2.1.1   Inventory of phonemes

Menggwa Dla has a phonemic inventory of fifteen consonants and five vowels. With the exception of the two glides — the palatal approximant /j/ and the labiovelar approximant /w/ — all the consonantal phonemes are realised at the

bilabial, alveolar and velar places of articulation. The consonantal phonemes are articulated with various manners of articulation: there are three voiceless plosives /p t k/, three voiced plosives /b d ɡ/, three fricatives /ɸ s x/, two nasals /m n/, one lateral approximant /l/, one trill /r/, and two (non-lateral) approximants /j w/. There are five vocalic phones: /i e a ʊ u/. The phonemes and their orthographic representations are presented in the following tables. (The orthographic variations of *<b/mb>* and *<g/ŋg>* are discussed in §2.1.3.2.)

Table 2.1   Consonantal phonemes and their orthographic representations

	bilabial	alveolar	palatal	velar
plosive, voiceless	/p/ *<p>*	/t/ *<t>*		/k/ *<k>*
plosive, voiced	/b/ *<b, mb>*	/d/ *<d>*		/ɡ/ *<g, ŋg>*
nasal	/m/ *<m>*	/n/ *<n>*		
fricative	/ɸ/ *<f>*	/s/ *<s>*		/x/ *<h>*
lateral approximant		/l/ *<l>*		
trill		/r/ *<r>*		
approximant			/j/ *<y>*	/w/ *<w>*

Table 2.2   Vocalic phonemes and their orthographic representations

	front	back
high	/i/ *<i>*	/u/ *<u>*
		/ʊ/ *<o>*
	/e/ *<e>*	
low		/a/ *<a>*

65

2.1.2 Distinctive features of phonemes

Table 2.3 and table 2.4 demonstrate the distinctive features of the phonemes in Menggwa Dla. Features used here follow those proposed in Sagey (1986)'s feature-geometry framework. Place nodes are represented here as univalent/ privative features (e.g. Ewen 1995), i.e. the feature either exists (√) or does not exist, rather than having binary values of + and −. Certain binary features are subsumed under these univalent nodes, e.g. [DORSAL] dominates [high], [low] and [back], [LABIAL] dominates [round]. For segments where a particular univalent feature is not present, binary features which are subsumed under that univalent feature become irrelevant, e.g. /p/ lacks the [DORSAL] feature, and hence the subordinate features of [high], [low] and [back] do not apply to apply to /p/. (Binary features which are subsumed under these univalent features are not shown in table 2.3 because they are not needed to distinguish the phonemes.)

Table 2.3   Distinctive features of consonantal phonemes in Menggwa Dla

	p	t	k	b	d	g	ɸ	s	x	m	n	r	l	j	w
[voice]	−	−	−	+	+	+	−	−	−	+	+	+	+	+	+
[consonantal]	+	+	+	+	+	+	+	+	+	+	+	+	+	−	−
[continuant]	−	−	−	−	−	−	+	+	+	−	−	+	+	+	+
[sonorant]	−	−	−	−	−	−	−	−	−	+	+	+	+	+	+
[lateral]	−	−	−	−	−	−	−	−	−	−	−	−	+	−	−
[LABIAL]	√			√			√			√					√
[CORONAL]		√			√			√			√	√	√		
[DORSAL]			√			√			√						√

66

Table 2.4   Distinctive features of vocalic phonemes in Menggwa Dla

	i	e	a	ʊ	u
[high]	+	–	–	–	+
[low]	–	–	+	–	–
[back]	–	–	–	+	+

2.1.3   Phonetic realisation of phonemes and orthographic conventions

Consonants in Menggwa Dla only show minor allophonic variations; voiceless stops, voiced stops, nasals, fricatives, liquids and glides are discussed in §2.1.3.1-6. Vowels in Menggwa Dla are described in the subsequent subsections: /u ʊ/ in § 2.1.3.7, /e i/ in §2.1.3.8, and /a/ in §2.1.3.9. The non-phonemic glottal stop is discussed in §2.1.3.10.

2.1.3.1   Voiceless plosives

There are three voiceless plosive phonemes: bilabial /p/ <p>, alveolar /t/ <t> and velar /k/ <k>. They are non-aspirated or slightly aspirated in all positions.

2-1.   *potapo*   /pʊtapʊ/   [pʊtapʊ]   'insects hop'

2-2.   *papa*   /papa/   [papa]   'wash inanimate things'

2-3.   *petwa*   /petwa/   [peto̯a]   'old age'

2-4.   *pupwa*   /pupwa/   [pupo̯a]   'short'

2-5.   *tutu*   /tutu/   [tutu]   'breast'/ 'eleven'

2-6.   *taki*   /taki/   [taki]   '(insects/ small animals) walk'

2-7. *tamako* /tamakʊ/ [tamakʊ] 'axe' (< Tok Pisin: *tamiok* 'axe')

2-8. *tikyawi* /tikjawi/ [tikjawi] 'small'

2-9. *kakalu* /kakalu/ [kakalu] 'pain'/ 'be painful'

2-10. *kapali* /kapali/ [kapali] 'aircraft' (< Malay: *kapal* 'ship')

2-11. *katpi* /katpi/ [katpi] 'cassava' (< Malay: *kasbi* 'cassava')

2-12. *iploa* /iplʊa/ [ʔiploa] 'fish'

2-13. *apa* /apa/ [ʔapa] 'today'

2-14. *ata* /ata/ [ʔata] 'grandmother'

2-15. *akya* /akja/ [ʔakja] 'little finger'

2.1.3.2   Voiced plosives

There are three voiced plosive phonemes: bilabial /b/, alveolar /d/ and velar /g/. Each of the three voiced plosive phonemes has two allophones. Word-initially, the voiced plosive phonemes are fully voiced, i.e. voicing starts before the plosive release in the oral cavity. Word-medially, the voiced plosives are pre-nasalised: [^{m}b] [^{n}d] and [^{ŋ}g].

/b/ → [^{m}b] / V__

/d/ → [^{n}d] / V__

/b/ → [^{ŋ}g] / V__

The following are examples of word initial /b/ [b] *<b>*, /d/ [d] *<d>* and /g/ [g] *<g>*.

2-16. *bakali* /bakali/ [bakali] 'frog'

2-17.	*befu*	/beɸu/	[beβu]	'mushroom'
2-18.	*bi*	/bi/	[bi]	'hold'
2-19.	*bofuna*	/boɸuna/	[boβuna]	'parent'
2-20.	*buklu*	/buklu/	[buklu]	'forest'
2-21.	*bukwa*	/bukwa/	[bukwa]	'big'
2-22.	*blaha*	/blaxa/	[blaɣa]	'light'
2-23.	*bya*	/bja/	[bja]	'coconut'
2-24.	*dani*	/dani/	[dani]	'this'
2-25.	*dofo*	/dʊɸʊ/	[dʊβʊ]	'hide'
2-26.	*dulua*	/dulua/	[dulua]	'male (animal)'
2-27.	*galali*	/galali/	[galali]	'hook'
2-28.	*gela*	/gela/	[gela]	'long'
2-29.	*glu*	/glu/	[glu]	'teacher' (< Malay: *guru* 'teacher')
2-30.	*gumla*	/gumla/	[gumla]	'roof'

Word-medially, the voiced plosives are pre-nasalised: [ᵐb] [ⁿd] and [ᵑg]. My language consultants spell /b d g/ in morpheme-initial position as *<b d g>* (excluding clitics). In morpheme-medial or clitic-initial positions, /b/ and /g/ are spelled *<mb>* and *<ng>~<ngg>* respectively.[1] The phoneme /d/ is never morpheme-medial or the first segment of a clitic (but /d/ can exist in morpheme-initial position with a compound or a verb; see examples 2-40 to 2-43 below), and

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[1] In Malay-Indonesian orthography, [ŋ] is spelled as *<ng>* and [ᵑg] is spelled as *<ngg>*, e.g. *bu**ng**a* [buŋa] 'flower' and *ba**ngg**a* [baᵑga] 'proud'. The prenasalised [ᵑg] is also rendered *<ngg>* in the names of three Menggwa Dla villages — *Menggau, Menggwal* and *Wanggurinda* — as these place names were first recorded by Dutch administrators and missionaries whose working language was Malay. On the other hand, both [ŋ] and [ᵑg] are usually rendered *<ng>* in Tok Pisin, e.g. *singaut* [siŋaut] 'shout'/ 'call' and *singelman* [siŋelman] 'unmarried man'. Dla people who are literate in Tok Pisin/ English but not Malay/ Indonesian usually spell [ᵑg] as *<ng>* rather than *<ngg>*. See §1.2.3 on the colonial and post-colonial history of the Dla territory, and §1.4.1 on the *lingue franche* of Malay and Tok Pisin.

hence the digraph of < *nd* > is not used.[2] In this thesis I follow the practice of my language consultants, except that [ᵑg] is rendered < *ŋg* > in this thesis for consistency.

Word-medial morpheme-medial < *mb* >, and < *ŋg* >:

2-31.	a*mb*uha	/a**b**uxa/	[ʔaᵐ**b**uɣa]	'cockatoo'
2-32.	afla*mb*li	/aɸla**b**li/	[ʔaβlaᵐ**b**li]	'many'
2-33.	hu*mb*utu	/xu**b**utu/	[xuᵐ**b**utu]	'deaf'
2-34.	nu*ŋg*ni	/nu**g**ni/	[nuᵑ**g**ni]	'when'
2-35.	su*ŋg*u	/su**g**u/	[suᵑ**g**u]	'later'
2-36.	ya*ŋg*ifi	/ja**g**iɸi/	[jaᵑ**g**iβi]	'wake (someone) up'
2-37.	nu*mb*-aha-hi	/nu**b**-axa-xi/	[nuᵐ**b**aɣaɣi]	'I am standing'[3]
	stand-1SG-PRES:CONT			
2-38.	nu*ŋg*-u-hi	/nu**g**-u-xi/	[nuᵑ**g**uɣi]	'He is standing'
	stand-3MSG-PRES:CONT			
2-39.	wuli=*mb*e	/wuli=**b**e/	[wuliᵐ**b**e]	'in house'
	house=INS			

Word-medial morpheme-initial < *b* >, < *d* > and < *g* >:

2-40.	wala*d*aki	/wala-**d**aki/	[o̞alaⁿ**d**aki]	'upper arm'
	hand-upper.arm			
2-41.	wala*b*uha	/wala-**b**uxa/	[o̞alaᵐ**b**uɣa]	'shoulder'
	hand-shoulder			

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[2] /d/, /r/ and /l/ are separate phonemes; see §2.1.4 for minimal pairs. Word medial */d/ in proto Dla becomes /l/ in Menggwa Dla; see §1.4.2.

[3] The irregular verb *nuŋgu* 'stand' (class I) has two finite verb stems: *nuŋg-* /nug-/ is used when the following segment is rounded, and *numb-* /nub-/ is used when the following segment is not rounded (§5.1.3).

2-42. *madupliwe* /ma-ɗapli-we/ [maⁿɗupliwe] 'do not fool around!'

NEG:IR-joke-CAUT

2-43. *magakyehi* /ma-ɠak-jexi/ [maᵑɠakjeɣi] 'will the two of us go up?'

NEG:IR-go.up:FUT-1DU

(c.f. the two instances of /g/ in the following example are not prenasalised because they are word-initial:

2-44. *ga gakyehye* /ɠa ɠak-jexje/ [ɠa ɠakjeɣje] 'The two of us will not go up.'

NEG:SMR go.up:FUT-1DU)

2.1.3.3   Nasals

There are two nasal phonemes: bilabial /m/ [m] <*m*> and alveolar /n/ [n] <*n*>. There is no velar nasal phoneme /ŋ/; the phone [ŋ] only occurs as the prenasalised portion of the [ᵑg] allophone of /g/ (see above). The nasal segments are always voiced. The phoneme /n/ can be the second phoneme of a consonant cluster (i.e. CnV; see §2.2.2).

2-45. *mni*   /mni/   [mni]   'just'

2-46. *mamo* /mamʊ/   [mamʊ] 'one'

2-47. *mefu*   /meɸu/   [meβu]   'thank'

2-48. *mi*   /mi/   [mi]   '(one's own) mother'

2-49. *monani* /monani/ [monani] 'sing'

2-50. *mumri* /mumri/ [mumri] 'lightning'

2-51. *munika* /munika/ [munika] 'nothing'

2-52. *napo*   /napʊ/   [napʊ]   'ready'

2-53. *nefi*   /neɸi/   [neβi]   'shoot'

71

2-54. *nomo* /nʊmʊ/ [nʊmʊ] 'tree'

2-55. *numu* /numu/ [numu] 'sit'

2-56. *nyewi* /njewi/ [njewi] 'person'

2-57. *kni* /kni/ [kni] 'ant'

2.1.3.4 Fricatives

There are three fricative phonemes: bilabial /ɸ/ *<f>*, alveolar /s/ *<s>* and velar /x/ *<h>*.

The bilabial /ɸ/ and the velar /x/ are always voiceless in word initial positions: [ɸ], [x]. Between two voiced segments, /ɸ/ and /x/ vary freely between voiced and voiceless realisations: [ɸ] ~ [β], [x] ~ [ɣ].

/ɸ/ → [ɸ] ~ [β] / [+voice] _ [+voice]

/x/ → [x] ~ [ɣ] / [+voice] _ [+voice]

2-58. *fa* /ɸa/ [ɸa] 'pick betel nut'

2-59. *fefi* /ɸeɸi/ [ɸeɸi] ~ [ɸeβi] 'leave'

2-60. *fofo* /ɸʊɸʊ/ [ɸʊɸʊ] ~ [ɸʊβʊ] 'blow'

2-61. *fri* /ɸri/ [ɸri] 'get rid'

2-62. *fumi* /ɸumi/ [ɸumi] 'move pith/ fibre'

2-63. *hai* /xai/ [xai] 'fire'

2-64. *heli* /xeli/ [xeli] 'ceremony'

2-65. *hihifu* /xixifu/ [xixiɸu] ~ [xiɣiβ] 'be happy'

2-66. *hohwam* /xʊxwam/ [xʊxo̥am] ~ [xʊɣo̥am] 'water monster'

2-67.	*hufni*	/xuɸni/	[xuɸni] ~ [xuβni]	'evening'
2-68.	*hwalfehi*	/xwalɸexi/	[xo̞alɸexi] ~ [xo̞alβeɣi]	'woman'
2-69.	*buftya*	/buɸtja/	[buɸtja]	'mouse/ rat'
2-70.	*afta*	/aɸta/	[ʔaɸta]	'bathe' (monovalent)

The alveolar fricative /s/ only occurs morpheme-initially, except in Tok Pisin loanwords where morpheme-medial /s/ is tolerated; these morpheme-medial /s/ phonemes in Tok Pisin loan words are always realised as [s] (see examples 2-85 and 2-86 below). Otherwise, /s/ only occurs word-medially when /s/ is the first segment of a verb stem (i.e. morpheme-initial position) and it is preceded by a prefix; word-medial /s/ phonemes are always realised as an alveolar flap [ɾ] (see examples 2-76 and 2-77 below). Otherwise, /s/ only occurs in word-initial positions. In utterance-medial positions, word-initial /s/ phonemes are realised as [s] in careful speech style, and freely alternates between [s] and [ɾ] in casual speech style. In utterance-initial positions, /s/ is always realised as [s]. This /s/ phoneme in Menggwa Dla corresponds with /t/ in Dla proper (e.g. Menggwa Dla: /si/ *si* 'you', /sela/ *sela* 'tail' versus Dla proper /ti/ *ti* 'you', /teda/ *tenda* 'tail'), and this [ɾ] allophone of /s/ in Menggwa Dla is one indication of the status of /s/ being a reflex of the */t/ proto-phoneme in proto-Dla (see §1.4.2-3). Cross-linguistically, it is common to find [ɾ] as an allophone of /t/, but rare as an allophone of /s/.

/s/ → [s] / V_V   (only in Tok Pisin loanwords)

→ [ɾ] / $_

→ [s] / X#_   (in careful speech style)

→ [s] ~ [ɾ] / X#_   (in casual speech style)

→ [s] / Ø#_

The following are examples of word-initial /s/. In casual speech style, the word-initial [s] phone can be substituted with [ɾ] in all of the following words.

2-71.   *safa*   /saɸa/   [saɸa] ~ [saβa]   'meat'

2-72.   *sela*   /sela/   [sela]   'tail'

2-73.   *si*   /si/   [si]   'you'

2-74.   *snaŋga* /snaɡa/   [snaᵑga]   'slow'

2-75.   *sumbu*   /subu/   [suᵐbu]   'laugh'

The phoneme /s/ can occur in morpheme-initial positions which are word-medial; word-medial /s/ occurs when a verb stem which begins with /s/ is prefixed with the negative irrealis prefix *ma-* (§6.3) or the disjoint-referential prefix *ma-* (§7.2.1).

2-76.   *maserinaho*   /ma-ser-i-naxʊ/ [maɾerinaxʊ]

                        NEG:IR-eat-1SG-CNTR 'I would not have eaten'

2-77.   *maserimbo*   /ma-ser-i-bʊ/ [maɾeriᵐbʊ]

                        DR-eat-1SG-DEP 'I ate, and someone else…'

(c.f. the word initial /s/ in the following example which must be realised as [s] in careful speech style:

2-78.   *serihambo*   /Ø-ser-ixa-bʊ/ [serixaᵐbʊ]

                        CR-eat-1SG-DEP 'I ate, and I …')

Utterance medially, word initial /s/ can freely alternate between [s] and [ɾ]. The following are some examples.

2-79. *lafu sambiafu*   /l-aɸu   **s**abi-aɸu/ [laɸu **s**aᵐbiaɸu] ~ [laβu **ɾ**aᵐbiaβu]

LIG-2SG POS:SMR-2SG 'you (SG) will be'

2-80. *numuambe seru* /numua＝be Ø-**s**er-u-Ø/ [numuaᵐbe **s**eru] ~ [numuaᵐbe **ɾ**eru]

abode＝INS CR-eat-3MSG-DEP 'he eats in (its) abode, and…'

Malay loan words were mostly borrowed into Menggwa Dla through Dla proper. Most varieties of Dla proper do not have /s/ [s];[4] /s/ in Malay is rendered as /t/ [t] in Dla proper and these words with /t/ are borrowed into Menggwa Dla with /t/ retained.[5] The following are examples of some Malay loanwords in Menggwa Dla.

2-81. *katpi*   /katpi/   [katpi]   'cassava' (< Malay: *kasbi*)

2-82. *tuhal(o)a* /tuxal(ʊ)a/ [tuɣal(o)a] 'school'   (< Papuan Malay: *skoula*)

2-83. *tumbaiŋgi* /tubaigi/   [tuᵐbaiⁿgi] 'worship' (< Malay: *sembahyang*)

2-84. *blati*   /blati/   [blati]   'rice'   (< Papuan Malay: *bras*)

However, morpheme-medial /s/ is tolerated in Tok Pisin loanwords; these morpheme-medial /s/ phonemes in Tok Pisin loanwords are always realised as [s].

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[4] It seems that all varieties of Dla proper have /t/ but no /s/, except that Lihen in the far east (close to the Anggor speaking area) has /s/ instead of /t/. Anggor has both /t/ and /s/ (Litteral 1980).
[5] One exception I am aware of is *suŋgu* 'later'. In Dla proper the word 'later' is *tuŋgu*, and speakers of Dla proper suggest that it is a loanword from Papuan Malay: *tunggu* [tuŋgu] 'wait'. Menggwa Dla speakers have the concept that /t/ in Dla proper always corresponds with /s/ in Menggwa Dla (when in fact Menggwa Dla has both /s/ and /t/). Presumably because *tuŋgu* is thought of as being a native word in Dla proper by Menggwa Dla speakers, the 'cognate' in Menggwa Dla was then hypercorrected as *suŋgu*.

2-85. *nesi*   /nesi/   [nesi]   'nurse'   (< Tok Pisin: *nes*)

2-86. *pusi*   /pusi/   [pusi]   'cat'   (< Tok Pisin: *pusi*)

2.1.3.5   Liquids

The voiced alveolar lateral approximant phoneme /l/ *<l>* is realised as an alveolar lateral approximant [l] for most speakers. For some speakers, /l/ freely varies between alveolar lateral approximant [l] and alveolar flap [ɾ]. The phoneme /l/ can be the second phoneme of a consonant cluster (i.e. ClV; see §2.2.2). The following are examples of word-medial /l/.

2-87. *alu*   /alu/   [ʔalu] (~ [ʔaɾu])   'string bag'

2-88. *wuli*   /wuli/   [wuli] (~ [wuɾi])   'house'

2-89. *sinala*   /sinala/ [sinala] (~ [sinaɾa])   'digit (finger/ toe)'

2-90. *gluma*   /gluma/   [gluma] (~ [gɾuma])   'forehead'

2-91. *humbli*   /xubli/   [xuᵐbli] (~ [xuᵐbɾi])   'buttock'

2-92. *imbalkwa* /ibalkwa/ [ʔiᵐbalko̞a] (~ [ʔiᵐbaɾko̞a])   'heavy'

Instances of word-initial /l/ are very rare. The following is an exhaustive list of lexical items which begin with /l/. There are also some grammatical words which begin with /l/: the genitive case clitic *=la* (§4.5.2), the comitative case clitic *=lofo* (§4.5.4), and the positive future copulas, e.g. *lambya* 'I will be' (§6.4.1).

2-93. *lapaŋgani* /lapagani/ [lapaⁿgani] 'airstrip' (< Malay: *lapangan* 'field')

2-94. *lohama*   /lʊxama/   [loɣama]   'mountain ridge'

2-95. *lambuli*   /labuli/   [laᵐbuli]   'group of people'

76

The following are some examples containing the alveolar trill /r/ <*r*> [r]. The phoneme /r/ can be the second phoneme of a consonant cluster (i.e. CrV; see §2.2.2). Like /l/, word initial /r/'s are very rare. The following are examples of word medial /r/.

2-96.　*barala* /barala/　[barala] 'index finger'

2-97.　*barufu* /baruɸu/　[baruβu] 'domesticated breadfruit'

2-98.　*amria* /amria/　[ʔamria] 'grass'

2-99.　*aru*　　/aru/　　[ʔaru]　'father's brother'

2-100. *wara*　/wara/　　[wara]　'and so' (§3.2.6)

2-101. *mrila*　/mrila/　　[mrila]　'chest'

2-102. *yari*　/jari/　　[jari]　'sago'

There are also very few words which begin with /r/; the following are all the words which begin with *r* encountered.

2-103. *rani*　　/rani/　　[rani]　　discourse demonstrative (§3.2.4)

2-104. *rewambi* /rewabi/ [reo̯aᵐbi]　'bottom'/ 'under'

2-105. *ruhwa*　/ruxwa/　[ruɣoa]　　'down below'

2-106. *ruŋgu*　/rugu/　　[ruⁿgu]　　'inside'

2.1.3.6　　　　Glides

There are two glide phonemes: palatal approximant /j/ <*y*> and labiovelar approximant /w/ <*w*>. The phoneme /j/ is always realised as the palatal approximant [j]. When preceding non-low vowels (/i e ʊ u/), /w/ is realised as [w].

When preceding low vowels (i.e. /a/), /w/ is lowered to [o̞]. Native speakers'

spelling of word-medial /wa/ alternates between <wa> and <oa>. For instance,

the past tense suffix -hwa /-xwa/ [-xo̞a] (§6.1.1) is often spelt as <hoa> by native

speakers. In this thesis, instances of /wa/ are consistently spelt as <wa>.

/w/ → [o̞] / _a

Both /j/ and /w/ can be the second consonant of a consonant cluster (i.e. CjV,

CwV; see §2.2.2). The following are a few examples of /j/ and /w/ in various

positions.

2-107. *wanu*   /wanu/   [o̞anu]   'money'

2-108. *wi*   /wi/   [wi]   'child'

2-109. *wuli*   /wuli/   [wuli]   'house'

2-110. *yama*   /jama/   [jama]   'shell'

2-111. *aya*   /aja/   [ʔaja]   'father'

2-112. *yowala* /jʊwala/ [jʊo̞ala]   'my' (1SG:GEN)

2-113. *yu*   /ju/   [ju]   'cuscus'

2-114. *gwi*   /gwi/   [gwi]   'another'

2-115. *ambya*   /abja/   [ʔaᵐbja]   'hole'

2-116. *kyahwa* /kjaxwa/ [kjaɣo̞a]   'crab'/ 'turtle'

2-117. *twaŋgi* /twagi/   [to̞aⁿgi]   'white people' (< Malay: *tuan* 'mister')

The glides /j/ and /w/ are not vowels underlyingly; there are minimal pairs

between /j/ and /i/ and between /w/ and /u/ on the other hand, albeit all the known

minimal pairs between the glides and high vowels are not monomorphemic. The following are some sets of class IIB cross-reference suffixes (§5.2.2); all of them have a third person feminine singular object (3FSG:O) cross-reference suffix -a, but their subject cross-reference suffix varies. Examples 2-118 and 2-119 are a minimal pair between /j/ and /i/, examples 2-120 and 2-121 are a minimal pair between /w/ and /u/, and examples 2-122 and 2-123 are a near minimal pair between /w/ and /u/.

2-118. hya /xja/ (< *-hya-a* /-xja-a/ (-1SG-3FSG:O)); vs.

2-119. hia /xia/ (< *-hi-a* /-xi-a/ (-N1FPL-3FSG:O))

2-120. hwa /xwa/ (< *-hwa-a* /-xwa-a/ (-1DU-3FSG:O)); vs.

2-121. hua /xua/ (< *-hu-a* /-xi-a/ (-1PL-3FSG:O))

2-122. wa /wa/ (< *-wa-a* /-wa-a/ (-2SG-3FSG:O)); vs.

2-123. wua /wua/ (< *-wu-a* /-wu-a/ (-N1M1PL-3FSG:O))

The realisation of the glides /j/ and /w/ in Menggwa Dla differ from those of the corresponding high vowels /i/ and /u/ in a number of ways:

- Firstly, the duration of the glides is shorter than the duration of the high vowels. In a glide-plus-vowel sequence like /ja/ or /wa/, the two segments belong to the same syllable, and the duration of the glide is shorter than the following vowel. In a sequence of vowels like /ia/ or /ua/, the two vowels belong to separate syllables, and the duration of the first vowel is similar to the duration of the second vowel;

- Secondly, in a glide-plus-vowel sequence like /ja/ or /wa/, the glide and vowel belong to the same syllable, and the whole syllable is either stressed or not stressed. In contrast, in a vowel sequence like /i.a/ or /u.a/,

the two vowels is syllabified as two separate syllables, and only one of the syllables would be stressed (see §2.4.1 on stress assignment);

- Thirdly, in a sequence of glide and vowel, it is often the case that the quality of the vowel is assimilated by the glide, or the quality of the glide is assimilated by the vowel. As seen above, /wa/ is pronounced as [o̜a], with the [w] lowered due to the influence of the following [a]. The reverse scenario, i.e. progressive assimilation, is true for the sequence /ja/: the [a] is often raised to [ɛ] due to the high tongue position of [j]. In a vowel sequence like /ia/ or /ua/, the quality of the two vowels is kept as distinct as possible from each other. In addition, when /u/ is followed by a vowel, /u/ is usually a little bit centralised: [ʉ] (§2.1.3.7).

Summarising the first and third points above, the realisation of the two minimal pairs and one near minimal introduced above (examples 2-118 to 2-123) is as follow.

2-124.	*hya*	/xja/	[xja] ~ [xjɛ]	*2-125.*	*hia*	/xia/	[xi a]
2-126.	*hwa*	/xwa/	[xo̜a]	*2-127.*	*hua*	/xua/	[xu a] ~ [xʉ a]
2-128.	*wa*	/wa/	[o̜a]	*2-129.*	*wua*	/wua/	[wu a] ~ [wʉ a]

See also §2.2.4 on vowel sequences.

2.1.3.7   /u/ and /ʊ/

The realisations of /u/ and /ʊ/ overlap to a large degree, but on average the realisation of /u/ is slightly higher than that of /ʊ/. The realisations of /u/ and /ʊ/ in

the following minimal set can be very difficult to differentiate by the unaccustomed ear.

2-130. hofo /xʊɸʊ/ [xʊɸʊ] 'ground' *2-131. hofu* /xʊɸu/ [xʊɸu] 'come'

2-132. hufu /xuɸu/ [xuɸu] 'sun'

When the following vowel is low, /ʊ/ may be realised at a lower position, which is rendered here as [o].

2-133. lohama /lʊxama/ [lʊɣama] ~ [loɣama] 'mountain ridge'

The following is a plot of the first formant value (on linear axis) versus second-minus-first formant value (on logarithmic axis) of clear instances of /u/ and /ʊ/ in the short text *Simon Korela Hwafo* (appendix 1).[6] The male speaker, Simon Kore, was born in 1950s. As seen in the plot below, the realisations of /u/ and /ʊ/ overlap to a large degree. The average first and second formant value of instances of /u/ in the text is 444.0 Hz and 1433.4 Hz,[7] and the average first and second formant value of instances of /ʊ/ in the text is 498.6 Hz and 1085.1 Hz. For a pair of vowels with similar phonetic quality, the vowel with lower first formant value is articulated at a higher tongue height than the other one. Averagely speaking, /u/ is articulated at a higher tongue height than /ʊ/, albeit very slightly; in English, the first formant values of the average realisations of /u/ (e.g. *moon*) and /ʊ/ (e.g. *book*) are around 100Hz apart.

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[6] There are 8 clear instances of /u/ and 17 clear instances of /ʊ/ in the text. Some cases of /u/ and /ʊ/ are ellipted in fast speech, and these 'unclear cases' are not included. Vowels in sections of speech in Tok Pisin are also ignored.

[7] Most /u/'s and some /ʊ/'s that Simon Kore pronounced in this text are quite fronted, and hence the relatively high second formant values. Nevertheless, we are mainly concerned with first formant values/ tongue height here.

Figure 2.5   Formant values of /u/ and /ʊ/ in *Simon Korela Hwafo*

F2 minus F1

| 10000 | 1000 | 100 |

300 —
350 —
400 —
450 —
500 —   F1
550 —
600 —
650 —
700 —

ʊ *u*
u *u*
u *u*
u ʊ   ʊ   ʊ *u*
ʊ *u* ʊ   ʊ
ʊ   ʊʊ   ʊʊ
ʊ ʊ   ʊ
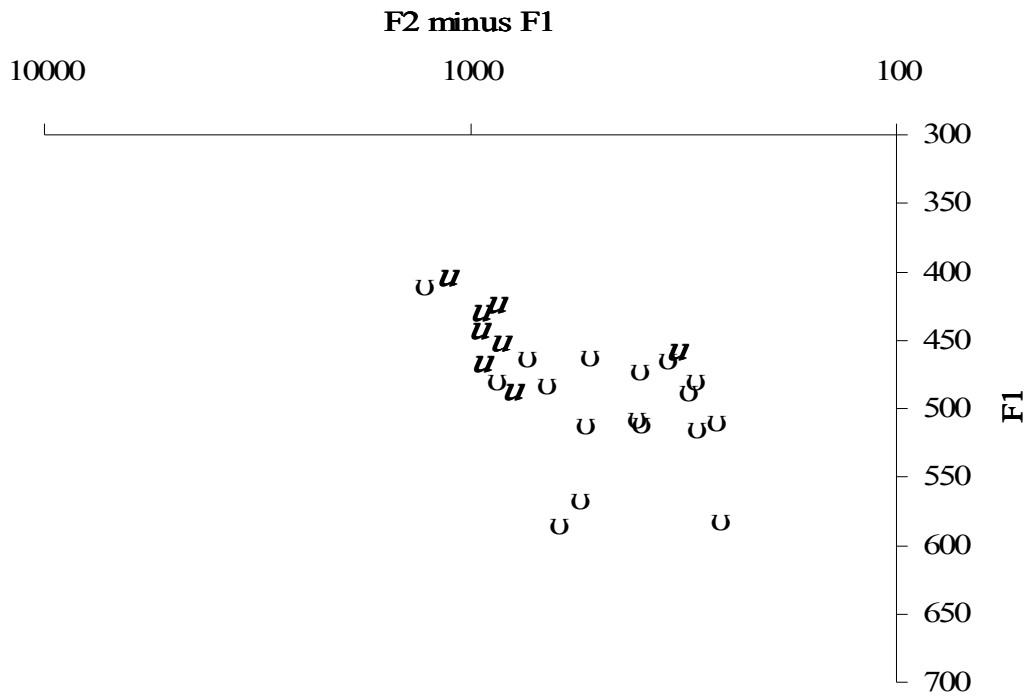
The following is another example. Figures 2.6 and 2.7 below are spectrograms of [ʔapuɸ] and [ʔapʊɸ] from the following two sentences uttered by Donald Yawa, a male speaker born in early 1980s (who is also the author of *Nimi Wami Kaku*; appendix 1).

ap-u   *fa-Ø-ya-a-mbo*   /apu ɸajabʊ/   [ʔapuɸajaᵐbʊ]

sleep-3MSG COMPL-CR-3SG-3FSG:O-DEP 'he slept, and then…'; and

ap-o   *fa-Ø-ya-a-mbo*   /apʊ ɸajabʊ/   [ʔapʊɸajaᵐbʊ]

sleep-3FSG COMPL-CR-3SG-3FSG:O-DEP 'she slept, and then…'.

82

Figure 2.6   Spectrogram of [ʔapuɸ]

ʔ   a   p   u   ɸ
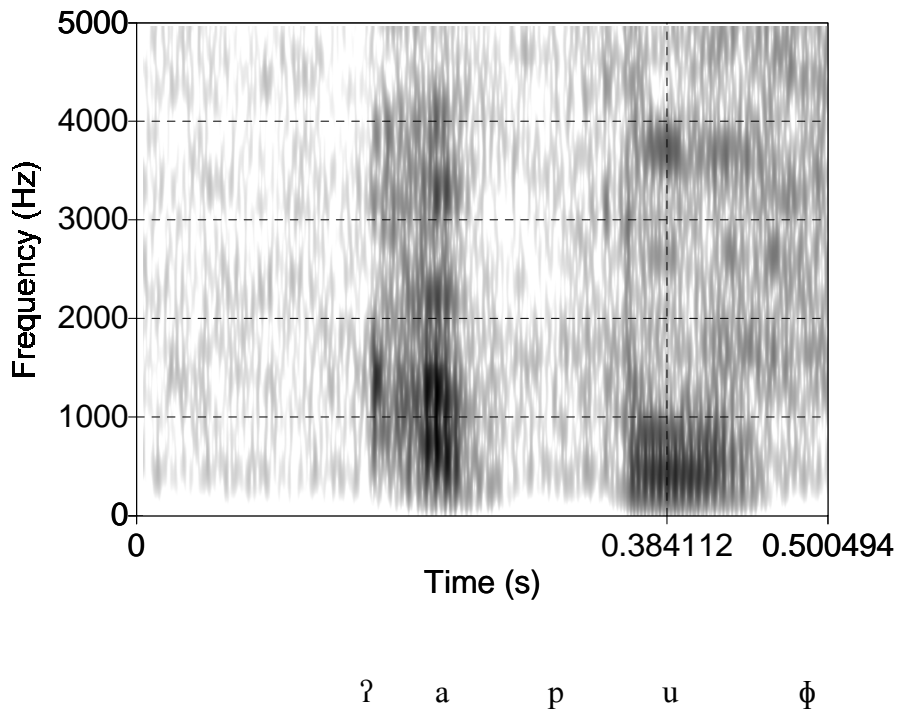
Figure 2.7   Spectrogram of [ʔapʊɸ]

ʔ   a   p   ʊ   ɸ
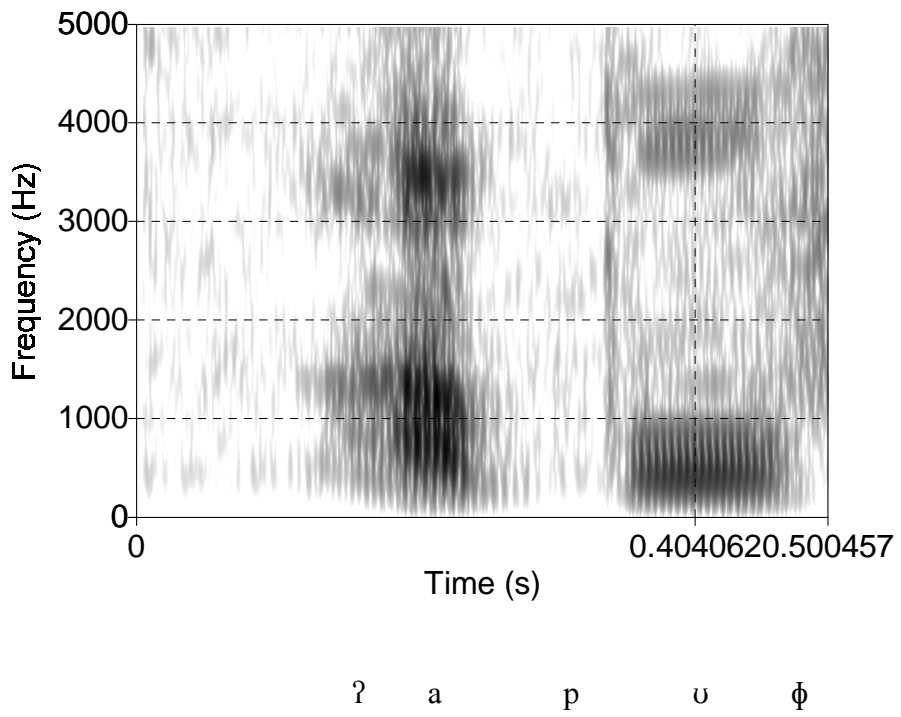
The first and second formants values of /u/ and /ʊ/ in figures 2.6 and 2.7 above are as follow:

p[u]ɸ: 414.43 Hz; 833.53 Hz (time = 0.384112")

p[ʊ]ɸ: 467.48 Hz; 689.92 Hz (time = 0.404062")

With the realisations of /u/ and /ʊ/ overlapping to such a large degree even in older speakers' speech, /u/ and /ʊ/ have merged in most — if not all — lexicons for a lot of younger speakers of Menggwa Dla born since late 1970s. For example, *yu* /ju/ 'cuscus' and *yo* /jʊ/ 'I' are homophonous for a lot of younger speakers: both pronounced as [ju] and written as *<yu>*. The dependency suffix *-mbo* (§7.5) is also mostly pronounced as [ᵐbu] and written as *<mbu>* by most younger speakers.

There are no native words beginning with /ʊ/ (there is the Papuan Malay loanword *oto* 'car' which begin with /ʊ/). On the whole the occurrence of /ʊ/ is rare in comparison with other vowels (see §2.2.4). See also §2.1.3.6 for the realisation of /u/ in comparison with /w/.

2.1.3.8   /i/ and /e/

The realisations of /i/ and /e/ on their own are simple: /i/ is realised as [i] and /e/ is realised as [e], and the difference is aurally quite distinct. For older speakers from the western villages of Menggwal and Wanggurinda, the high front vowel may have an unrounded velar onglide: [ɯi], seemingly randomly.[8] Also with older

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[8] However, the unrounded velar glide is possibly indicative of a deleted consonant, e.g. the proprietive case clitic *-mbi* (§4.5.6) — pronounced as [ᵐbɯi] by older Menggwal and Wanggurinda speakers and [ᵐbi] by other Menggwa Dla speakers — is *-mbl* [ᵐbɭə] in Dla proper. More investigation is needed.

speakers from the western villages of Menggwal and Wanggurinda, unstressed /i/ is sometimes deleted when it is preceded by one consonant, as in the name *Menggwal* /meɡwali/ which is pronounced as [meⁿɡo̯al] by a lot speakers from the western villages and [meⁿɡo̯ali] by speakers from the eastern villages of Menggau and Wahai. The demonstratives of *dani* 'this' and *akani* 'that' (§3.2.4) are often pronounced as [dan] and [akan] by older speakers from the western villages.[9] The vowel /i/ can be deleted word-medially too: *sa-niŋga-wa-hwa* (give-1SG-3SG:O-PAST) 'I gave him/her' is often pronounced as [sanⁿɡao̯aɣo̯a] — with no [i] between [n] and [ⁿɡ] — by older speakers from the western villages.

The phonetic realisation of the sequence /ei/ requires special treatment. The sequence of /ei/ is pronounced as [ei] in careful speech style, but normally the pair of vowels are raised to [ɪi̠] or [ii̠] (the second vowel [i̠] is an extra-high [i]). Younger speakers may even pronounce /ei/ as a long extra-high [iː]. Two minimal pairs between /i/ and /ei/ are *yafli* /jaɸli/ [jaβli] 'dog' versus *yaflei* /jaɸlei/ [jaβlii̠] 'cloud' and *kli* /kli/ [kli] 'boil' versus *klei* /klei/ [klii̠] 'fence (v.)'. Another minimal pair, which does not occur in the speech of all speakers, is the following pair of irregular coreferential chain verbs (§7.2):

pimbo /pi-bʊ/ [piᵐbʊ]

　　go:CR:3FSG-DEP 'she went and…', versus

peimbo /pei-bʊ/ [piːᵐbʊ]

　　go:CR:3MSG-DEP 'he went and…' (*pi* 'go' class I)

---

[9] Again, the deletion of word-final /i/ may be not totally random; the /i/'s which is deleted usually (always?) correspond with a word-final epenthetic vowel in Dla proper, e.g. *dan* [danə] 'this' and *akan* [ʔakanə] 'that' in Dla proper. More investigation is needed.

Figures 2.8 and 2.9 are spectrograms of Donald Yawa (male, born in early 1980s) saying *pimbo* /pibʊ/ [piᵐbʊ] and *peimbona* /peibʊna/ [pi̠ːmbʊna].[10, 11] The first and second formants values of [i] and [i̠ː] are:

p[i]m: 392.36 Hz; 2242.17 Hz; 2845.11 Hz (time = 0.116965")

p[i̠ː]m: 354.50 Hz; 2258.12 Hz; 2661.71 Hz (time = 0.277213")

The lower first formant value of [i̠ː] indicates that it is pronounced at a higher tongue height than [i]. The time frame of the vowel between [p] and [m] in [pi̠ːm] is also significantly longer than that in [pim]. Other than this [i̠ː] in the speech of younger speakers, there are no long vowels in Menggwa Dla. Sequences of identical vowel phonemes are always degeminated (§2.3), and thus underlyingly the vowel sequences of [ɪi̠]/ [ii̠]/ [i̠ː] must be a sequence of two different vowel phonemes. Older speakers suggest that [ɪi̠]/ [ii̠]/ [i̠ː] should be rendered <*ei*>, and hence I analyse [ɪi̠]/ [ii̠]/ [i̠ː] as /ei/ underlyingly.

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[10] Both *-mbo* and *-mbona* are (grammatical) free variations of the dependency suffix (§7.5).
[11] Figures 2.6 to 2.9 were collected by eliciting 'X slept and went and ate'. Amongst the paradigm were:

> ap-u   fa-Ø-ya-a-mbo,   pei-mbo-na,   ser-u-hwa.
> sleep-3MSG COMPL-CR-3SG-3FSG:O-DEP   go:CR:3MSG-DEP-and eat-3MSG-PAST
> 'He slept, then he went and ate.'

> ap-o   fa-Ø-ya-a-mbo,   pi-mbo-na,   ser-wa-hwa.
> sleep-3FSG COMPL-CR-3SG-3FSG:O-DEP   go:CR-3FSG-DEP-and eat-3FSG-PAST
> 'She slept, then he went and ate.'

The paradigm was not collected for the phonetic details intentionally.

Figure 2.8   Spectrogram of [piᵐbʊna]


```
p      i      m      b      ʊ      n      a
```
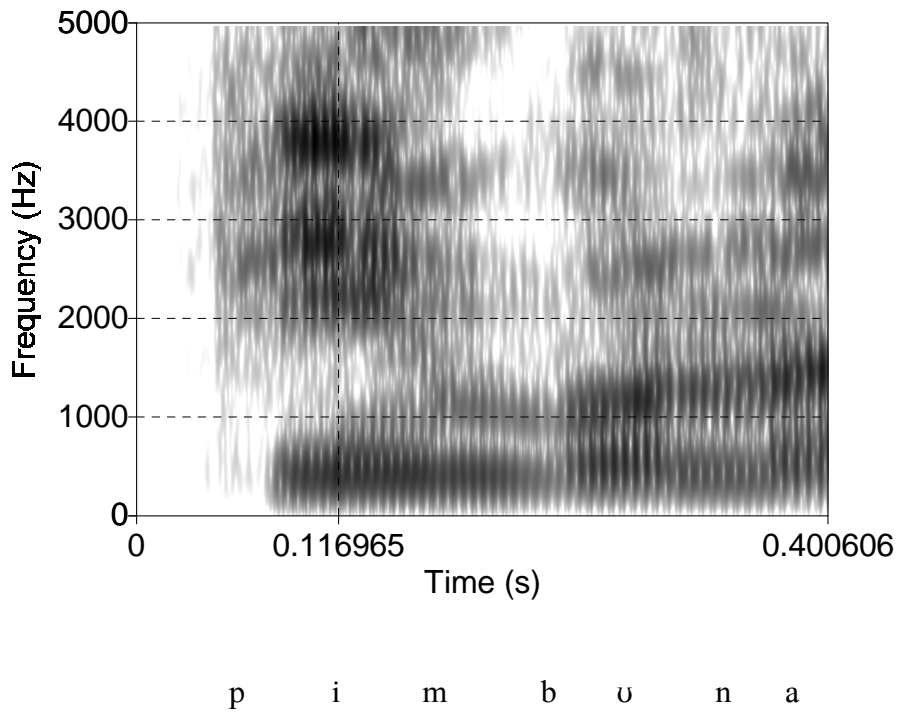
Figure 2.9   Spectrogram of [piːᵐbʊ]


```
p      i̱      i̱      m      b      ʊ
```
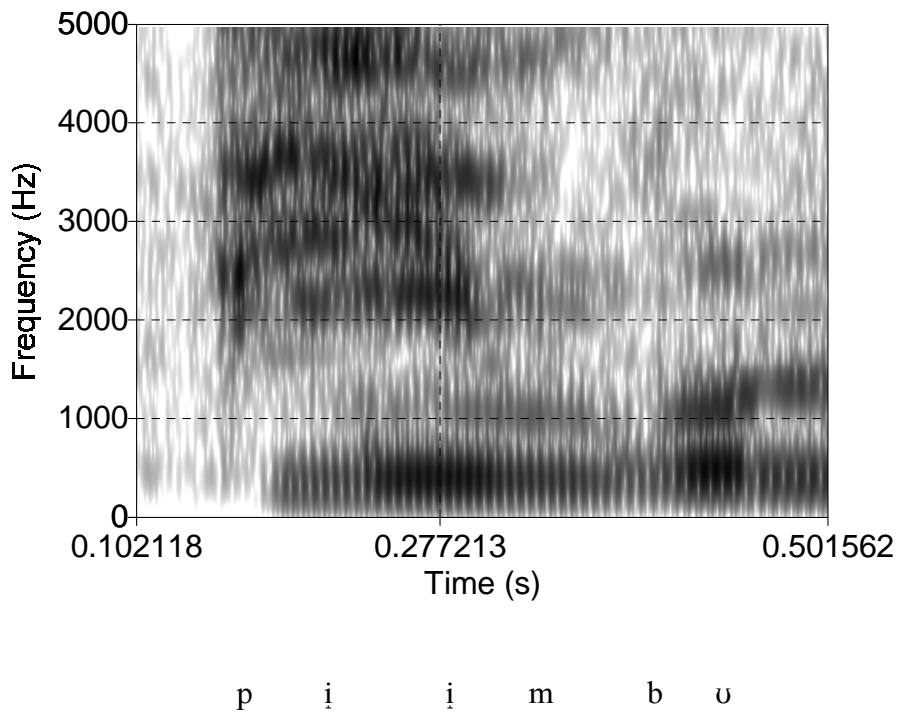
/a/

With the other four vowels occupying the top half of the vowel space, the
low vowel phoneme /a/ has a wide range of phonetic realisations within the bottom
half of the vowel space. The range of realisations of /a/ can be represented roughly
by the following IPA symbols.

```
                    ə

        ɛ          ɜ ɵ              ɔ

                    ɐ

                    a̠        ɒ
```
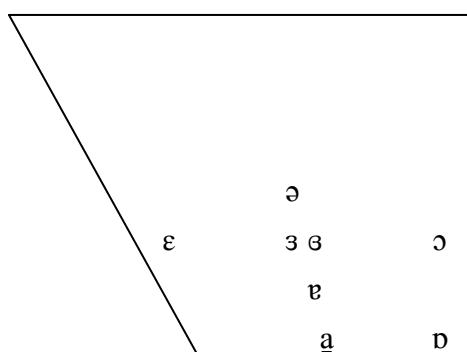
The unmarked realisation of /a/ is [a̠], a low central vowel (for typographic
convenience [a̠] is simply rendered [a] elsewhere in this thesis). When followed by
/i/, /a/ is usually raised to [ɐ] (near-low central vowel), e.g. *hai* /xai/ [xai] ~ [xɐi]
'fire'. The third person basic pronoun *ai* /ai/ is pronounced as [ai] ~ [ɐi] ~ [ɜi] ~ [əi]
~ [ɛi] ~ [ɛ] (and some people do write the third person basic pronoun as *e*).
Similarly, unstressed /a/ can be mid-centralised to some degree (see §2.4.1 on stress
assignment), e.g. *ra=pa* (that=only) 'only that' can be realised as [rapa] ~ [rapɐ] ~
[rapɜ] ~ [rapə] (if *pa* 'if' is not stressed).

In word-medial positions, /a/ tends to be rounded and/or raised when
following /w/. Take the example of *wahwa* /wa-xwa/ 3FSG-PAST 'she was'. The
realisation of the first instance of /wa/ in /waxwa/ ranges from [o̞a] ~ [o̞ɒ] ~ [o̞ɔ] ~
[o̞ɵ]. (In fact, some people write /waxwa/ as *wohwa*.) Word-finally, /a/ in the

sequence of /wa/ tends to be raised only a little bit and minimally rounded: /xwa/ in
/waxwa/ tends to be pronounced as [xo̯ɐ] or [xo̯a].

In the rest of the chapter, all these phonetic variations of /a/ are ignored, and
any instances of /a/ are broadly transcribed as [a] when the phonetic detail is not
important.

2.1.3.10   Glottal stops: vowels in word initial position

The glottal stop is not phonemic in Menggwa Dla. Words which begin with
/i e a ʊ/ have a glottal stop inserted before the vowel when the word occurs
utterance-initially. Utterance-medially, the glottal stop is optional.

2-134. *imbu*   /ibu/   [ʔiᵐbu]   'two'

2-135. *aya*   /aja/   [ʔaja]   'father'

2-136. *efu*   /eɸu/   [ʔeɸu]   'brain'

2-137. *oto*   /ʊtʊ/   [ʔʊtʊ]   'car'

For words beginning with /u/, the insertion of the glottal stop is optional. Without a
glottal stop, the word may be preceded by a [w].

2-138. *uti*   /uti/   [ʔuti] ~ [(w)uti]   'shrimp'

Vowel sequences are never separated by a glottal stop, e.g. the third person
citation pronoun *ai* /ai/ 's/he/it/they' (§4.6.1) is pronounced [ʔai] and never *[ʔaʔi].

2.1.4 Minimal pairs

Here are some minimal pairs, near minimal pairs, and distributional minimal pairs of the phonemes in Menggwa Dla. See §2.1.3.6 on minimal pairs of /w/ vs. /u/ and /j/ vs. /i/. See also §1.4.2 on the correspondence between Menggwa Dla and Dla proper, especially between /s t d l r/ in Menggwa Dla and /t d ɺ/ in Dla proper.

Word-initial /s/ vs. /d/ vs. /r/:

Word-initial /s/:	Word-initial /d/:	Word-initial /r/:
sufua /suɸua/ [suβua]	*dufua* /duɸua/ [duβua]	
'heart'	'egg'	
	dani /dani/ [dani]	*rani* /rani/ [rani]
	'this' (spatial DEM)	'DEM' (discourse DEM)[12]
safa /saɸa/ [saβa]		*rapa* /rapa/ [rapa]
'meat'/ 'interior'		'only that'

Word-initial /d/ vs. /l/:

Word-initial /d/:	Word-initial /l/:
dafuhu /daɸuxu/ [daβuɣu]	*lahumbi* /laxubi/ [laɣuᵐbi]
'blue'	'he will be'

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[12] See §3.2.4 on demonstratives. The discourse demonstrative is *yan* in Dla proper and *ra* in Anggor (neither of them have an *l/ r* phonemic distinction like Menggwa Dla does). See also §1.4.3 on sound correspondences with Dla and Anggor.

Word-initial /r/ vs. /s/ vs. /t/:

Word-initial /r/:	Word-initial /s/:	Word-initial /t/:
rapa /rapa/ [rapa]	*tambi* /tabi/ [taᵐbi]	*safa* /saɸa/ [saβa]
'only that'	'banana'	'interior'/ 'meat'
	tefu /teɸu/ [teβu]	*sefi* /seɸi/ [seβi]
	'tongue'	'give'
	tite /tite/ [tite]	*sini* /sini/ [sini]
	'bad'	'sky'
ruhwa /ruxwa/ [ruɣo̥a]	*tutu* /tutu/ [tutu]	*sufua* /suɸua/ [suβua]
'down below'	'breast'/ 'eleven'	'heart'

Word-medial /r/ vs. /l/ vs. /t/:

Word-medial /r/:	Word-medial /l/:	Word-medial /t/:
aru /aru/ [ʔaru]	*alu* /alu/ [ʔalu]	*hwatu* /xwatu/ [xo̥atu]
'father's brother'	'string bag'	'search'
bara /bara/ [bara]	*alani* /alani/ [ʔalani]	*ata* /ata/ [ʔata]
'run'	'cry'	'grandmother'
bufra /buɸra/ [buβra]	*aflambli* /aɸlabli/	*buftya* /buɸtja/ [buɸtja]
'vulva'	[ʔaβlaᵐbli] 'plenty'	'rat'
kro /krʊ/ [krʊ]	*klo* /klʊ/ [klʊ]	
'come down'	'separate'	
yari /jari/ [jari]		*yati* /jati/ [jati]
'sago'		'wrist'/ 'six'

/n/ vs. /l/:

/n/:	/l/:
kni /kni/ [kni]	*kli* /kli/ [kli]
'ant'	'boil'

/n/ vs. /r/:

/n/:	/r/:
banala /banala/ [banala]	*barala* /barala/ [barala]
'wing'	'index finger'/ 'four'

/p/ vs. /b/ vs. /m/ vs. /ɸ/:

pi /pi/ [pi]   *bi* /bi/ [bi]   *mi* /mi/ [mi]   *fi* /ɸi/ [ɸi]

'go'   'uncle other than father's brother'   'mother'   'body'

/k/ vs. /g/ and /g/ vs. /x/:

/k/:	/g/:	/x/:
klu /klu/ [klu]	*glu* /glu/ [glu]	
'eagle'	'teacher'	
	gwi /gwi/ [gwi]	*hwi* /xwi/ [xwi]
	'another'	'water'

/p/ vs. /t/ vs. /k/:

/p/:	/t/:	/k/:
apa /apa/ [ʔapa]	*ata* /ata/ [ʔata]	
'daytime'	'grandmother'	
popo /pʊpʊ/ [pʊpʊ]		*koko* /kʊkʊ/ [kʊkʊ]
'collect eggs from nests'		'faeces'
	tu /tu/ [tu]	*ku* /ku/ [ku]
	'bird'	'fence'

/ɸ/ vs. /x/:

/ɸ/:	/x/:
fufu /ɸuɸu/ [ɸuβu]	*hufu* /xuɸu/ [xuβu]
'horn'	'sun'
fi /ɸi/ [ɸi]	=*hi* /=xi/ [xi]
'body'	ADDESSIVE case clitic
	(§4.5.4)

/a/ vs. /e/:

/a/:	/e/:
nyafu /njaɸu/ [njaβu]	*nyefu* /njeɸu/ [njeβu]
'you (2NSG) are'	'we (1PL) are' (§6.4.1)

/e/ vs. /i/:

/e/:	/i/:
=mbe /=be/ [ᵐbe]	*=mbi* /=bi/ [ᵐbi]
INESSIVE case clitic (§4.5.3)	PROPRIETIVE case clitic (§4.5.5)

(See §2.1.3.8 on minimal pairs of /ei/ vs. /i/.)

/i/ vs. /u/:

/i/:	/u/:
mefi /meɸi/ [meβi]	*mefu* /meɸu/ [meβu]
'finish'	'thank'

/u/ vs. /ʊ/:

/u/:	/ʊ/:
nu /nu/ [nu]	*no* /nʊ/ [nʊ]
'he (3MSG) is'	'she (3FSG) is'
klu /klu/ [klu] 'eagle'	*klo* /klʊ/ [klʊ] 'separate'

/ʊ/ vs. /a/:

/ʊ/:	/a/:
fo /ɸʊ/ [ɸʊ]	*fa* /ɸa/ [ɸa]
'collect egg'	'pick betel nut'

2.2   Phonotactics

2.2.1   Syllable and word structure

Phonological words consist of one or more syllables, and syllables consist of phonemes organised according to phonotactic principles. A syllable in Menggwa Dla consists minimally of a vowel (V), and optionally one consonant (C) or two consonants (CC) preceding the vowel. In a consonant cluster, the second consonant must be one of the following sonorants: /n/ /r/ /l/ /j/ /w/.

(C) (n//r/l/j/w) V

2-139. *kni*   /kni/   [kni]   'ant'

2-140. *kri*   /krʊ/   [krʊ]   'come down'

2-141. *kli*   /kli/   [kli]   'boil'

2-142. *kyau*   /kjau/   [kjau]   'bite'

2-143. *kwala* /kwala/   [ko̥ala]   'seed'

See §2.2.2 on consonant clusters. Codas do exist in some exceptional syllables. Nevertheless, they are highly restricted in Menggwa Dla (see §2.2.3).

Except for the word *o* 'or' (which native speakers think is a Tok Pisin loanword: *o* 'or'), independent words must consist of at least two segments. There is one word which consists of two vowels (two syllables): the third person citation

pronoun *ai* 's/he/they/it' (§4.6.1).[13] Otherwise, monosyllabic words must have an

onset with one or two consonants.

C V; or C {n/l/r/j/w} V

The following monosyllabic words exemplify possible syllable shapes in

monosyllabic words.

CV:

2-144. yo /jʊ/ [jʊ]   'I/ we';

2-145. si /si/   [si]   'you';

2-146. mi /mi/ [mi] 'mother'

CCV:

2-147. gni /gni/ [gni] 'grease';

2-148. dla /dla/ [dla] 'Dla'

In polysyllabic words, syllables can have the shape of V, CV or C {n/l/r/j/w}

V. The syllables in bold in the following polysyllabic words exemplify the attested

syllable types in Menggwa Dla:

V:

2-149. *uru*   /**u**.ru/   [uru]   'dig'

2-150. *giefi*   /gi.**e**.ɸi/   [gieβi]   'follow'

2-151. *deu*   /de.**u**/   [deu]   'who?'

CV:

2-152. *wanafu*   /**wa**.**na**.**ɸu**/ [wanaβu] 'crown pigeon'

2-153. *numami* /**nu**.**ma**.**mi**/ [numami] 'above'

CCV:

2-154. *gluma*   /**glu**.ma/   [gluma]   'forehead'

2-155. *akwani*   /a.**kwa**.ni/   [ʔako̜ani] 'snake'

2-156. *mafwa*   /ma.**ɸwa**/   [maβo̜a] 'all'

Native monomorphemic words with four syllables have not been encountered. However, there are some native four-syllable compounds.

2-157. *walambani*   /wa.la-ba.ni/   [o̜ala^{m}bani]   'swim'

                  hand-swim

2-158. *hombakwala* /xʊ.ba-kwa.la/   [xʊ^{m}bako̜ala] 'eye'

                  see-seed

2-159. *hamodokwa* /xa.mʊ-dʊ.kwa/ [xamʊ^{n}dʊko̜a] 'testicle'

                  penis-egg(?)

The Malay loanword *lapaŋgani* /la.pa.ga.ni/ [lapaᵑgani] 'airstrip' (Malay:

lapangan 'field') is a monomorphemic word with four syllables. The native word

anyapaluku /a.nja.pa.lu.ku/ [ʔanjapaluku] 'tired' — with five syllables — is probably

a compound historically (the stress pattern of [ˌʔanjapaˈluku] suggests that the

boundary falls between *anya* and *paluku*; see §2.4.1 on stress assignment).

2.2.2   Consonant clusters

All fifteen consonants can be the onset of a CV syllable. The following table

summarises attested consonant clusters in morpheme-initial and morpheme-medial

positions. The meaning of the symbols used is as follow:

- \+ signifies that the cluster is attested in both morpheme-initial and

  morpheme-medial positions;

- ± signifies that the cluster is attested in morpheme-initial positions but not in

  morpheme-medial positions;

- ∓ signifies that the cluster is not attested in morpheme-initial positions but

  attested in morpheme-medial positions; and

- − signifies that the cluster is not attested in any positions.

Table 2.10   Attested consonant clusters (C_1C_2)

$C_1\downarrow C_2\rightarrow$	/n/	/r/	/l/	/j/	/w/	$C_1\downarrow C_2\rightarrow$	/n/	/r/	/l/	/j/	/w/
/p/	–	–	∓	–	∓	/ɸ/	∓	+	+	∓	∓
/t/	–	–	±	+	+	/s/	±	–	–	–	–
/k/	±	±	+	+	+	/x/	–	±	±	+	+
/b/	–	–	+	+	–	/l/	–	–	–	–	–
/d/	–	–	±	±	–	/r/	–	–	–	–	–
/g/	+	–	+	–	+	/j/	–	–	–	–	–
/m/	+	+	∓	∓	–	/w/	–	–	–	–	–
/n/	–	–	–	+	–						

The following are some observations:

- except /s/ in the cluster of /sn/, all consonants which can form an onset together with /n/ and /r/ are all non-coronal consonants (/r/ in Menggwa Dla is a reflex of *\/t/ in Proto Dla; §1.4.2);

- consonant clusters beginning with /p/ are only found in morpheme-medial positions;

- the sequence /tl/ is only found in one word: *tlefu* 'jaw harp';

- /d/ and /s/ only occur in morpheme-initial positions (§2.1.3.2,4), and hence there are no morpheme-medial consonant clusters beginning with /d/ or /s/;

- except for morpheme medial /pw/, bilabial consonants do not form consonant clusters with /w/;

- when C_1 is a fricative (which is [+continuant]), /r/ in C_2 position patterns more with /l/; when C_1 is [– continuant] (i.e. oral and nasal stops), /r/ in C_2 position patterns more with /n/, and /l/ patterns more with /j/.

In addition, consonant clusters which consist of a [+nasal] consonant and a [+consonantal] consonant — /kn/, /gn/, /sn/, /mn/, /mr/ — may be separated by a brief epenthetic schwa: *kni* [kni] ~ [kᵊni] 'ant', *mni* [mni] ~ [mᵊni] 'just', *tamnia* [tamnia] ~ [tamᵊnia] 'group of small things'. This epenthetic schwa is quite rare in Menggwa Dla, and it must be brief in duration and cannot carry stress. This contrast with the epenthetic central vowel in Dla proper, which occurs very frequently, has the same length as non-epenthetic vowels, and can sometimes carry stress. Another fact concerning /kn/, /gn/, /mn/ and /mr/ (but not /sn/) is that they are always followed by /i/.

The first syllable of the following words exemplifies consonant clusters found in morpheme-initial position. ((±) signifies that the cluster is not found in morpheme-medial positions; (∓) signifies that the cluster is found in morpheme-medial positions.)

Table 2.11   Examples of consonant clusters (C_1C_2) in morpheme-initial positions

$C_{1\downarrow}C_2{}^{\rightarrow}$	/n/	/r/	/l/	/j/	/w/
/p/	–	–	(∓)	–	(∓)
/t/	–	–	*tlefu* /t̠leɸu/ 'jaw harp' (±)	*tyo* /t̠jʊ/ 'middle/ ring finger'	*twafu* /t̠waɸu/ 'hornbill'
/k/	*kni* /k̠ni/ 'ant' (±)	*kro* /k̠rʊ/ 'come down' (±)	*klu* /k̠lu/ 'eagle'	*kyambe* /k̠jabe/ 'tomorrow'	*kwala* /k̠wala/ 'seed'
/b/	–	–	*blufa* /b̠luɸa/ 'short'	*bya* /b̠ja/ 'coconut'	–

100

/d/	–	–	dla /dla/ 'Dla' (±)	dya /dja/ 'name' (±)	–
/g/	gni /gni/ 'oil'	–	glutufu /glutuɸu/ 'spit'	–	gwi /gwi/ 'another'
/m/	mni /mni/ 'just'	mrila /mrila/ 'chest'	(∓)	(∓)	
/n/	–	–	–	nyewi /njewi/ 'person'	–
/ɸ/	(∓)	fri /ɸri/ 'get rid'	fla /ɸla/ 'place'	(∓)	(∓)
/s/	snaŋga /snaga/ 'slow' (±)	–	–	–	–
/x/	–	hri /xri/ 'come out' (±)	hlua /xlua/ 'blood (±)	hyela /xjela/ 'skin'	hwati /xwati/ 'leech'
/l/	–	–	–	–	–
/r/	–	–	–	–	–
/j/	–	–	–	–	–
/w/	–	–	–	–	–

The final syllable of the following words exemplifies consonant clusters found in morpheme-medial positions. ((±) signifies that the cluster is not found in morpheme-medial positions; (∓) signifies that the cluster is found in morpheme-medial positions.)

Table 2.12   Examples of consonant clusters (C₁C₂) in morpheme-medial positions

C₁↓C₂→	/n/	/r/	/l/	/j/	/w/
/p/	–	–	*dupli* /dupli/ 'play' (∓)	–	*pupwa* /pupwa/ 'short' (∓)
/t/	–	–	(±)	*amatya* /amatja/ 'yellow'	*petwa* /petwa/ 'old age'
/k/	(±)	(±)	*buklu* /buklu/ 'forest'	*akya* /akja/ 'little finger'	*bakwa* /bakwa/ 'path'
/b/	–	–	*humbli* /hubli/ 'buttock'	*ambya* /abja/ 'hole'	–
/d/	–	–	(±)	(±)	–
/g/	*nugni* /nugni/ 'when'	–	*yangla* /jagla/ 'green'	–	*hungwa* /hugwa/ 'white'
/m/	*amni* /amni/ 'garden'	*mumri* /mumri/ 'lightning'	*damlu* /damlu/ 'nose' (∓)	*kumya* /kumja/ 'vicinity' (∓)	–
/n/	–	–	–	*hutinya* /xutinja/ 'sand'	–
/ɸ/	*hufni* /xuɸni/ 'evening' (∓)	*bufra* /buɸra/ 'vagina'	*yafla* /jaɸli/ 'dog'	*safya* /saɸja/ 'community'	*mafwa* /maɸwa/ 'all'
/s/	(±)	–	–	–	–
/x/	–	(±)	(±)	*nihyamo* /nixjamo/ 'cane'[14]	*kyahwa* /kjaxwa/ 'crab'/ 'turtle'

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[14] Words with the sequence *hy* /xj/ in the last syllable have not been encountered.

/l/	–	–	–	–	–
/r/	–	–	–	–	–
/j/	–	–	–	–	–
/w/	–	–	–	–	–

Although the clusters of /pl/, /pw/, /ml/, /mj/ and /ɸn/ do not occur word-initially, these sequences of consonants are analysed as complex onsets due to the fact that /p/, /m/ and /ɸ/ cannot be followed by a consonant other than /n/ /l/ /r/ /j/ /w/,[15] and the sonority rises from the first consonant /p m ɸ/ to the second consonant /n l r j w/ just like any other consonant clusters.[16] In addition, consonants which can be undoubtedly regarded as codas are hugely restricted in Menggwa Dla (see §2.2.3).

2.2.3   Syllables with coda

There are some exceptional morpheme-medial two-consonant sequences: *ft* /ɸt/, *lk* /lk/, *lf* /lɸ/, *lk* /lk/ and *tp* /tp/. In these consonant sequences, the second consonant is not a sonorant, and the sonority falls from the first to the second consonant (unlike complex onsets where the sonority rises from the first to the second consonant; §2.2.2). Based on Maximum Onset Principle (Kahn 1976) (syllabify as many pre-vocalic consonants as legitimate onsets first) and Sonority Profile (Venneman 1972) (that sonority rises from the beginning of the syllable, peaks at the nucleus, and then falls till the end of the syllable), the first consonant of these consonant sequences is clearly the coda of the previous syllable, and the

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[15] One exception is the sequence /ɸt/; see §2.2.3.

[16] I am not aware of proposals of (non-language-specific) sonority hierarchies which deal with the ranking of /m/ versus /n/. The fact that the onset /mn/ is found but /nm/ is not found does not necessarily testify that /m/ is less sonorous than /n/, as onsets with falling sonority do occur, e.g. /sp/ in English. The onset cluster /mn/ may contradict the statement raised in the main text that onset clusters always have rising sonority.

second consonant the onset of the following syllable. There are three such sequences occurring in native words: *ft* /ɸ.t/, *lk* /l.k/ and *lf* /l.ɸ/. The following are words (which I am aware of) which contain these sequences.

2-160.	*a**ft**a*	/aɸ.ta/	[ʔaɸta]	'bathe' (monovalent)
2-161.	*a**ft**afefi*	/aɸ.ta.ɸe.ɸi/	[ʔaɸtaβeβi]	'bathe' (bivalent)
2-162.	*bu**ft**ya*	/buɸ.tja/	[buɸtja]	'rat/ mouse'
2-163.	*sa**ft**u*	/saɸ.tu/	[saɸtu]	'Saturday'
			(Malay: *Sabtu* < Arabic السبت *as sabt*)	
2-164.	*imba**lk**wa*	/i.bal.kwa/	[ʔiᵐbalkʊa]	'heavy'
2-165.	*giha**lf**i*	/gi.xal.ɸi/	[giɣalβi]	'cold'
2-166.	*anihwa**lf**i*	/a.ni.xwal.ɸi/	[ʔaniɣʊalβa]	'bottom'
2-167.	*hwa**lf**ehi*	/xwal.ɸe.xi/	[xʊalβeɣi]	'woman'
2-168.	*hwa**lf**ehima*	/xwal.ɸe.xi.ma/	[xʊalβeɣi(ma)]	'girl'
2-169.	*hwa**lf**a*	/xwal.ɸa/	[xʊalβa]	'young'

The sequence *lk* /l.k/ also occurs in the compound *wa**lk**ni* /wal-kni/ (pig-ant) 'mosquito'.[17] There is also the sequence *tp* /t.p/ in the Malay loanword *ka**tp**i* /katpi/ 'cassava' (Malay: *kasbi*).[18]

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[17] The word for 'pig' is *wali* in Menggwa Dla.

[18] These words with 'unusual' consonant clusters in Menggwa Dla are probably not borrowed from Dla proper (which has a much wider range of consonant clusters and uses epenthetic vowels liberally); some of these Menggwa Dla words have no cognates in Dla proper: Menggwa Dla *buftya* 'mouse' versus Dla proper *kombo* 'mouse', Menggwa Dla *gihalfi* 'cold' versus Dla proper *amnaŋgi* 'cold'. It is also unlikely that a language with (mostly) vowel-ending syllables like Menggwa Dla would borrow highly specific consonant clusters like *lf*, *lk* and *ft*. Based on the fact that both Anggor and Dla proper have epenthetic vowels, and that both /i/ and epenthetic vowel positions in Dla proper usually corresponds with /i/ in Menggwa Dla, we can assume that proto-Dla has epenthetic vowels and Menggwa Dla has gone through stages of changing epenthetic vowels into /i/ (and sometimes /u/), rather than proto-Dla having no epenthetic vowels and Dla proper randomly centralising and epenthesising vowels. Based on this postulation, we can further assume that the change from

Lastly, there are two words which end with /m/: *tupam* /tu.pam/ 'thing' and *hohwam* /xo.xwam/ 'flood'/ 'water monster'. The same words occur in Dla proper, but whether these are loanwords from Dla proper or irregularly inherited from proto-Dla is unclear.

2.2.4   Vowel restrictions

There is no instance of a lexical morpheme containing more than one /e/, and /ʊ/ is not found at the beginning of native words (there is a Papuan Malay loanword *oto* /ʊtʊ/ 'car').[19,20]

There are few monomorphemic vowel sequences. Apart from /ei/, all vowel sequences have an /a/ vowel: /ai/, /au/, /ia/, /ʊa/ and /ua/. These vowel sequences are syllabified as two different syllables (the usual maximum shape of syllables is CCV; §2.2.1). The stress-placements in the following words also indicates that the vowel sequences are syllabified as two separate syllables (primary stress falls on the penultimate syllable for nouns; §2.4.1), e.g. *yaɸlei* /ja.**ɸle**.i/ [ja**ˈβlɪ**i] 'cloud' versus *yaɸli* /**ja**.ɸli/ [**ˈja**βli] 'dog'.

2-170. /ai/:   *hai*   /xa.i/   [ˈxɐi]   'fire'

2-171. /au/:   *kyau*   /kja.u/   [ˈkjɐu]   'bite'

---

epenthetic vowels to /i/ was incomplete and the consonants of *lf*, *lk* and *ft* in Menggwa Dla are remnants of an earlier stage of the language when consonant clusters are much less restrictive.

[19] The [– low] [– high] vowels of /e/ and /ʊ/ are comparatively rare. The frequency of the five vowel phonemes in a 200 item Menggwa Dla 'basic' word list is as follow:

[+ high]	/i/ *<i>* 23%,	/u/ *<u>* 21%;
[– high] [– low]	/e/ *<e>* 7%,	/ʊ/ *<o>* 9%; and
[+ low]	/a/ *<a>* 40%.	

[20] There are some words with more than one /ʊ/ *<o>*: *fofo* 'blow' (which has a near minimal pair *fufu* 'play flute').

2-172. /ia/: *gwia*   /gwi.a/   [ˈgwia]   'lower leg'

2-173. /ʊa/: *ambloa*   /a.blʊ.a/   [ʔaˈᵐblʊa]   'outside'

2-174. /ua/: *hlua*   /xlu.a/   [ˈxlua]   'blood'

2-175. /ei/: *aŋgei*   /a.ge.i/   [ʔaˈⁿgei]   'worm' (see also §2.1.3.8 on /ei/)

Other vowel sequences do occur, but they are inter-morphemic, e.g. *deu?* /de-u/ (who.be-3MSG) 'who is he?', *hwafoefi!* /hwafu-efi-Ø/ (talk-N1FDU-IMP) 'you two talk!'. Due to the *a-deletion* rule (§2.3), underlying sequences of /ea/ or /ae/ always surface as [e].

2.3   Morphophonemics

Morphophonemic transparency is high in Menggwa Dla. There are only two morphophonemic rules, both concerning vowels across morpheme boundaries within a word.

The first morphophonemic rule is ***vowel degemination***. Two identical vowels adjacent to each other across morpheme boundaries are degeminated (including instances where the two vowels are separated by a zero morph).

vowel degemination rule:

$$
V \rightarrow \emptyset / \quad \{ \quad V \_ \ / \ \_ V \quad \}
$$

$$
\begin{pmatrix} \alpha \text{ high} \\ \beta \text{ back} \\ \gamma \text{ low} \end{pmatrix} \qquad \begin{pmatrix} \alpha \text{ high} \\ \beta \text{ back} \\ \gamma \text{ low} \end{pmatrix} \qquad \begin{pmatrix} \alpha \text{ high} \\ \beta \text{ back} \\ \gamma \text{ low} \end{pmatrix}
$$

2-176. *bima*   /bi-m**a-Ø-a**/   → /bim**a**/ [bim**a**]

hold-NEG:IR-N1SG-3FSG:O

'will you/s/he hold it?'

2-177. *saniŋgimbo*   /Ø-sa-nig**i-i**-bʊ/   → /sanig**i**bʊ/ [saniⁿg**i**ᵐbʊ]

CR-give-N1FPL-1SG:O-DEP

'they gave me it, and then (they did something)…'

2-178. *baramefambo*   /bara-m**e-e**ɸa-bʊ/   → /baram**e**ɸabʊ/ [baram**e**βaᵐbʊ]

run-DR-1PL-DEP

'we ran, and then (someone else did something)…'

The second morphophonemic rule is ***a-deletion***. When /a/ is preceded or followed by /e/, /a/ is deleted (including instances where the two vowels are intervened by a zero morph).

a-deletion rule:

a → Ø/ { e _ / _e}

Alternatively, using distinctive features:

a-assimilation rule:

V   →   V/   {   V   _   /   _   V   }

$$\begin{bmatrix} - \text{high} \\ - \text{back} \end{bmatrix} \quad \begin{bmatrix} -\text{low} \end{bmatrix} \quad \begin{bmatrix} -\text{high} \\ -\text{back} \\ -\text{low} \end{bmatrix} \quad \begin{bmatrix} -\text{high} \\ -\text{back} \\ -\text{low} \end{bmatrix}$$

Examples of **a → Ø/ _e**:

2-179. barefumbo   /bar**a-Ø-e**ɸu-bʊ/   → /bar**e**ɸubʊ/ [bar**e**βuᵐbʊ]

run-CR-1PL-DEP

'we ran, and then (we did something)…'

2-180. mekwambo   /m**a-e**k-wa-bʊ/   → /m**e**kwabʊ/ [m**e**ko̥aᵐbʊ]

DR-exist-3FSG-DEP

'the thing were there, and then (something else happened)…'

Examples of **a → Ø/ e_**:

2-181. fri bokefahwa /ɸri   bʊk**e-a**ɸa-xwa/   → /ɸri bʊk**e**ɸaxwa/ [ɸri bʊk**e**βaɣo̥a]

get.rid NEG:R-N1MDU-PAST

'They did not get rid of (it).'

2-182. hufwehambi   /xuɸw**e-a**xa-bi/   → /xuɸw**e**xabi/ [xuβw**e**ɣaᵐbi]

be.hot-1SG-PRES:STAT

'I am hot.'

        This *a*-deletion rule can be analysed as a collaboration of two ordered rules: /a/ is assimilated to /e/ when it is adjacent to /e/ in *a*-assimilation rule, and then the two adjacent /e/'s are degeminated according to the vowel degemination rule (see above). The following exemplifies the transformation from /bar**a-e**ɸi-Ø/ (run-N1FDU-IMP) to /bar**e**ɸi/ 'you two run!'.

                        /bar**ae**ɸi/

        a-assimilation   /bar**ee**ɸi/

        degemination   /bar**e**ɸi/

Unless specified otherwise, all Menggwa Dla examples in this thesis are given in underlying phonemic forms (rendered in orthographic form), i.e. forms before these morphophonemic rules are applied. For instance, in the following example (which is typical of chapters 3 to 7 on morphology and syntax; especially §7.2 on chain clauses), the forms given are underlying forms before the morphophonemic rules are applied: the surface form of *ma-e-afa-mbo* is *mefambo* /meɸabʊ/ [meβaᵐbʊ], and the surface form of *bara-Ø-efu-mbo* is *barefumbo* /bareɸubʊ/ [bareβuᵐbʊ] (c.f. example 2-179 above).

2-183. *ma-e-afa-mbo,*   *bara-Ø-efu-mbo…*

        DR-sleep-N1MDU-DEP   run-CR-1PL-DEP

        'They slept, and we run, and…'

2.4   Stress and Intonation

Words are not differentiated by suprasegmental features in Menggwa Dla. Stress in Menggwa Dla is manifested by an increased intensity of the stressed syllable. When a word is uttered in isolation, the stressed syllable has a higher pitch than neighbouring syllables. However, the intonation pattern of a clause typically monitors word boundaries more than stress pattern of syllables; in these cases, the stressed syllables of a word in continuous speech do not necessarily have higher pitch than neighbouring unstressed syllables (similar to Romance languages like Italian and Portuguese). Vowel quality is not significantly affected by stress except for /a/, which can be mid-centralised to some degree in unstressed positions

(§2.1.3.9). Stress assignment is discussed in §2.4.1; word pitch and clausal

intonation are discussed in §2.4.2.

2.4.1   Stress assignment

Stress assignment is predictable in Menggwa Dla. The lone syllable of

monosyllabic lexical words and pronouns carries stress.

2-184. *hwi*   /xwi/   [ˈxwi]   'water'

2-185. *si*   /si/   [ˈsi]   'you'

2-186. *ko*   /kʊ/   [ˈkʊ]   'fence'

Other monosyllabic grammatical words and clitics may carry stress, depending on

whether they are emphasised by the speaker or not (similar to English).

2-187. *si=pa*   /si=pa/   [ˈsi(ˈ)pa]   'only you' (2=only)

2-188. *yowala no* /jʊ.wa.la nʊ/ [jʊˈo̜ala (ˈ)nʊ] '(it) is mine' (1SG:GEN COP:3FSG)

For disyllabic and trisyllabic words, primary stress falls on the penultimate

syllable.

2-189. *hlua*   /xlu.a/   [ˈxlua]   'blood'

2-190. *damlu*   /da.mlu/   [ˈdamlu]   'nose'

2-191. *huŋgu*   /xu.gu/   [ˈxuⁿgu]   'thunder'

2-192. *yafli*   /ja.ɸli/   [ˈjaβli]   'dog'

2-193. *yaflei*   /ja.ɸle.i/ [jaˈβlii̥]   'cloud'

110

2-194. *imbali* /i.ba.li/ [ʔiˈᵐbali] 'thorn'

2-195. *lohama* /lʊ.xa.ma/[loˈɣama] 'mountain ridge'

Secondary stress falls on the first syllable for words with four syllables.

2-196. *lapaŋgani* /la.pa.ga.ni/ [ˌlapaˈⁿgani] 'airport'/ 'airstrip'

2-197. *walatapa* /walatapa/ [ˌo̞alaˈtapa] 'lower arm'

2-198. *hofowali* /xʊɸʊwali/ [ˌxʊβʊˈo̞ali] 'bandicoot'

The five-syllable monomorphemic word *anyapaluku* '(be) tired' has a secondary stress in the first syllable. Historically this word may be compound with the morpheme boundary between *anya* and *paluku*. There are no other five-syllable monomorphemic words.

2-199. *anyapaluku* /anjapaluku/ [ˌʔanjapaˈluku] '(be) tired'

Nominal clitics (§4.5) are not stressed.

2-200. *hwihi*   /xwi꞊xi/   [ˈxwiɣi]

                    water꞊ADS   'at the water'

2-201. *hwilalofo* /xwila꞊lʊɸʊ/   [ˈxwilalʊɸʊ]

                    mother꞊COM   'with mother'

2-202. *yapalimbo* /japali꞊bʊ/   [jaˈpaliᵐbʊ]

                    tree.kangaroo꞊OBJ '…tree kangaroo'

Stress assignment of verbs is a little bit more complicated. In an inflected verb, the verb stem always bears the primary stress of the verb: the primary stress falls on the lone syllable of a monosyllabic verb stem, or the penultimate syllable of a polysyllabic verb stem, and if the verb-stem ends in a consonant, that consonant is disregarded. Alternate syllables following the verb stem carry secondary stresses, except that suffixes following the cross-reference suffixes (§5) — i.e. tense-aspect-mood suffixes (§6) or the syntactic dependency marker *-mbo ~ -mbona* (§7) — are not stressed. Prefixes of the verb stem are also not stressed.[21]

pi (*pi-*/ *po-*) 'go' (class I):

2-203. pihwa	/pi-Ø-xwa/	[ˈpiɣo̥a]
	go-3MSG-PAST	'he went.'
2-204. piwahwa	/pi-wa-xwa/	[ˈpio̥ɒɣo̥a]
	go-3FSG-PAST	'she went.'
2-205. piefumbo	/pi-Ø-eɸu-bʊ/	[ˈpieˌβuᵐbʊ]
	go-CR-1PL-DEP	'we went, and…'
2-206. piafanimbo	/pi-Ø-aɸani-bʊ/	[ˈpiaˌβaniᵐbʊ]
	go-CR-N1MDU-DEP	'the two of them went, and …'
2-207. pomehyembo	/pʊ-me-exje-bʊ/	[ˈpʊmeˌɣjeᵐbʊ]
	go:DR-DR-1DU-DEP	'we two went, and someone else…'

---

humbli 'hear' (class I):

2-208. **humblihwa**	/xubli-Ø-xwa/	[ˈhuᵐbliɣo̥a]
	hear-3MSG-PAST	'he heard.'
2-209. **humbliambo**	/xubli-Ø-a-bʊ/	[ˈhuᵐbliˌaᵐbʊ]
	hear-CR-1SG-DEP	'I heard, and…'
2-210. **humbliiefumbo**	/xubli-Ø-eɸu-bʊ/	[ˈhuᵐbliˌeβuᵐbʊ]
	hear-CR-1PL-DEP	'we heard, and…'
2-211. **humbliafanimbo**	/xubli-Ø-aɸani-bʊ/	[ˈhuᵐbliˌaβaˌniᵐbʊ]
	hear-CR-N1MDU-DEP	'the two of them heard, and …'

seru (*ser-*/ *det-*) 'eat' (class IH):

(class I verbs with consonant-ending finite verb stems have similar stress patterns)

2-212. **serimbo**	/Ø-ser-i-bʊ/	[ˈseriᵐbʊ]
	CR-eat-1SG-DEP	'I ate, and…'
2-213. **maserihambo**	/ma-ser-ixa-bʊ/	[maˈreriˌɣaᵐbʊ]
	DR-eat-1SG-DEP	'I ate, and someone else...'
2-214. **madetufani**	/ma-det-uɸani/	[maˈdetuˌβani]
	NEG:IR-eat:FUT-N1MDU	'will they two eat?'

ganyaru (*ganyar-*) 'taste' (class IH):

2-215. **maganyarufani**	/ma-ganjar-uɸani/	[maˈganjaˌruβaˌni]
	NEG:IR-taste-N1MDU	'will they two taste (it)?'

bi 'hold' (class II):

(class IIB verbs with monosyllabic finite verb stems have similar stress patterns)

2-216. *bihi*   /bi-i-Ø-xi/   [ˈbiɣi]

                           hold-N1MSG-3MSG:O-CONT   'you are/ he is holding him.'

2-217. *biahi*   /bi-Ø-a-xi/   [ˈbiaɣi]

                           hold-N1SG-3FSG:O-CONT   'you are/ s/he is holding her/ it.'

2-218. *bihapahi*   /bi-xa-pa-xi/   [ˈbiɣaˌpaɣi]

                           hold-1SG-N1DU:O-CONT   'I am holding the two of them.'

2-219. *bimahapambo* /bi-ma-xa-pa-bʊ/   [ˈbimaˌɣapaᵐbʊ]

                           hold-DR-1SG-N1DU:O-DEP   'I am holding the two of them.'

hwamefi (*hwama-*) 'hang up' (class IIB):

2-220. *hwamayahi*   /xwama-Ø-ja-xi/   [ˈxo̜amaˌjaɣi]

                           hang-3SG-3FSG:O-CONT   'she hung it up.'/ 'it is hung up.'

2-221. *hwamahyapuhi* /xwama-xja-pu-xi/   [ˈxo̜amaˌɣjapuɣi]

                           hang-1SG-N1DU:O-CONT   'I hung the two of them up.'

