

Chapter 7

Dependent Verbal Morphology and Interclausal Relationship

There are three types of dependent clauses in Menggwa Dla: subordinate clauses (§7.1), chain clauses (§7.2), and non-finite chain clauses (§7.3.1). Nearly identical to non-finite chain clauses in form are the verbal noun phrases (§7.3.2). Subordinate verbs, chain verbs, non-finite chain verbs and verbal nouns are reduced in inflections to various levels in comparison with independent verbs (§6). Subordinate verbs are cross-referenced (§5.2), but they mark a slightly reduced range of tense-mood categories. Chain verbs are also cross-referenced, but they are basically devoid of tense-mood information. Nevertheless, chain verbs are marked for switch-reference and can sometimes indicate interclausal temporal relationships (§7.4). Non-finite chain verbs and verbal nouns are not cross-referenced, and the only verb-like inflection they have is the ‘posterior’ suffix *-mba* (§7.3). Verbal noun phrases function as grammatical relations, and they can be encliticised with certain nominal clitics (§4.5). Another noun-like property of verbal nouns is that verbal noun phrases require a copula (§6.4) when functioning as syntactic predicates. The following table, which is repeated from table 3.1 in §3.1.1, summarises the main morphosyntactic differences between independent verbs, subordinate verbs, chain verbs, non-finite chain verbs, verbal nouns, and nouns. Also see §3.1.1 on morphosyntactic comparison between these types of verbs, verbal nouns and nouns.

Table 7.1 Levels of verbal and nominal properties

	d)	e)	a), b), c)	f)
Independent verbs	full range	yes	no	none
Subordinate verbs	slightly reduced	yes	no	none
Chain verbs	basically no	yes	no	none
Non-finite chain verbs	no	no	no	none
Verbal nouns	no	no	yes	limited
Nouns	no	no	yes	full

a) phrase projecting;

b) can be cross-reference on verbs and resumptive pronouns;

c) require copulas to function as predicates

d) carry tense-mood affixes

e) take cross-reference suffixes

f) the range of case clitics of phrase projected by the word can take

The grammatical verbs of *fefi* ~ *mefi/ ma* ‘completive’ and *nungu* ‘sequential’ can be serialised to CR chain verbs (§7.2.1) and non-finite chain verbs (§7.3.1); the two grammatical verbs are discussed in §7.4. Chain verbs and non-finite chain verbs carry a dependency suffix *-Ø* ~ *-mbo* ~ *-mbona* which indicates that the verb is dependent on the final verb of the clause chain/ non-finite clause chain for full grammatical specifications; the dependency suffix is discussed in §7.5. The following are some examples of the types of verbs and verbal nouns mentioned above.

Independent verb (§6):

7-1. *han-wa-mbi.*

go.down-3FSG-PRES:TRANSN

‘She is going down (now).’

Subordinate verb — relative clause verb (§7.1.1):

7-2. [*han-wa-mbi*] (*hwalféhi = na humbutu no.*)

[go.down-3FSG-PRES] (woman = TOP deaf COP:3FSG)

‘(The woman) [who is going down/ who goes down] (is deaf).’

Subordinate verb — realis *-hwani* ‘when’ verb (§7.1.2.1):

7-3. (*nunḡula yapali-Ø, hwi = na*) *han-wa-hwani,*

(throat be.dry-DEP water = ALL) go.down-3FSG-when

(*wali ser-wa-hi.*)

(pig eat-3FSG-PRES:CONT)

‘(They become thirsty, and) when they go down (to the river, pigs eat (them).)’

Subordinate verb — irrealis *-hwani* ‘if’ verb (§7.1.2.2):

7-4. *hof-wa-hwani,* (*da-ufati da-mba-wa-Ø.*)

come-3FSG-if (this-medicine give:FUT-2SG-3SG:O-IMP)

‘If she comes, (give her this medicine).’

Subordinate verb — *-hi* simultaneous verb (§7.1.3):

- 7-5. *han-wa-hi*, (*akwani = mbo homba-Ø-a-hwa.*)
go.down-3FSG-SIM (snake = OBJ see-N1SG-3FSG:O-PAST)
'While going down, she saw a snake.'

Chain verb — CR chain verb (§7.2.1):

- 7-6. *Ø-han-o-mbo*, (*akwani = mbo homba-Ø-a-hwa.*)
CR-go.down-3FSG-DEP (snake = OBJ see-N1SG-3FSG:O-PAST)
'She_j went/ goes down, and (she_j saw a snake).'

Chain verb — DR chain verb (§7.2.1):

- 7-7. *ma-han-wa-mbo*, (*akwani aiahafumbo homba-Ø-a-hwa.*)
DR-go.down-3FSG-DEP (snake 3SG:OBJ see-N1SG-3FSG:O-PAST)
'She_j went/ goes down, and (the snake saw her_{j/k}).'

Chain verb — hypothetical protasis (§7.2.3):

- 7-8. *Ø-han-o-mbo*, (*akwani = mbo homba-Ø-a-naho.*)
CR-go.down-3FSG-DEP (snake = OBJ see-N1SG-3FSG:O-CNTF)
'If she has gone down, (she would have seen the snake).'

Non-finite chain verb (§7.3.1):

- 7-9. *hanu-mbo*, *walambani-mbo*, *seru-mbo*,
go.down-DEP swim-DEP eat-DEP
'One goes down, and swims, and eats, and ...'

Verbal noun (§7.3.2):

7-10. [*wamla seru-mbo*](=*na tite no.*)

[betel.nut eat-NOML](=TOP bad COP:3FSG)

‘Betel nut chewing (*lit.* ‘eating’) (is bad.)’

7.1 Subordinate clauses

Based on their functions, three types of subordinate clauses can be distinguished: relative clauses (§7.1.1), *-hwani* ‘if/when’ clauses (§7.1.2) and *-hi* simultaneous clauses (§7.1.3). Most subordinate verbs are formally indistinguishable from independent verbs (§6); both subordinate verbs and independent verbs carry cross-reference suffixes (§5.2), and except for the ‘if/ when’ suffix *-hwani*, the tense-mood suffixes used on subordinate verbs are formally the same as the ones used on independent verbs. Nevertheless, the range of tense-mood affixes available to relative clause verbs is smaller than independent verbs, and the grammatical categories marked by the subordinate tense-mood affixes may be slightly different from the formally identical independent tense-mood affixes. For instance, *-hi* marks present tense and continuous aspect on independent verbs (§6.1.1) but interclausal simultaneity on subordinate verbs (§7.1.3); *-mbi* marks present tense and stative/ ‘transitional’ aspect on independent verbs (§6.1.1) but only present tense on subordinate verbs (§7.3.1).

Relative clauses exist within noun phrases, and noun phrases may occupy the post-verbal position (§5.4). Otherwise, subordinate clauses always precede the matrix clause verb. ‘Because’ is conveyed by the word *hwambo* ‘being the case’

(§3.2.9). Copulas (§6.4) are not used in subordinate clauses; finite forms of copulas are only used in independent clauses.

7.1.1 Relative clauses

Relative clauses are subordinate clauses which act as nominal modifiers (§4.3). There is no relativising morpheme in Menggwa Dla, and relative clause verbs are formally indistinguishable from independent verbs (§6). Nevertheless, the range of tense-mood affixes available to relative clauses is restricted: only indicative (§6.1-2), tentative (§6.3.3) and counterfactual (§6.3.4) moods can be used in relative clauses. The past tense suffix *-hwa* (§6.1.2) is not used in relative clauses; the ‘past tense with focus’ suffix *-hya* (§6.1.2) is used for all past tense relative clauses.¹ The present tense stative/ transitional aspect suffix *-mbi* (§6.1.1) is used for all present tense relative clauses; the other present tense suffix, the present tense continuous aspect suffix *-hi* (§6.1.1) is not used in relative clauses.²

Relative clauses in Menggwa Dla can be externally-headed, internally-headed, or zero-headed. Relative clauses with overt heads are externally-headed if the position relativised is represented by a cross-reference suffix on the relative clause verb, and internally-headed if the position relativised is not represented by a cross-reference suffix on the relative clause verb. Verbs either carry a subject cross-reference suffix, or a subject plus an object cross-reference suffix (§5.2). This means that relative clauses are externally-headed when the position relativised is the subject or sometimes the object, and internally-headed when the position relativised

¹ See also §6.1 on the grammaticalisation of case clitics to realis tense-aspect suffixes.

