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, I½, IIß, II and III — depending on which sets of cross-reference suffixes they take (§5.2). In normal circumstances, class I and class I½ verbs take one subject cross-reference suffix, while class IIß, 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 İ VI
(one cross-reference suffix), the trivalent verb seli (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
IIIB which is a ‘wastebasket’ category, e.g. both the bivalent keli (ka-) ‘break’ (class
IIIB) and the monovalent keli (keli-) ‘break’ (class IIIB) 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 IIİ verb keli (efi-) ‘to become dark’ which
is zero-valent but carries two cross-reference suffixes, i.e. transitive. Class I/ İ VI
verbs are used in intransitive clauses, class I/ İ VI/ IIİB/ 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 Iii) 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 IIa), dukwefi ‘to wake up (monovalent)’ (class IIb), 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 IIa, most class IIb 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 IIa), dukwefi (dukwa-) ‘wake up’ (class IIb), 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

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 nungu-mbo,

  clean COMPL SEQ-DEP

  ‘After they have cleared (‘clean’) (the exterior),’ (B)

  (wepi ‘clean’ (class I); mefi (ma-) COMPL (class IIb); nungu (nu[ng/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), nungu (nu[ng/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 *fëfi* (fâ-) (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-nom.) ‘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-hl.*

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.* 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 Ii), *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

<table>
<thead>
<tr>
<th></th>
<th>non-future finite verb stem</th>
<th>future finite verb stem</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>pi</em> ‘go’ (I)</td>
<td><em>pi-</em></td>
<td><em>po-</em></td>
</tr>
<tr>
<td><em>kro</em> ‘come down’ (I)</td>
<td><em>kro-</em></td>
<td><em>kut-</em></td>
</tr>
<tr>
<td><em>hafu</em> ‘arrive’ (I)</td>
<td><em>haf-</em></td>
<td><em>gaf-</em></td>
</tr>
<tr>
<td><em>hahofu</em> ‘go up/ come up’ (Ih)</td>
<td><em>hah- / hahuf- / hahof-</em></td>
<td><em>gak- / gakuf- / gakof-</em></td>
</tr>
<tr>
<td><em>hanu</em> ‘go down’ (Ih)</td>
<td><em>han-</em></td>
<td><em>gan-</em></td>
</tr>
<tr>
<td><em>hofu</em> ‘come’ (I)</td>
<td><em>hof-</em></td>
<td><em>gof-</em></td>
</tr>
<tr>
<td><em>hafu</em> ‘go across/ pass’ (Iib)</td>
<td><em>haf- / hafâ- / hafaf-</em></td>
<td><em>gaf- / gafâ- / gafaf-</em></td>
</tr>
<tr>
<td><em>semi</em> ‘take’ (I)</td>
<td><em>semi-</em> / <em>sami-</em></td>
<td>*dam- / *dami- / <em>demi-</em></td>
</tr>
<tr>
<td><em>simi</em> ‘drink’ (I)</td>
<td><em>simi-</em></td>
<td><em>dom-</em></td>
</tr>
<tr>
<td><em>seru</em> ‘eat’ (Ih)</td>
<td><em>ser-</em></td>
<td><em>det-</em></td>
</tr>
<tr>
<td><em>samefi</em> ‘cook/ burn’ (Iib)</td>
<td><em>sama-</em></td>
<td><em>dama-</em></td>
</tr>
<tr>
<td><em>sefi</em> ‘give’ (III)</td>
<td><em>sa-</em></td>
<td><em>da-</em></td>
</tr>
</tbody>
</table>

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]~[r]; §2.1.3.4), and the corresponding future finite verb stem begins with *g/q/ or *d/d/ respectively. 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-û* ‘he ate’ versus *ded-û* ‘he will eat’ (see appendix 1 in Littoral 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 Littoral (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-afu-Ø!*

*come:*FUT-2SG-IMP

‘Come (later)!’ (*afu* 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.


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 Ii);

*semi* (*s[e/a]mi-* *d[e/a]mi(i)*-) ‘take’ (class I))


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)

CR-go.down-1DU-DEP bathe-1DU-PAST

‘We two went down and bathed.’ (-yehi class IHB, -chye class IA)

(aňa ‘bathe oneself’ (class I))


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.


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 I))

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, fâ-hwa-a-hwa.

break-CR-1DU-3FSG:O-DEP leave-1DU-3FSG:O-PAST

‘We two broke and left (it).’ (-hwa-a class IIB) (fêfi (fâ-) ‘leave’ (class IIB))

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 Iб)

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 *nunugu* ‘stand’ (class I) and *(ku)nanggu* ‘hang up’ (I) are *nung-* and *(ku)nang-* respectively when they are followed by a rounded segment (u/u, o/o or w/w), otherwise it is *numb-* and *(ku)namb-*, for instance, compare *numb-afu-Ø* ‘you (SG) stand!’ and *nunng-umu-Ø* ‘you (MPL) stand!’. For other irregular verb lexemes, the verb stem allomorphy is not phonologically conditioned. An example is the verb lexeme *habofu* ‘go up’ (class Ií): the non-future finite verb stem has the allomorphs of *hab-/*habof-/*hahuf* which are morphologically-conditioned by the following subject cross-reference suffix: *hahuf*- is used when the cross-reference suffix is 3MSG or N1MPL, *habof*- is used when the cross-reference suffix is 3FSG or N1FPL, and *hab-* is used for other cross-reference suffixes:

\[\text{The verb kunanggu 'hang a lot of things up' is the mass undergoer counterpart of nanggu 'hang things up' (§5.1.2).}\]
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. \textit{alu} (=mbo) \textit{bihahi} (< \textit{bi-ha-a-hi}).