2-222. *hwamamahyapumbo* /xwama-ma-xja-pu-bʊ/   [ˈxo̜amaˌmaɣjaˌpuᵐbʊ]

                           hang-DR-1SG-N1DU:O-DEP 'I hung the two of them up.'

sefi (*sa-/ da-*) 'give' (class III):

2-223. *sakayahwa*   /sa-ka-ja-xwa/   [ˈsakaˌjaɣo̜a]

                           give-3SG-1SG:O-PAST   'S/he gave me.'

2-224. *masambanawambo* /ma-sa-mbana-wa-bʊ/   [maˈɾaᵐbaˌnao̜ɒᵐbʊ]

                           DR-give-N1DU-3SG:O-DEP

                           'The two of them gave him/her, and…'

114

Vowels of the verb stem or morphs contiguous to the verb stem may be deleted by the vowel degemination rule or *a*-deletion rule (§2.3). Most usually it is the unstressed vowels of the verb stem or the vowel of the affix which get deleted, and the primary stress remains at the syllable which contains the stressed vowel. Secondary stress is as usual assigned to alternate syllables following the primarily stressed syllable (except for syllables which cannot be stressed, see above).

2-225. *mekwambo* /ma-ek-wa-bʊ/ → /mekwabʊ/ [ˈmeko̞aᵐbʊ]

DR-exist-3FSG-DEP 'it was there, and something else…'

2-226. *ekombo* /Ø-ek-ʊ-bʊ/ → /ekʊbʊ/ [ˈʔekʊᵐbʊ]

CR-exist-3FSG-DEP 'it was there, and it…'

2-227. *aftafanimbo* /aɸta-Ø-aɸani-bʊ/ → /aɸtaɸnibʊ/ [ˈʔaɸtaˌβaniᵐbʊ]

bathe-CR-N1MDU-DEP 'they two men bathed, and…'

2-228. *aftefimbo* /aɸta-Ø-eɸi-bʊ/ → /aɸteɸibʊ/ [ˈʔaɸteˌβiᵐbʊ]

bathe-CR-N1FDU-DEP 'they two bathed, and…'

2-229. *aftamumbo* /aɸta-Ø-mu-bʊ/ → /aɸtamubʊ/ [ˈʔaɸtaˌmuᵐbʊ]

bathe-CR-N1MDU-DEP 'they men bathed, and…'

If the stressed vowel is deleted, the stress falls on the conditioning vowel (the vowel which caused the deletion of the stressed vowel).

2-230. *fehwa* /fa-e-Ø-xwa/ → /fexwa/ [ˈfexo̞a]

leave-3FSG-3MSG:O-PAST 'she left him.'

(compare:

2-231. fehwa   /fa-i-Ø-xwa/   → /faixwa/ [ˈfaixo̜a]

              leave-3MSG-3MSG:O-PAST   'he left him.')

The negative semi-realis particle (§6.2), being an independent word, receives its own stress.

2-232. ga apaha   /ga   ap-axa/   [ˈga ˈ(ʔ)apaˌɣa]

              NEG:SMR sleep-1SG   'I will not sleep.'

Non-finite verb forms (§7.3) are stressed like other words; the dependency suffix *-Ø ~ -mbo* (§7.5) cannot be stressed.

2-233. pi(-mbo)   [ˈpi(ᵐbʊ)]   'going'

2-234. fa(-mbo)   [ˈɸa(ᵐbʊ)]   'picking of betel nuts'

2-235. apu(-mbo)   [ˈʔapu(ᵐbʊ)]   'sleeping'

2-236. seru(-mbo)   [ˈseru(ᵐbʊ)]   'eating'

2-237. hofahi(-mbo)   [xʊˈβaɣi(ᵐbʊ)]   'falling'

2-238. numuŋgwa(-mbo)   [nuˈmuⁿgo̜a(ᵐbʊ)]   'dying'

2-239. ganyaru(-mbo)   [gaˈnjaru(ᵐbʊ)]   'tasting'

2-240. samefi(-mbo)   [saˈmeβi(ᵐbʊ)]   'burning'

2-241. iŋginambo(-mbo)   [ˌʔiⁿgiˈnaᵐbʊ(ᵐbʊ)] 'being fast'

Each verb stem in a serial verb construction receives a primary stress, including the negative realis verb *boke/ boka* (§6.1.3), the positive semi-realis verb
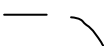
samby (§6.2), the completive verb *fefi* (*fa-*) ~ *me*/ *mefi* (*ma-*) (§7.4) and the

sequential verb *nuŋgu* (*nuŋg-*/*numb-*) (§7.4). Any syllables immediately preceding a

serialised verb stem cannot carry a secondary stress. Verb stems are in bold in the

examples below.

2-242. **hofa**hi **boke**hahwa   /xuɸaxi **buke**-axa-xwa/   [xʊˈβaɣi ˈbuke̩ɣaɣo̜a]

fall   NEG:R-1SG-PAST

'I did not fall.'

2-243. **pi boke**mehyembo   /**pi buke**-me-exje-bʊ/   [ˈpi ˈbuke̩meɣjeᵐbʊ]

go   NEG:R-DR-1DU-DEP

'we two did not go, and someone else…'

2-244. **homba boka**hanyahwa   /**xuba buka**-xa-nja-xwa/   [ˈxʊᵐba ˈbuka̩ɣanjaɣo̜a]

see   NEG:R-1SG-2SG:O-PAST

'I did not see you.'

2-245. **ganyar**ufani **samby**afani

/**ganjar**-uɸani **sabj**-aɸani/   [ˈganja̩ruβani ˈra̩ᵐbja̩βani]

taste-N1MDU   POS:SMR-N1MDU

'will they two taste (it)?'

2-246. **det**ufani **samby**afani

/**det**-uɸani   **sabj**-aɸani/   [ˈdetu̩βani ˈra̩ᵐbja̩βani]

eat:FUT-N1MDU POS:SMR-N1MDU

'they two will eat.'

2-247. **hwaf**ou **fa**yamu **nuŋg**umbo   [ˈxo̜aβʊu ˈβajamu ˈnuᵑguᵐbʊ]

/**xwaɸʊ**-u   **ɸa**-ja-mu   Ø-**nug**-u-bʊ/

talk-3MSG   COMPL-3SG-1NSG:O CR-SEQ-3MSG-DEP

'after he had talked with us, then…'

117

2.4.2 Word pitch and clausal intonation

The pitch pattern of a word is not always predictable. However, some generalisations can be made about word pitch and clausal intonation. In this section, high pitch is abbreviated as H, mid pitch is abbreviated as M, and low pitch is abbreviated as L. Contour pitches are analysed as a combination of the simple level pitches.[22]

Words uttered in isolation tend to have a H level or falling (HM/ HL) pitch pattern if the word is monosyllabic, HL pitch pattern if the word is disyllabic, and M…HL pitch pattern for words with three or more syllables.[23] This corresponds with stressed syllables having a H pitch.

2-248.	⎯ ╲	*2-249.*	⌒╲	*2-250.*	⌒╲
	yo [ˈjú]/ [ˈjô]		*simbu* [ˈsíᵐbù]		*rani* [ˈránì]
	'I'		'morning'		'that'

2-251.	⌣⌐	*2-252.*	⌣⌐		
	yapali [jāˈpálì]		*walambani* [ˌo̥ālāˈᵐbánì]		
	'tree kangaroo'		'swim'		

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[22] Subjectively speaking, the M pitch in Menggwa Dla corresponds with the pitch level of the low level tone in standard Cantonese (e.g. 二 [jì] 'two') and standard Hokkien (e.g. 兩 [nɉ] 'two'). In other words, the M pitch in Menggwa Dla is about one semitone (i.e. one-twelfth of an octave) below the mid level tone in Central Thai ('non-high' syllables with no tone mark in script, e.g. ใคร [kʰrāi] 'who'), Lao (syllables with <ˈ> tone mark in script, e.g. ແມ່ນ [mɛ̄:n] 'correct'), Vietnamese (syllables with no tone mark in script, e.g. *ba* [ɓā] 'three'), White Hmong (syllables with no tone mark in script, e.g. *xya* [ɕā] 'seven') and Cantonese (四 [ɕēi] 'four'). The H and L pitch require less description: H and L are the highest and lowest pitch in one's 'normal intonation range' at a given stretch of time.

[23] Unfortunately the voice recordings done in the field were not of good-enough quality to computer-generate pitch diagrams which are meaningful. The 'hand-drawn' pitch diagrams are at best approximate. Pitch is marked in the phonetic forms using the following IPA diacritics (above vowels): [ˊ] (acute) high pitch, [ˉ] (macron) mid pitch, [ˋ] (grave) low pitch, [ˆ] (circumflex) falling pitch, [ˇ] (caron) rising pitch.

In continuous speech, words are dominated by a larger clause intonation. Clause intonations are sensitive to word boundaries, clause type, and the existence of certain grammatical morphs, whereas the stress pattern of individual lexical words is ignored. Examples 2-253 to 2-258 below are chain clauses (§7.2). The dependency suffix *-mbo* (§7.5) on chain clause verbs indicates that the clause is a dependent clause, and that there is another clause following. The dependency suffix *-mbo* has a H level tone [ᵐbú] (e.g. example 2-253 below), M level tone [ᵐbū] (e.g. 2-254 below), or MH rising tone [ᵐbǔ] (e.g. example 2-255 below); the cross-reference suffix which precedes the dependency suffix inevitably has a H pitch. The pitch of the dependency suffix at the end of a chain clause is analogous with the 'comma' intonation in English.

In clauses, word boundaries are usually marked by words beginning with a M-H… pitch pattern. In the following example, the demonstrative *rani*, which would have a H-L pitch pattern [ˈránì] in isolation (because its first syllable is stressed), has a M-H pitch pattern [ˈrāní] which marks its initial word boundary within a clause.

2-253.
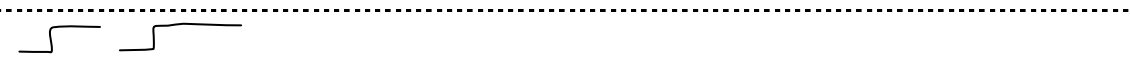
[ˈrāníɣí ˈnūmáᵐbú]

rani=hi   Ø-num-a-mbo,

DEM=ADS CR-sit-1SG-DEP

'I lived there, and…' (S)

Not all words can begin with a MH pitch pattern in continuous speech. Monosyllabic words have a H pitch, e.g. *tu* 'egg' in example 2-254. Vowel-ending monosyllabic verb stems, e.g. *ka-* 'break' (example 2-254), *fa-* 'leave' (example 2-255), must be in H pitch even when the verb stem is at the beginning of the verb. (On the other hand, verbs with a consonant ending monosyllabic verb stem (like *num-* in example 2-253 above) or polysyllabic verb stems begin with a usual MH pitch pattern.)

2-254.
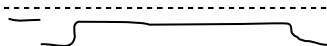
[ˈtú ˈĩᵐbúˈpá ˈkáɣǫáˌpúᵐbū]

tu   imbu=pa   ka-Ø-hwa-pu-mbo,

egg two=only break-CR-1DU-N1DU:O-DEP

'We broke only two eggs, and…' (N)

2-255.
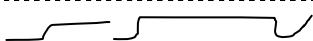
[nāˈⁿgání āˈβílá ˈɸájɛ́ᵐbǔ]

Naŋgani   afila   fa-Ø-ya-a-mbo,

Nangn   father   leave-CR-3SG-3FSG:O-DEP

'Nangn's father left, and…' (S)[24]

Occasionally, a monosyllabic word has a rising LH pitch, e.g. *yo* [ˈjǔ] in the example below. Monosyllabic words with rising LH pitch tend to be followed by a

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[24] *Naŋgani* is the Menggwa Dla equivalent of the name *Naŋgn* in Dla proper.

pause. The unusually stressed *yo* [ˈjǔ] in the following example is also a focused
expression.

2-256.

[ˈjǔ   ˈxōɸáᵐbō]
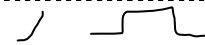
yo   Ø-hof-a-mbo,

1   CR-come-1SG-DEP

'I came, and…' (S)

Verbal prefixes cannot have a H pitch; prefixes always have a M pitch. For
verbs which begin with a MH pitch pattern (i.e. verbs with consonant-ending or
polysyllabic verb stems; see above), the MH pitch pattern begins at the verb stem
rather than the prefix. In the example below, the verbal prefix [mā] has a M pitch;
the MH pitch pattern begins from the verb stem *num-*; [ˈnū] has a M pitch and [mí]
has a H pitch.

2-257.
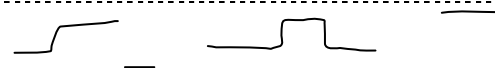
[nūˈmúlápà   māˈnūmííᵐbō   ˈgǫá]

nomola=pa   ma-num-ei-mbo   gwa,

children=only   DR-sit-N1FPL-DEP   but

'Only children were at home, but…' (A)

In the example above is a focus clitic =*pa* 'only' (§4.5.7). Nominal clitics are either in H or L pitch. There seems to be no rules which govern whether a nominal clitic has a H or L pitch, e.g. the clitic =*pa* in example 2-257 above has a L pitch, but in example 2-254 above =*pa* has a H pitch (presumably information structure plays no part as =*pa* indicate that the nominals are focused in both instances). The topic clitic =*na* (§4.5.6) also variously carries a L pitch (e.g. example 2-267 below) or a H pitch (e.g. example 2-268 below).

A grammatical free variant of the dependency suffix is -*Ø* (§7.5). The suffix before the -*Ø* dependency suffix inevitably has a H pitch.

2-258.
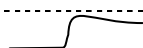
['xānjéɣí]

Ø-han-yehi-Ø,

CR-go.down-1DU-DEP

'We went down, and…' (N)

Another grammatical free variation of the dependency suffix is -*mbona* (§7.5). The dependency suffix -*mbona* has a M-H pitch pattern [ᵐbūná] (e.g. example 2-270 below), a M-MH pitch pattern [ᵐbūnǎ] (e.g. example 2-271 below), or a H-M pitch (e.g. example 2-262 below).

The following example is a non-finite chain clause (§7.3.1); all generalisations made about chain clauses in this section also applies to non-finite chain clauses.

2-259.

[ˈʔāpá ˈsīᵐbú   ˈʔāpá ˈsīᵐbúnà   ˈbāní kāˈxéβí̩ᵐbáᵐbū]

apa   *simbu,*   *apa*   *simbu*=*na*   *bani*   *kahefi-mba-mbo,*

now   morning   now   morning=TOP   sago   chop-POST-DEP

'In the morning, in the morning people go and chop sago…' (B)

The following are examples of other types of clauses. The suffix *-hi* indicate present tense continuous aspect on independent verbs (§6.1.1), and interclausal simultaneity on subordinate verbs (§7.1.3). These clauses always end in a H pitch.

2-260.

[ˈʔīlúɣḛ́ ˈnūmá̩ɣáɣḭ́]

*ilo-ha-a-**hi***   *num-aha-**hi**.*

work-1SG-3FSG:O-SIM   sit-1SG-PRES:CONT

'I work and live (here).' (S)

2-261.

['mūmé nā^ŋgání ʔā'βílálừβừ 'mūmé   'ʔīlúɣwé̠ 'nūmé̠ɣíː^mbə̄]

mome   Naŋgani   afila=lofo   mome   ilo-hwa-a-**hi**   Ø-num-ehi-mbo,

together Nangn   father＝COM   together   work-1DU-3FSG:O-SIM   CR-sit-1DU-DEP

'Together with Nangn's father we worked and lived (here), and…' (S)

Otherwise, declarative independent clauses always end in a L pitch.

2-262.
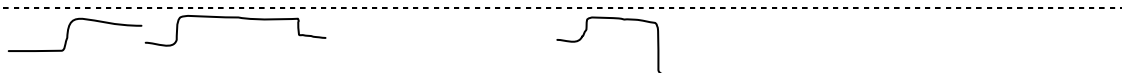
[sū^{'m}blúβú 'jārí̠húá^mbúnā   'sērjé̠βáɣọ̀à]

sumblufu yari-Ø-hu-a-mbona,   ser-yefa-**hwa**.

afternoon stir.sago-CR-1PL-3FSG:O-DEP   eat-1PL-PAST

'In the afternoon we stirred some sago, and we ate (the sparrows).' (N)

2-263.

[rāní ʔēɣálá ʔūlúá nò ʔāɣjá^mbì]

[rani ehala   ulua no]   ah-Ø-ya-a-mbi.

[DEM 3SG:GEN oil   COP:3FSG   call-3SG-3SG-3FSG:O-PRES:STAT

'It is called the moon's oil.' (A)

Declarative copulas tend to be in L pitch entirely.

2-264.

[ˈjōo̜álá ˈdjáná ˈpɔ́l nò]

yowala   dya＝na   Paul   no.

1SG:GEN   name＝TOP   Paul COP:3FSG

'My name is Paul.'

2-265.
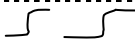
[ˈtite ˈnjewi ˈniwi]

tite   nyewi   niwi.

bad   people   COP:N1FPL

'They are bad people.'

Exclamations end in a L pitch.

2-266.
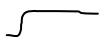
[ʔāmání nù kè]

amani   nu   ke!

good   COP   EXCL

'Its really good!'

Questions end in a MH rising pitch or H level pitch.

2-267.
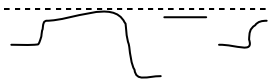
[ʔāˈmámʊ́nà.ˈgá.ˈkēú]

amamo = na ga   ke-u?

moon = TOP where where.be-3MSG

'Where is the moon?' (A)

2-268.

[ˈsīɣáβá.ˈdjáná ˈnāɣú.nʊ́]

sihafa   dya = na   naho no.

2SG:GEN name = TOP   what COP:3FSG

'What is your name?'

2-269.

[síná ˈhīlárí (ˈnjáβʊ́)]

si = na   Hilari (ny-afu)?
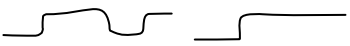
2SG = TOP Hilari (COP-2SG)

'(Are) you Hilari?'

Lastly, noun phrases can exist after the verb in declarative clauses; these are called the post-verbal noun phrases (§5.4). Post-verbal noun phrases are never

separated from the rest of the clause with a pause. However, post-verbal noun

phrases are not necessarily dominated by the clause intonation, and they may have a

pitch pattern of their own. In the first clause of the following example, the

dependency suffix -mbona has a usual MH pitch pattern. The post-verbal noun

phrase hamblu-hwila 'red mother (fowl)' is followed by a pause; it begins with a

MH pitch pattern, and remain H till the end of nominal. This is like as if the post-

verbal noun phrase hamblu-hwila originated in a position before the verb and got

shifted after the verb, with the pitch pattern intact.

2-270.

['mēko̧ám̩būná ˌxā ᵐblú'xwílá]   ['rāpé ʔurúᵐbú]

ma-ek-wa-mbona   hamblu-hwila,   ra=pa   uru-Ø-Ø-mbo,

DR-exist-3FSG-DEP red-mother   DEM=only dig-CR-3MSG-DEP

'The red mother (fouls) were there, and he dug only that, and…' (N)

Nevertheless, a post-verbal noun phrase may also have a pitch pattern of its

own. There are two instances of hwi=mbe (water=INS) 'in the water' in the

following example, one in the first clause and one in the second clause. In the

second clause, hwi=mbe exists before the verb, and is forced by the clausal

intonation of the second clause to begin with a MH pitch pattern: ['xwĩᵐbé].

However, in the first clause, hwi=mbe is a post-verbal nominal, and the clausal

intonation has no scope over the word hwi=mbe. In this instance the word

hwi=mbe is not forced to begin with a MH pitch pattern; the stressed syllable hwi

has a H pitch (and =mbe has a L pitch maybe because it is a case clitic and/ or it is

followed by a pause): [ˈxwǐᵐbè]. A chain clause would otherwise not end in a L

pitch. The dependency suffix *-mbo* on the verb which precedes the post-verbal

nominal has a M pitch typical of *-mbo*.

2-271.
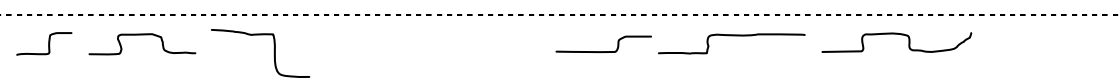
[ˈgīáí ˈɣānúᵐbū **ˈxwǐᵐbè**   **ˈxwīᵐbé** ˈxūᵐbáí ˈɸáí ˈnūⁿgúᵐbūnǎ]

gia-i   *Ø-han-u-mbo*   ***hwi=mbe*,**

follow-3MSG-3MSG:O CR-go.down-3MSG-DEP   water=INS

hwi=mbe *homba-i-Ø*   *fa-i-Ø*   *Ø-nuŋg-u-mbona,*

water=INS see-3MSG-3MSG:O COMPL-3MSG-3MSG:O CR-SEQ-3MSG-DEP

'The father followed the moon down into the water, and he saw the moon in the

water, and…' (A)

In the following example, the discourse demonstrative *rani* which exists after

the verb is more like a 'space filler' rather than a post-verbal noun phrase (see §5.4

on the semantics of post-verbal noun phrases). However, its pitch pattern is like that

of a post-verbal nominal: the present stative suffix *-mbi* has a L pitch as if it is at the

end of an independent clause; *rani*, on the other hand, has a MH pitch pattern. A

declarative independent clause would otherwise not end in a H pitch.

2-272.

[jā˩βlíí-ˈxúrí ʔā˩mámú-ˈxúrí ˈsēβúˌɣúá**ᵐbì** ˈrāní

*yaflei-huri   amamo-huri   s-efu-hu-a-**mbi**   rani.*

cloud-dew   moon-dew   call-1PL-1PL-3FSG:O-PRES:STAT   DEM

'We call dew "moon's dew".'   (A)

Chapter 3   Word Classes

There are three open word classes in Menggwa Dla — nouns, adjectives and verbs (§3.1). Other than the major open word classes, Menggwa Dla also has the following minor closed classes:

- Nominal clitics (§3.2.1);

- Personal pronouns (§3.2.2);

- Interrogative words (§3.2.3);

- Demonstratives (§3.2.4);

- Quantifiers (§3.2.5);

- Conjunctions (§3.2.6);

- Locative words (§3.2.7);

- Temporal words (§3.2.8);

- Interjections/ miscellaneous (§3.2.9).

3.1   Major word classes: nouns, adjectives and verbs

Nouns, adjectives and verbs are the major word classes in Menggwa Dla. Verbs typically carry most — if not all — affixes in a clause, while nouns and adjectives typically carry no affixes. Nouns head noun phrases (i.e. a head noun and its modifiers must be contiguous with each other; §4.3), and a noun phrase as a whole can carry one or more case clitics (§4.5). The following sentence exemplifies a prototypical noun, a prototypical adjective and a prototypical independent verb. The noun *akwani* 'snake' is morphologically simple; the topic clitic *=na* is an

enclitic of the noun phrase rather than a suffix to a particular noun, as shown by the fact that the head noun and the topic clitic can be intervened by modifiers like the adjective *tikyawi* 'small'. As an adjective, *tikyawi* 'small' is free to occupy any positions within the noun phrase; *tikyawi* 'small' can either precede or follow the head noun *akwani* 'snake'. The independent verb *yafukyauyahwa* is morphologically agglutinative; it has a past tense suffix *-hwa* and two cross reference suffixes: *-Ø* (N1SG) and *-ya* (1SG:O).

3-1.   *[akwani tikyawi]=na yafukyau-Ø-ya-hwa.*

      [snake   small]=TOP   bite-N1SG-1SG:O-PAST

      'A/ the small snake bit me.'

Independent verbs are always fully inflected. Different types of dependent verbs are deverbalised to various degrees. Even more deverbalised are the verbal nouns (i.e. nominalised verbs). The more salient morphosyntactic properties of verbs, verbal nouns and nouns are discussed in §3.1.1. Property words are not all adjectives; although the adjective word class is not closed, a lot of property words are verbs, and some are nouns; see §3.1.2. Copulas form a subgroup of verbs; see §6.4 on copulas.

3.1.1   Nouns and verbs

Nouns and verbs can be clearly distinguished by the following three morphosyntactic criteria: a) nouns can have noun modifiers and nouns project noun phrases (i.e. a head noun and its modifiers have to be contiguous; §4.3), verbs can have complements but verbs do not project phrases (i.e. a verb and its complements

do not have to be contiguous; §5.4); b) nouns can be cross-referenced on verbs (§5.2) or resumptive pronouns (§4.6.3), verbs cannot be cross-referenced on other words; and c) nouns require copulas to function as predicates (§6.4),[1] verbs do not require copulas to function as (syntactic) predicates.

Based on their level of verbal properties, three types of dependent verbs can be distinguished: subordinate verbs (§7.1), chain verbs (§7.3) and non-finite chain verbs (§7.3.1). In comparison with independent verbs which have the full range of verbal properties, subordinate verbs have a slightly reduced range of verbal properties, chain verbs are more deverbalised than subordinate verbs, and non-finite chain verbs have the smallest range of verbal properties amongst all verbs. Even more deverbalised than the non-finite chain verbs are the verbal nouns (§7.3.2). Verbal nouns are formally very similar to the non-finite chain verbs, but they satisfy the three criteria of being noun and verbs — respectively — as outlined above. The level of verbal and nominal properties of the various types of verbs and nouns can be measured against three contrastive features of independent verbs and (full) nouns (§4): d) independent verbs carry tense-mood affixes, nouns do not; e) independent verbs take cross-reference suffixes (§5), nouns do not; and f) noun phrases headed by full nouns can be attached with a range of case clitics (§4.5), independent verbs do not head phrases.[2] The level of verbal and nominal properties of various types of verbs and nouns are summarised in the following table.

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[1] However, copulas are not obligatory in present tense.
[2] There is only one situation where verbs can be the phonological host of case clitics: the last word of a noun phrase can be a relative clause verb, in which case the case clitic will have the relative clause verb as its host. See §7.1.1 on relative clauses.

Table 3.1   Levels of verbal and nominal properties

	d)	e)	a), b), c)	f)
Independent verbs	full range	yes	no	none
Subordinate verbs	slightly reduced	yes	no	none
Chain verbs	basically no	yes	no	none
Non-finite chain verbs	no	no	no	none
Verbal nouns	no	no	yes	limited
Nouns	no	no	yes	full

a) phrase projecting;
b) can be cross-reference on verbs and resumptive pronouns;
c) require copulas to function as predicates
d) carry tense-mood affixes
e) take cross-reference suffixes
f) the range of case clitics of phrase projected by the word can take

As shown in the table above, there is a gradual decrease in the level of verbal properties from independent verbs to (full) nouns. However, the level of nominal properties is not increasing gradually correspondingly; there is a sharp difference between non-finite chain verbs, which do not have any nominal properties (properties a, b and c), and verbal nouns which have nearly a full range of nominal properties. One property which set verbal nouns and full nouns apart is that noun phrases projected by verbal nouns can only take a limited range of case clitics (see §7.3.2), whereas noun phrases projected by full nouns can take a full range of case clitics.

The following are discussions on some of the main morphosyntactic properties of independent verbs, dependent verbs, verbal nouns and full nouns. Full

133

discussions on nouns can be found in §4, and full discussions on verbs and verbal nouns can be found in §5-§7.

Nouns in Menggwa Dla are not inflected; the person, number (§4.2) and gender (§4.1) features of a noun are not marked on the noun itself; person, number and gender features of a noun are only manifested by the cross-reference suffixes (§5) on verbs or pronouns (e.g. *efya* in example 3-6 below; §4.6) which cross-reference with the noun.

3-2.   *hwalfehi (mamo) hof-wa-hwa.*

      woman   (one)   come-3FSG-PAST

      '(One) woman came.'

3-3.   *hwalfehi (mafwa) hof-ei-hwa.*

      woman   (all)   come-N1FPL-PAST

      '(All) women came.'

3-4.   *yani (imbu)   hof-afa-hwa.*

      man (two)   come-N1MDU-PAST

      '(The) two men came.'

3-5.   *yani (mafwa) hof-uma-hwa.*

      man (all)   come-N1MPL-PAST

      '(All) men came.'

3-6.	*hwalfehi efya*	*hof-efye-hwa.*

woman	N1FSG:RSUMP	come-N1FSG-PAST

'The women themselves came.'

Nouns head noun phrases, and noun phrases can be encliticised with various nominal clitics like case clitics, topic clitics and focus clitics (§4.5).

3-7.	*[iplwa mamu]=mbo homba-Ø-hya-a-mbo...*

[fish	one]=OBJ	see-CR-1SG-3FSG:O-DEP

'I saw one fish, and...'

Nouns themselves do not carry any inflections. When functioning as (semantic) predicates, nouns require copulas to carry verbal inflections. However, copulas are not obligatory in present tense (§6.4).

3-8.	*dani=na [tebulu/ toko/ nyewi/ ayamu]	(no).*

this=TOP [table	shop	person chicken]	(COP:3FSG)

'This is a [table/ shop/ person/ chicken].'

3-9.	*ai=na glu	Ø-hwa.*

3=TOP teacher	COP:3MSG-PAST

'He was a teacher.'

Nouns can be modified by a range of modifiers like nouns, genitive phrases and relative clauses (see §4.3).

Common to independent verbs, subordinate verbs and chain verbs are their finite verb stems (§5.1)[3] and cross-reference suffixes (§5.2). Cross-reference suffixes agree with the person, number, and sometimes gender features of the subject or object of the clause. There are many different sets of cross-reference suffixes, and verbs are classified into verb classes based on the sets of cross-reference suffixes they can take. There are five verb classes: class I and IH verbs have one subject cross-reference suffix, and class IIB, II and III verbs have one subject cross-reference suffix plus one object cross-reference suffix (both cross-referencing and case marking follow an accusative-secundative alignment; §5.3.2). The following are examples of verbs from each of the five verb classes in independent past tense form.

3-10. *ap-aha-hwa.*

sleep-1SG-PAST

'I slept.' (*apu* (*ap-*) 'sleep' class I)[4]

3-11. *ser-iha-hwa.*

eat-1SG-PAST

'I ate.' (*seru* (*ser-*/ *det-*) 'eat' class IH)

---

[3] Despite being used in chain verbs, which are non-finite, finite verb stems are called 'finite verb stems' because they are the verb stem forms which are used in finite verb forms. The verb stem forms which are used in verbal nouns and non-finite chain verbs are called 'non-finite verb stems' (§5.1).

[4] A verb lexeme is quoted first by its non-finite verb stem, and then its finite verb stem(s) if it has finite verb stem(s) distinct from the non-finite verb stem (§5.1). If a verb lexeme has separate non-future versus future finite verb stems (§5.1.2), the non-future form(s) is/are quoted first. For the verb lexeme *apu* (*ap-*) 'sleep' (class I), *apu* is the non-finite form, and *ap-* is the finite verb stem form (§5.1.1). For the verb lexeme *seru* (*ser-*/ *det-*) 'eat' (class IH), *seru* is the non-finite form, *ser-* is the non-future finite verb stem and *det-* is the future finite verb stem (§5.1.2). For the verb *homba* 'see' (class II), *homba* is both the non-finite form and the finite verb stem.

3-12.   *dukwa-hya-a-hwa.*

wake.up-1SG-3FSG:O-PAST

'I woke up.'   (*dukwefi* (*dukwa-*) 'wake up (monovalent)' class IIB)[5]

3-13.   *homba-ha-a-hwa.*

see-1SG-3FSG:O-PAST

'I saw her/it.'   (*homba* 'see' class II)

3-14.   *sa-niŋga-wa-hwa.*

give-1SG-3SG:O-PAST

'I gave (it) to him/her/it.'   (*sefi* (*sa-/ da-*) 'give' class III)

Verbs also carry inflections other than cross-referencing. Independent verbs are inflected for tense, aspect, mood, status and/ or polarity (see §6). The status and polarity categories of a verb determine the overall morphological structure of the verb. There are three statuses in Menggwa Dla: realis (R; §6.1), semi-realis (SMR; §6.2) and irrealis (IR; §6.3). See §6.1-3 for the formation of independent verbs in the six polarity-status combinations, and §5.2 on the cross-reference suffixes. The following are examples of independent verbs in each of the six status-polarity combinations.

Positive realis:

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[5] The object cross-reference suffix *-a* (3FSG:O) here is semantically empty; see §5.3.2.2.

3-15. *yari-nya-a-hi.*

stir.sago-N1DU-3FSG:O-PRES:CONT

'They two are stirring sago.' (*yarifi* (*yari-*) 'stir sago' class IIB)

3-16. *(aiahafumbo) na-hi-Ø-hwa.*

(3SG:OBJ)   shoot-1SG-3MSG:O-PAST

'I shot him.' (*nefi* (*na-*) 'shoot' class II)

Negative realis:

3-17. *yarifi   bokefyehi (< boke-efye-hi).*

stir.sago   NEG:R-N1FDU-PRES:CONT

'They two are not stirring sago.' (*boke* NEG:R class I)

3-18. *nefi   boka-hi-Ø-hwa.*

shoot NEG:R-1SG-3MSG:O-PAST

'I did not shoot him.' (*boka* NEG:R class II)

Positive semi-realis:

3-19. *yari-nya-a   samby-efi.*

stir.sago-N1DU-3FSG:O POS:SMR-N1FDU

'They two will stir sago.'

3-20. *na-hi-Ø-mby-a.*

shoot-1SG-3MSG:O-POS:SMR-1SG

'I will shoot him.'

Negative semi-realis:

3-21.   *ga*   *yari-nya-a.*

NEG:SMR   stir.sago-N1DU-3FSG:O

'They two will not stir sago.'

3-22.   *ga*   *na-hi-Ø.*

NEG:SMR   shoot-1SG-3MSG:O

'I will not shoot him.'

Positive irrealis:

3-23.   *yari-wa-a-Ø!*

stir.sago-2SG-3FSG:O-IMP

'You stir sago!'

3-24.   *(aiahafumbo) na-o-Ø-Ø!*

(3SG:OBJ)   shoot-2SG-3MSG:O-IMP

'You shoot him!'

Negative irrealis:

3-25.   *yari-ma-nya-a-naho.*

stir.sago-NEG:IR-N1DU-3FSG:O-CNTF

'They would not have stirred sago.'

3-26.   *na-ma-hi-Ø-naho.*

shoot-NEG:IR-1SG-3MSG:O-CNTF

'I would not have shot him.'

There are three types of subordinate verbs (§7.1): relative clauses, *-hwani* 'if/ when' clauses and *-hi* simultaneous clauses. A lot of subordinate verbs are formally indistinguishable from independent verbs. With the exception of *-hwani*, all affixes used in subordinate verbs are also used in independent verbs. Nevertheless, the range of tense-mood affixes available to subordinate verbs is smaller, and the function of the tense-mood affixes may be slightly different from the ones used on independent verbs (see §7.1). In this sense subordinate verbs are slightly deverbalised. In the following example, the object head noun is modified by the relative clause *dani bukumbo pahyahya*.

3-27.   *[[dani buku=mbo   pa-hya-a-hya]   nyewi(=mbo)]*

[[this   book=OBJ   write-3SG-3FSG:O-PAST] person(=OBJ)]]

yo   homba-hi-Ø-hya.

1   see-1SG-3MSG:O-PAST:FOC

'I saw the person who wrote this book.'

The following examples demonstrate a *-hwani* 'when/ if' clause and a *-hi* simultaneous clause.

3-28.   *numuŋgwa-wa-hwani, ilo-hya-ni-mby-a.*

      die-3FSG-if   work-1SG-2SG:O-POS:SMR-1SG

      'If she dies I will kill ('work') you.'

3-29.   Fakfak＝*hi*   *ilo-Ø-a-hi,*

      Fakfak＝ADS work-3SG-3FSG:O-SIM

      ehala   *hwila＝na*   *numuŋgwa-wa-hwa.*

      3SG:GEN   mother＝TOP die-3FSG-PAST

      'While s/he was working in Fakfak, his/her mother died.'

More deverbalised than subordinate verbs are the chain verbs (§7.2). Like independent and subordinate verbs, chain verbs carry cross-reference suffixes. Chain verbs are void of tense and mood specifications;[6] they carry a syntactic dependence suffix *-Ø ~ -mbo ~ -mbona* (§7.5) which indicate that they depend on the independent or subordinate verb at the end of the clause chain for tense and mood specifications. One grammatical category which is only marked on finite chain verbs is switch-reference (CR: coreferential subjects; DR ＝ disjoint-referential subjects). In the following examples, the first clauses are chain clauses, and second clauses are independent clauses.

3-30.   *hofahi-Ø-a-mbo,*   *sumbu-aha-hwa.*

      fall-CR-1SG-DEP   laugh-1SG-PAST

      'I tripped over and I laughed.'

---

[6] The only exceptions are the small number of verb lexemes which have separate non-future versus future finite verb stems: a non-future verb stem is used when the clause chain is in past or present tense, and a future verb stem is used when the clause chain is in future tense (see §5.1.2). Other than these non-future and future finite verb stems, chain verbs are void of tense marking.

3-31. hofahi-ma-aha-mbo, sumbu-wa-hwa.

fall-DR-1SG-DEP   laugh-3FSG-PAST

'I tripped over and she laughed.'

More deverbalised than chain verbs are the non-finite chain verbs (§7.3.1).[7]
Non-finite chain verbs are formed by suffixing a syntactic dependence suffix *-Ø ~ -mbo ~ -mbona* (§7.5) to a non-finite verb stem (§5.1.1). Unlike chain verbs, non-finite chain verbs do not carry cross-reference suffixes. There is the 'posterior' suffix *-mba* which is used on non-finite chain verbs (and verbal nouns, see below) but not on other types of verbs. When used with a non-finite chain verb, the posterior suffix *-mba* signifies that the situation of the clause happens after the situation of the preceding clause, and that the situation of the *-mba* clause has a longer temporal span (the function of *-mba* on verbal nouns is different; see below). The subjects of non-finite chain clauses are usually indefinite, generic, low in animacy and/ or low in discourse salience. In the following example, the first two clauses are non-finite chain clauses, and the last clause is a subordinate clause, which is the final clause of the clause chain.

3-32. alani-mbo, wuli=na   pi-mbo,   haf-wa-hwani,

cry-DEP   house=ALL go-DEP   arrive-3FSG-when

'(People) cry, and go to the house, and when they arrive…'

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[7] Both chain verbs (§7.2) and non-finite chain verbs (§7.3.1) are non-finite; non-finite chain verbs are only called 'non-finite chain verbs' because of their non-finite verb stems (§5.1.1).

Verbal nouns (§7.3.2) are formally very similar with non-finite chain verbs. Both verbal nouns and non-finite chain verb has a non-finite verb stem. Like non-finite chain verbs, verbal nouns can also take the posterior suffix *-mba*. Verbal nouns with a posterior suffix *-mba* is like a 'future gerund': the posterior suffix *-mba* signifies that the situation of the verbal noun phrase occurs after (or is imagined to occur after) the situation of the clause in which the verbal noun phrase exists. (This is different from the non-finite chain verb *-mba*: with a non-finite chain verb, the posterior suffix *-mba* signifies that the situation of the clause happens after the situation of the preceding clause, and that the situation of the *-mba* clause has a longer temporal span.) Other than this difference in the meaning of the posterior suffix *-mba*, another difference between verbal nouns and non-finite chain verbs is that verbal nouns have a nominalising suffix which freely alternates between *-Ø ~ -mbo*, whereas non-finite chain verbs have a syntactic dependency suffix which freely alternates between *-Ø ~ -mbo ~ -mbona* (see also §7.5 on the dependency suffix). Verbal noun phrases headed by verbal nouns depict propositions; in this respect verbal noun phrases are similar to complement clauses or sometimes adverbial clauses in other languages. Nevertheless, verbal noun phrases are phrases rather than clauses because: a) the non-head constituents within a verbal noun phrase (e.g. ones which refer to the actor or undergoer) do not take nominal clitics, similar to prototypical noun modifiers (§3.1.2);[8] and b) the verbal noun phrase as a whole can take certain nominal clitics.[9] At the same time, verbal nouns are not full nouns as: a)

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[8] This also means that the genitive clitic is also not used within NPs headed by verbal nouns, unlike English where gerunds can be modified by possessive phrases, e.g. *she approved their handling of political dissidents* (§7.3.2).

[9] Although a lot of verbal tense-aspect-mood (TAM) affixes in Menggwa Dla are grammaticalised from and still has the same form as the nominal clitics (§4.5), and nominals in some languages are known to be inflected with TAM categories (e.g. Nordlinger & Sadler 2004a,b), the nominal clitics attached to verbal noun phrases in Menggwa Dla are nominal clitics rather than verbal TAM affixes (§6) as: a) some of the nominal clitics which can be used with verbal nouns (e.g. *=pa* 'only' (§4.5.7), *=nambo* ALLATIVE (§4.5.3)) have no equivalent verbal TAM affix forms (unlike — e.g. — *=hi* ADESSIVE (§4.5.3)

the range of case clitics available to the verbal noun phrase is limited and the case clitics attached to the verbal noun phrase still convey meanings typically associated with verbal categories (e.g. the adessive case clitic =*hi* conveys simultaneity); and b) verbal nouns cannot take complex modifiers like relative clauses or genitive phrases. If verbal nouns are cross-referenced on the verbs, they are always cross-referenced as third person feminine singular. In the following examples, verbal noun phrases are put in square brackets.

3-33. *[hwi   ti-Ø]   fa-hya-a   Ø-numb-a-mbo,*

[water get.rid-NOML] finish-1SG-3FSG:O CR-SEQ-1SG-DEP

'After I finished getting rid of the water...' (B)

3-34. *[nimi   wami pi-mba-mbo]   sa-hwa-a-mbo,   pi-ehye-hya.*

[mountain above go-POST-NOML] think-1DU-3FSG:O-DEP go-1DU-PAST:FOC

'We thought of going up the mountain, and we went.' (N)

Verbal nouns can also be cross-referenced on the verb, and very occasionally, verbal noun phrases can function as predicates and be followed by a copula like nouns; see §7.3.2.

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which has grammaticalised to -*hi* PRESENT CONTINUOUS (§6.1.1) and -*hi* SIMULTANEOUS (§7.1.3)); and b) like nominal clitics used with noun phrases, certain nominal clitics used in verbal noun phrases can cooccur (e.g. =*mboka=hi* (=ABSSIVE=ADESSIVE; §4.5.5, §4.5.3) with verbal noun phrases mean 'while not V-ing'), unlike verbal TAM affixes which never cooccur on the same verb. See §7.3.2 for examples of verbal noun phrases attached with nominal clitics.

3.1.2 Adjectives, property nouns and property verbs

<u>3.1.2.1   Predicative usage of adjectives, property nouns and property verbs</u>

In Menggwa Dla, property words which denote speed, human propensity and temperature ('hot'/ 'cold') are verbs. Other property words are mostly adjectives, or nouns in some instances (see below). The following are examples of property verbs used as predicates; being verbs, they carry cross-reference suffixes.

3-35. *(yo=na) gihalfi-aha-mbi.*

(1=TOP) be.cold-1SG-PRES:STAT

'I feel cold.' (*gihalfi* 'be cold')

3-36. *hwi(=na)   (tikyawi) hufwe-wa-mbi.*

water(=TOP) (little)   be.hot-3FSG-PRES:STAT

'The water is (a little bit) hot.' (*hufwa (hufwe-)* 'be hot')

3-37. *[anyapaluku/ suŋgwani]-wa-hi.*

[be.tired   be.sick]-3FSG-PRES:CONT

'She is [tired/ sick].'

(*anyapaluku* 'be tired'; *suŋgwani* 'be sick')

3-38. *wi=na   [gihali/   sihi]-Ø-hi.*

child=TOP [be.hungry stink]-3MSG-PRES:CONT

'The child [is hungry/ stinks].'

(*gihali* 'be hungry'; *sihi* 'stink')

3-39. *snaŋga-l-Ø-a!*

be.slow-LIG-N1SG-3FSG:O

'Slow down!' (e.g. walking, speaking, eating)

The following are examples of adjectives used as predicates. When used predicatively, adjectives require a copula like nouns. (However, copulas are not obligatory in present tense).

3-40. *yaflei=na [amani/ tite/ humbahu/ humbutu/ numbala] (no)*

dog=TOP [good   bad blind   deaf   black]   (COP:3FSG)

'The dog is [good/ bad/ blind/ deaf/ black].'

Property nouns are nouns which are attached with a proprietive case clitic *=mbi* or an abessive case *=mboka* when used as predicates (except in equational copular sentences, in which case the property noun is not attached with a case clitic).

3-41. *wali=na imbalkwa=mbi (no).*

pig=TOP weight=PROP   (COP:3FSG)

'The pig is heavy.'

3-42. *ai=na   ginya=mbi   (no/ nu).*

3=TOP   strength=PROP (COP:3FSG/ COP:3MSG)

'S/he is strong.'

3-43. *akwani＝na hali＝mbi*   *(no).*

snake＝TOP   sharpness＝PROP   (COP:3FSG)

'The snake is fearsome.'

3-44. *akwani＝na hali＝mboka*   *(no).*

snake＝TOP   sharpness＝ABSS (COP:3FSG)

'The snake is harmless.'

3.1.2.2   Attributive usage of adjectives, nouns and verbs

The following are examples of attributive property nouns. Like other noun modifiers, these proprietive phrases and abessive phrases (nouns attached with a proprietive phrase *＝mbi* or abessive case *＝mboka*) are grammatically free to precede or follow the head noun.

3-45.	*hali＝mbi*	*akwani*	3-46.	*hali＝mboka*	*akwani*
	sharpness＝PROP	snake		sharpness＝ABSS	snake
	'fearsome snake'			'harmless snake'	

3-47.	*imbalkywa＝mbi*	*yafli*	3-48.	*ginya＝mbi*	*hwalfehi*
	weight＝PROP	dog		strength＝PROP	woman
	'heavy dog'			'strong woman'	

Nouns in their citation forms can also be used as noun modifiers. However, such bare nouns have a genitive meaning, i.e. they can be attached with a genitive case clitic with no change in meaning.[10]

3-49. **hwalfehima(=la)** *hwila*   *3-50.* **gluhwi(=la)** *anihwalfi*

girl=GEN   mother   pond=GEN   bottom

'the mother of the girl'   'the bottom of the pond'

These sequences of two bare nouns are different from noun-noun compounds, in which the order of the two noun constituents is fixed, and the noun constituents cannot take any case clitics (see §4.3 on noun compounds).

3-51. **toko** *seru*   *3-52.* **ulua** *hwi*

shop food   fat   liquid

'food from shop'/ 'shop food'   'oil'

3-53. **ayamu** *koko*

chicken faeces

'chicken faeces'

Adjectives in their citation forms can be used attributively. An adjective is free to precede or follow the head noun. (However, there are preferences of whether an adjective precedes or follows the head noun; see §4.3). Adjectives are in bold in the following examples.

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[10] In these sequences of two bare nouns, the first is interpreted as having a genitive meaning and the second is interpreted as being the head noun. See §4.3 for NP internal syntax.

3-54. **_amani_** _ayamu_   3-55. **_tite̠_** _ayamu_

 <u>good</u>   chicken   <u>bad</u>   chicken

 'good chicken'   'bad chicken'

3-56. _waplu_ **_tikyawi_**   3-57. **_humbahu_** _nyewi_

 bucket <u>small</u>   <u>blind</u>   person

 'little bucket'   'blind person'

3-58. **_humbutu_** _nyewi_   3-59. **_numbala_** _tebulu_

 <u>deaf</u>   person   <u>black</u>   table

 'deaf person'   'black table'

3-60. _ihu_   **_ini_**   3-61. _yulu_   **_ati_**

 mango   <u>ripe</u>   leg   <u>right</u>

 'ripe mango'   'right leg'

3-62. _ifali_   **_tamnia_**

 spear   <u>small:MASS</u>

 'small spears'

Property verbs can be used as noun modifiers in the form of relative clauses
(§7.1.1).

149

3-63. *[gihalfi-wa-mbi]*   *yari*

[be.cold-3FSG-PRES:STAT] sago.jelly

'Sago jelly which is cold'

Alternatively, a property verb can act as a noun modifier in its non-finite form (i.e. the citation form). These non-finite verbs can be called verbal adjectives.[11] Like other adjectives, verbal adjectives are grammatically free to precede or follow the head noun. Nevertheless the pre-head position is much more common for verbal adjectives.

3-64. *hufua*   *hwi*   3-65. *gihalfi*   *hwi*

be.hot   water   be.cold   water

'hot water'   'cold water'

3-66. *anyapaluku* *nyewi*   3-67. *suŋgwani*   *yani*

be.tired   person   be.sick   man

'tired person'   'sick man'

3-68. *gihali*   *wi*   3-69. *sihi*   *safa*

be.hungry   child   be.smelly   meat

'hungry child'   'smelly meat' (i.e. rotten)

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[11] These verbal adjectives are not verbal nouns as verbal nouns carry a nominalising suffix which freely alternates between *-Ø* and *-mbo* (§7.3.2). Nor are the verbal adjectives dependent verbs as verbal adjectives do not take cross-reference suffixes (§5.2) nor the syntactic dependence suffix *-Ø ~ -mbo ~ -mbona* (§7.5).

3-70. *iŋginambo*   *oto*   *3-71.* *snaŋga*   *oto*

      be.fast   car   be.slow   car

      'fast car'   'slow car'

3.1.2.3   Adjectives as verb modifiers

Adjectives (including verbal adjectives) and property nouns can also be used as modifiers of verbs ('adverbs'). Verb modifiers need not be adjacent with the verb they modify.

3-72. *amani (yo) walambani-aha-mbi.*

      good   (1)   swim-1SG-PRES:STAT

      'I swim well.'

3-73. *kwaŋgi=nambo snaŋga-Ø   kaku-Ø-afani-mbo,*

      cassowary=ALL be.slow-ADJ walk-CR-N1MDU-DEP

      'They two walked slowly towards the cassowary, and…'

3-74. *ginya=mbi   hwafo-wa-hwa.*

      strength=PROP speek-3FSG-PAST

      'She spoke strongly.'

3-75. *iro-Ø   a hwatu-Ø-mu-mbo,*

      be.like.so-ADJ   ah search-CR-3MSG-PAST

      'They searched like so, and…' (A)

3.2   Minor word classes

3.2.1   Nominal clitics

Syntactically speaking, nominal clitics are independent words. The position of nominal clitics is syntactically determined: they are always placed at the last positions in noun phrases (there can be more than one clitic within a noun phrase). Phonologically speaking, nominal clitics are not independent words, as they are phonologically dependent on the host that they are encliticised to (§4.5).

The topic clitic =*na* marks a nominal or pronominal as the topic of the sentence (§4.5.6). The focus clitics =*pa* 'only' and =*amba* 'too' mark a nominal or pronominal as focused (§4.5.7). There are two grammatical case clitics: object case clitic =*mbo* (§4.5.1) and genitive case clitic =*la* (§4.5.2); subjects and ditransitive second objects are not case-marked (§4.5.1; §5.3.1). Lastly, there are the following seven semantic case clitics:

- inessive case =*mbe* (§4.5.3);
- adessive case =*hi*/ =*sehi* (§4.5.3);
- allative/ instrumental case =*na(mbo)* (§4.5.3);
- ablative case =*hya* (§4.5.3);
- perlative case =*roŋgo* (§4.5.4);
- comitative case =*lofo* (§4.5.4);
- proprietive case =*mbi* (§4.5.5); and
- abessive case =*mboka* (§4.5.5).

See §4.5 for more discussions on the nominal clitics.

152

3.2.2 Personal pronouns

In Menggwa Dla, pronouns are not obligatorily used; clauses often consist of a single verb which carries at least one cross-reference suffix (§5.4). The personal pronouns in Menggwa Dla tend to be used only in referring to high animate noun phrases (e.g. humans, dogs, pigs). There are different types of pronouns. The simplest of them are the citation pronouns (§4.6.1). There are only three citation pronouns, one for each person, and number is not distinguished: *yo* first person 'I/we', *si* second person 'you' and *ai* third person 's/he/it/they'. Citation pronouns are used in positions which cannot be case marked: in isolation, in topic position, or in subject position. (Ditransitive second objects, i.e. theme/ 'gift', are also not cased marked, but second objects cannot be pronominalised.)

3-76. *ai=na*   sista   *niwi.*

3=TOP   sister   COP:N1FPL

'They are nuns.'

If the speaker wishes to emphasise the person-number-gender features of the subject, a subject resumptive pronoun can be used (§4.6.3). Subject resumptive pronouns are basically independent words in the shape of class IA cross-reference suffixes (sometimes with minor changes in their phonological shapes; see §5.2.1). Sometimes a subject resumptive pronoun together with a citation pronoun can contribute to a finer person specification than a subject resumptive pronoun alone. For instance, in example 3-77 below, the citation pronoun *ai* (3) and the subject resumptive pronoun *afa* (N1MDU) together give the person-number-gender

combination of third person masculine dual (3MDU), while the citation pronoun *si* (2) and the subject resumptive pronoun *afa* (N1MDU) together give the person-number-gender combination of second person masculine dual (2MDU). In example 3-78 below, the citation pronoun *si* (2) and the subject resumptive pronoun *efa* (1PL) together indicate inclusive first person, while the citation pronouns *yo* (1) and the subject resumptive pronoun *efa* (1PL) together indicate exclusive first person. Citation pronouns on their own or subject resumptive pronouns on their own cannot distinguish inclusive versus exclusive first person.

3-77. *[ai/ si] afa   wuli   buki-na-a-hwa.*

    [3/ 2] N1MDU:RSUMP house build-N1DU-3FSG:O-PAST

    '[They/ you] two built the house.'

3-78. *[si/ yo] efa=na   numbala nyewi   nyefu.*

    [2/ 1] 1PL:RSUMP=TOP black   people COP:1PL

    'We (including you/ not including you) are black people.'

Case pronouns are used in case-marked grammatical relations (§4.6.2).[12] There are two types of case pronouns: object pronouns and genitive pronouns. There are fifteen object pronouns and fifteen genitive pronouns, each marking person, number, and sometimes gender. These case pronouns consist of a citation pronoun suffixed with a string of suffixes, one of which is a cross-reference suffix which is in most cases identical to a class I cross-reference suffix (§5.2.1). An

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[12] Or rather, 'case-markable' positions as the object case clitic is not obligatorily used (§4.5). Grammatical relations other than subjects and ditransitive second objects are case-marked (§5.3.1). Second objects cannot be pronominalised; second objects ('theme'/ 'gift') are most usually inanimate.

inclusive-exclusive distinction is made for first person references: exclusive pronouns have a first person citation pronoun with a first person cross-reference suffix, while inclusive pronouns have a second person citation pronoun with a first person cross-reference suffix. The following are some examples with citation pronouns (encliticised with the topic clitic =*na* in these examples), object pronouns (OBJ) and genitive pronouns (GEN).

3-79. *yo=na   sihafumbo hwahwa-ha-nya-hi.*

     1=TOP   2SG:OBJ   know-1SG-2SG:O-PRES:CONT

     'I know you (SG).'

3-80. *yo=na   sihafumbo hwahwa-na-nya-hi.*

     1=TOP   2SG:OBJ   know-1DU-2SG:O-PRES:CONT

     'We two know you (SG).'

3-81. *yo=na   siheimbo hwahwa-ha-ti-hi.*

     1=TOP   N1FPL:OBJ know-1SG-N1FPL:O-PRES:CONT

     'I know you (PL).'

3-82. *si=na   yoambo   hwahwa-Ø-ya-hi.*

     2=TOP   1SG:OBJ   know-N1SG-1SG:O-PRES:CONT

     'You (SG) know me.'

3-83. *ai=na*   *yohwehimbo*   *hwahwa-Ø-mua-hi.*

3=TOP   1DU:EXCL:OBJ   know-N1SG-1NSG:O-PRES:CONT

'S/he knows the two of us (EXCL).'

3-84. *ai=na*   *sihehimbo*   *hwahwa-Ø-mua-hi.*

3=TOP   1DU:INCL:OBJ   know-N1SG-1NSG:O-PRES:CONT

'S/he knows you and me.'

3-85. *si=na*   *yowala*   *dya=mbo*   *hwahwa-afa-hi.*

2=TOP   1SG:GEN   name=OBJ   know-2SG-PRES:CONT

'You (SG) know my name.'

3-86. *yo=na*   *sihafa*   *dya=mbo*   *hwahwa-aha-hi.*

1=TOP   2SG:GEN   name=OBJ   know-1SG-PRES:CONT

'I know your (SG) names.'

3-87. *yo=na*   *sihei*   *dya=mbo*   *hwahwa-aha-hi.*

1=TOP   N1FPL:GEN   name=OBJ   know-1SG-PRES:CONT

'I know your (PL) names.'

The other case clitics are attached to either object pronouns or genitive pronouns, e.g. comitative case is attached to object pronouns, ablative case is attached to genitive pronouns (see §4.6.2.)

3.2.3 Interrogative words

The position of an interrogative word in a clause is the same as in the corresponding non-interrogative counterpart (i.e. *in situ*), albeit intraclausal syntax is rather free (§5.4). These interrogative words occur by themselves, not being part of another phrase ('interrogative pronouns'). Two of them, namely *dahala ~ da=la* 'whose' and *naho* 'which' can also act as modifiers of head nouns ('interrogative adjectives'). On par with personal pronouns (§3.2.2; §4.6), the interrogative word for 'who' also has a citation form *da* 'who', an object form *dafumbo* 'whom' and a genitive form *dahala/ dala* 'whose'.

da	'who'
dafumbo	'whom' (who:OBJ)
dahala/ da=la	'whose' (who:GEN/ who=GEN)
ga	'where'
guku	'how'
naho	'what'/ 'which'
nahombo	'why' (but *naho=mbo* (what=OBJ) 'what')
nuŋgni	'when'
nuŋgwi	'how many'/ 'how much'

There are also special interrogative copulas: *de* 'who be' and *ke* 'where be' (§6.4.1). The following are examples of the interrogative words and some interrogative copulas.

3-88. *ai=na [da] de-u?*

3=TOP [who] who.be-3MSG

'Who is he?'

3-89. *[da] homba-Ø-nya-hwa?*

[who] see-N1SG-2SG:O-PAST

'Who saw you?'

3-90. *ai=na [dafumbo] iŋgufu-Ø-a-hwa?*

3=TOP [who:OBJ] attack-N1SG-3FSG:O-PAST

'Whom did s/he attack?'[13]

3-91. *[da=la   (yamogwamo)] no?*

[who=GEN (penis.gourd)]   COP:3FSG

'Whose (penis gourd) is this?'

3-92. *si=na [ga]   k-afu?*

2=TOP [where] where.be-2SG

'Where are you?'

3-93. *dani [guku] ser-o-mbi   no?*

this [how]   eat-3FSG-PRES:STAT COP:3FSG

'How does one eat this?'

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[13] People of unknown gender are cross-referenced as feminine (§4.1).

3-94.   *[naho]   kefi-ya-a-hwa?*

[what]   break-3SG-3FSG:O-PAST

'What broke?' (*kefi* 'break (intr.)'; class IIB)

3-95.   *[naho=mbo]   hwafo-afa-hwa?*

[what=OBJ]   say-2SG-PAST

'What did you say?'

3-96.   *[naho=nambo] ilo-Ø-a-hwa?*

[what=ALL]   work-N1SG-3FSG:O-PAST

'With what did you do that?' (=*nambo* allative-instrumental case; §4.5.3.2)

3-97.   *[naho (sihafa   wuli)=na]   bukwa no?*

[which (2SG:GEN   house)=TOP] big   COP:3FSG

'Which (of your houses) is big(ger)?'

3-98.   *[nahombo]   (rani=mbo) hwafo-afa-hwa?*

[why]   (DEM=OBJ)   say-2SG-PAST

'Why did you say (that)?'

3-99.   *[nuŋgni]   po-ma-a?*

[when]   go:FUT-NEG:IR-1SG

'When should I go?'

3-100. [nyawi nuŋgwi]   hof-wa-hwa?

[people how.many] come-3FSG-PAST

'How many people came?'[14]

3.2.4 Demonstratives

There are two spatial demonstratives: *dani* 'this'/ 'here', *akani* 'that'/ 'there',
and one discourse demonstrative *rani* 'the aforementioned'. There are separate
citation forms and bound forms of the demonstratives: the bound form is only used
when it is followed by a noun, locative word (§3.2.7) or a nominal clitic (§3.2.1;
§4.5); a citation form can be used whether or not it is followed by other constituents
within the phrase.[15]

Table 3.2   Demonstratives in Menggwa Dla

	'this'/ 'here'	'that'/ 'there'	'the aforementioned'
citation form:	*dani*	*akani ~ ani*	*rani*
bound form:	*da-*	*aka-*	*ra-*

There are two spatial demonstratives which refer to the location of an entity
or the location itself: *dani* / *da-* 'this'/ 'here' refers to a location close to the speaker,
and *akani ~ ani* / *aka-* 'that'/ 'there' refers to a location not close to the speaker.

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[14] This -*wa* (3FSG) is functionally number-neutral (see §5.2.4).
[15] The cognates of the three demonstratives in Dla proper are *dan, a(ka)n* and *yan*. In Anggor, there
are the demonstratives of *nda* 'this' and *ra* 'that' (Litteral 1980:82). See also §1.4.2-3 on historical
phonology.

3-101. yo dani＝hi   dani＝mbe misin＝la＝mbe   da＝mbe

1   here＝ADS this＝INS   mission＝LIG＝INS this＝INS

ilo-ha-a-hi,

work-1SG-3FSG:O-SIM

'I am working here in this in the mission station, and…' (S)

3-102. "o   dani   da-tupam dewahi"＝na   Ø-ah-Ø-ya-a-mbo,

"oh this   this-thing must.be"＝TOP CR-think-3SG-3SG-3FSG:O-DEP

'"Oh it must be this thing," he thought, and…' (A)

3-103. yohwefa ulua hwi   numami aya   saku-ya-a-hya   akani＝mbe.

1PL:GEN fat   liquid above   father put-3SG-3FSG:O-PAST:FOC there＝INS

'Father put our oil up in there.' (A)

3-104. ani＝mbe   kitaki-Ø-hi-a-Ø,

there＝INS   season:MASS-CR-3FSG-3FSG:O-DEP

'They sprinkle (the moon oil) there (amongst the food), and...' (A)

3-105. akani sea＝hi   num-afu-Ø.

that   chair＝ADS sit-2SG-IMP

'Sit on that chair.'/ 'Sit on the chair there.'[16]

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[16] If *akani* is also encliticised with *=hi*, *akani* does not form a noun phrase with *sea* 'chair' and it can only mean 'there'.

3-106. aka-bena(=hi)   no.

    that-side(=ADS) COP:3FSG

    'It is on that side.'

The discourse demonstrative *rani* refers to an entity or location which has been mentioned earlier in the discourse. In the following example, the antecedent of *ra=mbe* 'inside that' in the second clause is *sini=mbe akani=mbe* 'in the sky there' of the first clause.

*3-107. bohoni amamo=na sini=mbe **akani=mbe**=na awe.*

    before   moon=TOP   sky=INS   there=INS=TOP be.not

    *numami **ra=mbe**   pe-mboke-wa-hya   no.*

    above   DEM=INS be.gone-R:NEG-3FSG-PAST:FOC COP:3FSG

    'Once upon a time the moon was not <u>there</u> in the sky. The moon has not gone up <u>there</u>.' (A)

In the following example, the object phrase *rani=mbo* (DEM=OBJ) refers to the topic of the section — the moon (see the text *Amamola Hwafo* in appendix 1).[17]

3-108. ani=mbe rani=mbo hwatu-ma-hi ambya,

    that=INS DEM=OBJ   sit-3MPL-SIM hole

    'They were searching for that (*rani=mbo*) in the hole there (*ani=mbe*), and...' (A)

---

[17] The postverbal noun phrase *ambya* 'hole' clarifies the referent of the demonstrative *ani* 'that'. See §6.4 on postverbal noun phrases and intraclausal syntax in general.

The expression *ra-rani* is similar to 'so on and so forth' or '*etcetera*' in English.

3-109. "*awe*" *ra-rani   ma-r-efu-mbo,*

"no"   DEM-DEM DR-say-1PL-DEP

'"nothing really" and so on and so forth we said, and…' (A)

Demonstratives — the discourse demonstrative *rani* in particular — can occur many times within the same clause (see also example 3-101 above). In the following example, *rani=hya rani* at the beginning refers to the situation of the previous clause (the previous clause is an independent clause), while the following two instances of *rani* are modifiers of the head noun which they precede.

3-110. rani hya   rani, rani amni=la   afila   ahu rani amamo

DEM EMPH DEM DEM garden=GEN father self that moon

sa-i-Ø   Ø-hahuf-u-mbo,

take-3MSG-3MSG:O CR-go.up-3MSG-DEP

'Then, the garden's father himself took the moon back home, and…' (A)

For temporal references, *dani* 'this' refers to the current time, while non-current is referred to by *akani* or *rani* (see §3.2.8).

The spatial demonstratives *dani* and *akani ~ ani* and the discourse demonstrative *rani* are in paradigmatic opposition. The spatial demonstratives *dani* and *akani ~ ani* can also be used as discourse demonstratives: while *rani* is neutral

towards the entity's distance in relation to the speaker, *dani* and *akani ~ ani* can also be used as discourse demonstratives if the speaker wishes to stress the relative location of a previously-mentioned entity. In the following example, the spatial demonstrative *ani* 'there' is also used as a discourse demonstrative. As a spatial demonstrative, *ani* 'there' in the second clause conveys the distal position of spatial setting in relation to the speaker; as a discourse demonstrative, *ani* 'there' in the second clause either refers to *hwimbe* 'in the water' of the last clause, or *numuambe* 'in the abode' which was mentioned earlier in the text.

3-111. *hwi＝mbe＝na   sa-Ø-ya-a   -han-u-mbo,*

　　　water＝INS＝TOP take-CR-3SG-3FSG:O -go.down-3MSG-DEP

　　　ani   *a …   numu-a＝mbe   Ø-ser-u-Ø,*

　　　there   ah … live-place＝INS CR-eat-3MSG-DEP

　　　'Into the water he took them and went down, and there he eats at (his) abode, and…' (A)

3.2.5　Quantifiers

3.2.5.1　　　Numerals

There are native numerals from one to twelve. The first three numerals are 'pure' numerals (i.e. numerals which have no other meanings): *mamo* 'one', *imbu* 'two' and *imbu-mamo* (two-one) 'three' (the Dla proper numeral *gumu* 'three' is also sometimes used by Menggwa Dla speakers). Numerals can also be represented non-verbally by using the right hand index finger to point at certain parts of the left-hand-side of the upper body, in other words, a body part tally system. The numeral *mamo* 'one' is represented by pointing at *akya ~ akela* 'little finger', *imbu* 'two' by

pointing at *akyatyo ~ akelatyo* 'ring finger', and *imbumamo* 'three' by pointing at *baratyo* 'middle finger'. The names of the numerals from four to twelve are the same as the body parts they are represented by in the body part tally system.

Figure 3.3   Names of numerals and corresponding body parts

tutu 'breast'/ 'eleven'		*wala-buha* 'shoulder'/ 'ten'
humulu 'sternum'/ 'twelve'		*wala-daki* 'upper arm'/ 'nine'
		wala-lu 'elbow'/ 'eight'
		wala-tapa 'lower arm'/ 'seven'
akela ~ akya 'little finger'		*laria* 'wrist'/ 'six'
mamo 'one'		*hwila* 'thumb'/ 'five'
akelatyo ~ akyatyo 'index finger'		*barala* 'index finger'/ 'four'
imbu 'two'		
baratyo 'middle finger'		
imbumamo 'three'		
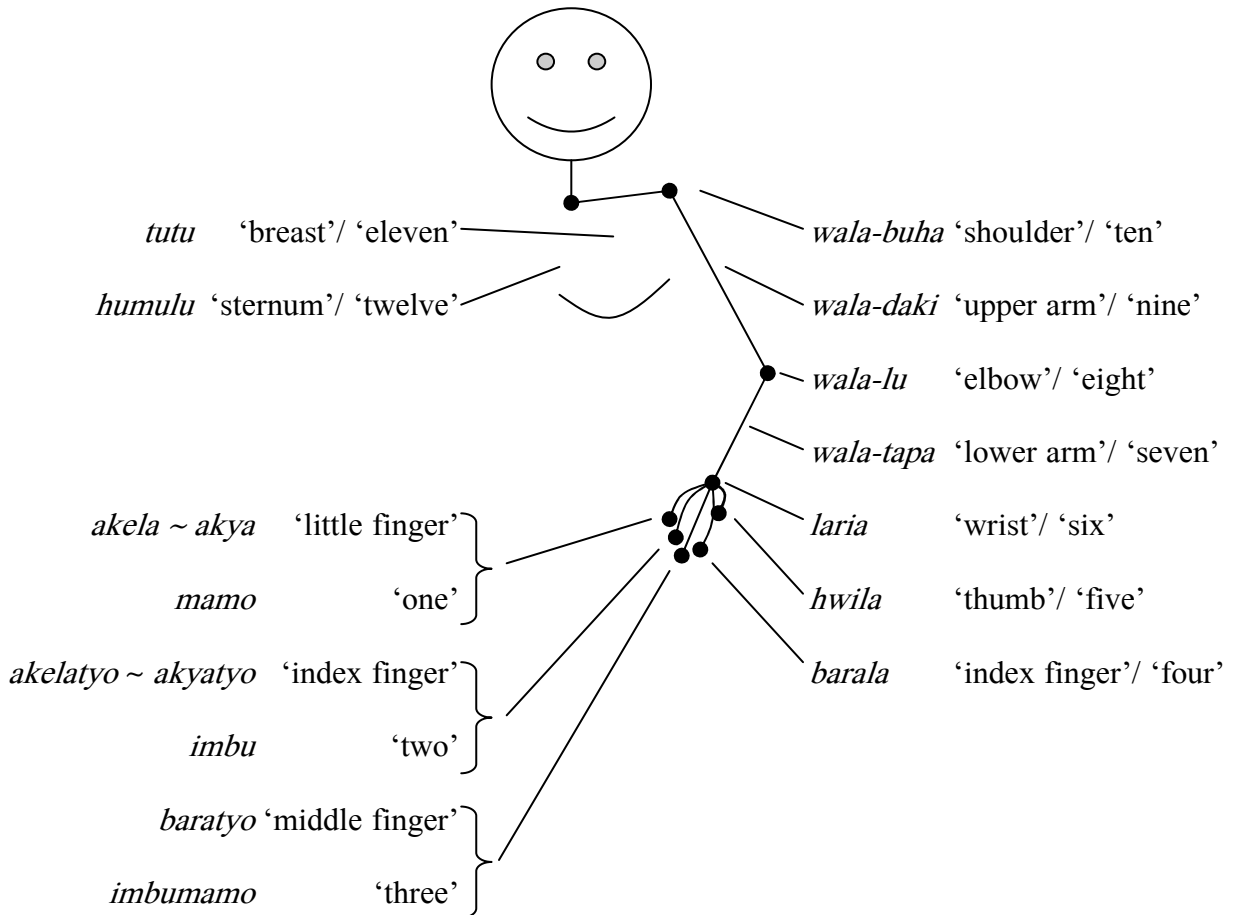
The 'pure' numerals can act as modifiers of nouns on their own. The body-part numerals, however, have to be encliticised with the adessive case *=hi* (§4.5.4) when acting as modifiers. Like other nominal modifiers, numerals are grammatically free to precede or follow the head noun (§4.3).

3-112. ayamu   mamo   *3-113. ayamu   imbumamo*

    chicken one   chicken three

    'One chicken'   'Three chickens'

3-114. ayamu   barala＝hi   *3-115. ayamu   tutu＝hi*

    chicken index.finger＝ADS   chicken breast＝ADS

    'Four chickens'   'Eleven chickens'[18]

Ordinal numerals do not exist distinctly from cardinal numerals; cardinal

numerals (without the adessive clitic ＝*hi*) can also be used ordinally. Both cardinal

and ordinal numerals are grammatically free to precede or follow the head noun

(§4.3). Nevertheless, cardinal numerals and ordinal numerals can sometimes be

distinguished by the fact that cardinal numerals determine the number category of

the noun phrase whereas ordinal numerals do not, and this difference in the number

category of the noun phrase may be reflected by the cross-reference suffixes on the

verb or pronoun which cross-reference with the noun phrase.

3-116. rani [mamo/ imbu/ imbumamo/ barala] sumbani no.

    DEM [one   two   three   four]   day   COP:3FSG

    'That is the [first/ second/ third/ fourth] day.'

---

[18] The expression *ayamu tutu=hi* (chicken breast=ADS) can also be interpreted as 'at the chicken's
breast'. However, numerals can also precede the modified noun, e.g. *tutu=hi ayamu* 'eleven chickens',
in which case the body-part word can only be interpreted as a numeral as nominal clitics must occur
in the last position of a noun phrase.

3-117. imbu buku yowala   no.

two   book 1SG:GEN COP:3FSG

'The second book is mine.'

'First born' is *amuŋgwa* and 'last born' is *akya* (which also means 'little

finger').[19] The other children are referred to using cardinal numbers.

3-118. yowala [amuŋgwa/ imbu/ imbumamo ... akya]   (no/   nu).

1SG:GEN [first.born   two   three   last.born] (COP:3FSG COP:3MSG)

'S/he is my [first born/ second born/ third born… last born].'

On the whole, native numerals above five are not much used these days;

people born as early as 1970s typically do not know the native numerals above three

or five. People generally use Malay and/or Tok Pisin numerals in most domains in

daily life. Malay and Tok Pisin ordinal numerals are especially popular, as

Menggwa Dla does not have ordinal numerals distinct from cardinal numerals.[20]

Numerals in Dla proper, Menggwa Dla, Bahasa Indonesia and Tok Pisin are given

below for reference.

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[19] This is interesting considering that people point to their *akya* 'little finger' (left hand) when they refer to the numeral *mamo* 'one'.

[20] In Malay, 'first' is *pertama*, and the rest of the ordinal numerals are formed by prefixing *ke-* to the cardinal numerals, e.g. *ketiga* 'third'. In Tok Pisin, ordinal numerals are formed by preposing *namba* 'number' to cardinal numerals, e.g. *namba wan* 'first', *namba tri* 'third'. When used attributively, the cardinal numerals in Tok Pisin are suffixed with the adjectivising suffix *-pela*, e.g. *wanpela pig* 'one pig'.

Table 3.4   Numerals in Dla, Bahasa Indonesia and Tok Pisin

Dla proper[21]	Menggwa Dla	Bahasa Indonesia	Tok Pisin	
		kosong, nul	*jiro*	'zero'
mamo	*mamo*	*satu*	*wan*	'one'
imbu	*imbu*	*dua*	*tu*	'two'
gumu	*imbumamo*	*tiga*	*tri*	'three'
betandei	*barala*	*empat*	*fo/ po*	'four'
hwindei	*hwila*	*lima*	*faif/ paip*	'five'
yati	*laria*	*enam*	*siks/ sikis*	'six'
wala-tapa	*wala-tapa*	*tujuh*	*seven*	'seven'
wala-du	*wala-lu*	*delapan[22]*	*et*	'eight'
wala-daki	*wala-daki*	*sembilan*	*nain*	'nine'
wala-buha	*wala-buha*	*sepuluh*	*ten*	'ten'
tutu	*tutu*	*sebelas*	*ileven[23]*	'eleven'
humundu	*humulu*	*dua belas*	*twelf*	'twelve'
(tutu)		*tiga belas*	*tetin*	'thirteen'
(wala-buha)		*empat belas*	*fotin*	'fourteen'

[21] Some older speakers of Dla proper suggest that the body part tally system, but not the numerals, actually extends beyond *humundu* 'sternum' = 'twelve'; the body parts are mirrored on the right hand side of the body, e.g. pointing at the left breast means 'eleven' and the right breast mean 'thirteen', left shoulder means 'ten' and the right shoulder means 'fourteen'. The whole body part tally system thus begins at the left hand little finger (= one), passes through the sternum (= twelve), and ends at the right hand little finger (= twenty-three). This seems to be confirmed by the fact that both 'twenty' and 'four' are recorded as *batenda* in the Dla proper ('Dera') word list in Galis (1955). However, according to older speakers whom I have consulted, the numerals above twelve are not usually expressed verbally; the forms of the Dla proper numerals from thirteen to twenty-three are really names of the corresponding body part.

[22] In Papuan Malay, Bahasa Melayu and many other varieties of Malay, 'eight' is *lapan*.

[23] Older Tok Pisin expressions for tens-plus-units like *wanpela ten wan* (one ten one) 'eleven' or *tupela ten tri* (two ten three) 'twenty-three' are only used these days in air traffic announcements in Papua New Guinea.

(wala-daki)	*lima belas*	*fiftin*	'fifteen'
(wala-du)	*enam belas*	*sikstin*	'sixteen'
(wala-tapa)	*tujuh belas*	*seventin*	'seventeen'
(yati)	*delapan belas*	*etin*	'eighteen'
(hwindei)	*sembilan belas*	*naintin*	'nineteen'
(betandei)	*dua puluh*	*twenti*	'twenty'
(betatyo)	*dua puluh satu*	*twenti wan*	'twenty one'
(akyatyo)	*dua puluh dua*	*twenti tu*	'twenty two'
(akya)	*dua puluh tiga*	*twenti tri*	'twenty three'
	dua puluh empat	*twenti fo*	'twenty four'
	seratus	*wan handred*	'one hundred'
	dua ratus	*tu handred*	'two hundred'
	seribu	*wan tausen*	'one thousand'
	dua ribu	*tu tausen*	'two thousand'
	sejuta	*wan milian*	'one million'
	dua juta	*tu milian*	'two million'

Lastly, 'half' is *safo* in Menggwa Dla, *stanga ~ stenga* in Papuan Malay, *setengah* in Bahasa Indonesia and *hap* in Tok Pisin. The word *safo* 'half' can function as a head noun and be modified by a numeral.

3-119. ahala=na=pa   hya   imbu safo tamako=nambo kikifi nuŋgu-mbo,

root=ALL=only   EMPH   two   half   axe=ALL chop   SEQ-DEP

'(From the top) to the root they chop the sago palm into two halves with an

axe, and…' (B)

<u>3.2.5.2   Non-numeral quantifiers</u>

There are two 'pure' non-numeral quantifiers: *mafwa* 'all' and *aflambli ~ aflambe* 'many'.[24] The concept of 'a few' or 'some' is usually conveyed by *imbumamo* 'three'. These words can be used referentially on their own, or used as a modifier of another noun.

3-120. *yo [mafwa/ aflambli/ imbumamo](=mbo) (iŋginambo) ser-iha-hwa.*

1   [all/   many/   three](=OBJ)   (fast)   eat-1SG-PAST

'I ate [all/ lots/ {three/ some}] (quickly).'

Due to the flexibility of constituents within noun phrases, sometimes a quantifier is ambiguously at the end of one noun phrase and at the beginning of a following noun phrase.

3-121. *[wali mafwa] hwatumali ser-yei-hwa.*

[pig   all]   vegetable   eat-N1FPL-PAST

'All the pigs ate the vegetables.'

3-122. *wali   [mafwa hwatumali]   ser-yei-hwa.*

pig   [all   vegetable]   eat-N1FPL-PAST

'The pigs ate all the vegetables.'

---

[24] The form *aflambli* is typically used in the western villages, and *aflambe* is typically used in eastern villages. The Dla proper word *maflambli* 'many' is also sometimes used.

Sometimes a quantifier is separated from a modified noun which is topicalised with a topic clitic =*na* (§4.5.2). When a nominal is topicalised, quantifiers are interpreted as having scope over the topicalised nominal.

3-123. *hwatumali=na wali mafwa ser-yei-hwa.*

      vegetable=TOP pig all eat-N1FPL-PAST

      'As for the vegetables, the pigs ate them all.'

Sometimes a quantifier occupies the post-verbal position (§5.4).

3-124. *waŋgu mambutya-Ø-hwa-a-Ø aflambli,*

      sparrow stick.hit:MASS-CR-1DU-3FSG:O-DEP many

      'We caught lots of sparrows, and…' (N)

However, any constituents — not just quantifiers — can exist in the post-verbal position (see §5.4).

3-125. *aflambli mambutya-Ø-hwa-a-Ø waŋgu,*

      many stick.hit:MASS-CR-1DU-3FSG:O-DEP sparrow

      'We caught lots of sparrows, and…'

When there is only one noun phrase in the clause, the post-verbal quantifier has scope over that noun phrase.

3-126. waŋgu   bukwa   mambutya-Ø-hwa-a-Ø   *aflambli,*

sparrow   big   stick.hit:MASS-CR-1DU-3FSG:O-DEP   many

'We caught lots of big sparrows, and…'

However, when there are more than one noun phrases in the clause, it is ambiguous as to which noun phrase the post-verbal quantifier modifies.

3-127. wihwala dufua=mbo   dofo-wi-hya   *mafwa.*

children egg=OBJ   hide-N1FPL-PAST:FOC all

'The children hid all the eggs.'/ 'All children hid eggs.' (50II)

3.2.6   Conjunctions

Conjoined noun phrases are usually simply juxtaposed (e.g. example 3-130 below; the position of the two noun phrases can be switched without any change in meaning).   There does not seem to be a native disjunctional word. Tok Pisin and Malay conjunctions and disjunctions are sometimes used: *na* 'and' and *o* 'or' in Tok Pisin, and *dan* 'and' and *atau* 'or' in Malay.

The conjunctions *wara ~ wa* 'so' and *ye* 'then' indicate logical progression of the situations between clauses. These conjunctions are placed at the beginning of clauses.

3-128. ye   me-wa-mbona,

then finish:DR-3FSG-DEP

'Then after that is finished …' (B)

3-129. *wara e bani=mbe o hwatumali o naho sama-Ø-hi-a-mbo,*

so   3 sago=INS   or leafy.vege or what cook-CR-3FPL-3FSG:O-DEP

'So people cook sago or greens or other things, and …' (A)

The conjunction *gwa* 'but' indicates an unexpected progression of situations between clauses. This conjunction can be placed at the beginning of clauses or at the end of clauses.

3-130. *gwa [afila]   [hwila]   … efya   ra=na   po-me-efya-mbo,*

but   [father] [mother]   N1FDU:RSUMP that=ALL   go:DR-DR-N1FDU-DEP

'But father and mother … the two of them went to that, and…' (A)

3-131. *"naho no"=hya   tutu-me-Ø-mbona gwa,*

"what COP:3FSG"=EMPH ask-DR-3MSG-DEP   but

'"What is it?" he asked, but…' (A)

3.2.7   Locative words (and locative nouns)

The following locative words exist in Menggwa Dla. The forms including the parenthesised segments are the citation forms; case clitics are attached to the forms without the parenthesised segments.

numami   'above'/ 'upward'

wami   'top'/ 'on'

anihwalfi   'below'/ 'downward'

173

rewambi	'bottom'/ 'under'
ruhwa	'down below'
ruŋgu	'inside'/ 'inward'
safa=mbe	'inside' (*safa=mbe* flesh=INS)
ambloa(na)	'outside'/ 'outward'
hulumbu(na)	'front'
gihyamu(na)	'back'
yamala	'left'/ 'left-hand side'
ati	'right'/ 'right-hand side'
murua	'middle'
bena ~ sena	'side'
baya	'foragable side'
	(the side where foodstuff can be hunted or collected)

Locative words can be used as verb modifiers or noun modifiers. When used as verb modifiers, locative words cannot be case-marked, as that would indicate that the locative word would be part of a noun phrase.

3-132. numami   pi-wa-hwa.

upward   go-3FSG-PAST

'She went upward.'

174

3-133. mni   ambloana＝pa   hya   [hwatu-seru-mbo]   pa

just   outside＝only   EMPH   [find-eat-NOML]   only

hri-Ø-ya-a   -fa-ya-a   -kaku-u-Ø,

come.out-CR-3SG-3FSG:O -leave-3SG-3FSG:O -walk-3MSG-DEP

'He only came out to search for food, and…' (A)[25]

Locative words can also be noun modifiers. In this case, the locative word must be part of a noun phrase, and if it is the last word of a noun phrase, it can be attached with a case clitic.

3-134. yulu   yamala＝hi potapo-wa-hi.

leg   left＝ADS   hop-3FSG-PRES:CONT

'(A bug is/ bugs are) hopping on the left leg.'

Sometimes the head noun which is modified by a locative word can be ellipted, as in the example below. With the inessive case clitic ＝*mbe* (§4.5.3), the interpretation is necessarily that the locative word *wami* 'top' is modifying an ellipted head noun which denotes some kind of enclosed space.

3-135. wami＝mbe saha-ya-a-hwa.

top＝INS   put-3SG-3FSG:O-PAST

'S/he put (it) in the top (e.g. shelf).'

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[25] The word *mni* 'just' does not modify *ambloana* 'outside'; this *mni* 'just' is a sentential adverbial which means something like 'only'.

In a lot of instances, locative words actually function as nouns. These locative nouns commonly form a noun phrase on their own and are attached with a case clitic.

3-136. *yamala＝hi*　　*nuŋg-wa-hi.*

　　　left＝ADS　　　stand-3FSG-PRES:CONT

　　　'She is standing on the left hand side.'

3-137. *wami＝na pi-wa-hwa.*

　　　top＝ALL　go-3FSG-PAST

　　　'She went to the top (e.g. of the mountain).'

Sometimes locative nouns are modified by another noun. In such cases, the modifying noun can be thought of as a genitive phrase with an optional genitive case clitic.

3-138. *nimi(＝la)*　　　　　*wami＝na pi-wa-hwa.*

　　　mountain(＝GEN)　top＝ALL　　go-3FSG-PAST

　　　'She went to the top of the mountain.'

3-139. *hupla(＝la)*　　　　　*murua＝mbe dufwa＝mbo safa-wa-a-hwa.*

　　　container(＝GEN)　middle＝INS　egg＝OBJ　　put-3SG-3FSG:O-PAST

　　　'S/he put the egg into the middle of the pot.'

3.2.8   Temporal words (and temporal nouns)

The following temporal words exist in Menggwa Dla.[26]

simbu	'morning'
sumblufu	'afternoon'
sumbli	'night'
sumbani	'day'
miŋgu	'week' (BI: *minggu* 'week'/ 'Sunday'
	< Portuguese *domingo* 'Sunday')
amamo	'month' (*amamo* 'moon')
humbani	'year'
hama	'few days ago'
hamani	'yesterday'
apa	'today'
kyambe	'tomorrow'
ahya	'few days ahead'
bohoni	'before'/ 'ago'
dahoni	'now'
suŋgu	'after'/ 'afterward'/ 'later'

Temporal words are most usually used as sentential adverbial. When used as sentential adverbials, temporal words can be (but rarely) attached with a local case clitic (§4.5.3).

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[26] For proper name temporal words, see §4.4.

3-140. sumblufu(=hi)   ap-ah-hwa.

afternoon(=ADS) sleep-1SG-PAST

'I slept in the afternoon.'

3-141. suŋgu(=hi)   pi-mba-mbo.

later(=ADS)   go-POST-DEP

'Let's go later.'[27]

Except *bohoni* 'before', *dahoni* 'now' and *suŋgu* 'later', the temporal words can function as nouns. These temporal nouns can be the head noun of a noun phrase (example 3-142), or a noun modifier in the form of a genitive phrase (with an optionally ellipted genitive case clitic; example 3-143).

3-142. apa=na   saftu   no.

today=TOP Saturday COP:3FSG

'Today is Saturday.'