² However, *-hi* is used in another type of subordinate clause; see §7.1.3 on *-hi* simultaneous clauses.

is the second object, oblique, or sometimes the object (§5.3.1). It can be said that for relative clauses with overt heads, Menggwa Dla has a preference of the position relativised being represented by an overt element within the relative clause, but external-headedness has precedence over internal-headedness. The following are examples of externally-headed, internally-headed and zero-headed relative clauses.

Externally-headed:

- 7-11. *[[dani = hi hof-u-hya] **yani**] sihi-Ø-hwa.*
 [[this = ADS come-3MSG-PAST] man] stink-3MSG-PAST
 ‘The man who came here stank.’

Internally-headed:

- 7-12. *[dani = hi **simbu** hof-u-hya] hwi-wa-hwa.*
 [this = ADS morning come-3MSG-PAST] rain-3FSG-PAST
 ‘It rained on the morning which he came.’

- 7-13. *[**wuli** = mbe hahof-u-hya] hah-ihah-hwa.*
 [house = INS go.up-3MSG-PAST] go.up-1SG-PAST
 ‘I went into the house that he went into.’

Zero-headed:

- 7-14. *[hahof-u-hya] ehala bi = la no.*
 [go.up-3MSG-PAST] 3SG:GEN uncle = GEN COP:3FSG
 ‘The one that he went up into (e.g. house) is his uncle’s.’

In an externally-headed relative clause, the head noun must be cross-referenced on the relative clause verb. Based on the preference for a head-noun-referring expression to exist within the relative clause, one potential analysis is that an ‘externally-headed relative clause’ is actually an internally-headed relative clause with a cross-reference suffix on the relative clause verb as the head. However, this cannot be true; it is the free (pro)nominal outside the relative clause — rather than the cross-reference suffix inside the relative clause — which is the head of the relative clause. This can be established by the syntactic behaviour of the other noun modifiers (e.g. adjectives) when the head noun has other noun modifiers in addition to the relative clause (§3.1; §4.3): for externally-headed relative clauses, the other modifiers of the head noun must exist outside of the relative clause; for internally-headed relative clauses, the other modifiers of the head noun must exist inside the relative clause. In the following example, the adjective *hwalfā* ‘young’ which modifies the head noun *yani* ‘man’ cannot exist within the relative clause. Otherwise, it can exist in any position within the noun phrase, including the post-head-noun position which is not contiguous to the relative clause (i.e. in this case *hwalfā* clearly cannot be part of the relative clause).

Externally-headed relative clause:

7-15. [(*hwalfā*) [*dani = hi hof-u-hya*] (*hwalfā*) *yani* (*hwalfā*)]

[(young) [this = ADS come-3MSG-PAST] (young) man (young)]

sihi-Ø-hwa.

stink-3MSG-PAST

‘The (young) man who came here stank.’

Contrast the example above with the example below. For modifier(s) of the head noun of an internally-headed relative clause, the modifier(s) must exist within the relative clause as well. Moreover, the modifier must form a noun phrase with the head noun which exists within the relative clause. In the following example, the adjective *bukwa* ‘big’ can exist immediately before or after the head noun *wuli* ‘house’. The noun phrase *bukwa wuli/ wuli bukwa* ‘big house’ is marked together with an inessive case clitic =*mbe* (§4.5.3).³

Internally-headed relative clause:

7-16. *[[(bukwa) **wuli** (bukwa)]=mbe hahof-u-hya] hah-ih-hwa.*
 [[(big) house (big)]=INS go.up-3MSG-PAST] go.up-1SG-PAST
 ‘I went into the (big) house that he went into.’

Except for relative clauses which exist in post-verbal nominals (§5.4), all subordinate clauses exist before the matrix clause verb. The following sentence exemplifies a post-verbal nominal which contains a relative clause.

7-17. *Ø-hahof-u-mbo [[dupli-Ø-hya] yani],*
 CR-go.up-3MSG-DEP [[joke-3MSG-PAST] man]
 ‘The man [who joked] went up, and...’

³ Instances of noun phrases with a relative clause plus another noun modifier are very rare in natural discourse, and there are no instances of a zero-headed relative clause modifying the same head noun with another noun modifier. Based on the assumption with externally-headed relative clause (§7.1.1.1) that only free (pro)nominals can be the head of a relative clause, zero-headed relative clauses (§7.1.1.3) are considered to be zero-headed because they lack an overt free (pro)nominal which refers to the head noun.

The following subsections of §7.1.1.1, §7.1.1.2 and §7.1.1.3 are more in-depth discussions on externally-headed relative clauses, internally-headed relative clauses and zero-headed relative clauses respectively.

7.1.1.1 Externally-headed relative clauses

Externally-headed relative clauses are free to precede or follow the head noun, like other noun modifiers (§4.3). The position relativised of an externally-headed relative clause must be represented by a cross-reference suffix within the relative clause. As cross-reference suffixes are pronominal in Menggwa Dla (§5.3.2), the cross-reference suffix which represents the position relativised in an externally-headed relative clause is analogous with resumptive pronouns in relative clauses in other languages.

The head of an externally-headed relative clause does not exist within the relative clause as the head cannot be cased-marked for the grammatical role of the position relativised in the relative clause. This can be clearly shown in cases where the position relativised is the object, but the head noun phrase is not the object of the matrix clause; in these cases, the head cannot take the object case clitic =*mbo* (§4.5.1) as if it exists within the relative clause.⁴ The position relativised is the object in the example below; the noun phrase which contains the relative clause in example 7-18 is the subject of the matrix clause, and in example 7-19, the noun phrase which contains the relative clause is the second object of the matrix clause.

⁴ Objects take an object case =*mbo*, but subjects and second objects are zero case-marked (§4.5.1, §5.3.1.)

7-18. *yani*(* = mbo) [*si homba-i-Ø-hya*] = na

man(* = OBJ) [2 see-N1MSG-3MSG:O-PAST] = TOP

yowala aru nu.

3SG:GEN dad.bro COP:3MSG

‘The man [whom you saw] is my uncle.’

7-19. *hyela*(* = mbo) [*numu-ya-a-hya*]

skin(* = OBJ) [wear-3SG-3FSG:O-PAST]

yoambo sa-ka-i-mbo.

1SG:OBJ give-3SG-1SG:O-DEP

‘S/he gave me the shirt [s/he was wearing], and...’

In the following example, the position relativised is the object, and the grammatical relation of the noun phrase *wamla fahyambo* ‘the betel nuts which s/he/you picked’ is also the object. However, the head noun *wamla* ‘betel nut’ still cannot be attached with an object case clitic in this case for two reasons: a) the head noun *wamla* ‘betel nut’ is not part of the relative clause; and b) case clitics are attached to the last word of a noun phrase, and the head noun *wamla* ‘betel nut’ happens not to be the last word of the noun phrase. The head noun *wamla* ‘betel nut’ must remain not case-marked.

7-20. [*wamla*(* = mbo) [*fā-Ø-a-hya*] = mbo]

[betel.nut(* = OBJ) [pick.betel.nut-N1SG-3FSG:O-PAST] = OBJ]

ser-ihahi.

eat-1SG-PRES:CONT

‘I am chewing the betel nut [which s/he/you picked].’

The examples above demonstrate post-nominal relative clauses. The following sentences exemplify prenominal relative clauses; relative clauses are free to precede or follow the head noun (§4.3).

7-21. [*hamani numungwa-wa-hya*] *wi* = na *amungwa no*.

[yesterday die-3FSG-PAST] child = TOP first.born COP:3FSG

‘The child [who died yesterday] is the first born child.’

7-22. [*hari-wu-a-hya*] *hwangu* = mbe = na

[enter-N1MSG-3FSG:O-PAST] cave = INS = TOP

imbumamo hwalfēhi Ø-numb-ei-mbo,

three woman CR-sit-N1FPL-DEP

‘In the cave which they entered lived three women, and...’