\textit{string.bag} (= \textit{OBJ}) \textit{hold-1SG-3FSG:O-PRES:CONT}

‘I am holding string bag(s).’ (-\textit{ha-a} class IIa)

To specify that there are three or more undergoer referents, the mass undergoer verb \textit{bibi} can be used.

5-21. \textit{alu} \textit{bibi-ha-a-hi}.

\textit{string.bag} \textit{hold:MASS-1SG-3FSG:O-PRES:CONT}

‘I am holding string bags.’ (-\textit{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 \textit{bi} must be used, as the undergoer can only be cross-referenced as singular in a mass undergoer verb.

5-22. \textit{alu} \textit{bi-ha-ti-hwa}.

\textit{string.bag} \textit{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 b-h-a-hwa.*

string.bag two  
hold-1SG-3SG:O-PAST

‘I was holding two string bags.’

5-24. *alu*  
*imbu b-h-a-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*  
*b oka-h-a-hi.*

string.bag  
hold  
NEG:R-1SG-3SG: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
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-3SG: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).
The following mass undergoer forms have a mass undergoer suffix -hi. The
-hi suffix does not alter the verb class membership.

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.
5-27. *ktefi-ya-a-hwa.*

break-3FSG-3FSG:O-PAST

‘It broke.’


MASS-break-3FSG-3FSG:O-PAST

‘They broke.’

5-29. *ka-ya-a-hwa.*

break-3FSG-3FSG:O-PAST

‘She broke it.’

5-30. *kaka-ya-a-hwa.*

break:MASS-3FSG-3FSG:O-PAST

‘She broke them.’

The following are two other mass undergoer verbs which involve reduplication.

<table>
<thead>
<tr>
<th>non-mass undergoer</th>
<th>mass undergoer</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>bi</em> (II)</td>
<td><em>bibi</em> (II)</td>
</tr>
<tr>
<td><em>fo</em> (II)</td>
<td><em>popo</em> (II)</td>
</tr>
</tbody>
</table>

The mass undergoer verb *mameti* ‘finish’ can have a monovalent or bivalent interpretation. However, the monovalent *mameti* has a non-mass undergoer counterpart *me* ‘finish’ (class I), while the bivalent *mameti* has a non-mass undergoer counterpart *mefi (ma-)‘finish’ (class IIb).

<table>
<thead>
<tr>
<th>non-mass undergoer</th>
<th>mass undergoer</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>me</em> (I)</td>
<td><em>mameti</em> (I)</td>
</tr>
<tr>
<td><em>mefi (ma-) (IIb)</em></td>
<td><em>mameti</em> (I)</td>
</tr>
</tbody>
</table>
5-31. *mamefi-wa-hwa.*

finish: MASS-3SG-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.

<table>
<thead>
<tr>
<th>non-mass undergoer</th>
<th>mass undergoer</th>
<th>cross-reference suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>kifi</em> (<em>ki-</em>) (IIb)</td>
<td><em>kitaki</em> (IIb)</td>
<td>‘collect liquid’</td>
</tr>
<tr>
<td><em>nangu</em> (<em>na/mb/ng/-</em>) (I)</td>
<td><em>ku-nangu</em> (<em>ku-na/mb/ng/-</em>) (I)</td>
<td>‘hang thing up’</td>
</tr>
<tr>
<td><em>samefi</em> (<em>sama-</em>) (IIb)</td>
<td><em>kumefi</em> (<em>kuma-</em>) (IIb)</td>
<td>‘cook’/ ‘burn’</td>
</tr>
<tr>
<td><em>semi</em> (I)</td>
<td><em>kwemi</em> (I)</td>
<td>‘take’</td>
</tr>
<tr>
<td><em>sihefi</em> (<em>siha-</em>) (IIb)</td>
<td><em>kufi</em> (<em>ku-</em>) (IIb)</td>
<td>‘leave things behind intentionally’/ ‘remove food from fire’</td>
</tr>
</tbody>
</table>

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.

See appendix 2 for the paradigms of *semi* (*semi- / sami- / dam- / dami- / demi-*) and *kwemi* (*kwami- / kwemi- / kumi- / kwami- / kwemi- / kumi-*).
There are five verb classes — verb class I, IIH, IIb, II and III — and six sets of cross-reference suffixes — class I (subject), class I (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; IIASUBJ, IIbSUBJ, IIaOBJ, IIbOBJ; IIISUBJ, IIIaOBJ, IIIbOBJ. Class I verbs take class IA or IB suffixes; class II 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>
<thead>
<tr>
<th>Verb classes</th>
<th>I</th>
<th>IIH</th>
<th>II/ IIb</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-reference suffixes</td>
<td>IA</td>
<td>IHA</td>
<td>IIA SUBJ</td>
<td>IIA OBJ</td>
</tr>
<tr>
<td></td>
<td>IB</td>
<td>IHB</td>
<td>IIb SUBJ</td>
<td>IIb OBJ</td>
</tr>
</tbody>
</table>

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 I H verbs, and one subset A subject
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

<table>
<thead>
<tr>
<th>subset A:</th>
<th>subset B/ subset A SUBJ + subset B OBJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>-mbi present (stative/ transn.) (§6.1.1, §7.1.1)</td>
<td>semi-real is positive (§6.2)</td>
</tr>
<tr>
<td>-hi present continuous (§6.1.1)</td>
<td>-Ø present imperative (§6.3.1)</td>
</tr>
<tr>
<td>-hi simultaneous (§7.1.3)</td>
<td>-ni tentative (§6.3.3)</td>
</tr>
<tr>
<td>-hwa past (§6.1.2)</td>
<td>-naho counterfactual (§6.3.4)</td>
</tr>
<tr>
<td>-hya past (with focus) (§6.1.2, §7.1.1)</td>
<td></td>
</tr>
<tr>
<td>ga- semi-real is negative (§6.2)</td>
<td></td>
</tr>
<tr>
<td>-Ø future imperative (§6.3.1)</td>
<td></td>
</tr>
<tr>
<td>-hwani real conditional (§7.1.2.1)</td>
<td><strong>subset B:</strong></td>
</tr>
<tr>
<td>disjoint-referential subjects (§7.2)</td>
<td>coreferential subjects (§7.2)</td>
</tr>
</tbody>
</table>

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: numungwa ‘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. **numungwa-afu-naho.**

die-2SG-CNTR

‘You would have died.’ (-afu class Ib)
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 I H verbs and cross-reference suffixes

Class I and I H 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 I H cross-reference suffixes.