3-143. [hamani(=la)   seru]=mbo   ser-iha-hi.

[yesterday(=GEN) food]=OBJ   eat-1SG-PRES:CONT

'I am eating yesterday's food.'

For temporal nouns which depict a period of time which is not unique in relation to the present moment, 'current' is expressed by *dani* 'this', e.g. *dani amamo* 'this month', and 'ago' and 'ahead' are expressed by *bohoni* 'before' and *suŋgu*

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[27] The word *pimbambo* is a verbal noun, and this sentence is literally 'there will be future-going later'; see §7.3.2 on verbal nouns.

'after' respectively, e.g. *(mamo) miŋgu bohoni* '(one) week ago', *(imbumamo) humbani suŋgu* '(three) years later'. See §3.2.4 on demonstratives.

3.2.9   Interjections, greeting phrases and miscellaneous would classes

Interjections are words which are semantically not related to the rest of the utterance. All of the following words except *hya* can form utterances on their own.

a	'ah'
o	'oh'
wu	'oh'
hya	INTJ
yambi	'OK' (example 3-160 below)
ai	'ai!' (exclamation of surprise/ accidents/ forgetfulness)
ini	'yes'
awe	'no'

The interjection *a* 'ah' can be used utterance initially (example 3-144 below) or medially (example 3-75 above), *o* 'oh' is used utterance-initially (example 3-102 above), and *wu* 'oh' is used utterance-medially (example 3-145 below).

3-144. a   yanu.

ah enough

'Ah, (that is) enough.' (N)

3-145. ye   bani safa aflambe wu ma-ek-wa-mbo,

   then sago meat plenty   oh DR-exist-3FSG-DEP

   'Then there would be a big pile of sago starch, and…' (B)

The interjection *hya* — homophonous with the ablative case clitic *=hya* (§4.5.3) — is a frequently used space filler which is used after noun phrases or direct quotes.

3-146. ahala=na=pa   hya   imbu safo tamako=nambo kikifi nuŋgu-mbo,

   root=ALL=only INTJ   two   half axe=ALL   chop SEQ-DEP

   'People chop (the trunk) into two halves along the length of the trunk ('only to the root'), and…' (B)

3-147. yaplu   hya   Ø-numb-a-mbo,

   coconut.stalk INTJ   CR-stand-1SG-DEP

   'I put the coconut stalk up, and…' (B)

3-148. wara rani hya rani sa-ya-a   pi-Ø-Ø-mbo,

   so   that INTJ that take-3SG-3FSG:O go-CR-3MSG-DEP

   'so then he took it away, and…' (A)

3-149. "naho ni"   hya hya tutu-Ø-ni   gwa,

   what TENT INTJ INTJ ask-3MSG-TENT but

   'maybe he asked (them) "what is it", but' (A)

180

Other than forming utterances on their own, the words *ini* 'yes' and *awe* 'no' can also be followed by *gwa* 'but' (§3.2.6), the exclamatory particle *ke* or the cautionary particle *we* (see below)). The word *ini* 'yes' is used to indicate agreement or existence (*ini* 'yes' is used in agreement with a negatively-polarised question), whereas *awe* 'no' is used to indicate non-agreement or non-existence (in example 3-151 below, *awe* 'no' signifies non-existence rather than non-agreement to a statement raised by someone).

3-150. "ga   po-l-afa?"   "ini, (ga   po-l-aha.)"

     "NEG:SMR go:FUT-LIG-2SG"   "yes (NEG:SMR go:FUT-LIG-1SG)"

     "You will not go?" "Yes, (I will not go.)"

3-151. awe, munika hof-ehye-mbi.

     no   nothing come-1DU-PRES

     'No, we are coming back with nothing.' (N)

In addition, *awe* 'no' can also be used in an independent clause as a predicate meaning 'be not'. Unlike verbs, the predicate *awe* is not inflected, and unlike nouns, *awe* cannot be followed by a copula.

3-152. awe, ai=na dani=hya awe.

     no   3=TOP here=ABL be.not

     'No, s/he is not from here.'

3-153. bohoni amamo=na sini=mbe akani=mbe=na awe.

before moon=TOP sky=INS there=INS=TOP be.not

'Once upon a time the moon was not there in the sky.'

(repeated from example 3-107 above; A)

Another invariant predicate is the word *hwambo* 'be the case'. The following example shows that *hwambo* can take an object argument. The phrase *imbumamo waplumbi ekwahya* is a zero-headed relative clause (§7.1.1.3): *-hya* is the only past tense suffix available to relative clauses, and the only *mbo* morph which can follow *-hya* is the object case clitic =*mbo* (§4.5.2).[28]

3-154. [imbumamo waplu=mbi ek-wa-hya]=mbo hwambo

[three bucket=PROP exist-3FSG-PAST]=OBJ be.the.case

pi-Ø-a-Ø,

go-CR-1SG-DEP

'With there being three buckets I go, and…' (B)

The following is another example of *hwambo*; the object case clitic =*mbo* is not obligatorily used in Menggwa Dla (§4.5.1).

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[28] The dependency suffix *-mbo* (§7.5), which marks a verb as a dependent verb and lacking in tense-mood information, is mutually exclusive with the past tense suffix *-hya*. The nominalising suffix *-mbo* (§7.3.2) is also mutually exclusive with the past tense suffix *-hya*.

3-155. [afila hwila aniŋgi-Ø-hi-a-Ø,   seri-hi-a-hya](=mbo)

[father mother use-CR-N1FPL-3FSG:O-DEP eat-N1FPL-3FSG:O-PAST](=OBJ)

hwambo,

be.the.case

ye   yaflei huri "amamo huri" s-efu-hu-a-mbi   rani.

then cloud dew "moon   dew" call-1PL-1PL-3FSG:O-PRES:STAT DEM

'Like how father and mother have been using and eating it, we call cloud

dew "moon dew".' (A)

The word *hwambo* often takes *ilo-Ø ~ ilo-mbo ~ iro-Ø ~ iro-mbo* (be.like.so-

NOML) as its argument (*ilo ~ iro* 'be so' class II).

3-156. ... gihali   me-Ø-wa-mbo,

      hungry COMPL-CR-3FSG-DEP

ilo-mbo   hwambo   tamako semi nuŋgu-mbo…

be.like.so-NOML be.the.case axe   take SEQ-DEP

bani numu-a=nambo pi-mba-mbo.

sago sit-place=ALL   go-POST-NOML

'(People) are hungry, and so they take axes, and … go to the place where the

sago palms exist.' (B)

The following example shows a variant of *hwambo* — *hwahwambo*. The last

clause in the following example also shows that *hwambo* can occur without any

argument expressions. (The copula *no* which follows *hwambo* in the last clause

does not indicate that *hwambo* is a noun: copulas can be placed after any predicates, including verbs, to indicate that the whole clause is in focus; see §6.4.3.)

3-157. *awe   gwa,*

no   but

yohwefa ulua hwi   numami aya   saku-ya-a-hya   akani=mbe.

1PL:GEN fat   liquid above   father put-3SG-3FSG:O-PAST:FOC there=INS

iro-Ø   hwahwambo aniŋgi-Ø-hu-a-Ø,   Ø-ser-yefu-Ø,

be.like.so-NOML be.the.case   use-CR-1PL-3FSG:O-DEP   CR-eat-1PL-DEP

hwambo   no.

be.the.case COP:3FSG

'Nothing really, father put our oil up there. Like so we use it and eat, and that is the case.' (A)

There are the cautionary particle *we* and the exclamatory particle *ke*. The cautionary particle *we* can be used on its own meaning 'beware!' or 'watch out!', or placed after a verbal noun or noun in predicate position indicating prohibition. The exclamatory particle *ke* is used in sentence final positions and conveys positive exclamation. The cautionary particle *we* can be thought of as the negative counterpart of the exclamatory particle *ke*.

3-158. *we!   akwani yafu-kyau we!*

CAUT   snake   tooth-bite CAUT

'Watch out! Be cautious of the snake biting.'

3-159. amani no   ke!

good   COP:3FSG   EXCL

'It is real good!'

3-160. "yambi ke!"   sa-hwa-a   Ø-numb-ehi-mbo,

"OK   EXCL" think-1DU-3FSG:O CR-SEQ-1DU-DEP

'"That's OK!" we thought, and then…' (N)

There is also the 'reflexive' word *ahu*. The 'reflexive' word *ahu* is not itself
a pronoun, but it can — in some instances — indicate coreference within a clause.
See §4.6.4.

There is the all-purpose greeting phrase *amani nu!* (good COP:POS) 'It is
good!' (notice that the copula has to be in the non-finite form). There are also the
following time specific greetings:

simbu amani	good morning
sumbani amani	good day (used in day time except early morning)
sumblufu amani	good afternoon/ evening
sumbli amani	good evening/ night

These phrases can be followed by the non-finite copula *nu* and/ or an exclamatory
particle *ke* (see above), e.g. *sumbani amani nu ke!* 'absolutely good day!'.

Chapter 4

Nouns, Pronouns and Noun phrases

In Menggwa Dla, nouns denote entities (real or imagined), abstract ideas and properties. A noun phrase consists of a head noun on its own, or a head noun plus one or more modifiers, all of which must be contiguous to each other (with exceptions; see §4.3).

Three nominal categories are grammaticalised in Menggwa Dla grammar: person, genders (§4.1) and number (§4.2). However, these nominal categories are not marked within the noun phrases. Instead, the person, gender and number categories of a nominal are manifested by cross-reference suffixes (§5.2).

Nouns can be modified by various modifiers: adjectives, genitive phrases, proprietive/ abessive phrases, demonstratives, degree qualifiers, quantifiers and relative clauses (§4.3). There are no morphological differences between proper names and common nouns (§4.4). On the noun phrase level there are the numerous case clitics and other nominal clitics like the topic clitic and focus clitics (§4.5). Different sets of pronouns are used in different positions (§4.6). There are the 'citation pronouns' which are used in topic/ subject positions or in isolation, and there are only three of them, each marking only a person category: *yo* first person ('I'/ 'We'), *si* second person (i.e. 'you') and *ai* third person ('s/he/it/they'). There are also the object pronouns, genitive pronouns and subject resumptive pronouns which have fifteen or sixteen members, each marking different person, number and

gender combinations. These pronouns also mark a distinction of inclusive versus exclusive first person; nowhere else in Menggwa Dla (and Dla proper) grammar is the distinction of exclusive versus inclusive first person grammaticalised (see §4.6).

4.1   Gender

Menggwa Dla can be described as having a 'feminine' versus 'masculine' gender system. However, there are important differences between the gender system in Menggwa Dla and the gender systems in European languages. In European languages with masculine-feminine gender systems (e.g. Romance languages), the quantity of masculine nouns and the quantity of feminine nouns are not too imbalanced, and the grammatical gender of a noun is in some cases reflected in the phonological shape of the noun. In Menggwa Dla, however, the vast majority of nouns are feminine, and the criteria used in determining the gender of a noun are purely semantic. The grammatical gender of animate nouns (humans in particular) basically corresponds with biological sex; for inanimate nouns, all but a handful of them are feminine.

Semantically speaking, feminine is the unmarked gender; even with animates, nouns are masculine only when they are specified as being male in biological sex. Based on the huge bias towards the feminine gender, the terms 'masculine' versus 'non-masculine' (feminine plus 'neuter') could have been chosen for the two genders. Nevertheless, the term 'feminine' has been chosen over 'non-masculine' due to typographical ease. The abbreviations of 'F' are also easier to decipher than

the abbreviations of 'NM'.[1] The semantics of gender for human references is introduced in §4.1.1; the semantics of gender for non-human references is introduced in §4.1.2.

The gender category of a nominal is only manifested by verbal cross-reference suffixes which cross-reference with the nominal (§5.2). (Nevertheless, not all cross-reference suffixes mark gender.) For instance, the phonological shape of the noun *kapali* 'aeroplane' gives no indication of its gender category; without knowledge of the semantic criteria on which gender-assignment is based, one can only tell the gender of that noun by the verbal cross-reference suffix which cross-references with it.

4-1.   *kapali   hof-u-mbi.*

aeroplane   come-3MSG-PRES:TRANSN

'The plane is coming/ has just arrived.'

One can deduce that *kapali* 'aeroplane' is masculine in Menggwa Dla because of the cross-reference suffix *-u*, which is the class IA cross-reference suffix (§5.2.1) for third person masculine singular (3MSG). The corresponding (class IA) third person feminine singular suffix is *-wa*.

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[1] The abbreviation N is already used for non-first person (N1) and non-singular number (NSG) cross-reference suffixes (§5.2). Luckily no cross-reference suffixes are both non-first person and non-singular; imagine an abbreviation with 3 N's: N1NSGNM.

4.1.1 Gender of human references

For humans, references which denote a male person or a group of males are masculine.

4-2. *patulu*   *hamani*   *han-u-hya.*

priest   yesterday   go.down-3MSG-PAST:FOC

'The priest went down yesterday.'

4-3. *patulu*   *hamani*   *han-ufa-hya.*

priest   yesterday   go.down-N1MDU-PAST:FOC

'The two priests went down yesterday.'

References which denote a female person, a group of females or a group with at least one male and one female are feminine.

4-4. *twaŋgi*   *hamani*   *han-yefye-hya.*

white.person yesterday go.down-3FDU-PAST:FOC

'The two white people went down yesterday.'

(two women or one women plus one man)

A person or a group of people of whom the biological sex is unknown or unspecified are also feminine.

4-5.	*newi	yama＝mboka	ni-wi.*

people	money＝ABSS	COP:PRES-3FPL

'People are without money.'

4-6.	*da	monani-wa-hi?*

who	sing-3FSG-PRES:CONT

'Who is singing?'

Interrogative words (§3.2.3) can be cross-referenced as masculine if the referent is known or assumed to be male.

4-7.	*da	monani-Ø-hi?*

who	sing-3MSG-PRES:CONT

'Who is singing?' (e.g. the singer's voice is low in pitch)

4-8.	*da	sihafa	aru	n-u?*

who	2SG:GEN	dad.bro	COP:PRES-3MSG

'Who is your uncle?'

## 4.1.2	Gender of non-human references

Higher animates like *yafli* 'dog' and *wali* 'pig' are cross-referenced as masculine only when they are specified as biologically male. If the biological sex of (at least one of) the individuals is female, or the biological sex is unknown or not highlighted, the animate noun is cross-referenced as feminine.

4-9.   *yowala*   *wali*   *(dulua)*   *(imbu)*   *pi-__afa__-hwa.*

      1SG:GEN   pig   (male)   (two)   go-N1MDU-PAST

      'My two male pigs have gone.' (The pigs are specified as male)

4-10.   *yowala*   *wali*   *pi-__efye__-hwa.*

      1SG:GEN   pig   go-N1FDU-PAST

      'My two pigs have gone.'

      (Two female pigs, or one female pig plus one male pig)

4-11.   pusi *hwila=na*   *aflambli* *ser-__wa__-mbi.*

      cat   mother=TOP   plenty   eat-3FSG-PRES:STAT

      'The mother cat eats a lot.'

4-12.   *yafli=na*   *imbalkwa=mbi* *no.*

      dog=TOP   weight=PROP   COP:3FSG

      'The dog is heavy.'

      (The sex of the dog is not highlighted; the dog could be male or female.)

      Animals and insects of which the biological sex is difficult to determine are cross-referenced as feminine, e.g. *mani* 'louse', *akwani* 'snake' (example 4-13). The vast majority of inanimate things are feminine in gender (example 4-14).

4-13.   *rani akwani kelia*   *mafwa(=mbo)* *ser-wa-hwa.*

      DEM snake   cockroach all(=OBJ)   eat-3FSG-PAST

      'That snake ate all the cockroaches.'

4-14.   *oto me-ek-wa-mbo=na*   *hof-aha-hwa.*

      car DR-exist-3FSG-DEP=TOP   come-1SG-PAST

      'The car was here when I came.'

      (*lit.* 'The car was here and then I came here.')

There are actually some animals and some inanimate things which are specifically masculine; certain things which are considered *blaha* 'light' are masculine. 'Light' things are things which are perceived as 'light' enough to defy the earth's gravity, and most 'light' things are masculine, e.g. *amamo* 'moon', *hufu* 'sun', *yaflei* 'cloud', *kapali* 'aeroplane' and other flying birds and animals like *ambuha* 'cockatoo', *bahu* 'flying fox' and *manyafra* 'fruit bat'.[2] (However, flightless or poor-flying birds like *kwaŋgi* 'cassowary' and *ayamu* 'chicken', flying insects like *walkni* 'mosquito', *mupi* 'star', and flying birds and animals which are specified as female are cross-referenced as feminine; *mupi* 'star' and flying insects are feminine probably because they are too small for its gender to be 'significant'.) All other animates and inanimates are cross-referenced as feminine because they are *imbalkwa* 'heavy', i.e. they stay on the ground or in the water.

4-15.   *rani bohoni amamo rani hwi=mbe*   *Ø-num-u-mbona,*

      that before moon   that water=INS   CR-sit-3MSG-DEP

      'Once upon a time the moon existed in the water, and…' (A)

---

[2] The sun and moon are also masculine beings in traditional mythology.

4-16. *waŋgu mamu=pa homba-hi-**Ø**-hwa.*

sparrow one=only   see-1SG-3MSG:O-PAST

'I only saw one sparrow.'

4-17. *bahu   barufu   Ø-ser-**ufani**-mbo,*

flying.fox breadfruit CR-eat-N1MDU-DEP

'The two flying-foxes ate the breadfruits, and…'

4-18. *(rani kapali)   Sentani=hya   n-**u**.*

(that aeroplane) Sentani=ABL   COP:PRES-3MSG

'(That aeroplane) is from Sentani.'

However, when there are three or more (plural in number) of these 'light' non-human entities, the 'light' non-human entities may be considered to have 'become heavy', and thus cross-referenced as feminine.

4-19. *tu   mafwa pi-Ø-wi-mbo,*

bird all   go-CR-N1FPL-DEP

'All the birds flew away, and…'

(On the other hand, plural masculine human nouns must be cross-referenced as masculine:

4-20. India *patulu mafwa   pi-Ø-mu-mbo,*

India priest all   go-CR-N1MPL-DEP

'All the Indian priests left, and…')

These 'light' masculine non-human nouns are increasing cross-referenced as feminine (even when the noun is singular or dual) by younger speakers, in analogy with other feminine non-human nouns.

Another noteworthy point is that this 'light' versus 'heavy' distinction also extends to folk phonology. Speakers of Menggwa Dla often comment that the high vowels of *i* /i/ and *u* /u/ 'sound light', whereas the mid vowels of *e* /e/ and *o* /ʊ/ 'sound heavy'. One pair of examples demonstrating this 'sound-weight-gender' correspondence is the words *hufu* 'sun' (masculine) and *hofo* 'ground' (feminine). Another pair of examples is the class IB and class IHB cross-reference suffixes for third person singular: *-u* for masculine and *-o* for feminine (§5.2.1). Some semi-realis positive verb forms (§6.2.1) take a masculine suffix *-i* or a feminine suffix *-e*, e.g. *lahumbi* 'he will be' versus *lahombe* 'she will be'. The masculine suffix *-i* and the feminine suffix *-e* are used more frequently in Anggor (Litteral 1990:53-54), e.g. *an-i* 'he is' versus *an-e* 'she is'.

See also §5.2.4 on how sometimes third person nominals are cross-referenced as third person feminine singular when they are of low discourse prominence (regardless of their inherent person-number-gender features).

4.2   Number and person

Three numbers are distinguished in Menggwa Dla: singular (SG), dual (DU) and plural (PL). Singular means one of a kind, dual means two of a kind, and plural means three or more.

Similar to gender (§4.1), the category of number is not marked on the nouns themselves. The number of a noun is only exhibited by a cross-reference suffix which cross-references with it (§5.2). Cross-reference suffixes mark singular versus dual versus plural number, or in some instance singular versus non-singular number (i.e. dual and plural marked by the same form).

There are a small number of nouns which denote a group of entities rather than single individuals, e.g. *wihwala* 'a group of children' (c.f. *wi* 'child'), *oloha safya* 'community' (etymology unknown). There is the adjective *tamnia* which means 'a mass of small things'. A group of three or more entities is often cross-referenced as singular rather than plural, especially when the entity is low in discourse prominence (§5.2.4). In such cases the group of entities is viewed as one single mass rather than many individuals. In addition, there are the 'mass undergoer' verbs which indicate that the undergoer is viewed as a single mass rather than plural individuals (see §5.1.4).

There are three person categories in Menggwa Dla: first, second and third. A first person reference has the speaker or a group including the speaker as its referents. A second person reference has the addressee or a group including the addressee but not the speaker as its referents. A third person reference has referent

or referents which are neither the speaker nor the addressee (except in certain circumstances, see below).

The grammatical category of person is marked in cross-reference suffixes (§5.2) and pronouns (§4.6). Some cross-reference suffixes (§5.2) and subject resumptive pronouns (§4.6.3) only distinguish between first person and non-first person, i.e. second person and third person are expressed by the same form, e.g. the first person dual subject resumptive pronoun *ehya* (1DU:RSUMP) 'we two' versus the non-first person feminine dual subject resumptive pronoun *efya* (N1FDU:RSUMP) 'you/ they two'. For dual and plural first person references, an inclusive-exclusive distinction is made by the object pronouns (§4.6.2), and genitive pronouns (§4.6.2).

Except when coordinated or marked with a comitative case (§4.5.5) in relation with a first or second person reference (which can be covert), all nouns are cross-referenced as third person. It is not quite accurate to say that third person references always have referents which are neither the speaker nor the addressee. For instance, a mother — when addressing her child — can say something like example 4-21 below where the noun *mi* 'mother', which is cross-referenced as third person, refers to the speaker herself.[3]

4-21. *mi=na   hihifu-mboke-wa-hi.*

mother=TOP happy-NEG:R-3FSG-PRES:CONT

'Mother is not happy.'

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[3] There are two words for 'mother': *mi* and *hwila*. Usually *mi* refers to one's own mother and *hwila* refers to someone-else's mother. In example 4-21 *mi* 'mother' can refer to the speaker herself only because *mi* is here referring to the mother of the addressee and the speaker is the addressee's mother.

A more accurate statement would be that first person references have one referent which is specified for the discourse role of speaker, second person references have one referent which is specified for the discourse role of addressee (but none of the referents is the speaker), and third person references have referents which are not specified for their discourse role. Nevertheless, the speaker/ addressee are most usually referred by a first/ second person reference respectively, while instances where a third person reference can refer to the speaker or addressee are highly restricted.

4.3   Noun modifiers, word order in NP and noun compounds

Noun phrases can be clearly identified in Menggwa Dla, as the head noun and its modifiers are always contiguous to each other. The syntactic positions of nominal clitics (§4.5) also testify to the existence of noun phrases — nominal clitics have the last independent word in a noun phrase as their host.

4-22. *[wuli   bukwa imbu=mbi/   wuli   imbu bukwa=mbi]   ni-wi.*
      [house big   two=PROP/   house two   big=PROP]   COP:PRES-N1FPL
      'They have two big houses.'

A head noun can be modified by one or more of the following modifiers:

- adjectives (§3.1.2);
- demonstrative (§3.2.4);
- quantifier (§3.2.5);

- genitive phrase (§3.1.2; §4.5.3);

- proprietive/ abessive phrase (§3.1.2; §4.5.5); and/ or

- relative clause (§7.1.1).

Grammatically speaking, the order of modifiers in relation to the head noun is rather free; constituents in a noun phrase can be scrambled to any order and still be grammatical (except for certain genitive phrases with ellipted genitive clitic, in which case the genitive phrase must precede the head noun; §4.5.3). However, there are tendencies as to whether a modifier precedes or follows the head noun:[4]

- Relative clauses nearly always precede head nouns;

- There is a weak tendency of possessive phrases being placed in front of the head noun;

- Demonstratives are nearly always at the left or right edge of the noun phrase;

- There are weak tendencies for non-numeral quantifiers and lower numerals ('three' and below) to follow the head noun;

- Adjectives (§3.1.2) tend to be closer to the head noun than other noun modifiers within the same noun phrase; adjectives which denote dimensions (e.g. *bukwa* 'big', *tikyawi* 'small', *blufa* 'short') tend to follow the head noun; other adjectives tend to may precede the head noun.

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[4] 'Tendencies' presented here are based on subjective evaluations: 'nearly always' means more than 90% occurrence rate; 'tend to' means around 75% occurrence rate; 'weak tendency' means around 60% occurrence rate.

The following are some examples of complex noun phrases which may or may not follow the word-order tendencies outlined above. It is grammatical to scramble the order of a head noun and its modifying phrases to any order, hence it is impossible for noun phrases with three or more constituents to consist of hierarchies of binary noun phrases. The noun modifiers are in bold in the following examples.

4-23.   **[imbumamo]**   waplu

[three]   bucket

'three buckets' (B)

4-24.   yari   **[blufa]**   **[imbu]**

sago   [short]   [two]

'two short (pieces of) sago' (N)

4-25.   **[yowala]**   hwafo   **[blufa]**   **[ilomo＝la]**

[1SG:GEN]   story   [short]   [creator＝GEN]

'my short mythical story' (A)

4-26.   **[rani]**   hwi   **[aniŋgi]**

[DEM]   liquid   [useable]

'that useable liquid' (A)

4-27.   bani   **[safa]**   **[aflambe]**

sago   [meat]   [plenty]

'plenty of sago fibre' (B)

4-28. *[yowala]* *ifali* *[tamnia]*

[1SG:GEN] spear [small:MASS]

'my small spears' (N)

4-29. *sumbli* *[rani]* *[murua]*

night [DEM] [middle]

'middle of that night' (N)

4-30. *[tikyawi tite]* *hombakwala* *[yowala]*

[little bad] eye [1SG:GEN]

'my slightly bad eye'

4-31. *[wanu=mbi]* *[tite]* *newi*

[money=PROP] [bad] person

'wealthy bad person'

4-32. *[petwa]* *[hwalfehi=mboka]* *yani*

[old] [woman=ABSS] man

'old wife-less man'

4-33. *[[hoho-hia-hya]* *[amamo=la]* *hwafo]* *(hoho-mba-Ø.)*

[[tell-N1FPL-3FSG:O-PAST] [moon=GEN] story] (tell-POST-DEP)

'(I will tell you) the moon's story which they told.' (A)

4-34. *[yani [si homba-i-Ø-hya]](=na*   Julius *nu.)*

[man [2 see-N1MSG-3MSG:O-PAST]](= TOP   Julius COP:3MSG)

'The man whom you saw (is Julius).'

Multiple-embedded genitive phrases are right headed.

4-35. *[[ehala]*   *hwila=la]*   *glu*

[[3SG:GEN]   mother=GEN] teacher

'his/her mother's teacher'

     Noun compounds differ from modified noun phrases in that the positions of the components in a noun compound are fixed. Endocentric noun compounds are always right-headed. A modified noun phrase differs from a noun compound in its pitch pattern (§2.4.2): in a modified noun phrase, each component has its own pitch domain (e.g. [[MH…]$_{NP}$ MH…]$_{NP}$), whereas noun compounds are covered by a single pitch domain (e.g. [MHH….]$_{NP}$ pitch pattern) (see also examples in §3.1.2).

Common noun-noun compounds:

4-36. *yulu*   *sinala*

     leg   digit   'toe'

4-37. *gni*   *hwi*

     fat   liquid   'oil'

4-38. *tumbaiŋgi wuli*

     worship   house   'church/ chapel'

4-39. *suŋgwani wuli*

sickness house   'clinic'

4-40. *tirati   pepa*

letter   paper   'letter paper'

Proper name-noun compounds:

4-41. *Malai   fafo*

Malay   language 'Malay language'

4-42. *Indonesia hwalfehi*

Indonesia woman   'Indonesian woman'

4-43. *Ostrelia   wanu*

Australia money   'Australian dollar'

Verbal noun-noun compounds:

4-44. *pifi   pepa*

writing   paper   'writing paper'

4-45. *humufi   hutumu*

wrapping leaf   'wrapping leaf'

4-46. *fuŋgifi   pitu*

stabbing knife   'stabbing knife'

4-47. *simi   hupla*

drinking container 'cup'

4-48. *homba   kwala*

see   seed   'eye'

In exocentric noun compounds, the 'head-like' component also exists to the right of the other component.

4-49. *hamblu*   *hwila*

red   mother   'red mother fowl'

Lastly, noun phrases are coordinated by juxtaposition; see §3.2.6.

4.4   Proper names versus common nouns

A piece of discourse has its temporal settings, spatial settings, participants and props. Some of these, especially human participants, are given uniquely identifiable names. These names are called proper names.

Morphologically speaking, no morphosyntactic properties distinguish proper names and common nouns in Menggwa Dla; both proper names and common nouns do not take inflectional morphology, and phrases headed by either proper names or common nouns take the same nominal clitics (§4.5). Syntactically speaking, both proper names and common nouns tend to occur on their own (unlike English where common nouns are often preceded by an article). Both proper names and common nouns can be modified by various kinds of noun modifiers (§4.3). However, contexts where proper names are modified are much more restrictive (similar to English).

4-50. *[yani   imbumamo] hof-uma-hwa.*

[man   three]   come-N1MPL-PAST

'Three men came.'

4-51. *[Peter imbu] [John mamo] hof-uma-hwa.*

[Peter two]   [John one]   come-N1MPL-PAST

'Two Peters and one John came.' (?)

The difference between them really lies in the semantics of bare proper

names and bare common nouns: without context, a common noun on its own is not

specified for definiteness and specificity;[5] on the other hand, proper names are by

default specific and usually definite (proper names are only non-specific or

indefinite in highly marked situations).

Common noun — not specified for definiteness and specificity:

4-52. *buku(=mbo) sufua-aha-mbi.*

book(=OBJ)   want-1SG-PRES:STAT

'I want [the specific/ a specific/ any] book.'

Proper name — specific by default and usually definite:

4-53. John*(=mbo) sufua-aha-mbi.*

John(=OBJ)   want-1SG-PRES:STAT

'I want John.'

(a specific John whom the speaker assumes the addressee knows)

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[5] However, the syntactic relation or the semantic role of a reference may influence the specificity of
the reference. For instance, subjects tend to be specific.

The following are some comments on personal names, spatial names and temporal names relevant to modern Menggwa Dla society.

Since the coming of Dutch missionaries in 1950s and Australian missionaries in 1960s, every person has a European given name. These days children are given a European name, and sometimes also a native name. These European names are usually names of Biblical figures, popes or saints. Biblical names come from the English or Indonesian versions of the bible (biblical names in Indonesian tend to be more Latin-sounding).

These days not all people have a native name. Native names are usually two or three syllables long. Typically people introduce themselves using their European name plus their family name (i.e. clan name); people seldom mention their native name to strangers. Speakers of Dla proper and speakers of Menggwa Dla basically share the same set of native personal names, but the phonological forms of them maybe different between Dla proper and Menggwa Dla, e.g. *Foan* and *Naŋgn* in Dla proper versus *Foani* and *Naŋgani* in Menggwa Dla. Menggwa Dla people may have the Dla proper version of native Dla names, but the reverse has not been observed.

Each Menggwa Dla village is traditionally inhabited by only one extended patrilineal family, or clan. The following are the names of the five Menggwa Dla-speaking villages, followed by the clan-family names associated with each of the villages:

Menggau	*— Kore*
Wahai (Wahai Nº 1)	*— Lambuwe*
Ambofahwa (Wahai Nº 2)	*— Kine*
Wanggurinda	*— Yawa*
Menggwal[6]	*— Mafli*

4-54. *yowala   gwafu=na   wahai   (no).*

1SG:GEN village=TOP Wahai (COP:3FSG)

'My village is Wahai.' (i.e. 'I come from Wahai.')

4-55. *meŋgwal=na   tikyawi mayana gwa meŋgau=na   mayana awe.*

Menggwal=TOP little far but Menggau=TOP far be.not

'Menggwal is a little bit far away but Menggwa is not far away (from

Kamberatoro).'

Whole villages often shift to another location, but the names of the villages

usually remain constant. Sometimes one village fissions into two villages, with one

group staying at the original site and the other setting up a new village at another

site. The new village may be called the *namba tu* (Tok Pisin) or *nomor dua* (Malay)

'number 2' of the old village, e.g. *Wahai Nº 2* is a 'derivative' of the original Wahai

village (now also called *Wahai Nº 1*). In addition, new villages may also acquire a

new name, e.g. Wahai Nº 2 is also known as *Ambofahwa*.

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[6] *Menggwal* is /megwali/ underlyingly. People from the western villages of Menggwal and
Wanggurinda may delete underlying /i/ at word-medial or word-final positions (§2.1.3.8). People
from the eastern villages of Menggau and the two Wahai's always pronounce *Menggwal* with the final
/i/: [meⁿgǫali].

Sometimes villages merge back due to dwindling population, e.g. *Akamari* Nº 1 and Nº 2, to the east of Kamberatoro airstrip has merged back to form a single Akamari (these are in Dla proper-speaking area). Kamberatoro is the mission station on the Papua New Guinean side, and Kamberatoro is often referred to as *Kamby* by English speaking missionaries and government officials, usually with an Anglicised pronunciation of [kæmbi] ~ [kɛmbi]. These days Dla people also refer to Kamberatoro as [keᵐbi]. In Vanimo, Dla people from the Papua New Guinean side usually say that they come from *Kamby* [kembi]. In analogy, Nimberatoro (another Dla proper-speaking village) is also often referred as *Nimby*.

Streams, caves, mountains and valleys all have names. Places names typically do not bear indication of the type of location they denote, e.g. *Humlali* is the name of the stream which flows near Wanggurinda, *Dulufu* is a cave on the Papua New Guinean side northwest of Wanggurinda and northeast of Menggwal. However, the type of location can also be specified by adding a common noun denoting the kind of location: *Humlali hwi* 'Humlali water', *Dulufu ambya* 'Dulufu hole'. Some place names give vague hints to the type of location, e.g. *Galuhomba* is the name of a mountain: *galu* 'lookout' and *homba* 'see' (some of these place names are featured in the text *Nimi Wami Kaku*; see appendix 1).

Dutch and Australian missionaries have introduced the Western calendar system, which for religious, educational and career purposes has become an integral part of life of people even in the most-remote villages. People use Indonesian and/ or Tok Pisin names for dates, months and years. The names for months in

Indonesian and Tok Pisin are slightly different as they are borrowed from Dutch and English respectively, both of which have Latin-based names of month.

Table 4.1　　　Names of months in Bahasa Indonesia and Tok Pisin

Indonesian:	*Januari*	*Februari*	*Maret*	*April*	*Mei*	*Juni*
Tok Pisin:	*Janueri*	*Februeri*	*Mas*	*Epril*	*Me*	*Jun*

Indonesian:	*Juli*	*Agustus*	*September*	*Oktober*	*November*	*Desember*
Tok Pisin:	*Julai*	*Ogas*	*Septemba*	*Oktoba*	*Novemba*	*Desemba*

4-56.　Indonesia　independens　dei　*hwambo,*
　　　　 Indonesia　independence　day　due.to

　　　　 yo　efa　　　　　　　 Ogas＝*hi*　　 Arso＝*na*
　　　　 1　　1PLEXCL:RSUMP　August＝ADS　Arso＝ALL

　　　　 [futbol　pilai-mbo]　pi-mba-Ø　　 no.
　　　　 [football　play-DEP]　go-POST-DEP　COP:3FSG

　　　　 'Because of Independence Day of Indonesia, all of us are going to Arso to play football in August.'　(80II)[7]

　　　　 For days of the week, people use 'native' names of the week or the ones from Tok Pisin or Indonesian. The native names of the week from Monday to Friday are the names of digits from the little finger to the thumb (see below). The names for Saturday and Sunday are borrowed from Bahasa Indonesia. In Bahasa Indonesia, *Senin* 'Monday', *Selasa* 'Tuesday', *Rabu* 'Wednesday', *Kamis*

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[7] All foreign words are in Tok Pisin except *Arso* which is a town in West Papua south of Jayapura.

'Thursday', *Jumat* 'Friday' and *Sabtu* 'Saturday' are borrowed from Arabic (الاثنين *al iθnajn* 'Monday', الثلاثاء *aθ θala:θa* 'Tuesday', الأربعا *al ʔarbaʕa* 'Wednesday', الخميس *al xami:s* 'Thursday', الجمعة *al dʒumʕa* 'Friday', and السّبت *as sabt* 'Saturday'), while *Minggu* 'Sunday' (which also means 'week') is from Portuguese *domingo* 'Sunday'. The days of the week in Tok Pisin are from English: *Fraide* 'Friday', *Sarere* 'Saturday', *Sande* 'Sunday' and *Mande* 'Monday' are from the corresponding English names; *Tunde* 'Tuesday', *Trinde* 'Wedenesday' and *Fonde* 'Friday' are from English 'two day' 'three day' and 'four day' respectively (with the *d* of 'day' prenasalised in the Tok Pisin version).

Table 4.2   Names of days in Bahasa Indonesia, Menggwa Dla and Tok Pisin

Indonesian[8]	Menggwa Dla	Tok Pisin	
Hari Senin	*Akya ~ Akela*	*Mande*	'Monday'
Hari Selasa	*Akyatyo ~ Akelatyo*	*Tunde*	'Tuesday'
Hari Rabu	*Baratyo*	*Trinde*	'Wednesday'
Hari Kamis	*Barala*	*Fonde*	'Thursday'
Hari Jumat	*Hwila*	*Fraide*	'Friday'
Hari Sabtu	*Saftu*	*Sarere*	'Saturday'
Hari Minggu	*Miŋgu*	*Sande*	'Sunday'

4-57. wi   hwila   Jumat*(=hi)*   *numuŋgwa-wa-hwa.*

child   mother   Friday(=ADS)   die-3FSG-PAST

'The child's mother died on Friday.'[9]

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[8] *Hari* 'day'.

[9] The word *hwila* is polysemous: *hwila* 'thumb'/ 'mother' → *hwila(=hi)* 'five'/ 'Friday'.

Hours are given in a twelve-hour system. Coincidentally, native numerals extend from one till twelve (§3.2.5.1). Time-telling involving only hours is conducted in Menggwa Dla, Tok Pisin or Papuan Malay, whereas time telling involving minutes is conducted in Tok Pisin or Papuan Malay. The following is an example of hour-telling in Menggwa Dla. Notice that for numerals from four to twelve, the forms with the adessive case =*hi* are used, e.g. *hwila*=*hi* (thumb=ADS) 'five', *walabuha*=*hi* (shoulder=ADS) 'ten' (see §3.2.5.1).

4-58.   *hwila*=*hi*   *yamo-wa-hi*   *no.*

thumb=ADS (<five)   be.time-3FSG-PRES:PROG   COP:3FSG

'It is five o'clock now.'

4.5   Case and other nominal clitics

Comparing with languages from neighbouring families, the Senagi languages have rich repertoires of case, topic and focus markers in the form of enclitics. One salient feature which sets Dla and Anggor apart is that in Dla, some verbal affixes have the same form as certain nominal clitics, whereas in Anggor, verbal morphology and nominal morphology show much less similarity in their forms.

There are two grammatical case clitics in Menggwa Dla: object case =*mbo* (§4.5.1) and genitive case =*la* (§4.5.2); subjects and second objects are zero case-marked. There are four local cases: inessive case =*mbe* ('in'/ 'from inside', 'to inside'), adessive case =*hi*/ =*sehi* ('on'), allative case =*na(mbo)* ('to') and ablative case =*hya* ('from') (see §4.5.3). There is actually another local case: perlative case =*roŋgo* ('through'). However, it is also often used to mean 'together', similar to

the comitative case =*lofo* (see §4.5.4). There are also the proprietive case =*mbi*

and abessive case =*mboka*, meaning 'have'/ 'exist' and 'not have'/ 'not exist'

respectively (see §4.5.5). There are three non-case nominal clitics: the topic clitic

=*na* (§4.5.6) and the focus clitics =*amba* 'also' and =*pa* 'only' (§4.5.7). The

following is a table summarising the nominal clitics, and any corresponding verbal

affixes in Menggwa Dla. See also §6.1 for discussions on the grammaticalisation of

certain case clitics into verbal suffixes and grammatical verbs.

Table 4.3   Nominal clitics and corresponding verbal suffixes

nominal clitics	verbal suffixes/ grammatical verb
object case =*mbo* (§4.5.1)	dependency -*Ø* ~ -*mbo* ~ -*mbona* (§7.5)
genitive case =*la* (§4.5.2)	
inessive case =*mbe* (§4.5.3)	
adessive case =*hi*/ =*sehi* (§4.5.3)	present continuous -*hi* (§6.1.1)
	simultaneous -*hi* (§7.1.3)
allative case =*na(mbo)* (§4.5.3)	
ablative case =*hya* (§4.5.3)	past tense (with focus) -*hya* (§6.1.2; §7.1.1)
perlative case =*roŋgo* (§4.5.4)	
comitative case =*lofo* (§4.5.4)	
proprietive case =*mbi* (§4.5.5)	present (stative/ transitional) -*mbi* (§6.1.1; §7.1.1)
abessive case =*mboka* (§4.5.5)	realis negative verb *boke*/ *boka* (§6.1.3; §7.1; §7.2; §7.3.1)
topic =*na* (§4.5.6)	
focus =*amba* 'also' (§4.5.7)	
focus =*pa* 'only' (§4.5.7)	

There are several reasons why the nominal clitics are clitics rather than particles or affixes. Firstly, the nominal clitics are attached to the last independent word in a noun phrase (or other clitics if the noun phrase has more than one clitic); the clitics are not attached to words of any particular word classes. (Unlike the corresponding verbal suffix which is always attached to verbs.)

4-59.   *wali imbu＝na*/   *imbu   wali＝na*

   pig   two＝TOP   two   pig＝TOP

   'As for the two pigs'[10]

Secondly, case clitics which begin with /b/ are prenasalised [ᵐb], which indicates that the phoneme /b/ in these clitics is considered word-medial rather than word-initial (§2.1.3.2). Thirdly, the case clitics (sometimes) form part of the stress and pitch domain of their phonological host (see §2.4).

   Two or more nominal clitics can sometimes cooccur:
*   Oblique relations can be topicalised, in which case the oblique case clitic precedes the topic clitic (see §4.5.6);
*   The focus clitics ＝*amba* 'too' and ＝*pa* 'only' can follow any nominal clitics (see §4.5.7); and
*   The genitive case can precede any nominal clitic (§4.5.2).

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[10] See §4.3 on word order within noun phrases.

4.5.1   Object case clitic

The object case clitic =*mbo* marks the transitive object or the ditransitive first object of a clause; subjects and ditransitive second objects are not case-marked. See §5.3 on grammatical relations and semantic roles in Menggwa Dla.

The use of the object case clitic =*mbo* is not obligatory; =*mbo* is seldom used when the cross-reference suffixes are sufficient in determining the grammatical relationships, or when the semantic roles of the arguments are unambiguous. In the following example, real-world knowledge tells us that humans cook bandicoots and bandicoots are incapable of cooking; *hofowali* 'bandicoot' is without doubt the undergoer, and hence it is the object (there are no voice oppositions in Menggwa Dla; §5.3). In such cases the object case clitic =*mbo* is generally not used.

4-60. *hofowali(=mbo)   sama-Ø-ya-a-mbo,*

bandicoot(=OBJ)   cook-CR-3SG-3FSG:O-DEP

'S/he cooked the bandicoot, and…'

In the following example, the quantifier in the noun phrase *wi imbu* 'two children' matches the number feature of the object cross-reference suffix but not the subject-cross-reference suffix; *wi imbu* is most probably the object.[11]

4-61. *wi   imbu aftafefi-ya-pu-hwa.*

child two   bathe-3SG-N1DU:O-PAST

'S/he bathed the two children.'

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[11] Another possible scenario is the *imbu* 'two' is not the modifier of *wi* 'child', in which case the child would be interpreted as the subject, and *imbu* would be interpreted as 'the two of them'.

In the first clause of the following example, the person-number-gender features of the cross-reference suffixes fail to disambiguate the semantic roles of the human participants. Without contexts, both human participants are equally likely to be the actor or the undergoer. In such cases, the norm is for the object to be marked with an object case clitic =*mbo*. The subject is also likely to be marked with a topic clitic =*na* if it is also the topic (see §4.5.6).

4-62. Jason=*na*   Jacobus=*mbo*   *ifali-ma-i-Ø-mbona,*   *hlua-Ø-mbi.*

Jason=TOP   Jacobus=OBJ   attack-DR-3MSG-3MSG:O-DEP   bleed-3MSG-PRES

'Jason hit Jacobus and (Jacobus) is bleeding.'

The following example shows a ditransitive first object (the recipient) with the object case clitic =*mbo*.

4-63. *[Jayapura=hi   tupam bli-mbo]*

[Jayapura=ADS   thing   buy-NOML]

Greg=mbo se-ratus   ribu   rupiah   *Ø-sa-ka-u-mbo,*

Greg=OBJ   one-hundred thousand Rupiah   CR-give-3SG-3SG:O-DEP

'S/he gave Greg one hundred thousand Rupiah to buy things in Jayapura...'

The following sentences exemplify =*mbo* being encliticised to objects with a stimulant semantic role.

4-64. *hof-afu!* nius *=mbo* *humbli-afu!*

come-2SG news = OBJ hear-2SG

'Come (now)! Listen to the news (on radio)!'

4-65. *ambya bena waŋgu=mbo* *sa-Ø-hwa-a-mbo,*

hole side sparrow = OBJ think-CR-1DU-3FSG:O-DEP

'We were thinking of the sparrows in the cave, and…'[12]

Pronouns in object position carry cross-reference suffixes; see §4.6.2 for the paradigm of object pronouns. Related to the object case clitic are the syntactic dependence suffix *-Ø ~ -mbo ~ -mbona* which is used in chain verbs and non-finite chain verbs (§7.2; §7.3.1; §7.5), and the nominalising suffix *-Ø ~ -mbo* which is used in verbal nouns (§7.3.2).

4.5.2 Genitive case clitic

The genitive case clitic *=la* marks the nominal as being a possessor[13] or a beneficiary. The possessive usage of *=la* is introduced first.

When used as a modifier to a head noun, the genitive phrase usually precedes the head noun (see §4.3 on word order within noun phrases).

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[12] The sparrows in this example are considered as a single mass rather than plural individuals, and hence agreed as singular. See §5.2.4.

[13] 'Possessor' is used here as a cover term for the possessor in a possessive relationship (e.g. *Peter's dog*), the 'whole' of a part-whole relationship (e.g. *the handle of the door*), and the 'relator' in an associative relationship (e.g. *Simon's country*).

4-66. katakis＝*la*   *buku*   4-67. *newi*＝*la*   *sufua*

      catechist＝GEN book   people＝GEN feeling

      'The catechist's book'   'People's feeling'

4-68. *hufu*＝*la* *hwafo*   4-69. Hilari＝*la*   *glu*

      sun＝GEN talk   Hilari＝GEN teacher

      'The sun's story.'   'Hilari's teacher'

4-70. *yani* *imbu*＝la   *gwafu*

      man two＝GEN village

      'The two men's village'

The genitive case clitic ＝*la* is generally not needed when the head noun refers to:

- a relative of the referent of the modifier;
- the location of an object in relation to another object (locative words are mostly nouns; §3.2.7);
- the natural outcome or produce of something; or
- a part of the modifier.

In these instances the head noun and the modifier are usually simply juxtaposed, with the bare modifier noun immediately preceding the head noun. Such modifiers can be understood as a genitive phrase with an ellipted genitive clitic, as the genitive case clitic ＝*la* can still be used with such modifier nouns.

4-71. Salome*(=la)*   *hwila*   4-72. *waplu(=la)*   *safa*

Salome(=GEN) mother   bucket(=GEN) interior

'Salome's mother'   'The interior of the bucket'

4-73. *tu(=la)*   *koko*   4-74. *tebulu(=la)* *ilu*

bird(=GEN)   faeces   table(=GEN) leg

'The bird's faeces'   'The leg of the table'

The possessum need not be overt, as shown in the following examples.

4-75. *da=la*   *(no)?*   4-76. Helen *=la*   *(n-o).*

who=GEN   (COP:3FSG)   Helen=GEN   (COP:3FSG)

'Whose is it?'   'It is Helen's.'

4-77. Yohanes *=la=na*   *imbalkwa-mbi (no).*

Yohanes=GEN=TOP   weight-PROP   (COP:3FSG)

'Yohanes' (one) is heavy.'

With the genitive case *=la*, the possessor is marked in relation to the

possessum head noun. In some situations, the reverse marking pattern is possible: a

possessum can sometimes be marked with a proprietive case *=mbi* (or the negative

counterpart the abessive case *=mboka*) in relation to a possessor head noun. See

§4.5.5 on the proprietive and abessive case clitics.

[[possessum] =*mbi* possessor]:

4-78. *[tutuhi wi=mbi   yani] Ø-hof-u-mbo,*

  [eleven child=PROP man] CR-come-3MSG-DEP

  'The man with eleven children came, and…'

 [[possessor] =*la* possessum]:

4-79. *dani=na   [Wauni=la   nomola] (niwi).*

  this=TOP [Wauni=GEN children] (COP:N1FPL)

  'These are Wauni's children.'

Other than marking possessors, the genitive case clitic =*la* also marks beneficiaries.

4-80. *[patulu=la]   fimi-aha-hi,*

  [priest=GEN] fetch.water-1SG-SIM

  'While I was fetching water for the priest…'

4-81. *[Stanis =la]   bibi-ha-a-mby-a.*

  [Stanis=GEN] hold:MASS-1SG-3FSG:O-POS:SMR-1SG

  'I will hold them for Stanis.'

Sometimes a beneficiary phrase is ambiguously a possessive phrase which modifies an ellipsed head noun. For instance, example 4-81 above can also be interpreted as 'I will hold Stanis' things'. If the possessive meaning is intended, an object case clitic =*mbo* (§4.5.1) can be added if the noun phrase is an object.

4-82.   [[Stanis=la]=mbo]   bibi-ha-a-mby-a.

[[Stanis=GEN]=OBJ]   hold:MASS-1SG-3FSG:O-POS:SMR-1SG

'I will take Stanis' things.'

Pronouns have special genitive forms which carry cross-reference suffixes; see §4.6.2 for the paradigm of genitive pronouns.

4.5.3   Inessive case, adessive case, ablative case and allative case clitics

The local cases of inessive, adessive, ablative, and allative are introduced in §4.5.4.1. The allative case also marks instruments; the instrumental use of the allative case is introduced in §4.5.4.2.

4.5.3.1   Local cases

Local cases signify the static location or dynamic location (origin, path or destination) of the marked nominal. In English, these functions are fulfilled by prepositions like *in*, *on*, *at*, *through*, *from* and *to*. A marker of dynamic location can be further specified for the nature of its origin, path and/ or destination, e.g. the 'in' morpheme in *into* (*in-to*) marks the destination as being the interior of some enclosed space.

Languages with big repertoires of cases — like most Uralic languages and Dagestani languages — typically have a lot of local cases. The local cases in these languages are portmanteau morphemes covering at least the dimensions of 1) static location versus different kinds of motions (e.g. motion in, out, through), and 2) the

nature of the origin/ path/ destination (e.g. inside, outside, on the surface). Estonian

has a comparatively straightforward paradigm of local cases amongst Uralic

languages. There are six local cases, three indicating 'interior locations' and three

indicating 'exterior locations'.

Table 4.4   Local cases in Estonian

	motion from	static location	motion to
interior	elative *-st*	inessive *-s*	illative *-sse*
exterior	ablative *-lt*	adessive *-l*	allative *-le*

For instance, the illative case *-sse* indicates motion to the interior of

something ('into' in English), and ablative case *-lt* indicates motion from the exterior

of something (no comparable English preposition).

The local cases in Menggwa Dla also mark interior versus exterior locations.

However, the system is quite rudimentary: there are three exterior cases, but only

one interior case; the inessive case *=mbe* usually mark an interior static location,

but it can also mark motion from or to an interior location.

Table 4.5   Local cases in Menggwa Dla

	motion from	static location	motion to
interior	←	inessive *=mbe*	→
exterior	ablative *=hya*	adessive *=hi/=sehi*	allative *=na(mbo)*

The form of the allative case clitic freely alternates between =*na* and

=*nambo*, (whereas the topic clitic has one invariable form of =*na*; §4.5.6). For the

adessive case clitic, the form is most usually =*hi*; =*sehi* is only used for human

locations (see below).

'Interior' refers to a location inside an enclosed or contained space.

'Exterior' refers to a location at the exterior of an enclosed space, or a location

which is not enclosed. Houses are enclosed: *wuli*=*mbe* (house=INS) signifies

'inside the house', 'into the house' or 'from the interior of the house', contrasting

with *wuli*=*hi* (house=ADS) which means 'at the exterior of the house'.

Geographical locations like villages and towns are considered non-enclosed, so the

inessive case =*mbe* cannot be used with nouns denoting villages or towns:

gwafu=*hi* (village=ADS) 'in/ at the village'. Ceremonies are not spatially enclosed:

tumbaiŋgi=*hi* (worship=ADS) 'at Mass', *heli*=*hi* (dance=ADS) 'at a traditional

ceremony'. Bodies of water are considered to have an interior, so *hwi*=*mbe*

(water=INS) means 'inside the pool/ lake/ river' and *hwi*=*hi* (water=ADS) means

'at the bank' or 'shore of the pool/ lake/ river' or 'on the surface of the water'. The

sky also is considered to have an interior: *sini*=*mbe* sky=INS 'in the sky'.

The following are examples with the inessive case =*mbe* or the adessive

case =*hi* indicating static locations.

4-83. *[Kembi*=*hi*   *numb-aha-hya]*   *no.*   haus   sik=*mbe*.

[Kamberatoro=ADS stand-1SG-PAST:FOC] COP: 3FSG   house sick=INS

'I was born in Kamberatoro. In the clinic.'

4-84.　Mosbi＝*hi*　　　　*homba-ha-pa-hwa.*

　　　　Port.Moresby＝ADS　see-1SG-N1DU:O-PAST

　　　　'I saw the two of them in Port Moresby.'

4-85.　*wanu＝na*　　[*tebolu＝hi/　alu＝mbe*]　　　*no.*

　　　　money＝TOP　[table＝ADS/　string.bag＝INS]　COP:3FSG

　　　　'The money is on the table/ inside the string bag.'

4-86.　*waplu＝mbe　hutinya＝mbi　no.*

　　　　bucket＝INS　　sand＝PROP　　COP:3FSG

　　　　'There is sand inside the bucket.'

4-87.　*waplu＝hi　　hai　koko＝mbi　　no.*

　　　　bucket＝ADS　fire　faeces＝PROP　COP:3FSG

　　　　'There is ash next to the bucket.'

4-88.　*akwani＝na　hwi＝mbe　　num-wa-hi.*

　　　　snake＝TOP　　water＝INS　sit-3FSG-PRES:CONT

　　　　'The snake is in the water.'

　　　　Motion to and from the interior is conveyed by the inessive case ＝*mbe*,
motion from the exterior is conveyed by the ablative case ＝*hya* ('from') and motion
to the exterior is conveyed by the allative case ＝*na(mbo)* (see above for definitions
of 'interior' and 'exterior'). The following are a few examples.

222

4-89. *wuli=mbe   fa-hwa-a   Ø-numb-ehi-mbo,*

house＝INS   leave-1DU-3FSG:O   CR-SEQ-1DU-DEP

'We left (from the inside) home, and…' (N)

4-90. *wuli=na   pi-Ø-ehi-Ø,*

house＝ALL   go-CR-1DU-DEP

'We went (towards) home, and…' (N)

4-91. *wuli=mbe   Ø-hah-yehi-mbo,*

house＝INS   CR-go.up-1DU-DEP

'We went inside the house, and…'

4-92. *mamblu=hya hof-ei-mbi.*

Bambol＝ABL   come-N1FPL-PRES

'They came from Bambol.'

4-93. *hutumu=hi humu-Ø-ya-a-mbo,*

leaf＝ADS   tie-CR-3SG-3FSG:O-DEP

alu=mbe   saku-Ø-ya-a-Ø,

string.bag＝INS put.in-CR-3SG-3FSG:O-DEP

'He wrapped them with leaves, and put them inside the string bag, and…'

(N)[14]

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[14] Although an enclosed space is created by folding the leaves, *hutumu* 'leaf' is marked with adessive case *=hi* because leaves are inherently interior-less.

For temporal locations, the adessive case *=hi* is more common than the inessive case *=mbe* (there is no obvious difference in meaning; *=mbe* is more common with younger speakers). Common-noun temporal locations like *miŋgu dani* 'this week' and *hamani* 'yesterday' are not usually case-marked, whereas proper-name temporal locations like *hwila* 'Friday', *miŋgu* 'Sunday' and *April ~ Epril* 'April' are usually case-marked.

4-94. *rani amamo(=hi)   newi   aflambli   numuŋgwa-wi-hwa.*

DEM month(=ADS)   people   many   die-3FPL-PAST

'A lot of people died that month.'

4-95. *miŋgu=hi   homba-mba-mbo tumbaiŋgi=hi.*

Sunday=ADS   see-POST-NOML   Mass=ADS

'I will see you on Sunday at Mass.'

4-96. ogas *=hi   Arso =nambo pi-wi-hwa.*

August=ADS   Arso=ALL   go-N1FPL-PAST

'They went to Arso in August.'

4-97. *saftu=mbe   nu-mbo, simbu   ye   wuli=nambo pi-ehye-hwa.*

Saturday=INS COP-DEP   morning   then house=ALL   go-1DU-PAST

'On Saturday, in the morning we went home.' (N)

Local cases are rarely found with human nouns. Amongst the four local cases, human nouns are only found with ablative *=hya* and adessive *=sehi*. With

human nouns, the form of the adessive case clitic is *=sehi* instead of the usual form of *=hi*.

4-98.   *wihwala=hya   amtali   sami-aha-mbi.*

  children=ABL   flu   take-1SG-PRES:STAT

  'I have gotten the flu from the children.'

4-99.   Domitela*=na*   Tony*=sehi*   *fa-hi-a-hwa.*

  Domitela=TOP   Tony=ADS   leave-3FPL-3FSG:O-PAST

  'Domitela got married with Tony.' (*lit.* 'they left her on Tony.')

The other two local cases of inessive *=mbe* and allative *=na(mbo)* are not found with human nouns. Recipients are marked with the objective case clitic *=mbo* (§4.5.1). Irregularly spaced attempts by me to attach an inessive case clitic to human nouns were immediately corrected to non-human versions by my language teachers. For instance, attempts by me to say *inside him/her* were corrected as something like the following.

4-100. *ahala   fi/   hambala/   sufwa=mbe*

  3SG:GEN   body/   stomach/   liver=INS

  'Inside his/her body/ stomach/ liver'[15]

When pronominalised, ablative case *=hya* is attached to a genitive pronoun, while adessive case *=sehi* is attached to an object pronoun (see §4.6.2). The

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[15] The seat of emotion in Dla is *sufwa* 'liver', which also means 'feeling' and 'to feel' (class I). The seat of emotion is also the liver in Malay (*hati* 'liver') and Tok Pisin (*lewa* 'liver').

adessive case clitic =*hi* is homophonous with the present continuous suffix -*hi*

(§6.1.1) and simultaneous suffix -*hi* (§7.1.3). The ablative case clitic =*hya* is

homophonous with the past tense with focus suffix -*hya* (§6.1.2).

4.5.3.2   Instrumental use of the allative case

        The allative case clitic =*nambo* can also mark instruments or means which

are used to aid the realisation of a situation. Instrumental phrases are always oblique;

there is no applicative morphology which turns an instrumental phrase into an

argument.

4-101. *ra=nambo hwi   fri-Ø-mu-mbo,*

        DEM=ALL   water   get.rid-CR-N1MPL-DEP

        'They got rid of the water with that, and…' (A)

4-102. *palaŋgi=nambo   hyela   numuli-Ø,*

        machete=ALL   skin   remove-DEP

        '(People) remove the bark ('tree skin') with machete, and…' (B)

4-103. *imbu safo   tamako=nambo kikifi nuŋgu-mbo,*

        two   half   axe=ALL   chop SEQ-DEP

        '(People) chop (the trunk into) two halves with an axe, and then…' (B)

4-104. *imbumamo=pa yari=na   ser-yehi fa-hwa-a   Ø-numb-ehi-mbo,*

        three=only   sago=ALL eat-1DU COMPL-1DU-3FSG:O CR-SEQ-1DU-DEP

        'After we have eaten only three (birds) with sago…' (N)

4-105. [pitu]=na   fuŋgifi-Ø.

[knife]=ALL stab-IMP

'Stab (it) with a knife.'

4-106. gwatina twaŋgi   fafo=na   tutu-ya-i-mbo,

again   white.people language=ALL ask-3SG-1SG:O-DEP

'S/he asked me again in Tok Pisin, and…'

The allative-instrumental case is also *=na(mbo)* in Dla proper and Anggor (Litteral 1980: 81-82). In Karkar-Yuri, the southern neighbour of Dla, instruments are either marked by *-an*, which also marks recipients, or *fek*, which also means 'on/ at/ to' (but not 'in') (Rigden 1986c).[16] Amongst other Papuan languages, syncretism of the allative and instrumental cases is also observed in Manambu and neighbouring Ndu languages in Middle Sepik (Aikhenvald, 2005), and also in Watam and neighbouring Lower Ramu languages (W. Foley, p.c.).

4.5.4   Comitative case and perlative case clitics

The comitative case clitic *=lofo* marks a participant as accompanying another participant in performing the same action or undergoing the same state or action. Alternatively, *=lofo* marks a participant as the reciprocal partner of the subject in performing or undergoing the action denoted by the verb. When attached

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[16] It is interesting to note that in Amanab, the Border family language spoken to the north and east of Dla, the instrumental case is syncretised with the genitive case but not the allative case. However, the form of the genitive-instrumental case in Amanab is also *-na* (allative is *-gam*; Minch 1992: 134). The genitive marker is also *na* in many Sepik and Lower Sepik languages (W. Foley p.c.).

to a pronoun, =*lofo* is preceded by an object pronoun (§4.6.2), e.g. *sihehimbo*=*lofo* (1:INCL:DU:OBJ=COM) 'with the two of us'.

In some situations the comitatively-marked participant is cross-referenced on the verb, and sometimes not. When the comitatively-marked participant is viewed as equally agentive as the subject in performing or undergoing an action or state, both are cross-referenced together on the verb with a single subject cross-reference suffix.

4-107. *gwi   sumbani*

     another time

     aya=*lofo   wuli*=*mbe   Ø-num-ehi   fa-hwa-a-mbo,*

     father=COM   house=INS   CR-sit-1DU   COMPL-1DU-3FSG:O-DEP

     'Once I was at home with father, and then…' (N)

     (1DU = 'I' and 'father')

4-108. *gwafu*=*hi   hwafo   pi-Ø-ya-a-mbo,*

     village=ADS   talk   go-CR-3SG-3FSG:O-DEP

     [mafwa oloha safa]=*lofo   Ø-han-umu-mbo,*

     [all   community]=COM   CR-go.down-3MPL-DEP

     'He went to talk in the village, and he went down with all the men, and…'

     (A) (3MPL = 'he' and 'all the men')

Sometimes the comitatively-marked participant is doing the same action as denoted by the verb with the subject, yet only the subject is cross-referenced. In

such cases, the speaker is focusing on the subject's volition towards the situation and/or the subject is taking the initiation of the situation, whereas the comitatively-marked participant is considered not to have such volition and/or is the passive partner in the situation. The following are some examples.

4-109. *bi＝lofo   dukumi＝hi   klo-Ø-hya-a-Ø,*

mum.bro＝COM valley＝ADS   separate-CR-1SG-3FSG:O-DEP

'I parted with uncle at the valley, and…'

4-110. *sihafumbo＝lofo   kro-l-a-mby-a.*

2SG:OBJ＝COM   come.down-LIG-1SG-POS:SMR-1SG

'I will come down with you.'

4-111. *ai   Ø-hof-o-mbo,   yohwefumbo＝lofo*

3   CR-come-3FSG-DEP 1PL:OBJ＝COM

hwafo-o   fa-ya-mu   Ø-nuŋg-o-mbo,

talk-3FSG COMPL-3SG-1NSG:O CR-SEQ-3FSG-DEP

'She came, talked with us, and…'

Instances where a nominal is marked with a comitative case clitic ＝*lofo* in relation to an object are very rare. In all encountered cases, either the predicate does not carry any cross-reference suffixes (i.e. non-finite chain clauses; §7.3.1), or the object is cross-referenced on the verb as third person feminine singular because the object lacks pragmatic prominence (§5.2.4). Hence it is indeterminable as to

whether the comitatively-marked nominal is ever cross-referenced on the verb. The

following are two examples.

4-112. hwi=lofo   yarifi-Ø,

water＝COM   stir.sago-DEP

'Stir the sago with water, and…'

4-113. wari   hwatumali=lofo   sama-Ø-hya-a-Ø,

pig   leafy.vegetable＝COM cook-CR-1SG-3FSG:O-DEP

'I cooked the pork with vegetables, and…'

Based on the fact that none of the other oblique relations can be cross-

referenced on the verb, it can be assumed that the construction where the

comitatively-marked relation is not cross-referenced is the comitative construction-

proper. On the other hand, the construction where the comitatively-marked relation

is cross-referenced is an 'inclusory construction', and more specifically a 'split

inclusory construction' (e.g. Lichtenberk 2000; Singer 2001). In an inclusory

construction, within the same clause there is a reference (either free or bound) of

which the set of referents properly includes that of another free reference; this

included free reference may be unmarked or marked as conjuntive or comitative.

Lichtenberk (2000) classifies inclusory constructions into 'phrasal inclusory

constructions' and 'split inclusory constructions'. In a phrasal inclusory

construction, the including reference and the included reference form a phrase. One

example — from Toqabaqita — of such a phrase is the noun phrase *kamareqa*

doqora-ku (1DU:EXCL brother-1SG) 'I and my brother' (Lichtenberk 2000:10). In

this noun phrase, the referent of *doqora-ku* 'my brother' is one of the referent of the pronoun *kamareqa* 'the two of us'. On the other hand, the inclusory construction in Menggwa Dla is a 'split inclusory construction'. In a split inclusory construction, the including and included reference do not form a phrase. In the case of Menggwa Dla, the including reference is the non-singular cross-reference suffix, and the included reference is the comitatively-marked (pro)nominal. In the following example (which a repeat of example 4-107 above), the referent set of cross-reference suffixes *-ehi* and *-hwa* (1DU) properly includes the referent of the comitatively-marked noun phrase *aya=lofo* 'with father'.

4-114. *gwi   sumbani*

    another time

    aya=lofo   wuli=mbe Ø-num-ehi fa-hwa-a-mbo,

    father=COM   house=INS CR-sit-1DU COMPL-1DU-3FSG:O-DEP

    'Once I was at home with father, and then…' (N)

    (1DU = 'I' and 'father')

The perlative case *=roŋgo* usually describes a path which a participant travels along or a place which a participant travels through; another function of the perlative case *=roŋgo* is indicating 'volitionless-accompaniment', i.e. similar to cases where a comitatively-marked nominal is not cross-referenced (see above).

4-115. *yaŋga=roŋgo bara-Ø-u-mbo,*

    bush=PER   run-CR-3MSG-PAST

    'He ran through the bush, and…'

4-116. yo lohama=roŋgo pi-aha-hwa.

1   ridge=PER   go-1SG-PAST

'I went along the ridge.'

4-117. wara yo apa   dahoni ane=roŋgo wa hoho-mba-la-mbo.

so   1   daytime now   friend=PER oh   tell-POST-LIG-NOML

'So now in this daytime I will tell you ('friend') this story.' (A)

4.5.5   Proprietive case and abessive case clitics

The proprietive case clitic =*mbi* marks an entity as existing (existential meaning), or being possessed, either physically or metaphorically, by some other participant (possessive meaning). The abessive case clitic =*mboka* is the negative counterpart of the proprietive case clitic =*mbi*: the abessive case clitic =*mboka* indicates an entity as absent (non-existential) or lacking by a possessor (non-possessive).

There is no verb of possession ('have') or non-possession ('not have') in Menggwa Dla; predicative possession (non-possession) is indicated by the possessum in proprietive case (abessive case) as the predicate followed by a copula (which is optional in present tense; §6.4).

4-118. ten toea=mbi=pa   nya.

ten   Toea=PROP=only COP:1SG

'I only have ten Toea.'

4-119. *tafko＝mboka   nya.*

cigarette＝ABSS COP:1SG

'I do not have cigarettes.'

4-120. *wuli＝mboka   niwi.*

house＝ABSS   COP:N1FPL

'They do not have a house/ houses.'

The proprietive and abessive cases can also be used attributively: proprietive phrases and abessive phrases can be used as noun modifiers (§4.3) meaning 'with' and 'without' respectively.

4-121. *[[wamla＝mbi]   alu(＝mbo)]   sa-wa-a   hof-afu-Ø.*

[[betel.nut＝PROP string.bag(＝OBJ)] carry-2SG-3FSG:O come-2SG-IMP

'Bring me ('carry come') the string bag with betel nut in it.' (80I)

With the attributive use of proprietive case, the proprietive phrase denotes a possessum, and is embedded within the noun phrase which is headed by the possessor noun. The reverse is true for genitive phrases: the genitive phrase denotes a possessor, and is embedded within the noun phrase which is headed by the possessum noun.

[[possessor=GEN] possessum]   [[possessum=PROP] possessor]

4-122. yani=la   wi   *4-123. wi=mbi   yani*

       man=GEN child   child=PROP   man

       'The man's child'   'The/a man with a child'

Another difference between proprietive phrases and genitive phrases is definiteness, as shown by the translations of the examples above; proprietive phrases (the modifying possessum) are always indefinite, whereas genitive phrases (the modifying possessor) are most usually definite (except when the genitive phrase denotes the genus in general:

4-124. wari=la   ilu=na   apa=mbi   no.

       pig=GEN   leg=TOP   sweetness=PROP   COP:3FSG

       'Pigs' legs are tasty.')

Nouns modified by a genitive phrase have to be definite in Menggwa Dla, e.g. the whole noun phrase in example 4-122 above has to be definite. Because of the definiteness restrictions outlined above, it is not possible for a genitive phrase to be embedded within a proprietive phrase, as the definiteness requirements of the inner and outer phrase contradict: the outer proprietive case requires the proprietive clause to be indefinite, but the inner genitive phrase requires the outer proprietive phrase definite.

*[[[possessor=GEN] possessum=PROP] possessor]

4-125. *[[hwalfehi=la]   hutamu=mbi]   wi

     [[woman=GEN] rope=PROP]   child

'The child with [a rope of the woman]'

On the other hand, it is possible to have a proprietive phrase embedded within a genitive phrase as proprietive phrases do not place a restriction on their head noun's definiteness.

[[[possessum=PROP] possessor=GEN] possessum]

4-126. [[wi=mbi]   hwalfehi]=la   hutamu

     [[child=PROP] woman]=GEN rope

'[The woman with a child]'s rope'

    Proprietive case can also denote a container which has various things in it. For instance, *alu=mbi* (string.bag=PROP) in the following example means 'the string bag and the various things inside it'; *alu=mbi* (string.bag=PROP) does not modify *ifali* 'spear' as neither can be contained within each other and they do not have a possessive relation with each other (nominals are coordinated by juxtaposition; §3.2.6).

4-127. *hwaŋgu=hi* *alu=mbi*   *ifali*   *ku-hwa-a*   *Ø-numb-ehi-mbo,*

     cave=ADS   string.bag=PROP spear   leave-1DU-3FSG:O CR-SEQ-1DU-DEP

'At the cave we left the string bag, including the things in it, and the spears, and…' (N)

The proprietive case =*mbi* and abessive case =*mboka* can also denote existential and non-existential meanings.

4-128. [Kamberatoro=*hya* Amanab=*nambo*]=*na bakwa*=*mbi* *wahwa*.

[Kamberatoro=ABL Amanab=ALL]=TOP   road=PROP   COP:PAST:3FSG

From Kamberatoro to Amanab there used to be a road.'

4-129. *dani*=*hi*   *toko*=*mboka*   *no*.

this=ADS shop=ABSS   COP:3FSG

'There are no shops here.'

The use of =*mbi* and =*mboka* to convey (non-)existential meaning is only grammatical for inanimates. With humans, the verb *numu* 'sit' or *nuŋgu* 'stand' is used; whether *numu* 'sit' or *nuŋgu* 'stand' is used depends on the posture of existence, but *numu* 'sit' also conveys long term existence. The existence or non-existence of non-humans can also be conveyed by *numu* 'sit' or *nuŋgu* 'stand' if their horizontal or vertical 'posture' is emphasised.

4-130. *Amgotro*=*hi* tentara *num-uma-mbi*.

Amgotro=hi army   sit-N1MPL-PRES:STAT

'There are army personal stationed ('sit') at Amgotro.'

4-131. nomo＝hi   tuhala   nomola   Ø-numb-ei-mbo,

tree＝ADS   school   children   CR-stand-N1FPL-DEP

'There are school children standing next to the tree, and…'/

'The school children are standing next to the tree, and…'

4-132. akani(＝hi)   laulau   *nomo   nuŋg-o-mbi.*

that(＝ADS)   Malay.apple   tree   stand-3FSG-PRES:STAT

'There are Malay apple trees there.'   (Tok Pisin: *laulau* 'Malay apple')

4.5.6   Topic clitic

The topic clitic ＝*na* marks a (pro)nominal as a topic expression. Topic expressions are placed at the beginning of a clause, except when they are preceded by a locative word (§3.2.7), temporal word (§3.2.8; example 4-136 below), or conjunction (§3.2.6; example 4-145 below), in which case the topic expression would follow these constituents immediately (also see below for clauses with two topic expressions). Alternatively, a topic phrase may be not clause-initial because it is preceded by another topic phrase (see towards the end of this §4.5.6). Topic expressions are most usually also the grammatical subject of the clause; subjects are zero case-marked in Menggwa Dla (§4.5.1; 5.3.1), and the topic clitic ＝*na* is attached directly at the end of the topic expressions. The following are examples of topic expressions are also the subject of the clause.

4-133. wali＝na   ga   ke-o?

pig＝TOP   where   COP:where-3FSG

'Where is the pig?'

4-134. bahu＝na   pi-wa-hwa.

flying.fox＝TOP   go-3FSG-PAST

'The flying fox flew away.'

4-135. ai＝na   tumali   hupla   ambya ruŋgu pipa-me-Ø-mbo,

3＝TOP pandanus container hole   inside hide-DR-3MSG-DEP

'He was hiding in an empty pandanus trunk, and…' (A)

4-136. hamani   yo＝na popo-Ø-ha-a-mbo,

yesterday 1＝TOP collect.egg:MASS-CR-1SG-3FSG:O-PAST

'Yesterday I collected eggs, and…'

Nevertheless, the topic clitic is not obligatorily used; the topic clitics in the examples above can be omitted freely. The clause-initial position is also not 'reserved' for topic expressions. For instance, a topic phrase can be preceded by a locative/ temporal word as in example 4-136 above. Focused expressions, e.g. interrogative words (§3.2.3), can also be in clause-initial position, as shown in the example below. As expected, the topic clitic ＝*na* cannot be attached to question words, as question words are always focused and cannot be topicalised. In the example below, ＝*na* is an allative case clitic (§4.5.3) and not a topic clitic. This can be established by the fact that allative case clitic can freely alternate between ＝*na* and ＝*nambo,* whereas the topic clitic has only one form: ＝*na.*[17]

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[17] The topic clitic is not homophonous with the allative case clitic in Dla proper and Anggor. In Dla proper the topic clitic is =*nya* and the allative clitic is =*na(mbo).* In Anggor, the topic clitic is =*ana* and the allative clitic is =*na(mbo)* (Litteral 1980: 79-80).

4-137. *ga＝na(mbo)   pi-afe (＜pi-afa-hi)?*

      where＝ALL   go-2SG-PRES:CONT

      'Where are you going?'

A non-subject can also be topicalised. When an object is topicalised, only the topic case clitic ＝*na* is used, and the object case clitic ＝*mbo* (§4.5.1) is not used. This is rather similar to Korean and Japanese where the topic particle (Korean 은 *un*/ 는 *nun*; Japanese は *wa*) always suppresses the subject case particle (Korean 이 *i*/가 *ka*; Japanese が *ga*) or the object case particle (Korean 을 *ul*/ 를 *lul*; Japanese を *o*) when a subject or object is topicalised. In Menggwa Dla, when a pronominal is topicalised, it is always in its citation form (§4.6.1). As shown in example 4-139 below, a noun phrase cannot be marked with both an object case clitic ＝*mbo* and a topic clitic ＝*na*.[18]

4-138. *dani＝na   yo   ilo-ha-a-hya.*

      this＝TOP 1   work-1SG-3FSG:O-PAST:FOC

      'As for this, I made it.'

4-139. * *dani＝mbo＝na   yo   ilo-ha-a-hya.*

      this＝OBJ＝TOP   1   work-1SG-3FSG:O-PAST:FOC

Topicalised ditransitive second objects have never been observed in natural discourse. The following are a few constructed examples showing different core

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[18] Nevertheless, *=nambo* is one of the free variants of the allative-instrumental case (§4.5.3).

grammatical relations being topicalised. The following examples all mean 'I gave John Jane's betel nuts', but they all have different pragmatic prominence patterns, as shown by the rough English translations.

Subject topicalised:

4-140. [yo]=na [Jane=la   wamla] [John]=mbo sa-niŋga-wa-hwa

[1]=TOP [Jane=GEN betel.nut] [John]=OBJ give-1SG-3SG:D-PAST

'As for me, I gave Jane's betel nuts to John.'

First object topicalised:

4-141. [John]=na [yo] [Jane=la   wamla]   sa-niŋga-wa-hwa

[John]=TOP [1] [Jane=GEN betel.nut] give-1SG-3SG:D-PAST

'As for John, I gave Jane's betel nuts to him.'

Second object topicalised:

4-142. [Jane=la   wamla]=na   [yo] [John]=mbo sa-niŋga-wa-hwa

[Jane=GEN betel.nut]=TOP [1]   [John]=OBJ   give-1SG-3SG:D-PAST

'As for Jane's betel nuts, I gave them to John.'

When oblique relations are topicalised, the topic clitic follows the case clitic. The following are three examples.

4-143. Amanab=nambo=na bakwa=mbi no.

Amanab=ALL=TOP   road=PROP   COP:3FSG

'To Amanab there is a road.'

4-144. hwi＝mbe＝na   sa-ya-a   Ø-han-u-mbo,

      water＝INS＝TOP   take-3SG-3FSG:O CR-go.down-3MSG-DEP

      'Into the water, he took them and went back, and…' (A)

4-145. ye   wuli＝mbe＝na   galali＝hi   hwama-Ø-i-Ø,

      then house＝INS＝TOP hook＝ADS hang.up-CR-3MSG-3FMG:O-DEP

      'Then inside the house he hung him at the hook, and…' (A)

      There can be two topic expressions within a clause, as shown in the example below. The first of the two topic expressions is called primary topic, it has scope over more than one clause, i.e. there are a number of clauses which comment on the referent of the primary topic expressions. The second of the two topic expressions is called secondary topic, and it has scope only over its own clause (Lambrecht 1994: 147). In other words, there is only one clause, the clause where the topic expressions exist, which comments on the second topic referent. In the following example, *amamo＝na* is the primary topic expression, and *sini＝mbe akani＝mbe＝na* is the secondary topic expression.

4-146. bohoni [amamo＝na] [sini＝mbe akani＝mbe＝na] awe.

      before [moon＝TOP] [sky＝INS   there＝INS＝TOP] be.not

      'Once upon a time the moon was not there in the sky.' (A)

In equative sentences (§6.4.2) the topic clitic is usually present, probably because the clitic =*na* is also effectively dividing the two parts of the equative sentence in linear speech.

4-147. [yowala   dya]=na   Rita *no.*

　　　[1SG:GEN   name]=TOP Rita COP:3FSG

　　　'My name is Rita.'

4.5.7　Focus clitics

There are two clitics which mark a nominal as focused: =*amba* 'too' and =*pa* 'only'. The focus clitics can co-occur with any case clitics (e.g. object case in examples 4-150 and 4-151 below; oblique cases in examples 4-152 and 4-153 below). When co-occurring with case clitics, the focus clitics follow the case clitic (§4.5.1-5). The focus clitics do not co-occur with the topic clitic =*na* (§4.5.7) as focuses and topics are mutually exclusive, and the focus clitics do not co-occur with each other. The following are examples of =*amba* 'too' and =*pa* 'only'.

4-148. amani yo=amba po-ma-a?

　　　good　1=too　　go:FUT-IRR:NEG-1SG

　　　'Should I go too?' (*lit.* 'Is it good that I go too?')

4-149. ahu si=pa.

　　　self 2=only

　　　'Up to you.'/ 'Only yourself (should make this decision).'

4-150. yapali＝mbo＝pa   *hwatu fa-Ø-hwa-a-Ø,*

tree.kangaroo＝OBJ＝only   search finish-CR-1DU-3FSG:O-DEP

gan-yehi-Ø.

go.down:FUT-1DU-JUS

'We will only search of tree kangaroos and after that is finished, we will go

down.' (N)

4-151. yoambo＝amba buku   sa-ka-ya-hwa.

1SG:OBJ＝too   book   give-3SG-1SG:O-PAST

'He gave a book to me as well.'

4-152. mni amblwa＝na＝pa   hya hwatu seru-mbo＝pa

just outside＝ALL＝only INTJ search eat-NOML＝only

hri-ya-a   fa-ya-a   kaku-Ø-u-Ø,

come.out-3SG-3FSG:O leave-3SG-3FSG:O walk-CR-3MSG-DEP

'He only comes out just to search for food, and…' (A)

4-153. imbumamu＝mbi＝pa nya.

three＝PROP＝only   COP:1SG

'I only have three.'

4.6   Personal pronouns and the reflexive word *ahu*

Personal pronouns are only used to refer to animates, or sometimes higher

animates like *yafli* 'dog' or *wari* 'pig'. Personal pronouns are not obligatorily used

in any positions; clauses often consist simply of a verb which most usually carries at

least a subject cross-reference suffix (see examples in, e.g., §5.4 on intraclausal syntax and §5.2 on cross-referencing). Personal pronouns are not even obligatory in rare cases where the verb is not cross-referenced (see examples in, e.g., §7.3.1 on non-finite chain verbs).

There are three types of pronouns: citation pronouns, case pronouns and subject resumptive pronouns. Two factors distinguish the three sets of pronouns: whether they carry cross-reference suffixes or not, and in what grammatical relations/ pragmatic positions they are used. Case pronouns and subject resumptive pronouns carry cross-reference suffixes; their cross-reference suffixes mark person, number and sometimes gender categories. Citation pronouns, on the other hand, do not carry cross-reference suffixes. In fact there are only three citation pronouns, one for each person category. Case pronouns are used for grammatical positions which require overt case marking in Menggwa Dla (§4.5), i.e. oblique positions and first objects which are not topicalised. Citation pronouns and subject resumptive pronouns are used in other positions, i.e. in isolation, topics, or subjects. Personal pronouns are not used for second objects, i.e. the theme/ 'gift' in a ditransitive clause. The following is a matrix of the three types of pronouns against the two distinguishing factors.

Table 4.6   Morphosyntactic differences between types of pronouns

Type of pronoun:	citation	case	subject resumptive
cross-reference suffix	no	yes	yes
case-marked positions	no	yes	no

Citation pronouns, case pronouns and subject resumptive pronouns are discussed in §4.6.1, §4.6.2 and §4.6.3 respectively. In addition, there is also the 'reflexive' word *ahu*. Although *ahu* itself is not a pronoun, it often affects the interpretations of the pronouns. The 'reflexive' word *ahu* is discussed in §4.6.4.

4.6.1   Citation pronouns

There are three citation pronouns. They mark person, but not number and gender.

yo   first person

si   second person[19]

ai   third person

The citation pronouns are used in isolation or when the pronoun is the subject or topic. The citation pronouns can be attached with a topic clitic (§4.5.6) or a focus clitic (*=pa* 'only' and *=amba* 'too'; §4.5.7), but not a case clitic (§4.5.1-5).

4-154. yo! yo!

'Me! Me!'

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[19] The second person citation pronoun *si* on its own can only signify second person. However, when followed by a first person dual or plural subject resumptive pronoun (§4.6.3), the combination signifies inclusive first person. Nowhere else in Menggwa Dla grammar is inclusive versus exclusive first person distinguished.

4-155. *si＝na dani＝hi Ø-hof-afu-mbo,*

2＝TOP here＝ADS CR-come-2SG-DEP

'You came here, and …'

4-156. *ai＝na yo sufua boka-hi-Ø-hi.*

3＝TOP 1 like NEG:R-1SG-3MSG:O-PRES:CONT

'Him I do not like.'

4-157. *si＝pa hofu boke-afa-hwa.*

2＝only come R:NEG-2SG-PAST

'Only you did not come.'

4-158. *yo＝amba gan-i-mby-a.*

1＝too go.down:FUT-1SG-POS:SMR-1SG

'I will go down too.'

4.6.2   Case pronouns

There are two paradigms of case pronouns: genitive pronouns and object pronouns. Genitive pronouns are pronominalised versions of genitive phrases, and object pronouns are used in object positions; all object pronouns have an inbuilt object case *mbo* (§4.5.1). The following are the forms of the object pronouns and the genitive pronouns.

Table 4.7   Object pronouns

		1 EXCL	1 INCL	2	3
SG		*yo-Ø-a-mbo*		*si-h-afu-mbo*	*ai-ah-**afu**-mbo*
DU	M	*yo-hw-ehi-mbo*	*si-h-ehi-mbo*	*si-h-afani-mbo*	*ai-ah-afani-mbo*
	F			*si-h-efi-mbo*	*ai-ah-efi-mbo*
PL	M	*yo-hw-efu-mbo*	*si-h-efu-mbo*	*si-h-umu-mbo*	*ai-ah-umu-mbo*
	F			*si-h-ei-mbo*	*ai-ah-ei-mbo*

(*ai* can be omitted; *ai-a* is also pronounced as *e*, *aiahafumbo* → *ehafumbo*)

Table 4.8   Genitive pronouns

		1 EXCL	1 INCL	2	3
SG		*yo-**w-a-la***		*si-h-afa*	*ai-ah-**a-la***
DU	M	*yo-hw-ehya*	*si-h-ehya*	*si-h-afa*	*ai-ah-afa*
	F			*si-h-efya*	*ai-ah-efya*
PL	M	*yo-hw-efa*	*si-h-efa*	*si-h-ama*	*ai-ah-ama*
	F			*si-h-ei*	*ai-ah-ei*

(*ai* can be omitted; *ai-a* is also pronounced as *e*, *aiahala* → *ehala*)

The case pronouns are morphologically complex. They begin with what is formally a citation pronoun, but the person category they mark is slightly different: *yo* for first person exclusive, *si* for first person inclusive and second person, and *ai* for third person (citation pronouns on their own do not mark the exclusive versus inclusive distinction; §4.6.1). The citation pronouns are then followed by another person marking morpheme: *yo* is followed by *-hw*, *si* is followed by *-h*, and *ai* is followed by *-ah*. After the two person morphs, genitive pronouns take a class IA

cross-reference suffix, whereas object pronouns carry a class IB cross-reference suffix (§5.2.1), with the exception that a) any *e* at the end of the class IB suffix is changed to *a*, e.g. the N1FDU suffix *-efye* becomes *-efya* when used in a genitive pronoun, e.g. *ai-ah-efya* (3-3-N1FDU); and b) the N1MPL suffix used in genitive pronouns is *-ama* instead of *-uma*. The object pronouns have an object case suffix *-mbo* following the class IB cross-reference suffix. The *-mbo* suffix of the object pronouns cannot be omitted, in contrast with the nominal object case clitic *=mbo* which is optional in most circumstances (see §4.5.1). The pronouns for first person singular and third person singular are irregular in both paradigms:

- the *-hw* (1) suffix is replaced by *-w* for the 1SG genitive pronoun and *-Ø* for the 1SG object pronoun;[20]

- the 1SG and 3SG genitive pronouns unexpectedly have a genitive suffix *-la* (c.f. genitive clitic *=la*; §4.5.2);

- the 3SG object pronoun unexpectedly has *-afu* (2SG) as its cross-reference suffix rather than the usual *-u* (3MSG) or *-o* (3FSG); and

- the 1SG and 3SG genitive pronouns unexpectedly have *-a* as their cross-reference suffix.