7-23. *yo* [*dani buku = mbo pa-hya-a-hya*] *nyewi* (= mbo)

1 [this book = OBJ write-3SG-3FSG:O-PAST] person (= OBJ)

hwahwa-hi-Ø-hi.

know-1SG-3MSG:O-PRES:CONT

‘I know the person who wrote this book.’

Relative clauses must exist within noun phrases, but relative clauses need not be adjacent to the head noun, as shown in the following example. In the following example, the head noun *hwafɔ* ‘talk’ is modified by two modifiers: the genitive phrase *amamo = la* ‘of the moon’ and the relative clause *hohohiahya* ‘which they told’. The order of modifiers within a noun phrase is grammatically free (§4.3); the head noun and its modifiers can be in any order within the noun phrase.

7-24. *[[hoho-hi-a-hya] amamo = la hwafɔ] hoho-mba-mbo.*

[[tell-3FPL-3FSG:O-PAST] moon = GEN talk] tell-POST-NOML

‘(I) will tell (you) the story of the moon which they were telling.’ (A)

Because of the lack of case-marked relativising morphemes, and because subjects and objects are often expressed only as cross-reference suffixes, sometimes the position relativised can be ambiguous. In the following example, the relative clause *hombaihya* can either mean ‘who [saw him]’ or ‘whom [you/ he saw]’; if *hombaihya* is an independent clause, it would mean ‘you/he saw him’. Also compare example 7-25 below with example 7-18 above.

7-25. *yani [homba-i-Ø-hya] = na*

man [see-N1MSG-3MSG:O-PAST] = TOP

yowala aru nu.

3SG:GEN dad.bro COP:3MSG

‘[The man [who saw him]/ the man [whom you/he saw]] is my uncle.’

Relative clauses which are not in past tense and positive polarity are rare in natural discourse. The following are some examples of relative clauses which are not positive and/ or not past tense.

Present tense (§6.1.1) relative clause:

7-26. *[[ap-aha-mbi] wuli = mbe]*

[[sleep-1SG-PRES] house = INS]

numungwa kelia aflambli = mbi no.

dead cockroach many = PROP COP:3FSG

‘There are many dead cockroaches in the house that I am staying in.’

Negative polarity past tense (§6.1.3) relative clause:

7-27. *[[sungwani buke-wi-hya] **refugee** = na] dani = hi num-ei-hwa.*

[[be.sick NEG:R-N1FPL-PAST] **refugee** = TOP] this = ADS sit-N1FPL-PAST

‘The refugees who were not sick stayed here.’

Future tense relative clause (§6.2):

7-28. **hwalfehi** *[John = sehi fa-hi-a samby-ei] = mbo*

woman [John = ADS leave-N1FPL-3FSG:O POS:SMR-N1FPL] = OBJ

hwahwa boka-ha-a-hi.

know NEG:R-1SG-3FSG:O-PRES:CONT

‘I do not know the woman [whom they will leave on John (i.e. marry him)].’

Tentative mood (§6.3.3) relative clause:

7-29. *[[aiahafumbo sungwani sa-ka-wa-ni] yafli = na]*

[[3SG:GEN sickness give-3SG-3SG:O-TENT] dog = TOP]

numungwa-wa-hi.

be.dead-3FSG-PRES:CONT

‘The dog who may have given him/her the sickness is dead.’

Counterfactual mood (§6.3.4) relative clause:

7-30. *[[apa kapali hahof-yei-naho] pasindia = na]*

[[today aeroplane go.up-N1FPL-CNTF] passenger = TOP]

hofu boke-wi-hwa.

come NEG:R--N1FPL-PAST

‘Passengers who were to board the aeroplane today did not come.’

7.1.1.2 Internally-headed relative clauses

If the position relativised is not cross-referenced on the relative clause verb, the head noun must occur within the relative clause. Second objects and obliques are never cross-referenced; objects are sometimes cross-referenced (§5.3.1). The head noun must be in the case of its grammatical relation within the relative clause, and the entire internally-headed relative clause carries a case clitic of its grammatical relation in the matrix clause. As there is no relativiser morpheme, it is up to the context to clarify which constituent is the head noun.

Second object relativised position:⁵

7-31. [*tirati* sa-ka-ya-hya]=mbo sama-hya-a-hwa.

[letter give-3SG-1SG:O-PAST]=OBJ burn-1SG-3FSG:O-PAST

‘I burnt the letter which s/he gave me.’

Oblique relativised position:

7-32. [*saftu* hof-afa-hya]=hi

[Saturday come-1SG-PAST]=ADS

amni=mbe ilo-hu-a-hya no.

garden=INS work-1PL-3FSG:O-PAST:FOC COP:3FSG

‘On the Saturday which you came we were working in the garden.’

7-33. dani=na [aiahafumbo **gun = nambo** na-Ø-a-hya] no.

this = TOP [3SG:OBJ **gun = ALL** shoot-N1SG-3FSG:O-PAST] COP:3FSG

‘This is the gun [which s/he/you shot him/her with].’

Object relativised position:

7-34. [*ufati* simi-aha-mbi]=nambo bapli kakalu-aha-mbi.

[medicine drink-1SG-PRES]=ALL head pain-1PL-PRES:STAT

‘I am heaving a headache because of the medicine I am taking.’

⁵ Second objects are zero case marked; as the head noun *tirati* ‘letter’ exists within the relative clause and the position relativised is the second object, the head noun *tirati* ‘letter’ must be zero case marked.

7-35. [*aiahala muli = mbo ser-ihahya*]=na kwala aflambli = mbi no.

[3SG:GEN orange = OBJ go-1SG-PAST] = TOP seed many = PROP COP:3FSG

‘His/her orange which I ate has lots of seeds.’

As seen in example 7-35 above, the head of a relative clause (*muli* ‘orange’) can be a modified nominal (the genitive phrase *aiahala* ‘his/her’). However, noun modifiers on their own cannot be relativised. Compare example 7-36 below with example 7-35 above. In example 7-36 below, the intended head noun *yani* ‘man’ is embedded within the noun phrase *yanila muli* ‘the man’s orange(s)’, and the sentence is ungrammatical.

7-36. *[[*yani = la*] muli = mbo ser-ihahya]=na

[[man = GEN] orange = OBJ go-1SG-PAST] = TOP

muli aflambli = mbi nu.

orange many = PROP COP:3MSG

‘The man whose orange(s) I ate has lots of oranges.’

Some younger speakers (born in 1980s or later) use non-finite verb forms (§5.1.1) instead of finite verb forms for internally-headed relative clauses. Relative clauses with non-finite verbs are usually deemed unacceptable by older speakers. (Verbs in externally-headed relative clauses remain finite for younger speakers; §7.1.1.1.)

7-37. [*yo tohalwa=mbo pi*]=*na* Jayapura =*hi no gwa...*

[1 school=OBJ go]=TOP Jayapura = ADS COP:3FSG but

‘The school which I go to is in Jayapura, but...’ (*pi* ‘go’ class I; 80V)

7-38. [movie *yohwefumbo nafi*]=*na*

[movie 1PL:OBJ show]=TOP

Malay *na* Chinese subtitle =*mbi no*.

Malay and Chinese subtitle = PROP COP:3FSG

‘The movie we were shown had Malay and Chinese subtitles.’

(*nafi* ‘show’ class II; 80IV)

7-39. [*ai yani=lofo hwafo*]=*na* misionari *nu*.

[3 man=COM talk]=TOP missionary COP:3MSG

‘The man whom s/he was talking with is a missionary.’

(*hwafo* ‘talk’ class I; 80II)

7.1.1.3 Zero-headed relative clauses

Relative clauses can also be zero-headed, but zero-headed relative clauses are relatively rare. For zero-headed relative clauses, the position relativised can be a subject, object, second object or an oblique object.

7-40. [*kia boke-wa-mbi*]=*mbo kaha-wa-a-Ø!*

[bear.fruit NEG:R-3FSG-PRES]=OBJ chop-2SG-3FSG:O-IMP

‘Chop the one which does not bear fruit.’