The phonological shapes of class IA and class IB cross-reference suffixes are given below. The 3MSG, N1PL 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 -aфа.

Table 5.4 Class IA cross-reference suffixes

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>M</td>
<td>-aha</td>
<td>-afa</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>-wa</td>
</tr>
<tr>
<td>DU</td>
<td>M</td>
<td>-ehye</td>
<td>-efa</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>-efye</td>
</tr>
<tr>
<td>PL</td>
<td>M</td>
<td>-efa</td>
<td>-ma' -uma</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>-wi' -ei</td>
</tr>
</tbody>
</table>

Table 5.5 Class IB cross-reference suffixes

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>M</td>
<td>-a</td>
<td>-afu</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>-o</td>
</tr>
<tr>
<td>DU</td>
<td>M</td>
<td>-ehi</td>
<td>-afani</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>-efi</td>
</tr>
<tr>
<td>PL</td>
<td>M</td>
<td>-efu</td>
<td>-mu' -umu</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>-wi' -ei</td>
</tr>
</tbody>
</table>
Class I H cross-reference suffixes mark exactly the same person-number-gender combinations as class I cross-reference suffixes, and class I H suffixes are only slightly different from class I suffixes in their phonological shapes. There are only four class I H verbs: *seru* (*ser-/* det-*) ‘eat’, *hanu* (*han-/* gan-*) ‘go down’, *hahofu* (*hah(of/uf)-/* gak(of/uf)-*) ‘go up’ and *ganyaru* (*ganyar-*) ‘taste’. All class I H verbs have consonant ending finite verb stems. Most of the class I H cross-reference suffixes begin with a high vowel or a corresponding glide, and hence these cross-reference suffixes are called class I high — I H 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 -ufã.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>-iha</td>
<td>-ufã</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>-iha</td>
<td>-ufã</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>-yehye</td>
<td>-ufã</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>-yehye</td>
<td>-yefye</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>-yefã</td>
<td>-uma</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>-yefã</td>
<td>-yefi</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>-ufã</td>
<td>-umi</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>-ufã</td>
<td>-yefi</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.6 Class IHA cross-reference suffixes

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>-i</td>
<td></td>
<td>-u</td>
</tr>
<tr>
<td>F</td>
<td>-i</td>
<td>-wa</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>-yehi</td>
<td>-ufani</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>-yehi</td>
<td>-yefi</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>-yefi</td>
<td>-umu</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>-yefi</td>
<td>-yefi</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.7 Class IHB cross-reference suffixes

Class I and I H verbs are used in intransitive or (mono)transitive clauses (see §5.3.2). Class I and I H verbs are mostly monovalent, although there are some bivalent class I/ I H 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 I H), and avalent verbs like *hwi* ‘rain’ (class I). Most motion verbs belong to class I.
or I\textsubscript{H}, e.g. \textit{hanu} (\textit{han-}/ \textit{gan-}) ‘go down’ (class I\textsubscript{I}), \textit{kro} (\textit{kro-}/ \textit{kut-}) ‘come down’ (class I), and all physiological and psychological state verbs belong to class I, e.g. \textit{apu} (\textit{ap-}) ‘sleep’ (class I), \textit{anyapaluku} ‘be tired’ (class I), \textit{hihiu} ‘be happy’ (class I).

Class I/I\textsubscript{H} verbs can have vowel-ending or consonant-ending finite verb stems. Verb class I and I\textsubscript{H} 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 I\textsubscript{H} verbs.

The following are examples of class I and class I\textsubscript{H} verbs.

\textbf{5-36. (yo) bara-aha-hwa.}

(1) run-1SG-PAST

‘I ran.’ (\textit{bara} ‘run’ class I)

\textbf{5-37. \textit{Ø}-hahuf-u-Ø…}

CR-go.up-3MSG-DEP

‘He went up (into the house), and…’ (\textit{hahofu} ‘go up’ class I\textsubscript{H})

\textbf{5-38. \{yafl\ {\textit{wi}}\} (=\textit{na}) sungwani-wa-mbi.}

[dog child]=TOP sick-3FSG-PRES

‘The puppy is sick.’ (\textit{sungwani} class I)

\textbf{5-39. (\textit{yo}=\textit{na}) aiahafumbo sumbu-e\textsubscript{fà}-hwa.}

(1 =TOP) 3SG:OBJ laugh.at-1PL-PAST

‘We laughed at him/her.’ (\textit{sumbu} ‘laugh (at)’ class I)
5-40. *sumblufu wangu=mbo ser-yeфа-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
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 \( \text{fa} \) ‘pick betel nut’ and the class IIb verb lexeme \( \text{fefi} (\text{fa}-) \) ‘leave’ (monovalent/ bivalent). Both have the same finite verb stem form (§5.1.1) of \( \text{fa}- \). In a coreferential chain verb form (§7.2.1), subset B cross-reference suffixes are required, thus both \( \text{fa} \) ‘pick betel nut’ (class II) and \( \text{fefi} (\text{fa}-) \) ‘leave’ (class IIb) take class IIb cross-reference suffixes in a coreferential chain verb.