The *ai* morpheme of the third person pronouns can be omitted, e.g. *aiahala* (3SG:GEN) 'his/her/its' freely alternates with *ahala*. Some speakers pronounce the initial *aia* portion of the third person pronouns as *e*, e.g. *ehala* (3SG:GEN) for *aiahala*. The 2SG and 2MDU genitive pronouns are homophonous, as the 2SG and N1MDU class IA cross-reference suffixes are also homophonous: *-afa* (§5.2.1).

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[20] Although both *-Ø* and *-w* are preceded by *o* and followed by *a*, the [w] in *yowala* (1SG:GEN) is clearly audible, whereas the [w] is only very faint between the two vowels in *yoambo* (1SG:OBJ).

The corresponding object and genitive forms of *da* 'who' are *dafumbo* 'who' and *dahala* ~ *da=la* 'whose' (see §3.2.3). The following are a few examples of the case pronouns.

4-159. *yohwefa ulua   hwi   numami aya   saku-ya-a-hya*   *akani=mbe.*

    1PL:GEN grease liquid above   father put-3SG-3SG:O-PAST:FOC that=INS

    'Father put our oil up in there.' (A)

4-160. *ai!   sihafa   tongs   hwi=mbe hofahi-wa-mbi!*

    ai   2SG:GEN   thongs water=INS fell-3FSG-PRES:TRANSN

    'Ai! Your thongs fell into the river!'

4-161. *(ai=na)   sihehimbo   homba-Ø-mu-naho.*

    (3=TOP) 1INCL:DU:OBJ   see-N1SG-1NSG:O-CNTR

    'S/he would have seen you and me.'

4-162. *yoambo   hwafo-ya-i   Ø-nuŋg-u-mbo,*

    1SG:OBJ   talk-3SG-1SG:O CR-SEQ-3MSG-DEP

    'He talked with me, and then…' (N)

When attached to pronouns, the ablative case clitic *=hya* (§4.5.3) is attached to a genitive pronoun, e.g. *sihafa=hya* (2SG:GEN=ABL) 'from you', while the comitative case clitic *=lofo* (§4.5.5) and adessive case clitic *=sehi* (§4.5.3) are attached to an object pronoun, e.g. *sihafumbo=lofo* (2SG:OBJ=COM) 'with you', *ahafumbo=sehi* (3SG:OBJ=ADS) 'on him/her'. The other semantic case clitics are

not used with pronouns as pronouns are only used to refer to higher animates (see §4.5.3-5).

4-163. *aiahala=hya   tite   suŋgwani   sami-aha-mbi.*

3SG:GEN=ABL bad sick   take-1SG-PRES:STAT

'I got the deadly sickness from him/her.' (*-mbi* = 'I am still sick')

4-164. *ai=na   yoambo=sehi fa-hi-a-hwa.*

3=TOP   1SG:OBJ=ADS leave-3PL-3FSG:O-PAST

'She got married with me.' (*lit.* 'They (her _j family/clan) left her _j on me.')

4-165. *aiaheimbo=lofo   meŋgau=nambo   pi-Ø-a-mbo,*

3FPL:OBJ=COM   Menggau=ALL   go-CR-1SG-DEP

'I went to Menggau with them, and…'

4.6.3   Subject resumptive pronouns

Subject resumptive pronouns are used only in the presence of an overt subject nominal (sometimes a series of conjoined nominals) or subject pronominal (i.e. citation pronoun; §4.6.1) in the same clause. In contrast to citation pronouns which only mark person, subject resumptive pronouns mark person, number and sometimes gender categories. Subject resumptive pronouns serve one or both of the following functions:

- emphasising or further specifying the number and sometimes also the gender features of its antecedent (this is especially the case when its

antecedent is a citation pronoun as citation pronouns only mark number; §4.6.1); and

- indicating that the subject is focused.

Formally, subject resumptive pronouns are independent words with the same phonological shapes as the class IA cross-reference suffixes (§5.2.1), except that any final *e*'s becomes *a* (e.g. the N1FDU cross-reference suffix is *-efye* whereas the N1FDU subject resumptive pronoun is *efya* 'you/ they two'), and the 3MSG subject resumptive pronoun is *u* rather than Ø. Subject resumptive pronouns are independent words; a subject resumptive pronoun need not be adjacent with its subject antecedent. When a subject resumptive pronoun co-occurs with a citation pronoun (§4.6.1), first exclusive, first inclusive, second and third person distinctions can be made, similar to the case clitics (see §4.6.2).

Table 4.9   Citation pronouns plus subject resumptive pronouns

		1 EXCL	1 INCL	2	3
SG	M	*yo aha*		*si afa*	*ai **u***
	F				*ai wa*
DU	M	*yo ehya*	*si ehya*	*si afa*	*ai afa*
	F			*si efya*	*ai efya*
PL	M	*yo efa*	*si efa*	*si ma*	*ai ma*
	F			*si wi*	*ai wi*

The following are examples of subject resumptive pronouns coooccuring with citation pronouns. When the antecedent of a subject resumptive pronoun is a

citation pronoun, they are usually linearly close to each other. The subject in example 4-166 below is focused as indicated by the focus clitic =*amba* 'too' (§4.6.7) and maybe also by the subject resumptive pronoun *aha*. In example 4-167 below, the subject resumptive pronoun *u* further specifies the third person singular subject (as indicated by both the citation pronoun *ai* (3) and the subject cross-reference suffix -*Ø* (3SG)) is masculine gender.

4-166. *yo*=*amba aha   yowala ifali tamnya   kwami-Ø-a-mbo,*

      1=too   1SG:RSUMP 1SG:GEN spear small:MASS take:MASS-CR-1SG-DEP

      'I too took my small spears, and…' (N)

4-167. *ai u   rani nafi-Ø-ya-hwa.*

      3 3MSG:RSUMP DEM show-3SG-1SG:O-PAST

      'He himself showed me that.'

      In the following example, the antecedent of the subject resumptive pronoun *efya* (N1FDU:RSUMP) is the conjoined noun phrase *afila hwila* 'father and mother'. The resumptive pronoun *efya* is used here to indicate contrastive focus: the clauses immediately in front and behind this clause (in the text *Amamola Fafo* 'The story of the moon'; appendix 1) mention of what the children did instead: they stayed behind.

4-168. afila   hwila   ra＝na   dofo   heli＝hi   o   naho＝nambo

      father   mother   DEM＝ALL   secret   dance＝ADS   or   what＝ALL

      efya   *ra＝na*   *po-me-efya-mbona,*

      N1FDU:RSUMP   DEM＝ALL   go-DR-N1FDU-DEP

      'Father and mother the two of them went to a secret ceremony or somewhere,

      and…' (A)

4.6.4 The 'reflexive' word *ahu*

The prototypical notion of reflexivity involves one grammatical position expressed as coreferential with another grammatical position within the same clause, and that the two grammatical positions have different semantic roles. This type of reflexivity cannot be expressed in Menggwa Dla, i.e. the core and oblique relations within a clause cannot be coreferential with each other. For example, reflexive cross-reference suffix combinations — i.e. first person subject with first person object and second person subject with second person object — do not exist (§5.3.1). Similarly, if both a subject and an object pronoun (i.e. a citation pronoun (§4.6.1) and an object case pronoun (§4.6.2) respectively) are used in a clause, they cannot be both first person or both second person.

Nevertheless, there is a 'reflexive' word *ahu* in Menggwa Dla. It functions to indicate: a) reflexive possession; or b) exclusive focus ('emphatic reflexive'). However, the word *ahu* is not itself a pronoun. We will have a look at examples of reflexive possession first.

The following is the translation given to me when I attempted to elicit 'I saw myself in the photo' (Bahasa Indonesia: *saya melihat saya sendiri dalam foto* ((1SG see 1SG self in photo), Tok Pisin: *mi lukim mi yet long foto*).

4-169. *yo ahu hombafluma(=mbo) foto=hi   homba-ha-a-hwa.*   .

      1   self   face(=OBJ)   photo=ADS   see-1SG-3FSG:O-PAST

      'I saw my face in the photo.'   (50II)

First of all, notice that the object is expressed as a third person entity; expressing both the subject and the object as first person is simply not possible in Menggwa Dla. Secondly, the word *ahu* indicates that there is a possessive relation between two grammatical relations in the clause (based on the semantics, the object *hombafluma* 'face' is possessed by the subject *yo* 'I'), but the word *ahu* is not part of the object noun phrase *hombafluma(=mbo)* 'face(=OBJ)'. This can be established by the fact that the word *ahu* can exist in positions which are explicitly not within any case-marked phrases:

4-170. *yo hombafluma(=mbo) foto=hi   ahu   homba-ha-a-hwa.*   .

      1   face(=OBJ)   photo=ADS   self   see-1SG-3FSG:O-PAST

      'I saw my face in the photo.'

Another related fact is that the word *ahu* cannot take a case clitic (§4.5). For instance, the following examples involve a constituent occupying the post-verbal position (any one constituent can occupy the post-verbal position; see §5.4). No

matter whether *hombafluma* 'face' or *ahu* occupies the post-verbal position, it is always *hombafluma* 'face' and not *ahu* which (can) take the object case clitic =*mbo*.

4-171. *yo ahu foto=hi   homba-ha-a-hwa   hombafluma(=mbo).*

　　1   self photo=ADS see-1SG-3FSG:O-PAST face(=OBJ)

　　'I saw my face in the photo.' (50I)

4-172. *yo hombafluma(=mbo) foto=hi   homba-ha-a-hwa   ahu.*

　　1   face(=OBJ)   photo=ADS see-1SG-3FSG:O-PAST self

　　'I saw my face in the photo.'

　　　The reflexive word *ahu* is also not mutually exclusive with genitive phrases. In example 4-173 below, *ahu* specifies that the genitive pronoun *ahala* (3SG:GEN) is coreferential with the subject *Saimonu* 'Simon'. Without *ahu*, the possessor is not specified as being coreferential or disjoint-referential with the subject, as in example 4-174.

4-173. *Saimonu ahu ahala   bani   kaha-ya-a-hwa.*

　　Simon   self 3SG:GEN sago.palm chop-3SG-3FSG:O-PAST

　　'Simon ~j~ chopped his own ~j/*k~ sago palm.'

4-174. *Saimonu ahala   bani   kaha-ya-a-hwa..*

　　Simon   3SG:GEN sago.palm chop-3SG-3FSG:O-PAST

　　'Simon ~j~ chopped his ~j/k~ sago palm.'

Another function of *ahu* is indicating exclusivity, i.e. exhaustive listing focus or 'emphatic reflexive'. This is similar to the use of reflexive pronouns in English where the reflexive pronoun indicates that only the referent(s) of the reference concerned acted or underwent the situation.

4-175. *amni＝la   afila   ahu rani amamo*

garden＝GEN father self DEM moon

sa-i-Ø   Ø-hahof-u-mbo,

take-N1MSG-3MSG:O CR-go.up-3MSG-DEP

'The garden father himself took the moon back home, and…' (A)

The previous discourse of example 4-175 mentions that the 'garden father' went to see the moon together with a group of men; *ahu* here indicates that amongst all the men, only the garden father took the moon.

Chapter 5

Intraclausal Morphosyntax

In this chapter we will have a look at morphology and syntax which are common to both independent and dependent clauses: verb stems, cross-reference suffixes, grammatical relations, transitivity, valency and intraclausal syntax. See Chapter 6 for morphology specific to independent verbs. See Chapter 7 for interclausal relationships and morphology specific to dependent verbs and verbal nouns.

A verb lexeme may have various verb stems. Most commonly, a verb lexeme has separate 'non-finite verb stem' and 'finite verb stem(s)' (§5.1.1). Some verb lexemes make a further distinction of 'non-future finite verb stem(s)' and 'future finite verb stems' (§5.1.2). There are also a lot of verb lexemes with other verb stem irregularities (§5.1.3). There is also a group of 'mass undergoer' verb lexemes which indicate that the undergoers is considered a single mass and cross-referenced as singular (§5.1.4).

Cross-reference suffixes mark the person, number (§4.2), and sometimes also gender (§4.1) of the subject or object. Verbs are classified into one of five verb classes — class I, Iн, IIв, II and III — depending on which sets of cross-reference suffixes they take (§5.2). In normal circumstances, class I and class Iн verbs take one subject cross-reference suffix, while class IIв, class II and class III verbs take one subject cross-reference suffix plus one object cross-reference suffix. There are

some vague correlations between the semantics and verb classes: most verbs which describe motion, psychological states and physiological states belong to class I or Iн (one cross-reference suffix), the trivalent verb *sefi* (*sa-/ da-*) 'give' belongs to class III (two cross-reference suffixes), most bivalent and other trivalent verbs which usually have animate (first) objects belong to class II (two cross-reference suffixes). However, there is also a high level of arbitrariness towards the class-membership assignment of a verb, and there are often mismatch between the number of cross-reference suffixes and the valence of the verb. This is especially true for verb clas IIв which is a 'wastebasket' category, e.g. both the bivalent *kefi* (*ka-*) 'break' (class IIв) and the monovalent *kefi* (*kefi-*) 'break' (class IIв) take two cross-reference suffixes in most verb forms. See individual subsections in §5.2 for more comments on each verb class.

Grammatical relations in Menggwa Dla are basically aligned in an accusative-secundative alignment for both cross-referencing and case marking (see §5.3.1). Both (pro)nominals and cross-reference suffixes can be expressions of core grammatical relations (§5.3.2), and hence the transitivity of a clause must be at least equal to the number of cross-reference suffixes, which are obligatory in most types of verbs. Nevertheless, the transitivity of a clause does not necessarily match the valence of the verb, e.g. there is the type IIв verb *efifi* (*efi-*) 'to become dark' which is zero-valent but carries two cross-reference suffixes, i.e. transitive. Class I/ Iн verbs are used in intransitive clauses, class I/ Iн/ IIв/ II verbs are used in transitive clauses and class II/ III verbs are used in ditransitive clauses (§5.3.2); see §5.3.2. There are no voice oppositions and 'real' valence-changing morphology in Menggwa Dla; see §5.3.3.

Intraclausal syntax plays a minor role in Menggwa Dla. Most clauses are verb-final, and the order amongst the free constituents (noun phrases and other words) before the verb is free. Nevertheless, one constituent can occupy the post-verbal position; this constituent further specifies the identity of a reference mentioned earlier in the clause (or sometimes in previous clauses). These post-verbal constituents form the same intonation domain with the rest of the clause in front of it, and these post-verbal constituents can express either old or new information; hence these post-verbal constituents are not manifestations of right-dislocation or anti-topics in their prototypical sense. See §5.4 on intraclausal syntax.

5.1   Verb stems

Every verb and verbal noun has a verb stem which provides the basic lexical meaning. There are verb lexemes of which the verb stem remains constant in all environments, e.g. the verb stem of the verb lexeme *bara* 'run' (class I) is always *bara-*. Other verb lexemes have two or more allomorphic verb stems: some verb lexemes have a 'non-finite verb stem' and one or more 'finite verb stem(s)' (§5.1.1), e.g. the verb lexeme *pefi* 'close' (class IIB) has the non-finite verb stem *pefi-* and the finite verb stem *pa-*. A small number of frequently used verb lexemes make a further distinction of 'non-future finite verb stem' and 'future finite verb stem' (§5.1.2), e.g. the verb lexeme *hanu* 'go down' (class IH) has the non-finite verb stem *hanu-*, non-future finite verb stem form *han-*, and future finite verb stem *gan-*. Some verb stems may exhibit other irregularities (§5.1.3).

There is also a class of verb lexemes — the 'mass undergoer verbs' — which indicate that the undergoer (usually the object) is viewed as a single mass rather than plural individuals, and the undergoers are cross-referenced as singular if they are cross-referenced; see §5.1.4.

5.1.1   Non-finite verb stems and finite verb stems

Most verbs have a verb stem called the non-finite verb stem, and one (or more) verb stem(s) called the finite verb stem(s). The non-finite verb stem is the 'basic' form of a verb lexeme; the non-finite verb stem is the form which people quote a verb lexeme with, e.g. *hofahi* 'to fall' (class I), *apu* 'to sleep' (class I), *hanu* 'to go down' (class Iн), *dukwefi* 'to wake up (monovalent)' (class IIв), *homba* 'to see' (class II), and *sefi* 'to give' (class III) (see §5.2 on the five verb classes). Most verb forms, however, utilise the finite verb stem. Some class I, all class Iн, most class IIв and all class III verb lexemes have finite verb stems which are distinct from the non-finite verb stem:[1] *apu* (*ap-*) 'sleep' (class I), *ganyaru* (*ganyar-*) 'taste' (class Iн), *dukwefi* (*dukwa-*) 'wake up' (class IIв), *sefi* (*sa-*) 'give' (class III). On the other hand, the finite verb stem and the non-finite verb stem are formally identical for some class I and most class II verb lexemes:[2] *hofahi* 'fall' (class I), *homba* 'see' (class II).

The major functional difference between finite verb stems and non-finite verb stems is that non-finite verb stems do not take cross-reference suffixes whereas

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[1] The finite verb stem is placed between parentheses after the non-finite verb stem, e.g. for the verb lexeme *apu* (*ap-*) 'sleep' (class I), *apu-* is the non-finite verb stem, and *ap-* is the finite verb stem.
[2] Verb lexemes of which the finite verb stem is formally the same as the non-finite verb stem are only quoted by their non-finite verb stem form, e.g. for the verb lexeme *hofahi* 'fall' (class I), *hofahi-* is both the non-finite verb stem and the finite verb stem.

finite verb stems take cross-reference suffixes. Finite verb stems are used in

independent verbs (§6), subordinate verbs (§7.1) and chain verbs (§7.2). Non-finite

verb stems are used in non-finite chain verbs (§7.3.1) and verbal nouns (§7.3.2).

Serial verb constructions in non-finite chain clauses have a string of non-finite verb

stems (with no cross-reference suffix in between) plus other affixes. The serial verb

construction in the following non-finite chain clause has three non-finite chain verbs,

each consisting of a non-finite verb stem.

5-1.   *wepi mefi   nuŋgu-mbo,*

   clean COMPL SEQ-DEP

   'After they have cleared ('clean') (the exterior),' (B)

   (*wepi* 'clean' (class I); *mefi* (*ma-*) COMPL (class IIB); *nuŋgu* (*nu[ŋg/mb-]*) SEQ

   (class I))

Serial verb constructions in independent, subordinate and chain clauses can

consist of strings of finite verb root plus cross-reference suffix(es) and other affixes.

The serial verb construction in the following chain clause has three chain verbs, each

carrying a finite verb stem and their cross-reference suffix(es).

5-2.   *kaka-hya-a   saha-hya-a   Ø-numb-a-mbo,*

   break:MASS-1SG-3FSG:O put-1SG-3FSG:O CR-SEQ-1SG-DEP

   'I would divide (the pile of sago starch) and put them (on the palm stalk),

   and…' (B)

   (*kakefi* (*kaka-*) 'break' (MASS, bivalent) (class IIB); *sahefi* (*saha-*) 'put

   horizontally' (class IIB), *nuŋgu* (*nu[ŋg/mb]-*) SEQ (class I))

Alternatively, when a lexical verb is followed by certain grammatical verbs like the realis negative verb *boke* (class I)/ *boka* (class II) (§§6.1.3) or the completive verb *fefi* (*fa-*) (class IIB) (§7.4), the lexical verb must be (for realis negative) or can be (for completive) in the non-finite form. The following is an example of a negative realis serial verb form.[3]

5-3.   *(hamani)*   *apu*   *boke-aha-hwa.*

      (yesterday) sleep NEG:R-1SG-PAST

      'I did not sleep (yesterday).' (*apu* (*ap-*) 'sleep' (class I); *boke* NEG:R (class I))

5.1.2   Finite verb stems: non-future versus future

Most verb lexemes have only one finite verb stem which is used in all environments where a finite verb stem is required (§5.1.1). The following are examples of the verb *apu* (*ap-*) 'sleep' (class I) in past tense (§6.1.2), present tense continuous aspect (§6.1.1) and future tense (§6.2). The finite verb stem remains invariant for *apu* (*ap-*) 'sleep' (class I) and most other verb lexemes.

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[3] The non-finite verb stem in a *boke*/ *boka* construction looks superficially like a verbal noun (§7.3.2) with a zero nominalising suffix (*apu-Ø* (sleep-NOML) 'sleeping') which acts as an argument (or possibly modifier) of the following finite verb. However, there are a few reasons why such non-finite forms are considered to form a serial verb construction with the following verb rather than a verbal noun: a) verbal nouns have a nominalising suffix which freely alternates between *-Ø* and *-mbo* (§7.3.2); the non-finite verb stem in such serial verb constructions can never be suffixed with *-mbo*; b) unlike verbal nouns, the non-finite lexical verb cannot take any case clitics; c) the non-finite verb stem must occur right before the finite verb stem; if the non-finite verb stem is a noun (or adjective) which represents an argument (or modifier) of the following verb, one would expect the 'noun' (or 'adjective') to be able to occupy any position in the clause (see §5.4 on intraclausal syntax); and d) *boke* and *boka* are not used as verbs which convey non-existence or non-possession; there are no verbs which convey (non-)existence or (non-)possession specifically (§4.5.5).

5-4. *ap-aha-hwa.*

sleep-1SG-PAST

'I slept.' (*-aha* class IA)

5-5. *ap-aha-hi.*

sleep-1SG-PRES:CONT

'I am sleeping.' (*-aha* class IA)

5-6. *ap-a-mby-a.*

sleep-1SG-POS:SMR-1SG

'I will sleep.' (*-a* class IB)

Nevertheless, a number of frequently-used verb lexemes have two tense-based finite verb stems: a 'non-future finite verb stem' which is used in past and present tenses, and a 'future finite verb stem' which is used in future tense. An example is *simi* (*simi-*/ *dom-*) 'drink' (class I): the non-future finite verb stem *simi-* is used in past and present tenses, and the future finite verb stem *dom-* is used in future tense (future finite verb stems mark future tense rather than irrealis status; see below.)

5-7. *simi-aha-hwa.*

drink-1SG-PAST

'I drank.' (*-aha* class IA)

5-8.   *simi-aha-hi.*

drink-1SG-PRES:CONT

'I am drinking.' (-*aha* class IA)

5-9.   *dom-a-mby-a.*

drink:FUT-1SG-POS:SMR-1SG

'I will drink.' (-*a* class IB)

Verb lexemes which manifest this phenomenon are a) most of the self-transferring motion verbs (e.g. *pi* 'go'); and b) some other frequently used verb lexemes which begin with *s*.[4] The following is (probably) an exhaustive list of verb lexemes which manifest this phenomenon. Three of the verb lexemes — *hahofu* 'go up/ come up' (class IH), *hafu* 'go across/ pass' (class IIB) and *semi* 'take' (class I) — have multiple allomorphic verb stem forms which are morphologically conditioned by the following cross-reference suffix; see the paradigms of these verb lexemes in appendix 2.

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[4] Not all verb lexemes beginning with *s* have separate future versus non-future finite verb stems, e.g. *sumbu* 'laugh' (class I) and *sihi* 'give off smell' (class I) have invariant verb stems: *sumbu-*, *sihi-*.

Table 5.1   Verb lexemes with non-future versus future finite verb stems

	non-future finite verb stem	future finite verb stem
pi 'go' (I)	*pi-*	*po-*
kro 'come down' (I)	*kro-*	*kut-*
hafu 'arrive' (I)	*haf-*	*gaf-*
hahofu 'go up/ come up' (IH)	*hah- / hahuf- / hahof-*	*gak- / gakuf- / gakof-*
hanu 'go down' (IH)	*han-*	*gan-*
hofu 'come' (I)	*hof-*	*gof-*
hafu 'go across/ pass' (IIB)	*haf- / hafa- / hafaf-*	*gaf- / gafa- / gafaf-*
semi 'take' (I)	*semi- / sami-*	*dam- / dami- / demi-*
simi 'drink' (I)	*simi-*	*dom-*
seru 'eat' (IH)	*ser-*	*det-*
samefi 'cook/ burn' (IIB)	*sama-*	*dama-*
sefi 'give' (III)	*sa-*	*da-*

As demonstrated in the table above, in the majority of cases the non-future finite verb stem begins with *h* /x/ or *s* /s/ ([s]~[ɾ]; §2.1.3.4), and the corresponding future finite verb stem begins with *g* /g/ or *d* /d/ respectively.[5] In some cases the vowels are different, e.g. from *i* to *o* in *pi* (*pi-/ po-*) 'go' and *simi* (*simi-/ dom-*) 'drink', and from *o* to *u* in *kro* (*kro-/ kut-*) 'come down' (all class I verbs).

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[5] Similar *h-g* and *s-d* alterations between non-future versus future verb stems are also found in Dla's sister language Anggor, e.g. *ses-ü* 'he ate' versus *ded-ü* 'he will eat' (see appendix 1 in Litteral 1972 for a list of verbs in Anggor which demonstrate non-future versus future alterations). Unfortunately, there are no linguistic clues so far which point towards the possible origin of this morphophonemic alteration in Dla and Anggor. The formation of future tense in Anggor is also very complex; see Litteral (1980: 70-71) for the formation of future tense in Anggor.

Notice that the future finite verb stems are purely marking future tense, and not irrealis status. For instance, imperative mood (§6.3.1) is an irrealis category, yet imperative verbs can utilise either a non-future or future finite verb stem to mark a present versus future tense distinction (for lexical verb lexemes which have separate non-future versus future finite verb stems).

Present imperative:

5-10. hof-afu-Ø!

  come-2SG-IMP

  'Come (immediately)!' (*hofu* (*hof-*/ *gof-*) 'come' class I; *-afu* class IB)

Future imperative:

5-11. gof-afa-Ø!

  come:FUT-2SG-IMP

  'Come (later)!' (*-afa* class IA)

The following are the semi-realis and irrealis verb forms which utilise the future finite verb stem. The non-future finite verb stem is used in all other verb forms which require a finite verb stem (§5.1.1).

- semi-realis positive (§6.2.1; §6.2.3);
- semi-realis negative (§6.2.2; §6.2.3);
- future imperative/ jussive mood (§6.3.1); and
- future tentative mood (§6.3.3).

The future finite verb stem is also used in chain verbs (§7.2) when the
independent (§6) or subordinate verb (§7.1) at the end of the clause chain is in future
tense. Other than this non-future versus future finite verb stem alteration, chain
verbs are void of tense-mood specifications. In the following pair of examples, the
first clause is a chain clause and the second clause is an independent clause. In
example 5-12, the chain verb *hanyehi* has a non-future finite verb stem *han-* and the
independent verb *semiehyehwa* has a non-future finite verb stem *semi-* because the
independent verb — and hence the whole sentence — is in past tense (§6.1.2); in
example 5-13, the chain verb *ganyehi* has a future finite verb stem *gan-* and the
independent verb *demiembyehi* has a future verb stem *demi-* because the
independent verb is in future tense (§6.2.1). Example 5-14 and 5-15 demonstrate
that the non-future versus future verb stem alternation occurs even when the
following independent verb has an invariant verb stem.

5-12. *Ø-__han__-yehi-mbo,*   *__semi__-ehye-__hwa__.*

CR-go.down-1DU-DEP   take-1DU-PAST

'We two went down and took (it).' (*-yehi* class IHB, *-ehye* class IA)

(*hanu* (*han-*/ *gan-*) 'go down' (class IH);

semi (*s[e/a]mi-*/ *d[e/a]m(i)-*) 'take' (class I))

5-13. *Ø-__gan__-yehi-mbo,*   *__demi-emby__-ehi.*

CR-go.down:FUT-1DU-DEP take:FUT-1NSG:POS:SMR-1DU

'We two will go down and take (it).' (*-yehi* class IHB, *-ehi* class IB)

5-14. *Ø-**han**-yehi-mbo,*   *afta-ehye-**hwa**.*

CR-go.down-1DU-DEP   bathe-1DU-PAST

'We two went down and bathed.' (*-yehi* class IHB, *-ehye* class IA)

(*afta* 'bathe oneself' (class I))

5-15. *Ø-**gan**-yehi-mbo,*   *afta-**emby**-ehi.*

CR-go.down:FUT-1DU-DEP bathe-1NSG:POS:SMR-1DU

'We two will go down and bathe.' (*-yehi* class IHB, *-ehi* class IB)

This contrasts with a verb lexeme like *kefi* (*ka-*) 'break' (bivalent) (class IIB) which has an invariant finite verb stem *ka-*. Chain verbs formed from these verb lexemes are entirely void of tense-mood specifications.

5-16. *ka-Ø-hwa-a-mbo,*   *ser-yehye-hwa.*

break-CR-1DU-3FSG:O-DEP eat-1DU-PAST

'We two broke and ate (it).' (*-hwa-a* class IIB, *-yehye* class IHA)

(*kefi* (*ka-*) 'break' (bivalent) (class IIB); *seru* (*ser-/ det-*) 'eat' (class IH))

5-17. *ka-Ø-hwa-a-mbo,*   *det-yemby-ehi.*

break-CR-1DU-3FSG:O-DEP eat:FUT-1NSG:POS:SMR-1DU

'We two will break and eat (it).' (*-hwa-a* class IIB, *-yehi* class IHB, *-ehi* IB)

5-18. *ka-Ø-hwa-a-mbo,*   *fa-hwa-a-hwa.*

break-CR-1DU-3FSG:O-DEP leave-1DU-3FSG:O-PAST

'We two broke and left (it).' (*-hwa-a* class IIB) (*fefi* (*fa-*) 'leave' (class IIB))

5-19. *ka-Ø-hwa-a-mbo,*   *fa-hwa-a*   *samby-ehi.*

break-CR-1DU-3FSG:O-DEP leave-1DU-3FSG:O POS:SMR-1DU

'We two will break and eat (it).' (*-hwa-a* class IIB, *-ehi* IB)

5.1.3   Other verb stem allomorphy

Some irregular verb lexemes make idiosyncratic changes to their verb stems

depending on the following cross-reference suffix. Sometimes the allomorphy of the

verb stem forms are phonologically conditioned. For instance, the finite verb stems

nuŋgu 'stand' (class I) and *(ku)naŋgu* 'hang up' (I)[6] are *nuŋg-* and *(ku)naŋg-*

respectively when they are followed by a rounded segment (*u* /u/, *o* /ʊ/ or *w* /w/),

otherwise it is *numb-* and *(ku)namb-*, for instance, compare *numb-afu-Ø!* 'you (SG)

stand!' and *nuŋg-umu-Ø!* 'you (MPL) stand!'. For other irregular verb lexemes, the

verb stem allomorphy is not phonologically conditioned. An example is the verb

lexeme *hahofu* 'go up' (class IH): the non-future finite verb stem has the allomorphs

of *hah-* / *hahof-* / *hahuf-* which are morphologically-conditioned by the following

subject cross-reference suffix: *hahuf-* is used when the cross-reference suffix is

3MSG or N1MPL, *hahof-* is used when the cross-reference suffix is 3FSG or N1FPL,

and *hah-* is used for other cross-reference suffixes:

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[6] The verb *kunaŋgu* 'hang a lot of things up' is the mass undergoer counterpart of *naŋgu* 'hang things up' (§5.1.2).

1SG:	*hah-iha-hwa*	(-*hwa*: past tense)
2SG:	*hah-ufa-hwa*	
3MSG:	*hahuf-u-hwa*	
3FSG:	*hahof-wa-hwa*	
1DU:	*hah-yehye-hwa*	
N1MDU:	*hah-ufa-hwa*	
N1FDU:	*hah-yefye-hwa*	
1PL:	*hah-yefa-hwa*	
N1MPL:	*hahuf-uma-hwa*	
N1FPL:	*hahof-yei-hwa*	

See appendix 2 for paradigms of other irregular verbs.

5.1.4   Mass undergoer verbs

Mass undergoer verbs specify that the inanimate undergoer reference has three or more referents. The undergoer of a mass undergoer verb is most usually the object. However, there is one mass undergoer verb lexeme — *kakefi* 'break' (monovalent) (class IIB) — where the undergoer is the subject (see below).

Despite having three or more undergoer referents, the undergoer reference is always cross-referenced as singular if the undergoer reference is cross-referenced on the verb. With mass undergoer verbs, the individual identities of the inanimate undergoer referents are not pragmatically salient, and the group of undergoer referents is viewed as one single mass rather than plural individuals. Take the example of *bi* 'hold' (class II), of which the mass undergoer counterpart is *bibi* 'hold' (class II). To convey 'I am holding string bags', one can simply use the non-mass undergoer verb *bi*, and if the undergoer referents — the string bags — are low in discourse saliency, the undergoers can be cross-referenced by a number-neutral 3FSG cross-reference suffix (§5.2.4).

5-20. *alu(=mbo)*   *bihahi (< bi-ha-a-hi).*

  string.bag(=OBJ)   hold-1SG-3FSG:O-PRES:CONT

  'I am holding string bag(s).' (*-ha-a* class IIA)

To specify that there are three or more undergoer referents, the mass undergoer verb *bibi* can be used.

5-21. *alu*   *bibi-ha-a-hi.*

  string.bag hold:MASS-1SG-3FSG:O-PRES:CONT

  'I am holding string bags.' (*-ha-a* class IIA)

If the three or more undergoer referents are for some reason very salient in the discourse, then the undergoers can be cross-referenced as plural. However, the non-mass undergoer verb *bi* must be used, as the undergoer can only be cross-referenced as singular in a mass undergoer verb.

5-22. *alu*   *bi-ha-ti-hwa.*

  string.bag hold-1SG-N1FPL:O-PAST

  'I was holding string bags.'

If the undergoer reference is specified as having two referents, the undergoer can be cross-referenced as singular if the undergoer is not salient (see §5.2.4), or 'correctly' cross-referenced as dual. A non-mass undergoer verb must be used as

mass undergoer verbs indicate that the undergoer reference has three or more referents.

5-23. *alu   imbu bi-ha-a-hwa.*

string.bag two   hold-1SG-3FSG:O-PAST

'I was holding two string bags.'

5-24. *alu   imbu bi-ha-pa-hwa.*

string.bag two   hold-1SG-N1DU:O-PAST

'I was holding two string bags.'

Mass undergoer verbs cannot be in negative polarity. The negative counterpart of both examples 5-20 (non-mass undergoer) and 5-21 (mass undergoer) has to be formed from the non-mass undergoer verb lexeme (see §6.1.3 on realis negation).

5-25. *alu   bi   boka-ha-a-hi.*

string.bag hold NEG:R-1SG-3FSG:O-PRES:CONT

'I am not holding string bags.' (*-ha-a* class IIA)

The use of mass undergoer verbs is not obligatory. Whether the undergoer noun phrase is overt or covert, or whether the undergoer noun phrase is quantified or not has no influence over whether a mass undergoer verb or a non-mass undergoer verb is used. This optionality is further demonstrated in the following example. In the first clause the verb *pupuhwa* 'we plucked feathers, and…' is formed from the

272

non-mass undergoer verb lexeme *pupu*. In the second clause, the verb *pupuahwehi* 'we plucked feathers, and…' is formed from the mass undergoer verb lexeme *pupu-ahwe*. The two clauses depict the same situation.

5-26.　*ninala　pupu-Ø-hwa-a-Ø,*

　　　　feather　pluck.feather-CR-1DU-3FSG:O-DEP

　　　　pupu-ahwe-ehi　　　　Ø-numb-ehi-mbo,

　　　　pluck.feather-MASS-1DU　CR-SEQ-1DU-DEP

　　　　'We plucked the birds' feathers, and after we have plucked the feathers,

　　　　then …'　(*-hwa-a* class IIB, *-ehi* class IB)　(N)

Different types of mass undergoer verbs are introduced in the rest of this section. The following lists of mass undergoer verbs are probably not exhaustive, as the use of mass undergoer verbs are optional, and speakers' repertoires of mass undergoer verbs vary. Mass undergoer verb lexemes are derived from their non-mass undergoer counterpart. However, the derivation process is not productive and not predictable, and only some mass undergoer verb lexemes have a clearly segmentable mass undergoer affix.

Some mass undergoer verbs have an *-ahwe* mass undergoer suffix. The *-ahwe* suffix also changes the class membership from class II to class I. Example 5-26 above demonstrates one such pair of verb lexemes: *pupu* (class II) and *pupu-ahwe* (class I).

non-mass undergoer	mass undergoer	
fofo (II)	*fofo-ahwe* (I)	'blow'/ 'smoke'/ 'observe animals' footprints'
kiki (II)	*kiki-ahwe* (I)	'cross river'/ 'chop-cut horizontal things'/ 'wash sago pith'
pupe (II)	*pupe-ahwe* (I)	'wash (transitive)'
pupu (II)	*pupu-ahwe* (I)	'remove feather from skin'

The following mass undergoer forms have a mass undergoer suffix *-hi*. The *-hi* suffix does not alter the verb class membership.

non-mass undergoer	mass undergoer	
homba (II)	*homba-hi* (II)	'see'/ 'look'
hwatu (I)	*hwatu-hi* (I)	'search'

The undergoer argument of most mass undergoer verbs is the object. Nevertheless, there is the mass undergoer verb *kakefi* 'break' (monovalent) of which the undergoer is the subject. The subject undergoer of such verbs has to be cross-referenced as singular, and the object cross-reference suffix takes on the 'dummy' value of 3FSG (§5.3.2). The bivalent counterpart is *kaka ~ kaka-hi-ahwe* 'break' (bivalent), of which the mass undergoer is the object.

non-mass undergoer	mass undergoer	
kefi (IIB)	*ka-kefi* (IIB)	'break (monovalent)'
kefi (*ka-*) (IIB)	*kaka* (IIB) ~ *kaka-hi-ahwe* (I)	'break (bivalent)'

5-27. *kefi-ya-a-hwa.*   5-28. *ka-kefi-ya-a-hwa.*

break-3FSG-3FSG:O-PAST   MASS-break-3FSG-3FSG:O-PAST

'It broke.'   'They broke.'

5-29. *ka-ya-a-hwa.*   5-30. *kaka-ya-a-hwa.*

break-3FSG-3FSG:O-PAST   break:MASS-3FSG-3FSG:O-PAST

'She broke it.'   'She broke them.'

The following are two other mass undergoer verbs which involve reduplication.

non-mass undergoer	mass undergoer	
bi (II)	*bibi* (II)	'hold'
fo (II)	*popo* (II)	'collect eggs from nest'

The mass undergoer verb *mamefi* 'finish' can have a monovalent or bivalent interpretation. However, the monovalent *mamefi* has a non-mass undergoer counterpart *me* 'finish' (class I), while the bivalent *mamefi* has a non-mass undergoer counterpart *mefi* (*ma-*) 'finish' (class IIB).

non-mass undergoer	mass undergoer	
me (I)	*mamefi* (I)	'finish (monovalent)'
mefi (*ma-*) (IIB)	*mamefi* (I)	'finish (bivalent)'

5-31. *mamefi-wa-hwa.*

finish:MASS-3FSG-PAST

'Things finished.'/ 'She finished things.'

The following are miscellaneous mass undergoer verbs which begin with *k*.
Except for *kitaki*, the second segment is a rounded segment.

non-mass undergoer	mass undergoer	
kifi (*ki-*) (IIB)	*kitaki* (IIB)	'collect liquid'
naŋgu (*na[mb/ŋg]-*) (I)	*ku-naŋgu* (*ku-na[mb/ŋg]-*) (I)	'hang thing up'
samefi (*sama-*) (IIB)	*kumefi* (*kuma-*) (IIB)	'cook'/ 'burn'
semi (I)	*kwemi* (I)[7]	'take'
sihefi (*siha-*) (IIB)	*kufi* (*ku-*) (IIB)	'leave things behind intentionally'/ 'remove food from fire'

5.2   Classes of verbs and cross-reference suffixes

Most verbs in Menggwa Dla carry cross-reference suffixes; some verbs have
one subject cross-reference suffix, while others have one subject and one object
cross-reference suffix. (Some personal pronouns also carry a cross-reference suffix
(§3.2.2; §4.6)). There are numerous sets of cross-reference suffixes, and verb
lexemes are classified into verb classes depending on which sets of cross-reference
suffixes their finite verb stem (§5.1.1) takes.

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[7] See appendix 2 for the paradigms of *semi* (*semi-/ sami-*; *dam-/ dami-/ demi-*) and *kwemi* (*kwami-/ kwemi-/ kumi-*; *kwam-/ kwami-/ kwemi-/ kumi-*).

There are five verb classes — verb class I, IH, IIB, II and III — and six sets of cross-reference suffixes — class I (subject), class IH (subject), class II subject, class II object, class III subject and class III object. Except for class III subject cross-reference suffixes, each paradigm of cross-reference suffix has two allomorphic subsets, called subset A and subset B (see below). In total there are eleven paradigms of cross-reference suffixes: class IA, IB; IHA, IHB; IIA SUBJ, IIB SUBJ, IIA OBJ, IIB OBJ; III SUBJ, IIIA OBJ, IIIB OBJ. Class I verbs take class IA or IB suffixes; class IH verbs take class IHA or IHB suffixes; class IIB verbs can only take class IIB subject and object suffixes; class II verbs take class IIA or IIB subject and object suffixes; and class III verbs take class III subject and class IIIA/ IIIB object suffixes. This is summarised in the following table.

Table 5.2   Verb classes and corresponding paradigms of cross-reference suffixes

verb classes	I	IH	II/ IIB		III	
cross-reference	IA	IHA	IIA SUBJ	IIA OBJ		IIIA OBJ
					III SUBJ	
suffixes	IB	IHB	IIB SUBJ	IIB OBJ		IIIB OBJ

With the exception of class IIB verbs which take class IIB suffixes in all environments, whether subset A or B cross-reference suffixes is used depends on the overall morphology of the verb. The following table summarises the conditioning grammatical categories in both independent and dependent clauses. The only verb forms which use subset B cross-reference suffixes exclusively are the coreferential chain verb forms (§7.2). The categories labelled 'subset B/ subset A SUBJ + subset B OBJ' requires one subset B suffix for class I and IH verbs, and one subset A subject

277

suffix plus one subset B object suffix for class IIB, II and III verbs. (See appendix 2

for a summary of all the cross-reference suffixes.)

Table 5.3   Grammatical categories and associated subset A/B cross-referencing

subset A:	subset B/ subset A SUBJ + subset B OBJ
-mbi present (stative/ transn.) (§6.1.1, §7.1.1)	semi-realis positive (§6.2)
-hi present continuous (§6.1.1)	*-Ø* present imperative (§6.3.1)
-hi simultaneous (§7.1.3)	*-ni* tentative (§6.3.3)
-hwa past (§6.1.2)	*-naho* counterfactual (§6.3.4)
-hya past (with focus) (§6.1.2, §7.1.1)	
ga- semi-realis negative (§6.2)	
-Ø future imperative (§6.3.1)	
-hwani real conditional (§7.1.2.1)	**subset B:**
disjoint-referential subjects (§7.2)	coreferential subjects (§7.2)

The following are examples of verbs in counterfactual mood which require a

subset B suffix or a subset A SUBJ plus a subset B OBJ suffix: *numuŋgwa* 'die' (class I)

takes a class IB cross-reference suffix, while *nefi* (*na-*) 'shoot' (class II) takes a class

IIA subject and class IIB object cross-reference suffix in counterfactual mood.

5-32.   *numuŋgwa-afu-naho.*

    die-2SG-CNTR

    'You would have died.' (*-afu* class IB)

278

5-33.   *na-ha-ni-naho.*

shoot-1SG-2SG:O-CNTR

'I would have shot you.' (-*ha* class IIA SUBJ; -*ni* class IIB OBJ)

Compare the counterfactual verb form in example 5-33 above with the past tense verb form in example 5-34 below which utilises subset A suffixes exclusively, and the coreferential chain verb form in example 5-35 below which utilises subset B suffixes exclusively.

5-34.   *na-ha-nya-hwa.*

shoot-1SG-2SG:O-PAST

'I shot you.' (-*ha* class IIA SUBJ; -*nya* class IIA OBJ)

5-35.   *na-Ø-hya-ni-mbo,*

shoot-CR-1SG-2SG:O-DEP

'I shot you, and…' (-*hya* class IIB SUBJ; -*ni* class IIB OBJ)

The five classes of verbs and six classes of cross-reference suffixes are introduced in §5.2.1 to §5.2.3. There are great variations in the person-number-gender combinations marked by the different sets of cross-reference suffixes. Finally, in §5.2.4, we will see that what are formally third person feminine singular (3FSG) suffixes can also function as gender-neutral or number-neutral third person cross-reference suffixes.

5.2.1 Class I and Iн verbs and cross-reference suffixes

Class I and Iн verbs carry one cross-reference suffix which cross-references with the subject. Class IA, IB, IHA and IHB cross-reference suffixes mark the same person-number-gender combinations (see §5.2 on the subset A/ B distinction), and they differ only slightly in their phonological forms. We will have a look at class I cross-reference suffixes first, and then class IH cross-reference suffixes.

The phonological shapes of class IA and class IB cross-reference suffixes are given below. The 3MSG, N1MPL and N1FPL cross-reference suffixes have two phonologically conditioned allomorphs: allomorphs which do not begin with a vowel (*-Ø, -ma, -mu, -wi*) are used when they are attached to a vowel-ending base, and allomorphs which begin with a vowel (*-u, -uma, -umu, -ei*) are used when they are attached to a consonant-ending base. The following are the class IA and class IB cross-reference suffixes. Notice that the class IA 2SG and N1MDU suffixes share the same shape *-afa*.

Table 5.4 Class IA cross-reference suffixes

		1	2	3
SG	M	*-aha*	*-afa*	*-Ø/ -u*
	F			*-wa*
DU	M	*-ehye*	*-afa*	
	F		*-efye*	
PL	M	*-efa*	*-ma/ -uma*	
	F		*-wi/ -ei*	

Table 5.5 Class IB cross-reference suffixes

		1	2	3
SG	M	*-a*	*-afu*	*-u*
	F			*-o*
DU	M	*-ehi*	*-afani*	
	F		*-efi*	
PL	M	*-efu*	*-mu/ -umu*	
	F		*-wi/ -ei*	

Class IH cross-reference suffixes mark exactly the same person-number-gender combinations as class I cross-reference suffixes, and class IH suffixes are only slightly different from class I suffixes in their phonological shapes. There are only four class IH verbs: *seru* (*ser-/ det-*) 'eat', *hanu* (*han-/ gan-*) 'go down', *hahofu* (*hah(uf/of)-/ gak(uf/of)-*) 'go up' and *ganyaru* (*ganyar-*) 'taste'. All class IH verbs have consonant ending finite verb stems. Most of the class IH cross-reference suffixes begin with a high vowel or a corresponding glide, and hence these cross-reference suffixes are called class I high — IH for short. The following are the class IHA and class IHB cross-reference suffixes. Notice that the class IHA 2SG and N1MDU suffixes share the same shape *-ufa*.

Table 5.6 Class IHA cross-reference suffixes

		1	2	3
SG	M	*-iha*	*-ufa*	*-u*
	F			*-wa*
DU	M	*-yehye*	*-ufa*	
	F		*-yefye*	
PL	M	*-yefa*	*-uma*	
	F		*-yei*	

Table 5.7 Class IHB cross-reference suffixes

		1	2	3
SG	M	*-i*	*-ufu*	*-u*
	F			*-o*
DU	M	*-yehi*	*-ufani*	
	F		*-yefi*	
PL	M	*-yefu*	*-umu*	
	F		*-yei*	

Class I and IH verbs are used in intransitive or (mono)transitive clauses (see §5.3.2). Class I and IH verbs are mostly monovalent, although there are some bivalent class I/ IH verbs like *semi* (*s[e/a]mi-/ d[e/a]m(i)-*) 'take' (grab and carry away) (class I), *simi* (*simi-/ dom-*) 'drink' (class I) and *seru* (*ser-/ det-*) 'eat' (class IH), and avalent verbs like *hwi* 'rain' (class I). Most motion verbs belong to class I

or IH, e.g. *hanu* (*han-/ gan-*) 'go down' (class IH), *kro* (*kro-/ kut-*) 'come down' (class I), and all physiological and psychological state verbs belong to class I, *e.g.* *apu* (*ap-*) 'sleep' (class I), *anyapaluku* 'be tired' (class I), *hihifu* 'be happy' (class I). Class I/IH verbs can have vowel-ending or consonant-ending finite verb stems. Verb class I and IH are closed; new verbs are entering the language as class II verbs (§5.2.2). Also see §5.3.3 on transitivity and valency of class I and class IH verbs. The following are examples of class I and class IH verbs.

5-36.   *(yo) bara-aha-hwa.*

(1)   run-1SG-PAST

'I ran.' (*bara* 'run' class I)

5-37.   *Ø-hahuf-u-Ø…*

CR-go.up-3MSG-DEP

'He went up (into the house), and…' (*hahofu* 'go up' class IH)

5-38.   *[yafli wi](=na)   suŋgwani-wa-mbi.*

[dog   child](=TOP) sick-3FSG-PRES

'The puppy is sick.' (*suŋgwani* class I)

5-39.   *(yo=na) aiahafumbo sumbu-efa-hwa.*

(1=TOP) 3SG:OBJ   laugh.at-1PL-PAST

'We laughed at him/her.' (*sumbu* 'laugh (at)' class I)

5-40. *sumblufu waŋgu=mbo ser-yefa-hwa.*

afternoon sparrow=OBJ eat-1PL-PAST

'In the afternoon we ate (the sparrows).' (*seru* (*ser-/ det-*) 'eat' class IH)

The object of a class I/ IH verb is usually not cross-referenced, as shown in example 5-39 and 5-40 above. However, if the object is a high animate and salient in the discourse, the verb can take class II subject and object cross-reference suffixes instead, in which case there would be an object cross-reference suffix which cross-references with the salient high animate object (§5.2.2). (On the other hand, class IIB, class II and class III verbs cannot substitute their class II/ III cross-reference suffixes with a class I/ IH suffix.) In example 5-41 below, the verb *serunyahwa* 's/he ate you' has the class IIA cross-reference suffixes *-Ø-nya* (-3SG-2SG:O). The verb lexeme *seru* (*ser-/ det-*) is a class IH verb lexeme, which in usual situations takes a single class IH cross-reference suffix even when there is an overt object noun phrase, as shown in example 5-40 above.

5-41. *sihafumbo yafuhwe-aha-hwa.*

2SG:OBJ dream-1SG-PAST eat-3MSG-PAST

yafuhwe-me-aha-mbo, kafuloahwi seru-Ø-nya-hwa.

dream-DR-1SG-DEP devil eat-3SG-2SG:O-PAST

'I dreamt of you. I dreamt that the devil ate you.' (*-Ø-nya* class IIA) (70I)

5.2.2 Class IIB and II verbs and class II cross-reference suffixes

Class IIB and class II verbs take two cross-reference suffixes (in verb forms which require cross-reference suffixes; §5.1.1): one cross-references with the subject

283

and the other with the object. Class IIB verbs must take class IIB cross-reference suffixes in all environments. In contrast, class II verbs take class IIA and/or IIB cross-reference suffixes depending on the overall verbal morphology (see §5.2). Take the example of the class II verb lexeme *fa* 'pick betel nut' and the class IIB verb lexeme *fefi* (*fa*-) 'leave' (monovalent/ bivalent). Both have the same finite verb stem form (§5.1.1) of *fa*-. In a coreferential chain verb form (§7.2.1), subset B cross-reference suffixes are required, thus both *fa* 'pick betel nut' (class II) and *fefi* (*fa*-) 'leave' (class IIB) take class IIB cross-reference suffixes in a coreferential chain verb.

5-42. *fa-Ø-ya-a-mbo,*

pick.betel.nut-CR-3SG-3FSG:O-DEP

'S/he picked betel nuts, and…'

(*-ya-a* class IIB)

5-43. *fa-Ø-ya-a-mbo,*

leave-CR-3SG-3FSG:O-DEP

'S/he left, and…'

(*-ya-a* class IIB)

In a disjoint-referential chain verb form (§7.2.1), subset A cross-reference suffixes are required, with the exception that class IIB verbs take subset B cross-reference suffixes regardless, thus *fa* 'pick betel nut' (class II) takes class IIA cross-reference suffixes whereas *fefi* (*fa*-) 'leave' (class IIB) takes class IIB cross-reference suffixes in a disjoint-referential chain verb.

5-44. *fa-ma-Ø-a-mbo.*

pick.betel.nut-DR-N1SG-3FSG:O-DEP

'S/he/you picked betel nut, and…'

(*-Ø-a* class IIA)

5-45. *fa-ma-ya-a-mbo.*

leave-DR-3SG-3FSG:O-PAST

'S/he left, and…'

(*-ya-a* class IIB)

Class IIA and class IIB <u>subject</u> cross-reference suffixes mark slightly different person-number-gender combinations; in singular number, class IIA SUBJ suffixes mark a first versus non-first person distinction, whereas class IIB SUBJ suffixes mark a first versus second versus third person distinction. In contrast, class IIA and class IIB <u>object</u> cross-reference suffixes mark the same person-number-gender combinations. The following are tables of class IIA and class IIB subject plus object suffixes. Notice the special forms of the subject suffixes when the object is third person masculine singular (3MSG:O) or non-first person masculine plural (N1MPL:O). In natural discourse, the forms with a third person feminine singular object (3FSG:O) are the most common as 3FSG suffixes can be functionally gender-neutral or number-neutral (§5.2.4).

Table 5.8   Class IIA subject and object cross-reference suffixes

SUBJ→ OBJ↓	1SG -ha	1DU -hwa	1PL -hu	N1MSG N1FSG -Ø	N1DU -na	N1MPL -wu	N1FPL -hi
1SG -ya				-Ø-ya	-na-ya	-wu-ya	-hi-ya
1NSG -mua				-Ø-mua	-na-mua	-wu-mua	-hi-mua
2SG -nya	-ha-nya	-hwa-nya	-hu-nya	-Ø-nya	-na-nya	-wu-nya	-hi-nya
3MSG -Ø	-hi-Ø	-hwa-Ø	-hu-Ø	-i-Ø -ya-Ø	-nwa-Ø	-wu-Ø	-hwa-Ø
3FSG -a	-ha-a	-hwa-a	-hu-a	-Ø-a	-na-a	-wu-a	-hi-a
N1DU -pa	-ha-pa	-hwa-pa	-hu-pa	-Ø-pa	-na-pa	-wu-pa	-hi-pa
N1MPL -ma/mu	-hi-ma	-ho-ma	-hu-mu	-i-ma	-no-ma	-wu-mu	-ho-ma
N1FPL -ti	-ha-ti	-hwa-ti	-hu-ti	-Ø-ti	-na-ti	-wu-ti	-hi-ti

Table 5.9   Class IIB subject and object cross-reference suffixes

SUBJ→ OBJ↓	1SG -hya	1DU -hwa	1PL -hu	2SG -wa	3MSG -ya	3FSG	N1DU -nya	N1MPL -wu	N1FPL -hi
1SG -i				-wa-i	-ya-i		-nya-i	-wu-i	-hi-i
1NSG -mu				-wa-mu	-ya-mu		-nya-mu	-wu-mu	-hi-mu
2SG -ni	-hya-ni	-hwa-ni	-hu-ni		-ya-ni		-nya-ni	-wu-ni	-hi-ni
3MSG -Ø	-hi-Ø	-ho-Ø	-hu-Ø	-o-Ø	-i-Ø	-e-Ø	-nu-Ø	-wu-Ø	-ho-Ø
3FSG -a	-hya-a	-hwa-a	-hu-a	-wa-a	-ya-a		-nya-a	-wu-a	-hi-a
N1DU -pu~pwi	-hya-pu	-hwa-pu	-hu-pu	-wa-pu	-ya-pu		-nya-pu	-wu-pu	-hi-pu
N1MPL -mo/mu	-hi-mo	-ho-mo	-hu-mu	-o-mo	-i-mo		-nu-mu	-wu-mu	-ho-mo
N1FPL -ti	-hya-ti	-hwa-ti	-hu-ti	-wa-ti	-ya-ti		-nya-ti	-wu-ti	-hi-ti

Class IIB verbs are used in transitive clauses, while class II verbs are used in transitive or ditransitive clauses (see §5.3.2). Verb class IIB includes avalent, monovalent and bivalent verbs, and verb class II includes bivalent and trivalent verbs. Examples of class IIB verbs are:

- avalent (only one known): *efifi* (*efi-*) 'become dark/ night';

- monovalent: *kefi* (*kefi-*) 'break (monovalent)'; and

- bivalent: *numufi* (*numu-*) 'wear', *kefi* (*ka-*) 'break (bivalent)'.

Examples of transitive class II verbs are:

- bivalent: *bi* (*bi-*) 'hold', *nefi* (*na-*) 'shoot'; and

- trivalent: *nafi* (*nafi-*) 'show', *tohaloa* 'school/ teach'.

The non-finite verb stem form (§5.1.1) of most class IIB verbs has a *fi* ending, and the corresponding finite verb stem form is usually the non-finite verb stem form minus the *fi* ending, e.g. *pifi* (*pi-*) 'throw' (class IIB). If the non-finite verb stem form ends in *efi*, the finite verb stem form usually ends in *a*, e.g., *samefi* (*sama-*) 'cook/ burn' (class IIB), *fefi* (*fa-*) 'leave' (class IIB). Except the verb lexeme *hafu* (*haf(a(f))-/ gaf(a(f))-*) 'go pass/ across' (class IIB) which has consonant-ending finite verb stem in some instances, all class IIB and class II verbs have vowel-ending finite verb stems. All new verbs, even monovalent ones, are entering the languages as class II verbs, e.g. *tumbaiŋgi* 'pray/ have mass' (monovalent) from Malay *semahyang* 'worship', *bli* 'buy' (bivalent) from Malay *beli* 'buy', *tuholwa* 'teach' (bivalent/ trivalent) from the Malay noun form *sekolah* 'school' and Tok Pisin verb *skul* 'to school'.

The following are examples demonstrating class IIB and class II verbs and cross-reference suffixes.

5-46. haf pas siks *dukwa-hya-a-hwa.*

half past six wake.up-1SG-3FSG:O-PAST

'I woke up at half past six.'

(*dukwefi* (*dukwa-*) 'wake up' (monovalent) class IIB; *-hya-a* class IIB)

5-47. (ai＝na) (aiahafumbo) hamani *homba-ya-Ø-hwa.*

(3＝TOP) (3SG:OBJ) yesterday see-N1FSG-N1MSG:O-PAST

'She saw him yesterday.' (*homba* 'see' class II; *-ya-Ø* class IIA)

5-48. *hufu   homba-Ø-i-Ø-mbo,*

    sun   see-CR-3MSG-3MSG:O-DEP

    'He saw the sun, and…' (*homba* 'see' class II; *-i-Ø* class IIB)

5-49. *ai bani＝mbe o hwatmali o   naho sama-Ø-hi-a-mbo,*

    3 sago＝INN or leafy.vege or what cook-CR-3FPL-3FSG:O-DEP

    'They cook it with sago, leafy vegetables, etc.'

    (*samefi* (*sama-*) 'cook/ burn' class IIB; *-hi-a* class IIB)

5-50. *sumblufu yari-hu-a-hwa.*

    afternoon stir.sago-1PL-3FSG:O-PAST

    'In the afternoon we stirred sago.'

    (*yarifi* (*yari-*) 'stir sago' class IIB; *-hu-a* class IIB)

5.2.3   Class III verbs and cross-reference suffixes

There is only one class III verb lexeme: *sefi* (*sa-/ da-*) 'give', and all clauses with *sefi* (*sa-/ da-*) 'give' are ditransitive (see §5.3.2). Its cross-reference suffixes cross-reference with the subject and the object (the recipient) of the clause. The second object (the theme/ 'gift') is not cross-referenced on the verb. First object (pro)nominals are in object case ＝*mbo* (§4.5.1), whereas subjects and second objects are zero case-marked (§5.3.1).

There is no subset A/B distinction (§5.2) for class III SUBJ suffixes. The class III subject and object cross-reference suffixes combine with no irregularities. A free variation of the first person singular (1SG) subject verb base *sa-niŋga-* is *seku-*, e.g.

both *sa-niŋa-nya-hwa* (give-1SG-2SG:O-PAST) and *seku-nya-hwa* (give:1SG-2SG:O-PAST) mean 'I gave you'. The future verb base counterpart of *seku-* is *deku-*, e.g. both *deku-ni-mby-a* (give:FUT:1SG-2SG:O-POS:SMR-1SG) and *da-niŋa-ni-mby-a* (give:FUT-1SG-2SG:O-POS:SMR-1SG) mean 'I will give you'. The class IIIB non-first person dual (N1DU) object suffix varies freely between *-po* and *-pwi* (only *-po* is shown in the table below).

Table 5.10   Class IIIA/ IIIB subject and object cross-reference suffixes

SUBJ→ OBJ↓	1SG -niŋa	1DU -niŋwa	1PL -niŋu	2SG -mba	3SG -ka	N1DU -mbana	N1MPL -mbu	N1FPL -niŋi
1SG								
-ya				-mba-ya	-ka-ya	-mbana-ya	-mbu-ya	-niŋi-ya
-i				-mba-i	-ka-i	-mbana-i	-mbu-i	-niŋi-i
1NSG								
-mua				-mba-mua	-ka-mua	-mbana-mua	-mbu-mua	-niŋi-mua
-mu				-mba-mu	-ka-mu	-mbana-mu	-mbu-mu	-niŋi-mu
2SG								
-nya	-niŋa-nya	-niŋwa-nya	-niŋu-nya		-ka-nya	-mbana-nya	-mbu-nya	-niŋi-nya
-ni	-niŋa-ni	-niŋwa-ni	-niŋu-ni		-ka-ni	-mbana-ni	-mbu-ni	-niŋi-ni
3SG								
-wa	-niŋa-wa	-niŋwa-wa	-niŋu-wa	-mba-wa	-ka-wa	-mbana-wa	-mbu-wa	-niŋi-wa
-u	-niŋa-u	-niŋwa-u	-niŋu-u	-mba-u	-ka-u	-mbana-u	-mbu-u	-niŋi-u
N1DU								
-pa	-niŋa-pa	-niŋwa-pa	-niŋu-pa	-mba-pa	-ka-pa	-mbana-pa	-mbu-pa	-niŋi-pa
-po	-niŋa-po	-niŋwa-po	-niŋu-po	-mba-po	-ka-po	-mbana-po	-mbu-po	-niŋi-po
N1MPL								
-pu	-niŋa-pu	-niŋwa-pu	-niŋu-pu	-mba-pu	-ka-pu	-mbana-pu	-mbu-pu	-niŋi-pu
-pu	-niŋa-pu	-niŋwa-pu	-niŋu-pu	-mba-pu	-ka-pu	-mbana-pu	-mbu-pu	-niŋi-pu
N1FPL								
-ti	-niŋa-ti	-niŋwa-ti	-niŋu-ti	-mba-ti	-ka-ti	-mbana-ti	-mbu-ti	-niŋi-ti
-ti	-niŋa-ti	-niŋwa-ti	-niŋu-ti	-mba-ti	-ka-ti	-mbana-ti	-mbu-ti	-niŋi-ti

(top: class IIIA; bottom: class IIIB)

The following sentences exemplify the class III verb lexeme *sefi* (*sa-*/ *da-*).

5-51. *(si) (yoambo) wamla   sa-mba-i-Ø!*

(2) (1SG:OBJ) betel.nut give-2SG-1SG:O-IMP

'Give me the betel nut(s) (now)!' (*-mba* class III, *-i* class IIIB)

5-52. *Nola=mbo wanu   da-niŋa-u-mby-a.*

Nola=OBJ   money give:FUT-1SG-3SG:O-POS:SMR-1SG

'I will give Nola money.' (*-niŋa* class III, *-u* class IIIB, *-a* class IB)[8]

5.2.4   The gender-/ number-neutral 3FSG cross-reference suffixes

Other than indicating that a reference is third person, feminine and singular,

the 3FSG cross-reference suffixes can also be used in another way: what are formally

3FSG cross-reference suffixes can function as gender- or number-neutral third person

cross-reference suffixes for third person non-human references.[9] A gender-/

number-neutral 3FSG suffix can only be used when the non-human referent is 'easily

accessible', i.e. satisfying at least one of these conditions:

- the referent is introduced (or re-introduced) by a nominal earlier in the clause;

- the syntactic relation of the reference has not changed since the last clause;

- the referent is the only salient non-human referent in the discourse.

The gender-/number-neutral 3FSG suffixes are phonologically simpler than ordinary

cross-reference suffixes.[10] In a referent accessibility hierarchy like Ariel's

'accessibility marking scale' (1990), the gender-/number-neutral 3FSG suffixes,

which are phonologically simpler, would occupy a position closer to the 'most

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[8] The positive semi-realis verb *samby* (§6.2.1) takes class I(B) cross-reference suffixes (§5.2.1).
[9] These gender-/number-neutral 3FSG cross-reference affixes are referential, unlike the semantically-empty 3FSG cross-reference suffixes which do not have referents (§5.3.2.2).
[10] The number of forms of ordinary cross-reference suffixes hugely outnumber the forms of gender-/ number-neutral cross-reference suffixes, and 3FSG cross-reference suffixes most usually have forms which are simpler than other cross-reference suffixes (§5.2.1-3).

accessible' end than the ordinary cross-reference suffixes ('person affixes' in Ariel 1990).

In the first clause of the example below, the 'inherent' single number feature of the 3FSG object suffix -*a* obviously does not match that of the noun phrase *wamla imbu* 'two (bunches of) betel nuts'. From an interpretation point of view, the referent of the subject cross-reference suffix -*ha* (1SG) is obviously the author of the speech; the referents of the object suffix -*a* (3FSG) are then most likely to be *wamla imbu* due to the semantics of the verb *fa* 'pick betel nut' (class II). Functionally speaking, this 3FSG object suffix -*a* is number-neutral. The object of the first clause is coreferential with the object of the second clause, and it is again expressed by a number-neutral 3FSG object suffix -*a*.

5-53.   *wamla   imbu   fa-ha-a-hwa.*

   betel.nut   two   pick.betel.nut-1SG-3FSG:O-PAST

   alu=mbe   saku-Ø-hwa-a-Ø,

   string.bag=INS put.in-CR-1DU-3FSG:O-DEP

   semi-ehye-hwa.

   take-1DU-PAST

   'I picked two (bunches of) betel nut. We put them into the string bag, and we took (the string bag).' (N)

In the first clause of the following example, the object *tu imbupa* 'only two eggs' is 'correctly' cross-referenced as dual.[11] In the second and third clause the

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[11] Probably because the clitic =*pa* has a focusing function (§4.5.7).

objects are cross-referenced with a number-neutral 3FSG suffix; the objects of the second and third clause are interpreted as coreferential with the subject of the first clause.

5-54. *tu   imbu＝pa   ka-hwa-**pu**-mbo,*

     egg two＝only break-1DU-<u>N1DU:O</u>-DEP

     *fafa-hwa-**a**-Ø,*

     cook.egg-1DU-<u>3FSG:O</u>-DEP

     *ser-yehi fa-hwa-**a**   Ø-numb-ehi-mbo,*

     eat-1DU COMPL-1DU-<u>3FSG:O</u> CR-STAT-1DU-DEP

     'We broke only two eggs, and we cooked the eggs, and after we have eaten them…' (N)

Gender- or number-neutral 3FSG suffixes are mostly used to encode less-salient referents (the 'betel nuts' in example 5-53 above and the 'eggs' in example 5-54 above are not mentioned again in the rest of the text *Nimi Wami Kaku* 'Hunting in the Mountains'). However, salient non-human referents can also be cross-referenced by a gender-/ number-neutral 3FSG suffix. The following examples are from the text *Amamola Hwafo* 'The moon's story'. The main protagonist *amamo* 'moon', which is masculine in gender, is sometimes cross-referenced by a gender-neutral 3FSG cross-reference suffix; the addressee would have no problem interpreting these gender-neutral 3FSG cross-reference suffixes as referring to the moon as the moon is the only salient non-human protagonist throughout the text. The cross-reference suffixes which are underlined in the following examples all cross-reference with the masculine moon.

5-55. *hwi=mbe=na   sa-ya-a   Ø-han-u̱-mbo,*

       water=INS=TOP take-3SG-3FSG:O CR-go.down-3MSG-DEP

       ani   a [num-wa-mbi] fla=mbe, numu-a=mbe ser-u̱-Ø,

       there ah [sit-3FSG-PRES] place=INS sit-place=INS eat-3MSG-DEP

       'Into the water it (the moon) took them and went down, and in the place

       where it lives ('sit'), in its living place it eats, and…' (A)

5-56. *homba-i-Ø   Ø-nuŋg-u-mbo,*

       see-3MSG-3MSG:O CR-SEQ-3MSG-DEP

       alu   baya muriha-ya-a-mbo,

       string.bag side take.out-3SG-3FSG:O-DEP

       'He looked at it (the moon), and he took it out of the string bag, and…' (A)

       In *Amamola Hwafo*, the masculine 'moon' is cross-referenced by a 3FSG

suffix in five clauses and 'correctly' by a third person masculine (3MSG) suffix in

twenty-two clauses (there are also two clauses where the moon is cross-referenced

only by cross-reference suffixes which do not mark gender, namely class II

third/non-first person singular (3SG/ N1SG) subject cross-reference suffixes; §5.2.2).

Gender-neutral 3FSG suffixes are rare as there are not many non-human entities

which are masculine in gender (§4.2).

5.3   Grammatical relations, semantic roles, transitivity and valence

       In this section are discussions on grammatical relations (§5.3.1), transitivity

(§5.3.2), and semantic roles and valency (§5.3.3). Grammatical relations are aligned

in an accusative-secundative alignment (§5.3.1). The transitivity of a clause does not necessarily match the valency of the predicate, and there are semantically empty cross-reference suffixes (§5.3.2). On the other hand, there are no voice oppositions and 'real' morphological valence-adjusting operations in Menggwa Dla (see §5.3.3).

5.3.1 Grammatical relations

Prototypically, core grammatical relations represent semantic arguments, and oblique relations represent semantic adjuncts. However, core grammatical relations can sometimes be semantically empty, i.e. not representing semantic arguments (§5.3.2.2).

Core grammatical relations in intransitive and transitive[12] clauses are aligned in a nominative-accusative alignment, and the objects in transitive and ditransitive clauses are aligned in a first-second object alignment (i.e. the recipient relation in a ditransitive clause is marked in the same manner as a transitive object). These two alignments are known collectively as the 'nominative-secundative'[13] alignment. The intransitive subject [S] and the transitive/ ditransitive subject [A] are collectively referred to as the 'subject', the transitive object [P] and the ditransitive first object [R] are collectively referred to as the 'object', and the ditransitive second object [T] is referred to as the 'second object'.

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[12] 'Transitive' here means 'monotransitive', i.e. having one subject and one object. It is potentially confusing that the term 'monovalent' means having one semantic argument, while the term 'transitive' involves two core grammatical relations, and hence the term 'monotransitive' is avoided here. There are indeed verbs like *kefi* 'break' (monovalent) (class IIB) which are monovalent-(mono)transitive (§5.3.3); having the same prefix *mono-* used for both valency and transitivity can be confusing.
[13] The term 'secundative' as used by, e.g., Siewierska (2004).

Figure 5.11   Morphosyntactic alignment of core grammatical relations
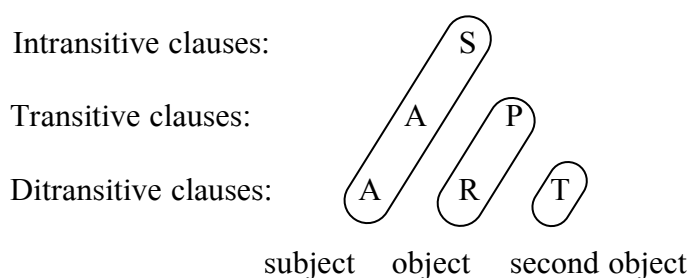
Cross-referencing (§5.2) operates in the nominative-secundative alignment. Class I and class IH verbs have one subject cross-reference suffix, while class IIB, class II and class III verbs have one subject cross-reference suffix plus one object cross-reference suffix. Second objects are never cross-referenced on the verb. Oblique relations are also not cross-referenced on the verb (there is no applicative morphology which promotes an oblique relation to become a core relation). Class I/ IH verbs are used in intransitive clauses, class I/ IH/ IIB/ II verbs are used in transitive clauses and class II/ III verbs are used in ditransitive clauses (§5.3.2).

Table 5.12   Cross-referencing of grammatical relations in verbal clauses[14]

	subject	object	second object	(oblique)
intransitive clause, class I/IH verb	yes	—	—	(no)
transitive clause, class I/IH verb	yes	no	—	(no)
transitive clause, class IIB/II verb	yes	yes	—	(no)
ditransitive clause, class II/III verb	yes	yes	no	(no)

---

[14] This excludes non-finite chain verbs (§7.3.1) which carry no cross-reference suffixes at all.

```
        (OBL)        (OBJ)        SUBJ
          ↓            ↓            ↓
5-57.  (yulu=na)   (yari=mbo)   ser-u-hi.

       (leg=ALL)   (sago=OBJ)   eat-3MSG-PRES:CONT

       'He eats (sago) (with legs).'  (e.g. a person with no arms)

       (seru (ser-/ det-) 'eat' class IH)
```

```
        (OBL)          OBJ    2ND OBJ      SUBJ  OBJ
          ↓             ↓       ↓           ↓    ↙
5-58.  (wuli=mbe)   yoambo   wanu    sa-mba-i-hwa.

       (house=INS)  1SG:OBJ  money   give-3SG-1SG:O-PAST

       'S/he gave me money (inside the house).'  (sefi (sa-/ da-) 'give' class III)
```

With case marking, objects ([P]/ [R]) can take the object case clitic =*mbo* (§4.5.1; the object case =*mbo* is not obligatory in Menggwa Dla), while both subjects ([S]/ [A]) and second objects ([T]) are zero case-marked. This is, strictly speaking, not a nominative-secundative alignment as the [A] and [T] relations are not marked distinctly. Even without distinct case marking, subject (pro)nominals and second object nominals can be easily distinguished by: a) cross-referencing ([A]s are cross-referenced in verb forms which carry cross-referencing, and [T]s are never cross-referenceed; b) the semantics of the verb and (pro)nominals (subjects are most usually animate and second objects are most usually inanimate); and c) the context. On the other hand, there is a wide range of semantic case clitics available for the oblique relations (§4.5).

Table 5.13   Case marking of grammatical relations

subject	object	second object	oblique
Ø	(=*mbo*)	Ø	various semantic cases (§4.5)

```
      SUBJ      OBJ       2ᴺᴰOBJ
       ↓         ↓          ↓
```
5-59.   <u>Benedict</u> <u>sista=*mbo*</u> *<u>ayamu</u>* *<u>wuli</u>*   *nafi-Ø-ti-hwa.*

<u>Benedict</u> <u>sister=OBJ</u> <u>chicken</u> <u>house</u> show-3SG-N1FPL:O-PAST

'Benedict showed the sisters the chicken coup.' (*nafi* 'show' class II)

There are also other areas of morphosyntax which make reference to the nominatively- and secundatively-aligned core relations and the oblique relations. Firstly, the three core-grammatical relations can be distinguished by their behaviour in terms of pronominalisation: pronouns in subject positions come in the form of citation pronouns, pronouns in object positions come in the form of object pronouns, and second objects cannot be pronominalised (§4.6). Personal pronouns in Menggwa Dla are only used to refer to high animates (§4.6). Nevertheless, in some rare cases, oblique relations can have human referents, and they can be pronominalised in the form of an object or genitive pronoun encliticised with a case clitic (see §4.6.2).

```
      SUBJ    OBJ         2ᴺᴰOBJ
       ↓       ↓            ↓
```
5-60.   <u>ai</u> *<u>aiaheimbo</u>* *<u>ayamu</u>* *<u>wuli</u>*   *nafi-Ø-ti-hwa.*

<u>3</u> <u>3FPL:OBJ</u>   <u>chicken</u> <u>house</u> show-3SG-N1FPL:O-PAST

'S/he showed them the chicken coup.' (*nafi* 'show' class II)

OBL
↓

5-61. **_yowala=hya_**   *semi-Ø-hwa.*

1SG:GEN=ABL   get-3MSG-PAST

'He got it from me.' (*semi* (*s[a/e]mi-*/ *d[a/e]m(i)-*) 'get' class II)

Secondly, relativisation (§7.1.1) also makes indirect reference to grammatical relations. Relative clauses can be externally-headed or internally-headed: relative clauses are externally-headed when the position relativised is cross-referenced on the relative clause verb, and internally-headed when the position relativised is not cross-referenced on the relative clause verb (§7.1.1).[15] In relative clauses, of which the verb is subordinate, subjects are always cross-referenced, objects are sometimes cross-referenced, and second objects and obliques are never cross-referenced. This means that relative clauses are externally-headed when the position relativised is the subject or the object in some occasions, and internally-headed when the position relativised is the second object, an oblique, or object in some occasions. See §7.1.1 for examples.

Thirdly, there is one syntactic property which distinguishes subject from other grammatical relations: only subjects can be the pivots for switch-reference, i.e. the references which switch-reference markers monitor as being coreferential or disjoint-referential (§7.2). Cross-linguistically, being switch-reference pivots is not a very good indicator of subjecthood as switch-reference pivots are not always the syntactic subjects in some languages (in other languages a switch-reference marker

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[15] As cross-reference suffixes are pronominal (§5.3.2), cross-reference suffixes within externally-headed relative clauses are functionally similar to resumptive pronouns in relative clauses in other languages.

298

may select its switch-reference pivots by criteria like agentivity, animacy and/ or 'topicality' instead of syntactic criteria). However, the switch-reference pivots are always the subjects in Menggwa Dla, with no exceptions. See §7.2.2 for examples.

5.3.2   Transitivity and expressions of core grammatical relations

Traditionally, transitivity refers to the number and type of core grammatical relations which are expressed in a clause. In Menggwa Dla, core grammatical relations can be expressed as cross-reference suffixes and/or (pro)nominals.[16] However, neither of them is necessarily present in a clause: on one hand, nominals are more often than not elided and pronouns are rarely used; on the other hand, clauses can be headed by a non-finite chain verb (§7.3.1) which do not carry cross-reference suffixes.

A cross-reference suffix need not cooccur with a nominal which it cross-references with. In fact clauses often consist of a single verb. This shows that the cross-reference suffixes in Menggwa Dla can be pronominal, i.e. they can be expressions of grammatical relations on their own.

5-62.   *hwahwa-__wa__-mbi.*

know-3FSG-PRES

'She knows.' (*hwahwa* 'know' class I)

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[16] 'Expression of core grammatical relation' is not the same as expressions which 'fill argument positions' in the sense of formal theories like Lexical Function Grammar (LFG) and Government & Binding (GB) where there can only be one expression which fills a syntactic argument position ('function-argument biuniqueness' in LFG and 'theta criterion' in GB). 'Expression of core grammatical relation' here simply means an expression which is capable of being the sole overt expression of a grammatical relation in a clause. Alternatively, in case a grammatical relation is not expressed by any overt expressions in a clause, 'expression of core grammatical relation' means any posited zero pronouns which: a) express a core relation; and b) have clearly recoverable antecedents.

5-63.   *sana-Ø-**hya-a**-Ø,*

put.on.top-CR-1SG-3FSG:O-DEP

'I put it on top, and…' (*sanefi* 'put on top' class IIB)

In a serial verb construction, the same core grammatical relation can be represented by more than one cross-reference suffix. In the following example with serialised coreferential chain verbs (§7.2), the subject 'he' is expressed by three subject cross-reference suffixes (*-u, -ya, -u*) and the object 'us' is expressed by one object cross-reference suffix (*-mu*).

5-64.   *hwafo-**u**   fa-**ya-mu**   Ø-nuŋg-**u**-mbo,*

talk-3MSG   COMPL-3SG-1NSG:O   CR-SEQ-3MSG-DEP

'He talked to us, and…' (*hwafo* 'talk' class I, *fefi* class IIB, *nuŋgu* class I)

On the other hand, nominals and pronominals can also act as expressions of core grammatical relations. This can be easily demonstrated in non-finite chain clauses (§7.3.1). The predicate of non-finite chain clauses — the non-finite chain verb — does not carry cross-reference suffixes, and the (pro)nominals (or zero pronouns) are the only expressions of grammatical relations in such clause.[17] In the following non-finite chain clause, the non-finite chain verb *numuli-Ø* (remove-DEP) carries no cross-reference suffixes; the subject is expressed by a zero (which can be substituted by a nominal like *nyewi* 'people') and the object is expressed by the

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[17] If only the cross-reference suffixes are recognised as expressions of the core grammatical relations, then all non-finite chain clauses would have to be considered zero-intransitive; this would defeat the purpose of classifying clauses based on transitivity.

nominal *hwela* 'skin' which can be encliticised by an object clitic *=mbo* (§4.5.1).

The nominal *palaŋgi=nambo* (machete = ALL) 'with machete' is an oblique relation.

5-65. Ø *palaŋgi=nambo* **hwela** *numuli-Ø,*

      machete = ALL   skin   remove-DEP

     '(People) remove the bark with machetes, and…' (B)

     Even with verbal clauses which carry cross-reference suffixes, there are cases where an object or a second object is not cross-referenced and can only be expressed as a nominal or pronominal. For instance, some bivalent verbs have only one cross-reference suffix (verb class I/IH), and all trivalent verbs have only two cross-reference suffixes (verb class II/III); their objects and second objects respectively can only be expressed as a (pro)nominal or a zero (§5.3.1).

Bivalent, one cross-reference suffix (objects realised as (pro)nominal):

5-66. **yari=mbo** *Ø-ser-o-mbo,*

     sago = OBJ   CR-eat-3FSG-DEP

     'She ate sago, and…' (*seru* (*ser-*/ *det-*) 'eat' class IH)

5-67. **sihafumbo** *humbli-aha-hwa.*

     2SG:OBJ   hear-1SG-PAST

     'I heard you.' (*humbli* 'hear' class I)

Trivalent, two cross-reference suffixes (second objects realised as nominals):

5-68. *[**malai fafo**]*   *tohaloa-Ø-hi-mu-mbo,*

     [Malay language] school-CR-N1FSG-1NSG:O-DEP

     'They taught us Malay, and…' (*tohaloa* 'school/ teach' class II)

5-69. ***buku** nafi-hi-Ø-hwa.*

     book   show-1SG-3MSG:O-PAST

     'I showed him the book.' (*nafi* 'show' class II)

There are also numerous cases where a core grammatical relation is expressed by both a (pro)nominal and a cross-reference suffix. In the following examples, the subjects are expressed as both (pro)nominals and cross-reference suffixes.

5-70. ***yo=pa** [ilohe (< ilo-ha-a-hi)]*   *Ø-num-a-mbo,*

     1=only   work-1SG-3FSG:O-SIM   CR-sit-1SG-DEP

     'Only I work and live here, and…' (S)

5-71. *[**mafwa [uti]**   **[iploa]**] numuŋgwa-wa-hwa.*

     [all   [shrimp] [fish]]   die-3FSG-PAST

     'All the shrimps and fish died.' (50I)

In the example below, both the subject and object are expressed as both pronominals and cross-reference suffixes.

5-72. **yo=na sihafumbo** *yafuhu-ha-nya-mbi.*

    1=TOP   2SG:OBJ   want.favour.from-1SG-2SG:O-PRES

    'I want you to do (me) a favour.' (60I)

When a (pro)nominal cooccurs with a corresponding cross-reference suffix, there is the question of whether the cross-reference suffix or the (pro)nominal occupies the argument position (see footnote 16), i.e. whether the cross-reference suffixes are 'pronominal agreement' (occupying argument positions) or 'grammatical agreement' (not occupying argument positions) in the sense of Bresnan and Mchombo (1987). I leave this question unanswered; I adopt a theory-independent view that a core grammatical relation can be expressed by both a cross-reference suffix and an agreeing (pro)nominal.[18] After all, the full interpretation of a semantic argument may sometimes need to be established by both a (pro)nominal and an agreeing person marker, even in a language like English which is said to only have 'grammatical agreement' only, e.g. in a sentence like *the fish eat-Ø everything I drop into the tank.* In Menggwa Dla, there are also cases where the full interpretation of a semantic argument can only be established by both a (pro)nominal and a cross-reference suffixes. In the following example, the citation pronoun *si* (§4.6.1) has a more specific person feature than the cross-reference suffix *-efi* (class IB; §5.2.1), but the cross-reference suffix *-efi* carries number and gender features which the pronoun *si* lacks. Together the pronoun and the cross-reference suffix

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[18] Nonetheless, this 'theory-independent' view is in a lot of ways akin to the position taken by Barlow (1992) and Pollard & Sag (1988). For Barlow, agreement is not a morphosyntactic notion where morphosyntactic features have to be matched between two linguistic expressions, nor a semantic notion where certain semantic properties of one or a group of referents are expressed; agreement is a discourse notion where both the agreement expression and the agreed reference contribute to the identification and characterisation of the discourse referents.

contribute to the person-number-gender features of second person feminine dual (2FDU) of the subject reference.

5-73.   si   dani=hi   Ø-num-efi-Ø,

    2   this=ADS   CR-sit-N1FDU-DEP

    'You two sat here, and…'

(See also Siewierska (2004:121-127) on the conflicting arguments on what is considered 'pronominal agreement' and 'grammatical agreement' by different linguists.)

So far we have seen that a core grammatical relation can be expressed by a cross-reference suffix and/ or a (pro)nominal. We will now have a look at examples of clauses with different transitivity: in clauses with fully referential cross-reference suffixes (§5.3.2.1), in clauses with semantically-empty cross-reference suffixes (§5.3.2.2), and in clauses with no cross-reference suffixes, i.e. non-finite chain clauses (§5.3.2.3).

<u>5.3.2.1   Clauses with fully referential cross-reference suffixes</u>

Earlier in this §5.3.2 we have seen that valency refers to the number of semantic arguments a verb requires, and transitivity refers to the number of grammatical relations which are expressed as cross-reference suffixes/ (pro)nominals or ellipsed. Most cross-reference suffixes in natural discourse are referential (i.e. they have referents) because the valency of the very is equal or higher than the number of cross-reference suffixes. The transitivity of that clause is also equal or

higher than the number of cross-reference suffixes as cross-reference suffixes are themselves expressions of core grammatical relations (§5.3.2).