7-41. [yo popo-ha-a-hya]=mbo

[1 collect.eggs:MASS-1SG-3FSG:O-PAST]=OBJ

holombo ka-wa-a-Ø!

first break-2SG-3FSG:O-IMP

‘Cook the ones which I have collected first.’

7-42. ai [hihiri-ma-hya]=mbo jual-wu-a-mbo.

3 [steal-N1MPL-PAST]=OBJ sell-N1MPL-3FSG:O-DEP

‘They sold what they have stolen, and...’

7-43. [sa-ka-nya-hya]=na sufwa-aha-mbi.

[give-3SG-2SG:O-PAST:] = TOP like-1SG-PRES:STAT

‘I like what s/he gave you.’

7-44. [nung-wa-mbi]=na yamala no.

[sit-3FSG-PRES]=TOP left COP:3FSG

‘The one that she lives in is the left hand side one.’

The zero-headed relative clauses in Menggwa Dla are functionally similar to complement clauses in other languages, as both zero-headed relative clauses and complement clauses can act as arguments of the matrix predicate. Nevertheless, zero-headed relative clauses in Menggwa Dla are different from prototypical complement clauses⁶ in that complement clauses are represented in the semantic frame of the matrix verb as propositions, whereas zero-headed relative clauses are

⁶ Clauses which function on their own as arguments of the matrix clause (e.g. Noonan 1985).

represented in the semantic frame of the matrix verb as variables like other (pro)nominals. Moreover, complement clauses do not exist in Menggwa Dla as such; English complement clauses can be translated into Menggwa Dla using simultaneous clauses (§7.1.3; example 7-45 below), verbal noun phrases (§7.3.2; example 7-46 below), or chain clauses (§7.2; example 7-47 below).

7-45. [hai fofo-Ø-a-hi] homba-hi-Ø-hi.

[fire blow-N1SG-3FSG-SIM] see-1SG-3MSG:O-PRES:CONT

‘I see him blowing fire.’ (*lit.* ‘While he is blowing fire, I see him.’)

7-46. [hai fofo-Ø] homba-hi-Ø-hwa.

[fire blow-NOML] see-1SG-3MSG:O-PAST

‘I saw him blowing fire.’ (*lit.* ‘I saw the (masculine) fire-blowing.’)

7-47. hai(=mbo) fofo-ma-Ø-a-mbo, homba-hi-Ø-hwa.

fire(=OBJ) blow-DR-N1SG-3FSG:O-DEP see-1SG-3MSG:O-PAST

‘I saw him blowing fire.’ (*lit.* ‘He was blowing fire, and I saw him.’)

7.1.2 -hwani if/ when clauses

Subordinate clauses marked with *-hwani* in Menggwa Dla are comparable to *if* or *when* subordinate clauses in English. In Menggwa Dla, *-hwani* clauses can be realis (§7.1.2.1) or irrealis (§7.1.2.2).

7.1.2.1 Realis *-hwani* ‘when’ clauses

A realis *-hwani* verb has a (non-future) finite verb stem (§5.1.1-2), subset A cross-reference suffix(es) (§5.2), and a *-hwani* ‘when’ suffix at the end. With realis *-hwani* clauses, the situation is known by the speaker as having occurred (positive polarity) or not occurred (negative polarity), or habitually occurring (positive) or habitually not occurring (negative), and the situation of the matrix clause begins after the inchoation point of the situation of the *-hwani* clause. The use of subordinate realis *-hwani* clauses is rather rare, for that sequential meaning is mostly conveyed by chain clauses (§7.2). A realis *-hwani* clause is used as the final clause of a non-finite clause chain or when it is followed by non-finite chain clauses (and non-finite chain clauses themselves are rather rare; §7.3.1). In a non-finite chain clause, the subject must be coreferential with the subject of the following clause in the clause chain. On the other hand, the subject of a *-hwani* clause must be disjoint-referential with the subject of its matrix clause. In effect, a non-finite chain verb and a realis *-hwani* verb is the coreferential (CR) and disjoint-referential (DR) verb forms — respectively — of a switch-reference (SR) system. Nevertheless, this non-finite/ *-hwani* SR system is used much less often than the chain clause SR system. (See §7.2 on chain clauses and §7.3.1 on non-finite chain clauses.)

In the following examples, the clauses preceding the *-hwani* clauses are non-finite chain clauses; in example 7-48 the *-hwani* clause is followed by another non-finite chain clause, and in example 7-49 the *-hwani* clause is followed by an independent clause. Notice the change in subject between the realis *-hwani* clause and the following matrix clause in both examples.

7-48. [*hofahi-Ø, hofa = hi ek-wa-hwani,*]

[fall-DEP ground = ADS exist-3FSG-when]

palangi = nambo hwela numuli-Ø,

machete = ALL skin remove-DEP

‘(The sago palm) falls, and then it lies on the ground, then (people) remove the bark with machetes, and...’ (B)

7-49. [*wangu harifi-mbo, num-wa-hwani,*] *butya-hwa-a-Ø.*

[sparrow enter-DEP sit-3FSG-when hit.with.stick-1DU-3FSG:O-JUS

‘The sparrows enter (the cave), and when they are already there, we will catch the sparrows.’ (N)

The following is an example with two positive realis *-hwani* clauses.

Whether the first *-hwani* clause is subordinate to the second *-hwani* clause or not is unclear.

7-50. *efi-ya-a-hwani,* *hwalfehi ap-ei-hwani,*

become.dark-3SG-3FSG:O-when woman sleep-N1FPL-when

yani dofo heli = na pi-mbo,

man secret ceremony = ALL go-DEP

‘When it becomes dark, when the women sleep, the men go to the secret ceremony, and...’

A negative realis *-hwani* verb is formed like an independent negative realis verb: the lexical verb is in its non-finite form; class I, IH and IIB lexical verbs are

serialised with the negative verb *boke* (class I), and class II and III verbs are serialised with the negative verb *boka* (class II) (see §6.1.3). The following is an example of a negative realis *-hwani* clause.

7-51. *hihifu boke-Ø-hwani, wuli hanu-mbo,*
 be.happy NEG:R-3MSG-when house go.down-DEP

‘When **he** is not happy, (**the foreign bride** _j) would leave the house, and...’

7.1.2.2 Irrealis *-hwani* ‘if/ when’ clauses

Positive irrealis *-hwani* verbs have the same form as realis *-hwani* verbs (§7.1.2.1), except that sometimes a future finite verb stem is used instead of a non-future finite verb stem (see below). Negative irrealis *-hwani* verbs are formed by affixing the negative irrealis affix *ma-/ -m/ -ma/ -me* (§6.3) to the verb stem of a positive irrealis *-hwani* verb.

The situation of an irrealis *-hwani* clause is imagined by the speakers, and the truth value of the *-hwani* clause proposition can turn out to be true. In some instances the speaker can be sure that the proposition of a *-hwani* clause will happen in the future (as in the example below). In these cases the *-hwani* clause is comparable with a *when* clause in English.

7-52. *efi-ya-a-hwani, ehala wuli pi-mba-Ø no.*
 become.dark-3SG-3FSG:O-when 3SG:GEN house go-POST-NOML COP:3SG

‘When it gets dark, (we) will go to his/her house.’

Most usually an irrealis *-hwani* clause is used as the protasis (the *if* clause) of a real conditional sentence. Real conditional sentences are conditional sentences where the protasis can be true or false based on (the speaker's) real world knowledge.⁷ The proposition of the irrealis *-hwani* apodosis (the *then* matrix clause) becomes true if the proposition of the irrealis *-hwani* protasis becomes true. The following sentences exemplify irrealis *-hwani* protases followed by apodoses in semi-real status (§6.2).

7-53. *hwi hof-wa-hwani, ga-gof-aha.*

water come-3FSG-if NEG:SMR-come:FUT-1SG

'If it rains, I will not come.'

7-54. *numungwa-wa-hwani, ilo-hya-ni-mby-a.*

die-3FSG-if work-1SG-2SG:O-POS:SMR-1SG

'If she dies, I will kill you.'