5-42. \( \text{fa-Ø}-\text{ya-a-mbo}, \)  
\( \text{pick.betel.nut-CR-3SG-3FSG:O-DEP} \) leave-CR-3SG-3FSG:O-DEP  
‘S/he picked betel nuts, and…’ ‘S/he left, and…’  
(-\( \text{ya-a} \) class IIb) (-\( \text{ya-a} \) 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 \( \text{fa} \) ‘pick betel nut’ (class II) takes class IIA cross-reference suffixes whereas \( \text{fefi} (\text{fa}-) \) ‘leave’ (class IIb) takes class IIb cross-reference suffixes in a disjoint-referential chain verb.

5-44. \( \text{fa-ma-Ø-a-mbo}. \)  
\( \text{pick.betel.nut-DR-N1SG-3FSG:O-DEP} \) leave-DR-3SG-3FSG:O-PAST  
‘S/he/you picked betel nut, and…’ ‘S/he left, and…’  
(-\( \text{Ø-a} \) class IIA) (-\( \text{ya-a} \) class IIb)
Class II A and class II B subject cross-reference suffixes mark slightly different person-number-gender combinations; in singular number, class II A SUBJ suffixes mark a first versus non-first person distinction, whereas class II B SUBJ suffixes mark a first versus second versus third person distinction. In contrast, class II A and class II B object cross-reference suffixes mark the same person-number-gender combinations. The following are tables of class II A and class II B 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 II A subject and object cross-reference suffixes

<table>
<thead>
<tr>
<th>OBJ</th>
<th>SUBJ</th>
<th>1SG</th>
<th>1DU</th>
<th>1PL</th>
<th>N1MSG</th>
<th>N1FSG</th>
<th>N1DU</th>
<th>N1MPL</th>
<th>N1FPL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>-ya</td>
<td>-ha</td>
<td>-hwa</td>
<td>-hu</td>
<td>-Ø</td>
<td>-na</td>
<td>-wu</td>
<td>-hi</td>
<td></td>
</tr>
<tr>
<td>1NSG</td>
<td>-mua</td>
<td></td>
<td></td>
<td></td>
<td>-Ø-mua</td>
<td>-na-mua</td>
<td>-wu-mua</td>
<td>-hi-mua</td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td>-nya</td>
<td>-ha-nya</td>
<td>-hwa-nya</td>
<td>-hu-nya</td>
<td>-Ø-nya</td>
<td>-na-nya</td>
<td>-wu-nya</td>
<td>-hi-nya</td>
<td></td>
</tr>
<tr>
<td>3MSG</td>
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<td>-hwa-Ø</td>
<td>-hu-Ø</td>
<td>-i-Ø</td>
<td>-ya-Ø</td>
<td>-nwa-Ø</td>
<td>-wu-Ø</td>
<td>-hwa-Ø</td>
</tr>
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<td>3FSG</td>
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<td>-ha-a</td>
<td>-hwa-a</td>
<td>-hu-a</td>
<td>-Ø-a</td>
<td>-na-a</td>
<td>-wu-a</td>
<td>-hi-a</td>
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<td></td>
<td>N1DU</td>
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<td></td>
<td></td>
<td>-Ø-pa</td>
<td>-na-pa</td>
<td>-wu-pa</td>
<td>-hi-pa</td>
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</tr>
<tr>
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<td>N1MPL</td>
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<td></td>
<td></td>
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<td>-no-ma</td>
<td>-wu-mu</td>
<td>-ho-ma</td>
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<td>N1FPL</td>
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<td></td>
<td>-Ø-ti</td>
<td>-na-ti</td>
<td>-wu-ti</td>
<td>-hi-ti</td>
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</table>
Table 5.9  Class IIb subject and object cross-reference suffixes

<table>
<thead>
<tr>
<th>Subj →</th>
<th>1SG</th>
<th>1DU</th>
<th>1PL</th>
<th>2SG</th>
<th>3MSG</th>
<th>3FSG</th>
<th>N1DU</th>
<th>N1MPL</th>
<th>N1FPL</th>
</tr>
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<td>-nya</td>
<td>-wu</td>
<td>-hi</td>
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<td>-nya-i</td>
<td>-wu-i</td>
<td>-hi-i</td>
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<td>-ya-mu</td>
<td>-nya-mu</td>
<td>-wu-mu</td>
<td>-hi-mu</td>
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</tr>
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<td>-hwa-ni</td>
<td>-hu-ni</td>
<td>-ya-ni</td>
<td>-nya-ni</td>
<td>-wu-ni</td>
<td>-hi-ni</td>
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</tr>
<tr>
<td>3MSG</td>
<td>-Ø</td>
<td>-hi-Ø</td>
<td>-ho-Ø</td>
<td>-hu-Ø</td>
<td>-o-Ø</td>
<td>-i-Ø</td>
<td>-e-Ø</td>
<td>-nu-Ø</td>
<td>-wu-Ø</td>
</tr>
<tr>
<td>3FSG</td>
<td>-a</td>
<td>-hya-a</td>
<td>-hwa-a</td>
<td>-hu-a</td>
<td>-wa-a</td>
<td>-ya-a</td>
<td>-nya-a</td>
<td>-wu-a</td>
<td>-hi-a</td>
</tr>
<tr>
<td>N1DU</td>
<td>-hya-pu</td>
<td>-hwa-pu</td>
<td>-hu-pu</td>
<td>-wa-pu</td>
<td>-ya-pu</td>
<td>-nya-pu</td>
<td>-wu-pu</td>
<td>-hi-pu</td>
<td></td>
</tr>
<tr>
<td>-pu-pwi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N1MPL</td>
<td>-hi-mo</td>
<td>-hwa-mo</td>
<td>-hu-mo</td>
<td>-wa-mo</td>
<td>-ya-mo</td>
<td>-nya-mo</td>
<td>-wu-mo</td>
<td>-hi-mo</td>
<td></td>
</tr>
<tr>
<td>-mo/mu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 avelant, monovalent and bivalent verbs, and verb class II includes bivalent and trivalent verbs. Examples of class IIb verbs are:

- avelant (only one known): *efi*ī (*efī-*) ‘become dark/ night’;
- monovalent: *kefī* (*kefī-*) ‘break (monovalent)’; and
- bivalent: *numufī* (*numu-*) ‘wear’, *kefī* (*ka-*) ‘break (bivalent)’.