Class I and class Iʜ verbs have one subject cross-reference suffix (§5.2.1); clauses with a class I or class Iʜ verb can be intransitive and monovalent/ bivalent, or transitive and bivalent. Class IIʙ, class II and class III verbs have a subject cross-reference suffix and an object cross-reference suffix (§5.2.2). Clauses with a class IIʙ verb are transitive and bivalent; clauses with a class II verb can be transitive and bivalent/ trivalent, or ditransitive and trivalent. Clauses with the class III verb *sefi* (*sa-/ da-*) 'give' are ditransitive and trivalent. These relationships are summarised in the table below.

Figure 5.14   Verb class membership, transitivity and valence in clauses with fully referential cross-reference suffixes

class I verbs		
class Iʜ verbs	intransitive ⟷ monovalent
class IIʙ verbs	transitive ⟷ bivalent
class II verbs	transitive ⟷ bivalent
class III verbs	ditransitive ⟷ trivalent
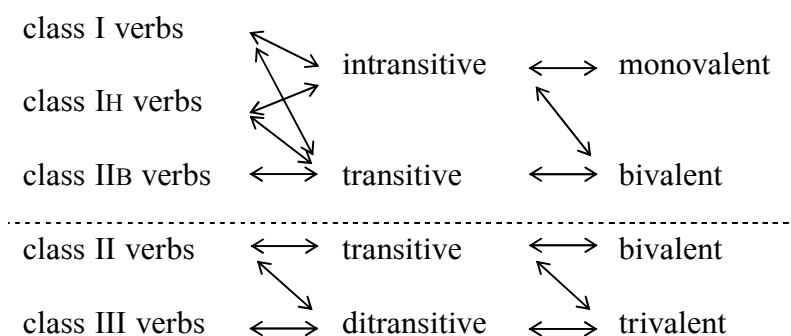
The following are examples of monovalent intransitive class I and class Iʜ verbs. The subject is expressed by the subject cross-reference suffix, and optionally also a subject (pro)nominal. (Subject nominals are zero-case marked, and subjects can be pronominalised; §5.3.1.)

5-74. *ap-**aha**-hi.*

sleep-1SG-PRES:CONT

'I am sleeping.' (*apu* (*ap-*) 'sleep' class I)

5-75. ***bahu*** *pi-**wa**-mbi.*

flying.fox go-3FSG-PRES:TRANSN

'The flying fox flew away.' (*pi* (*pi-*/ *po-*) 'go' class I)

5-76. *rani bohoni **amamo** rani hwi=mbe Ø-num-**u**-mbona...*

DEM before   moon   DEM water=INS CR-sit-3MSG-DEP

'Once upon a time the moon lived in the water, and…' (A)

5-77. ***ai*** *hwi=na   Ø-han-**u**-mbo.*

3   water=ALL CR-go.down-3MSG-DEP

'He went down towards the water, and…'

(*hanu* (*han-*/ *gan-*) 'go down' class IH)

The following are examples of clauses with a transitive class I or class IH verb. In the following examples, the objects are expressed as nominals (§5.3.1).

5-78. *yo **sihafa   dia=mbo** hwahwa-aha-hi.*

1   2SG:GEN name=OBJ know-1SG-PRES:CONT

'I know your name.' (*hwahwa* 'know' class I)

5-79. **_ufati=mbo_**   _simi-aha-hwa._

medicine＝OBJ drink-1SG-PAST

'I took the medicine.' (_simi_ (_simi-_/ _dom-_) 'drink' class I)

5-80. **_mamo(=mbo)=pa_**   _ser-iha-hwa._

one(＝OBJ)＝only   eat-1SG-PAST

'I ate only one.' (_seru_ (_ser-_/ _det-_) 'eat' class IH)

The object nominal of such clauses can, however, be elided. Such bivalent transitive clauses can be easily mistaken with a bivalent intransitive clause with a class I(H) verb. In the former case, the object can be zero-pronominlised and the identity of the object is easily recoverable (example 5-81 below). In the latter case, the identity of the undergoer is so insignificant to the discourse that it is not expressed as a grammatical relation (example 5-82 below).

One cross-reference suffix, transitive, bivalent:

5-81. _(rani=mbo nonofo-Ø-a-mbo,) ye   Ø ser-iha-hwa._

(DEM＝OBJ smell-CR-1SG-DEP) then   eat-1SG-PAST

'(I smelt it $_j$, and) then I ate Ø $_j$.'

One cross-reference suffix, intransitive, bivalent:

5-82. _(dukwa-Ø-hya-a-mbo,)_   _ye   ser-iha-hwa._

(wake.up-CR-1SG-3FSG:O-DEP   then eat-1SG-PAST

'(I woke up, and) then I ate.'

Some class I/IH verbs which usually depict monovalent-intransitive situations can be used to depict the causative bivalent-transitive version of the situation. For instance, *nuŋgu* (*nu[mb/ŋg]-*) 'stand' (class I) usually depicts a monovalent-intransitive situation.

5-83. *akani=hi*   *Ø-numb-a-mbo,*

there=ADS CR-stand-1SG-DEP

'I was standing there, and…'

However, the same class I verb can also mean 'cause to stand'. In the following example, the object is expressed by the nominal *yaplu* 'coconut stalk'.

5-84. **_yaplu_**   *hya*   *Ø-numb-a-mbo,*

coconut.stalk EMPH CR-cause.stand-1SG-DEP

'I would set up ('cause stand') the coconut stalk, and…' (B)

In another example, *pi* (*pi-/ po-*) 'go' (class I) usually depicts a monovalent-intransitive situation. However, *pi* can also mean 'cause to go'. In the following example, the verb *pi* in the first chain clause means 'cause to go' and the verb *pi* in the second chain clause means 'go'. Both verbs take class I cross-reference suffixes. The object of the first chain clause — in other words, the causee — is coreferential with the subject of the second chain clause.

5-85. *[Ø hli-aha-hi]   pi-a   ma-hya-a   Ø-numb-a-mbo,*

    [scrape-1SG-SIM] cause.go-1SG COMPL-1SG-3FSG:O CR-SEQ-1SG-DEP

    ye   pi-Ø-o-mbo,

    then go-CR-3FSG-DEP

    'While scraping Ø (the pith of the interior of sago palm) I would make all the

    pith loose ('cause go'), and then the pith would become loose ('go'), and…'

    (B)

Class IIB verbs are always transitive as they have two cross-reference suffixes. Class IIB verbs are mostly bivalent (for class IIB verbs which are monovalent or avalent, see §5.3.2.2).

5-86. *yaŋgi-wu-a-hwa.*

    wake.up-N1MPL-3FSG:O-PAST

    'They woke her up.' (*yaŋgifi* (*yaŋgi-*) 'wake up (bivalent)' class IIB)

5-87. *imbu(=mbo) ka-hya-pu-hwa.*

    two(=OBJ)   break-1SG-N1DU:O-PAST

    'I broke two of them.' (*kefi* (*ka-*) 'break (bivalent)' class IIB)

Class II verbs are transitive and mostly bivalent.

5-88. *(si/ ai) (yohwehimbo/ yohwefumbo) homba-Ø-mwa-hwa.*

    (2/ 3) (1DU:OBJ/   1PL:OBJ)   see-N1SG-1NSG:O-PAST

    'You/s/he saw us.' (*homba* 'see' class II)

5-89.   *hupla(=mbo)*   *papa-Ø-hya-a-mbo,*

       container(=OBJ)   wash-CR-1SG-3FSG:O-DEP

       'I washed the pot, and…' (*papa* 'wash' class II)

The class II verb lexemes of *nafi* 'show' and *tohaloa* 'school/ teach' are trivalent. They are usually used ditransitively; the second object is expressed as a nominal or an ellipted element (second objects cannot be pronominalised; §5.3.1).

5-90.   *aiahafumbo* **bakwa** *nafi-hi-Ø-hwa.*   *Ø nafi-Ø-hi-Ø-mbo,*

       3SG:OBJ   <u>path</u>   show-1SG-3MSG:O-PAST   show-CR-1SG-3MSG:O-DEP

       'I showed him the path _j. I showed him Ø _j, and… ' (*nafi* 'show' class II)

5-91.   <u>***heli***</u>   *yaninoma=mbo*   *tohaloa-wu-mu-hwa.*

       <u>ceremony</u> boy=OBJ   school-N1MPL-N1MPL:O-PAST

       'They taught the boys the ceremony.' (*toholoa* 'school' class II)

The verb *tohaloa* 'school' can also be used transitively, with a meaning roughly translatable as 'being teacher of', just as the English verb 'teach' can also be used either ditransitively or transitively. The verb *nefi* 'show' can also mean 'teach'. Some speakers use this verb either ditransitively or transitively, while others only use this verb ditransitively.

5-92. *dani hombani tohaloa-ha-ti-mbi.*

this   year   school-1SG-N1FPL:O-PRES:STAT

'This year I teach them.' (*toholoa* 'school' class II)

5-93. *nafi-ha-ti-hwa.*

show-1SG-N1FPL:O-PAST

'I showed them.'

There is another expression which means 'teach': *hwafo sefi* (talk give), where *hwafo* 'talk' is a second object (the noun *hwafo* 'talk' and the verb *sefi* 'give' do not have to be adjacent). The class III verb *sefi* (*sa-/ da-*) 'give' is trivalent and ditransitive. The second object can be expressed as a nominal or zero-pronominalised.

5-94. *aiahafumbo hwafo   sa-niŋga-wa-hwa.*

3:OBJ   talk   give-1SG-3SG:O-PAST

'I gave him/her a talk.'/ 'I taught him/her.' (*sefi* (*sa-/ da-*) 'give' class III)

5-95. *ai suŋgwani sa-ka-ya-hwa.*

3 sickness   give-3SG-1SG:O-PAST

'S/he gave me the sickness.'

5-96. *(rani=mbo sama-Ø-hya-a-mbo,)   ye   Ø   Ø-sa-niŋga-u-mbo,*

(DEM=OBJ cook-CR-1SG-3FSG:O-DEP) then   CR-give-1SG-3SG:O-DEP

'(I cooked that ₍ⱼ₎, and) then I gave him Ø ₍ⱼ₎, and…'

Some class IIB and class I verbs have fewer semantic arguments than cross-reference suffixes, and as oblique relations are never cross-referenced, this means that at least one cross-reference suffix is semantically empty, i.e. no referent. As seen in §5.3.2.1, the cross-reference suffixes are pronominal, and hence all cross-reference suffixes 'count' towards the transitivity of a clause, despite the fact that one or more of the cross-reference suffixes are semantically empty. These semantically-empty cross-reference suffixes are analogous with the expletive/ dummy pronouns in English, e.g. *it is raining* where the pronoun *it* is semantically empty. All semantically-empty cross-reference suffixes take the default person-gender-number combination of third person feminine singular (3FSG).

Figure 5.15   Verb class membership, transitivity and valence in clauses with semantically empty cross-reference suffixes

The following are the monovalent class IIB verb lexemes:

- *hihili* (*hihili-*) 'turn around/ back';

- *kafefi* (*kafa-*) 'spill'

     (bivalent counterpart: *kafefi* (*kafa-*) 'pour liquid' class IIB);

- *kefi* (*kefi-*) 'break', *kakefi* (*kakefi-*) 'break:MASS' (§5.1.4)

     (bivalent counterpart: *kefi* (*ka-*) 'break'; *kaka* 'break:MASS' class IIB);

- *dukwefi* (*dukwa-*) 'wake up'

  (bivalent counterpart: *yaŋgifi* (*yaŋgi-*) 'wake someone up' class IIB).

The lone semantic argument of *kafefi* (*kafa-*) 'spill', *kefi* (*kefi-*) 'break' and *dukwefi* (*dukwa-*) 'wake up' has an undergoer semantic role. The lone semantic argument is treated as the subject; the object cross-reference suffix is semantically empty. Compare the following monovalent-transitive verbs and their bivalent-transitive counterpart.

Monovalent: Bivalent:

5-97.   *kefi-nya-a-mbi.*   5-98.   *ka-nya-a-mbi.*

   break-N1DU-3FSG:O-PRES   break-N1DU-3FSG:O-PRES

   'The two things are broken.'   'They two broke it.'

   (*lit.* 'the two things broke it.')   (*kefi* (*ka-*) 'break' (bivalent))

   (*kefi* 'break' (monovalent))

5-99.   *kakefi-ya-a-mbi.*   5-100. *kaka-nya-a-mbi.*

   break:MASS-N1SG-3FSG:O-PRES   break:MASS-N1DU-3FSG:O-PRES

   'The things are broken.'   'They two broke them.'

   (*lit.* 'the things broke it.')   (*kaka* 'break:MASS' (bivalent))

   (*kakefi* 'break:MASS' (monovlnt))

5-101. *tutu kafa-ya-a-hwa.*

    milk spill-3FSG-3FSG:O-PAST

    'The milk spilled.'

    (*lit.* 'the milk spilled it.')

    (*kafefi* (*kafa-*) 'spill')

5-102. *tutu kafa-ya-a-hwa.*

    milk spill-3FSG-3FSG:O-PAST

    'She poured the milk.'

    (*kafefi* (*kafa-*) 'pour')

Monovalent:

5-103. *yani dukwa-Ø-wu-a-mbo,*

    man wake.up-CR-N1MPL-3FSG:O-DEP

    'The men woke up, and...' (*lit.* 'the men woke it up.')

    (*dukwefi* (*dukwa-*) 'wake up' (monovalent) class IIB)

Bivalent:

5-104. *yani yaŋgi-Ø-wu-a-mbo,*

    man wake.up-CR-N1MPL-3FSG:O-DEP

    'The men woke her/it up, and...'

    (*yaŋgifi* (*yaŋgi-*) 'wake up' (bivalent) class IIB)

As seen in the examples above, the semantically-empty 3FSG object suffixes (-*a*) on the monovalent verbs are formally indistinguishable from the fully referential 3FSG object suffixes (-*a*) in bivalent verbs. Having semantically-empty objects is rare cross-linguistically.[19] Unlike the fully referential objects which can be expressed as (pro)nominals, semantically-empty objects cannot be expressed as

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[19] However there is also the expression *cark it* — meaning 'die', e.g. *he carked it* — in Australian and New Zealand English where the object pronoun *it* is semantically empty.

(pro)nominals as (pro)nominals cannot be semantically empty. The semantically-empty object suffixes of these verbs do not convey reflexive meaning, as reflexive cross-referencing patterns (e.g. 1SG SUBJ with 1SG OBJ) do not exist in Menggwa Dla (see §4.6.4).

Other than having defective paradigms (as they cannot have object cross-reference suffixes other than *-a* (3FSG:O)), these monovalent class IIB verbs have the same formation as other class IIB verbs. Most importantly, these monovalent transitive class IIB verb lexemes form the realis negative form in the same manner as other bivalent class IIB verb lexemes. The realis negative form of class IIB verb lexemes are formed with the lexical verb lexeme in its non-finite verb form followed by the realis negative verb *boke* (class I). In other words, negative realis clauses with a class lexical IIB verb would only have one cross-reference suffix, i.e. they can be intransitive as class I verbs only have one cross-reference suffix. The following example shows that *kefi* 'break' in negative polarity is ambiguously monovalent and bivalent,

Monovalent:

5-105. *kefi* *boke-efye-mbi.*

      break NEG:R-N1DU-PRES

      'The two (things) are not broken.'

      (*kefi* (*kefi-*) 'break (monovalent)' class IIB)

Bivalent:

5-106. kefi   boke-efye-mbi.

break NEG:R-N1DU-PRES

'They two did not break it.'

(*kefi* (*ka-*) 'break (bivalent)' class IIB)

The completive verb *fefi* (*fa-*) 'class IIB' can be serialised with a monovalent lexical verb in a coreferential chain verb form (§7.2.1), in which case the object cross-reference suffix would be semantically empty. In the following example, the completive verb *fefi* (*fa-*) is serialised with *apu* (*ap-*) 'sleep' (class I) which only has one semantic argument; the 3FSG object suffix *-a* on the completive verb is semantically empty.

5-107. ap-ehi   fa-hwa-a   Ø-numb-ehi-mbo,

sleep-1DU COMPL-1DU-3FSG:O SEQ-1DU-DEP

'After we have slept…' (N) (*ap* 'sleep' class I, *fefi* class IIB, *nuŋgu* class I)

The only semantic argument of *hihili* 'turn around/ back' has an actor semantic role. The actor is treated as the subject; the object cross-reference suffix is semantically empty.

5-108. (yo=na) hihili-hwa-a   Ø-numb-ehi-mbo,

(1=TOP) turn.back-1DU-3FSG:O CR-SEQ-1DU-DEP

'We turned back, and then…' (N)

There is also the class IIB verb *efifi* 'become dark/ late' which has two cross-reference suffixes but no semantic arguments. For this avalent transitive verb, both cross-reference suffixes take the default person-number-gender combination of 3FSG, and expectedly there can be no (pro)nominals representing core relations in the clause.[20]

5-109. efi-ya-a-mbi.

get.dark-3SG-3FSG:O-PRES

'It is getting dark.' (*lit.* 'It darkens it.')

(*efifi* (*efi-*) 'get dark' class IIB)

Most other avalent meteorological verbs belong to class I (but not all meteorological events are expressed by avalent clauses; see below). The following are examples of meteorological events expressed by avalent class I verbs.

5-110. hwi-wa-mbi.

rain-3FSG-PRES:STAT

'It is raining.'

5-111. mumri-wa-mbi.

thunder-3FSG-PRES:STAT

'It is thundering.'

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[20] There seems to be no verb which specifically means 'to get bright'; the notion of 'getting bright' can be conveyed by *simbu* 'be morning' (class I).

5-112. sumblufu-wa-hi.

become.evening-3FSG-PRES:CONT

'It is getting late.'

However, some meteorological events can be depicted using monovalent intransitive verbs.

5-113. hwi   hof-wa-mbi.

water come-3FSG-PRES

'It is raining.'

'Windy' is expressed in the following manner.

5-114. yafu(=na)   bukwa no.

wind(=TOP) big   COP:3SG

'It is windy.'

There is also the 'temporal' verb *yamo* 'be time' which can be avalent (example 5-115) or monovalent (example 5-116).

5-115. yamo-wa-hi.

be.time-3FSG-PRES:CONT

'It is time.' (e.g. to go, to start doing something)

5-116. imbumamo yamo-wa-hi.

      three   be.time-3FSG-PRES:CONT

      'It is three o'clock.' (*lit.* 'three is the time.')

<u>5.3.2.3</u>   <u>Transitivity in non-finite chain clauses</u>

      Non-finite chain clauses do not carry cross-reference suffixes; all core-grammatical relations have to be expressed as (pro)nominals or zeros in non-finite chain clauses (§7.3.1). Non-finite chain clauses often have subjects which are expressed by a zero, of which the referents can be recovered from the context.[21]

Ditransitive:

5-117. simbu   Ø ayamu＝mbo seru **<u>sefi-mbo</u>**,

      morning   chicken＝OBJ food <u>give-DEP</u>

      'In the morning (people) feed their chicken, and…'

Transitive:

5-118. Ø sihafumbo **<u>sumbu-mba-mbo</u>**,

       2SG:OBJ   <u>laugh.at-POST-DEP</u>

      '(People) will laugh at you …'

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[21] The subject of a non-finite chain clause must be coreferential with the following clause along the clause chain (§7.3.1), and hence the verb *efifi* 'get dark' (class IIB), of which the subject is semantically empty, does not occur in non-finite chain clauses. If *efifi* were used in non-finite chain clause, the clause would be zero-intransitive, i.e. not having any core grammatical relations.

Intransitive:

5-119. Ø **_pi-mba-mbo_**,

go-POST-DEP

'Ø will go …'

5.3.3   Semantic roles and valence-changing

There are no voice oppositions in Menggwa Dla. In a transitive clause, the subject typically has an agent, force or experiencer semantic role, and the object typically has a patient, theme or stimulus semantic role.

Agent-subject/ patient-object:

5-120. nomo=mbo kaha-ya-a-hwa.

tree=OBJ   chop.down-3SG-3FSG:O-PAST

'S/he chopped down the tree.' (*kahefi* (*kaha-*) 'chop down' class IIB)

Agent-subject/ theme-object:

5-121. buku=mbo   sa-hya-a-hwa.

book=OBJ   carry-1SG-3FSG:O-PAST

'I carried the book.' (*sefi* (*sa-*) 'carry' class IIB)

Force-subject/ patient-object:

5-122. yafu yafutambya=mbo pa-ya-a-hwa.

wind door=OBJ   close-3SG-3FSG:O-PAST

'The wind closed the door.' (*pefi* (*pa-*) 'close' class IIB)

Experiencer-subject/ stimulus-object:

5-123. *sihafa*   *hwafo=mbo*   *humbli-wa-hwa.*

2SG:GEN talk=OBJ   hear-3FSG-PAST

'She heard your talk.' (*humbli* 'hear' class I)

In clauses depicting involuntary physiological states like 'be sick' and 'be tired', a lot of Papuan languages treat the animate experiencer as some kind of non-subject; the subject is then the force (e.g. 'sickness', 'tiredness') or semantically empty. The following are examples from two languages from the Trans New Guinea family.

Lani (Donohue 2005; Dani; Trans New Guinea; Papua)

5-124. *an*   *andi*   *e'nake*   *mbake* *logonit,*

1SG sickness 3SG:S/A:did:1SG:P and   and:CR

'I was sick, and […]' [lit. 'sickness does me.']

Tauya (MacDonald 1990:187; Madang-Adelbert Range, Trans New Guinea; PNG)

5-125. *ya-sepame-a-ʔa.*

1SG:O-sick-3SG-IND

'I am sick.' [lit. 'it sicks me.']

In Menggwa Dla, however, the animate experiencer is treated as the subject, similar to English. The inanimate force is either conveyed by the verb itself, or treated as an object.

5-126. *(ai=na) suŋgwani-wa-mbi.*

(3=TOP) be.sick-3FSG-PRES:STAT

'She is sick.' (*suŋgwani* 'be sick' class I)

5-127. *(yo=na) anyapaluku-ehye-mbi.*

(1=TOP) be.tired-1DU-PRES:STAT

'We are tired.' (*anyapaluku* 'be tired' class I)

5-128. *(yo=na) gihali(=mbo) sufua-aha-mbi.*

(1=TOP) hunger(=OBJ) feel-1SG-PRES:STAT

'I am hungry.' (*sufua* 'feel' class I)

With the verb *kakalu* 'be painful', the affected theme is externally possessed: the undergoer possessor is the subject, and the theme (the affected area) is the object.

5-129. *(yo=na) bapli(=mbo) kakalu-aha-mbi.*

(1=TOP) head(=OBJ) be.painful-1SG-PRES:STAT

'I have a headache.' (*kakalu* 'be painful' class I)

The inanimate cause of an animate's undergoing of a state is always marked as an oblique, most usually with an allative-instrumental case clitic (§4.5.3).

5-130. *hutamu=nambo hofahi-aha-hwa.*

rope=ALL trip.over-1SG-PAST

'I tripped over due to the rope.' (*hofahi* 'trip over' class I)

Except in equational copular sentences (§6.4.2), instruments are never the subject of a clause. However, instruments can be topicalised (§4.5.6).

5-131. *tamako=nambo=na nomo(=mbo) kahefi-mbo,*

      axe=ALL=TOP   tree(=OBJ)   chop.down-DEP

      'With an axe, one chops down trees, and…'

There are also no 'real' morphological operations — e.g. applicative constructions, causative constructions — which increase or decrease the valence. Monovalent posture and self-motion verbs (all class I/IH verbs) can indicate causativity by zero-derivation to the verb form; the causee of the resulting bivalent verb is not cross-referenced (as the verb class has not changed, and there is still only one subject cross-reference suffix), but the causee maybe expressed as an object (pro)nominal.

Monovalent: Bivalent:

5-132. *(yo) Ø-num-a-mbo,*   5-133. *(yo) aiahafumbo Ø-num-a-mbo,*

   (1)   CR-sit-1SG-DEP   (1)   3SG:OBJ   CR-sit-1SG-DEP

   'I sat, and…'   'I sat him/her, and…' (70I)

Otherwise causativity can be conveyed analytically by the verb *wambloa* 'force'/ 'let' (class II) in chain verb form (§7.2). As the causer and causee are most usually disjoint-referential, the verb *wambloa* is usually in disjoint-referential chain verb form.

5-134. wambloa-ma-hi-Ø-mbo,   ser-u-hi.

force-DR-1SG-3MSG:O-DEP eat-3MSG-PRES:CONT

'I force him and he is eating.' (70I)

5.4   Intraclausal syntax

There are few intraclausal syntactic rules in Menggwa Dla, and like most

Papuan languages, syntax is light in functional load in comparison with morphology.

Clauses are most usually verb-final; only in an antitopic construction is there an

antitopic expression which occupies the post-verbal position (see below).

Clauses often consist of a single verb or a single serial verb construction;

clauses need not have any (pro)nominals. The following are some examples of

clauses with no (pro)nominals: the verb in examples 5-135 and 5-136 are

independent verbs (§6), and the verb in examples 5-137 and 5-138 are chain verbs

(§7.2).

5-135. num-aha-hi.

sit-1SG-PRES:CONT

'I live (here).' (*numu* (*num-*) 'sit' class I; S)

5-136. ga-da-niŋga-nya.

NEG:SMR-give:FUT-1SG-2SG:O

'I will not give you (something).' (*sefi* (*sa-/ da-*) 'give' class III)

5-137. hriha-wu-a   *Ø-nuŋ-umu-mbo,*

pull.out-N1MPL-3FSG:O CR-SEQ-N1MPL-DEP

'They pulled (the moon) out, and…' (*hriha* 'pull out' class II; A)

5-138. Ø-han-yehi-Ø,

CR-go.down-1DU-DEP

'We went down, and…' (*hanu* (*han-/ gan-*) 'go down' class IH; N)

When there are (pro)nominals in a clause, the verb is placed after all the (pro)nominals. The following are examples with verbs preceded by one (pro)nominal. (See §4.3 on syntax within noun phrases).

5-139. yo=pa   ilohe (< ilo-ha-a-hi).

1=only   work-1SG-3FSG:O-PRES:CONT

'Only I work (here).' (S)

5-140. hwi   fiha-hya-a   *Ø-numb-a-mbo,*

water fetch.water-1SG-3FSG:O CR-SEQ-1SG-DEP

'I fetch water, and…' (B)

When there is more than one (pro)nominal present in a clause, their relative order is free. Citation pronouns, which only mark person (e.g. *yo* 'first person'), are used for subjects (§4.6.1), and object pronouns, which marks person, number and sometimes gender categories (e.g. *yoambo* (1SG:OBJ) 'me'), are used for objects (§4.6.2). Otherwise, subject noun phrases are zero case-marked, and object noun

phrases take an optional object case clitic =*mbo* (§4.5.1; §5.3.1). In the following examples, the subject nominal precedes the object nominal. The order of the subject and the object nominals can be interchanged freely with no change in pragmatic status and semantics.

5-141. hilari ufati   simi-Ø-hya.

      Hilari medicine drink-3MSG-PAST:FOC

      'Hilari took the medicine.' (*simi* (*simi-*/ *dom-*) 'drink' class I)

5-142. akwani tikyawi yoambo yafukyau-me-wa-mbo,

      snake   small   1SG:OBJ bite-DR-3FSG-DEP

      'A small snake bit me, and…' (*kyau* 'bite' class I)

5-143. yo=amba aha   yowala ifali tamnya   kwami-Ø-a-mbo,

      1=too   1SG:RSUMP 1SG:GEN spear small:MASS take:MASS-CR-1SG-DEP

      'I too took my own small spears, and…'

      (*kwemi* 'take' class I, mass undergoer; N)

In the following examples, the object precedes the subject. The order of the object and subject nominals can also be interchanged freely.

5-144. wali Vincent na-ya-a   fa-Ø-ya-a-mbo,

      pig   Vincent shoot-3SG-3FSG:O COMPL-CR-3SG-3FSG:O-DEP

      'Vincent shot the pig, and then…'

      (*nefi* (*na-*) 'shoot' class II; *fefi* (*fa-*) 'leave')

5-145. rani amni baya tupam nyawi hihiri fa-Ø-ya-a-Ø,

DEM garden side thing person steal COMPL-CR-3SG-3FSG:O-DEP

'Someone was stealing things at the garden, and…'

(*hihiri* 'steal' class I; A)

5-146. Victoria=mbo nyawi iŋgufu-Ø-ya-a-Ø,

Victoria=OBJ person attack-CR-3SG-3FSG:O-DEP

'Someone attacked Victoria, and…' (*iŋgufu* 'attack' class II)

5-147. miŋgu yohwefumbo bisop hoho-Ø-ya-mu-mbo,

Sunday 1PL:OBJ   bishop talk-CR-3SG-1NSG:O-DEP

'On Sunday the bishop talked to us, and…' (*hoho* 'talk' class II)

Ditransitive clauses (§5.3.2) with more than one overt (pro)nominal are rare. If both the object and second object (pro)nominals are present in a clause, the relative order of the object and the second object is also free. Objects take an optional object suffix *=mbo* (§4.5.1). Second objects cannot be pronominalised (§4.6), cannot be cross-referenced on the verb, and are zero case-marked (§5.3.1).

5-148. a. hilari(=mbo) buku Ø-sa-ka-u-mbo,

    Hilari(=OBJ)   book CR-give-3SG-3SG:O-IMP

b. buku hilari(=mbo) Ø-sa-ka-u-mbo,

'S/he gave Hilari the book, and…' (*sefi* (*sa-*/ *da-*) 'give' class III)

5-149. a. poto   ata(=mbo)   nafi-ha-a-hwa.

      photo grandmother(=OBJ) show-1SG-3SG:O-IMP

    b. ata(=mbo) poto nafi-ha-a-hwa.

    'I showed grandmother the photos.' (*nafi* 'show' class II)

Oblique phrases can occur in any pre-verbal positions; oblique phrases can even occur before a topic expression (see below).

5-150. a. **<u>hwi=mbe</u>** *yo bakali homba-ha-a-hwa.*

      <u>water</u>=INS 1   frog   see-1SG-3FSG:O-PAST

    b. yo **<u>hwi=mbe</u>** *bakali homba-ha-a-hwa.*

    c. yo bakali **<u>hwi=mbe</u>** *homba-ha-a-hwa.*

    d. **<u>hwi=mbe</u>** *yo=na bakali homba-ha-a-hwa.*

            1=TOP

    'I saw a frog in the water.' (*homba* 'see/ look' class II)

Topic expressions are marked with an optional topic clitic *=na* (§4.5.6). Topic phrases which are marked with *=na* must occur clause-initially, except when the topic phrase is preceded by a non-topicalised oblique phrase or a conjunction, in which case the topic phrase follows the clause-initial oblique phrase or conjunction. The sentences examplify clause-initial topic phrases; see §4.5.6 for more examples.

5-151. **_hwi=mbe=na_**   _sa-ya-a_   _Ø-han-u-mbo,_

water=INS=TOP carry-3SG-3FSG:O CR-go.down-3MSG-DEP

'Into the water he took (it) downward, and…'

(*sefi* (*sa-*) 'carry' class IIB, *hanu* (*han-/ gan-*) 'go down' class IH; A)

5-152. **_ai=na_** _tumali_   _hupla_   _ambya ruŋgu pipa-me-Ø-mbo,_

3=TOP pandanus container hole   inside hide-DR-3MSG-DEP

'He (the moon) hid in a hole inside a pandanus trunk, and…'

(*pipa* 'hide' class I; A)

5-153. **_nomola=na_**   _[yafli giefi   hahofu-mbo]_ _homba-hi-ti-mbo,_

children=TOP [dog   follow go.up-NOML] see-N1FPL-N1FPL:O-DEP

'The children saw them following the dog upward, and…'

(*homba* 'see/ look' class II)

Focused nominals other than question words can be placed after the verb in dependent clauses. These post-verbal nominals are most usually used to introduce new information which is not important to the discourse. These post-verbal expressions belong to the clause of the preceding verb syntactically as they are not separated with the preceding verb by a pause, and no resumptive elements are used before the verb. (However, see §2.4.2 on intonation patterns of post-verbal nominals.) The following are examples of post-verbal nominals in subordinate (§7.1) and chain clauses (§7.2).

Subordinate clause:

5-154. ani＝mbe rani＝mbo hwatu-ma-hi   __ambya__,

    there＝INS that＝OBJ   search-3MPL-SIM <u>hole</u>

    'They were searching for that in the hole, and…'

    (*hwatu* 'search' class I; A)

Chain clause:

5-155. ma-ek-wa-mbona __hamblu hwila__,

    DR-exist-3FSG-DEP <u>red</u>   <u>mother</u>

    'The red mother fowls are there, and…' (*eku* (*ek-*) 'exist' class I; N)

5-156. mi   lambuli   ani   wuli   kumya bani

    mother group   there house near   sago

    kaha-hi-a-mbo   __humlali baya__,

    chop-3FPL-3FSG:O-DEP <u>Humlali collect.place</u>

    'Mother and other women were chopping sago grown near the house at

    Humlali Creek, and…' (*kahefi* (*kaha-*) 'chop upright things' class IIB; N)

5-157. ser-yefa-mbo __yari＝mbo__,

    eat-1PL-DEP   <u>sago＝OBJ</u>

    'We ate the sago, and…' (*seru* (*ser-/ det-*) 'eat' class IH)

5-158. baha-hya-a-Ø   __hutumu＝hi__,

    cut.put-1SG-3FSG:O-DEP <u>leaf＝ADS</u>

    'I cut it (into lumps) and put them on the leaves…'

    (*bahefi* (*baha-*) 'cut and put' class IIB; B)

5-159. sa-hya-a   pi-a   saha-hya-a   Ø-numb-a-mbo

carry-1SG-3FSG:O go-1SG put-1SG-3FSG:O CR-SEQ-1SG-DEP

yaplu   *sena,*

coconut.stalk side

'I take (the bucket) to the coconut stalk, and…'

(*sefi* (*sa-*) 'carry' class IIB, *pi* (*pi-/ po-*) 'go' class I, *sahefi* (*saha-*) 'put

horizontally' class IIB; *nuŋgu* (*nuŋg- ~ numb-*) 'stand' class I; B)

In the examples above, only the post-verbal nominal is focused ('argument-

focus'; Lambrecht 1994: 228). Occasionally, the post-nominal nominal itself does

not convey new information. For instance, in the following example, the 'bucket'

has already been mentioned a number of times in the text. In such cases, the

predicate and the oblique post-verbal nominal are focused together ('predicate focus';

Lambrecht 1994:226); in the following example, the 'strainer' is presupposed, and

the assertion made is 'spreading in the bucket'.

5-160. byali   fali-hya-a   Ø-numb-a-mbo   *waplu=mbe,*

strainer spread-1SG-3FSG:O CR-SEQ-1SG -DEP bucket=ADS

'I spread the strainer inside the bucket…' (*falifi* (*fali-*) 'spread' class IIB; B)

5.5   Summary

In this chapter 5 we have had a look at a diverse range of topics which are

common to both independent and dependent clauses. We have seen in §5.1 that

some verb lexemes have only one verb stem form, and some verb lexemes have

many more than one verb stem forms. One common distinction is non-finite versus finite verb stems (§5.1.1); non-finite verb stems are used when it is not attached with cross-reference suffixes, and finite verb stems are used when it is attached with cross-reference suffixes. A small number of commonly-used verbs make a further distinction of non-future versus future finite verb stems (§5.1.2); they are used in non-future and future tenses — respectively — in verb forms where finite verb stems are required. The verb stems of some verb lexemes show other irregularities (§5.1.3). Some verbs — the mass undergoer verbs (§5.1.4) — specify that the undergoer reference is a mass of multiple referents.

We have discussed in §5.2 the morphology of verb class and cross-referencing. There are five verb classes (class I, IH, IIB, II and III) and four corresponding classes of cross-reference suffixes (class I, IH, II and III; class IIB verbs take a subset of class II suffixes). Class I and IH verbs only take a subject cross-reference suffix, whereas class IIB, II and III verbs take a subject cross-reference suffix and an object cross-reference suffix. Except for class III subject suffixes, each set of cross-reference suffixes have two subsets: subset A and B (i.e. there are eleven paradigms of cross-reference suffixes in total: IA, IB, IHA, IHB, IIA SUBJ, IIB SUBJ, IIB OBJ, IIA OBJ, III SUBJ, IIIA OBJ, IIIB OBJ; the forms of the cross-reference suffixes are summarised in appendix 2). Except class IIB verbs which must take class IIB subject and object suffixes in all environments, whether a verb takes subset A, subset B or a mixture of subset A and B (i.e. A for subject and B for object) is conditioned by the other inflections of the verb. There are some vague correlations between the semantics of a verb and the verb class membership of a verb, but overall the verb class assignment of a verb is best regarded as arbitrary. The verb class of a verb determines the number of cross-reference suffixes it take,

and the presence or absence of a cross-reference suffix is not determined by the discourse status of the cross-referenced reference. The cross-reference suffixes indicate the person (§4.2), number (§4.2) and sometimes gender (§4.1) of a referent. However, non-human reference of low discourse salience can be cross-referenced as third person feminine singular (§5.2.4).

Overall, grammatical relations in Menggwa Dla are aligned in an accusative-secundative alignment (§5.3.1): intransitive subjects [S] and transitive subjects [A] are marked similarly ('subject'), monotransitive objects [P] are marked similarly as ditransitive first objects [R] (the recipient relation; '(first) object'), and ditransitive second objects [T] (the theme/ 'gift' relation) is treated separately. In terms of cross-referencing, subjects are cross-referenced by subject cross-reference suffixes, (first) objects are cross-referenced by object cross-reference suffixes, and second objects are never cross-referenced on the verb. In terms of case marking, (first) objects can be marked with an object case clitic =*mbo* (§4.5.1), while subjects and second objects are zero-case-marked.

Both cross-reference suffixes and free (pro)nominals can be sole expression of a subject or object. The (grammatical) transitivity of a clause is determined by the number of core grammatical relations expressed by cross-reference suffixes and/ or free (pro)nominals (§5.3.2). Nevertheless, the grammatical transitivity of a clause does not necessarily correspond with the semantic valency of the verb (§5.3.3). For instance, there is the bivalent verb *seru* (*ser-/ det-*) 'eat' (class IH) which can be used either intransitively and transitively (similar to English), and there is the zero-valent

verb *efifi* (*efi-*) 'it becomes dark' (class IIB) which has two 'dummy' cross-reference suffixes (and hence transitive).

We have seen in §5.4 that intraclausal syntax play a minor role in Menggwa Dla. Clauses are most usually verb-final, and the order of the constituents in front of the clause is free. Some clauses have one constituent after the verb; this post-verbal constituent give further information towards a reference mentioned earlier in the clause or earlier in the discourse. However, this is not a manifestation of right-dislocation or anti-topic in their prototypical sense, as the post-verbal constituent form a single intonation domain with the rest of the clause in front of it, and the post-verbal constituent can express either new or old information.

Chapter 6

Independent Verbal Morphology

Verb stems and cross-reference suffixes, which are found in both independent and dependent clauses, were introduced in chapter 5. In this chapter 6, we will look at verbal morphology which is specific to independent clauses; verbal morphology which is found only in dependent clauses will be discussed in chapter 7.

Independent verbs are grammatically marked for status[1], tense, aspect, mood and/or polarity. In terms of verbal morphology, the most important categories are status and polarity (polarity is independent of status in Menggwa Dla), as the overall morphological structure of a verb is determined first by its status and polarity. A lot of languages have a binary realis-irrealis status distinction; Mithun (1999:173) generalises the binary status distinction as follows: 'The realis portrays situations as actualized, as having occurred or actually occurring, knowable through direct perception. The irrealis portrays situations as purely within the realm of thought, knowable only through imagination'. In addition to realis status and irrealis status, there is also an in-between status category called 'semi-realis' in Menggwa Dla, which signifies that on one hand it is like irrealis in that the situation is imagined, but on the other hand it is like realis in that the speaker is conveying his/ her certainty over the realisation (positive future declarative) or non-realisation (negative future declarative) of the situation.

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[1] The status categories of 'realis' and 'irrealis' are often described as macro-mood categories (e.g. Palmer 2001). I reserve the term 'mood' for the semantically narrower traditional mood categories like 'declarative', 'interrogative' and 'imperative'.

The following table lists the tense-aspect-mood categories associated with each of the six status-polarity combinations for ordinary verbs (for copulas, see §6.4). Positive realis and positive irrealis are indicated by zero morphs (but the tense-aspect-mood affixes for positive realis and positive irrealis moods are mutually exclusive); negative realis (§6.1.3) is conveyd by negative realis verb *boke* (class I) or *-boka* (class II); positive semi-realis (§6.2.1) is conveyd by the positive semi-realis verb *samby* or its bound form *-mby/ -mb*; negative-semi-realis (§6.2.2) is conveyd by a particle *ga*; and negative-irrealis (§6.3) is conveyd by an affix *ma-/ -ma/ -me/ -m*.

Table 6.1   Realis categories

Positive realis:	Negative realis:
Ø (§6.1)	*boke* (class I)/ *boka* (class II) (§6.1.3)
Present transitional *-mbi* (§6.1.1.1)	
Present stative *-mbi* (§6.1.1.2)	
Present continuous *-hi* (§6.1.1.1-2)	
Past *-hwa* (§6.1.2)	
'Past with focus' *-hya* (§6.1.2)	

Table 6.2   Semi-realis categories

Positive semi-realis:	Negative semi-realis:
samby (class I)/ *-mb* / *-mby* (§6.2.1,3)	*ga-* (§6.2.2-3)

Table 6.3   Irrealis categories

Positive irrealis: $\varnothing$ (§6.3)	Negative irrealis: *ma-* ~ *-ma* ~ *-me* ~ *-m* (§6.3)
Imperative and jussive moods *-Ø* (§6.3.1)	Prohibitive mood
Cautious mood *-we* ~ *-e* (§6.3.2)	*ma-* … *-we* ~ *-e* (§6.3.2)
Tentative mood *-ni* (§6.3.3.1-2)	
Future interrogative mood (§6.3.3.3)	
Indirect imperative mood (§6.3.3.3)	
Counterfactual mood *-naho* (§6.3.4)	

For independent clauses, tenses always have the time of utterance ('present time')[2] as the point of reference; for dependent clauses, the point of reference may be the time of utterance (absolute tense) or the time of some other clause (relative tense). Three tenses are distinguished: past, present and future tense. Present tense in Menggwa Dla conveys present time or near present time. Near present time refers to immediate past time or immediate future time, in other words time which is considered by the speaker to be near the present time, typically no more than a few minutes away from the present time. Correspondingly, past tense and future tense convey non-immediate past time and non-immediate future time respectively. If the progression of time is represented by a horizontal line running from left to right, and the time of utterance by an × on the horizontal time line, this is how the tenses in Menggwa Dla dissect the time line:

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[2] 'Time of utterance' and 'present time' here refer to the time of utterance in real time or the time of utterance of a direct quote.

past tense	present tense	future tense

t
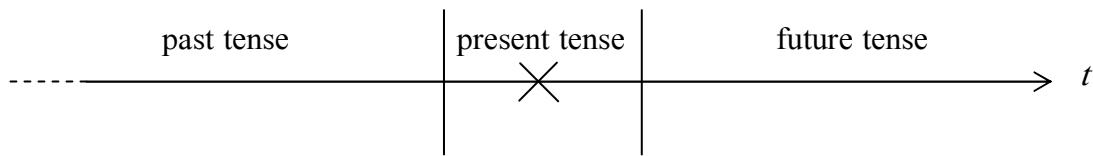
Also in this chapter 6, we will look at different forms of the copula and copular sentences (§6.4). Clauses in Menggwa Dla are most usually verb final, but it is not uncommon to find a single noun phrase occupying the post-verbal position. Copulas form a special class of verbs in Menggwa Dla. Essentially, copulas have one or more class I cross-reference suffixes (§5.2.1), and they mark less status, tense, mood and polarity categories than independent verbs.

6.1   Realis status

Positive realis verbs are formed with a (non-future) finite verb stem (§5.1.1-2), followed by subset A cross-reference suffix(es) (except for class IIB verbs which must take class IIB suffixes regardless; §5.2.2), and finally by a tense-aspect (TA) suffix. The finite verb stem, cross-reference suffix(es) and the TA suffix form one phonological word.

FINITE VERB STEM — CROSS-REF SUFFIX(ES) — TA SUFFIX

Negative realis verbs are formed with the lexical verb in its non-finite form plus a following negative realis verb *boke* (class I) or *boka* (class II). The non-finite verb stem (§5.1.1) of the lexical verb and the negative realis verb *boke/ boka* are separate phonological words. Class I, IH and IIB lexical verbs take *boke*, while class II and III lexical verbs take *boka*. The class of cross-reference suffixes used, however, are

determined by the verb class of the negative realise verb *boke* and *boka*: *boke* is a class I verb, and *boka* is a class II verb. See §6.1.3 for more discussions on negative realis verb forms.

$$\text{NON-FINITE VERB STEM} \quad \begin{Bmatrix} boke \\ boka \end{Bmatrix} \text{ — CROSS-REF SUFFIX(ES) — TA SUFFIX}$$

All realis categories are in past or present tense, and they are declarative and non-modal in nature. One salient feature is that most realis tense-aspect suffixes have case clitic counterparts; it is most likely that these realis tense-aspect were grammaticalised from the case clitics. Cross-linguistically it is not uncommon to have tense-aspect-mood markers grammaticalised from case markings (e.g. Blake 2001:180-131). One transparent example is from Kalaw Lagaw Ya (a dialect of the Western Torres Strait language) where pratically the whole set of case suffixes are also used on verbs to indicate tense or asepct (Kennedy 1984). Aikhenvald (2005) mentions that in Manambu (a Ndu language spoken in East Sepik Province in Papua New Guinea) and a wide range of other languages in her survey that case markers are often used with dependent clauses (often at the edge of the clause) to indicate various dependent relationships. These dependent clauses may be reanalysed as independent clauses ('desubordination'), and the case markers may be reanalysed as verbal tense-aspect-mood affixes. This is also likely the path of grammaticalisation of most of the realis tense-aspect suffixes in Menggwa Dla (except *-hwa*; see below); it is likely that the relative clauses (§7.1.1) were reanalysed as independent clauses, maybe through a stage of 'obligatory' cleft constructions. Amongst the four realis tense-aspect suffixes (see table 6.4 below), *-mbi*, *-hi* and *-hya* are the ones which can be used on relative clause verbs (§7.1.1); these are also the ones which have

corresponding case clitic forms. The remaining past tense suffix -*hwa* cannot be used on any dependent verbs, and -*hwa* is also the only realise tense-aspect suffix which does not have a corresponding case clitic form. The following table lists the realis suffixes and the corresponding case clitics.

Table 6.4   Realis suffixes and corresponding case clitics

Realis suffixes	Corresponding case clitics
present transitional/ stative -*mbi* (§6.1.1)	proprietive case =*mbi* (§4.5.5)
present continuous -*hi* (§6.1.1)	adessive case =*hi* ~ =*sehi* (§4.5.3)
past -*hwa* (§6.1.2)	(no corresponding case clitic)
past with focus -*hya* (§6.1.2)	ablative case =*hya* (§4.5.3)

The negative realis verb *boka/ boke* is no doubt related to the abessive case clitic =*mboka* (§4.5.5). There are no specific interrogative forms for realis categories. See §6.1.4 on questions in realis status.

6.1.1   Present tense -*mbi* and -*hi*

The aspectual meaning of -*mbi* and -*hi* varies depending on whether the situation is dynamic (§6.1.1.1) or stative (§6.1.1.2). See also §7.1 on the use of -*mbi* and -*hi* in subordinate clauses, and §7.3.2 on the use of the adessive case clitic =*hi* with verbal noun phrases.

6.1.1.1 Present transitional -*mbi* and present continuous -*hi* in dynamic situations

In dynamic situations, the present continuous suffix -*hi* signifies that the dynamic situation is ongoing in the present time. In other words, -*hi* signifies that

the present moment lies between the inchoation and completion point of the dynamic

situation (if the situation is durative; see below for punctual situations). The present

transitional suffix -*mbi* signifies that the inchoation point or the completion point of

the dynamic situation is in present or near-present time. Using a left square bracket

to represent the inchoation point, a right square bracket to represent the completion

point, and a horizontal wavy line for the duration of a durative dynamic event, the

use of present continuous -*hi* and present transitional -*mbi* is appropriate if the

present moment falls within the time indicated by the arrows.
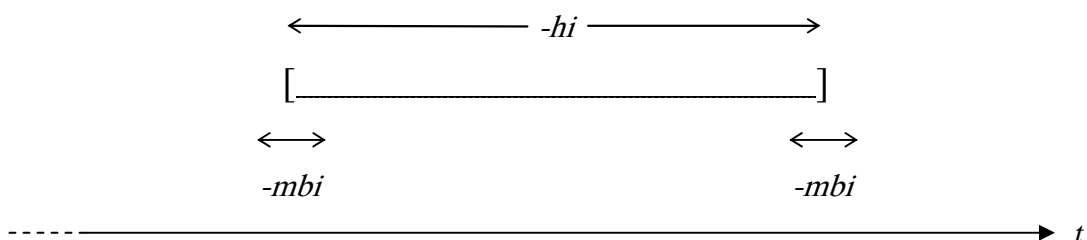
When a dynamic situation is ongoing at the present time, and the dynamic

situation has just begun or is about to finish very soon (i.e. the transition point is in

near present time), either -*hi* or -*mbi* can be used. Whether -*hi* or -*mbi* is used

depends on whether the speaker chooses to emphasise the ongoing-ness of the

situation (in which case the present continuous -*hi* would be used) or the transition

in situation (in which case the present transitional -*mbi* would be used).

The semantic difference between present continuous -*hi* and present

transitional -*mbi* in dynamic situations is best demonstrated by motion verbs like

hofu (*hof-*/ *gof-*) 'come' (class I) and *pi* (*pi-*/ *po-*) 'go' (class I). Dynamic situations

described by motion verbs usually have clearly defined inchoation and completion

points (i.e. 'the start/ end of the journey'). For instance, in announcing one's departure or arrival, the present transitional *-mbi* is appropriate as the time of departure or arrival is close to the time of utterance.

6-1. *pi-aha-mbi.*

go-1SG-PRES:TRNSN

'I am going (now).'

6-2. pater   pitpit   *hof-u-mbi.*

Father Pitpit   come-3MSG-PRES:TRNSN

'Father Pitpit has just arrived/ is arriving very soon.'

6-3. *awe.   munika hof-ehye-mbi.*

no   nothing come-1DU-PRES:TRNSN

'No, we have just come back (with) nothing.' (N)

Example 6-1 is usually said when one is about to depart. Example 6-2 would be uttered when the speaker saw Father Pitpit approaching his intended destination, or when he has just arrived at his destination. Example 6-3, which is from a direct quote, was uttered by the author of the quote not long after the author has arrived at his house.

In describing a journey as ongoing in the present time, especially if the inception point and the completion point is not near the present time, present continuous *-hi* is used.

6-4. *kapali* green river = *na*   *pi-Ø-hi.*

aeroplane Green River = ALL go-3MSG-PRES:CONT

'The aeroplane is going to/ towards Green River.'

(e.g. seeing the aeroplane still high up in the sky; 60I)

6-5. *afta-mba-mbo*   *hwi = na*   *han-yei-hi.*

bathe-POST-NOML   water = ALL go.down-N1FPL-PRES:CONT

'They are going down to the stream to bathe.' (e.g. seeing them walking

down towards the stream; *hanu* (*han-*/ *gan-*) 'go down' class IH)

The following are a few examples of present continuous -*hi* and present

transitional -*mbi* involving other dynamic situations.

6-6. *tohala nomola monani-wi-hi.*

school child   sing-N1FPL-PRES:CONT

'The school children are singing.' (*monani* 'sing' class I)

6-7. *dafumbo hiniŋgiafe³ (< hiniŋgi-afa-hi).*

who:OBJ   wait-2SG-PRES:CONT

'Who are you waiting for?' (seeing the addressee seemingly waiting for

someone) (*hiniŋgi* 'wait' class I)

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³ When a present continuous suffix -*hi* is suffixed to a cross-reference suffix which ends in *a* or *e*, *a-hi*
and *e-hi* are both often coalesced as *e.*

6-8. *mi＝la*   *tirati pa-hya-a-hi.*

mother＝GEN letter write-1SG-3FSG:O-PRES:CONT

'I am writing a letter for mother.' (*pefi* (*pa-*) 'write' class IIB)

6-9. *kufru-aha-mbi!*

vomit-1SG-PRES:TRNSN

'I am going to vomit now!' (*kufru* 'vomit' class I)

6-10. radio news *humbli-aha-mbi.*

radio news listen-1SG-PRES:TRNSN

'I am going to listen to the radio news now.' (*humbli* 'listen' class I)

Punctual situations are situations of which the inchoation point is the completion point (e.g. *fefi* (*fa-*) 'leave' class IIB), or the time between inchoation and completion point are perceived as insignificantly short (e.g. *amtali* 'sneeze/ cough' class I). Since punctual situations lack duration (i.e. 'ongoing-ness': significant length of time between the inchoation point and the completion point), *-hi* is not usually used. If a punctual event occurs in immediate-past or immediate-future time, the present transitional *-mbi* can be used. In the following diagram, the adjacent left and right square brackets represent a punctual situation. The use of present transitional *-mbi* is appropriate if the punctual event happened in present or near-present time.

[]

$\longleftrightarrow$

-mbi

t

344

6-11. *ai haf-wa-mbi.*

3   arrive-3FSG-PRES:TRNSN

'She is arriving now/ has just arrived.'   (*hafu* (*haf-*/ *gaf-*) 'arrive' class I)

6-12. *yafli atimbati-wa-mbi.*

dog   sneeze-3FSG-PRES:TRNSN

'The dog has just sneezed.'   (*atimbati* 'sneeze' class I)

6-13. *pi-hya-a-mbi.*

throw-1SG-3FSG:O-PRES:TRNSN

'I am throwing it now/ have just thrown it.'   (*pifi* (*pi-*) 'throw' class IIB)

However, in iterative situations, in which punctual situations occur successively, both present transitional *-mbi* and present continuous *-hi* can be used. The interactive situation is simply viewed as a single durative situation. (Each pair of square brackets represents a single instance of punctual situation.)

6-14.   *fali*   *potato-wa-hi.*

insect   jump-3FSG-PRES:CONT

'The insects are hopping around.' (*potato* 'insects jump' class I)

Habitual situations, in which dynamic situations are repeated over a period of time, are also treated like durative situations. Present habitual situations are marked with present continuous *-hi* in independent verbs. The following diagram schematises a habitual event.

$$\overleftarrow{\hspace{3cm}\textit{-hi}\hspace{3cm}\rightarrow}$$
{[_____]......[_____]......[_____]......[_____]......[_____]...}
- - - - - ——————————————————————————————→ *t*
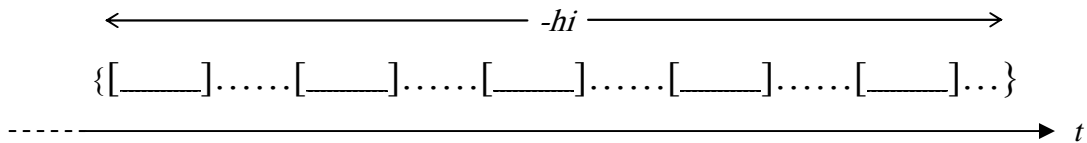
Independent clauses with *-hi* are often ambiguously indicating both a habitual and a non-habitual meaning.

6-15.   *ai*   *fofo-Ø-hi.*

3   smoke-3MSG-PRES:CONT

Habitual: 'He smokes.'

Non-habitual: 'He is smoking now.' (*fofo* 'smoke'/ 'blow' class I)

6-16.   *hyela*   *pupe-mbo*   *hwi=na*   *pi-aha-hi.*

clothe   wash-NOML   water=ALL   go-1SG-PRES:CONT

Habitual: 'I go to the creek to wash clothes.'

Non-habitual: 'I am going to the creek to wash clothes.'

6-17.   hyela   numu-hu-a-hi.

clothe   wear-1PL-3FSG:O-PRES:CONT

Habitual: 'We wear (Western) clothes.'

Non-habitual: 'We are wearing (Western) clothes now.'

(*numu* 'wear' class IIB)

6-18.   ye   ser-i   fa-hya-a-mbo,   apa-aha-hi.

then   eat-1SG COMPL-1SG-3FSG:O-DEP   sleep-1SG-PRES:CONT

'Then I eat it, and then sleep.' (B)

Non-habitual dynamic situations in negative polarity are stative as the situation is not occuring. See §6.1.1.2 on negative dynamic states.

6.1.1.2 Present stative -*mbi* and present continuous -*hi* in non-dynamic situations

In present tense independent clauses which convey states or properties, present stative -*mbi* presents the present state/ property as not having salient inchoation and completion points, whereas present continuous -*hi* presents the present state/ property as temporally bounded. State- and property verbs marked with the present stative -*mbi* are portrayed as comparatively permanent, and states marked with the present continuous -*hi* are portrayed as comparatively temporary. Using a horizontal straight line to represent states/ properties, states/ properties marked with present stative -*mbi* can be represented by an unbound straight line running through past, present and future time (present time is marked with × on the timeline; the state may have inchoation and completion points, but the speaker is simply not emphasising them):
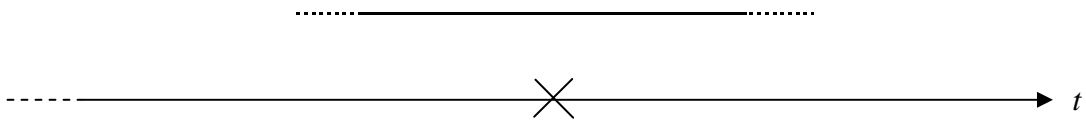
States marked with present continuous *-hi* can be represented by a straight line bound on the left by an inchoation point in the past and bound on the right by a completion point in the future.
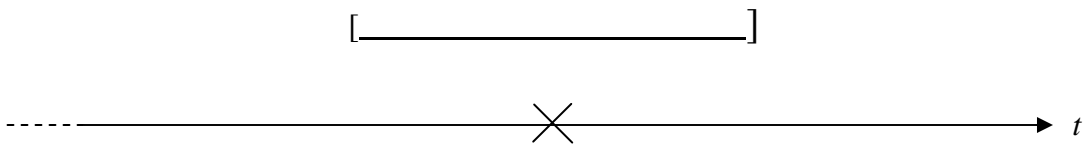
Some states — including most physiological states — do not have clearly definable inchoation point and/ or completion point. They are normally marked with present stative *-mbi*.

6-19. *hufwehambi (< hufwe-aha-mbi).*

be.hot-1SG-PRES:STAT

'I feel hot.' (*hufwa* (*hufwe-*) 'be hot' class I)

6-20. *mi, gihali(=mbo) sufwa-aha-mbi.*

mother hunger(=OBJ) feel-1SG-PRES:STAT

'Mother, I am hungry.' (*sufwa* 'feel' class I; 90I)

6-21. *hambala(=mbo) kakalu-aha-mbi.*

stomach(=OBJ)   ache-1SG-PRES:STAT

'I have a stomach ache.' (*kakalu* 'ache' class I)[4]

6-22. *safa   sihi-wa-mbi.*

meat stink-3FSG-PRES:STAT

'The piece of meat stinks.' (*sihi* 'stink/ give off smell' class I)

In clauses describing meteorological situations, present stative *-mbi* is more common than present continuous *-hi*. Ultimately all meteorological situations have an inchoation point and a completion point (albeit they can be vague); *-mbi* is used because the speaker is not emphasising the inchoation and completion points.

6-23. *hwi   hof-wa-mbi.*

water come-3FSG-PRES:STAT

'It is raining.' (*hofu* (*hof-/ gof-*) 'come' class I)

6-24. *efi-ya-a-mbi.*

become.dark-3SG-3FSG:O-PRES:STAT

'It is becoming dark (evening).' (*efifi* (*efi-*) 'become dark' class IIB)

Some verbs ambiguously convey both a change of state and the resulting state. States which are the result of another situation, called 'inchoative-statives' in

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[4] See §5.3.3 on the semantic roles and grammatical relations in a *kakalu* 'ache' clause.

Sasse (1991:36), are usually marked with present continuous *-hi* to emphasise there being a salient inchoation point to the state.

6-25. aiahafumbo hwahwa-hi-Ø-hi.

3SG:OBJ   be.acquainted-1SG-3MSG:O-PRES:CONT

'I know him.' (*hwahwa* 'be acquainted with'/ 'know' class II)

6-26. ai numuŋgwa-Ø-hi.

3 be.dead-3MSG-PRES:CONT

'He is dead.' (*numuŋgwa* 'be dead'/ 'die' class I)

6-27. ai hambala-wa-hi.

3 be.pregnant-3FSG-PRES:CONT

'She is pregnant.' (*hambala* 'be pregnant' class I)

6-28. hwilahi (< hwila＝hi)   yamo-wa-hi.

five   thumb＝ADS be.time-3FSG-PRES:CONT

'The time is five.' (*yamo* 'be time' class I)

Stance verbs convey both the action and the resulted stance.

6-29. tumbaiŋgi wuli＝mbe num-uma-hi.

worship   house＝INS sit-N1MPL-PRES:CONT

'They are sitting inside the church.' (*numu* (*num-*) 'sit' class I; 50I)

The present stative *-mbi* is also possible with inchoative-statives. With the use of present stative *-mbi*, the speaker is simply not emphasising the inchoation point of the state. This is especially common when the subject is inanimate; the inchoation and completion points of states with inanimate subjects are usually low in discourse salience (i.e. the inchoation and completion points are 'not worth emphasising').

6-30. Sentani = *hi*   *lapaŋgani bukwa ek-wa-mbi.*

Sentani = ADS airport   big   exist-3FSG-PRES:STAT

'There is a big airport in Sentani.'

(*eku* (*ek-*) 'exist' class I; Malay *lapangan* 'field'; 80II)

6-31. *hyela   kunaŋg-wa-mbi.*

clothe   be.hung.up:MASS-3FSG-PRES:STAT

'The clothes are hung up (there).'

(*kunaŋgu* (*kuna[ŋg/mb]-*) 'hang up'/ 'be hung up' class I, mass undergoer)

6-32. *ihu   kia-wa-mbi.*

mango bear.fruit-3FSG-PRES:STAT

'The mango tree is bearing fruits.' (*kia* 'bear fruit' class I; 70II)

Sometimes present stative *-mbi* is used to convey the lack of a conceivable completion point.

6-33. *ye* *sini=mbe* *pe-u-mbi*   *rani.*

then sky=INS   be.gone-3MSG-PRES:STAT that

'(The moon) went into the sky and stayed there (ever since).'

(*pe* 'be gone' class I; A)

In Menggwa Dla, dynamic situations in negative polarity are treated like stative situations. Like other states, the present continuous *-hi* is used to convey that the negative state is temporary, and the present stative *-mbi* is used to convey that the negative state is permanent or the inchoation and completion points are not salient. See §6.1.3 for negative realis verb forms.

6-34. *seru* *boke-aha-hi.*

eat   NEG:R-1SG-PRES:CONT

'I have not eaten yet.'/ 'I am not eating now.'

(*seru* (*ser-*/ *det-*) 'eat' class IH; *-aha* class IA)

6-35. *uti*   *seru* *boke-wa-mbi.*

prawn eat   NEG:R-3FSG-PRES:STAT

'She does not eat prawns.'

6-36. *ai* *fofo*   *boke-wa-hi.*

3   smoke NEG:R-3FSG-PRES:CONT

'She is not smoking currently.' (*fofo* 'smoke'/ 'blow' class I)

6-37. *ai* *fofo* *boke-wa-mbi.*

    3   smoke NEG:R-3FSG-PRES:STAT

    'She does not smoke.'

6.1.2   Past tense *-hwa* and past tense with focus *-hya*

Past tense in Menggwa Dla signifies non-immediate past time.[5] Both *-hwa* and *-hya* mark past tense, and neither are specified for aspectual information. The difference between *-hwa* and *-hya* is that *-hwa* only marks past tense, whereas *-hya* also indicates that a constituent in the clause or the whole clause is focused. We will see some examples of the semantically less marked *-hwa* first.

6-38. *tikyewi* *ap-ehye-hwa.*

    small   sleep-1DU-PAST

    'We slept a little bit.' (*apu* (*ap-*) 'sleep' class I; N)

6-39. *kapali*   *imbu* *na-Ø-pa-hwa.*

    tree.kangaroos two   shoot-3SG-N1DU:O-PAST

    'S/he shot two tree kangaroos.' (*nefi* (*na-*) 'shoot' class II)

6-40. *mi=lofo*   *klo-hya-a-hwa.*

    mother=COM separate-1SG-3FSG:O-PAST

    'I parted with my mother.' (*klo* (*klo-*) 'separate' class IIB)

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[5] Immediate past time is conveyed by present tense. See §6.1.

6-41. *hamani* tiga puluh ribu *sa-niŋga-wa-hwa.*

yesterday three ten thousand give-1SG-3SG:O-PAST

'Yesterday I gave him/ her thirty thousand (rupiah).'

(*sefi* (*sa-*/ *da-*) 'give' class III)

The past tense with focus suffix *-hya* signifies that a constituent of the clause or the whole clause is in focus. The focused constituent most usually represents new information. The function of *-hya* can be clearly demonstrated in content questions and answers to content questions; *-hya* is used in such clauses because there is always a focused constituent which seeks or provides new information. It is also grammatical for content questions and answers to be marked with *-hwa* instead of *-hya*; *-hwa* is simply indifferent to — rather than negating — the fact that something is focused in the clause. Nevertheless, *-hya* is much more common with content questions, and answers to content questions are also nearly always marked with *-hya.* See also §6.1.4 for the formation of interrogative sentences.

6-42. a. *nahombo fa-wa-hya?*

why leave-2SG-PAST

'Why did you leave?' (*fefi* (*fa-*) 'leave' class IIB)

b. *bapli kakalu-aha-hya.*

head ache-1SG-PAST:FOC

'(Because) I had a headache.' (*kakalu* 'ache' class I)

6-43.   a. *nuŋgni numuŋgwa-Ø-hwa?*

      when   die-3MSG-PAST

      'When did he die?' (*numuŋgwa* 'die' class I)

    b. *saftu   simbu   numuŋgwa-Ø-hya.*

      Saturday morning die-3MSG-PAST:FOC

      'He died on Saturday morning.'

On the other hand, past tense with focus *-hya* tends not to be used in polarity questions and answers to polarity questions as there is no focused consituents. Polarity questions are mostly answered simply with *ini* 'yes' or *awe* 'no' (§3.2.9). However, if a finite past tense verb is used in the answer, the verb is most usually marked with *-hwa*.

6-44.   a. *hihiri-mbo   homba-i-Ø-hwa?*

      steal-NOML   see-N1SG-3MSG:O-PAST

      'Did you see him stealing?' (*hihiri* 'steal' class I; *homba* 'see' class II)

    b. *ini   homba-i-Ø-hwa.*   *[? homba-i-Ø-hya]*

      yes see-N1SG-3MSG:O-PAST

      'Yes, I saw him (stealing).'

Of course *-hya* is not only used in answers; *-hya* is also often found in narrative clauses. When a piece of new information is presented, it is normal for the verb to be marked with *-hya* if the sentence is in past tense.

6-45.   Vanimo haus   sik=*mbe nuŋ-wa-hya.*

Vanimo house sick=INS stand-3FSG-PAST:FOC

'She was born in Vanimo hospital.'

(*nuŋgu* (*numb-* ~ *nuŋ-*) 'stand' class I)

6-46.   *awe gwa yohwefa ulua hwi   numami aya*

no   but 1PL:GEN fat liquid above   father

saku-ya-a-hya   akani=mbe.

put-3SG-3FSG:O-PAST:FOC there=INS

'Nothing really, father put our oil up in there.'

(*sakufi* (*saku-*) 'put into container' class IIB; A)[6]

A general way of indicating that the whole clause is in focus is using an
auxiliary copula (-*hya* can only be used in past tense). See §6.4.3 for more
discussions and examples (and also reasons why a sentence like the following is not
considered a cleft construction).

6-47.   *marini-aha-hi   no!*

urinate-1SG-PRES:CONT COP:3FSG

'I am urinating!' (*marini* 'urinate' class I)

(e.g. uttered when urinating in the bush while someone is approaching)

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[6] See §5.4 on post-verbal noun phrases.

6.1.3   Negative realis verb *boke* and *boka*

A negative realis independent clause is formed by the lexical verb in its non-finite form (§5.1.1) followed by a negative realis verb *boke* (class I) or *boka* (class II). Whether *boke* or *boka* is used depends on the verb class membership (§5.2) of the lexical verb: for class I, IH and IIB lexical verbs, *boke* (class I) is used; for class II and III lexical verbs, *boka* (class II) is used. Class IH, IIB and III lexical verbs have mismatching classes of cross-reference suffixes between positive and negative realis verb forms: in positive realis, the finite lexical verb stem itself controls the class membership of the cross-reference suffixes; in negative realis, it is the negative realis verb *boke* (class I) or *boka* (class II) which controls the membership of the cross-reference suffixes. The following table summarises the class of cross-reference suffix used in positive realis verb form versus negative realis verb form.

Table 6.5   Cross-reference suffixes in positive/ negative realis independent verbs

verb class of verb stem/ verb lexeme:	I	IH	IIB	II	III
cross-referencing in positive realis:	IA	IHA	IIB	IIA	IIIA
negative realis verb:		*boke*		*boka*	
cross-referencing in negative realis:		IA		IIA	

The negative realis verbs *boke* and *boka* are not used as independent verbs. The negative realis verb always take subset A cross-referencing (§5.2). Other than independent verbs, the negative realis verb *boke*/ *boka* is also used in realis subordinate clause verbs (§7.1) and disjoint-referential chain clause verbs (§7.2.1). Coreferential chain clause verbs (§7.2.1) and non-finite chain clause verbs (§7.3.1)

cannot be in negative polarity, while verbal noun phrases (§7.3.2) are negated by an abessive case clitic =*mboka* (§4.5.5.)

Also notice that due to the *a*-deletion rule and the vowel degemination rule (§2.3), the initial segment of cross-reference suffixes which begin with *a* or *e* would be deleted by the preceding *a* or *e* segment at the end of *boke* or *boka*, e.g. *boke-aha* (NEG:R-1SG) > *bokeha*, *boke-efa* (NEG:R-1PL) > *bokefa*, *boka-Ø-a* (NEG:R-N1SG-3FSG:O) > *boka* . The following are examples of positive and negative realis verb forms formed from class I lexical verb lexemes.

Class I lexical verbs:

6-48.   ek-wa-hwa.

    exist-3FSG-PAST

    'It was here.' (*eku* (*ek-*) 'exist' (non-human) class I; *-wa* class IA)

6-49.   eku   boke-wa-hwa.

    exist NEG:R-3FSG-PAST

    'It was not here.' (*-wa* class IA)

6-50.   sumblufu   afta-aha-hwa.

    afternoon bathe-1SG-PAST

    'I washed myself this afternoon.'

    (*afta* (*afta-*) 'bathe oneself' class I; *-aha* class IA)

6-51. *simbu   afta   bokehahwa (< boke-aha-hwa).*

morning bathe   NEG:R-1SG-PAST

'I did not wash myself in the morning.' (*-aha* class IA)

Class IH lexical verbs (notice the change in the cross-reference suffixes):

6-52. *wuli   hah-iha-hwa.*

house go.up-1SG-PAST

'I went up (into) the house.'

(*hahofu* (*hah(of)-* / *gak(of)-*) 'go up' class IH; *-iha* class IHA)

6-53. *wuli   hahofu   bokehahwa (< boke-aha-hwa).*

house go.up   NEG:R-1SG-PAST

'I did not go up (into) the house.' (*-aha* class IA)

6-54. *ganyar-iha-hwa.*

taste-1SG-PAST

'I tasted it.' (*ganyaru* (*ganyar-*) 'taste' class IH; *-iha* class IHA)

6-55. *ganyaru   bokehahwa (< boke-aha-hwa).*

taste   NEG:R-1SG-PAST

'I did not taste it.' (*-aha* class IA)

Class IIB lexical verbs (notice the change in the cross-reference suffixes):

6-56.　*klohyahwa (< klo-hya-a-hwa).*

　　　　　　　　separate-1SG-3FSG:O-PAST

　'I separated it.'　(*klo* 'separate' class IIB; *-hya-a* class IIB)

6-57.　*klo*　　　*bokehahwa (< boke-aha-hwa).*

　separate　　　　　　　　　NEG:R-1SG -PAST

　'I did not separate it.'　(*-aha* class IA)

6-58.　*hafafnyahwa (< hafaf-nya-a-hwa).*

　　　　　　　　　go.across-N1DU-3FSG:O-PAST

　'The two of them went across.'

　(*hafu* (*haf(a(f))-* / *gaf(a(f)-*) 'go across' class IIB; *-nya-a* class IIB)

6-59.　*hafu*　　　*bokefahwa (< boke-afa-hwa).*

　go.across　　　　　　　　NEG:R-N1MDU-PAST

　'The two men did not go across.'　(*-afa* class IA)

6-60.　*hafu*　　　*bokefyehwa (< boke-efye-hwa).*

　go.across　　　　　　　　NEG:R-N1FDU-PAST

　'The two people did not go across.' [7]　(*-efye* class IA)

　　The following are realis examples formed from class II and class III verb

lexemes; class II and class III verb stems take the *boka* negative realis verb.　The

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[7] Possible human referents of a feminine dual reference are two women or a women plus a man.　See §4.1 for the semantics of grammatical gender in Dla.

class III verb lexeme *sefi* (*sa-/ da-*) has a special negative realis verb form *sekoni*

(which is then followed by *boka*).

Class II lexical verbs:

6-61. *klikli-Ø-a-hwa.*

scratch-N1SG-3FSG:O-PAST

'S/he scratched.' (*klikli* 'scratch' class II, -*Ø-a* class IIA)

6-62. *klikli   bokahwa (< boka-Ø-a-hwa).*

scratch   NEG:R-N1SG-3FSG:O-PAST

'S/he did not scratch.' (-*Ø-a* class IIA)

6-63. *iŋgufu-hi-Ø-hwa.*

attack-1SG-3MSG:O-PAST

'I attacked him.' (*iŋgufu* 'attack' class II; -*hi-Ø* class IIA)

6-64. *iŋgufu boka-hi-Ø-hwa.*

attack   NEG:R-1SG-3MSG:O-PAST

'I did not attack him.' (-*hi-Ø* class IIA)

Class III lexical verbs:

6-65. *sa-ka-wa-hwa.*

give-3SG-3SG:O-PAST

'S/he gave (it) to him/her.' (*sefi* (*sa-/ da-*) 'give' class III; -*ka-wa* class IIIA)

6-66.   *sekoni*   *boka-i-Ø-hwa.*

give:NEG:R NEG:R-3MSG-3MSG:O-PAST

'He did not give (it) to him.' (*-i-Ø* class IIA; 50I)

6-67.   *sekoni*   *boka-ya-Ø-hwa.*

give:NEG:R NEG:R-3FSG-3MSG:O-PAST

'She did not give (it) to him.' (*-ya-Ø* class IIA)

6-68.   *sekoni*   *boka-Ø-a-hwa.*

give:NEG:R NEG:R-3SG-3FSG:O-PAST

'S/he did not give (it) to her.' (*-Ø-a* class IIA)

Another important point concerning the negative realis verb form is that in the eastern villages of Menggau and Wahai, but not in western villages of Wanggurinda and Menggwal, there is a trend of the negative irrealis suffix (*ma-/ -ma/ -me/ -m*; §6.3) being used to indicate negative realis.[8] These innovative negative realis verb forms are formed by the positive realis verb form (e.g. example 6-70) affixed by a negative irrealis affix, which now also indicates negative realis (e.g. example 6-69b, compare this with the conservative negative realis form 6-69a). Example 6-71 demonstrates a negative irrealis verb form.

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[8] While the negative semi-realis verb form remains unchanged: the negative semi-realis particle *ga* plus followed by a (future) finite verb stem plus subset A cross-reference suffix(es) (§6.2.2).

6-69. a. Conservative negative realis:

wamla   aflambli seru boke-aha-hwa.

betel.nut many   eat   NEG:R-1SG-PAST

'I did not chew ('eat') a lot of betel nut.' (*-aha* class I)

b. Innovative negative realis:

wamla   aflambli ma-ser-iha-hwa.

betel.nut many   NEG:R-eat-1SG-PAST

'I did not chew ('eat') a lot of betel nut.' (*-iha* class IH)

Positive realis:

6-70. wamla   aflambli ser-iha-hwa.

betel.nut many   eat-1SG-PAST

'I chewed ('ate') a lot of betel nut.'

Negative irrealis:

6-71. wamla   aflambli ma-ser-i-naho.

betel.nut many   NEG:IR-eat-1SG-CNTR

'I would not have chewed ('eaten') a lot of betel nut.' (*-i* class IHB)

6.1.4   Questions in realis status

Except for copulas (§6.4), there are no verb forms which indicate interrogative mood specifically. Polarity questions are only distinguished from their statement counterparts by intonation: statements usually end in low pitch, whereas questions end in a high pitch (§2.4.2).

6-72. *suŋgwaniafe (< suŋgwani-afa-hi)?*

                    sick-2SG-PRES:CONT

    'Are you sick?' (*suŋgwani* 'sick' class I)

6-73. *hufwe-efa-mbi?*   *gihalfi-efa-mbi?*

    be.hot-2SG-PRES:STAT be.cold-2SG-PRES:STAT

    'Are you feeling hot? Are you feeling cold?'

    (*hufwa* (*hufwe-*) 'be hot' class I; *gihalfi* 'be cold' class I)

6-74. Rupiah *han-wa-mbi?*

    Rupiah go.down-3FSG-PRES:TRANSN

    'Has the (exchange rate of) Rupiah gone down?'

    (*hanu* (*han-/ gan-*) 'go down' class IH)

6-75. *tumbaiŋgi=mbo pi-wi-hwa?*

    worship=OBJ   go-N1FPL-PAST

    'Did they go to mass?' (*pi* (*pi-/ po-*) 'go' class I)

    Polarity questions may have the question tag *o awe* 'or not'. However, the positive counterpart of *o ini* 'or yes' is not found, presumably because *ini* cannot function as a predicate on its own, unlike *awe* (§3.2.9).

6-76. *gihalfi sufwa-afa-mbi*   *o* *awe?*

    hunger feel-2SG-PRES:STAT or not

    'Are you hungry or not?' (*sufwa* 'feel' class I)

A realis polar question can also carry a realis interrogative copula *be* (§6.4.1), either in its finite form (*b-/ be-*; example 6-77) or non-finite form (*be*; example 6-78).

6-77.　*fofo-afa-hi*　　　　　*befu (< be-afu)?*

　　　smoke-2SG-PRES:CONT　　　　　COP:INTRG-2SG

　　　'Do you smoke?'　(*fofo* 'smoke'/ 'blow' class I; 70II)

6-78.　*ap-u-hi*　　　　*be?*

　　　sleep-3MSG-PRES:CONT COP:INTRG

　　　'Is he sleeping?'　(*apu* (*ap-*) 'sleep' class I)

There are no special syntactic rules governing the question word(s) in content questions; word order is rather free in Menggwa Dla in general (§5.4).

6-79.　*ai ga＝na*　　*pi-wa-hwa?*

　　　3　where＝ALL　go-3FSG-PAST

　　　'Where did she go?'

6-80.　*dahfumbo＝lofo hwafo-afa-hi?*

　　　who:OBJ＝COM　talk-2SG-PRES:CONT

　　　'With whom are you talking?'　(*hwafo* 'talk' class I)

6-81. *kapali=mbe   tupam nuŋgni   sa-hi-a   hahof-yei-hwa?*

aeroplane=INS thing how.much carry-N1FPL-3FSG:O go.up-N1FPL-PAST

'How much stuff did they take onto the aeroplane?'

(*sefi* (*sa-*) 'carry' class II, *hahofu* (*hah(o(f))-/ gak(o(f))-* 'go up' class IH)

We have seen above that realis polar questions may carry a present
interrogative copula. Realis content questions may also carry a copula, but a present
declarative copula is used instead. The copula used can be either finite (example 6-
82) or non-finite (example 6-83).

6-82. *nahombo tutuafe (< tutu-afa-hi)   ny-afu?*

why   ask-2SG-PRES:CONT COP:PRES-2SG

'Why are you asking?' (*tutu* 'ask' class I; 80I)

6-83. *ga=nambo pi-afa-hya   nu?*

where=ALL go-2SG-PAST:FOC COP:PRES

'Where did you go?'

See also §6.4 on other copular questions.

6.2   Semi-realis status

Semi-realis status encompasses only one tense-mood category — future
declarative (other future categories are irrealis; §6.3). Future declarative verbs of
positive and negative polarities have markedly different morphological forms:
positive semi-realis verbs are characterised by a serialised 'positive semi-realis verb'

samby (class I) (§6.2.1), whereas negative semi-realis verbs have a negative semi-realis particle *ga* (§6.2.2). Finite verb stems are used for semi-realis verb forms (§5.1.1), and if the lexical verb lexeme makes a distinction between future versus non-future finite verb stems (§5.1.2), the future form must be used. The form of the positive semi-realis verb varies greatly depending on the person-number-gender features of the subject, and it is difficult to give a general morphological template of positive semi-realis verbs. In some cases the positive semi-realis verb forms a separate phonological word from the lexical verb, and in other cases the positive semi-realis verb forms a phonological word together with the lexical verb (see §6.2.1). On the other hand, negative semi-realis verbs are morphologically simple in comparison. Negative semi-realis verb forms begin with a negative semi-realis particle *ga* and then followed by a (future) finite verb stem (§5.1.1-2) together with its cross-reference suffix(es). The cross-reference suffixes used in negative semi-realis verb forms are always class A suffixes (§5.2). The negative semi-relias particle *ga* is a separate phonological word.

> *ga*　(FUTURE) FINITE VERB STEM — CLASS A CROSS-REF SUFFIX(ES)

The following verbs exemplify realis versus semi-realis, and positive versus negative verb forms of the verb lexeme *hofu* (*hof-/ gof-*) 'come' (class I).

6-84. *hof-efa-hwa.* 　　　　　6-85. *hofu　boke-efa-hwa.*

　　　come-1PL-PAST 　　　　　　　come　NEG:R-1PL-PAST

　　　'We came.' (-*efa* class IA) 　　　'We did not come.'

6-86. *gof-efu*   *samby-efu.*   *6-87.* *ga*   *gof-efa.*

come:FUT-1PL POS:SMR-1PL   NEG:SMR come:FUT-1PL

'We will come.' (-*a* class IB)   'I will not come.'

The functional differences between semi-realis verbs and other future verb

forms will be discussed in §6.2.3.

6.2.1   Forms of positive semi-realis verbs

Semi-realis verbs usually come in the form of a lexical verb serialised with

the positive semi-realis verb *samby* (class I) (which is not used as a lexical verb).

The lexical verb usually has a (future) finite verb stem (§5.1.1-2) and takes a:

- class IB/ IBH cross-reference suffix for class I/ IH verbs;

- class IIB SUBJ plus class IIB OBJ suffix for class IIB verbs;

- class IIA SUBJ plus class IIB OBJ suffix for class II verbs; and

- class III SUBJ plus class IIIB OBJ suffix for class III verbs.

The positive semi-realis verb usually comes in the form of *samby* taking its own

class IB cross-reference suffix. The following is an example formed from *yarifi*

(*yari-*) 'stir sago' (class IIB).

6-88. *yari-nya-a*   *samby-efi.*

stir.sago-N1DU-3FSG:O POS:SMR-N1FDU

'The two of them will stir sago.' (-*nya-a* class IIB, -*efi* class IB)

The following table demonstrates the positive semi-realis verb *samby* and its

class IB cross-reference suffixes. The positive semi-realis verb *samby* is usually a

morphologically free word (both the lexical verb and *samby* have their own stress domain; §2.4.1), except when the subject is: a) 1SG, in which case the positive semi-realis verb stem becomes *-mby*, and the grammatical verb becomes morphologically bound to the preceding lexical verb (and *-mby* belongs to the stress domain of the lexical verb, i.e. *-mby* does not receive a primary stress); b) 3MSG, 3FSG or N1MPL, in which case the positive semi-realis verb stem becomes *-mb*, the grammatical verb becomes morphologically bound to the preceding lexical verb (*-mb* also belongs to the stress domain of the lexical verb), and the morphological structure of the grammatical verb itself is quite irregular.

Table 6.6　　　Positive semi-realis verb stem and its cross-reference affix(es)

		1	N1 2	3
SG	M	*-**mby**-a*	*samby-afu*	*-ah-u-**mb**-i*
	F			*-ah-o-**mb**-e*
DU	M	*samby-ehi*	*samby-afani*	
	F		*samby-efi*	
PL	M	*samby-efu*	*-ah-u-**mb**-imu*	
	F		*samby-ei*	

The class IB cross-reference suffixes are repeated below for comparison.

Table 6.7　　　Class IB cross-reference suffixes (repeated from table 5.5 in §5.2.1)

SUBJ→	1SG	1DU	1PL	2SG	3MSG	3FSG	N1MDU	N1FDU	N1MPL	N1FPL
V_ C_	*-a*	*-ehi*	*-efu*	*-afu*	*-u*	*-o*	*-afani*	*-efi*	*-mu* *-umu*	*-wi* *-ei*

369

The cross-reference suffix which a class I/ IH lexical verb stem takes is a usual class IB/ IHB cross-reference suffix, except that:

- when the subject is 3SG, the cross-reference suffix is -*a* (class I)/ -*ya* (class IH) (these irregular cross-reference suffixes do not mark gender distinctions) instead of the regular class IB/ IHB cross-reference suffixes of -*u* (3MSG) and -*o* (3FSG); and

- when the subject is N1MPL, the cross-reference suffix is -*uma* (for both class I and class IH) instead of the regular class IB/ IHB cross-reference suffix -*umu*.

When the subject is first person non-singular, the cross-reference suffix (class IB: -*ehi* (1DU), -*efu* (1PL); class IHB: -*yehi* (1DU), -*yefu* (1PL)) can be contracted with the following positive semi-realis verb root *samby*: -*(y)ehi samby* and -*(y)efu samby* becomes -*(y)emby* (-1NSG:POS:SMR). For class I verbs of which the finite verb stem (§5.2.1) ends in a vowel, a -*l* ligature has to be inserted between the lexical main verb stem and its cross-reference suffix.[9]

We will first look at a few examples of positive future declarative verbs with <u>consonant-ending</u> class I/IH lexical verb stems.

6-89. *ap-a-mby-a.*

sleep-1SG-POS:SMR-1SG

'I will sleep.' (*apu* (*ap-*) 'sleep' class I)

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[9] Class IH verbs all have consonant ending finite verb stems (§5.2.1).