7-55. *yafli bli-mbo hof-ei-hwani, numbala holombo*

dog buy-NOML come-N1FPL-if black first

da-mba-u-mbo homba-Ø-a samby-afu.

give:FUT-2SG-3SG:O-DEP see-N1SG-3FSG:O POS:SMR-2SG

'If (someone) comes to buy the dogs, you try ('see') to give them the black ones first.'

⁷ On the other hand, hypothetical protases, which cannot be true based on real world knowledge, are rendered as chain clauses (§7.2.3).

Unlike realis *-hwani* clauses (§7.1.2.1), an irrealis *-hwani* clause need not be adjacent to a non-finite chain clauses, and the subject of an irrealis *-hwani* clause need not be disjoint-referential with the subject of the matrix clause. Example 7-56 below is an example where the interclausal subjects are coreferential. (The verb of the second clause is in future tentative mood; §6.3.3.2.)

7-56. *amani malai fafo kwami-afa-hwani,*

good Malay language take-2SG-if

Indonesia = *hi tohalwa po-me-afu.*

Indonesia = ADS school go:FUT-NEG:IR-2SG

‘If you learn Malay well, maybe you can go to school in Indonesia.’

The following are two examples of negative irrealis *-hwani* clauses.

7-57. *ma-gof-afa-hwani, yo = amba ga-po-l-aha.*

NEG:IR-come:IR-2SG-if I = too NEG:SMR-go:FUT-LIG-1SG

‘If you do not come, neither will I go.’

7-58. *hambala-me-wa-hwani, da-ufati da-mba-wa-Ø.*

be.pregnant-NEG:IR-3FSG-if this-medicine give:FUT-2SG-3SG:O-IMP

‘If she does not become pregnant, give her this medicine.’

Usually non-future finite verb stems (§5.1.2) are used in irrealis *-hwani* protases; the use of non-future verb stems signify that the conditional sentence is ‘timeless’ in that the apodosis proposition will occur whenever the protasis

proposition is satisfied. Future finite verb stems are only used when there is a specific time slot in the future in which the protasis proposition has to be fulfilled for the apodosis proposition to be fulfilled. This happens mostly when there is a future temporal word in the protasis. (Nevertheless, only a small number of verb lexemes have distinct non-future versus future finite verb stems; §5.1.2.)

7-59. *mingu da-ŋga-nya-hwani, ilo-ma-Ø-a?*

Sunday give:FUT-1SG-2SG:O-if do-NEG:IR-N1SG-3FSG:O

‘If I give (that) to you on Sunday, will you do (it)?’

7-60. *kyambe gof-afa-hwani, mome Senggi =na pi-mba-mbo.*

tomorrow come:FUT-2SG-if together Senggi = ALL go-POST-NOML

‘If you come tomorrow, (we) will go to Senggi together.’

7.1.3 *-hi* simultaneous clauses

The last type of subordinate clause is the *-hi* simultaneous clause.

Simultaneous verbs are formed with a finite verb stem (§5.1.1), subset A cross-reference suffix(es) (§5.2), and a simultaneous suffix *-hi* at the end of the verb. If the simultaneous suffix *-hi* is preceded by a cross-reference suffix which ends in *a*, the sequence *a-hi* can be contracted as *e* (see examples 7-65 and 7-66 below).⁸ The simultaneous suffix *-hi* signifies that the temporal domain of the situation of the subordinate clause and the matrix clause are at least partially overlapping. The

⁸ This contraction is available for simultaneous *-hi* verbs (subordinate) but not for present continuous *-hi* verbs (independent; §6.1.1).

following are examples of *-hi* simultaneous clauses. (Interclausal temporal relations in general are also discussed in §7.4).

7-61. *aya yapali hwatu-Ø-hi, dukumi po-me-Ø-mbona,*
father tree.kangaroo search-3MSG-SIM valley go-DR-3MSG-DEP
‘Father was searching for tree kangaroos as he went along the valley, and ...’

(N)

7-62. *hli-aha-hi, pi-a ma-hya-a numb-a-mbo,*
scrape-1SG-SIM go-1SG COMPL-1SG-3FSG:O SEQ-1SG-DEP
‘I would scrape (the interior of a sago palm), and make (the pith) loose, and then...’ (B)

7-63. *hwafo-ha-nya-hi homba-Ø-i-Ø.*
talk-1SG-2SG:O-SIM look-N1SG-1SG:O-IMP
‘Look at me while I am talking to you.’

Sometimes there are sentences like the following where the final clause and the preceding clause both carry a *-hi* suffix. In such sentences, the final clause is an independent clause where the suffix *-hi* indicates present tense and continuous aspect (§6.1.1), whereas the preceding clause is a subordinate clause where the suffix *-hi* indicates interclausal simultaneity. Except for relative clauses which exist within post verbal nominals (§7.1.1), subordinate clauses always precede the matrix clause verb (§7.1).

7-64. *numungwa-Ø-hi hihifu-aha-hi.*

be.dead-3MSG-SIM be.happy-1SG-PRES:CONT

‘I am glad that he is dead.’

7-65. *hambalafè (< hambala-afà-hi), sihafà afila hwahwa-Ø-hi.*

be.pregnant -2SG-SIM 2SG:GEN father know-3MSG-PRES:CONT

‘Your father knows that you are pregnant.’

7-66. *ilohe (< ilo-ha-a-hi), num-aha-hi.*

work-1SG-3FSG:O-SIM sit-1SG-PRES:CONT

‘I work and live (here).’ (S)

Also shown in the examples above is that *-hi* simultaneous clauses do not mark switch-reference (the subject of a *-hi* simultaneous clause can be coreferential or disjoint-referential with the subject of the matrix clause), unlike chain clauses which are marked for switch-reference (see §7.2.2).

As a case clitic on noun phrases, *=hi* represents adessive case (§4.5.3); as a tense-mood suffix on independent verbs, *-hi* signifies present tense continuous aspect (§6.1.1); the adessive case clitic *=hi* is also used with verbal noun phrases to indicate simultaneity (§7.3.2).

7.2 Chain clauses

Chain clauses — also known as medial clauses and cosubordinate clauses — are very common amongst Papuan languages.⁹ One or more chain clauses are linearly ‘chained’ together with an independent clause or a subordinate clause at the end to form a ‘clause-chain’; all preceding chain clauses are dependent on the final independent or subordinate clause for full tense-mood information.

Like independent (§6) and subordinate verbs (§7.1), chain verbs in Menggwa Dla carry cross-reference suffixes (§5.2). However, chain verbs do not have tense-mood affixes; instead, they have a dependency suffix *-Ø ~ -mbo ~ -mbona* (§7.5) which indicates that the clause is a dependent clause and the clause is dependent on the final clause of the clause chain for full tense-mood specifications. With the exception of the small number of verb lexemes which have tense-sensitive finite verb stem forms (§5.1.2), chain verbs in Menggwa Dla are devoid of tense-mood information. The following exemplifies two clause-chains: example 7-67 is in past tense (realis status) and example 7-68 is in future tense (semi-realisation status). In both examples, the first two clauses are chain clauses and the final clause is an independent clause. The chain verbs have a syntactic dependency suffix *-mbo*, and the independent verbs have tense-status affixes. Also notice that *hahofu* (*hah(of/uf)- / gak(of/uf)-*) ‘go up’ (class IH) in the second chain clause has a tense-sensitive finite verb stem (§5.1.2); the verb in the second clause of example 7-67 has a non-future finite verb root *hahof-*, and the verb in the second clause of example 7-68 has a future finite verb root *gakof-*. Otherwise, chain clauses are totally devoid of tense and mood information, like the identical first chain clauses in both examples.

⁹ Although not all Papuan languages have chain clauses, e.g. Marind languages on the southern coast and languages of the Bird’s Head area.

7-67. *wuli = hi afile = lofo hwafo-Ø-u-mbo,*

house = ADS father = COM talk-CR-3MSG-DEP

Ø-hahof-u-mbo,

CR-go.up-3MSG-DEP

ye ap-u-hwa.

then sleep-3MSG-PAST

‘He_j talked with father outside the house, and he_j went into the house, and then slept.’