Examples of transitive class II verbs are:

- bivalent: *bi* (*bi-*) ‘hold’, *nefī* (*na-*) ‘shoot’; and
- trivalent: *nafī* (*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-3SG:O-PAST

‘I woke up at half past six.’

(dukwefi (dukwa-) ‘wake up’ (monovalent) class IIb; -hya-a class IIb)

5-47. (ai=na) (aiahahaumbo) hamani homba-ya-∅-hwa.

(3=TOP) (3SG:OBJ) yesterday see-N1SG-N1MSG:O-PAST

‘She saw him yesterday.’ (homba ‘see’ class II; -ya-∅ 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-nainga* is *seku-, e.g.*
both *sa-ninga-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-ninga-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

<table>
<thead>
<tr>
<th>SUBJ→obj↓</th>
<th>1SG</th>
<th>1DU</th>
<th>1PL</th>
<th>2SG</th>
<th>3SG</th>
<th>N1DU</th>
<th>N1MPL</th>
<th>N1FPL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>-ninga</td>
<td>-ningwa</td>
<td>-ningu</td>
<td>-mba</td>
<td>-ka</td>
<td>-mbana</td>
<td>-mbu</td>
<td>-ningi</td>
</tr>
<tr>
<td>-ya</td>
<td></td>
<td></td>
<td></td>
<td>-mba-ya</td>
<td>-ka-ya</td>
<td>-mbana-ya</td>
<td>-mbu-ya</td>
<td>-ningi-ya</td>
</tr>
<tr>
<td>-i</td>
<td></td>
<td></td>
<td></td>
<td>-mba-i</td>
<td>-ka-i</td>
<td>-mbana-i</td>
<td>-mbu-i</td>
<td>-ningi-i</td>
</tr>
<tr>
<td>1NSG</td>
<td>-mua</td>
<td>-mu</td>
<td></td>
<td>-mba-mua</td>
<td>-ka-mua</td>
<td>-mbana-mua</td>
<td>-mbu-mua</td>
<td>-ningi-mua</td>
</tr>
<tr>
<td>-ni</td>
<td>-ninga-ni</td>
<td>-ningwa-ni</td>
<td>-ningu-ni</td>
<td></td>
<td>-ka-ni</td>
<td>-mbana-ni</td>
<td>-mbu-ni</td>
<td>-ningi-ni</td>
</tr>
<tr>
<td>3SG</td>
<td>-wa</td>
<td>-ninga-wa</td>
<td>-ningwa-wa</td>
<td>-ningu-wa</td>
<td>-mba-wa</td>
<td>-ka-wa</td>
<td>-mbana-wa</td>
<td>-mbu-wa</td>
</tr>
<tr>
<td>-u</td>
<td>-ninga-u</td>
<td>-ningwa-u</td>
<td>-ningu-u</td>
<td>-mba-u</td>
<td>-ka-u</td>
<td>-mbana-u</td>
<td>-mbu-u</td>
<td>-ningi-u</td>
</tr>
<tr>
<td>N1DU</td>
<td>-pa</td>
<td>-ninga-pa</td>
<td>-ningwa-pa</td>
<td>-ningu-pa</td>
<td>-mba-pa</td>
<td>-ka-pa</td>
<td>-mbana-pa</td>
<td>-mbu-pa</td>
</tr>
<tr>
<td>N1MPL</td>
<td>-pu</td>
<td>-ninga-pu</td>
<td>-ningwa-pu</td>
<td>-ningu-pu</td>
<td>-mba-pu</td>
<td>-ka-pu</td>
<td>-mbana-pu</td>
<td>-mbu-pu</td>
</tr>
</tbody>
</table>

(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)


Nola = OBJ  money  give:FUT-1SG-3SG:O-POS:SMR-1SG

‘I will give Nola money.’  (*-ninga class III, -u class IIIb, -a class I)\(^8\)

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

---

\(^8\) The positive semi-realis verb *samby* (§6.2.1) takes class I(s) 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-O-hwa-a-O,
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.\textsuperscript{11} In the second and third clause the

\textsuperscript{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 kar-hwa-pu-mbo,*

egg two = only break-1DU-N1DU:O-DEP

*fafa-hwa-g* *O,*

cook.egg-1DU-3FSG:O-DEP

*ser-yehi fa-hwa-g* *O-numb-ehi-mbo,*

eat-1DU COMPL-1DU-3FSG:O 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 Hwafó* ‘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. \( \text{hwi} = \text{mb} \text{e} = \text{na} \quad \text{sa-ya-a} \quad \text{\( \emptyset \)-han-\text{u}-mbo}, \)

water = INS = TOP take-3SG-3FSG;O CR-go.down-3MSG-DEP

\( \text{ani} \quad \text{a} \quad [\text{num-\( \emptyset \)-mbi}] \quad \text{fla} = \text{mb} \text{e}, \quad \text{numu-a} = \text{mb} \text{e} \quad \text{ser-\text{u}-O}, \)

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. \( \text{homba-i-\( \emptyset \)} \quad \text{\( \emptyset \)-nung-u-mbo}, \)

see-3MSG-3MSG;O CR-SEQ-3MSG-DEP

\( \text{alu} \quad \text{baya muriha-ya-\text{a}-mbo}, \)

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\(^\text{12}\) 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’\(^\text{13}\) 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’.