6-90.   *numbahombe.*

    numb-a-ah-o-mb-e

    stand-3SG-3-F-POS:SMR-F-3SG

    'She will stand.' (*nuŋgu* (*numb-~nuŋg-*) 'stand' class I)

6-91.   *gof-afani   samby-afani.*

    come:FUT-N1MDU POS:SMR-N1MDU

    'The two men will come.' (*hofu* (*hof-/ gof-*) 'come' class I)

6-92.   *dam-efu   samby-efu ~ dam-emby-efu.*

    take:FUT-1PL POS:SMR-1PL ~ take:FUT-1NSG:POS:SMR-1PL

    'We will take (it).' (*semi* (*semi-/ dam-*) 'take' class I)

6-93.   *detyahumbi.*

    det-ya-ah-u-mb-i

    eat:FUT-3SG-3-M-POS:SMR-M

    'He will eat.' (*seru* (*ser-/ det-*) 'eat' class IH)

6-94.   *gan-yehi   sambi-ehi.   ~ gan-yemby-ehi.*

    go.down:FUT-1DU POS:SMR-1DU ~ go.down:FUT-1NSG:POS:SMR-1DU

    'The two of us will go down.' (*hanu* (*han-/ gan-*) 'go down' class IH)

    The following are examples of class I verbs with vowel-ending finite verb

stems (§5.2.1). Note the *-l* ligature.

6-95. *numuŋgwa-l-ei samby-ei.*

     die-LIG-3FPL   POS:SMR-3FPL

     'They will die.' (*numuŋgwa* 'die' class I)

6-96. *po-l-afʉ   samby-afʉ.*

     go:FUT-LIG-2SG POS:SMR-2SG

     'You will go.' (*pi* (*pi-/ po-*) 'go' class I)

6-97. *hwafolahumbi.*

     hwafo-l-a-ah-u-mb-i

     talk-LIG-3SG-3-M-POS:SMR-3SG

     'He will talk.' (*hwafo* 'talk' class I)

6.2.1.2 Class IIB/ II/ III positive semi-realis verbs

For class IIB lexical verb stems, class IIB subject and class IIB object suffixes are used (class IIB verb stems can only take class IIB cross-reference suffixes; §5.2.2). For class II lexical verb stems (§5.2.2), a class IIA subject suffix and a class IIB object suffix are used. For class III lexical verb stems, a class III subject suffix and a class IIIB object suffix are used (there is no subset A/B distinction for class III subject cross-reference suffixes; §5.2.3).

For first person dual (1DU) and plural (1PL) subjects only, the positive semi-realis verb stem (§6.2.1) can freely alternate between *samby* (morphologically free)

and *-mby* (bound to the preceding lexical verb). The following are examples of positive semi-realis verbs with class IIB, II or III lexical verb stems:

Class IIB verbs:

6-98.   ka-nya-pu   samby-afani.

break-N1DU-N1DU:O POS:SMR-N1MDU

'The two of you/ them broke the two things.'

(*kefi* (*ka-*) 'break something' class IIB; *-nya-pu* class IIB)

6-99.   gafa-hu-a   samby-efu.

go.across:FUT-1PL-3FSG:O POS:SMR-1PL

'We will go across.'

(*hafu* (*haf(a(f))-/ gaf(a(f))-*) 'go across/ pass' class IIB; *-hu-a* class IIB)

Class II verbs:

6-100. na-Ø-i-ah-u-mb-i.

shoot-N1SG-1SG:O-3-M-POS:SMR-3MSG

'He will shoot me.' (*nefi* (*na-*) 'shoot' class II; *-Ø* class IIA, *-i* class IIB)

6-101. hoho-ha-ni-mby-a.

tell-1SG-2SG:O-POS:SMR-1SG

'I will tell you (SG).' (*hoho* 'tell' class II; *-ha* class IIA, *-ni* class IIB)

Class III verb stems:

6-102. da-ka-i-ah-o-mb-e.

give:FUT-3SG-1SG:O-3-F-POS:SMR-3FSG

'She will give (it) to me.' (*sefi* (*sa-*/ *da-*) 'give' class III; *-ka* III, *-i* IIIB)

6-103. da-niŋgi-ni   samby-ei.

give:FUT-N1FPL-2SG:O   POS:SMR-N1FPL

'They will give (it) to you.' (*-niŋgi* class III, *-ni* class IIIB)

6.2.2   Forms of negative semi-realis verbs

A negative semi-realis verb is formed by a negative semi-realis particle *ga* followed by a (future) finite verb stem (§5.1.1), and then suffixed by subset A cross-reference suffixes (§5.2), again with the exception that class IIB verb stems must take class IIB cross-reference suffixes (§5.2.2).

6-104. ga   namb-aha.

NEG:SMR hang.up-1SG

'I will not hang (it) up.'(*naŋgu* (*namb-~naŋg-*) 'hang up' class I; *-aha* class IA)

6-105. ga   det-yefa.

NEG:SMR eat:FUT-1PL

'We will not eat.' (*seru* (*ser-*/ *det-*) 'eat' class IH; *-yefa* class IHA)

6-106. *ga   numu-ya-a.*

   NEG:SMR   wear-3SG-3FSG:O

   'S/he will not wear (it).'   (*numu* 'wear' class IIB; *-ya-a* class IIB)

6-107. *ga   wamblwa-Ø-nya.*

   NEG:SMR   force-N1SG-2SG:O

   'S/he will not force you.'   (*wamblwa* 'force' class II; *-Ø-nya* class IIA)

6-108. *ga   da-ŋgi-mua.*

   NEG:SMR   give:FUT-N1FPL-1NSG:O

   'They will not give (it) to us.'

   (*sefi* (*sa-/ da-*) 'give' class III; *-ŋgi-mua* class IIIA)

When the verb stem is a vowel-ending class I verb stem (§5.2.1), an *-l* ligature is placed between the verb stem and the class IA cross-reference suffix, unless the subject is third person masculine singular (3MSG), in which case the cross-reference suffix is *-Ø* and the *-l* ligature is not used. The following are a few examples of negative semi-realis verb forms with vowel-ending class I verb stems.

6-109. *ga   suŋgwani-l-wa.*

   NEG:SMR   be.sick-LIG-3FSG

   'She will not be sick.'   (*suŋgwani* 'be sick' class I; *-wa* class IA)

375

6-110. ga   *suŋgwani-Ø.*

       NEG:SMR be.sick-3MSG

       'He will not be sick.' (-*Ø* class IA)

6-111. ga   *mome-l-efye.*

       NEG:SMR be.together-LIG-N1FDU

       'They two will not be together.' (*mome* 'be together' class I; -*efye* class IA)

6-112. ga   *sumbu-l-uma.*

       NEG:SMR laugh-LIG-N1MPL

       'They will not laugh.' (*sumbu* 'laugh' class I; -*uma* class IA)

6-113. ga   *numuŋgwa-l-ei.*

       NEG:SMR die-LIG-N1FPL

       'They will not die.' (*numuŋgwa* 'die' class I; -*ei* class IA)

6.2.3   Functions of semi-realis verbs

Verbs in semi-realis status are statements which convey the speaker's absolute certainty that a proposition will hold in the future, and that the speaker is committed to the truth value of of the proposition. Semi-realis sentences cannot be used as questions; future tense questions are in irrealis mood (§6.3). The following are a few examples of clauses with verbs in semi-realis status.

6-114. *kyambe   sihafa   wuli＝na   po-l-a-mby-a.*

tomorrow 2SG:GEN house＝ALL go:FUT-LIG-1SG-POS:SMR-1SG

'I will (certainly) go to your house tomorrow.' (*pi* (*pi-/ po-*) 'go' class I; 60II)

6-115. *sihafumbo＝lofo ilo-na-a   samby-efi.*

2:OBJ＝COM   work-N1DU-3FSG:O POS:SMR-N1FDU

'The two of them will (certainly) work with you.' (*ilo* 'work' class II; 50I)

6-116. *hihiri＝mbo ga   homba-Ø-ya.*

steal＝DEP   NEG:SMR see-N1SG-1SG:O

'[S/he/ (?) you] will (certainly) not see me stealing (it).'

(*homba* 'see' class II; 80II)

Other than using positive semi-realis verb forms, another common strategy of conveying positive future declarative meaning is using a posterior verbal noun (§7.3.2) plus an optional present copula (§6.4). In the following example, *pi-mba-Ø* (go-POST-NOML) is a posterior verbal noun.

6-117. *kyambe   sihafa   wuli   pi-mba-Ø   no.*

tomorrow 2SG:GEN house go-POST-NOML COP:3FSG

lit. 'There will be going to your house.' (*pi* (*pi-/ po-*) 'go' class I)

The pragmatic difference between semi-realis verbs and posterior verbal nouns is that with semi-realis verbs, the speaker is conveying his or her certainty that the situation will occur in the future, whereas with posterior verbal nouns, the

speaker is conveying his or her belief that the situation will occur, but is not committed to the truth value of the proposition. For instance, the speaker in example 6-114 above (semi-realis verb) and the speaker in example 6-117 above (posterior verbal noun) both believe that s/he will go to the addressee's house the day after the time of utterance. If the speaker of example 6-114 fails to go to the addressee's house for whatever reason, the speaker is likely to be considered a liar. On the other hand, if the speaker of example 6-117 fails to go to the addressee's house, the speaker is unlikely to be considered a liar since the speaker has not committed to the realisation of the proposition.

Posterior verbal nouns do not convey uncertainty; to convey uncertainty, a tentative mood verb would be used (§6.3.3.1-2).

6-118. *kyambe   sihafa   wuli=na   po-m-a-ni.*

    tomorrow 2SG:GEN house=ALL go:FUT-NEG:IR-1SG-TENT

    'Maybe I will go to your house tomorrow.' (*-a* class IB)

6.3   Irrealis status

The following are the irrealis categories found in independent verbs; the irrealis tense-mood suffixes are in paradigmatic opposition (this excludes the *ma-* prefix used in prohibitive mood which is a negative irrealis prefix; see below):

- Imperative and jussive moods *-Ø* (§6.3.1);
- Cautious mood *-e ~ -we* (§6.3.2);
- Prohibitive mood *ma-…-e ~ -we* (§6.3.2);

- Tentative mood *-ni* (§6.3.3.1-2);

- Future interrogative mood *-ni* (§6.3.3.3); and

- Counterfactual mood *-naho* (§6.3.4).

There is no affix marking positive irrealis specifically. The positive irrealis verb forms have the following morphological structure (the prohibitive mood verbs are never in positive polarity):

FINITE VERB STEM — CROSS REF SUFFIX(ES) — TM SUFFIX

Formally, the negative irrealis verbs differ from the positive irrealis verbs by having an extra negative irrealis affix which is affixed to the verb stem. The negative realis affix has the form of *ma-*, *-ma*, *-me* or *-m*. The negative realis affix is always *ma-* when affixed to non-finite verb stems (§5.1.1). For finite verb stems, the regular allomorphy of the negative irrealis affix is as follows:

- *-ma* is suffixed to class IIB, class II or class III verb stems.
- *ma-* is prefixed to consonant ending class I or class IH verb stems;
- *-me* is suffixed to vowel ending class I verb stems, except that when the following class IB cross-reference suffix begins with *a*, the negative irrealis suffix becomes *-m*.

Nevertheless, there are verb lexemes with irregular negative irrealis affixes, e.g. *sihefi* (*siha-*) 'remove cooked food from fire' (class IIB) has a negative irrealis infix *[ma]*: *si[ma]ha-*. Except for verb lexemes which have irregular negative

irrealis affix and/ or irregular disjoint-referential affix (§7.2.1), the negative irrealis affix is formally identical with the disjoint-referential affix, except that *-m* is not used in disjoint-referential chain verbs as they always take subset A cross-reference suffixes.

6.3.1   Imperative and jussive moods

'Imperative' and 'jussive' are simply terminologies given to different parts of the same imperative-jussive paradigm. In Menggwa Dla, imperative mood conveys command, exhortation, invitation or permission towards second person subject referent(s), whereas jussive mood conveys command, exhortation, invitation or permission towards first or third person referent(s). Imperative-jussive verbs are formed with a finite verb stem, followed by a set of cross-reference suffixes (see below) and then followed by a zero imperative-jussive suffix.

For verb lexemes which have a future versus non-future finite verb stem distinction (§5.1.2), a tense distinction of present versus future is possible in their imperative-jussive forms. Present tense in Menggwa Dla conveys present time, immediate past time and immediate future time, whereas future tense conveys non-immediate future time (§6). Present imperative-jussive conveys that the speaker wishes that the content of the command/ exhortation/ invitation/ permission be fulfilled immediately after the time of utterance, whereas future imperative-jussive conveys that the speaker wishes that the content of the command/ exhortation/ invitation/ permission be fulfilled sometime in the future but not immediately.

Future imperative-jussive verbs have a future finite verb stem, subset A cross-reference suffix(es) and a zero imperative-jussive suffix, except for class IIB verbs which must take class IIB cross-reference suffixes (§5.2.2). Present imperative-jussive verbs have a non-future finite verb stem instead, and the cross-reference suffixes involved are similar to those of positive semi-realis verbs (§6.2.1) and other irrealis categories like tentative and counterfactual moods (§6.3.3-4):

- class IB/ IHB cross-reference suffix(es) for class I/ IH verb stems;

- class IIB subject plus class IIB object suffixes for class IIB verb stems;

- class IIA subject plus class IIB object suffixes for class II verb stems; and

- class III subject plus class IIIB object suffixes for class III verb stems.

The following are a few examples of imperative-jussive verbs.[10]

Present imperative: Future imperative:

6-119. hof-afu-Ø!   *6-120. gof-afa-Ø!*

    come-2SG-IMP   come:FUT-2SG-IMP

    'Come (now)!'   'Come (later)!'

    (*hofu* (*hof-*/ *gof-*) 'come' class I; *-afu* class IB, *-afa* class IA)

6-121. ser-yefi-Ø!   *6-122. det-yefye-Ø!*

    eat-N1FDU-IMP   eat:FUT-N1FDU-IMP

    'You two eat (now)!'   'You two eat (later)!'

    (*seru* (*ser-*/ *det-*) 'eat' class IH; *-yefi* class IB, *-yefye* class IA)

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[10] There are no examples of class II verbs in this subsection as no class II verbs make a distinction of future versus non-future finite verb stems.

6-123. sama-wa-a-Ø!   *6-124. dama-wa-a-Ø!*

cook-2SG-3FSG:O-IMP   cook:FUT-2SG-3FSG:O-IMP

'Cook it (now)!'   'Cook it (later)!'

(*samefi* (*sama-/ dama-*) 'cook' class IIB; *-wa-a* class IIB)

Present/ future jussives:

6-125. yowala   wuli   [hahof-u-Ø   / gakof-u-Ø].

1SG:GEN   house   [go.up-3MSG-JUS / go.up:FUT-3MSG-JUS]

'He should go into my house (now/ later).'

(*hahofu* (*hah- ~ hahof/ gak- ~ gakof-*) 'go up' class IH; *-u* class IHA/ IHB)

6-126. yafli wi   [sa-niŋgu-u-Ø   / da-niŋgu-wa].

dog   child [give-1PL-3SG:O-JUS / give:FUT-1PL-3SG:O-JUS]

'Let us give him/her the puppy (now/ later).'

(*sefi* (*sa-/ da-*) 'give' class III; *-niŋgu-u* class IIIB, *niŋgu-wa* class IIIA)

For verb lexemes which do not have a future versus non-future distinction for their finite verb stems (which is the case with most verb lexemes), no tense distinction is made for their imperative-jussive verb forms. These verb lexemes form their imperative-jussive verb forms like the present tense imperative-jussive verb forms described in the previous paragraph (with class IB/ IHB/ IIB SUBJ + IIB OBJ/ IIA SUBJ + IIB OBJ/ III SUBJ + IIIB OBJ cross-referencing; see above). Functionally, the unmarked interpretation of these imperative/ jussive verbs is also the present tense/ immediate future time interpretation, i.e. that the speaker wishes

that the content of the command/ exhortation/ invitation/ permission be fulfilled immediately.

6-127. dukwa-hi-a-Ø!

wake.up-N1FPL-3FSG:O-IMP

'All of you wake up (now)!' (*dukwefi* (*dukwa-*) 'wake up' class IIB; 60I)

6-128. yowala   nitufu hwatu-afu-Ø!

1SG:GEN lime   search-2SG-IMP

'Search for my lime (now)!'/ 'Find some lime for me (now)!'

(*hwatu* 'search' class I; *-afu* class IB)

6-129. hai fofo-wa-a-Ø!

fire blow-2SG-3FSG:O-IMP

'Light the fire!'

(*fofo* 'blow' class IIB; *-wa-a* class IIB; 50I)

6-130. hupla   imbu bi-na-pu-Ø!

container two   hold-N1DU-N1DU:O-IMP

'You two hold the two pots!'

(*bi* 'hold' class II; *-na* class IIA, *-pu* class IIB; 70I)

6-131. homba-Ø-i-Ø!

see-N1SG-1SG:O-IMP

'Look at me!' (*homba* 'see/ look' class II; *-Ø* class IIA, *-i* class IIB)

6-132. afta-efu-Ø!

bathe-1PL-JUS

'Let us bathe (now).' (*afta* 'bathe' class I; *-efu* class IB)

A non-immediate future interpretation can be lexically specified by the temporal word *suŋgu* 'later' (§3.2.8).

6-133. suŋgu afta-efu-Ø.

later   bathe-1PL-JUS

'Let us bathe later.'

All class II verb stems end in a vowel (§5.2.2). When a class II verb stem is followed by the class II suffixes of *-Ø-a* (-N1SG-3FSG:O), a lot of speakers — older speakers in particular — prefer to have an *-l* ligature between the verb stem and the cross-reference suffixes (especially when the verb stem also ends with *a*).

6-134. fa-l-Ø-a-Ø!

pick.betel.nut-LIG-N1SG-3FSG:O-IMP

'You pick betel nut!'

(*fa* 'pick betel nut' class II; *-Ø* class IIA, *-a* class IIB)

6-135. homba-l-Ø-a-Ø!

see-LIG-N1SG-3FSG:O-IMP

'Look!' (*homba* 'see/ look' class II)

6-136. pupe(-l)-Ø-a-Ø!

      wash(-LIG)-N1SG-3FSG:O-IMP

      'Wash it!' (*pupe* 'wash' class II)

      Commands or exhortations conveyed by the imperative-jussive mood outlined in this subsection are not necessarily viewed as direct or rude, but a polite and less direct form of command/ exhortation/ invitation/ permission can be conveyed using tentative mood in future tense. See §6.3.3.2.

6.3.2   Prohibitive and cautious moods

      By using the cautious mood verb form, the speaker is advising the addressee (sometimes the speaker him/herself) to be cautious of or refrain from some situation, usually because the fulfilment of that situation would potentially have adverse effect on someone. Cautious mood verb forms are non-finite; there is no cross-referencing on the verb. Cautious verb form is formed by a non-finite verb stem followed by a cautious suffix: *-e* if the non-finite verb stem ends in *i* or *a*, *-we* if the non-finite verb stem ends in *e, o* or *u* (non-finite verb stems always ends in a vowel; §5.1.1).

      Prohibitive mood is the semantic negative counterpart of imperative-jussive mood (§6.3.1). Prohibitive verb forms are non-finite as well; they do not carry any cross-reference suffixes. Prohibitive verbs are formed by prefixing a negative irrealis prefix *ma-* (§6) and suffixing a cautious mood suffix *-e ~ -we* (see above) to a non-finite verb stem.

6-137. akani ma-nuŋgu-we!   *hofahi-e.*

there NEG:IR-stand-CAUT   fall-CAUT

'Do not stand there! Lest (you) fall.'

(*nuŋgu* (*numb-/nuŋg-*) 'stand' class I, *hofahi* 'fell/ trip over' class IIB; 70II)

6-138. ma-fefi-e!

NEG:IR-leave-CAUT

'Do not leave!'/ 'Let us/ me not leave.' (*fefi* (*fa-*) 'leave' class IIB)

6-139. ma-seru-we!   *tite no.*

IR:NEG-eat-CAUT   bad COP:3FSG

'Do not eat (that)! It is bad.'

In addition, *we* on itself is an interjection (§3.2.9) which can be translated as 'watch out!' or 'be careful!'.

6-140. we!   *akwani yafu-kyau-we.*

watch.out   snake   tooth-bite-CAUT

'Watch out! Be careful of the snake biting.'

(*kyau* 'bite' class I)

6.3.3   Tentative mood and questions in future tense

Tentative mood conveys that the proposition is considered to be a possible outcome or possible conclusion by the speaker, comparable with the use of the English modal verb *may* when it is used in an epistemic sense to convey uncertainty.

The formation of tentative mood verb forms differ between non-future tenses (§6.3.3.1) and future tense (§6.3.3.2). In future tense, tentative mood verb forms also function as questions or indirect requests.

6.3.3.1   Non-future tentative mood

Positive non-future tentative mood verb forms consist of a non-future finite verb stem (§5.1.2), followed by subset A cross-reference suffix(es) (except for class IIB verbs which must always take class IIB cross-reference suffixes; §5.2.2), and finally by a tentative *-ni*. Negative forms have a negative irrealis affix *ma-/ -ma/ -me/ -m/* (§6.3) affixed to the non-future finite verb stem (§5.1.2).

6-141. *yafli sihafa   iplwa ser-yefye-ni.*

   dog 2SG:GEN fish   eat-N1FDU-TENT

   'Maybe the dogs ate/ is eating your fish.'

   (*seru* (*ser-/ det-*) 'eat' class IH; *-yefye* class IH)

6-142. *nyewi tu   popo-Ø-a-ni.*

   people egg take.egg:MASS-N1SG-3FSG:O-TENT

   'Maybe someone took/ is taking the eggs.'

   (*popo* 'take eggs from nest' class II, mass undergoer; *-Ø-a* class IIA)

6-143. *fa-ya-a-ni.*

   leave-3SG-3FSG:O-TENT

   'Maybe s/he has just left.'

   (*fefi* (*fa-*) 'leave' class IIB; *-ya-a* class IIB)

6-144. hwahwamayani.

   a. hwahwa-ma-Ø-ya-ni.

   know-NEG:IR-N1SG-1SG:O-TENT

   'Maybe s/he/you does not know me.'

   b. hwahwa-ma-ya-Ø-ni.

   know-NEG:IR-N1FSG-3MSG:O-TENT

   'Maybe she/you does not know him.'

(*numu* (*num-*) 'sit' class I; *-Ø-ya*, *-ya-Ø* class IIA)[11]

Another strategy to convey tentativeness is having a realis clause followed by a tentative copula (§6.4.1). The following is an example.

6-145. akana   num-u-hi   meni.

   there   sit-3MSG-PRES:CONT COP:TENT

   'Maybe he is there.' (*numu* (*num-*) 'sit' class I; *-u* class IA)

6.3.3.2   Future tentative mood

Future tentative mood verbs always carry a negative irrealis affix; there is no positive formal counterpart. Even though all future tentative mood verbs have a negative irrealis affix, the speaker is not biased towards the positive or negative outcome by using a future tentative verb. Future tentative verb forms are formed by a future finite verb stem, a negative irrealis affix (§6), a set of cross-reference suffixes, and optionally a tentative suffix *-ni*. The sets of cross-referencing used are

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[11] The speaker cannot remember which the intended interpretation was. Without context this sentence remains ambiguous. Also see the paradigm of class IIA cross-reference suffixes in §5.2.2.

similar to those of positive semi-realis verbs (§6.2.1) and other irrealis categories like present imperative-jussive (§6.3.1) and counterfactual moods (§6.3.4):

- class IB/ IHB cross-reference suffix(es) for class I and IH verb stems;

- class IIB subject plus class IIB object suffixes for class IIB verb stems;

- class IIA subject plus class IIB object suffixes for class II verb stems; and

- class III subject plus class IIIB object suffixes for class III verb stems.

6-146. *kyambe   ma-gof-a(-ni).*

    tomorrow   NEG:IR-come:FUT-1SG(-TENT)

    'I may come tomorrow.'

    (*hofu* (*hof-/ gof-*) 'come' class I; *-a* class IB)

6-147. *homba-ma-na-ni-ni.*

    see-NEG:IR-N1DU-2SG:O-TENT

    'Maybe the two of them will see you.'

    (*homba* 'see' class II; *-na* class IIA, *-ni* class IIB)

6-148. *yohwefa   tirati   pa-ma-ya-a-ni.*

    1PL:GEN   letter   write-NEG:IR-3SG-3FSG:O-TENT

    'Maybe s/he will write the letter for us.'

    (*pefi* (*pa-*) 'write' class IIB; *-ya-a* class IIB)

6-149. *wanu   aflambli ma-sa-mbu-mu(-ni).*

money plenty   NEG:IR-give-N1MPL-1NSG(-TENT)

'Maybe they will give us lots of money.'

(*sefi* (*sa-* / *da-*) 'give' class III; *-mbu* class III, *-mu* class IIIB)

6.3.3.3   Questions in future tense

Future tentative mood verb forms can also be used for questions in future
tense. We have seen that future declaratives are expressed by semi-realis verb forms
(§6.2). Future interrogatives, however, must be in irrealis status. The future
tentative verb form is used for both content questions (question word questions) and
polarity questions (yes-no questions). The following are some examples of content
questions in future tense.

6-150. *dani＝hya＝na   ga＝na   po-ma-afu?*

here＝ABL＝TOP   where＝ALL go:FUT-NEG:IR-2SG

'From here where will you go?' (*pi* (*pi-*/ *po-*) 'go' class I; *-afu* class IB)

6-151. *nahombo kaha-ma-wa-a?*

why   chop-NEG:IR-2SG-3FSG:O

'Why will you chop it down?'

(*kahefi* (*kaha-*) 'chop standing things' class IIB; *-wa-a* class IIB)

6-152. *nuŋgwi   bli-ma-ha-a?*

how.many buy-NEG:IR-1SG-3FSG:O

'How many should I buy?' (*bli* 'buy' class II; *-ha* class IIA, *-a* class IIB)

The following are some examples of polarity questions in future tense.

6-153. yoambo hiniŋgi-m-afa?

    1SG:OBJ wait-NEG:IR-N1MDU

    'Will they wait for me?' (*hiniŋgi* 'wait' class I; *-afa* class IB)

6-154. amani mome-m-a?

    can   be.together-NEG:IR-1SG

    'Can I be together (with you)?' (*mome* 'be together' class I; *-a* class IB; 80I)

An extension of this interrogative function is that future tentative clauses in the form of polarity questions also convey indirect commands or exhortations in the right contexts (mainly when the subject is the addressee). Commands and exhortations expressed by future tentative verb forms are less direct and more polite than commands or exhortations expressed by imperative verb forms (§6.3.1).

6-155. bya   ma-dom-afu.

    coconut NEG:IR-drink:FUT-2SG

    'Please drink the coconut.'

    (*simi* (*simi-*/ *dom-*) 'drink' class I; *-afu* class IB)

6-156. sea＝*hi*   *ma-num-afu.*

chair＝ADS NEG:IR-sit-2SG

'Please sit on the chair.'

(*numu* (*num-*) 'sit' class I; *-afu* class IB)

6.3.4　Counterfactual mood

Counterfactual mood conveys that the polarity of the proposition is opposite to what has actually occurred. Counterfactual verb forms have a non-future finite verb, a counterfactual suffix *-naho* at the end of the verb, and cross-reference suffix(es) in between:

- class IB/ IHB cross-reference suffix(es) for class I and IH verb stems;
- class IIB subject plus class IIB object suffixes for class IIB verb stems;
- class IIA subject plus class IIB object suffixes for class II verb stems; and
- class III subject plus class IIIB object suffixes for class III verb stems.

The following are examples of the *-naho* counterfactual mood verb. Counterfactual clauses often cooccur with hypothetical protases, which come in the form of chain clauses (demonstrated in examples 6-157 to 6-159 below); see also §7.2.3 on hypothetical protases.

6-157. hwahwa-Ø-a-mbona,　rani　ma-ser-i-naho.

know-CR-1SG-DEP   DEM NEG:IR-eat-1SG-CNTR

'If I knew, I would not have eaten that.'

(*hwahwa* 'know' class I, *seru* (*ser-*/ *det-*) 'eat' class IH;

-a class IB, *-i* class IHB)

6-158. *hwahwa-Ø-a-mbona, numu-hya-a-naho.*

  know-CR-1SG-DEP   wear-1SG-3FSG:O-CNTR

  'If I have known, I would have worn it.'

  (*numu* 'wear' class IIB, *-hya-a* class IB)

6-159. *rani amani ilo-ma-Ø-a-mbo,   homba-ha-a-naho.*

  DEM good   work-DR-N1SG-3FSG:O-DEP see-1SG-3FSG:O-CNTR

  'If you have done it well, I would have seen it.'

  (*ilo* 'work' class II, *homba* 'see' class II;

  -Ø-a class IIA, *-ha* class IIA, *-a* class IB)

6-160. *hihifu-me-o-naho.*

  be.happy-NEG:IR-3FSG-CNTR

  'She would not have been happy.' (*hihifu* 'be happy' class I, *-o* class IB)

6-161. *yafli wi   sa-niŋga-ni-naho   gwa,*

  dog   child give-1SG-2SG:O-CNTR but

  [ga＝nambo   pi-wi-hya]   hwahwa boke-aha-hi.

  [where＝ALL go-N1FPL-PAST] know   NEG:R-1SG-PRES:CONT

  'I would give you the puppies, but I do not know where they have gone.'

  (*sefi* (*sa-*/ *da-*) 'give' class III, *pi* (*pi-*/ *po-*) 'go' class I, *hwahwa* 'know' class

  I; *-niŋga* class III, *-ni* class IIIB, *-wi* class IA, *-aha* class IA)

6.4   Copulas and independent copular clauses

The forms of different copulas are introduced in §6.4.1. Different kinds of independent copular clauses are introduced in §6.4.2. Copulas can also be used as an auxiliary verb which indicates that the whole clause is focused; see §6.4.3.

6.4.1   Copulas

Copula is a special class of verb in Menggwa Dla. Like other verbs, copulas also have finite forms which carry cross-referencing and non-finite forms which do not. However, as the main verb of a clause, finite copulas only head independent clauses (§6), and the non-finite copulas only head non-finite chain clauses (§7.3.2) (copulas are not used as the main verb of subordinate clauses (§7.1) and chain clauses (§7.2); see also §6.4.3 on auxiliary copulas). Moreover, finite copulas mark less tense-aspect-mood categories than ordinary verbs, and the way tense-aspect-mood-polarity categories are expressed in copulas is also mostly different from those in ordinary verbs (§6.1-3). The following table summarises the copulas in Menggwa Dla; the copulas are introduced in the listed order in the rest of this section.

Table 6.8   Copulas in Menggwa Dla

Non-finite form	Finite form
positive declarative *nu*	present tense *ny-✕/ nV-✕*
	past tense *Ø-✕-hwa*
	future tense *l-✕-samby-✕*
negative declarative *me*	future tense *ga … l-✕*
	non-future tense *m(e)-✕*
future interrogative *me*	*m(e)-✕*
tentitive *meni*	*m(e)-✕-ni*
non-future interrogative *be*	*b(e)-✕*
'where' interrogative *ke*	*k(e)-✕*
'who' interrogative *de*	*d(e)-✕*

Most copulas carry class Iʙ cross-referencing, while some carry class Iᴀ cross-referencing (§5.2.1). Repeated below are the forms of class Iᴀ and class Iʙ cross-reference suffixes.

Table 6.9 Class Iᴀ cross-reference suffixes

		1	2	3
SG	M			*-Ø/ -u*
		-aha	*-afa*	
	F			*-wa*
DU	M			*-afa*
		-ehye		
	F			*-efye*
PL	M			*-ma/ -uma*
		-efa		
	F			*-wi/ -ei*

(V_: *Ø, ma, wi* / C_: *u, uma, ei*)

Table 6.10 Class Iʙ cross-reference suffixes

		1	2	3
SG	M			*-u*
		-a	*-afu*	
	F			*-o*
DU	M			*-afani*
		-ehi		
	F			*-efi*
PL	M			*-mu/ -umu*
		-efu		
	F			*-wi/ -ei*

(V_: *mu, wi* / C_: *umu, ei*)

The non-finite form of the positive declarative copula is *nu*. Finite forms of the positive declarative copula distinguish three tenses: present, past and future. The present tense copula conveys timeless states — states which hold in the present and extend indefinitely in the past and in the future (unless qualified lexically to be temporally bounded). The past tense copula conveys states which hold in the past but no longer hold in the present. The future tense copula conveys the speaker's confidence in the actual holding of the state in future time.

Finite forms of the positive present declarative copula have class IB cross-reference suffixes. The finite stem of the positive present declarative copula is *ny-*, except when the subject is third person singular (3SG) or non-first person plural (N1PL), the stem is *nV-* where *V* is a copy of following vowel. (Through vowel degemination rule (§2.3), *nu-u* (3MSG) and *no-o* (3FSG) become *nu* and *no* respectively.)

Table 6.11   Positive present declarative copulas

		1	2	3
SG	M	*ny-a*	*ny-afu*	*nu-u*
	F			*no-o*
DU	M	*ny-ehi*	*ny-afani*	
	F		*ny-efi*	
PL	M	*ny-efu*	*nu-mu*	
	F		*ni-wi*	

6-162. yo＝na Helen *ny-a.*

1＝TOP Helen COP:PRES-1SG

'I am Helen.'

Positive past declarative copulas are formed with what is formally a class IA cross-reference suffix suffixed with a past tense suffix *-hwa* (§6.1.2).

Table 6.12   Positive past declarative copulas

		1	2	3
SG	M	*aha-hwa*	*afa-hwa*	*Ø-hwa*
	F			*wa-hwa*
DU	M	*ehye-hwa*	*afa-hwa*	
	F		*efye-hwa*	
PL	M	*efa-hwa*	*ma-hwa*	
	F		*wi-hwa*	

6-163. ai tite wi   Ø-hwa.

3   bad child 3MSG-PAST

'He was a small child.'

6-164. dani＝na misin   *bukwa wo-hwa.*

this＝TOP mission.station big   3FSG-PAST

'This was a big mission station.'

Positive future declarative copulas have the same forms as the morphs which follow a class I lexical verb stem in a semi-realis verb form. See §6.2.1.

Table 6.13   Positive future declarative copulas

		1	2	3
SG	M	*l-a-mby-a*	*l-afu samby-afu*	*l-a-ah-u-mb-i*
	F			*l-a-ah-o-mb-e*
DU	M	*l-e(hi sa)mby-ehi*	*l-afani samby-afani*	
	F		*l-efi samby-efi*	
PL	M	*l-e(fu sa)mby-efu*	*l-uma-ah-u-mb-imu*	
	F		*l-ei samby-ei*	

(*lehi sambyehi* (1DU) and *lefu sambyefu* (1PL) can be contrated to *lembyehi* (1DU) and *lembyefu* (1PL) respectively.)

6-165. yo amani glu   l-a-mby-a.

> 1   good   teacher LIG-1SG-POS:SMR-1SG

> 'I will be a good teacher.'

Negative future declarative copulas are formed like negative semi-realis verbs (§6.2.2): the predicate nominal is preceded by a negative semi-realis particle *ga* and followed by an *l* ligature which is suffixed with a class IA cross-reference suffix. The exception is that when the subject is third person masculine singular (3MSG), the cross-reference suffix is *-Ø* and the *l* ligature is not used.

Table 6.14   Negative future declarative copulas

		1	2	3
SG	M	ga … l-aha	ga … l-afa	ga … Ø
	F			ga … l-wa
DU	M	ga … l-ehye		ga … l-afa
	F			ga … l-efye
PL	M	ga … l-efa		ga … l-uma
	F			ga … l-ei

6-166. *yo ga*   *amani glu*   *l-aha.*

    1   NEG:SMR good   teacher   LIG-1SG

    'I will not be a good teacher.'

6-167. *ga*   *tite nesi*   *Ø.*

    NEG:SMR bad nurse 3MSG

    'He will not be a bad nurse.'

The non-finite form of the negative declarative copula is *me*. Finite forms of the negative declarative copula distinguish two tenses: non-future and future.

Negative non-future copulas and the future interrogative copulas have the same forms (e.g. both have the non-finite form *me*). This unification suggest that with copulas, negativity is semantically subordinate to the status of irrealis, unlike other verbs where negativity is independent from status (§6.1; §6.2; §6.3). Negative non-future/ future interrogative copulas have a class IB cross-reference suffix, except

that when the subject is first person singular (1SG), the class IA suffix of -aha is used

instead (some younger speakers pronounce this suffix as -aya). The negative non-

future/ future interrogative copula stem is me, except when the following cross-

reference suffix begins with a, then the copula stem is m. This allomorphy is

identical with that of the negative irrealis affix (§6.3).

Table 6.15   Negative non-future declarative/ future interrogative copulas

		1	2	3
SG	M	m-aha	m-afu	me-u
	F			me-o
DU	M	me-ehi	m-afani	
	F		me-efi	
PL	M	me-efu	me-mu	
	F		me-wi	

6-168. amani glu   m-aha.

    good   teacher NEG:IR-1SG

    'I am/was not a good teacher.'

6-169. amani glu   m-aha?

    good   teacher NEG:IR-1SG

    'Will I be a good teacher?'

The tentative copula is formed by the *me* copula — either the non-finite or finite forms — suffixed with the tentative suffix *-ni* (§6.3.3). The tentative copula does not mark tense.

6-170. *amani glu*   *m-aha-ni.*

good   teacher NEG:IR-1SG-TENT

'Maybe I was/ am/ will be a good teacher.'

6-171. *me-ni.*

NEG:IR-TENT

'Maybe.'

There are three other sets of copulas similar in form with *me* — the non-future interrogative copula *be*, the 'where' interrogative copula *ke* and the 'who' interrogative copula *de*. The only formal difference is that the initial consonants are *b*, *k* and d respectively instead of *m*. The 'where' interrogative copula is only used when accompanied by *ga* 'where', and the 'who' interrogative copula is only used when accompanied by *da* 'who'.

Table 6.16   Non-future interrogative copulas

		1	2	3
SG	M	b-aha	b-afu	be-u
	F			be-o
DU	M	be-ehi	b-afani	
	F		be-efi	
PL	M	be-efu	be-mu	
	F		be-wi	

6-172. *amani glu   b-aha?*

    good   teacher NFUT:INTRG:COP-1SG

    'Am/ was I a good teacher?'

Table 6.17   'Where' interrogative copulas

		1	2	3
SG	M	k-aha	k-afu	ke-u
	F			ke-o
DU	M	ke-ehi	k-afani	
	F		ke-efi	
PL	M	ke-efu	ke-mu	
	F		ke-wi	

6-173. *amani glu   ga   ke-o?*

    good   teacher where where:COP-3FSG

    'Where is the/ a good teacher?'

Table 6.18   'Who' interrogative copulas

		1	2	3
SG	M	d-aha	d-afu	de-u
	F			de-o
DU	M	de-ehi	d-afani	
	F		de-efi	
PL	M	de-efu	de-mu	
	F		de-wi	

6-174. *da   de-u?*

who   who:COP-3MSG

'Who is he?'

6-175. *amani glu   da   de-o?*

good   teacher who   who:COP-3FSG

'Who is the/ a good teacher?'

6.4.2   Independent copular clauses

Predicates are not always verbal; nominals and pronominals can also form predicates. Copulas are placed after predicate nominals and predicate pronominals to provide subject cross-referencing, tense, aspect, mood and/or polarity information, as nominals do not provide this grammatical information and pronominals provide cross-referencing information at most. The main usages of copulas are: a) to equate the predicate (pro)nominal with the subject (pro)nominal (equative usage); and b) to

indicate that the referent(s) of the subject (pro)nominal is/ are properly included in the set of referents of the predicate (pro)nominal (proper-inclusion usage). In equative and proper-inclusion copular clauses, predicate nominals are not case-marked, and predicate pronouns are in their citation forms. Equative and proper-inclusion copular clauses are introduced in §6.4.2.1. There are also other copula clauses where the predicate (pro)nominal is case marked; they are introduced in §6.4.2.2-5.

Unlike English where existential clauses are usually copular (e.g. *There was a haunted house in the forest*), existential clauses in Menggwa Dla are usually verbal: the verb *eku* (*ek-*) 'exist' (class I) is used for non-living things, while *nuŋgu* (*nu[ŋg/mb]-*) 'stand' (class I) and *numu* (*num-*) 'sit' (class I) are used for living things (whether *nuŋgu* 'stand' or *numu* 'sit' is used dependends on their usual stance).

6-176. tamako ek-wa-mbi.

    axe   exist-3FSG-PRES:STAT

    'There is an axe (there).'

6-177. Arso =*hi   tite yani aflambli num-uma-mbi.*

    Arso =ADS bad man many   sit-3MPL-PRES:STAT

    'In Arso there are many bad men.'

6-178. akani bani nomo nuŋ-wa-mbi.

there sago tree   stand-3FSG-PRES:STAT

'There are sago palms there.'

Copulas are also used in subordinate clauses (§7.1), non-finite chain clauses (§7.3.1) and verbal noun phrases (§7.3.2), but not in chain clauses (§7.2). This section covers copular usage with independent clauses; see the relevant sections on the usage of copulas with dependent clauses.

6.4.2.1   Equative and proper-inclusion copular clauses

In an equative copular clause, the subject (pro)nominal and the predicate (pro)nominal are both semantically definite, and the two references share exactly the same referents. Because of this, the subject and the predicate (pro)nominal in equative copular sentences are — by definition — interchangeable with no semantic differences.

6-179. a. dani=na yowala mi   no.

this=TOP 1SG:GEN mother COP:3FSG

'This is my mother.'

b. yowala mi=na dani no.

'My mother is this (person).'

6-180. a. ai=na stesen meneja Ø-hwa.

3=TOP station manager 3MSG-PAST

'He was the new station manager.'

b. stesen meneja＝*na ai Ø-hwa.*

   'The station manager was he.'

6-181. a. dani hwi＝na   humlali no.

   this   water＝TOP Humlali COP:3MSG

   'This stream is Humlali.'

b. humlali＝na dani hwi no.

   'Humlali is this stream.'

In a proper-inclusion copular clause, the referents of the predicate nominal properly includes the referents of the subject (pro)nominal. In a proper-inclusion copular clause, the predicate nominal is indefinite in meaning, and thus the predicate cannot be a pronominal. Also because of this, the subject and the predicate nominals cannot be interchanged.

6-182. yo＝na nesi   l-a-mby-a.

   1＝TOP nurse LIG-1SG-POS:SMR-1SG

   'I will be a nurse.'

6-183. ai＝amba numbala newi   ny-afani.

   3＝too   black   people COP-N1MDU

   'They are black people too.'

406

6-184. dani wuli＝na   ayamu wuli no.

this   house＝TOP chicken house COP:3FSG

'This hut is a chicken coop.'

As seen in the examples above and in §4.3, simplex noun phrases (one which only contain an unmodified head noun and one which is not a proper name) are not specified for definiteness, and so copular sentences with a simplex noun phrase are often ambiguously equative and proper-inclusion in nature. For instance:

6-185. ai＝na   Utai＝la   patulu nu.

3＝TOP Utai＝ABL priest COP:3MSG

a. 'He is the priest from Utai.' (equative)

b. 'He is a priest from Utai.' (proper-inclusion)

Subjects of copula clauses do not have to be expressed by nominals or pronominals; they can be expressed simply by verbal cross-referencing (§5.3.2).

6-186. yowala   bofuna ny-__efi__.

1SG:GEN   parent COP-N1FDU

'They are my parents.'

6-187. tohalwa be-__wa__.

school   COP:NEG:NFUT-3FSG

'(This) is not a school.'

Adjectives (§3.1.2) require a copula when they are used predicatively (except when the sentence is positive declarative; see example 6-192 below).

6-188. *sihafa*   *gwafu＝na*   *mayana be.*

       2SG:GEN   village＝TOP far   COP:INTRG

       'Is your village far away?'

6-189. *dani gwafu＝na*   *getali no.*

       this   village＝TOP long COP:3FSG

       'This village is long.'

6-190. *sihafa*   *computer＝na*   *tikyawi no*   *ke!*

       2SG:GEN computer＝TOP small   COP3FSG EXCLM

       'Your computer is small!'

Positive present declarative copulas are often ellipted.

6-191. *yo＝na* Greg *(nya).*   6-192. *dani＝na*   *amani (no) .*

       1＝TOP Greg (1SG:COP:PRES)   this＝TOP good   (3SG:COP:PRES)

       'I am Greg.'   'This is good.'

In copular questions, either declaratives or interrogative copulas can be used (§6.4.1). Copular questions with declarative copulas usually have rising or high level intonation (§4.2.2).

6-193. Hilari *[ny-afu   / b-afu]?*

Hilari [COP:PRES-2SG / COP:INTRG-2SG]

'Are you Hilari?'

6.4.2.2   Proprietive possessive and abessive non-possessive copular clauses

Menggwa Dla does not have verbs which mean 'to have' or 'to possess'. To indicate possession at the clause level, one strategy is using a copular clause with the possessum in proprietive case (§4.5.5) as the predicate and the possessor as the subject.

6-194. ai＝na   wanu＝mbi   nu.

3＝TOP money＝PROP COP:3MSG

'He has (lots of) money.'

6-195. amuŋgwamba＝na hwalfehi imbu＝mbi Ø-hwa.

village.head＝TOP   woman   two＝PROP   3MSG-PAST

'The village head had two wives.'

The negative counterpart is formed by the possessum in abessive case (§4.5.5), and the copula still in positive polarity.

6-196. refugee＝na   TB＝mbi   (wi-hwa)   gwa ufati＝mboka   efa-hwa.

refugee＝TOP TB＝PROP (N1FPL-PAST) but   medicine＝ABSS 1PL-PAST

'The refugees had tuberculosis, but we did not have medicine.'

6-197. ai=na   wi=mboka   nu.

    3=TOP child=ABSS COP:3MSG

    'He does not have a child.'

6-198. ai=na   yulu=mboka   no.

    3=TOP leg=ABSS   COP:3FSG

    'She does not have leg(s).'

6.4.2.3   Genitive possessive and genitive beneficial copular clauses

       Another strategy to indicate possession at the clause level is using a copular

clause with the possessor in genitive case (§4.5.2) as the predicate and the

possessum as the subject. As the genitive case marks both possessor and beneficiary,

these genitive copular clauses can ambiguously indicate both possessive and

beneficial meanings.

6-199. tirati=na   yowala   no.

    letter=TOP 1SG:GEN COP:3FSG

    'The letter is mine/ for me.'

6-200. buku=na   sihei   (no).

    book=TOP 2FPL:GEN (COP:3FSG)

    'The book is yours/ for you.'

6-201. *rani kapali＝na*   Garamut＝*la*   *Ø-hwa.*

　　　that aeroplane＝TOP Garamut＝GEN 3MSG-PAST

　　　'That aeroplane belonged to Garamut.'

The negative counterpart is formed by the copula in negative polarity.

6-202. *dani hofo＝na*   *yohwefa m-efu.*

　　　this land＝TOP 1PL:GEN NEG:COP-1PL

　　　'This land is not ours.'

6-203. *dani ilo＝na*   *petwa yani＝la*   *me-o.*

　　　this work＝TOP old   man＝GEN NEG:COP-1PL

　　　'This job is not the old man's.'

6.4.2.4   Locative copular clauses

　　　Copular clauses can be formed with the predicate (pro)nominal in one of the

four local cases: inessive case ＝*mbe*, adessive case ＝*hi* / ＝*sehi*, allative case

＝*na(mbo)* and ablative case ＝*hya* (§4.5.3). Inessive copular clauses signify 'be in',

'be going in' or 'be coming out of'; adessive copular clauses signify 'be at'; allative

copular clauses signify 'be going to'; and ablative copular clauses signify 'be

coming from'.

6-204. *mi＝la*   *rumu＝mbe no.*

　　　mother＝GEN room＝INS   COP:3FSG

　　　'It is in mother's room.'

6-205. Syatan＝*na ehala   sufwa＝mbe nu.*

       Satan＝TOP 3SG:GEN liver＝INS   COP:3MSG

       'Satan is inside his soul.'

6-206. saftu＝hi   no.

       Saturday＝ADS   COP:3FSG

       'It is on Saturday.'

6-207. ai Humberto＝*sehi no.*

       3   Humberto＝ADS COP:3FSG

       'She is at (e.g. sitting next to) Humberto.'

6-208. yo＝na Aitape＝*nambo ny-a.*

       1＝TOP Aitape＝ALL   COP-1SG

       'I am (going) to Aitape.'

6-209. Meri＝*na*   Biak＝*na   lahombe.*

       Meri＝TOP Biak＝ALL COP:FUT:3FSG

       'Meri will be (going) to Biak.'

6-210. ai Buka＝*hya nu.*

       3   Buka＝ABL COP:3MSG

       'He is (coming) from Buka.'

6-211. *dani* muli *suŋgwani＝na* Jayapura＝*hya no.*

this citrus sickness＝TOP Jayapura＝ABL COP:3MSG

'This citrus sickness comes from Jayapura (area).'

6.4.2.5 Instrumental and comitative copular clauses

Predicate nominals are sometimes in allative-instrumental or comitative cases (§4.5.3-4). Instrumental copular clauses signify 'be done with' and commitative copular clauses signify 'be together with'.

6-212. *dani＝na* *tumahi＝nambo no.*

this＝TOP axe＝ALL COP:3FSG

'This is (done) with an axe.'

6-213. Susan＝*na* *hwila＝lofo no.*

Susan＝TOP mother＝COM COP:3FSG

'Susan is with (her) mother.'

6.4.3 Copulas as auxiliary verbs

Copulas can function as auxiliary verbs which indicate that the whole clause is focused. The auxiliary copula follows the main verb immediately. The following is an example.

6-214. *numami ra＝mbe pe boke-wa-hya no.*

above DEM＝INS be.gone NEG:R-3FSG-PAST:FOC COP:3FSG

'It has not gone up there.' (A)

413

Formally, a sentence like the example above looks like a cleft construction, where *numami rambe pe bokewahya* is a zero-headed relative clause (§7.1.1.3) and the copula is the main verb of the clause. Nevertheless, clauses with auxiliary copulas are not cleft constructions, as the verb which precedes the auxiliary copula is often in a form which cannot be a relative clause verb. For instance, in the second clause below, the main verb *piwahi* 'she is going' has a present continuous suffix *-hi* (§6.1.1); relative clause verbs cannot take *-hi* (§7.1.1), and hence *piwahi* is not a relative clause.

6-215. rani amni   baya tupam nyawi hihiri fa-Ø-ya-a-Ø,

DEM garden side   thing   person steal   COMPL-CR-3SG-3FSG:O-DEP

pi-wa-hi   *no.*

go-3FSG-PRES:CONT COP:3FSG

'Someone has stolen things from the garden and is going.' (A)

Auxliary copulas which are used in chain clauses (§7.2) have an invariant non-finite chain verb form *nu-mbo* (COP-DEP).

6-216. ra=nambo rani hwi   fri-Ø-mu-mbo   nu-mbo,

DEM=ALL   DEM water get.rid-CR-3MPL-DEP COP-DEP

'They used that to get rid of the water, and…' (A)

Chapter 7

Dependent Verbal Morphology and Interclausal Relationship

There are three types of dependent clauses in Menggwa Dla: subordinate clauses (§7.1), chain clauses (§7.2), and non-finite chain clauses (§7.3.1). Nearly identical to non-finite chain clauses in form are the verbal noun phrases (§7.3.2). Subordinate verbs, chain verbs, non-finite chain verbs and verbal nouns are reduced in inflections to various levels in comparison with independent verbs (§6). Subordinate verbs are cross-referenced (§5.2), but they mark a slightly reduced range of tense-mood categories. Chain verbs are also cross-referenced, but they are basically devoid of tense-mood information. Nevertheless, chain verbs are marked for switch-reference and can sometimes indicate interclausal temporal relationships (§7.4). Non-finite chain verbs and verbal nouns are not cross-referenced, and the only verb-like inflection they have is the 'posterior' suffix -*mba* (§7.3). Verbal noun phrases function as grammatical relations, and they can be encliticised with certain nominal clitics (§4.5). Another noun-like property of verbal nouns is that verbal noun phrases require a copula (§6.4) when functioning as syntactic predicates. The following table, which is repeated from table 3.1 in §3.1.1, summarises the main morphosyntactic differences between independent verbs, subordinate verbs, chain verbs, non-finite chain verbs, verbal nouns, and nouns. Also see §3.1.1 on morphosyntactic comparison between these types of verbs, verbal nouns and nouns.

Table 7.1   Levels of verbal and nominal properties

	d)	e)	a), b), c)	f)
Independent verbs	full range	yes	no	none
Subordinate verbs	slightly reduced	yes	no	none
Chain verbs	basically no	yes	no	none
Non-finite chain verbs	no	no	no	none
Verbal nouns	no	no	yes	limited
Nouns	no	no	yes	full

a) phrase projecting;

b) can be cross-reference on verbs and resumptive pronouns;

c) require copulas to function as predicates

d) carry tense-mood affixes

e) take cross-reference suffixes

f) the range of case clitics of phrase projected by the word can take

The grammatical verbs of *fefi ~ mefi*/ *ma* 'completive' and *nuŋgu* 'sequential' can be serialised to CR chain verbs (§7.2.1) and non-finite chain verbs (§7.3.1); the two grammatical verbs are discussed in §7.4. Chain verbs and non-finite chain verbs carry a dependency suffix *-Ø ~ -mbo ~ -mbona* which indicates that the verb is dependent on the final verb of the clause chain/ non-finite clause chain for full grammatical specifications; the dependency suffix is discussed in §7.5. The following are some examples of the types of verbs and verbal nouns mentioned above.

Independent verb (§6):

7-1.   *han-wa-mbi.*

go.down-3FSG-PRES:TRANSN

'She is going down (now).'

Subordinate verb — relative clause verb (§7.1.1):

7-2.   *[han-wa-mbi]*   *(hwalfehi=na humbutu no.)*

[go.down-3FSG-PRES] (woman=TOP deaf   COP:3FSG)

'(The woman) [who is going down/ who goes down] (is deaf.)'

Subordinate verb — realis *-hwani* 'when' verb (§7.1.2.1):

7-3.   *(nuŋgula yapali-Ø,   hwi=na)   han-wa-hwani,*

(throat   be.dry-DEP water=ALL) go.down-3FSG-when

(wali ser-wa-hi.)

(pig   eat-3FSG-PRES:CONT)

'(They become thirsty, and) when they go down (to the river, pigs eat

(them).)'

Subordinate verb — irrealis *-hwani* 'if' verb (§7.1.2.2):

7-4.   *hof-wa-hwani,   (da-ufati   da-mba-wa-Ø.)*

come-3FSG-if   (this-medicine give:FUT-2SG-3SG:O-IMP)

'If she comes, (give her this medicine.)'

Subordinate verb — *-hi* simultaneous verb (§7.1.3):

7-5. *han-wa-hi,*   *(akwani=mbo homba-Ø-a-hwa.)*

   go.down-3FSG-SIM (snake=OBJ see-N1SG-3FSG:O-PAST)

   'While going down, she saw a snake.'

Chain verb — CR chain verb (§7.2.1):

7-6. *Ø-han-o-mbo,*   *(akwani=mbo homba-Ø-a-hwa.)*

   CR-go.down-3FSG-DEP (snake=OBJ see-N1SG-3FSG:O-PAST)

   'She $_j$ went/ goes down, and (she $_j$ saw a snake).'

Chain verb — DR chain verb (§7.2.1):

7-7. *ma-han-wa-mbo,* *(akwani aiahafumbo homba-Ø-a-hwa.)*

   DR-go.down-3FSG-DEP (snake 3SG:OBJ see-N1SG-3FSG:O-PAST)

   'She $_j$ went/ goes down, and (the snake saw her $_{j/k}$.)'

Chain verb — hypothetical protasis (§7.2.3):

7-8. *Ø-han-o-mbo,*   *(akwani=mbo homba-Ø-a-naho.)*

   CR-go.down-3FSG-DEP (snake=OBJ see-N1SG-3FSG:O-CNTF)

   'If she has gone down, (she would have seen the snake.)'

Non-finite chain verb (§7.3.1):

7-9. *hanu-mbo, walambani-mbo, seru-mbo,*

   go.down-DEP swim-DEP   eat-DEP

   'One goes down, and swims, and eats, and …'

Verbal noun (§7.3.2):

7-10. [wamla   seru-mbo](=na   tite   no.)

      [betel.nut eat-NOML](=TOP bad COP:3FSG)

      'Betel nut chewing (*lit.* 'eating') (is bad.)'

7.1   Subordinate clauses

Based on their functions, three types of subordinate clauses can be distinguished: relative clauses (§7.1.1), *-hwani* 'if/when' clauses (§7.1.2) and *-hi* simultaneous clauses (§7.1.3). Most subordinate verbs are formally indistinguishable from independent verbs (§6); both subordinate verbs and independent verbs carry cross-reference suffixes (§5.2), and except for the 'if/ when' suffix *-hwani*, the tense-mood suffixes used on subordinate verbs are formally the same as the ones used on independent verbs. Nevertheless, the range of tense-mood affixes available to relative clause verbs is smaller than independent verbs, and the grammatical categories marked by the subordinate tense-mood affixes may be slightly different from the formally identical independent tense-mood affixes. For instance, *-hi* marks present tense and continuous aspect on independent verbs (§6.1.1) but interclausal simultaneity on subordinate verbs (§7.1.3); *-mbi* marks present tense and stative/ 'transitional' aspect on independent verbs (§6.1.1) but only present tense on subordinate verbs (§7.3.1).

Relative clauses exist within noun phrases, and noun phrases may occupy the post-verbal position (§5.4). Otherwise, subordinate clauses always precede the matrix clause verb. 'Because' is conveyed by the word *hwambo* 'being the case'

419

(§3.2.9). Copulas (§6.4) are not used in subordinate clauses; finite forms of copulas are only used in independent clauses.

7.1.1   Relative clauses

Relative clauses are subordinate clauses which act as nominal modifiers (§4.3). There is no relativising morpheme in Menggwa Dla, and relative clause verbs are formally indistinguishable from independent verbs (§6). Nevertheless, the range of tense-mood affixes available to relative clauses is restricted: only indicative (§6.1-2), tentative (§6.3.3) and counterfactual (§6.3.4) moods can be used in relative clauses. The past tense suffix *-hwa* (§6.1.2) is not used in relative clauses; the 'past tense with focus' suffix *-hya* (§6.1.2) is used for all past tense relative clauses.[1] The present tense stative/ transitional aspect suffix *-mbi* (§6.1.1) is used for all present tense relative clauses; the other present tense suffix, the present tense continuous aspect suffix *-hi* (§6.1.1) is not used in relative clauses.[2]

Relative clauses in Menggwa Dla can be externally-headed, internally-headed, or zero-headed. Relative clauses with overt heads are externally-headed if the position relativised is represented by a cross-reference suffix on the relative clause verb, and internally-headed if the position relativised is not represented by a cross-reference suffix on the relative clause verb. Verbs either carry a subject cross-reference suffix, or a subject plus an object cross-reference suffix (§5.2). This means that relative clauses are externally-headed when the position relativised is the subject or sometimes the object, and internally-headed when the position relativised

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[1] See also §6.1 on the grammaticalisation of case clitics to realis tense-aspect suffixes.
[2] However, *-hi* is used in another type of subordinate clause; see §7.1.3 on *-hi* simultaneous clauses.

is the second object, oblique, or sometimes the object (§5.3.1). It can be said that for relative clauses with overt heads, Menggwa Dla has a preference of the position relativised being represented by an overt element within the relative clause, but external-headedness has precedence over internal-headedness. The following are examples of externally-headed, internally-headed and zero-headed relative clauses.

Externally-headed:

7-11. *[[dani＝hi   hof-u-hya]   <u>**yani**</u>]   sihi-Ø-hwa.*

[[this＝ADS   come-3MSG-PAST]   <u>man</u>]   stink-3MSG-PAST

'The man who came here stank.'

Internally-headed:

7-12. *[dani＝hi   <u>**simbu**</u>   hof-u-hya]   hwi-wa-hwa.*

[this＝ADS   <u>**morning**</u>   come-3MSG-PAST]   rain-3FSG-PAST

'It rained on the morning which he came.'

7-13. *[<u>**wuli**</u>＝mbe hahof-u-hya]   hah-iha-hwa.*

[<u>house</u>＝INS go.up-3MSG-PAST]   go.up-1SG-PAST

'I went into the house that he went into.'

Zero-headed:

7-14. *[hahof-u-hya]   ehala   bi＝la   no.*

[go.up-3MSG-PAST] 3SG:GEN uncle＝GEN COP:3FSG

'The one that he went up into (e.g. house) is his uncle's.'

In an externally-headed relative clause, the head noun must be cross-referenced on the relative clause verb. Based on the preference for a head-noun-referring expression to exist within the relative clause, one potential analysis is that an 'externally-headed relative clause' is actually an internally-headed relative clause with a cross-reference suffix on the relative clause verb as the head. However, this cannot be true; it is the free (pro)nominal outside the relative clause — rather than the cross-reference suffix inside the relative clause — which is the head of the relative clause. This can be established by the syntactic behaviour of the other noun modifiers (e.g. adjectives) when the head noun has other noun modifiers in addition to the relative clause (§3.1; §4.3): for externally-headed relative clauses, the other modifiers of the head noun must exists outside of the relative clause; for internally-headed relative clauses, the other modifiers of the head noun must exist inside the relative clause. In the following example, the adjective *hwalfa* 'young' which modifies the head noun *yani* 'man' cannot exist within the relative clause. Otherwise, it can exist in any position within the noun phrase, including the post-head-noun position which is not contiguous to the relative clause (i.e. in this case *hwalfa* clearly cannot be part of the relative clause).

Externally-headed relative clause:

7-15. [(hwalfa) [dani=hi hof-u-hya]   (hwalfa) <u>**yani**</u> (hwalfa))]

[(young) [this=ADS come-3MSG-PAST] (young)   <u>man</u> (young)]

sihi-Ø-hwa.

stink-3MSG-PAST

'The (young) man who came here stank.'

Contrast the example above with the example below. For modifier(s) of the head noun of an internally-headed relative clause, the modifier(s) must exist within the relative clause as well. Moreover, the modifier must form a noun phrase with the head noun which exists within the relative clause. In the following example, the adjective *bukwa* 'big' can exist immediately before or after the head noun *wuli* 'house'. The noun phrase *bukwa wuli*/ *wuli bukwa* 'big house' is marked together with an inessive case clitic =*mbe* (§4.5.3).[3]

Internally-headed relative clause:

7-16. *[[(bukwa)* **wuli** *(bukwa)]=mbe hahof-u-hya]*   *hah-iha-hwa.*

[[(big)   house (big)]=INS   go.up-3MSG-PAST] go.up-1SG-PAST

'I went into the (big) house that he went into.'

Except for relative clauses which exist in post-verbal nominals (§5.4), all subordinate clauses exist before the matrix clause verb. The following sentence exemplifies a post-verbal nominal which contains a relative clause.

7-17. *Ø-hahof-u-mbo   [[dupli-Ø-hya]   yani],*

CR-go.up-3MSG-DEP [[joke-3MSG-PAST] man]

'The man [who joked] went up, and…'

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[3] Instances of noun phrases with a relative clause plus another noun modifier are very rare in natural discourse, and there are no instances of a zero-headed relative clause modifying the same head noun with another noun modifier. Based on the assumption with externally-headed relative clause (§7.1.1.1) that only free (pro)nominals can be the head of a relative clause, zero-headed relative clauses (§7.1.1.3) are considered to be zero-headed because they lack an overt free (pro)nominal which refers to the head noun.

The following subsections of §7.1.1.1, §7.1.1.2 and §7.1.1.3 are more in-depth discussions on externally-headed relative clauses, internally-headed relative clauses and zero-headed relative clauses respectively.

7.1.1.1 Externally-headed relative clauses

Externally-headed relative clauses are free to precede or follow the head noun, like other noun modifiers (§4.3). The position relativised of an externally-headed relative clause must be represented by a cross-reference suffix within the relative clause. As cross-reference suffixes are pronominal in Menggwa Dla (§5.3.2), the cross-reference suffix which represents the position relativised in an externally-headed relative clause is analogous with resumptive pronouns in relative clauses in other languages.

The head of an externally-headed relative clause does not exist within the relative clause as the head cannot be cased-marked for the grammatical role of the position relativised in the relative clause. This can be clearly shown in cases where the position relativised is the object, but the head noun phrase is not the object of the matrix clause; in these cases, the head cannot take the object case clitic =*mbo* (§4.5.1) as if it exists within the relative clause.[4] The position relativised is the object in the example below; the noun phrase which contains the relative clause in example 7-18 is the subject of the matrix clause, and in example 7-19, the noun phrase which contains the relative clause is the second object of the matrix clause.

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[4] Objects take an object case =*mbo*, but subjects and second objects are zero case-marked (§4.5.1, §5.3.1.)

7-18. yani(*=mbo)   [si homba-i-Ø-hya]=na

man(*=OBJ)   [2 see-N1MSG-3MSG:O-PAST]=TOP

yowala   aru   nu.

3SG:GEN dad.bro COP:3MSG

'The man [whom you saw] is my uncle.'

7-19. hyela(*=mbo) [numu-ya-a-hya]

skin(*=OBJ)   [wear-3SG-3FSG:O-PAST]

yoambo sa-ka-i-mbo.

1SG:OBJ give-3SG-1SG:O-DEP

'S/he gave me the shirt [s/he was wearing], and…'

In the following example, the position relativised is the object, and the grammatical relation of the noun phrase *wamla fahyambo* 'the betel nuts which s/he/you picked' is also the object. However, the head noun *wamla* 'betel nut' still cannot be attached with an object case clitic in this case for two reasons: a) the head noun *wamla* 'betel nut' is not part of the relative clause; and b) case clitics are attached to the last word of a noun phrase, and the head noun *wamla* 'betel nut' happens not to be the last word of the noun phrase. The head noun *wamla* 'betel nut' must remain not case-marked.

7-20. *[__wamla__(*=mbo) [fa-Ø-a-hya]=mbo]*

[betel.nut(*=OBJ) [pick.betel.nut-N1SG-3FSG:O-PAST]=OBJ]

ser-iha-hi.

eat-1SG-PRES:CONT

'I am chewing the betel nut [which s/he/you picked].'

The examples above demonstrate post-nominal relative clauses. The following sentences exemplify prenominal relative clauses; relative clauses are free to precede or follow the head noun (§4.3).

7-21. *[hamani   numuŋgwa-wa-hya] __wi__=na   amuŋgwa no.*

[yesterday die-3FSG-PAST]   child=TOP first.born COP:3FSG

'The child [who died yesterday] is the first born child.'

7-22. *[hari-wu-a-hya]   __hwaŋgu__=mbe=na*

[enter-N1MSG-3FSG:O-PAST] cave=INS=TOP

imbumamo hwalfehi Ø-numb-ei-mbo,

three   woman   CR-sit-N1FPL-DEP

'In the cave which they entered lived three women, and…'

7-23. *yo [dani buku=mbo pa-hya-a-hya]   __nyewi__(=mbo)*

1   [this   book=OBJ   write-3SG-3FSG:O-PAST] person(=OBJ)

hwahwa-hi-Ø-hi.

know-1SG-3MSG:O-PRES:CONT

'I know the person who wrote this book.'

Relative clauses must exist within noun phrases, but relative clauses need not be adjacent to the head noun, as shown in the following example. In the following example, the head noun *hwafo* 'talk' is modified by two modifiers: the genitive phrase *amamo=la* 'of the moon' and the relative clause *hohohiahya* 'which they told'. The order of modifiers within a noun phrase is grammatically free (§4.3); the head noun and its modifiers can be in any order within the noun phrase.

7-24. *[[hoho-hi-a-hya]*   *amamo=la* **hwafo***]*   *hoho-mba-mbo.*

     [[tell-3FPL-3FSG:O-PAST] moon=GEN talk]   tell-POST-NOML

     '(I) will tell (you) the story of the moon which they were telling.' (A)

Because of the lack of case-marked relativising morphemes, and because subjects and objects are often expressed only as cross-reference suffixes, sometimes the position relativised can be ambiguous. In the following example, the relative clause *hombaihya* can either mean 'who [saw him]' or 'whom [you/ he saw]'; if *hombaihya* is an independent clause, it would mean 'you/he saw him'. Also compare example 7-25 below with example 7-18 above.

7-25. *yani* *[homba-i-Ø-hya]=na*

     man   [see-N1MSG-3MSG:O-PAST]=TOP

     yowala   *aru*   *nu.*

     3SG:GEN dad.bro COP:3MSG

     '[The man [who saw him]/ the man [whom you/he saw]] is my uncle.'

Relative clauses which are not in past tense and positive polarity are rare in natural discourse. The following are some examples of relative clauses which are not positive and/ or not past tense.

Present tense (§6.1.1) relative clause:

7-26. *[[ap-aha-mbi]   wuli=mbe]*

[[sleep-1SG-PRES] house=INS]

numuŋgwa kelia   aflambli=mbi no.

dead   cockroach many=PROP   COP:3FSG

'There are many dead cockroaches in the house that I am staying in.'

Negative polarity past tense (§6.1.3) relative clause:

7-27. *[[suŋgwani buke-wi-hya]   <u>**refugee**</u>=na] dani=hi num-ei-hwa.*

[[be.sick   NEG:R-N1FPL-PAST] <u>refugee</u>=TOP] this=ADS sit-N1FPL-PAST

'The refugees who were not sick stayed here.'

Future tense relative clause (§6.2):

7-28. <u>**hwalfehi**</u> *[John=sehi fa-hi-a   samby-ei]=mbo*

<u>woman</u>   [John=ADS leave-N1FPL-3FSG:O POS:SMR-N1FPL]=OBJ

hwahwa boka-ha-a-hi.

know   NEG:R-1SG-3FSG:O-PRES:CONT

'I do not know the woman [whom they will leave on John (i.e. marry him)].'

Tentative mood (§6.3.3) relative clause:

7-29. *[[aiahafumbo suŋgwani sa-ka-wa-ni]   yafli＝na]*

    [[3SG:GEN   sickness   give-3SG-3SG:O-TENT] dog＝TOP]

    numuŋgwa-wa-hi.

    be.dead-3FSG-PRES:CONT

    'The dog who may have given him/her the sickness is dead.'

Counterfactual mood (§6.3.4) relative clause:

7-30. *[[apa   kapali   hahof-yei-naho]   pasindia＝na]*

    [[today aeroplane go.up-N1FPL-CNTF] passenger＝TOP]

    hofu boke-wi-hwa.

    come NEG:R--N1FPL-PAST

    'Passengers who were to board the aeroplane today did not come.'

7.1.1.2   Internally-headed relative clauses

    If the position relativised is not cross-referenced on the relative clause verb, the head noun must occur within the relative clause. Second objects and obliques are never cross-referenced; objects are sometimes cross-referenced (§5.3.1). The head noun must be in the case of its grammatical relation within the relative clause, and the entire internally-headed relative clause carries a case clitic of its grammatical relation in the matrix clause. As there is no relativiser morpheme, it is up to the context to clarify which constituent is the head noun.

Second object relativised position:[5]

7-31. *[tirati sa-ka-ya-hya]=mbo*   *sama-hya-a-hwa.*

[letter give-3SG-1SG:O-PAST]=OBJ burn-1SG-3FSG:O-PAST

'I burnt the letter which s/he gave me.'

Oblique relativised position:

7-32. *[saftu   hof-afa-hya]=hi*

[Saturday come-1SG-PAST]=ADS

amni=mbe ilo-hu-a-hya   *no.*

garden=INS work-1PL-3FSG:O-PAST:FOC COP:3FSG

'On the Saturday which you came we were working in the garden.'

7-33. *dani=na [aiahafumbo* **gan=nambo** *na-Ø-a-hya]*   *no.*

this=TOP [3SG:OBJ   gun=ALL   shoot-N1SG-3FSG:O-PAST] COP:3FSG

'This is the gun [which s/he/you shot him/her with].'

Object relativised position:

7-34. *[ufati   simi-aha-mbi]=nambo bapli kakalu-aha-mbi.*

[medicine drink-1SG-PRES]=ALL   head pain-1PL-PRES:STAT

'I am heaving a headache because of the medicine I am taking.'

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[5] Second objects are zero case marked; as the head noun *tirati* 'letter' exists within the relative clause and the position relativised is the second object, the head noun *tirati* 'letter' must be zero case marked.

7-35.	*[aiahala muli*＝*mbo ser-iha-hya]＝na kwala aflambli＝mbi no.*

[3SG:GEN orange＝OBJ go-1SG-PAST]＝TOP seed   many＝PROP   COP:3FSG

'His/her orange which I ate has lots of seeds.'

As seen in example 7-35 above, the head of a relative clause (*muli* 'orange')
can be a modified nominal (the genitive phrase *aiahala* 'his/her'). However, noun
modifiers on their own cannot be relativised. Compare example 7-36 below with
example 7-35 above. In example 7-36 below, the intended head noun *yani* 'man' is
embedded within the noun phrase *yanila muli* 'the man's orange(s)', and the
sentence is ungrammatical.

7-36.	*[[*yani*＝*la] muli*＝*mbo ser-iha-hya]＝na*

   [[man＝GEN] orange＝OBJ go-1SG-PAST]＝TOP

muli   aflambli＝mbi nu.

orange many＝PROP   COP:3MSG

'The man whose orange(s) I ate has lots of oranges.'

Some younger speakers (born in 1980s or later) use non-finite verb forms
(§5.1.1) instead of finite verb forms for internally-headed relative clauses. Relative
clauses with non-finite verbs are usually deemed unacceptable by older speakers.
(Verbs in externally-headed relative clauses remain finite for younger speakers;
§7.1.1.1.)

431

7-37. *[yo **tohalwa=mbo** pi]=na* Jayapura=*hi* no gwa...

[1 school=OBJ go]=TOP Jayapura=ADS COP:3FSG but

'The school which I go to is in Jayapura, but…' (*pi* 'go' class I; 80V)

7-38. *[**movie** yohwefumbo nafi]=na*

[movie 1PL:OBJ show]=TOP

Malay na Chinese subtitle=*mbi* no.

Malay and Chinese subtitle=PROP COP:3FSG

'The movie we were shown had Malay and Chinese subtitles.'

(*nafi* 'show' class II; 80IV)

7-39. *[ai **yani=lofo** hwafo]=na* misionari nu.

[3 man=COM talk]=TOP missionary COP:3MSG

'The man whom s/he was talking with is a missionary.'

(*hwafo* 'talk' class I; 80II)

7.1.1.3 Zero-headed relative clauses

Relative clauses can also be zero-headed, but zero-headed relative clauses are relatively rare. For zero-headed relative clauses, the position relativised can be a subject, object, second object or an oblique object.

7-40. *[kia boke-wa-mbi]=mbo kaha-wa-a-Ø!*

[bear.fruit NEG:R-3FSG-PRES]=OBJ chop-2SG-3FSG:O-IMP

'Chop the one which does not bear fruit.'

7-41. *[yo popo-ha-a-hya]=mbo*

[1 collect.eggs:MASS-1SG-3FSG:O-PAST]=OBJ

holombo ka-wa-a-Ø!

first   break-2SG-3FSG:O-IMP

'Cook the ones which I have collected first.'

7-42. *ai [hihiri-ma-hya]=mbo   jual-wu-a-mbo.*

3 [steal-N1MPL-PAST]=OBJ   sell-N1MPL-3FSG:O-DEP

'They sold what they have stolen, and…'

7-43. *[sa-ka-nya-hya]=na   sufwa-aha-mbi.*

[give-3SG-2SG:O-PAST:]=TOP   like-1SG-PRES:STAT

'I like what s/he gave you.'

7-44. *[nuŋ-wa-mbi]=na   yamala no.*

[sit-3FSG-PRES]=TOP left   COP:3FSG

'The one that she lives in is the left hand side one.'

The zero-headed relative clauses in Menggwa Dla are functionally similar to complement clauses in other languages, as both zero-headed relative clauses and complement clauses can act as arguments of the matrix predicate. Nevertheless, zero-headed relative clauses in Menggwa Dla are different from prototypical complement clauses[6] in that complement clauses are represented in the semantic frame of the matrix verb as propositions, whereas zero-headed relative clauses are

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[6] Clauses which function on their own as arguments of the matrix clause (e.g. Noonan 1985).

represented in the semantic frame of the matrix verb as variables like other (pro)nominals. Moreover, complement clauses do not exist in Menggwa Dla as such; English complement clauses can be translated into Menggwa Dla using simultaneous clauses (§7.1.3; example 7-45 below), verbal noun phrases (§7.3.2; example 7-46 below), or chain clauses (§7.2; example 7-47 below).

7-45. *[hai fofo-Ø-a-hi]*   *homba-hi-Ø-hi.*

[fire blow-N1SG-3FSG-SIM] see-1SG-3MSG:O-PRES:CONT

'I see him blowing fire.' (*lit.* 'While he is blowing fire, I see him.')

7-46. *[hai fofo-Ø]*   *homba-hi-Ø-hwa.*

[fire blow-NOML] see-1SG-3MSG:O-PAST

'I saw him blowing fire.' (*lit.* 'I saw the (masculine) fire-blowing.')

7-47. *hai(=mbo) fofo-ma-Ø-a-mbo,*   *homba-hi-Ø-hwa.*

fire(=OBJ) blow-DR-N1SG-3FSG:O-DEP   see-1SG-3MSG:O-PAST

'I saw him blowing fire.' (*lit.* 'He was blowing fire, and I saw him.')

7.1.2   *-hwani* if/ when clauses

Subordinate clauses marked with *-hwani* in Menggwa Dla are comparable to *if* or *when* subordinate clauses in English. In Menggwa Dla, *-hwani* clauses can be realis (§7.1.2.1) or irrealis (§7.1.2.2).

<u>7.1.2.1</u>   <u>Realis *-hwani* 'when' clauses</u>

A realis *-hwani* verb has a (non-future) finite verb stem (§5.1.1-2), subset A

cross-reference suffix(es) (§5.2), and a *-hwani* 'when' suffix at the end. With realis

-hwani clauses, the situation is known by the speaker as having occurred (positive

polarity) or not occurred (negative polarity), or habitually occurring (positive) or

habitually not occurring (negative), and the situation of the matrix clause begins

after the inchoation point of the situation of the *-hwani* clause. The use of

subordinate realis *-hwani* clauses is rather rare, for that sequential meaning is mostly

conveyed by chain clauses (§7.2). A realis *-hwani* clause is used as the final clause

of a non-finite clause chain or when it is followed by non-finite chain clauses (and

non-finite chain clauses themselves are rather rare; §7.3.1). In a non-finite chain

clause, the subject must be coreferential with the subject of the following clause in

the clause chain. On the other hand, the subject of a *-hwani* clause must be disjoint-

referential with the subject of its matrix clause. In effect, a non-finite chain verb

and a realis *-hwani* verb is the coreferential (CR) and disjoint-referential (DR) verb

forms — respectively — of a switch-reference (SR) system. Nevertheless, this non-

finite/ *-hwani* SR system is used much less often than the chain clause SR system.

(See §7.2 on chain clauses and §7.3.1 on non-finite chain clauses.)

In the following examples, the clauses preceding the *-hwani* clauses are non-

finite chain clauses; in example 7-48 the *-hwani* clause is followed by another non-

finite chain clause, and in example 7-49 the *-hwani* clause is followed by an

independent clause. Notice the change in subject between the realis *-hwani* clause

and the following matrix clause in both examples.

7-48. *[hofahi-Ø, hofo=hi   ek-wa-hwani,]*

[fall-DEP   ground=ADS exist-3FSG-when]

palaŋgi=nambo hwela numuli-Ø,

machete=ALL   skin   remove-DEP

'(**The sago palm**) falls, and then **it** lies on the ground, then (**people**) remove

the bark with machetes, and…' (B)

7-49. *[waŋgu   harifi-mbo, num-wa-hwani,] butya-hwa-a-Ø.*

[sparrow enter-DEP   sit-3FSG-when   hit.with.stick-1DU-3FSG:O-JUS

'**The sparrows** enter (the cave), and when they are already there, **we** will

catch the sparrows.' (N)

The following is an example with two positive realis *-hwani* clauses.
Whether the first *-hwani* clause is subordinate to the second *-hwani* clause or not is
unclear.

7-50. *efi-ya-a-hwani,   hwalfehi ap-ei-hwani,*

become.dark-3SG-3FSG:O-when woman   sleep-N1FPL-when

yani dofo heli=na   pi-mbo,

man secret ceremony=ALL go-DEP

'When **it** becomes dark, when **the women** sleep, **the men** go to the secret

ceremony, and…'

A negative realis *-hwani* verb is formed like an independent negative realis
verb: the lexical verb is in its non-finite form; class I, IH and IIB lexical verbs are

serialised with the negative verb *boke* (class I), and class II and III verbs are serialised with the negative verb *boka* (class II) (see §6.1.3). The following is an example of a negative realis *-hwani* clause.

7-51.   *hihifu   boke-Ø-hwani,   wuli   hanu-mbo,*

be.happy NEG:R-3MSG-when house go.down-DEP

'When **he** is not happy, (**the foreign bride** ⱼ) would leave the house, and…'

7.1.2.2   Irrealis *-hwani* 'if/ when' clauses

Positive irrealis *-hwani* verbs have the same form as realis *-hwani* verbs (§7.1.2.1), except that sometimes a future finite verb stem is used instead of a non-future finite verb stem (see below). Negative irrealis *-hwani* verbs are formed by affixing the negative irrealis affix *ma-/ -m/ -ma/ -me* (§6.3) to the verb stem of a positive irrealis *-hwani* verb.

The situation of an irrealis *-hwani* clause is imagined by the speakers, and the truth value of the *-hwani* clause proposition can turn out to be true. In some instances the speaker can be sure that the proposition of a *-hwani* clause will happen in the future (as in the example below). In these cases the *-hwani* clause is comparable with a *when* clause in English.

7-52.   *efi-ya-a-hwani,   ehala   wuli   pi-mba-Ø   no.*

become.dark-3SG-3FSG:O-when 3SG:GEN house go-POST-NOML COP:3SG

'When it gets dark, (we) will go to his/her house.'

Most usually an irrealis *-hwani* clause is used as the protasis (the *if* clause) of a real conditional sentence. Real conditional sentences are conditional sentences where the protasis can be true or false based on (the speaker's) real world knowledge.[7] The proposition of the irrealis *-hwani* apodosis (the *then* matrix clause) becomes true if the proposition of the irrealis *-hwani* protasis becomes true. The following sentences exemplify irrealis *-hwani* protases followed by apodoses in semi-realis status (§6.2).

7-53. *hwi   hof-wa-hwani,   ga-gof-aha.*

water come-3FSG-if   NEG:SMR-come:FUT-1SG

'If it rains, I will not come.'

7-54. *numuŋgwa-wa-hwani, ilo-hya-ni-mby-a.*

die-3FSG-if   work-1SG-2SG:O-POS:SMR-1SG

'If she dies, I will kill you.'

7-55. *yafli bli-mbo   hof-ei-hwani,   numbala holombo*

dog   buy-NOML come-N1FPL-if   black   first

da-mba-u-mbo   homba-Ø-a   samby-afu.

give:FUT-2SG-3SG:O-DEP   see-N1SG-3FSG:O POS:SMR-2SG

'If (someone) comes to buy the dogs, you try ('see') to give them the black ones first.'

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[7] On the other hand, hypothetical protases, which cannot be true based on real world knowledge, are rendered as chain clauses (§7.2.3).

Unlike realis *-hwani* clauses (§7.1.2.1), an irrealis *-hwani* clause need not be adjacent to a non-finite chain clauses, and the subject of an irrealis *-hwani* clause need not be disjoint-referential with the subject of the matrix clause. Example 7-56 below is an example where the interclausal subjects are coreferential. (The verb of the second clause is in future tentative mood; §6.3.3.2.)

7-56. *amani malai fafo kwami-afa-hwani,*

good Malay language take-2SG-if

Indonesia＝*hi tohalwa po-me-afu.*

Indonesia＝ADS school go:FUT-NEG:IR-2SG

'If you learn Malay well, maybe you can go to school in Indonesia.'

The following are two examples of negative irrealis *-hwani* clauses.

7-57. *ma-gof-afa-hwani, yo＝amba ga-po-l-aha.*

NEG:IR-come:IR-2SG-if 1＝too NEG:SMR-go:FUT-LIG-1SG

'If you do not come, neither will I go.'

7-58. *hambala-me-wa-hwani, da-ufati da-mba-wa-Ø.*

be.pregnant-NEG:IR-3FSG-if this-medicine give:FUT-2SG-3SG:O-IMP

'If she does not become pregnant, give her this medicine.'

Usually non-future finite verb stems (§5.1.2) are used in irrealis *-hwani* protases; the use of non-future verb stems signify that the conditional sentence is 'timeless' in that the apodosis proposition will occur whenever the protasis

439

proposition is satisfied. Future finite verb stems are only used when there is a specific time slot in the future in which the protasis proposition has to be fulfilled for the apodosis proposition to be fulfilled. This happens mostly when there is a future temporal word in the protasis. (Nevertheless, only a small number of verb lexemes have distinct non-future versus future finite verb stems; §5.1.2.)

7-59.   *miŋgu* **da**-*ŋa-nya-hwani,*   *ilo-ma-Ø-a?*

Sunday give:FUT-1SG-2SG:O-if do-NEG:IR-N1SG-3FSG:O

'If I give (that) to you on Sunday, will you do (it)?'

7-60.   *kyambe* **gof**-*afa-hwani,*   *mome*   Senggi = *na*   *pi-mba-mbo.*

tomorrow come:FUT-2SG-if   together Senggi = ALL go-POST-NOML

'If you come tomorrow, (we) will go to Senggi together.'

7.1.3   *-hi* simultaneous clauses

The last type of subordinate clause is the *-hi* simultaneous clause. Simultaneous verbs are formed with a finite verb stem (§5.1.1), subset A cross-reference suffix(es) (§5.2), and a simultaneous suffix *-hi* at the end of the verb. If the simultaneous suffix *-hi* is preceded by a cross-reference suffix which ends in *a,* the sequence *a-hi* can be contracted as *e* (see examples 7-65 and 7-66 below).[8] The simultaneous suffix *-hi* signifies that the temporal domain of the situation of the subordinate clause and the matrix clause are at least partially overlapping. The

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[8] This contraction is available for simultaneous *-hi* verbs (subordinate) but not for present continuous *-hi* verbs (independent; §6.1.1).

following are examples of *-hi* simultaneous clauses. (Interclausal temporal relations in general are also discussed in §7.4).

7-61. *aya   yapali   hwatu-Ø-hi,   dukumi po-me-Ø-mbona,*

father tree.kangaroo search-3MSG-SIM valley   go-DR-3MSG-DEP

'Father was searching for tree kangaroos as he went along the valley, and …'
(N)

7-62. *hli-aha-hi,   pi-a   ma-hya-a   numb-a-mbo,*

scrape-1SG-SIM   go-1SG   COMPL-1SG-3FSG:O   SEQ-1SG-DEP

'I would scrape (the interior of a sago palm), and make (the pith) loose, and then…' (B)

7-63. *hwafo-ha-nya-hi   homba-Ø-i-Ø.*

talk-1SG-2SG:O-SIM   look-N1SG-1SG:O-IMP

'Look at me while I am talking to you.'

Sometimes there are sentences like the following where the final clause and the preceding clause both carry a *-hi* suffix. In such sentences, the final clause is an independent clause where the suffix *-hi* indicates present tense and continuous aspect (§6.1.1), whereas the preceding clause is a subordinate clause where the suffix *-hi* indicates interclausal simultaneity. Except for relative clauses which exist within post verbal nominals (§7.1.1), subordinate clauses always precede the matrix clause verb (§7.1).