7-68. *wuli = hi afile = lofo hwafo-Ø-u-mbo,*

house = ADS father = COM talk-CR-3MSG-DEP

Ø-gakof-u-mbo,

CR-go.up:FUT-3MSG-DEP

ye ap-a-ah-u-mb-i.

then sleep-3SG-3-M-POS:SMR-3MSG

‘He_j will talk with father outside the house, and he_j will go into the house, and then sleep.’

Although devoid of tense-mood information, chain verbs in Menggwa Dla are marked with switch-reference, and in some instances completive aspect and interclausal sequentiality as well. Forms of chain verbs are introduced in §7.2.1, and the syntax of switch-reference in §7.2.2. In addition, hypothetical protases are also expressed as chain clauses (§7.2.3). The form and function of the grammatical verbs of *fefi ~ mefi/me* ‘completive’ and *nungu* ‘sequential’ are discussed in §7.4.

Grammatically speaking, the three dependency suffixes — \emptyset , *-mbo* and *-mbona* — are free variations; see §7.5 for discussions on the dependency suffixes. Non-finite chain clauses, which do not carry cross-reference suffixes, are linearly ‘chained’ like chain clauses; see §7.3.1 on non-finite chain clauses. As the main verb of a clause, copulas are not used in chain clauses; all copular chain clauses are non-finite chain clauses; see §7.3.1.

7.2.1 Form of chain verbs

All chain verbs carry a cross-reference morpheme indicating that its subject is coreferential (CR) or disjoint-referential (DR) with the subject of a following clause (see §7.2.2 on the syntax of switch-reference). Chain verbs which indicate coreference of subjects between clauses are called CR chain verbs, and chain verbs which indicate disjoint-reference of subjects between clauses are called DR chain verbs. There are a number of morphosyntactic differences between CR chain verbs and DR chain verbs: a) CR chain verbs have a zero CR morph, whereas DR chain verbs have a *ma-/ -ma* or *-me* DR affix; b) CR chain verbs carry subset B cross-referencing (§5.2), whereas DR chain verbs carry subset A cross-referencing, with the exception of class IIB verbs which must take subset B cross-referencing regardless (§5.2.2); c) CR chain verbs must be in positive in polarity, whereas DR chain verbs can be in positive or negative polarity;¹⁰ d) CR chain verbs can be serialised with the completive verb *fēfi (fā-)* ~ *mefi (ma-)/ me* and the sequential verb *nungu (nu[mb/ŋg]-)* (§7.4), whereas DR chain verbs cannot be serialised with these verbs;

¹⁰ If two clauses have coreferential subjects and the first clause is in negative polarity, then the first clause cannot be a (CR or DR) chain clause; the first clause must be an independent clause, e.g.:

- \emptyset -hof-u-mbona gwa, wuli hahofu boke- \emptyset -hwa. wuli=hi \emptyset -num-u-mbo...
CR-come-3MSG-DEP but house go.up NEG;R-3MSG-PAST house=ADS CR-sit-3MSG-DEP
‘He_j came here but he_j did not go into the house. He_{j/k} sat outside the house, and...’

and e) as for the dependency suffix, CR chain verbs usually take $-\emptyset$ or $-mbo$, whereas DR chain verbs usually take $-mbo$ or $-mbona$ (see §7.5); $-mbona$ is rare with CR chain verbs and $-\emptyset$ is rare with DR chain verbs. The morphosyntactic differences between CR chain verbs and DR chain verbs are summarised in the following table.

Table 7.2 Morphosyntactic differences between CR and DR chain verbs

	CR chain verbs:	DR chain verbs:
CR/DR morph:	\emptyset	<i>ma-/ -ma/ -me</i>
cross-referencing:	subset B	subset A (except for class IIB verbs which must take subset B)
polarity:	must be positive: \emptyset	can be positive: \emptyset , or negative: <i>boke / boka</i>
interclausal temporal relations:	can be serialised with <i>fefi</i> (IIB) ~ <i>mefi</i> (IIB) / <i>me</i> (I) 'completive' and <i>nungu</i> (I) 'sequential' (§7.4)	do not indicate interclausal temporal relations
dependency suffix (§7.5):	$-\emptyset \sim -mbo \sim$ $-mbona$ (rare)	$-\emptyset$ (rare) ~ $-mbo \sim mbona$

The following are examples of a simplex CR chain verb, a CR chain verb serialised with both a completive verb and a sequential verb, and a DR chain verb, all in positive polarity. See §7.4 for more discussions on the completive verb and the sequential verb; see §7.5 for more discussions on the dependency suffix $-\emptyset \sim -mbo \sim -mbona$.

7-69. *Ø-ser-i-mbo*,

CR-eat-1SG-DEP

‘I ate, and I...’ (-*i* class IHB)

7-70. *ser-i fa-hya-a Ø-numb-a-Ø*,

eat-1SG COMPL-1SG-3FSG:O CR-SEQ-1SG-DEP

‘I ate, and after that I...’ (-*i* class IHB, -*hya-a* class IIB, -*a* class IB)

7-71. *ma-ser-ih-a-mbo*,

DR-eat-1SG-DEP

‘I ate, and someone else...’ (-*ih-a* class IHA)

The following are more detailed discussions on the DR affix and irregular DR verb forms (§7.2.1.1), and cross-reference suffixes and polarity in chain verbs (§7.2.1.2).

7.2.1.1 The DR affix and irregular DR verb forms

The most salient difference between DR and CR chain verbs is that CR verb forms have a zero CR morph, whereas DR chain verbs have an overt DR affix. Usually, the DR affix comes in the form of *ma-*, *-ma* or *-me*. The DR morph has the same allomorphy as the negative irrealis affix (§6.3).¹¹ However, some verb lexemes have irregular DR chain verb forms and/or irregular negative irrealis verb

¹¹ There is also an *-m* allomorph of the negative irrealis affix. However, *-m* is only used when followed by a subset B cross-reference suffix (§5.2), and DR chain verbs only take subset A cross-reference suffixes, so *-m* is not used with DR chain verbs.

forms, in which case the DR affix may differ from the negative irrealis affix. The (regular) allomorphy of the DR morph is as follow.

- *ma-* is prefixed to consonant ending class I or class IH finite verb stems;¹²
- *-me* is suffixed to vowel ending class I finite verb stems.
- *-ma* is suffixed to class IIB or II finite verb stems;
- *ma-* is prefixed to class III finite verb stems;

Cross-linguistically, it is usual for the DR verb forms to be more marked than the CR verb forms (e.g. Haiman 1983), and Menggwa Dla conforms to this tendency. The following are examples of the regular DR affixes in each verb class.

7-72. *ma-hof-u-mbo*,

DR-come-3MSG-DEP

‘He came, and someone else...’

(*hofu* (*hof-/gof-*) ‘go down’ class I; *-u* class IA)

7-73. *ma-ganyar-ih-a-mbo*,

DR-taste-1SG-DEP

‘I tasted it, and someone else...’

(*ganyaru* (*ganyar-*) ‘taste’ class IH; *-iha* class IHA)

¹² All class IH verbs have consonant ending finite verb stems (§5.2.1).

7-74. *bara-me-ehye-mbo*,

run-DR-1DU-DEP

‘We ran, and someone else...’

(*bara* ‘run’ class I; *-ehye* class IA)

7-75. *pi-ma-ya-a-mbo*,

throw-DR-3SG-3FSG:O-DEP

‘S/he threw it, and someone else...’

(*pifi* (*pi-*) ‘throw’ class IIB; *-ya-a* class IIB)

7-76. *homba-ma-Ø-a-mbo*,

see-DR-N1SG-3FSG:O-DEP

‘S/he/you saw it, and someone else...’

(*homba* ‘see’ class II; *-Ø-a* class IIA)

7-77. *ma-sa-ninga-nya-mbo*,

DR-give-1SG-2SG:O-DEP

‘I gave you (something), and someone else...’