\(^{12}\) ‘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 \textit{kefi} ‘break’ (monovalent) (class IIb) which are monovalent-(mono)transitive (§5.3.3); having the same prefix \textit{mono}- used for both valency and transitivity can be confusing.

\(^{13}\) The term ‘secundative’ as used by, e.g., Siewierska (2004).
Cross-referencing (§5.2) operates in the nominative-secundative alignment. Class I and class I\(^H\) verbs have one subject cross-reference suffix, while class II\(^B\), 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/ I\(^H\) verbs are used in intransitive clauses, class I/ I\(^H\)/ II\(^B\)/ 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\(^{14}\)

<table>
<thead>
<tr>
<th></th>
<th>subject</th>
<th>object</th>
<th>second object</th>
<th>(oblique)</th>
</tr>
</thead>
<tbody>
<tr>
<td>intransitive clause, class I/I(^H) verb</td>
<td>yes</td>
<td>—</td>
<td>—</td>
<td>(no)</td>
</tr>
<tr>
<td>transitive clause, class I/I(^H) verb</td>
<td>yes</td>
<td>no</td>
<td>—</td>
<td>(no)</td>
</tr>
<tr>
<td>transitive clause, class II(^B)/II verb</td>
<td>yes</td>
<td>yes</td>
<td>—</td>
<td>(no)</td>
</tr>
<tr>
<td>ditransitive clause, class II/III verb</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>(no)</td>
</tr>
</tbody>
</table>

\(^{14}\)This excludes non-finite chain verbs (§7.3.1) which carry no cross-reference suffixes at all.
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-referenced; 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

<table>
<thead>
<tr>
<th>subject</th>
<th>object</th>
<th>second object</th>
<th>oblique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø</td>
<td>(= mbo)</td>
<td>Ø</td>
<td>various semantic cases (§4.5)</td>
</tr>
</tbody>
</table>

SUBJ OBJ 2NDOBJ


Benedict sister = OBJ chicken house 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. ai aiaheimbo ayamu wuli nafi-Ø-ti-hwa.

3 3FPL:OBJ chicken house show-3SG-N1FPL:O-PAST

‘S/he showed them the chicken coup.’ (nafi ‘show’ 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). 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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5 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.
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. \textit{hwahwa-\textit{wa}-mbi}.

\textit{know-3FSG-PRES}

‘She knows.’ (\textit{hwahwa} ‘know’ class I)

\(^{16}\)‘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-O-hya-a-O*,

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-nung-u-mbo*,

talk-3MSG COMPL-3SG-1NSG:O CR-SEQ-3MSG-DEP

‘He talked to us, and…’ (*hwafo* ‘talk’ class I, *fefi* class IIb, *nungu* 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. In the following non-finite chain clause, the non-finite chain verb *numuli-O* (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

---

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 \textit{hwela} ‘skin’ which can be encliticised by an object elitic = \textit{mbo} (§4.5.1).

The nominal \textit{palangi=nambo} (machete = \textsc{all}) ‘with machete’ is an oblique relation.

\textbf{5-65.} $\emptyset$ \textit{palangi=nambo} \textit{hwela} numuli=$\emptyset$, \textit{machete = all} \textit{skin} remove-\textsc{dep}

\begin{quote}
‘(People) remove the bark with machetes, and…’ (B)
\end{quote}

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/I\textsc{h}), 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):

\textbf{5-66.} \textit{vari=mbo} $\emptyset$-\textit{ser-o-mbo}, \textit{sago = obj} CR-eat-3\textsc{fsg}-\textsc{dep}

\begin{quote}
‘She ate sago, and…’ (\textit{seru} (\textit{ser-\textsc{det}}) ‘eat’ class I\textsc{h})
\end{quote}

\textbf{5-67.} \textit{sihafumbo} \textit{humbli-aha-hwa}.

\begin{quote}
2SG:OBJ hear-1SG-\textsc{past}
‘I heard you.’ (\textit{humbli} ‘hear’ class I)
\end{quote}
Trivalent, two cross-reference suffixes (second objects realised as nominals):

5-68. **[malai faho]** 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** nafí-hi-Ø-hwa.

book show-1SG-3MSG-O-PAST

‘I showed him the book.’ (nafí ‘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]]** numungwa-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 yafuha-*ha-nya-mbi.

\[ \begin{align*}
1 = \text{TOP} & 2 \text{SG:OBJ} \quad \text{want.favour.from-1SG-2SG:O-PRES} \\
\end{align*} \]

\[ \text{‘I want you to do (me) a favour.’ (60I)} \]

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

\[^{18}\text{Nonetheless, this ‘theory-independent’ view is in a lot of ways akin to the position taken by Barlow (1992) and Pollard & Sag (1988). For Barlow, agreement is not a morphosyntactic notion where morphosyntactic features have to be matched between two linguistic expressions, nor a semantic notion where certain semantic properties of one or a group of referents are expressed; agreement is a discourse notion where both the agreement expression and the agreed reference contribute to the identification and characterisation of the discourse referents.}\]
contribute to the person-number-gender features of second person feminine dual (2FDU) of the subject reference.

5-73. si dani = hi Ø-num-effi-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).