7-64.   *numuŋgwa-Ø-hi*   *hihifu-aha-hi.*

       be.dead-3MSG-SIM   be.happy-1SG-PRES:CONT

       'I am glad that he is dead.'

7-65.   *hambalafe (< hambala-afa-hi),*   *sihafa*   *afila*   *hwahwa-Ø-hi.*

                    be.pregnant -2SG-SIM   2SG:GEN father   know-3MSG-PRES:CONT

       'You father knows that you are pregnant.'

7-66.   *ilohe (< ilo-ha-a-hi),*   *num-aha-hi.*

         work-1SG-3FSG:O-SIM   sit-1SG-PRES:CONT

       'I work and live (here).'   (S)

       Also shown in the examples above is that *-hi* simultaneous clauses do not mark switch-reference (the subject of a *-hi* simultaneous clause can be coreferential or disjoint-referential with the subject of the matrix clause), unlike chain clauses which are marked for switch-reference (see §7.2.2).

       As a case clitic on noun phrases, =*hi* represents adessive case (§4.5.3); as a tense-mood suffix on independent verbs, *-hi* signifies present tense continuous aspect (§6.1.1); the adessive case clitic =*hi* is also used with verbal noun phrases to indicate simultaneity (§7.3.2).

7.2   Chain clauses

Chain clauses — also known as medial clauses and cosubordinate clauses — are very common amongst Papuan languages.[9] One or more chain clauses are linearly 'chained' together with an independent clause or a subordinate clause at the end to form a 'clause-chain'; all preceding chain clauses are dependent on the final independent or subordinate clause for full tense-mood information.

Like independent (§6) and subordinate verbs (§7.1), chain verbs in Menggwa Dla carry cross-reference suffixes (§5.2). However, chain verbs do not have tense-mood affixes; instead, they have a dependency suffix *-Ø ~ -mbo ~ -mbona* (§7.5) which indicates that the clause is a dependent clause and the clause is dependent on the final clause of the clause chain for full tense-mood specifications. With the exception of the small number of verb lexemes which have tense-sensitive finite verb stem forms (§5.1.2), chain verbs in Menggwa Dla are devoid of tense-mood information. The following exemplifies two clause-chains: example 7-67 is in past tense (realis status) and example 7-68 is in future tense (semi-realis status). In both examples, the first two clauses are chain clauses and the final clause is an independent clause. The chain verbs have a syntactic dependency suffix *-mbo*, and the independent verbs have tense-status affixes. Also notice that *hahofu* (*hah(of/uf)-* / *gak(of/uf)-*) 'go up' (class IH) in the second chain clause has a tense-sensitive finite verb stem (§5.1.2); the verb in the second clause of example 7-67 has a non-future finite verb root *hahof-*, and the verb in the second clause of example 7-68 has a future finite verb root *gakof-*. Otherwise, chain clauses are totally devoid of tense and mood information, like the identical first chain clauses in both examples.

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[9] Although not all Papuan languages have chain clauses, e.g. Marind languages on the southern coast and languages of the Bird's Head area.

7-67. *wuli=hi   afila=lofo   hwafo-Ø-u-mbo,*

house=ADS father=COM   talk-CR-3MSG-DEP

Ø-hahof-u-mbo,

CR-go.up-3MSG-DEP

ye   ap-u-hwa.

then   sleep-3MSG-PAST

'He ⱼ talked with father outside the house, and he ⱼ went into the house, and then slept.'

7-68. *wuli=hi   afila=lofo   hwafo-Ø-u-mbo,*

house=ADS father=COM   talk-CR-3MSG-DEP

Ø-gakof-u-mbo,

CR-go.up:FUT-3MSG-DEP

ye   ap-a-ah-u-mb-i.

then   sleep-3SG-3-M-POS:SMR-3MSG

'He ⱼ will talk with father outside the house, and he ⱼ will go into the house, and then sleep.'

Although devoid of tense-mood information, chain verbs in Menggwa Dla are marked with switch-reference, and in some instances completive aspect and interclausal sequentiality as well. Forms of chain verbs are introduced in §7.2.1, and the syntax of switch-reference in §7.2.2. In addition, hypothetical protases are also expressed as chain clauses (§7.2.3). The form and function of the grammatical verbs of *fefi ~ mefi/me* 'completive' and *nuŋgu* 'sequential' are discussed in §7.4.

Grammatically speaking, the three dependency suffixes — *-Ø, -mbo* and *-mbona* —

are free variations; see §7.5 for discussions on the dependency suffixes. Non-finite

chain clauses, which do not carry cross-reference suffixes, are linearly 'chained' like

chain clauses; see §7.3.1 on non-finite chain clauses. As the main verb of a clause,

copulas are not used in chain clauses; all copular chain clauses are non-finite chain

clauses; see §7.3.1.

7.2.1   Form of chain verbs

All chain verbs carry a cross-reference morpheme indicating that its subject

is coreferential (CR) or disjoint-referential (DR) with the subject of a following clause

(see §7.2.2 on the syntax of switch-reference). Chain verbs which indicate

coreference of subjects between clauses are called CR chain verbs, and chain verbs

which indicate disjoint-reference of subjects between clauses are called DR chain

verbs. There are a number of morphosyntactic differences between CR chain verbs

and DR chain verbs: a) CR chain verbs have a zero CR morph, whereas DR chain

verbs have a *ma-/ -ma* or *-me* DR affix; b) CR chain verbs carry subset B cross-

referencing (§5.2), whereas DR chain verbs carry subset A cross-referencing, with the

exception of class IIB verbs which must take subset B cross-referencing regardless

(§5.2.2); c) CR chain verbs must be in positive in polarity, whereas DR chain verbs

can be in positive or negative polarity;[10] d) CR chain verbs can be serialised with the

completive verb *fefi* (*fa-*) ~ *mefi* (*ma-*)/ *me* and the sequential verb *nuŋgu*

(*nu[mb/ŋg]-*) (§7.4), whereas DR chain verbs cannot be serialised with these verbs;

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[10] If two clauses have coreferential subjects and the first clause is in negative polarity, then the first
clause cannot be a (CR or DR) chain clause; the first clause must be an independent clause, e.g.:

- *Ø-hof-u-mbona   gwa, wuli   hahofu boke-Ø-hwa.   wuli=hi   Ø-num-u-mbo...*
  CR-come-3MSG-DEP but house go.up NEG:R-3MSG-PAST   house=ADS   CR-sit-3MSG-DEP
  'He _j came here but he _j did not go into the house. He _{j/k} sat outside the house, and...'

and e) as for the dependency suffix, CR chain verbs usually take *-Ø* or *-mbo*, whereas DR chain verbs usually take *-mbo* or *-mbona* (see §7.5); *-mbona* is rare with CR chain verbs and *-Ø* is rare with DR chain verbs. The morphosyntactic differences between CR chain verbs and DR chain verbs are summarised in the following table.

Table 7.2   Morphosyntactic differences between CR and DR chain verbs

	CR chain verbs:	DR chain verbs:
CR/DR morph:	*Ø*	*ma-/ -ma/ -me*
cross-referencing:	subset B	subset A (except for class IIB verbs which must take subset B)
polarity:	must be positive: *Ø*	can be positive: *Ø*; or negative: *boke / boka*
interclausal temporal relations:	can be serialised with *fefi* (IIB) ~ *mefi* (IIB) /*me* (I) 'completive' and *nuŋgu* (I) 'sequential' (§7.4)	do not indicate interclausal temporal relations
dependency suffix (§7.5):	*-Ø ~ -mbo ~ -mbona* (rare)	*-Ø* (rare) ~ *-mbo ~ mbona*

The following are examples of a simplex CR chain verb, a CR chain verb serialised with both a completive verb and a sequential verb, and a DR chain verb, all in positive polarity. See §7.4 for more discussions on the completive verb and the sequential verb; see §7.5 for more discussions on the dependency suffix *-Ø ~ -mbo ~ -mbona*.

7-69.   *Ø-ser-i-mbo,*

CR-eat-1SG-DEP

'I ate, and I ...' (*-i* class IHB)

7-70.   *ser-i*   *fa-hya-a*   *Ø-numb-a-Ø,*

eat-1SG   COMPL-1SG-3FSG:O   CR-SEQ-1SG-DEP

'I ate, and after that I ...' (*-i* class IHB, *-hya-a* class IIB, *-a* class IB)

7-71.   *ma-ser-iha-mbo,*

DR-eat-1SG-DEP

'I ate, and someone else...' (*-iha* class IHA)

The following are more detailed discussions on the DR affix and irregular DR verb forms (§7.2.1.1), and cross-reference suffixes and polarity in chain verbs (§7.2.1.2).

7.2.1.1   The DR affix and irregular DR verb forms

The most salient difference between DR and CR chain verbs is that CR verb forms have a zero CR morph, whereas DR chain verbs have an overt DR affix. Usually, the DR affix comes in the form of *ma-*, *-ma* or *-me*. The DR morph has the same allomorphy as the negative irrealis affix (§6.3).[11] However, some verb lexemes have irregular DR chain verb forms and/or irregular negative irrealis verb

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[11] There is also an *-m* allomorph of the negative irrealis affix. However, *-m* is only used when followed by a subset B cross-reference suffix (§5.2), and DR chain verbs only take subset A cross-reference suffixes, so *-m* is not used with DR chain verbs.

forms, in which case the DR affix may differ from the negative irrealis affix. The (regular) allomorphy of the DR morph is as follow.

- *ma-* is prefixed to consonant ending class I or class IH finite verb stems;[12]

- *-me* is suffixed to vowel ending class I finite verb stems.

- *-ma* is suffixed to class IIB or II finite verb stems;

- *ma-* is prefixed to class III finite verb stems;

Cross-linguistically, it is usual for the DR verb forms to be more marked than the CR verb forms (e.g. Haiman 1983), and Menggwa Dla conforms to this tendency. The following are examples of the regular DR affixes in each verb class.

7-72.   *ma-hof-u-mbo*,

DR-come-3MSG-DEP

'He came, and someone else…'

(*hofu* (*hof-*/ *gof-*) 'go down' class I; *-u* class IA)

7-73.   *ma-ganyar-iha-mbo*,

DR-taste-1SG-DEP

'I tasted it, and someone else…'

(*ganyaru* (*ganyar-*) 'taste' class IH; *-iha* class IHA)

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[12] All class IH verbs have consonant ending finite verb stems (§5.2.1).

7-74.   *bara-me-ehye-mbo*,

run-DR-1DU-DEP

'We ran, and someone else…'

(*bara* 'run' class I; *-ehye* class IA)

7-75.   *pi-ma-ya-a-mbo*,

throw-DR-3SG-3FSG:O-DEP

'S/he threw it, and someone else…'

(*pifi* (*pi-*) 'throw' class IIB; *-ya-a* class IIB)

7-76.   *homba-ma-Ø-a-mbo*,

see-DR-N1SG-3FSG:O-DEP

'S/he/you saw it, and someone else…'

(*homba* 'see' class II; *-Ø-a* class IIA)

7-77.   *ma-sa-niŋga-nya-mbo*,

DR-give-1SG-2SG:O-DEP

'I gave you (something), and someone else…'

(*sefi* (*sa-/ da-*) 'give' class III; *-niŋga-nya* class IIIA)

There are verbs with irregular DR chain verb forms. Three verbs have

irregular DR verb stems. The verb lexeme *pi* 'go' (class I) has a non-future finite

verb stem *pi-* and a future finite verb stem *po-*. However, this verb lexeme

unexpectedly uses *po-* for all DR chain verb forms. The verb lexeme *hwafo* 'say'

(class I) has the verb stem *hwafo-* in all environments, except that in DR chain verb

forms the verb stem is *eh-* when it is followed by a rounded segment (*-u* 3MSG, *-wa* 3FSG, *-uma* N1MPL), and *r-* when it is followed by an unrounded segment (all other class IA cross-reference suffixes; §5.2.1).

7-78.   *mehwambo* (< *ma-eh-wa-mbo*),

DR-say-3FSG-DEP

'She said, and someone else…'

7-79.   *ma-r-aha-mbo,*

DR-say-1SG-DEP

'I said, and someone else…'

7-80.   *mehumambo* (< *ma-eh-uma-mbo*),

DR-say-N1MPL-DEP

'They said, and someone else…'

The verb *apu* (*ap-*) 'sleep' (class I) has *ap-* as its DR verb stem when the subject is third person singular (cross-reference suffixes: *-u* 3MSG, *-wa* 3FSG), and *e* otherwise.

7-81.   *mehambo* (< *ma-e-aha-mbo*),

DR-sleep-1SG-DEP

'I slept, and someone else…'

7-82.   *ma-ap-wa-mbo,*

DR-say-3FSG-DEP

'She slept, and someone else…'

7-83.   *memambo* (< *ma-e-ma-mbo*),

DR-sleep-N1MPL-DEP

'They slept, and someone else…'

For some speakers the DR affix is infixed to certain verbs, e.g. the DR verb base for *kahefi* (*kaha-*) 'chop' (class IIB) is *ka[ma]ha-*; the DR verb base for *kefi* 'break' (monovalent) (class IIB) is *ka[me]fi-*. The verb lexemes *mefi* (*ma-*) 'finish' (bivalent) (class IIB) and *me* 'finish' (monovalent) (class I) do not have CR chain verb forms when they are used as lexical verbs;[13] their verb stems are portmanteau morphs representing both the lexical morpheme and the DR morpheme, and they do not take an extra DR affix, e.g. *ma-hya-a-mbo* (finish:DR-1SG-3FSG:O-DEP) 'I finished it, and someone else …', *me-wa-mbo* (finish:DR-3FSG-DEP) 'it finished, and someone else …'.

7.2.1.2   Polarity and cross-reference suffixes on chain verbs

Except for class IIB verbs which can only take class IIB cross-reference suffixes (§5.2.2), DR chain verbs take subset A cross-reference suffixes, and CR chain verbs take subset B cross-reference suffixes. DR chain verbs can be in positive or negative polarity; CR chain verbs must be in positive polarity. In Menggwa Dla, the domain of negativity does not extend beyond clause boundaries; if the subjects of

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[13] See also §7.4 on the use of *mefi* (*ma-*)/ *me* as a grammatical verb indicating completive aspect.

two adjacent clauses are coreferential but the first clause is in negative polarity, the first clause cannot be a chain clause (a subordinate (§7.1) or independent clause (§6) can be used instead).

The negative form of a DR chain verb is formed by serialising a negative verb *boke* (class I) or *boka* (class II) in DR chain verb form to a non-finite form of the lexical verb; class I, IH and IIB lexical verbs take *boke* (which takes class I cross-reference suffixes), whereas class II and III lexical verbs take *boka* (which takes class II cross-reference suffixes). This is formally the same as the negative realis verb *boke/ boka* used in independent clauses (§5.1.3). Nevertheless, the chain clause negative verb *boke/ boka* does not indicate status, unlike the independent clause negative realis verb *boke/ boka* which indicates realis status. The following are examples of positive CR chain verbs, positive DR chain verbs and negative DR chain verbs in different verb classes. Notice the changes in the cross-reference suffixes, especially when the negative verb *boke* (class I)/ *boka* (class II) is used. The class III verb lexeme *sefi* (*sa-/ da-*) 'give' has a special negative non-finite form *sekoni* (§5.2.3).

Class I vowel ending finite verb stem, e.g. *hlua* 'bleed':
CR, positive:
7-84.   hlua-Ø-u-mbo,

bleed-CR-3MSG-DEP

'He $_j$ bled, and he $_j$...' (*-u* class IB)

DR, positive:

7-85.   *hlua-me-Ø-mbo,*

       bleed-DR-3MSG-DEP

       'He bled, and someone else...' (-*Ø* class IA)

DR, negative:

7-86.   *hlua   boke-me-Ø-mbo,*

       bleed NEG-DR-3MSG-DEP

       'He did not bleed, and someone else...' (-*Ø* class IA)

Class I consonant ending finite verb stem, e.g. *hofu* (*hof-*/ *gof-*) 'come':

CR, positive:

7-87.   *Ø-hof-a-mbo,*

       CR-come-1SG-DEP

       'I came, and I...' (-*a* class IB)

DR, positive:

7-88.   *ma-hof-aha-mbo,*

       DR-come-1SG-DEP

       'I came, and someone else...' (-*aha* class IA)

DR, negative:[14]

7-89.   *hofu   boke-me-aha-mbo,*

come   NEG-DR-1SG-DEP

'I did not come, and someone else...' (*-aha* class IA)

Class IH consonant ending verb stem, e.g. *hanu* (*han-*/ *gan-*) 'go down':

CR, positive:

7-90.   *Ø-han-ufu-mbo,*

CR-come-2SG-DEP

'You went down, and you...' (*-ufu* class IHB)

DR, positive:

7-91.   *ma-han-ufa-mbo,*

DR-come-2SG-DEP

'You went down, and someone else...' (*-ufa* class IHA)

DR, negative:

7-92.   *hanu   boke-me-afa-mbo,*

come   NEG-DR-2SG-DEP

'You did not go down, and someone else...' (*-afa* class IA)

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[14] The non-finite verb stem of the lexical verb is used in a negative DR chain clause, and all non-finite verb stems are vowel-ending (§5.1.1).

Class IIB verb stem, e.g. *fefi* (*fa-*) 'leave':

CR, positive:

7-93. *fa-Ø-ya-a-mbo,*

leave-CR-3SG-3FSG:O-DEP

'S/he $_j$ left, and s/he $_j$ ...' (-*ya-a* class IIB)

DR, positive:

7-94. *fa-ma-ya-a-mbo,*

leave-DR-3SG-3FSG:O-DEP

'S/he $_j$ left, and someone else...' (-*ya-a* class IIB)

DR, negative:

7-95. *fefi* *boke-me-wa-mbo,*

leave NEG-DR-3SG-3FSG:O-DEP

'She did not leave, and someone else...' (-*wa* class IA)

Class II verb stem, e.g. *homba* 'see':

CR, positive:

7-96. *homba-Ø-hya-a-mbo,*

see-CR-1SG-3FSG:O-DEP

'I saw her $_j$, and I...' (-*hya-a* class IIB)

DR, positive:

7-97. *homba-ma-ha-a-mbo,*

      see-DR-1SG-3FSG:O-DEP

      'I saw her ₍ⱼ₎, and she ₍ⱼ₎/ someone else ₍ₖ/ₗ…₎ …' (*-ha-a* class IIA)

DR, negative:

7-98. *homba boka-ma-ha-a-mbo,*

      see   NEG-DR-1SG-3FSG:O-DEP

      'I did not see her ₍ⱼ₎, and she ₍ⱼ₎/ someone else ₍ₖ/ₗ…₎ …' (*-ha-a* class IIA)

Class III verb stem, *sefi* (*sa-/ da-*) 'give':

CR, positive:

7-99. *Ø-sa-ka-ni-mbo,*

      CR-give-3SG-2SG:O-DEP

      'S/he ₍ⱼ₎ gave you (something), and s/he ₍ⱼ₎ …' (*-ka-ni* class IIIB)

DR, positive:

7-100. *ma-sa-ka-nya-mbo,*

      DR-give-3SG-2SG:O-DEP

      'S/he gave you (something), and someone else …' (*-ka-nya* class IIIA)

DR, negative:

7-101. *sekoni   boka-ma-Ø-nya-mbo,*

      give:NEG NEG:R-DR-N1SG-2SG:O-DEP

      'S/he did not give you (something), and someone else …' (*-Ø-nya* class IIA)

Some verbs have distinct non-future versus future finite verb stems (§5.1.2); the non-future verb stem is used when the final clause of the clause chain is in a non-future tense (§6.1, §6.3), and the future verb stem is used when the final clause of the clause chain is in future tense (§6.2, §6.3). Compare the future chain verb forms of *sefi* (*sa-/ da-*) 'give' (class III) below with the non-future chain verb forms of *sefi* in examples 7-99 and 7-100 above.

CR, positive:

7-102. Ø-da-ka-ni-mbo,

      CR-give:FUT-3SG-2SG:O-DEP

      'S/he j will give you (something), and s/he j ...' *(-ka-ni* class IIIB)

DR, positive:

7-103. ma-da-ka-nya-mbo,

      DR-give:FUT-3SG-2SG:O-DEP

      'S/he will give you (something), and someone else ...' *(-ka-nya* class IIIA)

However, in a DR negative verb form, the non-finite verb form of the lexical verb is used, and non-finite verb forms are invariant (§5.1.1); the same DR negative verb form is used no matter what tense the sentence is in.

7-104. sekoni   boka-ma-Ø-nya-mbo,

   give:NEG NEG-DR-N1SG-2SG-DEP

   'S/he/you will not give you (something), and someone else...'

   (*-Ø-nya* class IIA)

  There are also verb lexemes like *simi* (*simi-/ dom-*) 'drink' (class I) of which the non-future finite verb stem ends in a vowel and the future finite verb stem ends in a consonant; the shape and position of the DR affix changes accordingly.

CR, positive, non-future:

7-105. simi-Ø-u-mbo,

   drink-CR-3MSG-DEP

   'He ⱼ drank, and he ⱼ...' (*-u* class IB)

DR, positive, non-future:

7-106. simi-me-Ø-mbo,

   drink-DR-3MSG-DEP

   'He drank, and someone else...' (*-Ø* class IA)

CR, positive, future:

7-107. Ø-dom-a-mbo,

   CR-drink:FUT-1SG-DEP

   'I will drink, and I...' (*-a* class IB)

DR, positive, future:

7-108. ma-dom-aha-mbo,

      DR-drink:FUT-1SG-DEP

      'I will drink, and someone else...' (*-aha* class IA)

DR, negative:

7-109. simi   boke-me-Ø-mbo,

      drink NEG-DR-3MSG-DEP

      'He did/ will not drink, and someone else...' (*-Ø* class IA)

7.2.2   Syntax of switch-reference[15]

Considerable functional differences exist between older speakers' <u>traditional</u> <u>switch-reference (SR) system</u> and younger speakers' <u>innovative SR system</u> (as used by speakers born since late 1970s). The traditional SR system used by older speakers is canonical of SR systems amongst Papuan languages: the CR and DR morphemes indicate that the subject of its own clause is coreferential and disjoint-referential respectively with the subject of a following clause. The references monitored by SR morphemes are called the SR pivots, and in Menggwa Dla the SR pivots are always the syntactic subjects, with no exceptions. The primary function of canonical SR systems is the indication of discourse participant continuity versus discontinuity, and in clause types where SR is marked, the correct CR or DR verb form must be used no matter what the person-number-gender features the SR pivots have. In the innovative SR system used by younger speakers, the CR verb forms only retain the coreference function when the subject cross-reference suffixes of the two clauses cannot resolve

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[15] Part of this §7.2.2 was presented in de Sousa (2005) and published as de Sousa (2006, in press).

the referentiality of the interclausal subjects; otherwise CR verb forms are SR-neutral, i.e. they do not monitor the referentiality of the references across clauses. The traditional SR system is discussed in §7.2.2.1 and the innovative SR system is discussed in §7.2.2.2. Cases of referential overlap are not marked differently between older and younger speakers' speech, and they are discussed in §7.2.2.3.

7.2.2.1   Traditional SR system

In older speakers' speech, if the subject of a chain clause is coreferential with that of a following clause, then a CR chain verb form is used; if the subject of a chain clause is disjoint-referential with that of a following clause, then a DR chain verb form is used.

Figure 7.3   Relationship from function to form in the Traditional SR System

coreferential   disjoint-referential
interclausal subjects   interclausal subjects

CR chain verb form   DR chain verb form

In this respect the traditional SR system in Menggwa Dla is a canonical SR system. In Menggwa Dla, the SR pivots are always the syntactic subjects (more on this point below). In the following example (repeated from example 7-67 above), the first two clauses are chain clauses, and the last clause is an independent clause. The CR chain verb forms *hwafoumbo* 'he talks and...' and *hahofumbo* 'he goes up and...' in the first and second clauses both indicate the coreference of the subject of their own clause with the subject of the immediately following clause.

7-110. *wuli＝hi   afila＝lofo   hwafo-Ø-u-mbo,*

house＝ADS father＝COM talk-CR-3MSG-DEP

Ø-hahof-u-mbo,

CR-go.up-3MSG-DEP

ye   ap-u-hwa.

then   sleep-3MSG-PAST

'**He** j talked with father outside the house (CR), and **he** j went into the house

(CR), and then **he** j slept.'

In the following example, the DR chain verb form *hwafomembo* 'he talks

and…' in the first clause indicates a change in subject between its own clause and

the following (second) clause, whereas the CR chain verb form *hahofumbo* 'he goes

up and…' in the second clause indicates that the subjects of the its own clause is

coreferential with the subject of the following (third) clause.

7-111. *wuli＝hi   afila＝lofo   hwafo-me-Ø-mbo,*

house＝ADS father＝COM talk-DR-3MSG-DEP

Ø-hahof-u-mbo,

CR-go.up-3MSG-DEP

ye   ap-u-hwa.

then   sleep-3MSG-PAST

'**He** j talked with father k outside the house (DR), and **he** *j/k/l went into the

house (CR), and then slept.'

The SR pivots in Menggwa Dla are always the syntactic subjects (§5.3.1). Subjects can be expressed as (pro)nominals or cross-reference suffixes (§5.3.2). In the first clause of the following example, the object noun phrase is topicalised in the first clause, and the topicalised object of the first clause is coreferential with the subject of the second clause. However, this coreference between the topic-object of the first clause and the subject of the second clause is ignored by the SR morphemes because SR morphemes only monitor the syntactic subjects, which are disjoint-referential in this case. In the first clause, the subject noun phrase *nyewi* 'person' is cross-referenced by *-ya* (N1FSG) on the verb (people of unknown gender are cross-referenced as feminine; §4.1.1), and the subject of the second clause is *-Ø* (3MSG), which can be inferred as coreferential with the 3MSG reference of the previous clause, *Pius*.

	OBJ	SUBJ		
7-112.	Pius = *na*	*nyewi*	*yaŋga = mbe*	*iŋgufu-__ma__-ya-Ø-mbo,*
	Pius = TOP	person	bush = INS	attack-__DR__-N1FSG-3MSG:O-DEP

suŋgwani	*wuli = nambo*	*pi-Ø-hya*		*nu.*
sick	house = ALL	go-3MSG-PAST:FOC		COP:3MSG

'As for Pius _k, someone _j attacked him _k in the bush (DR), and he _{k/?l} went to the clinic.' (60III)

In Menggwa Dla, there is no voice opposition, and there is basically no morphological valency changing operations (see §5.3.3). For involuntary states like *suŋgwani* 'be sick', *kakalu* 'be in pain', and *gihali* 'be hungry', the animate undergoer is the subject, while the inanimate force is either the object or part of the

predicate. This is different from a lot of Papuan languages where animate undergoers of involuntary states are treated as some kind of non-subject. In the first clause of the following example, the animate undergoer is the subject and the inanimate force is the object (it can take the object case clitic *=mbo*; §4.5.1). The subject of the first clause is coreferential with the subject of the second clause, and hence the first clause is marked as coreferential (despite the fact that the semantic role of the subject changed from undergoer to actor).

7-113.   *gwa*   *gihali(=mbo)*   *sufwa-Ø-a-mbo,*

but   hunger(=OBJ)   feel-**CR**-1SG-DEP

stroberi   *imbu*   *hihiri-Ø-a-mbo,*

strawberry   two   steal-**CR**-1SG-DEP

ser-iha-hwa.

eat-1SG-PAST

'But then I was hungry (CR), and I stole two strawberries and I ate them.' (50II)

The phenomenon of 'clause-skipping' is very common in Menggwa Dla and other Papuan SR languages. 'Clause-skipping' refers to the fact that sometimes a clause is marked as coreferential or disjoint-referential not in relation to the immediately following clause, but in relation to another clause following in the clause chain. In a piece of discourse, some clauses depict foreground events, and some clauses depict background information. Foreground CR clauses often 'skip' linearly following background clauses. In the following example, the second clause and the third clause are backgrounded in the discourse; they are marked as CR and DR respectively in relation to their immediately following clause (the third and

fourth clause respectively). The first clause, which is a foreground clause, is marked as CR in relation to the following foreground clause — the fourth clause — rather than the immediately following second clause.

7-114. *pi-a   ma-hya-a   Ø-numb-a-mbo,*   FOREGROUND

    go-1SG COMPL-1SG-3FSG:O **CR-**SEQ-1SG-DEP

    '**I** would make (the pith) loose (CR),'

CR | *ye   pi-Ø-o-mbo,*   BACKGROUND

    then go-**CR**-3FSG-DEP

    'then (**the pith**) would become loose (CR),'

    hupla=mbe   ma-ek-wa-mbona,   BACKGROUND

    container=INS **DR-**exist-3FSG-DEP

    'and (**the pith**) would stay in the empty trunk (DR),'

waplu   sa-hya-a   hof-a   saha-hya-a   Ø-numb-a-mbo...

p.bucket carry-1SG-3FSG:O come-1SG put-1SG-3FSG:O CR-SEQ-1SG-DEP

'and **I** would take the palm leaf bucket here (CR), and…' (B)

In the following example, the first clause is the beginning of a discourse section where the main protagonist of the section — *Kariawi* — is introduced. The second clause is also a foreground clause, and it is marked as CR in relation to the following foreground clause — the sixth clause; the third, fourth and fifth clauses are background clauses, and they are 'skipped' by the second clause.

7-115. *gwi   sumbani*   FOREGROUND

another day

    rani [kariawi Ø-ah-umu-wu-a-hya]   *rani ai Ø-hof-u-mbona,*

    DEM [Kariawi call-3-3MPL-3MPL-3FSG:O-PAST] DEM 3 **CR-**come-3MSG-DEP

'One day there was this (person) whom they call Kariawi he _k came (CR),'

Kariawi Ø-hof-u-mbona,   FOREGROUND

Kariawi **CR-**come-3MSG-DEP

'**Kariawi** _k came (CR),'

    *nomola = pa   **ma**-num-ei-mbo gwa,*   BACKGROUND

    children = only **DR-**sit-3FPL-DEP   but

CR   'and only **children** _{n+o+p...} were at home (DR),'

    afila   hwila   rana dofo   heli = hi   o   naho = nambo

    father mother DEM   secret ceremony = ADS or what = ALL

      *efya   rana po-**me**-efya-mbona,* BACKGROUND

      N1FDU:RSUMP   DEM go-**DR-**N1FDU-DEP

'**father and mother the two of them** _{1+m} went to this secret ceremony or

something (DR),'

    *nomola = pa   **ma**-num-ei-mbo,*   BACKGROUND

    children = only **DR-**sit-3FPL-DEP

'only **the children** _{n+o+p...} were at home (DR),'

*rani Kariawi seru-mbo homba-**Ø**-ya-ti-mbo,*   FOREGROUND

DEM Kariawi eat-NOML see-**CR-**3SG-N1FPL:O-DEP

'and **Kariawi** _k saw them _{n+o+p...} eating (CR), and...' (A)

Clause-skipping by CR morphemes is very common. There are also cases of DR morphemes skipping clauses to find its other SR pivot. Occasionally there are two DR chain clauses both depicting parts of the same situation, and both are marked as DR in relation to the same third clause, which of course cannot be immediately following both clauses at the same time. In the following example, the first and second clauses depict part of the same situation, and both are marked as DR in relation to the third clause; the first DR chain clause has 'skipped' the second clause.

7-116. Solomon *afila   suŋgwani wuli＝na   po-__me__-Ø-mbo,*

Solomon   father sick   house＝ALL go-__DR__-3MSG-DEP

'**Solomon's father** _j went to the clinic (DR),'

DR

　　　Solomon＝*lofo   po-__me__-Ø-mbo,*

　　　Solomon＝COM   go-__DR__-3MSG-DEP

　　　'**he** _j took Solomon along (DR),'

DR

nesi   ufati   sa-ka-u-mbo...

nurse medicine give-3SG-3SG:O-DEP

'and **the nurse** _k gave him medicine (CR), and…' (50I)

As seen in all of the examples above, in older speakers' traditional SR system, a CR or DR chain verb form has to be used even when the subject cross-reference suffixes already indicate that the interclausal subjects are coreferential or disjoint-referential unambiguously. Reference disambiguation is basically not needed when one of the subject suffixes is first or second person, or when the gender features are conflicting. In the examples below, the person-number-gender features of the subject cross-reference suffixes already indicate the coreference (1SG and 1SG in

example 7-117) and disjoint-reference (1SG and 3FSG in example 7-118) of the interclausal subjects. Nevertheless, a CR chain verb is still required in example 7-117, and a DR chain verb form is still required in example 7-118.

7-117. *ye* *ser-i* *fa-Ø-hya-a-mbo,*

  then eat-1SG COMPL-**CR**-1SG-3FSG:O-DEP

  ap-aha-hi.

  sleep-1SG-PRES:CONT

  'I eat (CR), and then I sleep.' (B)

7-118. *ini.* pusi *homba-**ma**-ha-a-mbo,*

  yes cat see-**DR**-1SG-3FSG:O-DEP

  hwi=na *han-wa-hwa.*

  water=ALL go.down-3FSG-PAST

  'Yes, I saw the cat j (DR), it **j/k** went down towards the stream.' (60III)

  Although reference-tracking is often an important function of SR markers (this is especially true of CR markers), reference-tracking is not the primary function of canonical SR systems. The primary function of canonical SR systems is the indication of discourse participant continuity versus discontinuity, i.e. a CR marker indicates that the 'salient' participant — the SR pivot — will continue to be foregrounded in a following clause, a DR marker indicates that the 'salient' will not be foregrounded in a following clause; see de Sousa (2005, in press) on this.

The function of the SR system is different for speakers of Menggwa Dla who were born since late 1970s. The function of the innovative SR system differs depending on whether the subject cross-reference suffixes (i.e. the SR pivots) can resolve the referentiality of the interclausal subjects or not. The innovative SR system consists of two mutually exclusive sub-systems.

Sub-system 1

When the person-number-gender information of the two subject cross-reference suffixes already unambiguously indicates that the two subjects are coreferential or disjoint-referential (this happens when one of the cross-reference suffixes is first or second person, or when the gender features of the two suffixes do not match), CR chain verb forms are SR-neutral, i.e. they do not monitor the referentiality of the references between clauses. Reversely, disjoint-referential subjects can be indicated by either CR verb forms or DR verb forms. CR can be thought of as an unmarked chain verb form, and DR chain verb forms are optionally used when the interclausal subjects are disjoint-referential.

Figure 7.4   Relationship from function to form in Sub-system 1 of the Innovative SR system

coreferential   disjoint-referential
interclausal subjects   interclausal subjects

CR chain verb form   DR chain verb form
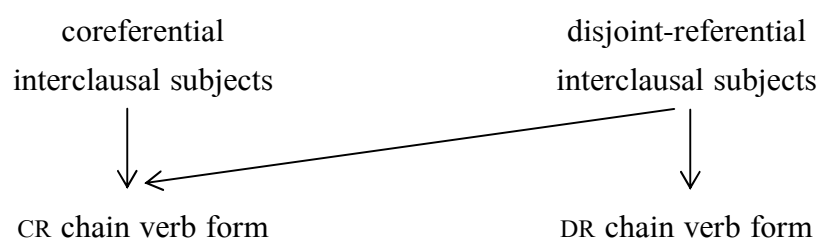
In example 7-119, the CR verb form *hofahiambo* 'I trip over and…' is used because the interclausal subjects are coreferential (both being 1SG). However, in example 7-120, the same CR verb form *hofahiambo* is used in the first clause, but the interclausal subjects are actually disjoint-referential (1SG and 3MSG). The fact is that the CR verb form in examples 7-119 and 7-120 are SR-neutral; the SR-neutral use of these CR verb form is licensed by the fact that the subject cross-reference suffixes on the two verbs have already indicated that the two subjects are coreferential and disjoint-referential respectively. While the use of a DR verb form like *hofahi-me-aha-mbo* (fall-DR-1SG-DEP) is also grammatical in example 7-120, most younger speakers would use a CR verb form in a situation like this.[16]

7-119.   *hofahi-Ø-a-mbo,*

       fall-CR-1SG-DEP

       sumbu-aha-hwa.

       laugh-1SG-PAST

       '**I** tripped over and **I** laughed.'

7-120.   *hofahi-Ø-a-mbo,*

       fall-CR-1SG-DEP

       yoambo   sumbu-Ø-hwa.

       1SG:OBJ   laugh-3MSG-PAST

       '**I** tripped over and **he** laughed at me.' (90I)

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[16] Also notice that example 7-120 is not a case of clause-skipping — clause-skipping only occurs within clause-chains. In example 7-120, the second clause is already the final independent clause of the clause chain; there is no clause to 'skip' to.

The following are two more examples. Since the subject cross-reference suffixes already indicate the disjoint-reference of the subjects between clauses, most younger speakers would use CR chain verb forms rather than DR chain verb forms in cases like these.

7-121. Peter   *atimbati-**Ø-u**-mbona,*

      Peter   sneeze-**CR-3MSG**-DEP

      bahu   *pi-**wa**-hwa.*

      flying.fox   go-**3FSG**-PAST

      '**Peter** sneezed and **the flying fox** flew away.' (80IV)

7-122. *aya*   *ifali*   *kwemi-**Ø-Ø**-mbo,*

      father   spear   take-**CR-3MSG**-DEP

      yo＝amba *aha*   *yowala* *ifali* *tamnya*   *kwami-**Ø-a**-mbo,*

      1＝too   1SG:RSUMP   1SG:GEN   *spear*   small:MASS   take-**CR-1SG**-DEP

      '**Father** took spears with him, **I** too took my own small spears, and…' (N)

It is also grammatical to use DR chain verb forms when the interclausal subjects are disjoint-referential. Nevertheless, most younger speakers only use DR chain verb forms to emphasise discourse discontinuity of some sort (in addition to participant discontinuity; see also §7.5 on how *-mbona* tends to correlate with discourse discontinuity). For instance, in the following example, a CR chain verb like *pi-Ø-u-mbona* (go-CR-3MSG-DEP) can be used in the first clause, but the younger speaker used the DR chain verb form *po-me-Ø-mbona* (go-DR-3MSG-DEP)[17]

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[17] The verb stem *po-* is an irregular DR chain verb stem of the verb lexeme *pi* 'go' (class I) (§7.2.1).

presumably because of the contrastive focus, or alternatively the disruption in spatial continuity (i.e. the spatial settings of the two clauses has changed).

7-123. *dukumi*   *po-__me-Ø__-mbona,*

       valley   go-__DR__-3MSG-DEP

      yo   *lohama*   *roŋgo*   *pi-__aha__-hwa.*

      1   ridge   along   go-__1SG__-PAST

      '**He** went to the valley, and **I** went along the ridge.' (N)

In the following example, the younger speaker may have used the DR verb form to emphasise the termination of the direct quote (i.e. mark the boundary between the direct quote and his own speech).[18]

7-124. *mi*   "... *bani*   *kaha-wa-a-Ø!*"   __me-h-wa__-mbo,

      mother   "… sago   chop-2SG-3FSG:O-IMP"   __DR__-say-__3FSG__-DEP

      pi-__Ø__-hwa.

      go-__3MSG__-PAST

      '**Mother** said "… you chop sago!" and **he** went.' (80I)

Cross-linguistically, it is not uncommon to see DR markers being used to indicate kinds of discourse discontinuity like temporal and spatial discontinuity when the interclausal subjects are actually coreferential (see, e.g. Roberts 1988, Stirling 1993).

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[18] In example 7-124, the verb stem *h-* is an irregular DR chain verb stem of the verb lexeme *hwafo* 'say' (class I) (§7.2.1).

Sub-system 1 of the innovative SR system is comparable to systems of 'general discourse continuity markers' like the ones in Bauzi (Briley 1997).[19] The CR markers in Menggwa Dla are comparable with the continuity markers in Bauzi which indicate discourse continuity in general (which need not include participant continuity). The DR markers in Menggwa Dla indicate both participant discontinuity and at least one other kind of discourse discontinuity, whereas the discontinuity markers in Bauzi indicate any one kind of discourse discontinuity. Other examples of general discourse continuity markers include the systems in Central Pomo (Mithun 1993) and Koasati (Rising 1992), both spoken in North America.

Sub-system 2

When the person-number-gender information of the two subject cross-reference suffixes is not sufficient in resolving whether the two subjects are coreferential or disjoint-referential (this happens when the two cross-reference suffixes are both third person and when the gender features are not conflicting), coreferential interclausal subjects are obligatorily indicated by CR verb forms, and disjoint-referential interclausal subjects are obligatorily indicated by DR verb forms. In effect, the traditional SR system is being retained by younger speakers in this restricted context.

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[19] Briley describes the system in Bauzi as a switch-reference system. Nevertheless, the 'same actor' marker can be used when the references are disjoint-referential and the 'different actor' markers can be used when the references are coreferential. This is obviously not a SR system, as the primary function of SR systems is the indication of participant continuity versus discontinuity; while the DR markers may be used to indicate other kinds of discourse discontinuity, the CR markers would always indicate participant continuity. The analysis of the system in Buazi as a system of general discourse continuity markers is mine.

Figure 7.5   Relationship from function to form in Sub-system 2 of the Innovative

SR system

coreferential	disjoint-referential
interclausal subjects	interclausal subjects
↓	↓
CR chain verb form	DR chain verb form
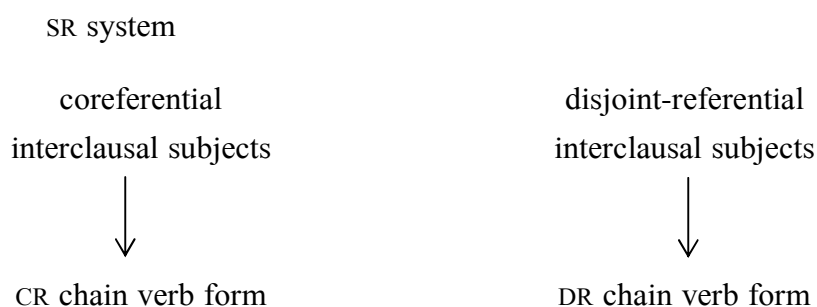
In the following example, all three subject suffixes are third person singular, and the gender features are not conflicting. The use of CR verb forms in this case necessarily indicates the coreference of the interclausal subjects.[20]

7-125.   ai   *dukwa-**Ø-ya**-a-mbo,*

3   wake.up-**CR-3SG**-3FSG:O-DEP

*Hilari = mbo   homba-**Ø-i**-Ø-mbona,*

Hilario = OBJ   see-**CR-3MSG**-3MSG:O-DEP

*alani-**Ø**-hwa.*

cry-**3MSG**-PAST

'**He** _j_ woke up (CR), **he** _j_ saw Hilari _k_ (CR), and **he** _j/*k_ cried.' (90III)

In a similar situation, if the interclausal subjects are meant to be disjoint-referential, then a DR verb form must be used; a CR verb form cannot be used in this situation because CR verb forms are no longer SR-neutral (as the person-number-gender features of the subject cannot disambiguate whether the subjects are coreferential or not).

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[20] In example 7-125, the verb *dukwefi* 'wake up' (class IIB) is monovalent; the object suffix -*a* (3FSG:O) in the first clause of example 7-125 is semantically empty (§5.3.2.2). For class IIB of cross-reference suffixes, gender is marked for 3SG subjects only when the object is 3MSG (§5.2.2).

7-126. Hilari＝*mbo*   *homba-**ma-i**-Ø-mbona*   (*/ *homba-**Ø-i**-Ø-mbona),*

Hilario＝OBJ   see-**DR-3MSG**-3MSG:O-DEP   (/see-**CR-3MSG**-3MSG:O-DEP)

*alani-**Ø**-hwa.*

cry-**3MSG**-PAST

'**He** ~j~ saw Hilari ~k~ (CR), and **he** ~*j/k/l~ cried.'

The following are two more examples. Also notice that in example 7-127, having overt noun phrases which disambiguate the referentiality of the subjects has no effect on the SR system; only the person-number-gender features of the cross-reference suffixes determine whether CR chain verb forms are SR neutral or not.

7-127. Peter＝*na*   *wamla*   **ma-ser-u**-*mbo*   (*/ ***ma-ser-u**-mbo),*

Peter＝TOP   betel.nut   **DR**-eat-**3MSG**-DEP   (/**DR**-eat-**3MSG**-DEP)

Simon＝*na*   *fofo-**Ø**-hwa.*

Simon＝TOP   blow-**3MSG**-PRES:CONT

'**Peter** is chewing betel nut (DR), and **Simon** is smoking.' (80II)

7-128. *numuŋgwa*   *boke-**me-wa**-mbo,*

die   NEG:R-**DR-3FSG**-DEP

dokter   *mefu-**wa**-hwa.*

doctor   thank-**3FSG**-PAST

'**She** ~j~ did not die (DR) and **she** ~k~ thanked the doctor.' (80II)

Sub-system 2 of the innovative SR system is comparable with so-called 'third-person SR systems' like the interclausal reference tracking systems in Eskimo-Aleut languages (e.g. Bergsland 1994, 1997 for Aleut; Woodbury 1983 for Central Yup'ik) and certain Tupí-Guaraní languages like Guajajára (Jensen 1997, 1998). In 'third-person SR systems', functional CR versus DR marking is only available when the 'SR' pivot of the marked clause is third person. The primary function of third-person SR systems is clearly reference-tracking rather than the indication of reference continuity versus discontinuity, and hence they are not SR systems. The rationale of having functional CR versus DR markings only for third person references is that reference disambiguation is often needed for third person references, but seldom needed for first and second person references (see de Sousa 2005, in press). Sub-system 2 of the innovative SR system in Menggwa Dla is more restrictive than the third-person SR systems mentioned above; in younger speakers' Menggwa Dla, functional CR versus DR marking is available only when both subjects are third person <u>and</u> with agreeing number and gender.

7.2.2.3   Referential overlap

Referential overlap refers to cases where the interclausal references have some — but not all — referents in common. This most usually happens when there is a mismatch in the number features of the interclausal subjects, e.g. 'they $_{j+k+l}$ …, he $_k$…', 'I…, We…'. Roberts (1997: 157-158) mentions that amongst Papuan SR languages, there are languages where all cases of referential overlap are marked as CR (e.g. Angave), and there are languages where cases of referential overlap are variously marked as CR and DR depending on person of the SR pivot (e.g. Waskia, Kewa; clauses with a first person SR pivot are more likely to be marked as CR, and

clauses with a non-first person SR pivot are more likely to be marked as DR), number of the SR pivot (e.g. Amele; clauses with SR pivot which properly includes the SR pivot of the control clause are more likely to be marked CR, and clauses with SR pivot which is properly included in the SR pivot of the control clause are more likely to be marked DR), or both the number and person of the SR pivots (e.g. Kobon, Usan). In Menggwa Dla, all cases of referential overlap can be marked as either CR or DR for both older and younger speakers. CR chain verbs are much more common in cases of referential overlap.

Older speakers:

7-129. gwafu=hi   hwafo pi-Ø-ya-a-mbo,   subject = 3SG

village=ADS talk   go-CR-3SG-3FSG:O-DEP

mafwa   olahasafya=lofo   Ø-han-umu-mbo...   subject = N1MPL

all   community=COM CR-go.down-N1MPL-DEP

'He _j spread the message at the village, and **all the men _{j+k+l...}** went down (to the river)...' (A)

7-130. [Vanimo=nambo pi-mba-mbo]   sa-Ø-ya-a-mbo,   subject = 3SG

[Vanimo=ALL   go-POST-NOML] think-CR-3SG-3FSG:O-DEP

ye   mome   Senggi=na   pi-Ø-ehi-mbo...   subject = 1DU

then together Senggi=ALL go-CR-1DU-DEP

'She _j thought of going to Vanimo, then **we _{i+j...}** went to Senggi ...' (60I)

7-131. *mome   Naŋgani afila=lofo   mome   ilohwe (< ilo-hwa-a-hi)*

together   Nangn   father=COM   together   work-1DU-3FSG:O-SIM

   Ø-num-ehi-mbo,   subject = 1DU

   CR-sit-1DU-DEP

Naŋgani afila   fa-Ø-ya-a-mbo...   subject = 3SG

Nangn   father   leave-CR-3SG-3FSG:O-DEP

'(I _i) together with Nangn's father _j we _{i+j} worked and lived (here), and

Nangn's father _j left…' (S)

Younger speakers:

7-132. *Ø-han-yehi-Ø,*   subject = 1DU

   CR-go.down-1DU-DEP

wamla   imbu fa-ha-a-hwa.   subject = 1SG

betel.nut two   pick.betel.nut-1SG-3FSG:O-DEP

'**We** _{i+j} went down, and **I** picked two bunches of betel nuts.' (N)

7-133. *ye   wuli=mbe fa-hwa-a   Ø-numb-ehi-mbo,*   subject = 1DU

then   house=INS   leave-1DU-3FSG:O CR-SEQ-1DU-DEP

aya   ifali   kwemi-Ø-Ø-mbo...   subject = 3MSG

father   spear   take-CR-3MSG-DEP

'Then **we** _{i+j} left the house, and then **father** _j took spears…' (N)

7-134. "*waŋgu=pa   no*"   *sa-Ø-hwa-a-mbo,*   subject = 1DU

"sparrow=only COP:3FSG" say-CR-1DU-3FSG:O-DEP

"*a   yanu*"   *sa-Ø-hu-a-mbo…*   subject = 1PL

"ah enough" say-CR-1PL-3FSG:O-DEP

'"Its is only sparrows (that we got)," said **we two** ₍ᵢ₊ⱼ₎, "ah that's OK,' said **we**

all ₍ᵢ₊ⱼ₊ₖ₊ₗ…₎ …' (N)

7-135. *aya   alani-Ø-Ø-mbo,*   subject = 3MSG

father cried-CR-3MSG-DEP

naho=nambo pi-efye-hwa.   subject = 3FDU

what=ALL   say-N1FDU-PAST

'**Father** ⱼ cried, and **the two of them** ₍ⱼ₊ₖ₎ went somewhere.' (90II)

In cases of referential overlap, DR chain verb forms are usually used to emphasise kinds of discourse discontinuity. For instance, the DR chain verb form is used in example 7-136 to emphasise the discontinuity in spatial setting; the DR chain verb form in example 7-137 is used to emphasise the end point of the quoted speech.

7-136. Kamby=*hi*   *klo-ma-hwa-a-mbo,*   subject = 1DU

Kamberatoro=ADS separate-DR-1DU-3FSG:O-DEP

ye   hof-aha-mbi.   subject = 1SG

then come-1SG-PRES:TRANSN

'**We** ₍ᵢ₊ⱼ₎ separated at Kamberatoro and **I** came (here).' (60I)

7-137. "... butya-hwa-a-Ø"   **me**-h-u-mbona,   subject = 3MSG

"… hit.with.stick-1DU-3FSG:O-IMP" <u>DR</u>-say-3MSG-DEP

tikyawi ap-ehye-hwa.   subject = 1DU

small   sleep-1DU-PAST

'**He** ${}_{j}$ said "… we will catch (sparrows)" and **we two** ${}_{j+k}$ slept a little bit.' (N)

7.2.3   Hypothetical protases

Protases, in other words the 'if' clauses of conditional sentences, can be marked in two different ways. Simple indicative protases, of which the truth value can be true or false, are expressed as irrealis *-hwani* clauses (§7.1.2). On the other hand, hypothetical protases, in other words protases of which the polarity must be false based on real word knowledge, are indicated by chain clauses. The dependency suffix (§7.5) of a hypothetical protasis chain verb is usually *-mbona*, but *-mbo* can be used as well. Hypothetical protasis often have counterfactual apodoses which carries the *-naho* counterfactual suffix (see §6.3.4 for more examples). The following exemplifies some hypothetical protases.

7-138. hwahwa-Ø-a-mbona,   wanu   ma-sa-ŋga-u-naho.

know-CR-1SG-DEP   money   NEG:IR-give-1SG-3SG:O-CNTR

'If I had known, I would not have given him/her the money.'

(*hwahwa* 'know' class I, *sefi* (*sa-*/ *da-*) 'give' class III)

7-139. rani amani sama-ma-ya-a-mbona,   suŋgwani-me-u-naho.

DEM good   cook-DR-3SG-3FSG:O-DEP be.sick-NEG:IR-3MSG-CNTR

'If it was well cooked, he would not be sick.'

(*samefi* (*sama-*) 'cook' class IIB, *suŋgwani* 'be sick' class I)

7-140. pi boke-me-Ø-mbo,   kyambe   yo efa   Amanab =na

go NEG:R-DR-3MSG-DEP tomorrow 1   1PL:RSUMP Amanab = ALL

po-l-emby-efu.

go:FUT-LIG-SMR:1NSG-1PL

'If he did not come, we would (have to) go to Amanab tomorrow.'

(*pi* (*pi-/ po-*) 'go' class I)

7.3   Non-finite chain clauses and verbal noun phrases

Non-finite chain clauses and verbal nouns are rare in natural discourse. Non-finite chain verbs and verbal nouns are formally nearly identical; non-finite chain verbs are formed with a non-finite verb stem (§5.1.1), an optional 'posterior' suffix -*mba*, and a dependency suffix -*Ø* ~ -*mbo* ~ -*mbona*; verbal nouns are formed with a non-finite verb stem, an optional posterior suffix -*mba*, and a nominalising suffix -*Ø* ~ -*mbo*. In addition, verbal noun phrases can also take certain case clitics (§4.5). Neither non-finite chain verbs nor verbal carry cross-reference suffixes (§5.2). The meaning of the 'posterior' suffix -*mba* is different depending on whether it is used on non-finite chain verbs or verbal nouns, see §7.3.1 and §7.3.2 respectively.

7.3.1 Non-finite chain clauses

Most usually, non-finite chain clauses are sentence-medial; sentence-medial non-finite chain clauses are discussed in §7.3.1.1. Very occasionally, non-finite chain clauses exist at the end of a sentence and are not followed by a finite verb; sentence-final non-finite chain clauses are discussed in §7.3.1.2.

7.3.1.1   Sentence-medial non-finite chain clauses

Non-finite chain clause is like an impersonal version of chain clauses (§7.2). Non-finite chain verbs do not carry cross-referencing, and non-finite chain clauses are used when the subject reference is non-specific or low in 'newsworthiness', e.g. non-human subjects of clauses depicting background information. Similar to CR (coreferential) chain verbs, non-finite chain verbs can also be serialised with the completive verb *fefi ~ mefi*[21] and sequential verb *nuŋgu* (§7.4), both in their non-finite forms, e.g. *seru mefi nuŋgu-mbo* 'after finishing eating'. On non-finite chain verbs, *-mba* signifies posteriority in relation to the situation of the preceding clause of the non-finite clause chain, and that the situation of the *-mba* clause has a longer temporal span.

7-141. byali   waplu semi nuŋgu-mbo,

    strainer bucket take SEQ-DEP

bani numu-a＝nambo pi-mba-mbo,   hafu-Ø…

    sago sit-place＝ALL   go-POST-DEP   arrive-DEP

    '(People) take strainers and buckets, and (they) go to the place where sago palms are grown, and (they) arrive…' (B)

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[21] The other completive verb — *me* (class I) — is not used in non-finite chain clauses; see §7.4.

Non-finite chain verbs do not carry switch-reference suffixes (§5.2) like chain clauses do (§7.2). Nonetheless, non-finite chain verbs require that their subject to be coreferential or referentially-overlapping with the subject of a clause along the non-finite clause chain, most usually the immediately following clause (see below). A non-finite clause chain is usually ended by an independent clause (§6) or a realis *-hwani* 'when' subordinate clause (§7.1.2); realis *-hwani* 'when' subordinate clauses are used adjacent to non-finite chain clauses, and the subject of a realis *-hwani* 'when' clause is always disjoint-referential with the subject of its matrix clause.

In the following example, the non-finite chain clause *waŋgu harifimbo numwahwani* 'the sparrows enter and stay' is subordinate to the matrix clause *butyahwa* 'let us catch them'. Notice the change of subject between the second clause *numwahwani* 'when they stay' and the third clause *butyahwa* 'let us catch them'

7-142. *[waŋgu   harifi-mbo,   num-wa-hwani,] butya-hwa-a-Ø.*

    [sparrow enter-DEP   sit-3FSG-when]   hit.with.stick-1DU-3FSG:O-DEP

    'When the sparrows enter (the cave) and stay there, we will catch them.' (N)

Although lacking SR markings, 'clause skipping' (§7.2.2) is also found with non-finite chain clauses. In the following example, the second clause — a non-finite chain clause — and the third clause — a realis *-hwani* 'when' subordinate clause — form a non-finite clause chain; the entire non-finite clause chain is subordinate to the

fourth clause, which is another non-finite chain clause. The subject of the first

clause — also a non-finite chain clause — is coreferential with the subject of the

fourth clause, rather than the subject of the second or third clauses which are

subordinate to the fourth clause. In other words, the first clause has 'skipped' the

linearly following second and third clauses.

7-143. kahefi nuŋgu-mbo,

    chop   SEQ-DEP

    '(People) chop (the sago palms),'

        [hofahi-Ø,

        [fall-DEP

        ['(the sago palms) fall,'

        hofo=hi   *ek-wa-hwani,]*

        ground=ADS exist-3FSG-when]

        'and when (the sago palms) lie on the ground,']

palaŋgi=nambo hwela numuli-Ø,

machete=ALL   skin   remove-DEP

'(people) remove the bark (of the sago palms) with machetes…'

wepi mefi   nuŋgu-mbo,

clean COMPL SEQ-DEP

'and after (they) finish clearing ('clean') the exterior (of the palms)… (B)

    A non-finite chain clause can also be followed by a chain clause (§7.2) and

vice versa. In the example below, the non-specific referent set of the subject

reference of the first clause — a non-finite chain clause — properly includes the first

person singular referent of the subject reference of the second clause, which is a chain clause.

7-144. *ahala=na=pa   hya   imbu safo tamako=nambo kikifi nuŋgu-mbo,*

root=ALL=only INTJ two   half axe=ALL   chop SEQ-DEP

kala-hya-a   Ø-numb-a-mbo,

split-1SG-3FSG:O CR-SEQ-1SG-DEP

'(People) chop the sago palm into two halves (from the top) to the root with an axe, and I would split the sago palm (into two halves), and…' (B)

In the following example, the first clause, which is a chain clause, is followed by a non-finite chain clause. As the subject referents has not changed between the two clauses, a coreferential chain verb (§7.2.1) is used in the chain clause.

7-145. *… gihali   me-Ø-wa-mbo,*

hungry COMPL-CR-3FSG-DEP

ilo-mbo   hwambo   tamako semi nuŋgu-mbo…

be.like.so-NOML be.the.case axe   take SEQ-DEP

'(People) are hungry, and so they take axes, and …' (B)

All copular chain clauses are non-finite chain clauses; copulas (§6.4) cannot be used in chain clauses (§7.2). The non-finite chain copula (§6.4) in a non-finite chain clause is a suffixed with a dependency suffix *-Ø ~ -mbo ~ -mbona* (§7.5) like other non-finite chain verbs. However, the subject of a non-finite copular clause is

484

'transparent' towards the subject coreference requirement of non-finite chain clauses and switch-reference of chain clauses (§7.2.2).

7-146. *ai=na tumali hupla ambya ruŋgu pipi-me-Ø-mbo,*

3=TOP pandanus container hole inside hide-DR-3MSG-DEP

ra nu-mbo,

DEM COP-DEP

pupla-Ø-wu-a-Ø,

break-CR-N1MPL-3FSG:O-DEP

'He was hiding in a hole inside a pandanus trunk, and that being the case, they broke the hole, and…' (A)

7-147. *yamu bena hafa-hwa-a Ø-numb-ehi-mbo,*

Yamu side go.pass-1DU-3FSG:O CR-SEQ-1DU-DEP

rani=hi nu-mbo,

DEM=ADS COP-DEP

"hwaŋgu wami gak-yehi-Ø" sa-Ø-hwa-a-mbo,

"cave above go.up:FUT-1DU-JUS" think-CR-1DU-3FSG:O-DEP

'We went across to Yamu (Creak), and being there, we though "let us go up to the cave," and…' (N)

7-148. *saftu=mbe nu-mbo,*

Saturday=INS COP-DEP

simbu ye wuli=nambo pi-ehye-hwa.

morning then house=ALL go-1DU-PAST

'It was on Saturday, and we went home in the morning.' (N)

485

<u>7.3.1.2</u>   <u>Sentence-final non-finite chain clauses</u>

Occasionally, non-finite chain clauses are found at the end of a sentence.
These non-finite chain clauses are not verbal noun phrases (§7.3.2) as the non-finite
chain clauses are not limited for the types of arguments they can have, unlike verbal
noun phrases which can only have one 'argument'.

Sentence final non-posterior non-finite chain clauses convey instructions:

7-149. hwi=lofo   yarifi-Ø.

    water=COM stir.sago-DEP

    'Stir sago with water.'

7-150. hutumu=hi bahefi-mbo.

    leaf=ADS   cut.put-DEP

    'Cut and distribute (food) on the (big) leaves.'

On the other hand, sentence-final posterior non-finite chain clauses are often
used in place of jussive verb forms (§6.3.1) or positive semi-realis verb forms (§6.2).
For instance:

Sentence-final posterior non-finite chain verb:

7-151. pi-mba-mbo ~ pi-mba-Ø.

    go-POST-DEP   go-POST-DEP

    '(I/ we/ you/ someone) will go.'

Jussive mood:

7-152. pi-efu-Ø!

    go-1PL-DEP

    'Let's go (now)!'

Positive semi-realis mood:

7-153. po-l-efu   samby-efu.

    go:FUT-LIG-1PL POS:SMR-1PL

    'We will go.'

    Semi-realis verb forms convey the speaker's absolute certainty that the situation will occur in the future, and jussive forms convey slight coercion. On the other hand, posterior chain verbs — which depict situations posterior to the time of utterance — are relatively polite in that they are semantically vague; they do not indicate the speaker's attitude towards the proposition (i.e. devoid of modal meaning), and the actor of the situation does not have to be expressed. The following are other examples of sentence-final non-finite chain clauses.

7-154. (hwalfehi pi-me-wi-mbo,)   ilo-mba-mbo.

    (woman go-DR-N1FPL-DEP)   work-POST-DEP

    '(When) the women leave,) (we) will work.'

7-155. *a   yo [humbli-me-aha-mbo hoho-hi-a-hya]*

ah 1 [hear-DR-1SG-DEP   tell-N1FPL-3FSG:O-PAST]

amamo=la hwafo hoho-mba-Ø.

moon=GEN story   tell-POST-DEP

'Ah I will tell you the moon's story which I heard them telling.' (A)

7.3.2   Verbal noun phrases

Verbal nouns are nominalised forms of verbs, akin to gerunds in English.
Verbal nouns are formed with a non-finite verb stem (§5.1.1), followed by an
optional posterior suffix *-mba*, and then by a nominalisation suffix *-Ø ~ -mbo*.
Verbal nouns are subcategorised for semantic arguments like verbs, but only one
argument can be expressed in a verbal noun phrase (see below). Verbal noun
phrases can be used as core grammatical relations or oblique relations, and verbal
noun phrases can take certain nominal clitics (§4.5; see below). In the following
example, *wamla seru-mbo* 'betel nut chewing' is a verbal noun phrase.

7-156. *[wamla   seru-mbo]=nambo yafu hamblu-wa-hwa.*

[betel.nut eat-NOML]=ALL   tooth be.red-3FSG-PAST

'The teeth have become red due to [betel nut chewing].'

Verbal noun phrases in Menggwa Dla share similarities with gerundial
phrases in English. Like English gerundial phrases, verbal noun phrases in
Menggwa Dla can depict general situations or particular instances of the situation.
For instance, the verbal noun phrase *wamla seru-mbo* 'betel nut chewing' in
example 7-156 above can mean betel nut chewing in general, or one particular

488

instance of betel nut chewing. Nevertheless, unlike gerundial phrases and more like noun incorporation, only one semantic argument can be expressed in the verbal noun phrase, and that expression must be in its citation form (i.e. not case-marked).[22] For instance, *hwi* 'water' in the verbal noun phrase *hwi ti* 'getting rid of water' below cannot take an object case *=mbo* (§4.5.1) (*hwi ti* can be translated literally as 'water-ridding').

7-157. [hwi   ti-Ø]   fa-hya-a   Ø-numb-a-mbo,

      [water get.rid-NOML] finish-1SG-3FSG:O CR-SEQ-1SG-DEP

      'After I finished getting rid of the water...' (B)

Also like noun incorporation in English, when a verbal noun is subcategorised for two semantic arguments, only the 'object' argument (§5.3.3) can be expressed in the verbal noun phrase, as shown in the examples above. When a verbal noun is subcategorised for only one semantic argument, that lone argument (which would be expressed as a subject if it were a clause; §5.3.3) can be expressed in the verbal noun phrase, as shown in the example below.

7-158. [tu   kwa klei-mba-Ø]   sa-hwa-a-mbo,

      [bird MOD fence-POST-NOML] think-1DU-3FSG:O-DEP

      'We thought [maybe the birds will be building their nests], and…' (N)

Also shown in the example above is the posterior suffix *-mba*. In verbal noun phrases, the posterior suffix *-mba* signifies that the situation of its own phrase

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[22] The fact that the argument expressions cannot be case-marked within verbal noun phrases also indicates that the verbal noun phrases are not (dependent) clauses.

occurred after (or is imagined to occur after) the situation of the main clause. (Contrast this with the usage of *-mba* with non-finite chain verbs; see §7.3.1.) The following are more examples of *-mba*.

7-159. *[[nimi   wami] pi-mba-mbo]   sa-hwa-a-mbo,   pi-ehye-hya.*

[[mountain above] go-POST-NOML] think-1DU-3FSG:O-DEP go-1DU-PAST:FOC

'We thought of [going up the mountain], and we went.' (N)

7-160. *apa   simbu=na [bani kahefi-mba-mbo] gihali(=mbo) me-wa-mbo,*

daytime morning   [sago chop-POST-NOML] hunger(=OBJ) finish-3FSG-DEP

lit. 'In the morning [before one chops sago] one gets ('finish') hungry…' (B)

When the verbal noun phrase situation started at the same time or before the matrix clause situation, the posterior suffix *-mba* is not used on the verbal noun. In example 7-161 below, the 'eating' situation of the verbal noun phrase begins before the 'seeing' situation of the matrix clause. Also notice that *seru-mbo* 'eating' is cross-referenced on the verb as non-first person feminine plural (N1FPL) in example 7-161. A verbal noun takes on the person-number-gender features of its 'subject' if it has one argument, and the 'object' if it has two arguments. In example 7-161, *seru-mbo* 'eating' is feminine as the agent reference (the 'subject') is feminine (the referents can be recovered from the discourse as being a group of females plus males). If the agents of the eating situation in the following example are all male, then the verbal noun would be cross-referenced as masculine, as shown in example 7-162.

490

7-161. rani Kariawi [seru-mbo] homba-ya-ti-mbo,

that Kariawi [eat-NOML] see-3SG-N1FPL:O-DEP

'Kariawi saw them eating, and…' (A)

7-162. rani Kariawi [seru-mbo] homba-i-mo-mbo,

that Kariawi [eat-NOML] see-3SG-N1MPL:O-DEP

'Kariawi saw them (male) eating, and…'

The posterior suffix *-mba* is also not used when the matrix clause depicts a habitual situation, as demonstrated in example 7-157 above and also in example 7-163 below. Example 7-163 below also demonstrates a serialised verbal noun construction. Like verbs, verbal nouns can also be serialised; *hwatu seru* can be literally translated as *find-eating*.

7-163. mni amblwa＝na＝pa   hya [hwatu seru-mbo]＝pa

just outside＝ALL＝only INJT [find   eat-NOML]＝only

hri-ya-a   fa-ya-a   kaku-Ø-u-Ø,

come.out-3SG-3FSG:O leave-3SG-3FSG:O walk-CR-3MSG-DEP

'It only came out to search (for things) to eat…' (A)

Verbal nouns cannot take the object case clitic ＝*mbo*, e.g. *seru-mbo＝mbo* (eat-NOML＝OBJ) is ungrammatical. Nevertheless, the nominalising suffix *-mbo* is not an object case clitic, as the nominalising suffix *-mbo* can also be used when the verbal noun phrase is the subject or topic of the clause (objects in topic position cannot take the object clitic ＝*mbo*; §4.5.6).

7-164. *[tafoko   fofo-mbo]=na   amani no.*

[cigarette blow-NOML]=TOP good COP:3FSG

'Smoking cigarettes is good.'

Verbal noun phrases can take the focus clitics (§4.5.7) of *=amba* 'too' and *=pa* 'only' (example 7-163 above), and also certain semantic cases: allative case *=na(mbo)* (§4.5.3) indicates reason or purpose (example 7-156 above), adessive case *=hi* (§4.5.3) indicates simultaneity (examples 7-165 and 7-166 below), and abessive case *=mboka* (§4.5.5) indicates negativity (example 7-166 below). (The final clauses of the following sentences are non-finite chain clauses; see §7.3.1.2 for the sentence final non-finite chain clauses; see footnote 9 in §3.1.1 for reasons why these nominal clitics used on verbal noun phrases are nominal clitics rather than verbal tense-aspect-mood affixes.)

7-165. *[hufwa-mbo]=hi   yarifi-Ø.*

[be.hot-NOML]=ADS stir.sago-DEP

'Stir the sago while (it) is hot.'

7-166. *[efifi-Ø]=mboka=hi   pi-mba-mbo.*

[become.dark-NOML]=ABSS=ADS go-POST-DEP

'(Let us) go before it gets dark.'

lit. 'While it has not got dark, there is future-going.'

7.4 The completive and sequential grammatical verbs

As lexical verbs, *fefi* (*fa-*) (class IIB) means 'leave', *mefi* (*ma-*) (class IIB) means 'finish' (bivalent), *me* (class I) means 'finish' (monovalent) and *nuŋgu* (*nu(ŋg/mb)-*) means 'stand'. As grammatical verbs, *fefi ~ mefi*/*me* indicate completive aspect and *nuŋgu* indicates interclausal sequentiality on CR chain clauses (§7.2) and non-finite chain clauses (§7.3.1).[23] The grammatical verbs are serialised to lexical verbs, and the whole serial verb construction is marked by a single dependency suffix *-Ø ~ -mbo ~ -mbona* (§7.5) at the end. When both the completive verb *fefi ~ mefi*/*me* and the sequential verb *nuŋgu* are serialised with a lexical verb, *fefi ~ mefi*/ *me* precedes *nuŋgu*. In a non-finite chain clause, non-finite verb forms are used throughout the serial verb construction.

7-167. apu   mefi   nuŋgu-Ø,

      sleep COMPL SEQ-DEP

      'After waking ('finished sleeping') …'

7-168. kahefi nuŋgu-mbo,

      chop   SEQ-DEP

      'After chopping …'

In a chain clause, the entire serial verb must share the same arguments, i.e. the person-number-gender features of all the subject cross-reference suffixes must agree, and the person-number-gender features of all the object cross-reference

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[23] In non-finite chain verbs, *fefi* and *mefi* (class IIB) are used and *me* (Class I) is not used (§7.3.1). The completive and sequential verbs cannot be used on DR chain verbs (§7.2.1), subordinate verbs (§7.1) and independent verbs (§6).

suffixes. The sequential verb *nuŋgu* and the preceding verb in the serial verb construction (either the completive verb *fefi ~ mefi/ me* or the lexical verb) must be finite, i.e. both verbs must have finite verb stems and each carrying their own cross-reference suffix(es); *homba-hya-ni* in examples 7-171 and *fa-hya-ni* in example 7-172 below are examples. On the other hand, the lexical verb which precedes the completive verb *fefi ~ mefi/ me* can be either finite or non-finite; *ser-i* in example and *homba-hya-ni* in example are finite, and *seru* in example 7-170 and *homba* in example 7-172 below are non-finite.

7-169. *ser-i   fa-Ø-hya-a-mbo,*

     eat-1SG COMPL-CR-1SG-3FSG:O-DEP

     'I ate it, and …' (*seru* (*ser-/ det-*) 'eat' class IH)

7-170. *seru   fa-Ø-hya-a-mbo,*[24]

     eat   COMPL-CR-1SG-3FSG:O-DEP

     'I ate it, and …'

7-171. *homba-hya-ni Ø-numb-a-mbo,*

     see-1SG-2SG:O CR-SEQ-1SG-DEP

     'I saw you, and …' (*homba* 'see' class II)

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[24] The non-finite verb *seru* cannot be a verbal noun which functions as the object of *fahyambo*; verbal nouns have a nominalising suffix which freely alternates between *-Ø* and *-mbo,* and *seru* cannot be suffixed with *-mbo.*

7-172. homba(-hya-ni) fa-hya-ni   Ø-numb-a-mbo,

see(-1SG-2SG:O) COMPL-1SG-2SG:O CR-SEQ-1SG-DEP

'After I saw you …'

The completive verb *fefi* (*fa-*) (class IIB) is more commonly used in the western villages of Wannggurinda and Menggwal; the completive verbs *mefi* (*ma-*) (class IIB) and *me* (class I) are more commonly used in the eastern villages of Menggau, Wahai Nº1 and Wahai Nº2 (Ambofahwa). For people who usually use *mefi* (*ma-*) and *me*, the monovalent *me* (class I) is used in chain clauses when the lexical verb has one argument, and the bivalent *mefi* (*ma-*) (class IIB) is used in chain clauses when the lexical verb has two arguments.[25] For people who usually use *fefi* (*fa-*), *fefi* (*fa-*) is used regardless of the valence of the lexical verb.

Monovalent *me* (class I):

*7-173. bapli=hi   hupo-a   **me-a**   Ø-numb-a-mbo,*

head =ADS put.on.head-1SG COMPL-1SG CR-SEQ-1SG-DEP

'I put it on top of my head…' (B)

Bivalent *mefi* (*ma-*) (class IIB):

*7-174. pi-a   **ma-hya-a**   Ø-numb-a-mbo,*

go-1SG COMPL-1SG-3FSG:O CR-SEQ-1SG-DEP

'I make it go, and…' (B)[26]

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[25] Cases of the completive verb being used in zero-valent and trivalent clauses have not been encountered.

[26] The use the bivalent *mefi* with the verb *pi* (*pi-*/ *po-*) 'go' (class I) also indicates that the lexical verb has a bivalent causative meaning (§5.3.3).

Monovalent *fefi* (*fa-*) (class IIB):

7-175. ap-ehi **fa-hwa-a**   Ø-numb-ehi-mbo,

sleep-1DU COMPL-1DU-3FSG:O CR-SEQ-1DU-DEP

'After we slept, then…' (N)

Bivalent *fefi* (*fa-*) (class IIB):

7-176. imbumamu=pa yari=na   ser-yehi **fa-hwa-a**   Ø-numb-ehi-mbo,

three=only   sago=ALL sleep-1DU COMPL-1DU-3FSG:O CR-SEQ-1DU-DEP

'We only ate three of them with sago, and…' (N)

The completive verb indicates that the situation is 'completed in entirety'. The completive verb is most usually used with atelic verbs. Nonetheless, it is grammatical to use the completive verb with any lexical verbs, except that the lexical verbs *fefi* 'leave' cannot be serialised with the grammatical verb *fefi*, and *mefi*/ *me* 'finish' cannot be serialised with the grammatical verbs *mefi*/ *me*. In the following example, *fefi* indicates that a participant (the subject) has experienced a complete change of location. Without *fefi*, the meaning of *hri* 'emerge' could potentially be that the moon has emerged a little bit out of the water.

7-177. amamo rani baya hri-ya-a   **Ø-fa-ya-a-mbona,**

moon   that side emerge-3SG-3FSG:O CR-COMPL-3SG-3FSG:O-DEP

Ø-hahof-u-mbona,

CR-go.up-3MSG-DEP

'The moon came out ('completely emerged') of that place, and went up, and…' (A)

In the following example, *fefi* indicates that the intended completion point of the situation has been reached, i.e. the undergoers had made a conscious decision of getting up before the situation of the next clause begins. Without *fefi*, the meaning of *apu* 'sleep' could potentially be that the undergoers did the action of the next clause while lying down or half awake.

7-178. *tikyawi ap-ehi*   **Ø-fa-hwa-a-mbo**,

      small   sleep-1DU CR-COMPL-1DU-3FSG:O-DEP

      sumbli ulyambo […] butya-hwa-a-Ø.

      night   perfect […] hit.with.stick-1DU-3FSG:O-IMP

      'We will take a small nap, and then at midnight […] we will catch (the

      sparrows by hitting them with sticks).' (N)

Similarly, in the following example, *fefi* indicates that the intended completion point of the situation has been reached: that the person has stolen everything that was intended.

7-179. *rani amni   baya tupam nyawi hihiri fa-Ø-ya-a-Ø*,

      DEM garden side   thing   person steal   COMPL-CR-3SG-3FSG:O-DEP

      pi-wa-hi   *no.*

      go-3FSG-PRES:CONT COP:3FSG

      'Someone has stolen things from the garden and is leaving.' (A)

In the following example, *fefi* signifies that the stimulus has been entirely sensed by the experiencer. Without *fefi*, the meaning could potentially be that the moon was partially seen by the person.

7-180. *hwi=mbe   homba-i-Ø   **fa-i-Ø**   Ø-nuŋ-u-mbo,*

water=INS   see-3MSG-3MSG:O   COMPL-3MSG-3MSG:O   CR-SEQ-3MSG-DEP

[o   dani   da-tupam dewahi]=na ah-Ø-Ø-ya-a-mbo,

[oh this   this-thing must]=TOP   think-CR-3-3SG-3FSG:O-DEP

'Having seen him in the water, he thought that it must be this thing (that was stealing)…' (A)

In the following example, *fefi* in the second clause indicates that the undergoers have been entirely affected. Without *fefi*, an alternative interpretation is that not all the eggs were eaten.

7-181. *fufa-Ø-hwa-a-Ø,*

cook.egg-CR-1DU-3FSG:O-DEP

ser-yehi **fa-hwa-a**   *Ø-numb-ehi-mbo,*

eat-1DU   COMPL-1DU-3FSG:O   CR-SEQ-1DU-DEP

'We cooked the eggs, and after we have eaten them…' (N)

The class I verb *nuŋgu* has *nuŋg-* as the finite verb stem when followed by a rounded segment (*u, o* or *w*), and *numb-* when followed by an unrounded segment. The verb *nuŋgu* is rather polysemous; the prototypical lexical meaning of *nuŋgu* is 'stand'. Another meaning of *nuŋgu* is 'be born'.

7-182. *akani numb-afu-Ø!*

there   stand-2SG-IMP

'Stand there!'

7-183. *Kamby=hi   numb-aha-hya.*

Kamberatoro=ADS   be.born-1SG-PAST:FOC

'I was born in Kamberatoro.'

The verb *nuŋgu* also has a more general meaning of 'do' or 'say'.

7-184. *"awe" aya   nuŋg-u-mbo...*

"no"   father say-3MSG-DEP

'"No," father said...' (N)

7-185. *iro=hya=hi   numb-ei-hya   hya   no   gwa...*

like.that=ABL=ADS do-3MSG-PAST:FOC INTJ   COP:3SG but

'They did it like that, but then...' (A)

When used as a grammatical verb, the grammatical verb *nuŋgu* — other than indicating interclausal sequentiality — also conveys a sense of 'being in a resulting state which has continuous relevance'. Firstly, the sequential verb *nuŋgu* signifies that the situation of the following chain clause is not immediately following the situation of its clause. In other words, *nuŋgu* entails a small length of time when the resulting state occurs before the beginning of the subsequent situation.

('delayed' sequentiality *nuŋgu*)

⟵⟶

[first situation *nuŋgu*]   [second situation…

------ ⟶ *t*

The completive *fefi ~ mefi/me* also indicates interclausal sequentiality by default. However, *fefi ~ mefi/me* can give the impression that the situation of the following clause occurs immediately following the situation of the first clause.

[first situation *fefi ~ mefi/me*] [second situation…

------ ⟶ *t*

In the following example, the 'going' event of the second clause does not happen immediately after the preceding 'taking' event.

7-186. *byali   waplu   semi   nuŋgu-mbo,*

strainer bucket take   SEQ-DEP

bani numu-a=nambo pi-mba-mbo.

sago sit-place=ALL   go-POST-NOML

'(People) take strainers and buckets, and then they go to the place where sago palms are grown.' (B)

Secondly, the completion verb *fefi ~ mefi/ me* is often used together with the sequential verb *nuŋgu.* Sequentiality necessarily entails the completion of the previous situation, but using *fefi ~ mefi/ me* together with *nuŋgu* is not redundant: in

addition to sequentiality, *nuŋgu* also indicate a resulting state of continuing relevance, and *fefi-nuŋgu ~ me(fi) nuŋgu* indicates a resulting state after the completion of the situation, i.e. perfect 'aspect'.
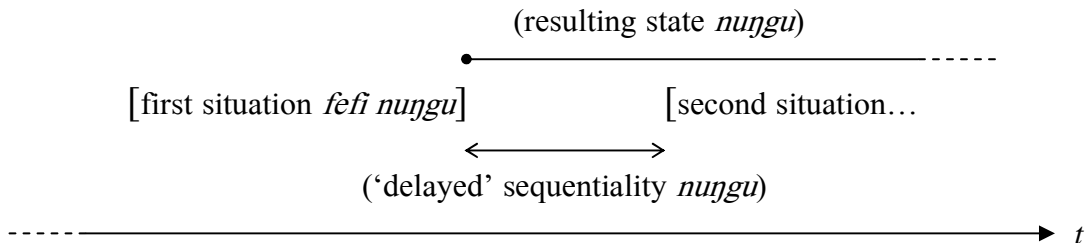
In the following examples, *fefi nuŋgu ~ mefi nuŋgu* indicates a state resulting from the situation depicted by the lexical verb, and that the following situation occurs sequentially but not immediately.

7-187. wepi **mefi   nuŋgu***-mbo,*

    clean COMPL SEQ-DEP

    ahala＝na＝pa   hya   imbu safo tamako＝nambo kikifi nuŋgu-mbo,

    stem＝ALL＝only EMPH two   half axe＝ALL   chop SEQ-DEP

    '(People) chop the sago palm into two halves (from the top) to the root with an axe, and I would split the sago palm (into two halves), and…'

7-188. *hwi=mbe* *homba-i-Ø*   <u>*fa-i-Ø*</u>   <u>*Ø-nuŋ-u-mbo*</u>,

water=INS see-3MSG-3MSG:O <u>COMPL-3MSG-3MSG:O</u> <u>CR-SEQ-3MSG-DEP</u>

[o dani da-tupam dewahi]=na ah-Ø-Ø-ya-a-mbo,

[oh this this-thing must]=TOP think-CR-3-3SG-3FSG:O-DEP

'Having seen him in the water, he thought that it must be this thing (that was

stealing), and…' (A) (repeated from example 7-180 above)

7-189. ap-ehi   <u>*fa-hwa-a*</u>   <u>*Ø-numb-ehi-mbo*</u>,

sleep-1DU <u>COMPL-1DU-3MSG:O</u> <u>CR-SEQ-1DU-DEP</u>

ye   [pi-mbo]   murua=mbe sumbli rani murua=mbe me-wa-mbo

then [go-NOML] middle=INS night   that middle=INS finish:DR-3FSG-DEP

ye   har-yehye-hwa.

then enter-1DU-PAST

'Having slept, in the middle of the trip at midnight (*sumbli mewambo*) we

entered (the cave).' (N)

Like the perfect 'aspect' in English, *fefi nuŋgu ~ mefi nuŋgu* in Menggwa

Dla conveys the continuous relevance of the resulting state. Because of this, the

situation depicted by the clause following a *fefi nuŋgu ~ mefi nuŋgu* clause cannot

be contradictory with the resulting state. In the example 7-190 below, which is

constructed based on 7-177 above, having *nuŋgu* after *fefi* is unnatural — because

fefi nuŋgu indicates that the moon continues to exist in the place where it has just

come out to, whereas the second clause indicates that the moon went somewhere

else.

7-190. ?amamo rani baya hri-ya-a   fa-ya-a   Ø-nuŋ-u-mbona,

   moon   that side emerge-3SG-3FSG:O COMPL-3SG-3FSG:O CR-SEQ-3MSG-DEP

Ø-hahof-u-mbona,

CR-go.up-3MSG-DEP

? 'The moon had come out of that place, and went up somewhere else,

and…'

How do simplex chain verbs/ non-finite chain verbs compare with verbs
serialised with the completive verb and/ or the sequential verb? Simplex chain
verbs/ non-finite chain verbs are not marked for interclausal temporal relations; the
only temporal requirement is that the situation of the following clause has to begin
after the inchoation point of the situation of the simplex chain verb/ non-finite chain
verb. Hence, the use of a simplex chain verb or simplex non-finite chain verb can
give the impression that the situation of the following clause is simultaneous with
that of its own clause.

7-191. ser-i   fa-Ø-hya-a-mbo,

   eat-1SG COMPL-CR-1SG-3FSG:O-DEP

ufati   simi-aha-hwa.

medicine drink-1SG-PAST

'I ate, and then I took the medicine.'

7-192. ser-i-mbo,

  eat-1SG-DEP

  ufati simi-aha-hwa.

  medicine drink-1SG-PAST

  '(While) I was eating, and I took the medicine.'/

  'I ate, and then I took the medicine.'

If simultaneity is emphasised, a *-hi* subordinate clause (§7.1.3) can be used.

7-193. ser-iha-hi,

  eat-1SG-DEP

  ufati simi-aha-hwa.

  medicine drink-1SG-PAST

  'While I was eating, I took the medicine.'

7.5 The dependency suffix

  The dependency suffix is used on chain verbs (§7.2) and non-finite chain verbs (§7.3.1) to indicate their status as dependent verbs, and the dependency suffixes come in the form of *-Ø, -mbo* or *-mbona*. The suffix *-Ø* and *-mbo* are used interchangeably on CR chain verbs and non-finite chain verbs, and the suffix *-mbo* and *-mbona* are used interchangeably on DR chain verbs. The suffix *-Ø* is very occasionally used with DR chain verbs, but DR chain verbs with a *-Ø* dependency suffix do not seem to differ in function from other DR chain verbs. On the other hand, *-mbona* used on CR chain verbs or non-finite chain verbs tends to indicate some sort of discourse discontinuity other than participant discontinuity (similar to

how younger speakers use DR chain verb forms to emphasise kinds of discourse

discontinuity; §7.2.2.2). With discourse discontinuity rarer than discourse continuity

in natural discourse, the zero phonological form -Ø and the longer phonological

form -*mbona* are perhaps iconic towards discourse continuity and discontinuity,

respectively, which they tend to be associated with.

The following are some examples of -*mbona* used with CR chain verbs; they

are all from the text *amamola hwafo* 'the story of the moon' (appendix 1). In these

CR chain verbs, while the CR morpheme indicates participant continuity, the

'discontinuity' dependency suffix -*mbona* indicates some kind of discourse

discontinuity other than participant discontinuity. In the following example, -*mbona*

indicates that the situation of the next clause is not sequential, i.e. temporal

discontinuity.

7-194. *hwi=mbe   Ø-num-u-**mbona**,*

    water=INS   CR-sit-3SG-DEP

    mni amblwa=na pa   hya   [hwatu seru-mbo]=pa

    only outside=ALL only EMPH   [find   eat-NOML]=only

        hri-ya-a   fa-ya-a   kaku-Ø-u-Ø,

      come.out-3SG-3FSG:O leave-3SG-3FSG:O walk-CR-3MSG-DEP

    '(The moon) lived in the water, and it only come out to find things to eat,

    and…' (A)

In the following example, the subjects of the second and the third clause are

disjoint-referential; the CR morpheme of the second clause indicates that the subject

— the moon — will again be foregrounded later in the clause chain (i.e. the third clause is 'skipped'). The 'discontinuity' dependency suffix *-mbona* in the second clause marks the termination of a discourse section; the next clause is the beginning of another discourse section where the next major protagonist of the text — the 'father of the garden' — is introduced. The 'father of the garden' will remain as the salient foreground participant before 'the moon' becomes the major protagonist again (all within the same clause-chain).