(*sefi* (*sa-/ da-*) ‘give’ class III; *-ninga-nya* class IIIA)

There are verbs with irregular DR chain verb forms. Three verbs have irregular DR verb stems. The verb lexeme *pi* ‘go’ (class I) has a non-future finite verb stem *pi-* and a future finite verb stem *po-*. However, this verb lexeme unexpectedly uses *po-* for all DR chain verb forms. The verb lexeme *hwafō* ‘say’ (class I) has the verb stem *hwafō-* in all environments, except that in DR chain verb

forms the verb stem is *eh-* when it is followed by a rounded segment (*-u* 3MSG, *-wa* 3FSG, *-uma* N1MPL), and *r-* when it is followed by an unrounded segment (all other class IA cross-reference suffixes; §5.2.1).

7-78. *mehwambo* (< *ma-eh-wa-mbo*),

DR-say-3FSG-DEP

‘She said, and someone else...’

7-79. *ma-r-aha-mbo*,

DR-say-1SG-DEP

‘I said, and someone else...’

7-80. *mehumambo* (< *ma-eh-uma-mbo*),

DR-say-N1MPL-DEP

‘They said, and someone else...’

The verb *apu* (*ap-*) ‘sleep’ (class I) has *ap-* as its DR verb stem when the subject is third person singular (cross-reference suffixes: *-u* 3MSG, *-wa* 3FSG), and *e* otherwise.

7-81. *mehambo* (< *ma-e-aha-mbo*),

DR-sleep-1SG-DEP

‘I slept, and someone else...’

7-82. *ma-ap-wa-mbo*,

DR-say-3FSG-DEP

‘She slept, and someone else...’

7-83. *memambo* (< *ma-e-ma-mbo*),

DR-sleep-N1MPL-DEP

‘They slept, and someone else...’

For some speakers the DR affix is infix to certain verbs, e.g. the DR verb base for *kahefi* (*kaha-*) ‘chop’ (class IIB) is *ka[ma]ha-*; the DR verb base for *kefi* ‘break’ (monovalent) (class IIB) is *ka[me]fi-*. The verb lexemes *mefi* (*ma-*) ‘finish’ (bivalent) (class IIB) and *me* ‘finish’ (monovalent) (class I) do not have CR chain verb forms when they are used as lexical verbs;¹³ their verb stems are portmanteau morphs representing both the lexical morpheme and the DR morpheme, and they do not take an extra DR affix, e.g. *ma-hya-a-mbo* (finish:DR-1SG-3FSG:O-DEP) ‘I finished it, and someone else ...’, *me-wa-mbo* (finish:DR-3FSG-DEP) ‘it finished, and someone else ...’.

7.2.1.2 Polarity and cross-reference suffixes on chain verbs

Except for class IIB verbs which can only take class IIB cross-reference suffixes (§5.2.2), DR chain verbs take subset A cross-reference suffixes, and CR chain verbs take subset B cross-reference suffixes. DR chain verbs can be in positive or negative polarity; CR chain verbs must be in positive polarity. In Menggwa Dla, the domain of negativity does not extend beyond clause boundaries; if the subjects of

¹³ See also §7.4 on the use of *mefi* (*ma-*)/ *me* as a grammatical verb indicating completive aspect.

two adjacent clauses are coreferential but the first clause is in negative polarity, the first clause cannot be a chain clause (a subordinate (§7.1) or independent clause (§6) can be used instead).

The negative form of a DR chain verb is formed by serialising a negative verb *boke* (class I) or *boka* (class II) in DR chain verb form to a non-finite form of the lexical verb; class I, IH and IIB lexical verbs take *boke* (which takes class I cross-reference suffixes), whereas class II and III lexical verbs take *boka* (which takes class II cross-reference suffixes). This is formally the same as the negative realis verb *boke/ boka* used in independent clauses (§5.1.3). Nevertheless, the chain clause negative verb *boke/ boka* does not indicate status, unlike the independent clause negative realis verb *boke/ boka* which indicates realis status. The following are examples of positive CR chain verbs, positive DR chain verbs and negative DR chain verbs in different verb classes. Notice the changes in the cross-reference suffixes, especially when the negative verb *boke* (class I)/ *boka* (class II) is used. The class III verb lexeme *sefi* (*sa-/ da-*) ‘give’ has a special negative non-finite form *sekoni* (§5.2.3).

Class I vowel ending finite verb stem, e.g. *hlua* ‘bleed’:

CR, positive:

7-84. *hlua-Ø-u-mbo*,

bleed-CR-3MSG-DEP

‘He_j bled, and he_j ...’ (-*u* class IB)

DR, positive:

7-85. *hlua-me-Ø-mbo*,

bleed-DR-3MSG-DEP

‘He bled, and someone else...’ (-Ø class IA)

DR, negative:

7-86. *hlua boke-me-Ø-mbo*,

bleed NEG-DR-3MSG-DEP

‘He did not bleed, and someone else...’ (-Ø class IA)

Class I consonant ending finite verb stem, e.g. *hofu* (*hof-/gof-*) ‘come’:

CR, positive:

7-87. *Ø-hof-a-mbo*,

CR-come-1SG-DEP

‘I came, and I...’ (-*a* class IB)

DR, positive:

7-88. *ma-hof-aha-mbo*,

DR-come-1SG-DEP

‘I came, and someone else...’ (-*aha* class IA)

DR, negative:¹⁴

7-89. *hofu boke-me-aha-mbo*,

come NEG-DR-1SG-DEP

‘I did not come, and someone else...’ (-*aha* class IA)

Class IH consonant ending verb stem, e.g. *hanu* (*han-/ gan-*) ‘go down’:

CR, positive:

7-90. *Ø-han-ufu-mbo*,

CR-come-2SG-DEP

‘You went down, and you...’ (-*ufu* class IHB)

DR, positive:

7-91. *ma-han-ufa-mbo*,

DR-come-2SG-DEP

‘You went down, and someone else...’ (-*ufa* class IHA)

DR, negative:

7-92. *hanu boke-me-afa-mbo*,

come NEG-DR-2SG-DEP

‘You did not go down, and someone else...’ (-*afa* class IA)

¹⁴ The non-finite verb stem of the lexical verb is used in a negative DR chain clause, and all non-finite verb stems are vowel-ending (§5.1.1).

Class IIB verb stem, e.g. *fēfi* (*fā-*) ‘leave’:

CR, positive:

7-93. *fā-Ø-ya-a-mbo*,

leave-CR-3SG-3FSG:O-DEP

‘S/he_j left, and s/he_j ...’ (*-ya-a* class IIB)

DR, positive:

7-94. *fā-ma-ya-a-mbo*,

leave-DR-3SG-3FSG:O-DEP

‘S/he_j left, and someone else...’ (*-ya-a* class IIB)

DR, negative:

7-95. *fēfi boke-me-wa-mbo*,

leave NEG-DR-3SG-3FSG:O-DEP

‘She did not leave, and someone else...’ (*-wa* class IA)

Class II verb stem, e.g. *homba* ‘see’:

CR, positive:

7-96. *homba-Ø-hya-a-mbo*,

see-CR-1SG-3FSG:O-DEP

‘I saw her_j, and I...’ (*-hya-a* class IIB)

DR, positive:

7-97. *homba-ma-ha-a-mbo*,

see-DR-1SG-3FSG:O-DEP

‘I saw her_j, and she_j/someone else_{k/l...} ...’ (-*ha-a* class IIA)

DR, negative:

7-98. *homba boka-ma-ha-a-mbo*,

see NEG-DR-1SG-3FSG:O-DEP

‘I did not see her_j, and she_j/someone else_{k/l...} ...’ (-*ha-a* class IIA)

Class III verb stem, *sefi* (*sa-/ da-*) ‘give’:

CR, positive:

7-99. *Ø-sa-ka-ni-mbo*,

CR-give-3SG-2SG:O-DEP

‘S/he_j gave you (something), and s/he_j ...’ (-*ka-ni* class IIIB)

DR, positive:

7-100. *ma-sa-ka-nya-mbo*,

DR-give-3SG-2SG:O-DEP

‘S/he gave you (something), and someone else ...’ (-*ka-nya* class IIIA)

DR, negative:

7-101. *sekoni boka-ma-Ø-nya-mbo*,

give:NEG NEG:R-DR-N1SG-2SG:O-DEP

‘S/he did not give you (something), and someone else ...’ (-*Ø-nya* class IIA)

Some verbs have distinct non-future versus future finite verb stems (§5.1.2); the non-future verb stem is used when the final clause of the clause chain is in a non-future tense (§6.1, §6.3), and the future verb stem is used when the final clause of the clause chain is in future tense (§6.2, §6.3). Compare the future chain verb forms of *sefi* (*sa-/ da-*) ‘give’ (class III) below with the non-future chain verb forms of *sefi* in examples 7-99 and 7-100 above.