5.3.2.1 Clauses with fully referential cross-reference suffixes

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 verb 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 I\(_H\) verbs have one subject cross-reference suffix (§5.2.1); clauses with a class I or class I\(_H\) verb can be intransitive and monovalent/ bivalent, or transitive and bivalent. Class I\(_B\), 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 I\(_B\) 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

<table>
<thead>
<tr>
<th>Class</th>
<th>Transitivity</th>
<th>Valence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class I(_H)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class I(_B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class II</td>
<td>transitive</td>
<td>bivalent</td>
</tr>
<tr>
<td>Class III</td>
<td>ditransitive</td>
<td>trivalent</td>
</tr>
</tbody>
</table>

The following are examples of monovalent intransitive class I and class I\(_H\) 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-3SG-PRES:TRANSN

‘The flying fox flew away.’  (*pi (pi- po-) ‘go’ class I)

5-76.  *rani bohoni amamo rani hwı=mbı  Ø-num-y-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  hwı=na  Ø-han-y-mbo.*

3  water =  ALL  CR-go.down-3MSG-DEP

‘He went down towards the water, and…’

(*hanu (han-i 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=mbı  hwahwa-aha-hi.*

1  2SG:GEN  name = OBJ  know-1SG-PRES:CONT

‘I know your name.’  (*hwahwa ‘know’ class I)
5-79. \textbf{ufati = mbo} \textit{simi-aha-hwa}.

\begin{tabular}{ll}
\text{medicine} = \text{OBJ} & \text{drink-1SG-PAST} \\
\end{tabular}

‘I took the medicine.’ (\textit{simi (simi- dom-)} ‘drink’ class I)

5-80. \textbf{mamo( = mbo) = pa} \textit{ser-ih-a-hwa}.

\begin{tabular}{ll}
\text{one( = OBJ)} = \text{only} & \text{eat-1SG-PAST} \\
\end{tabular}

‘I ate only one.’ (\textit{seru (ser-/ det-)} ‘eat’ class Ii)

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 Ii verb. In the former case, the object can be zero-pronominised 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:

\textbf{5-81.} \textit{(ra}ni = mbo \textit{nonofo-}}\textit{O-a-mbo,)} \textit{ye} \textit{O} \textit{ser-ih-a-hwa}.

\begin{tabular}{ll}
\text{(DEM = OBJ) smell-CR-1SG-DEP) then} & \text{eat-1SG-PAST} \\
\end{tabular}

‘(I smelt it, and) then I ate O.’

One cross-reference suffix, intransitive, bivalent:

\textbf{5-82.} \textit{(dukwa-}\textit{O-hya-a-mbo,)} \textit{ye} \textit{ser-ih-a-hwa}.

\begin{tabular}{ll}
\text{(wake.up-CR-1SG-3FSG:O-DEP)} & \text{then eat-1SG-PAST} \\
\end{tabular}

‘(I woke up, and) then I ate.’
Some class I/II verbs which usually depict monovalent-intransitive situations can be used to depict the causative bivalent-transitive version of the situation. For instance, *nunugu* (*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:Ø 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 avelent, see §5.3.2.2).

5-86. yangi-wu-a-hwa.

wake.up-N1MPL-3FSG:O-PAST

‘They woke her up.’ (yangifi (yangi- ‘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. *aihafumbo bakwa* *nafi-hi-Ø-hwa*. 

*Ø nafi-Ø-hi-Ø-mbo*,

*3SG:OBJ path show-1SG-3MSG:O-PAST show-CR-1SG-3MSG:O-DEP*

‘I showed him the path, I showed him Ø, and…’ (*nafi* ‘show’ class II)

5-91. *heli* *yaninoma=mbo* *tohaloa-wu-mu-hwa*.

*ceremony* *boy = OBJ school-N1MPL-N1MPL:O-PAST*

‘They taught the boys the ceremony.’ (*tohaloa* ‘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 *nafi* ‘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. *aihahafumbo hwafo sa-ninga-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 sungwani 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-ninga-u-mbo,*

(DEM = OBJ cook-CR-1SG-3FSG:O-DEP) then CR-give-1SG-3SG:O-DEP

‘(I cooked that , and) then I gave him Ø , and…’
5.3.2.2 Clauses with semantically-empty cross-reference suffixes

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’, *kakêfi (kakefi-)* ‘break:mass’ (§5.1.4)
  (bivalent counterpart: *kefi (ka-)* ‘break’; *kaka* ‘break:mass’ class IIB);
• *dukwefi* (*dukwa*) ‘wake up’

(bivalent counterpart: *yangifi* (*yangi*) ‘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.*

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))

5-98. *ka-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’ (monovalent))

5-100. *kaka-nya-a-mbi.*

- milk spill-3FSG-3FSG:O-PAST
- ‘The milk spilled.’
  - *(lit. ‘the milk spilled it.’)*
  - *(kafëfi (kafâ-) ‘pour’)*

5-102. *tutu kafâ-ya-a-hwa.*

- milk spill-3FSG-3FSG:O-PAST
- ‘She poured the milk.’

<table>
<thead>
<tr>
<th>Monovalent:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-103. <em>yani dukwa-Ø-wu-a-mbo,</em></td>
</tr>
<tr>
<td>- man wake.up-CR-N1MPL-3FSG:O-DEP</td>
</tr>
<tr>
<td>- ‘The men woke up, and...’ <em>(lit. ‘the men woke it up.’)</em></td>
</tr>
<tr>
<td>- <em>(dukwëfi (dukwa-) ‘wake up’ (monovalent) class IIb)</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bivalent:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-104. <em>yani yiangi-Ø-wu-a-mbo,</em></td>
</tr>
<tr>
<td>- man wake.up-CR-N1MPL-3FSG:O-DEP</td>
</tr>
<tr>
<td>- ‘The men woke her/it up, and...’</td>
</tr>
<tr>
<td>- <em>(yangifì (yangi-) ‘wake up’ (bivalent) class IIb)</em></td>
</tr>
</tbody>
</table>

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. 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 féfi (fà-) ‘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 féfi (fà-) 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 fà-hwa-a Ø-numb-ehi-mbo,

sleep-1DU COMPL-1DU-3FSG:O SEQ-1DU-DEP

‘After we have slept…’ (N) (ap ‘sleep’ class I, féfi 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.\(^{20}\)


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.’