7-195. *ani   a   [num-wa-mbi]   fla=mbe   numu-a=mbe   Ø-ser-u-Ø,*

there ah [sit-3FSG-PRES] place=INS sit-place=INS   CR-eat-3MSG-DEP

ser-u   Ø-num-u-la-mbona,

eat-3MSG CR-sit-3MSG-LIG-DEP

suŋgu amni=la   afila   ai Ø-hof-u-Ø,

later   garden=GEN father 3 CR-come-3MSG-DEP

'(The moon) eats at (his) abode the place where he lives, he eats and lives, and later the garden's father he came, and…' (A)[27]

In the following example, participant continuity has been maintained in all three clauses. However, *-mbona* is used in the first two clauses because of the disruption in the flow of spatial continuity (i.e. the spatial settings of the three clauses are significantly different).

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[27] The masculine *amamo* 'moon' is cross-referenced as feminine in the subordinate verb *num-wa-mbi*. This 3FSG cross reference suffix *-wa* is said to be 'gender-neutral', i.e. its gender feature 'does not count'. See §5.2.4.

7-196. amamo rani baya hri-ya-a   fa-Ø-ya-a-mbona,

moon   that side come.out-3SG-3FSG:O COMPL-CR-3SG-3FSG:O-DEP

'The moon came out from there,'

Ø-hahof-u-mbona,

CR-go.up-3MSG-DEP

'he went up,'

ye   sini＝mbe pe-u-mbi   rani.

then sky＝INS   be.gone-3SG-PRES:STAT that

'and he stays in the sky ever since.' (A)

The dependency suffix *-mbo* is obviously grammaticalised from the object case clitic ＝*mbo* (§4.5.1); cross-linguistically it is common for case clitics to be grammaticalised as markers of dependent clauses (see discussions in §6.1). As for the dependency suffix *-mbona*, this is likely to be bimorphemic: *-mbo* and *-na.* There are two nominal clitics in the shape of *na*: the topic clitic ＝*na* (§4.5.7) and the allative case clitic ＝*na* ~ ＝*nambo* (§4.5.3). Another word with the shape *na* is the conjunction *na* 'and' (§3.2.6). (However, this conjunction *na* may not be a native word; it is likely to be a loanword from Tok Pisin.) Currently, it is inconclusive as to which may be the origin of *na* in *-mbona.* Careful study of the corresponding dependency suffixes in Dla proper may shed light to this problem. Unfortunately, at the moment it is not clear to me what exactly the forms of the dependency suffixes are in Dla proper (but at least it is known that the topic clitic and allative case clitic in Dla proper are not homophonous: ＝*nya* and ＝*na(mbo)* respectively). Another question about the dependency suffixes in Menggwa Dla is hy *na* itself is not used as a dependency suffix, and why *na* must follow rather than

precede *mbo* to function as a dependency suffixes. Before these questions are

answered, I leave *-mbona* as not further analysable morphologically.

Appendix 1   Example texts

Simon Korela Hwafo — 'The Story of Simon Kore'

This is a brief autobiographic text by Simon Kore. Simon Kore was born in the 1950s and was from Menggau. Probably due to his wife who speaks Dla proper and having lived in Kamberatoro Station for around ten years, Simon's pronunciation of Menggwa Dla shows one sign of influence from Dla proper: the phoneme /s/ for other Menggwa Dla speakers are all pronounced as [t] by Simon (see §1.4.2). In the text below, /s/ *<s>* and/t/ *<t>* are kept distinct according to the speech of other Menggwa Dla speakers. Also notice how he code-switches into Tok Pisin when referring years of the western calendar.

This text was recorded on 19th April 2004. Unfortunately, Simon Kore died on 23rd April 2004 from acute malaria. The text was not interlinearised and translated fully before his death, and there is a small section where no one understood what he meant.

Simon *Kore=la*   *Hwafo*
Simon **Kore=GEN** **talk**

yo dani=hi [[dani=mbe misin-*la=mbe*   *da=mbe ilo-ha-a-hi]*
1   this=ADS [[this=INS   mission-LIG=INS this=INS work-1SG-3FSG:O-SIM]
        num-aha-hya]=mbo   tikyewi hwafo hoho-mba-mbo.
        sit-1SG-PAST]=OBJ   small   talk   tell-POST-DEP
'I will now tell (you) a small talk about me working and living in this mission station.'

long naintin   seventi tri   bihain indipendens,
in   nineteen seventy three after   independence
        Papua Niugini   indipendens *semi-wa-hi*   *semi fefi-mbo,*[i]
        Papua New.Guinea independence take-3FSG-SIM   take COMPL-DEP
        rani=hi   yo Ø-hof-a-mbo,
        DEM=ADS   1   CR-come-1SG-DEP
'In 1973 after independence, after Papua New Guinea achieved independence, at that point I came, and'

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[i] Simon Kore said that *semi fefi-mbo* was meant to be a correction of *semi-wa-hi* while I was transcribing this text immediately the recording.

[Papua New Guinea actually achieved independence in 1975]

[misin-la=mbe   da=mbe ilo-ha-a-hi]   *num-aha-hya.*
[mission-LIG=INS this=INS work-1SG-3FSG:O-SIM] sit-1SG-PAST:FOC
'I worked and lived in this mission station.'

---

mome   Naŋgani afila=lofo [mome   ilohwe (< ilo-hwa-a-hi)]
together Nangn   father=COM [together   work-1DU-3FSG:O-SIM]
        Ø-num-ehi-mbo,
        CR-sit-1DU-DEP
'Together with Nangn's father we worked and lived (there), and'[ii]

Naŋgani afila   fa-Ø-ya-a-mbo,
Nangn   father leave-CR-3SG-3FSG:O-DEP
'Nangn's father left, and'

ye   wuli=na ye   ny-efu   saf-u   famo-Ø-u-mbo,
then house=ALL then COP:PRES-1PL ?-3MSG ?-CR-3MSG-DEP
'then ??? to (his) house, and'

ye   wuli=na   pi-Ø-hwa.
then house=ALL go-3MSG-PAST
'he went back to his village.'

---

yo=pa   [ilohe (< ilo-ha-a-hi)]   Ø-num-a-mbo,
1=only   work-1SG-3FSG:O-SIM CR-sit-1SG-DEP
'Only I work and live (there), and'

ye   dahoni dani=na yet   tu   tausen   en fo   nau.
then now   this=TOP already two thousand and four now
'this is already 2004 now.'

---

rani=hi   Ø-num-a-mbo,
DEM=ADS CR-sit-1SG-DEP
'There I live, and'

dahoni awiya num-aha-hi   n-o.
now   still   sit-1SG-PRES:CONT COP:PRES-3FSG
'I still live (there) now.'

[ilohe (< ilo-ha-a-hi)]   num-aha-hi.
        [work-1SG-3FSG:O-SIM] sit-1SG-PRES:CONT
'I am working and living (there).'

[ii] *Naŋgani* is the Menggwa Dla equivalent of the Dla proper name *Naŋgn*. Donald Nangn Yawa speaks Menggwa Dla. Nevertheless, his native name *Naŋgn* is from Dla proper.

Nimi Wami Kaku — 'Hunting in the Mountains'

This text recounts a hunting trip by the author Donald Yawa and his father David Yawa. Donald Yawa was born in early 1980s and he is from Wanggurinda. He went to high school in Vanimo and has a very good command of English. He volunteered to transcribe the text after recording it on 2nd September 2002. His rendition of /wa/ varies between *<oa>* and *<wa>* (§2.1.3.6). Otherwise, except for the word *<lohama>* /lʊɣama/ [loɣama] 'ridge', all instances of /ʊ/ in older speakers' speech were rendered as *<u>* (rather than *<o>*) by Donald; he represents the younger generation which has merged /ʊ/ into /u/ in virtually all words (§2.1.3.7). See also §7.2.2.2 on the innovative switch-reference system used by younger speakers.

Nimi	*Wami*	*Kaku*
mountain	above	hunt

gwi   sumbani aya=lofo   uli=mbe   num-ehi fa-Ø-hwa-a-mbo,
another time   father=COM house=INS sit-1DU   COMPL-CR-1DU-3FSG:O-DEP
'Once with my father we were at home, and'

[nimi   wami pi-mba-mbo]   sa-Ø-hwa-a-mbo,
[mountain above go-POST-NOML] think-CR-1DU-3FSG:O-DEP
'we thought of going up the mountain, and'

pi-ehye-hya.
go-1DU-PAST:FOC
'we went.'

---

ye   wuli=mbe   fa-hwa-a   Ø-numb-ehi-mbo,
then   house=INS   leave-1DU-3FSG:O CR-SEQ-1DU-DEP
'Then we left the house, and then'

aya   ifali   kwemi-Ø-Ø-mbo,
father spear   take:MASS-CR-3MSG-DEP
'father took spears, and'

yo=amba aha   yowala ifali   tamnia   kwami-Ø-a-mbo,
1=too   1SG:RSUMP 1SG:GEN spear small:MASS take:MASS-CR-1SG-DEP
'me too I took my small spears, and'

alu   yari blufa   imbu semi-Ø-ehi-Ø,
string.bag sago short   two   take-CR-1DU-DEP
'we took a string bag and two pieces of sago, and'

ye   han-yehye-hwa.
then   go.down-1DU-PAST
'then we left (the house).'

Dulufu   ambya=nambo   sa-Ø-hwa-a-mbo,
Dulufu   hole=ALL   think-CR-1DU-3FSG:O-DEP
'We thought (of going) to Dulufu Cave, and'

Ø-han-yehi-Ø,
CR-go.down-1DU-DEP
'we went down into it, and'

wamla   imbu   fa-ha-a-hwa.
betel.nut two   pick.betel.nut-1SG-3FSG:O-PAST
'I picked two (bunches of) betel nut (from the betel palm next to the cave).'

---

alu=mbe   saku-Ø-hwa-a-Ø
string.bag=INS put.in-CR-1DU-3FSG:O-DEP
'We put them into the string bag and'

semi-ehye-hwa.
take-1DU-PAST
'took the string bag (with us).'

---

ruhwa   Ø-numb-ehi-mbo,
down.below   CR-stand-1DU-DEP
'We were there down below, and'

pi-ehye-hwa.
go-1DU-PAST
'we went.'

---

pi-Ø-ehi-Ø,
go-CR-1DU-DEP,
'We went, and'

Yamu   bena   hafa-hwa-a   Ø-numb-ehi-mbo,
Yamu   side   go.pass-1DU-3FSG:O   CR-SEQ-1DU-DEP
'we went across Yamu (Creak), and'

[rani=hi   nu-mbo]   "hwaŋgu wami gak-yehi-Ø"   sa-Ø-hwa-a-mbo
[DEM=ADS COP-DEP]   "cave   above go.up:FUT-1DU-JUS" think-CR-1DU-3FSG:O-DEP
'at that point we thought "let's go up to the cave," and'

Ø-hah-yehi-Ø,
CR-go:up-1DU-DEP
'we went up, and'

Dilambi wami hwaŋgu=hi alu=mbi   ifali   ku-hwa-a   Ø-numb-ehi-mbo,
Dilambi above cave=ADS string.bag=PROP[iii]   spear   leave-1DU-3FSG:O
       CR-SEQ-1DU-DEP
'at the cave on top of Dilambi (Mountain) we left the string bag and spears, and'

nimi   wami hah-yehye-hwa.
mountain above go:up-1DU-PAST
'we went (futher) up the mountain.'

- -

nimi   wami Ø-hah-yehi-Ø,
mountain   up   CR-go:up-1DU-DEP
'We went up the mountain, and'

[tu   kwa   klei-mba-Ø]   sa-Ø-hwa-a-mbo,
[bird MOD   make:nest-POST-NOML] think-CR-1DU-3FSG:O-DEP
'we thought that the birds must be making nests, and'

hwatu-hi-ehye-ni   gwa,
search-MASS-1DU-TENT but
'maybe we searched (for the birds), but'

- -

"awe" aya   Ø-nuŋ-u-mbo,
"no"   father CR-stand-3MSG-DEP
'"no (there aren't any)," father said,'

"dufa=mbi"   me-h-u-mbona
"enough=PROP" DR-say-3MSG-DEP
'"don't worry about it" he said, and'

"yapali=mbo=pa   hwatu fa-Ø-hwa-a-Ø,   gan-yehi-Ø"
"tree.kangaroo=OBJ=only search COMPL-CR-1DU-3FSG:O-DEP   go.down:FUT-1DU-JUS"
     me-h-u-mbona,
     DR-say-3MSG-DEP
'"we will look for tree kangaroos only and after that we go (back) down," he said, and'

"yambi=ke"   sa-hwa-a   Ø-numb-ehi-mbo,
"OK=EXCLM"   think-1DU-3FSG:O CR-SEQ-1DU-DEP
'"that's OK!" we thought, and then'

[aya   yapali   hwatu-Ø-hi,]   dukumi po-me-Ø-mbona,
[father tree.kangaroo search-3MSG-SIM] valley   go-DR-3MSG-DEP
'while father was searching for tree kangaroos, he along the valley, and'

yo lohama=roŋgo pi-aha-hwa.
1 ridge=PER   go-1SG-PAST
'I went along the ridge.'

[iii] *alu=mbi* (string.bag=PROP): the string bag plus the aforementioned things which exist inside the string bag.

pi-Ø-ehi-Ø,
go-CR-1DU-DEP
'We went, and'

hihili-hwa-a   Ø-numb-ehi-mbo,
turn.back-1DU-3FSG:O CR-SEQ-1DU-DEP
'we turned back, and then'

aya   dukumi   Ø-pih-ya-a-mbo,
father valley   CR-go-3MSG-3FSG:O-DEP
'father went along the valley, and'

amuŋgwa   sela bena=pa   hya klei   fa-Ø-ya-a-Ø
first.born tail side=only INTJ fence COMPL-CR-3SG-3FSG:O-DEP
'from the small valley ('first born tail') onwards, (the birds) have finished nest-building, and'

ma-ek-wa-mbona   hamblu   hwila,
DR-exist-3FSG-DEP   red   mother
'the red mother (fouls) were there, and'

ra=pa   uru-Ø-Ø-mbo,
DEM=only   dig-CR-3MSG-DEP
'only that he dug, and'

imbu=pa   foha-Ø-ya-pu-mbo,
two=only   take.egg-CR-3SG-N1DU:O-DEP
'he only took two eggs, and'

hutumu=hi   humu-Ø-ya-a-mbo,
leaf=ADS   tie-CR-3SG-3FSG:O-DEP
'he wrapped them in leaves, and'

alu=mbe   saku-ya-a   semi-Ø   Ø-hof-u-Ø,
string.bag=INS put:in-3SG-3FSG:O take-3MSG CR-come-3MSG-DEP
'he put them inside the string bag and brought it,'

Ø-hof-u-Ø,
CR-come-3MSG-DEP
'he came, and'

yoambo   hwafo-ya-i   Ø-nuŋg-u-mbo,
1SG:OBJ   talk-3SG-1SG:O   CR-SEQ-3MSG-DEP
'he said to me,'

"awe"   reh-ya-a   Ø-nuŋg-u-mbo,
"no"   say-3SG-3FSG:O CR-SEQ-3MSG-DEP
'"no (there weren't many)" he said, and then'

hwaŋgu=na   han-yehye-hwa.
cave=ALL   go.down-1DU-PAST
'we went down to the cave.'

Ø-han-yehi-Ø,
CR-go.down-1DU-DEP
'We went down, and'

sumblufu   hwaŋgu=na   efi-Ø-ya-a-mbo
afternoon cave=ALL   get.dark-CR-3SG-3FSG:O-DEP
'at the cave in the evening it was getting dark and'

me-wa-mbona,
finish:DR-3FSG-DEP
'it got totally dark, and'

tu   imbu=pa   ka-Ø-hwa-pu-mbo,
egg two=only   break-CR-1DU-N1DU:O-DEP
'we broke only two eggs, and'

fufa-Ø-hwa-a-Ø
cook:egg-CR-1DU-3FSG:O-DEP
'we cooked the eggs and'

ser-yehi fa-hwa-a   Ø-numb-ehi-mbo,
eat-1DU COMPL-1DU-3FSG:O CR-SEQ-1DU-DEP
'after we have eaten them,'

wara   ambya bena waŋgu=mbo   sa-Ø-hwa-a-mbo,
then   hole   side sparrow=OBJ think-CR-1DU-3FSG:O-DEP
'then we thought of the sparrows inside the cave, and'

"tikyewi ap-ehi   fa- Ø-hwa-a-mbo,   sumbli ulyambo
"small   sleep-1DU COMPL-CR-1DU-3FSG:O-DEP night   perfectly
    [waŋgu   harifi-mbo, num-wa-hwani] butya-hwa-a-Ø"
    [sparrow enter-DEP   sit-3FSG-when]   hit.with.stick-1DU-3FSG:O-JUS"
    me-h-u-mbona,
    DR-talk-3MSG-DEP
'"let's take a small sleep, and at midnight when the sparrows have entered and stayed (in the cave), we will catch them," he said, and'[iv]

tikyawi   ap-ehye-hwa.
small   sleep-1DU-PAST
'we slept a little.'

---

ap-ehi   fa-hwa-a   Ø-numb-ehi-mbo,
sleep-1DU COMPL-1DU-3FSG:O CR-SEQ-1DU-DEP
'After we have slept,'

[iv] *butya:* people hit the sparrows with sticks and then collect the stunned sparrows.

ye   [pi-mbo]   murua=mbe   sumbli   rani   murua=mbe   me-wa-mbo
then [go-NOML] middle=INS night   DEM   middle=INS   finish:DR-3FSG-DEP
'then in the middle of our journey when it became midnight and'

ye   har-yehye-hwa.
then enter-1DU-PAST
'then we entered (the cave).'

Ø-haf-ehi-Ø,
CR-arrive-1DU-DEP
'We arrived, and'

waŋgu   mambutyahwa (<   mamo   butya-Ø-hwa-a-Ø)   aflambli,
sparrow one hit.with.stick-CR-1DU-3FSG:O-DEP many
'we caught plenty of sparrows and,[v]'

me-wa-mbo,
finish:DR-3FSG-DEP
'after that was finished,'

semi-Ø-ehi-mbo,
take-CR-1DU-DEP
'we took them, and'

Ø-han-yehi-Ø,
CR-go:down-1DU-DEP
'we went down, and'

ninala   pupu-Ø-hwa-a-Ø,
hair   pluck.feather-CR-1DU-3FSG:O-DEP
'we removed the feathers,'

pupu-ahwe-ehi   Ø-numb-ehi-mbo,
pluck.feather-MASS-1DU CR-SEQ-1DU-DEP
'we removed lots of feathers, and'

nimi   sama-Ø-hwa-a-Ø,
stone burn-CR-1DU-3FSG:O-DEP
'we burnt some stones (for cooking), and' [we cook the birds, and]

siha-hwa-a   Ø-numb-ehi-mbo,
remove.food-1DU-3FSG:O CR-SEQ-1DU-DEP
'we removed the food from the fire, and'

imbu-mamo=pa   yari=na   ser-yehi   fa-hwa-a   Ø-numb-ehi-mbo,
two-one=only sago=ALL eat-1DU COMPL-1DU-3FSG:O CR-SEQ-1DU-DEP
'after we have eaten only three (birds) with sago,'

---

[v] *mamo:* one whole lot of.

ap-ehye-hwa.
sleep-1DU-PAST
'we slept.'

---

simbu   ye,   [saftu=mbe   nu-mbo]   simbu   ye   uli=nambo   pi-ehye-hwa.
morning then [Saturday=INS COP-DEP]   morning then house=ALL   go-1DU-PAST
'In the morning, being Saturday, in the morning we went home.'

wuli=na   pi-Ø-ehi-Ø,
house=ALL go-CR-1DU-DEP
'We went home, and

mi   lambuli ani   wuli   kumya
mother group   there house near
      bani kaha-Ø-hi-a-mbo   Humlali   baya,
      sago chop-CR-3FPL-3FSG:O-DEP Humlali   collect.side
"my mother and other women were chopping sago (grown) close to (our) house at
in Humlali (Creak),"[vi]

haf-ehi   Ø-numb-ehi-mbo,
arrive-1DU CR-SEQ-1DU-DEP
'After we arrived at the house, and'

"awe, munika hof-ehye-mbi.   waŋgu=pa   no"   sa-Ø-hwa-a-mbo,
"no   nothing come-1DU-PRES sparrow=only COP:3FSG" say-CR-1DU-3FSG:O-DEP
'"No, we are coming back with nothing. It is only sparrows (that we got)," we two
said, and'

"a   yanu"   sa-Ø-hu-a-mbo,
"ah   enough" say-CR-1PL-3FSG:O-DEP
'"ah that's enough," we all said, and'

sumblufu   yari-Ø-hu-a-mbona,
afternoon   sitr.sago-CR-1PL-3FSG:O-DEP
'in the afternoon we stirred some sago, and'

ser-yefa-hwa.
eat-1PL-PAST
'we ate (the sparrows).'

[vi] *baya:* the side where things are foraged.

Banila Hwafo — 'The Story of Sago'

In this text, the author Stanis Kore describes the process of making *yari* 'sago jelly' from *bani* 'sago (pith)'. Stanis Kore was born in 1970s and he is from Menggau. He is a cousin of Simon Kore. This text was recorded on 10th November 2004.

Notice that after the first chain clause is a section of nine non-finite chain clauses (marked by a curly bracket on the left; §7.3.1). These non-finite chain clauses have generic subject references ('people in general'). After the non-finite chain clauses are chain clauses (§7.2) with the subject cross-referenced as first person singular ('I'). All clauses in this text — except the last clause — form one clause chain; only the last two clauses of this text contain independent verbs.

The following is a diagram of the sago starch extracting apparatus used by Menggwa Dla people traditionally. The pith is put on the *walahwali* 'small coconut stalk' on top and are washed, crushed and kneaded against the *byali* 'strainer', which is a piece of coconut fibre cloth. The sago starch, together with water, then flow through the strainer and settle in the *damlu* 'nose' (the large bottom end) of the *yaplu* 'big coconut stalk' at the bottom. The sago starch is left to settle in the sago water, and then the sago water is scooped out, leaving the sago starch at the bottom. The coconut stalks are suspended at about waist height.

Figure A1.1   Traditional Menggwa Dla sago starch extracting apparatus
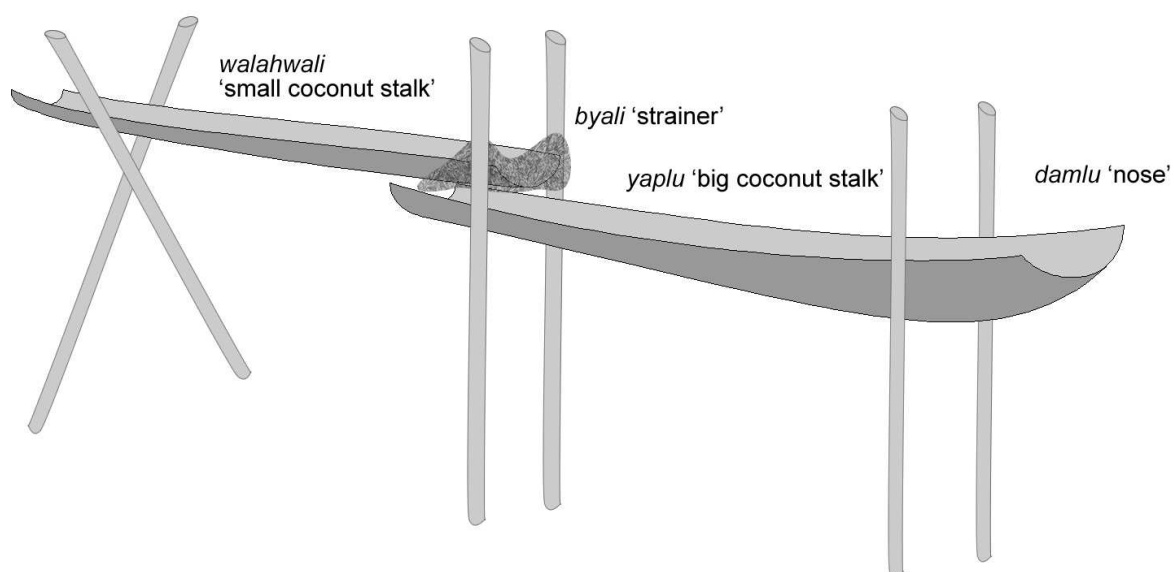
Bani=la   Hwafo
sago=GEN talk

apa   simbu,   apa   simbu=na   [bani kahefi-mba-mbo]
daytime morning daytime morning=TOP [sago chop-POST-NOML]
         gihali   me-Ø-wa-mbo,
         hungry   COMPL-CR-3FSG-DEP
'In the morning, people chop sago palm after they got hungry, and'

ilombo   hwambo   tamako semi nuŋgu-mbo,
thus   thus   axe   take SEQ-DEP
'so (people) take axes, and'

barefu   semi nuŋgu-mbo,
scraper   take SEQ-DEP
'take scrapers, and'

byali   waplu semi nuŋgu-mbo,
strainer bucket take SEQ-DEP
'take strainers and buckets, and'

bani numu-a=nambo   pi-mba-mbo,
sago sit-place=ALL   go-POST-DEP
'(people) go to the place where sago palms are, and'

hafu-Ø,
arrive-DEP
'arrive, and'

kahefi nuŋgu-mbo,
chop   SEQ-DEP
'chop down (sago palm), and'

[hofahi-Ø, hofo=hi   ek-wa-hwani]   palaŋgi=nambo   hwela numuli-Ø,
[fell-DEP   ground=ADS exist-3FSG-when] machete=ALL   skin   remove-DEP
'when (the sago palm) fell and stay (on the ground), (people) use machetes to remove the bark, and'

wepi   mefi   nuŋgu-mbo,
clean COMPL SEQ-DEP
'after they have cleared (the exterior of the sago palm), and'[vii]

ahala=na=pa   hya   imbu safo tamako=nambo   kikifi nuŋgu-mbo,
root=ALL=only INTJ two   half axe=ALL   chop   SEQ-DEP
'(from the top) to the root (people) chop (the sago palm) into two halves with an axe, and'

[vii] There are spikes on the exterior of sago palms, so the spikes have to be cleared first.

kala-hya-a Ø-*numb-a-mbo,*
split-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would split (the sago palm into two halves), and'

barefu sami-a Ø-*numb-a-mbo,*
scraper take-1SG CR-SEQ-1SG-DEP
'I would take the scraper, and'

[hli-aha-hi,] *[hli-aha-hi]* *pi-a ma-hya-a* Ø-*numb-a-mbo,*
[scrape-1SG-SIM] [scrape-1SG-SIM] go-1SG COMPL-1SG-3FSG:O CR-SEQ-1SG-DEP
'while scraping (the pith of the interior of sago palm), while scraping I would make the pith loose ('go'),'

ye pi-Ø-o-mbo,
then go-CR-3FSG-DEP
'then the pith would become loose ('go'), and'

hupla=mbe ma-ek-wa-mbona,
container=INS DR-exist-3FSG-DEP
'exist (loosely) in the trunk ('container'), and'

waplu sa-hya-a hof-a saha-hya-a Ø-numb-a-mbo,
bucket carry-1SG-3FSG:O come-1SG put-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would take ('carry-come-put') the bucket here, and'

waplu=mbe fufefi fa-hya-a Ø-numb-a-mbo,
bucket=INS transfer COMPL-1SG-3FSG:O CR-SEQ-1SG-DEP
'after I have put the sago pith inside the bucket,'

sa-hya-a pi-a saha-hya-a Ø-numb-a-mbo yaplu sena,
carry-1SG-3FSG:O go-1SG put-1SG-3FSG:O CR-SEQ-1SG-DEP big.coconut.stalk side
'I would take ('carry-go-put') (the bucket) to the big coconut stalk,'

sa-hya-a pi-a saha-hya-a Ø-numb-a-mbo,
carry-1SG-3FSG:O go-1SG put-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would take it, and'

ma-ek-wa-mbona,
DR-exist-3FSG-DEP
'(the bucket) sits there, and'

yaplu hya Ø-numb-a-mbo,
big.coconut.stalk INTJ CR-stand-1SG-DEP
'I would set up ('stand') the big coconut stalk, and'

walahwali sana-hya-a Ø-numb-a-mbo,
small.coconut.stalk put.on.top-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would put the sago pith on the (upper) small coconut stalk, and'

byali   fuŋgi-hya-a   Ø-numb-a-mbo,
strainer tie-1SG-3FSG:O CR-SEQ-1SG-DEP
'and tie the strainer (to the lower end of the small coconut stalk), and'

ye   me-wa-mbona,
then   finish:DR-3FSG-DEP
'then after that is finished,'

batini   fuame-a   Ø-numb-a-mbo,
sago.pith take.pith-1SG CR-SEQ-1SG-DEP
'I would take the sago pith, and'

walahwali   sana-hya-a   Ø-numb-a-mbo,
small.coconut.stalk   put.on.top-1SG-3FSG:O CR-SEQ-1SG-DEP
'put the sago pith on the small coconut stalk, and'

tikyawi waplu sami-a   Ø-numb-a-mbo,
little   bucket take-1SG CR-SEQ-1SG-DEP
'I would take a little bucket, and'

hwi   fiame-a   Ø-numb-a-mbo,
water fetch.water-1SG CR-SEQ-1SG-DEP
'I would fetch some water, and'

[pour the water into the small coconut stalk which is filled with sago pith, and]

[ye   kiki-ha-a-hi,]   [kiki-ha-a-hi]
[then wash.sago-1SG-3FSG:O-SIM] [wash.sago-1SG-3FSG:O-SIM]
       gwi   waplu   ma-hya-a   Ø-numb-a-mbo,
       another bucket finish-1SG-3FSG:O CR-SEQ-1SG-DEP
'then while washing the sago pith, while washing the sago pith another bucket (load
of sago pith) would be depleted, and'

mamefi-wa-mbona,
finish:MASS:DR-3FSG-DEP
'after all that were finished,'

bani hupla=na   pi-Ø-a-Ø
sago container=ALL go-CR-1SG-DEP
'I would go to the sago trunk ('container') and'

gwi   waplu sami-a   Ø-numb-a-mbo,
another bucket take-1SG CR-SEQ-1SG-DEP
'take another bucket (load of sago pitch), and'

sa-hya-a   Ø-hof-a-Ø   gwatina,
carry-1SG-3FSG:O CR-come-1SG-DEP again
'I would carry (the bucket now filled with sago pith) and come again, and'

saha-hya-a   Ø-numb-a-mbo,
put-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would put it (here), and'

rani [kiki-Ø]=hi   pi-Ø-a-Ø,
DEM [wash.sago-NOML]=ADS go-CR-1SG-DEP
'while (the pith is) soaking I would go and'

mamefi-wa-mbona,
finish:MASS:DR-3FSG-DEP
'after that is finished,'

[[wala gwatina pi-aha-hi]   [imbu-mamu waplu=mbi   ek-wa-hya]=mbo
[[then again   go-1SG-SIM] [two-one   bucket=PROP exist-3FSG-PAST]=OBJ
          hwambo]   pi-Ø-a-Ø,
          being.the.case] go-CR-1SG-DEP
'while I go again, and there would be three bucket (loads of sago pith), and so I would go and'

sami-a   Ø-numb-a-mbo,
take-1SG CR-SEQ-1SG-DEP
'take (the bucket), and'

sa-hya-a   Ø-hof-a-Ø,
carry-1SG-3FSG:O CR-come-1SG-DEP
'take (the bucket with sago pith) back here, and'

rani   kiki-Ø-hya-a-mbo,
DEM   wash.sago-CR-1SG-3FSG:O-DEP
'wash the sago pith, and'

ye   rani   mamefi-wa-mbona,
then DEM   finish:MASS:DR-3FSG-DEP
'then after that is finished, and'

[letting the sago starch to settle in the sago water, and]

hwi   ti   fa-hya-a   Ø-numb-a-mbo,
water get.rid COMPL-1SG-3FSG:O CR-SEQ-1SG-DEP
'after I have finished getting rid of the water (at the lower big coconut stalk),'

ye   bani safa aflambe   wu ma-ek-wa-mbo,
then sago meat lots   oh DR-exist-3FSG-DEP
'then there would be a big pile of sago starch,'

kaka-hya-a   saha-hya-a   Ø-numb-a-mbo,
break:MASS-1SG-3FSG:O put.horizontally-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would divide (the pile of sago starch) and put them (on the big coconut stalk), and'

imbu-mamu   safa   ma-fel-wa-mbona   waplu=mbe,
two-one   meat DR-exist-3FSG-DEP   bucket=INS
'there would be three pieces (of sago starch) in (the three) buckets, and'

byali   fali-hya-a   Ø-numb-a-mbo waplu=mbe,
strainer spread-1SG-3FSG:O CR-SEQ-1SG-DEP bucket=INS
'I spread the strainers inside the buckets, and'

bani   hofahi-a   Ø-numb-a-mbo,
sago drop-1SG CR-SEQ-1SG-DEP
'I put the sago starch into (the bucket), and'

bani damlu=mbe   hutumu=nambo   amama-hya-a   Ø-numb-a-mbo,
sago nose=INS   leave=ALL   cover-1SG-3FSG:O CR-SEQ-1SG-DEP
'I cover the sago starch at the bell ('nose') of the (lower) big coconut stalk with (big) leaves, and'

me-wa-mbona,
finish-3FSG-DEP
'after that is finished,'

waplu=mbe   bani safa-hya-a   Ø-numb-a-mbo,
bucket=INS   sago put-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would put the sago into a bucket, and'

bapli=hi   hupo-a   me-a   Ø-numb-a-mbo,
head=ADS put.on.head-1SG COMPL-1SG CR-SEQ-1SG-DEP
'I would put the bucket on (my) head, and'

ye   sa-hya-a   pi-Ø-a-mbo   wuli=mbe,
then carry-1SG-3FSG:O go-CR-1SG-DEP house=INS
'then carry it back home, and'

wuli=mbe   saha-hya-a   Ø-numb-a-Ø,
house=INS   put-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would put it inside the house, and'

pi-Ø-a-Ø,
go-CR-1SG-DEP
'I would go and'

hwi   fiha-hya-a   Ø-numb-a-Ø,
water get.water-1SG-3FSG:O CR-SEQ-1SG-DEP
'fetch water, and'

sa-hya-a   Ø-hahof-a-Ø,
carry-1SG-3FSG:O CR-go.up-1SG-DEP
'I take the water inside the house ('go up') and'

hupla=mbe   hli-hya-a   Ø-numb-a-Ø,
container=INS pour-1SG-3FSG:O CR-SEQ-1SG-DEP
'pour the water into a pot, and'

hai fofo-hya-a   Ø-numb-a-Ø
fire blow-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would blow a fire and'

sana-Ø-hya-a-Ø,
put.on.top-CR-1SG-3FSG:O-DEP
'put (the pot) on top (of the fire), and'

bani waplu=mbe safa-hya-a   Ø-numb-a-mbo,
sago bucket=INS put-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would put the sago into a bucket, and'

[then the boiling water would be poured into the bucket containing sago starch]

yari-Ø-hya-a-mbo,
stir.sago-CR-1SG-3FSG:O-DEP
'I would stir the sago, and'

ye   ginya   ma-ek-wa-mbona,
then   strength   DR-exist-3FSG-DEP
'then the sago would become tough (jelly-like), and'

baha-Ø-hya-a-Ø   hutumu=hi,
cut.put-CR-1SG-3FSG:O-DEP leaf=ADS
'I would cut the sago (into lumps) and put them on the (big) leaves,'

hutumu=hi baha-hya-a   Ø-numb-a-mbo,
leaf=ADS   cut.put-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would cut the sago and put them on the (big) leaves, and'

hwatumali   hupla=mbe   sama-hya-a   Ø-numb-a-mbo,
leafy.vegetable   container=INS cook-1SG-3FSG:O CR-SEQ-1SG-DEP
'I would cook vegetables in a pot, and'

so   me-wa-mbona,
cooked finish:DR-3FSG-DEP
'after it has been cooked,'

ye   [tamu-ha-a-hya]   Ø-numb-a-mbo,
then   [remove.from.fire-1SG-3FSG:O-PAST]   CR-stand-1SG-DEP
'then I would do (the action of) removing the pot from fire, and'

hutumu=hi gifuki-hya-a   saha-hya-a   Ø-numb-a-mbo,
leaf=ADS   distribute-1SG-3FSG:O put-1SG-3FSG:O CR-SEQ-1SG-DEP
'I distribute the (cooked vegetables) amongst the (big) leaves,'

ye   ser-i   fa-Ø-hya-a-mbo
then eat-1SG COMPL-CR-1SG-3FSG:O-DEP
'I would eat them and'

ap-aha-hi.
sleep-1SG-PRES:CONT
'sleep.'

ye   rani n-o   bani=la   hwafo.
then DEM   COP:PRES-3FSG sago=GEN   talk
'That is it, the story of sago.'

Amamola Hwafo — 'The Story of the Moon'

This is a text of a mythical story about the moon. The narrator is David Yawa, the father of Donald Yawa. He was born in 1950s and he is from Wanggurinda (his mother was from Menggwal). This text was recorded on 28ᵗʰ April 2004. Unfortunately there are portions of texts in section G which I still do not fully understand.

Clause skipping by the switch-reference markers (§7.3.2) is spectacular in this text. Clause skipping is marked by an arrow on the left of the clause. The bulk of section F is a direct quote of the children (in first person) reiterating events described in section E (in third person). Some third person singular (3FSG) cross-reference suffixes are in bold; they are instances where the masculine *amamo* 'moon' are 'wrongly' cross-referenced as feminine (see §5.2.4).

Amamo=la   Hwafo
moon=GEN   talk

(section A)
yowala   hwafo blufa ilomo=la
1SG:GEN story   short creator=GEN
      [bofuna   afatu   tumulu   hohoa-Ø]=hi   nuŋgu-mbo,
      [ancestor before roughly tell-NOML]=ADS   stand-DEP
'This is my short mythical story which my ancestors was telling, and'

a   yo [humbli-me-aha-mbo hoho-hi-a-hya]
ah 1 [hear-DR-1SG-DEP   tell-N1FPL-3FSG:O-PAST]
amamo=la   hwafo hoho-mba-Ø.
moon=GEN   story   tell-POST-DEP
'ah I will tell you the moon's story which I heard them telling.'

bohoni   amamo=na sini=mbe akani=mbe=na   awe.
before   moon=TOP sky=INS   there=INS=TOP be.not
'Once upon a time the moon was not there in the sky.'

*numami ra=mbe   pe   boke-**wa**-hya   no.*
above   DEM=INS   be.gone NEG:R-**3FSG**-PAST:FOC   COP:3FSG
'The moon has not gone up there.'

iro-la   hya hoho-hi-a-hya.
like.that-LIG INTJ   tell-N1FPL-3FSG:O-PAST:FOC
'They (my ancestors) said so.'

wara yo apa   dahoni ane=roŋgo   wa hoho-mba-la-mbo.
so   1   daytime now   friend=PER   so   tell-POST-LIG-NOML
'So now in this morning I will tell you this story.'

(section B)
rani bohoni amamo rani ~~hwi=mbe   num-wa-hya~~
DEM before moon   DEM ~~water=INS sit-3FSG-PAST:FOC~~
      hwi=mbe   Ø-num-u-mbona,
      water=INS CR-sit-3MSG-DEP
'Once upon a time the moon lived in the water, and'

mni ambloana=pa hya [hwatu seru-mbo]=pa
just outside=only INTJ [find   eat-NOML]=only
hri-ya-a   fa-ya-a   kaku-Ø-u-Ø,
come.out-3SG-3FSG:O leave-3SG-3FSG:O walk-CR-3MSG-DEP
'he only came outside to search for food, and'[viii]

[hwatu seru-Ø]=hi   Ø-nuŋg-u-Ø   nyawi=la   amni=mbe   ra-baya,
[search eat-NOML]=ADS CR-stand-3MSG-DEP people=GEN garden=INS DEM-side
'he did searched for food in people's gardens, and'

mni Ø-numeh-ya-a-mbo
just CR-sit-3SG-3FSG:O-DEP
'he just sit (there) and'

animbi ka-ya-a   hipahi-Ø-ya-a-ni.
crop   cut-3SG-3FSG:O   pull-CR-3SG-3FSG:O-TENT
'maybe he cut and pull the crops.'

---

sa-ya-a   Ø-han-u-mbo,
carry-3SG-3FSG:O   CR-go.down-3MSG-DEP
'He (the moon) took the crops and went down'

hwi=mbe=na   sa-ya-a   Ø-han-u-mbo,
water=INS=TOP carry-3SG-3FSG:O   CR-go.down-3MSG-DEP
'into the water he (the moon) took them and went down, and'

ani   a [num-wa-mbi] fla=mbe   numu-a=mbe   Ø-ser-u-Ø,
there ah sit-3FSG-PRES place=INS live-place=INS CR-eat-3MSG-DEP
'there in the place where he (the moon) lived, in (his) abode he (the moon) ate, and'

ser-u   Ø-num-u-la-mbona,
eat-3MSG CR-sit-3MSG-LIG-DEP
'he (the moon) ate and lived (in this place), and'

[viii] *hri*: come out of abode.

(section C)

suŋgu amni=la   afila   ai Ø-haf-u-mbo,
later   garden=GEN father 3SG CR-arrive-3MSG-DEP
'one day the father (owner) of the garden he arrived, and'

[rani amni   baya tupam nyawi   hihiri fa-Ø-ya-a-Ø,
[DEM garden side thing   person steal leave-CR-3SG-3FSG:O-DEP
      pi-wa-hi   no]   ah-Ø-Ø-ya-a-mbo,
      go-3FSG-PRES:CONT COP:3FSG] think-CR-3SG-3SG-3FSG:O-DEP
'he thought that someone has finished stealing things from the garden and is going
and'

rani Ø-haf-u-mbo,
DEM   CR-go.across-3MSG-DEP
'he went across (to the garden), and'

homba-Ø   tiau-Ø-hya   nu-mbo,
see-3MSG observe-3MSG-PAST:FOC COP-DEP
'he had a look, and'

homba-Ø-i-Ø-mbo,
look-CR-3MSG-3MSG:O-DEP
'he saw him (the moon), and'

[hwatu   muami-mbo] ma-han-u-mbona
[search take-NOML]   DR-go.down-3MSG-DEP
'he (the moon) has gone down (into the water) to search and take (things) and'

gia-i-Ø   Ø-han-u-mbo   hwi=mbe,
follow-3MSG-3MSG:O CR-go.down-3MSG-DEP   water=INS
'he (the father) followed him (the moon) down into the water, and'

hwi=mbe   homba-i-Ø   fa-i-Ø   Ø-nuŋ-u-mbona,
water=INS look-3MSG-3MSG:O COMPL-3MSG-3MSG:O CR-SEQ-3MSG-DEP
'he saw him (the moon) in the water, and'

"o   dani da-tupam   dewahi"=na   ah-Ø-Ø-ya-a-mbo,
"oh this this-thing must.be"=TOP think-CR-3SG-3SG-3FSG:O-DEP
'"oh it must be this thing" he thought, and'

Ø-haf-u-Ø
CR-go.across-3MSG-DEP
'he went across (to the village) and'

gwafu=hi   hwafo pi-Ø-ya-a-mbo,
village=ADS talk   go-CR-3SG-3FSG:O-DEP
'he spread the news at the village, and'

528

mafwa oloha safya=lofo Ø-han-umu-mbo,
all   community=COM   CR-go.down-3MPL-DEP
'all the people went down (to the water),'

hwi=hi   ra-aniŋgi   amaŋgwani   kakahi-ahwe   nuŋgu-Ø,
water=ADS   DEM-usable   sago.palm.branch cut:MASS-MASS SEQ-DEP
'then they cut many sago palm branches,'

ra=nambo rani hwi   fri-Ø-mu-mbo   nu-mbo,
DEM=ALL   DEM water get.rid-CR-3MPL-DEP COP-DEP
'they used that to get rid of the water, and'

ye   hwi ti-kli-me-wa-mbona   hwi   ti-kli-me-wa-mbo,
then water get.rid-boil-DR-3FSG-DEP   water get.rid-boil-DR-3FSG-DEP
'the water dried up,'[ix]

ani=mbe   rani=mbo   hwatu-ma-hi   ambya
there=INS   DEM=OBJ   search-3MPL-SIM   hole
'they were searching for the moon inside there (the hole),'

[[rewambi   numu-fla   o   naho=mbe o   nimi   yafu boke-wa-hi]
[[bottom   sit-place   or   what=INS   or   stone open NEG:R-3FSG-SIM]
    hwatu-ma-hi]   dili   kahwe-Ø-mu-Ø
    search-N1MPL-SIM] away   lift-CR-N1MPL-DEP
'at the bottom (of the hole) where the moon lives or something the stones obstructs
the view and the men searched and lifted the stone away and'

iro   a   hwatu-Ø-mu-mbo,
like.that ah   search-CR-3MPL-DEP
'they searched like that, and'

homba boka-ma-wu-Ø-mbona,
see   NEG:R-DR-N1MPL-3MSG:O-DEP
'they did not see him (the moon), and'

ai=na tumali   hupla   ambya ruŋgu pipa-me-Ø-mbo,
3=TOP pandanus container   hole   inside hide-DR-3MSG-DEP
'he (the moon) was hiding in a hole inside a pandanus trunk, and'

[ra   nu-mbo]   pupla-Ø-wu-a-Ø
[DEM   COP-DEP]   break-CR-N1MPL-3FSG:O-DEP
'that being the case they broke (the hole) and'

hriha-wu-a   Ø-nuŋg-umu-mbo,
pull.out-N1MPL-3FSG:O   CR-SEQ-N1MPL-DEP
'pulled him (the moon) out, and'

[ix] The prototypical meaning of *kli* is 'boil'; more generally, *kli* means liquid escaping by means other than being pouring out downward, e.g. evaporating, scooped out upward.

*sa-wu-**a**-hya.*
carry-3MPL-3FSG:O-PAST:FOC
'they took him (the moon) (away).'

(section D)
rani hya rani, rani amni=la afila ahu rani amamo
DEM INTJ DEM DEM garden=GEN father self DEM moon
　　　sa-i-Ø Ø-hahuf-u-mbo,
　　　carry-3MSG-3MSG:O CR-go.up-3MSG-DEP
'Then, the garden's father himself took the moon back home,[x]

alu=mbe saku-Ø-i-Ø-mbona,
string.bag=INS put-CR-3MSG-3MSG:O-DEP
'he put him (the moon) into a string bag, and'

ye wuli=mbe=na galali=hi hwama-i-Ø fa-i-Ø-hi,
then house=INS=TOP hook=ADS hang.up-3MSG-3MSG:O leave-N1MSG-3MSG:O-SIM
'then inside the house while he hung the moon on the hook and left him there,'[xi]

a ehala ulua hwi gni hwi hofahi-o-mbi rani.
ah 3SG:GEN fat liquid fat liquid fall.down-3FSG-PRES:STAT DEM
'ah the moon's oil dripped down.'[xii]

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rani wara e bani=mbe o hwatumali o naho sama-Ø-hi-a-mbo,
DEM so 3 sago=INS or leafy.vege or what cook-CR-3FPL-3FSG:O-DEP
'(People) cook sago or greens or other things, and'

ani=mbe kitaki-Ø-hi-a-Ø
there=INS season:MASS-CR-3FPL-3FSG:O-DEP
'sprinkle (the moon oil) as seasoning there (amongst the food), and'

seri-hi-a-hya.
eat-3FPL-3FSG:O-PAST:FOC
'eat.'

---

iro=hya=hi numb-ei-hya hya no gwa;
like.that=ABL=ADS stand-3FPL-PAST:FOC INTJ COP:3FSG but
'They did it like that; but then'

---

[x] *hahofu*: going up into a house.
[xi] *galali*: big hood in the middle of the house hanging above the fireplace.
[xii] *ulua hwi* and *gni hwi* are synonymous.

(section E)

gwi   sumbani [rani Kariawi ah-umu-wu-a-hya   rani]
another day   [DEM Kariawi think-3MPL-3MPL-3FSG:O-PAST DEM]
      ai Ø-hof-u-mbo,
      3 CR-come-3MSG-DEP
'One day there was this whom they call Kariawi (name of a spirit) he came'

Kariawi Ø-hof-u-mbona,
Kariawi CR-come-3MSG-DEP
'Kariawi came, and'

nomola=pa   ma-num-ei-mbo,
children=only DR-sit-3FPL-DEP
'only children were at home,'

gwa afila hwila ra=na   dofo heli=hi   o naho=nambo
but father mother DEM=ALL secret ceremony=ADS or what=ALL
      efya   ra=na   po-me-efya-mbona,
      N1FDU:RSUMP DEM=ALL go:DR-DR-N1FDU-DEP
'but father and mother the two of them went to a secret ceremony or somewhere,'

nomola=pa   ma-num-ei-mbo,
children=only DR-sit-N1FPL-DEP
'only children were at home, and'

rani Kariawi [seru-mbo] homba-Ø-ya-ti-mbona,
DEM Kariawi [eat-NOML] see-CR-3SG-N1FPL:O-DEP
'Kariawi saw them eating, and'

a aiaheimbo=lofo hwafo-u fa-ya-a   Ø-nuŋg-u-mbo,
ah 3FPL:OBJ=COM   talk-3MSG COMPL-3SG-3FSG:O CR-SEQ-3MSG-DEP
'after he have talked with them,'

uli=mbe   ~~Ø-suf-ei-mbo~~
house=INS   ~~CR-come-3FSG-DEP~~
suf-u   kafa-ya-a   Ø-num-u-mbo   mome,
come-3MSG come.inside-3SG-3FSG:O CR-sit-3MSG-DEP together
'he came inside the house and sat together (with the children), and'

homba-Ø-ni   gwa;
look-3MSG-TENT but
'maybe he saw (the moon oil); but'

rani hwi aniŋgi kitaki-Ø-hi-a-Ø,
DEM water useable collect.liquid:MASS-CR-3FPL-3FSG:O-DEP
'they collected and used the moon-oil and'

seri-ma-hi-a-mbona,
eat-DR-3FPL-3FSG:O-DEP
'ate, and'

531

naho ni   hya hya tutu-Ø-ni   gwa;
what TENT INTJ INTJ ask-3MSG-TENT but
'maybe he asked (them) what was it, but'

"awe gwa, yohwefa   ulua   hwi   numami aya   saku-ya-a-hya   akani=mbe.
"no but 1PL:GEN   fat   liquid above father put-3SG-3FSG:O-PAST:FOC there=INS
     iro   hwahwambo aniŋgi-Ø-hu-a-Ø,   Ø-ser-yefu-Ø   hwambo no"
     like.that   be.the.case use-CR-1PL-3FSG:O-DEP   CR-eat-1PL-DEP   the.case COP:3FSG"
     iro   sa-hi-a-mbo,
     like.that   say-3FPL-3FSG:O-DEP
'"Nothing really, father put our oil up there. Like this we use it and eat and it is so,"
they said so, and'

[aniŋgi-hi-a-hi]   ma-rer-i-mbona,
[use-3FPL-3FSG:O-SIM]   DR-eat-3FPL-DEP
'they used (the oil) and eat, and'

homba-Ø-ya-ti-mbo,
see-CR-3SG-N1FPL:O-DEP
'he saw them, and'

wara "yo   kwa homba-ha-a-mby-a"   Ø-nuŋg-u-mbo
so   "1   MOD see-1SG-3FSG:O-SMR:POS-1SG"   CR-stand-3MSG-DEP
'so "maybe I will have a look," he said, and'

Kariawi rani iro   me-h-u-mbona,
Kariawi DEM like.that DR-talk-3MSG-DEP
'Kariawi said that, and'

"amani no."
"good COP:3SG"
'"OK" (said the children)'

Kariawi rani "homba-ma-ha-a-ni?"   Ø-nuŋg-u-Ø   gwa,
Kariawi DEM "see-NEG:IR-1SG-3FSG:O-TENT"   CR-stand-3MSG-DEP but
'Kariawi said "can I see?" and'

"amani no"   ma-r-ei-mbona,
"good COP:3FSG" DR-talk-3FPL-DEP
'"OK" they said, and'

ai faha-ya-a   Ø-nuŋg-u-Ø,
3 take.down-3SG-3FSG:O CR-SEQ-3MSG-DEP
'he took (the string bag which the moon was in) down, and'

homba-i-Ø   Ø-nuŋg-u-mbo,
see-3MSG-3MSG:O   CR-SEQ-3MSG-DEP
'he saw him (the moon), and'

alu　　　　baya　muriha-Ø-ya-**a**-mbo,
string.bag side　take.out-CR-3SG-3FSG:O-DEP
'he took him (the moon) out of the string bag, and'

wara rani hya rani　sa-ya-**a**　　　　pi-Ø-Ø-mbo,
so　DEM INTJ DEM　carry-3SG-3FSG:O　go-CR-3MSG-DEP
'so he took him (the moon) away, and'

waplu=mbi　　　　hwi　　ma-ek-wa-mbona,
palm.bucket=PROP　water　DR-exist-3FSG-DEP
'there was a palm leaf bucket with some water in it, and'

amamo rani hwi=mbe　　ma-rafa-i-Ø-mbona
moon　DEM water=INS　DR-put.in.downward-3MSG-3MSG:O-DEP
'he put him (the moon) into the water, and'

amamo rani baya hri-ya-a　　　　　fa-Ø-ya-a-mbona,
moon　DEM side come.out-3SG-3FSG:O　COMPL-CR-3SG-3FSG:O-DEP
'the moon came out from there, and'

Ø-hahuf-u-mbo,
CR-go.up-3MSG-DEP
'he (the moon) went up, and'

ye　　sini=mbe　pe-Ø-u-mbo　　　　　rani,
then　sky=INS　be.gone-CR-3MSG-DEP DEM
'then he went to the sky and stayed there, and'

pe-Ø-u-mbo,
be.gone-CR-3MSG-DEP
'he has gone, and'

dahoni　homba-hu-**a**-mbi　　　　rani.
now　　see-1PL-3FSG:O-PRES:STAT DEM
'now we see the moon (in the sky).'

rani ehala　　hwafo no　　gwa;
DEM 3SG:GEN story COP:3FSG but
'This is his (the story teller's) story; but'

(section F)
wara, rani hya rani,　afila　hwila　hof-efi　　　homba-hi-Ø-nya-a-mbo,
so　DEM INTJ DEM　father mother come-N1FDU　look-MASS-CR-N1DU-3FSG:O-DEP
'so, then, the father and mother came back and looked,'

homba-hi-Ø-nya-a-mbona,
look-MASS-CR-N1DU-3FSG:O-DEP
'they looked, and'

533

wara *"amamo=na* *ga* *ke-u"* Ø-raf-nya-a-mbo,
so "moon=TOP where COP:where-3MSG CR-say-N1DU-3FSG:O-DEP
'so "where is the moon?" they said, and'

tutu-efye-ni *gwa;*
ask-N1FDU-TENT but
'asked; but'

wi-hwala *Ø-numb-ei-mbo:*
child-ren CR-stand-3FPL-DEP
'the children said:

    "awe, rani Kariawi o *nyawi* *rani* *Ø-suf-u-mbo,*
    "no DEM Kariawi or people DEM CR-come-3MSG-DEP
    "nothing really, that Kariawi or someone came, and

    yohwefumbo *homba-Ø-ya-mu-mbona,*
    1PL:OBJ see-CR-3SG-1NSG:O-DEP
    "he saw us, and"

?

    hwafo-u *fa-ya-mu* Ø-nuŋ-u-mbo,
    talk-3MSG COMPL-3SG-1NSG:O CR-SEQ-3MSG-DEP
    "he talked to us, and"

    dani aniŋgi-Ø-hu-a-mbo,
    this use-CR-1PL-3FSG:O-DEP
    "we used this,"

    [ehala *ulua hwi* *hofahi-**wa**-mbi]* *ye* *aniŋi-Ø-hu-a-mbo,*
    [3SG:GEN oil liquid fall.down-3FSG-PRES then use-CR-1PL-3FSG:O-DEP
    "we used the oil which the moon drips, and"

    seri-Ø-hu-a-mbona,
    eat-CR-1PL-3FSG:O-DEP
    "we eat, and"

    "'naho no'" *hya* *tutu-me-Ø-mbona gwa,*
    "'what COP:3FSG'" INTJ ask-DR-3MSG-DEP but
    ""'what is it?'" he asked, but"

    "'awe'" *ra-rani* *ma-r-efu-mbo,*
    "'no'" DEM-DEM DR-say-1PL-DEP
    ""'nothing really,'" and so on and so forth we said, and"

    ai faha-ya-a Ø-nuŋ-u-mbo,
    3 take.down-3SG-3FSG:O CR-SEQ-3MSG-DEP
    "he took it (the string bag) down, and"

sa-ya-**a**   pi-Ø-Ø-mbo,
carry-3SG-3FSG:O go-CR-3MSG-DEP
"he took him (the moon) and went (outside), and"

hwi=mbe   ma-safa-i-Ø-mbona,
water=INS   DR-put-3MSG-3MSG:O-DEP
"he put him (the moon) into the water, and"

rani hya   hri-ya-a   fa-Ø-ya-a-mbo   amamo rani
DEM INTJ   come.out-3SG-3FSG:O COMPL-CR-3SG-3FSG:O-DEP moon   DEM
"the moon came out and"

hahuf-u-hya   no."
go.up-3MSG-PAST:FOC COP:3FSG
"went up to the sky."

e   rani ehala   hwafo rani s-aha-hi   rani.
3   DEM 3SG:GEN story DEM talk-1SG-PRES:CONT DEM
'This is the story teller's story I am telling.'

(section G)
[afila   hwila   rani aniŋgi-hi-a   seri-hi-a-hya]   hwambo   ye
[father mother DEM use-N1FPL-3FSG:O eat-N1FPL-3FSG:O-PAST] hence   then
'Like how the father and mother have been using it for eating,'

yaflei huri amamo huri   s-efu-hu-a-mbi   rani.
cloud dew moon   dew   think-1PL-1PL-3FSG:O-PRES:STAT DEM
'we call dew moon's dew.'

[rani ehala   ulua no]   ah-Ø-ya-a-mbi.
[DEM 3SG:GEN oil   COP:3FSG] think-3SG-3SG-3FSG:O-PRES:STAT
'The moon's oil it is called.'

re-hi-a-mbi   a.
say-N1FPL-3FSG:O-PRES:STAT   ah
'we say that.'

amamo huri hofahi-wa-mbi   rani.
moon   dew fall.down-3FSG-PRES:STAT DEM
'the moon dew falls.'

tefu=hi   ganyaru-homba-ni   gwa,
tongue=ADS taste-see-TENT   but
'When one taste it with tongue,'

ye   rani hwahwa-Ø [apa=mboka]
then DEM know-DEP   [be.sweet=ABSS]
'then one knows that it is not sweet,'

535

ye   awe   rani   mayana hwambo   meni   rewambi=nambo.
then no   DEM   far   because COP:TENT bottom=ALL
'then no, maybe because (the moon) is far away towards the bottom (of the sky).'

wara   ye   [gihalfi-Ø]   ka-Ø-ya-a-mbona,
so   then [cold-NOML]   break-CR-3SG-3FSG:O-DEP
'So then when it is really cold,'

hwi   ma-hwi-we   a
water NEG:IRR-water-CAUT ah
'beware of the water.' (?)

yowala   hwafo ye   no.
1SG:GEN   talk   then COP:3FSG
'This is my talk.'

Appendix 2

Cross-reference suffixes, pronouns, copulas and irregular verbs

Class IIA subject and object cross-reference suffixes (§5.2.2)

SUBJ→ OBJ↓	1SG -ha	1DU -hwa	1PL -hu	N1MSG -Ø	N1FSG	N1DU -na	N1MPL -wu	N1FPL -hi
1SG -ya				-Ø-ya		-na-ya	-wu-ya	-hi-ya
1NSG -mua				-Ø-mua		-na-mua	-wu-mua	-hi-mua
2SG -nya¹	-ha-nya	-hwa-nya	-hu-nya	-Ø-nya		-na-nya	-wu-nya	-hi-nya
3MSG -Ø	-hi-Ø	-hwa-Ø	-hu-Ø	-i-Ø	-ya-Ø	-nwa-Ø	-wu-Ø	-hwa-Ø
3FSG -a	-ha-a	-hwa-a	-hu-a	-Ø-a		-na-a	-wu-a	-hi-a
N1DU -pa	-ha-pa	-hwa-pa	-hu-pa	-Ø-pa		-na-pa	-wu-pa	-hi-pa
N1MPL -ma/mu	-hi-ma	-ho-ma	-hu-mu	-i-ma		-no-ma	-wu-mu	-ho-ma
N1FPL -ti	-ha-ti	-hwa-ti	-hu-ti	-Ø-ti		-na-ti	-wu-ti	-hi-ti

Class IIB subject and object cross-reference suffixes (§5.2.2)

SUBJ→ OBJ↓	1SG -hya	1DU -hwa	1PL -hu	2SG -wa	3MSG -ya	3FSG	N1DU -nya	N1MPL -wu	N1FPL -hi
1SG -i				-wa-i	-ya-i		-nya-i	-wu-i	-hi-i
1NSG -mu				-wa-mu	-ya-mu		-nya-mu	-wu-mu	-hi-mu
2SG -ni	-hya-ni	-hwa-ni	-hu-ni		-ya-ni		-nya-ni	-wu-ni	-hi-ni
3MSG -Ø	-hi-Ø	-ho-Ø	-hu-Ø	-o-Ø	-i-Ø	-e-Ø	-nu-Ø	-wu-Ø	-ho-Ø
3FSG -a	-hya-a	-hwa-a	-hu-a	-wa-a	-ya-a		-nya-a	-wu-a	-hi-a
N1DU -pu²	-hya-pu	-hwa-pu	-hu-pu	-wa-pu	-ya-pu		-nya-pu	-wu-pu	-hi-pu
N1MPL -mo/mu	-hi-mo	-ho-mo	-hu-mu	-o-mo	-i-mo		-nu-mu	-wu-mu	-ho-mo
N1FPL -ti	-hya-ti	-hwa-ti	-hu-ti	-wa-ti	-ya-ti		-nya-ti	-wu-ti	-hi-ti

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¹ Free variation: -nye.
² For some speakers the N1DU:OBJ suffix is -pwi instead of -pu.

Class Iᴀ/ Iʜᴀ cross-reference suffixes (§5.2.1)

SUBJ→		1SG	1DU	1PL	2SG	3MSG	3FSG	N1MDU	N1FDU	N1MPL	N1FPL
Iᴀ:	V_ / C_	-aha	-ehye	-efa	-afa	-ø / -u	-wa	-afa	-efye	-ma / -uma	-wi / -ei
Iʜᴀ:	C_	-iha	-yehye	-yefa	-ufa	-u	-wa	-ufa	-yefye	-uma	-yei

Class Iʙ/ Iʜʙ cross-reference suffixes (§5.2.1)

SUBJ→		1SG	1DU	1PL	2SG	3MSG	3FSG	N1MDU	N1FDU	N1MPL	N1FPL
Iʙ:	V_ / C_	-a	-ehi	-efu	-afu	-u	-o	-afani	-efi	-mu / -umu	-wi / -ei
Iʜʙ:	C_	-i	-yehi	-yefu	-ufu	-u	-o	-ufani	-yefi	-umu	-yei

Class IIIᴀ/ IIIʙ subject and object cross-reference suffixes (§5.2.3)

SUBJ→ / OBJ↓	1SG -niŋga³	1DU -niŋgwa	1PL -niŋgu	2SG -mba	3SG -ka	N1DU -mbana	N1MPL -mbu	N1FPL -niŋgi
1SG								
-ya				-mba-ya	-ka-ya	-mbana-ya	-mbu-ya	-niŋgi-ya
-i				-mba-i	-ka-i	-mbana-i	-mbu-i	-niŋgi-i
1NSG								
-mua				-mba-mua	-ka-mua	-mbana-mua	-mbu-mua	-niŋgi-mua
-mu				-mba-mu	-ka-mu	-mbana-mu	-mbu-mu	-niŋgi-mu
2SG								
-nya	-niŋga-nya	-niŋgwa-nya	-niŋgu-nya		-ka-nya	-mbana-nya	-mbu-nya	-niŋgi-nya
-ni	-niŋga-ni	-niŋgwa-ni	-niŋgu-ni		-ka-ni	-mbana-ni	-mbu-ni	-niŋgi-ni
3SG								
-wa	-niŋga-wa	-niŋgwa-wa	-niŋgu-wa	-mba-wa	-ka-wa	-mbana-wa	-mbu-wa	-niŋgi-wa
-u	-niŋga-u	-niŋgwa-u	-niŋgu-u	-mba-u	-ka-u	-mbana-u	-mbu-u	-niŋgi-u
N1DU								
-pa	-niŋga-pa	-niŋgwa-pa	-niŋgu-pa	-mba-pa	-ka-pa	-mbana-pa	-mbu-pa	-niŋgi-pa
-po⁴	-niŋga-po	-niŋgwa-po	-niŋgu-po	-mba-po	-ka-po	-mbana-po	-mbu-po	-niŋgi-po
N1MPL								
-pu	-niŋga-pu	-niŋgwa-pu	-niŋgu-pu	-mba-pu	-ka-pu	-mbana-pu	-mbu-pu	-niŋgi-pu
-pu	-niŋga-pu	-niŋgwa-pu	-niŋgu-pu	-mba-pu	-ka-pu	-mbana-pu	-mbu-pu	-niŋgi-pu
N1FPL								
-ti	-niŋga-ti	-niŋgwa-ti	-niŋgu-ti	-mba-ti	-ka-ti	-mbana-ti	-mbu-ti	-niŋgi-ti
-ti	-niŋga-ti	-niŋgwa-ti	-niŋgu-ti	-mba-ti	-ka-ti	-mbana-ti	-mbu-ti	-niŋgi-ti

(top: class IIIᴀ; bottom: class IIIʙ)

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³ *seku* is a variant of *sa-niŋga* (give-1SG).
⁴ For some speakers, the class IIIʙ suffix for N1DU:OBJ is *-pwi* instead of *-po*.

Grammatical categories and associated subset A and B cross-reference suffixes (§5.2)

(with the exception of class IIB verbs which must take subset B cross-reference suffixes in all environments)

subset A:	subset B/ subset A SUBJ + subset B OBJ
-mbi present (stative/ transn.) (§6.1.1, §7.1.1)	semi-realis positive (§6.2)
-hi present continuous (§6.1.1)	*-Ø* present imperative (§6.3.1)
-hi simultaneous (§7.1.3)	*-ni* tentative (§6.3.3)
-hwa past (§6.1.2)	*-naho* counterfactual (§6.3.4)
-hya past (with focus) (§6.1.2, §7.1.1)	
ga- semi-realis negative (§6.2)	
-Ø future imperative (§6.3.1)	
-hwani real conditional (§7.1.2.1)	subset B:
disjoint-referential subjects (§7.2)	coreferential subjects (§7.2)

(subset B/ subset A SUBJ + subset B OBJ:

     subset B for class I/ IH verbs;

     subset B SUBJ + subset B OBJ for class IIB verbs;

     subset A SUBJ + subset B OBJ for class II; and

     SUBJ + subset B OBJ for class III verbs.

class IIB verbs must take subset B suffixes in all environments,

there is no subset A/B distinction for class III subject cross-reference suffixes.)

Irregular verbs

apu (ap-) 'sleep' class I:

Irregular DR chain verb stem:

1SG:	***mehambo***	<	*ma-e-aha-mbo*
2SG:	*mefambo*	<	*ma-e-afa-mbo*
3MSG:	*mapumbo*	<	*ma-ap-u-mbo*
3FSG:	*mapwambo*	<	*ma-ap-wa-mbo*
1DU:	***mehyambo***	<	*ma-e-ehya-mbo*
N1MDU:	*mefambo*	<	*ma-e-afa-mbo*
N1FDU:	*mefyambo*	<	*ma-e-efya-mbo*
1PL:	***mefambo***	<	*ma-e-efa-mbo*
N1MPL:	*mapumambo*	<	*ma-ap-uma-mbo*
N1FPL:	*mewimbo*	<	*ma-e-wi-mbo*

boke NEG:R **class I** (§6.1.3): not used in CR chain clauses (§7.2).

There are only independent verb form and DR chain verb form, which are regular:

	Independent verb form		DR chain verb form	
1SG:	*bokehahwa*	*< boke-aha-hwa*	*bokemehahwa*	*< boke-me-aha-mbo*
2SG:	*bokefahwa*	*< boke-afa-hwa*	*bokemefahwa*	*< boke-me-afa-mbo*
3MSG:	*bokehwa*	*< boke-Ø-hwa*	*bokemehwa*	*< boke-me-Ø-mbo*
3FSG:	*bokewahwa*	*< boke-wa-hwa*	*bokemewahwa*	*< boke-me-wa-mbo*
1DU:	*bokehyahwa*	*< boke-ehya-hwa*	*bokemehyahwa*	*< boke-me-ehya-mbo*
N1MDU:	*bokefahwa*	*< boke-afa-hwa*	*bokemefahwa*	*< boke-me-afa-mbo*
N1FDU:	*bokefyahwa*	*< boke-efya-hwa*	*bokemefyahwa*	*< boke-me-efya-mbo*
1PL:	*bokefahwa*	*< boke-efa-hwa*	*bokemefahwa*	*< boke-me-efa-mbo*
N1MPL:	*bokemahwa*	*< boke-ma-hwa*	*bokememahwa*	*< boke-me-ma-mbo*
N1FPL:	*bokewihwa*	*< boke-wi-hwa*	*bokemewihwa*	*< boke-me-wi-mbo*

boka NEG:R **class II** (§6.1.3): not used in CR chain clauses (§7.2).

There are only independent verb form and DR chain verb form, which are regular:

(shown here with -*a* 3FSG:O)

	Independent verb form		DR chain verb form	
1SG:	*bokahahwa*	*< boka-ha-a-hwa*	*bokamahambo*	*< boka-ma-ha-a-mbo*
N1SG:	*bokahwa*	*< boka-Ø-a-hwa*	*bokamambo*	*< boka-ma-Ø-a-mbo*
1DU:	*bokahwahwa*	*< boka-hwa-a-hwa*	*bokamahwambo*	*< boka-ma-hwa-a-mbo*
N1DU:	*bokanahwa*	*< boka-na-a-hwa*	*bokamanambo*	*< boka-ma-na-a-mbo*
1PL:	*bokahuahwa*	*< boka-hu-a-hwa*	*bokamahuambo*	*< boka-ma-hu-a-mbo*
N1MPL:	*bokawuahwa*	*< boka-wu-a-hwa*	*bokamawuambo*	*< boka-ma-wu-a-mbo*
N1FPL:	*bokahiahwa*	*< boka-hi-a-hwa*	*bokamahiambo*	*< boka-ma-hi-a-mbo*

hwafo 'talk' **class I**:

Suppletive paradigm of CR chain verb form (class II); Irregular DR chain verb stem:

	CR chain verb form	DR chain verb form	
1SG:	*sa-hya-a-mbo*	*ma-s-aha-mbo*	
2SG:	*saf-wa-a-mbo*	*ma-s-afa-mbo*	
3MSG:	*reh-ya-a-mbo ~ sa-ya-a-mbo*	*ma-eh-u-mbo*	*> mehumbo*
3FSG:	*reh-ya-a-mbo ~ sa-ya-a-mbo*	*ma-eh-wa-mbo*	*> mehwambo*
1DU:	*sa-hwa-a-mbo*	*ma-s-ehya-mbo*	
N1MDU:	*saf-nya-a-mbo*	*ma-s-afa-mbo*	
N1FDU:	*saf-nya-a-mbo*	*ma-s-efya-mbo*	
1PL:	*sa-hu-a-mbo*	*ma-s-efa-mbo*	
N1MPL:	*saf-wu-a-mbo*	*ma-eh-uma-mbo*	*> mehumambo*
N1FPL:	*sa-hi-a-mbo*	*ma-s-ei-mbo*	

(-*a* 3FSG:O)

540

nuŋgu (nuŋg-/ numb-) 'stand' class I:

naŋgu (naŋg-/ namb-) 'hang up' class I:

kunaŋgu (kunaŋg-/ kunamb-) 'hang up:MASS' class I:

The verb stem ends in *ŋg* when followed by a rounded segment, and *mb* when followed by an unrounded segment, e.g.:

1SG:	**numb-aha-hwa**
2SG:	*numb-afa-hwa*
3MSG:	*nuŋg-u-hwa*
3FSG:	*nuŋg-wa-hwa*
1DU:	**numb-ehya-hwa**
N1MDU:	*numb-afa-hwa*
N1FDU:	*numb-efya-hwa*
1PL:	**numb-efa-hwa**
N1MPL:	*nuŋg-uma-hwa*
N1FPL:	*numb-ei-hwa*

'think'/ 'call' class I plus II:

This verb, which does not have a non-finite form, carries both class IB and class IIA/B cross-reference suffixes. 3MSG, 3FSG and N1MPL have a different verb stem; 3MSG and 3FSG have irregular cross-reference suffixes. DR chain verb forms (§7.2.1) have a DR prefix *ma-* prefixed to the independent forms, and the last suffix is a dependency suffix instead (§7.5)

	CR chain verb form	independent verb form
1SG:	**s-a-hya-a-mbo**	**s-a-ha-a-mbi**
2SG:	*s-afu-wa-a-mbo*	*s-afu-Ø-a-mbi*
3MSG:	*ah-Ø-ya-a-mbo*	*ah-Ø-ya-a-mbi*
3FSG:	*ah-Ø-ya-a-mbo*	*ah-Ø-ya-a-mbi*
1DU:	**s-ehi-hwa-a-mbo**	**s-ehi-hwa-a-mbi**
N1MDU:	*s-af(ani)-nya-a-mbo*	*s-af(ani)-na-a-mbi*
N1FDU:	*s-ef(ya)-nya-a-mbo*	*s-ef(ya)-na-a-mbi*
1PL:	**s-efu-hu-a-mbo**	**s-efu-hu-a-mbi**
N1MPL:	*ah-umu-wu-a-mbo*	*ah-umu-wu-a-mbi*
N1FPL:	*s-ei-hi-a-mbo*	*s-ei-hi-a-mbi*

However, younger people typically use the verb forms of *hwafo* 'talk' (see above) as a substitute of this more complex 'think' verb. The suppletive CR chain verb paradigm of *hwafo* 'talk' is similar in form with that of the 'think' verb.

The following are verbs with distinct non-future versus future finite verb stems (§5.1.2):

	non-future finite verb stem	future finite verb stem
pi 'go' (I)	*pi-*	*po-*
kro 'come down' (I)	*kro-*	*kut-*
hafu 'arrive' (I)	*haf-*	*gaf-*
hahofu 'go up/ come up' (IH)	*hah- / hahuf- / hahof-*	*gak- / gakuf- / gakof-*
hanu 'go down' (IH)	*han-*	*gan-*
hofu 'come' (I)	*hof-*	*gof-*
hafu 'go across/ pass' (IIB)	*haf- / hafa- / hafaf-*	*gaf- / gafa- / gafaf-*
semi 'take' (I)	*semi- / sami-*	*dam- / dami- / demi-*
simi 'drink' (I)	*simi-*	*dom-*
seru 'eat' (IH)	*ser-*	*det-*
samefi 'cook/ burn' (IIB)	*sama-*	*dama-*
sefi 'give' (III)	*sa-*	*da-*

pi (*pi-/ po-*) 'go' class I:

The DR chain verb stem is unexpectedly *po-* as well, e.g.

- *pi-aha-hwa* (go-1SG-PAST) 'I went';
- *pi-Ø-a-mbo* (go-CR-1SG-DEP) 'I went, and I...';
- *po-l-a-mby-a* (go:FUT-LIG-1SG-POS:SMR-1SG) 'I will go'; but
- *pomehambo < po-me-aha-mbo* (go:DR-DR-1SG-DEP) 'I went, and someone else...'

hahofu 'go up/ come up' class IH:

The verb stem is *hahuf-/ gakuf-* when the subject is 3MSG or N1MPL; *hahof-/ gakof-* when the subject is 3FSG, and *hah-/ gak-* for other subjects, e.g.

1SG:	*hah-iha-hwa*
2SG:	*hah-ufa-hwa*
3MSG:	*hahuf-u-hwa*
3FSG:	*hahof-wa-hwa*
1DU:	*hah-yehye-hwa*
N1MDU:	*hah-ufa-hwa*
N1FDU:	*hah-yefye-hwa*
1PL:	*hah-yefa-hwa*
N1MPL:	*hahuf-uma-hwa*
N1FPL:	*hahof-yei-hwa*

542

hafu 'go across/ pass' class IIB:

This is the only class IIB verb (§5.2.2) with consonant ending verb stems. The non-future finite verb stems come in the form of *haf-*, *hafa-* or *hafaf-*; the future finite verb stems come in the form of *gaf-*, *gafa-*, *gafaf-*: *haf-/ gaf-* is used when the subject is 3SG; *hafa-/ gafa-* is used when the subject is 1SG, 1DU, 1PL or N1FPL; *hafaf-/ gafaf-* is used when the subject is 2SG, N1DU or N1MPL. The following independent verb forms demonstrate this (-*a* 3FSG:O):

1SG:	***hafa-hya-a-hwa***
2SG:	*hafaf-wa-a-hwa*
3SG:	*haf-ya-a-hwa*
1DU:	***hafa-hwa-a-hwa***
N1DU:	*hafaf-nya-a-hwa*
1PL:	***hafa-hu-a-hwa***
N1MPL:	*hafaf-wu-a-hwa*
N1FPL:	*hafa-hi-a-hwa*

semi 'take' class I

Realis	CR chain	DR chain
sami-aha-hwa	***sami-a-mbo***	***semi-me-aha-mbo***
sami-afa-hwa	*sami-afu-mbo*	*semi-me-afa-mbo*
semi-Ø-hwa	*semi-u-mbo*	*semi-me-Ø-mbo*
semi-wa-hwa	*semi-o-mbo*	*semi-me-wa-mbo*
semi-ehye-hwa	***semi-ehi-mbo***	***semi-me-ehye-mbo***
sami-afa-hwa	*sami-afani-mbo*	*semi-me-afa-mbo*
semi-efye-hwa	*semi-efi-mbo*	*semi-me-efye-mbo*
semi-efa-hwa	***semi-efu-mbo***	***semi-me-efa-mbo***
semi-ma-hwa	*semi-mu-mbo*	*semi-me-ma-mbo*
semi-wi-hwa	*semi-wi-mbo*	*semi-me-wi-mbo*
Positive semi-realis	Negative semi-realis	Irrealis
dam-a-mby-a	***ga dam-aha***	***ma-dam-a***
dam-afu samby-afu	*ga dam-afa*	*ma-dam-afu*
dam-Ø-ah-u-mb-i	*ga demi-Ø*	*ma-dam-u*
dam-Ø-ah-o-mb-e	*ga demi-wa*	*ma-dam-o*
demi-e(hi sa)mby-ehi	***ga dem-ehye***	***ma-dam-ehi***
dami-afani samby-afani	*ga dam-afa*	*ma-dam-afani*
demi-efi samby-efi	*ga dem-efye*	*ma-dam-efi*
dem-e(fu sa)mby-efu	***ga dem-efa***	***ma-dam-efu***
dami-ma-ah-u-mb-imu	*ga demi-ma*	*ma-dam-umu*
dem-ei samby-ei	*ga demi-wi*	*ma-dam-ei*

kwemi 'take:MASS' class I

Realis	CR chain	DR chain
kwami-aha-	*kwami-a-mbo*	*ku[ma]mi-aha-mbo*
kwami-afa-	*kwami-afu-*	*ku[ma]mi-afa-*
kwemi-Ø-	*kwemi-u-mbo*	*ku[me]mi-Ø-*
kwemi-wå-	*kwemi-ǫ-mbo*	*ku[me]mi-wa-*
kwemi-ehye-	*kwemi-ehi-*	*ku[me]mi-ehye-*
kwami-afa-	*kwami-afani-*	*ku[ma]mi-afa-*
kwemi-efye-	*kwemi-efi-*	*ku[me]mi-efye-*
kwemi-efa-	*kwemi-efu-*	*ku[me]mi-efa-*
kumi-ma-	*kumi-mu-*	*ku[me]mi-ma-*
kumi-wi-	*kumi-ei-*	*ku[me]mi-wi-*
Positive semi-realis	**Negative semi-realis**	**Irrealis**
kwam-amby-a	*ga kwami-aha*	*ku[ma]mi-a*
kwam-afu samby-afu	*ga kwami-afa*	*ku[ma]mi-afu*
kwam-Ø-ah-u-mb-i	*ga kwemi-Ø*	*ku[ma]mi-u*
kwam-Ø-ah-o-mb-e	*ga kwemi-wa*	*ku[ma]mi-o*
kwam-e(hi sa)mby-ehi	*ga kwemi-ehye*	*ku[ma]mi-ehi*
kwami-afani samby-afani	*ga kwami-afa*	*ku[ma]mi-afani*
kwam-efi samby-efi	*ga kwemi-efye*	*ku[ma]mi-efi*
kwam-e(fu sa)mby-efu	*ga kwemi-efa*	*ku[ma]mi-efu*
kumi-ma-ah-u-mb-imu	*ga kumi-ma*	*ku[ma]mi-mu*
kwam-ei samby-ei	*ga kumi-wi*	*ku[ma]mi-wi*

kahefi (*kaha-*) 'chop upright things' class IIB:

sihefi (*siha-*) 'remove food from cooking fire' class IIB:

The DR affix and negative irrealis affix of these verbs freely vary between the regular *-ma* suffix or the irregular *[ma]* infix, e.g.

- *kaha-ma-hya-a-mbo* (chop-DR-1SG-3FSG:O-DEP) ~ *ka[ma]ha-hya-a-mbo*

  'I chopped it, and someone else...'

- *siha-ma-hya-a* (remove.from.fire-NEG:IR-1SG-3FSG:O) ~ *si[ma]ha-hya-a*

  'will I remove it from cooking fire?'

Citation pronouns (§4.6.1)

yo   first person   *si*   second person   *ai*   third person

Object pronouns (§4.6.2) (class IB cross-reference suffixes)

		1 EXCL	1 INCL	2	3
SG		*yo-a-mbo*		*si-h-afu-mbo*	*ai-ah-afu-mbo*
DU	M	*yo-hw-ehi-mbo*	*si-h-ehi-mbo*	*si-h-afani-mbo*	*ai-ah-afani-mbo*
	F			*si-h-efi-mbo*	*ai-ah-efi-mbo*
PL	M	*yo-hw-efu-mbo*	*si-h-efu-mbo*	*si-h-umu-mbo*	*ai-ah-umu-mbo*
	F			*si-h-ei-mbo*	*ai-ah-ei-mbo*

(*ai* can be omitted; *ai-a* is also pronounced as *e*, *aiahafumbo* → *ehafumbo*)

Genitive pronouns (§4.6.2) (class IA cross-reference suffixes)

		1 EXCL	1 INCL	2	3
SG		*yo-w-ala*		*si-h-afa*	*ai-ah-ala*
DU	M	*yo-hw-ehya*	*si-h-ehya*	*si-h-afa*	*ai-ah-afa*
	F			*si-h-efya*	*ai-ah-efya*
PL	M	*yo-hw-efa*	*si-h-efa*	*si-h-ama*	*ai-ah-ama*
	F			*si-h-ei*	*ai-ah-ei*

(*ai* can be omitted; *ai-a* is also contracted as *e*, *aiahala* → *ehala*)

Citation pronouns plus subject resumptive pronouns (§4.6.3) (class IA suffixes)

		1 EXCL	1 INCL	2	3
SG	M	*yo aha*		*si afa*	*ai u*
	F				*ai wa*
DU	M	*yo ehya*	*si ehya*	*si afa*	*ai afa*
	F			*si efya*	*ai efya*
PL	M	*yo efa*	*si efa*	*si ma*	*ai ma*
	F			*si wi*	*ai wi*

Copulas in Menggwa Dla (§6.4.1)

Non-finite form	Finite form
positive declarative *nu*	present tense *ny-×/ nV-×* past tense *Ø-×-hwa* future tense *l-×-samby-×*
negative declarative *me*	future tense *ga … l-×* non-future tense *m(e)-×*
future interrogative *me*	*m(e)-×*
tentitive *meni*	*m(e)-×-ni*
non-future interrogative *be*	*b(e)-×*
'where' interrogative *ke*	*k(e)-×*
'who' interrogative *de*	*d(e)-×*

The following are the finite forms of the copulas:

Positive present declarative copulas

(class IB cross-reference suffixes)

		1	2	3
SG	M	*ny-a*	*ny-afu*	*nu-u*
	F			*no-o*
DU	M	*ny-ehi*	*ny-afani*	
	F		*ny-efi*	
PL	M	*ny-efu*	*nu-mu*	

Positive past declarative copulas

(class IA cross-reference suffixes)

		1	2	3
SG	M	*aha-hwa*	*afa-hwa*	*Ø-hwa*
	F			*wa-hwa*
DU	M	*ehye-hwa*	*afa-hwa*	
	F		*efye-hwa*	
PL	M	*efa-hwa*	*ma-hwa*	

Positive future declarative copulas (class IB cross-reference suffixes)

		1	2	3
SG	M	*l-a-mby-a*	*l-afu samby-afu*	*l-a-ah-u-mb-i*
SG	F			*l-a-ah-o-mb-e*
DU	M	*l-e(hi sa)mby-ehi*	*l-afani samby-afani*	
DU	F		*l-efi samby-efi*	
PL	M	*l-e(fu sa)mby-efu*	*l-uma-ah-u-mb-imu*	
PL	F		*l-ei samby-ei*	

Negative future declarative copulas (class IA cross-reference suffixes)

		1	2	3
SG	M	*ga ... l-aha*	*ga ... l-afa*	*ga ... Ø*
SG	F			*ga ... l-wa*
DU	M	*ga ... l-ehye*	*ga ... l-afa*	
DU	F		*ga ... l-efye*	
PL	M	*ga ... l-efa*	*ga ... l-uma*	
PL	F		*ga ... l-ei*	

Negative non-future declarative/ future interrogative copulas (*me*)

(class IA cross-reference suffixes)

		1	2	3
SG	M	*m-aha*	*m-afu*	*me-u*
SG	F			*me-o*
DU	M	*me-ehi*	*m-afani*	
DU	F		*me-efi*	
PL	M	*me-efu*	*me-mu*	
PL	F		*me-wi*	

Tentative copulas: add *-ni* to the *me* copulas, e.g. *m-aha-ni* 'I maybe'

Non-future interrogative copulas: substitute *m* with *b*, e.g. *b-aha* 'is/ was I?'

'Where' interrogative copulas: substitute *m* with *k*, e.g. *ga k-aha* 'where am I?'

'Who' interrogative copulas: substitute *m* with *d*, e.g. *da d-aha* 'who am I?'

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