\(^{20}\)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.’)

5.3.2.3 Transitivity in non-finite chain clauses

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.  

Ditransitive:

5-117. *simbu* Ø ayamu = mbo seru *sefi-mbo.*

morning chicken = OBJ food *give-DEP*

‘In the morning (people) feed their chicken, and…’

Transitive:

5-118. Ø *siha'umbo sumbu-mba-mbo.*

2SG:OBJ *laugh.at-POST-DEP*

‘(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 IIIs), 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.’ (*kاهefi (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. sihaña  hwafó=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-aʔa.

1SG:O-sick-3SG-IND

‘I am sick.’ [lit. ‘it sick 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. \((ai=na)\) *sungwani-wa-mbi.*

(3 = TOP) be.sick-3SG-PRES:STAT

‘She is sick.’ (*sungwani* ‘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,*

\[
\begin{align*}
\text{axe} & = \text{ALL} = \text{TOP} & \text{tree}(=\text{OBJ}) & \text{chop.
down-DEP} \\
\end{align*}
\]

‘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/I\(\bar{H}\) 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: \hspace{1cm} Bivalent:

5-132. *(yo) \(\emptyset\)-num-a-mbo,* \hspace{1cm} 5-133. *(yo) aiahafumbo \(\emptyset\)-num-a-mbo,*

\[
\begin{align*}
\text{(1) CR-sit-1SG-DEP} & & \text{(1) 3SG:OBJ CR-sit-1SG-DEP} \\
\end{align*}
\]

‘I sat, and…’ \hspace{1cm} ‘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. \textit{wambloa\-ma\-hi\-O\-mbo}, \textit{ser\-u\-hi}.

\text{force\-DR\-1SG\-3MSG\:O\-DEP eat\-3MSG\-PRES\:CONT}

‘I force him and he is eating.’ (701)

5.4 \textbf{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. \textit{num\-aha\-hi}.

\text{sit\-1SG\-PRES\:CONT}

‘I live (here).’ (\textit{numu \text{num}}) ‘sit’ class I; S)

5-136. \textit{ga\-da\-ninga\-nya}.

\text{NEG:SMR\-give\:FUT\-1SG\-2SG\:O}

‘I will not give you (something).’ (\textit{seti \text{sa\-} da}) ‘give’ class III)
5-137. hriha-wu-a Ø-nung-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-ı 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 ufάti simi-ό-hya.

Hilari medicine drink-3MSG-PAST:FOC

‘Hilari took the medicine.’ \((simi (simi-i dom-) ‘drink’ class I)\)

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 ifάli tamnya kwami-ό-a-mbo,

1 too 1SG:RSUMP 1SG:GEN spear small:MASS take:MASS-CR-1SG-DEP

‘I too took my own small spears, and…’

\((kwemί ‘take’ class I, mass undergoer; N)\)

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 fά-ό-ya-a-mbo,

pig Vincent shoot-3SG-3FSG:O COMPL-CR-3SG-3FSG:O-DEP

‘Vincent shot the pig, and then…’

\((nefi (na-) ‘shoot’ class II; fefί (fa-) ‘leave’)\)
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 ingufu-Ø-ya-a-Ø,*

Victoria=OBJ person attack-CR-3SG-3FSG:O-DEP

‘Someone attacked Victoria, and…’ (ingufu ‘attack’ class II)

5-147. *mingu 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)
Oblique phrases can occur in any pre-verbal positions; oblique phrases can even occur before a topic expression (see below).

5-150. a. hwi=mbe yo bakali homba-ha-a-hwa.

water = INS 1 frog see-1SG-3SG:O-PAST

b. yo hwi=mbe bakali homba-ha-a-hwa.

c. yo bakali hwi=mbe homba-ha-a-hwa.

d. hwi=mbe 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. *hwī = 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…’

(*sefī* (*sa*) ‘carry’ class IIb,  *hanu* (*han*/ *gan*) ‘go down’ class III; A)

5-152. *ai = na*  *tumali*  *hupla*  *ambya rungu 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*  [*yaflī 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  hole

‘They were searching for that in the hole, and…’

(hwatu ‘search’ class I; A)

Chain clause:

5-155. ma - ek - wa - mbona  **hambu hwila**.

DR - exist - 3FSG - DEP  red  mother

‘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  Humlali  collect.place

‘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  sago = OBJ

‘We ate the sago, and…’ (seru (ser- / det-) ‘eat’ class IH)

5-158. baha - hya - a - Ø  **butumu = hi**.

cut.put - 1SG - 3FSG: O - DEP  leaf = ADS

‘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.

coconutstalk  side

‘I take (the bucket) to the coconut stalk, and…’

(sefī (sa-)) ‘carry’ class IIb,  pi (pi-/ po-) ‘go’ class I,  sahefī (saha-) ‘put horizontally’ class IIb;  nungu (nung-~ 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 = mbc.

strainer  spread-1SG-3FSG:O  CR-SEQ-1SG -DEP  bucket = ADS

‘I spread the strainer inside the bucket…’ (faliī (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 IHi) which can be used either intransitively and transitively (similar to English), and there is the zero-valent
verb *efifi* (*eфи-*) ‘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.