CR, positive:

7-102. *Ø-da-ka-ni-mbo*,

CR-give:FUT-3SG-2SG:O-DEP

‘S/he_j will give you (something), and s/he_j ...’ (*-ka-ni* class IIIB)

DR, positive:

7-103. *ma-da-ka-nya-mbo*,

DR-give:FUT-3SG-2SG:O-DEP

‘S/he will give you (something), and someone else ...’ (*-ka-nya* class IIIA)

However, in a DR negative verb form, the non-finite verb form of the lexical verb is used, and non-finite verb forms are invariant (§5.1.1); the same DR negative verb form is used no matter what tense the sentence is in.

DR, negative:

7-104. *sekoni boka-ma-Ø-nya-mbo,*

give:NEG NEG-DR-N1SG-2SG-DEP

‘S/he/you will not give you (something), and someone else...’

(-Ø-nya class IIA)

There are also verb lexemes like *simi* (*simi-/ dom-*) ‘drink’ (class I) of which the non-future finite verb stem ends in a vowel and the future finite verb stem ends in a consonant; the shape and position of the DR affix changes accordingly.

CR, positive, non-future:

7-105. *simi-Ø-u-mbo,*

drink-CR-3MSG-DEP

‘He_j drank, and he_j...’ (-u class IB)

DR, positive, non-future:

7-106. *simi-me-Ø-mbo,*

drink-DR-3MSG-DEP

‘He drank, and someone else...’ (-Ø class IA)

CR, positive, future:

7-107. *Ø-dom-a-mbo,*

CR-drink:FUT-1SG-DEP

‘I will drink, and I...’ (-a class IB)

DR, positive, future:

7-108. *ma-dom-aha-mbo*,

DR-drink:FUT-1SG-DEP

‘I will drink, and someone else...’ (-*aha* class IA)

DR, negative:

7-109. *simi boke-me-Ø-mbo*,

drink NEG-DR-3MSG-DEP

‘He did/ will not drink, and someone else...’ (-Ø class IA)

7.2.2 Syntax of switch-reference¹⁵

Considerable functional differences exist between older speakers’ traditional switch-reference (SR) system and younger speakers’ innovative SR system (as used by speakers born since late 1970s). The traditional SR system used by older speakers is canonical of SR systems amongst Papuan languages: the CR and DR morphemes indicate that the subject of its own clause is coreferential and disjoint-referential respectively with the subject of a following clause. The references monitored by SR morphemes are called the SR pivots, and in Menggwa Dla the SR pivots are always the syntactic subjects, with no exceptions. The primary function of canonical SR systems is the indication of discourse participant continuity versus discontinuity, and in clause types where SR is marked, the correct CR or DR verb form must be used no matter what the person-number-gender features the SR pivots have. In the innovative SR system used by younger speakers, the CR verb forms only retain the coreference function when the subject cross-reference suffixes of the two clauses cannot resolve

¹⁵ Part of this §7.2.2 was presented in de Sousa (2005) and published as de Sousa (2006, in press).

the referentiality of the interclausal subjects; otherwise CR verb forms are SR-neutral, i.e. they do not monitor the referentiality of the references across clauses. The traditional SR system is discussed in §7.2.2.1 and the innovative SR system is discussed in §7.2.2.2. Cases of referential overlap are not marked differently between older and younger speakers' speech, and they are discussed in §7.2.2.3.

7.2.2.1 Traditional SR system

In older speakers' speech, if the subject of a chain clause is coreferential with that of a following clause, then a CR chain verb form is used; if the subject of a chain clause is disjoint-referential with that of a following clause, then a DR chain verb form is used.

Figure 7.3 Relationship from function to form in the Traditional SR System



In this respect the traditional SR system in Menggwa Dla is a canonical SR system. In Menggwa Dla, the SR pivots are always the syntactic subjects (more on this point below). In the following example (repeated from example 7-67 above), the first two clauses are chain clauses, and the last clause is an independent clause. The CR chain verb forms *hwafoumbo* 'he talks and...' and *hahofumbo* 'he goes up and...' in the first and second clauses both indicate the coreference of the subject of their own clause with the subject of the immediately following clause.

7-110. *wuli = hi afile = lofo hwafo-Ø-u-mbo,*

house = ADS father = COM talk-CR-3MSG-DEP

Ø-hahof-u-mbo,

CR-go.up-3MSG-DEP

ye ap-u-hwa.

then sleep-3MSG-PAST

‘**He**_j talked with father outside the house (CR), and **he**_j went into the house (CR), and then **he**_j slept.’

In the following example, the DR chain verb form *hwafomembo* ‘he talks and...’ in the first clause indicates a change in subject between its own clause and the following (second) clause, whereas the CR chain verb form *hahofumbo* ‘he goes up and...’ in the second clause indicates that the subjects of the its own clause is coreferential with the subject of the following (third) clause.

7-111. *wuli = hi afile = lofo hwafo-me-Ø-mbo,*

house = ADS father = COM talk-DR-3MSG-DEP

Ø-hahof-u-mbo,

CR-go.up-3MSG-DEP

ye ap-u-hwa.

then sleep-3MSG-PAST

‘**He**_j talked with father_k outside the house (DR), and **he**_{*j/k/l} went into the house (CR), and then slept.’

The SR pivots in Menggwa Dla are always the syntactic subjects (§5.3.1). Subjects can be expressed as (pro)nominals or cross-reference suffixes (§5.3.2). In the first clause of the following example, the object noun phrase is topicalised in the first clause, and the topicalised object of the first clause is coreferential with the subject of the second clause. However, this coreference between the topic-object of the first clause and the subject of the second clause is ignored by the SR morphemes because SR morphemes only monitor the syntactic subjects, which are disjoint-referential in this case. In the first clause, the subject noun phrase *nyewi* ‘person’ is cross-referenced by *-ya* (N1FSG) on the verb (people of unknown gender are cross-referenced as feminine; §4.1.1), and the subject of the second clause is $-\emptyset$ (3MSG), which can be inferred as coreferential with the 3MSG reference of the previous clause, *Pius*.

	OBJ		SUBJ		
7-112.	<i>Pius = na</i>	<i>nyewi</i>	<i>yan̄ga = mbe</i>	<i>ingufu-<u>ma</u>-ya-\emptyset-mbo,</i>	
	Pius = TOP	person	bush = INS	attack- <u>DR</u> -N1FSG-3MSG:O-DEP	
	<i>sun̄gwani</i>	<i>wuli = nambo</i>	<i>pi-\emptyset-hya</i>	<i>nu.</i>	
	sick	house = ALL	go-3MSG-PAST:FOC	COP:3MSG	

‘As for Pius_k, someone_j attacked him_k in the bush (DR), and he_{k/71} went to the clinic.’ (60III)

In Menggwa Dla, there is no voice opposition, and there is basically no morphological valency changing operations (see §5.3.3). For involuntary states like *sun̄gwani* ‘be sick’, *kakalu* ‘be in pain’, and *gihali* ‘be hungry’, the animate undergoer is the subject, while the inanimate force is either the object or part of the

predicate. This is different from a lot of Papuan languages where animate undergoers of involuntary states are treated as some kind of non-subject. In the first clause of the following example, the animate undergoer is the subject and the inanimate force is the object (it can take the object case clitic =*mbo*; §4.5.1). The subject of the first clause is coreferential with the subject of the second clause, and hence the first clause is marked as coreferential (despite the fact that the semantic role of the subject changed from undergoer to actor).

7-113. *gwa gihali(=mbo) sufwa-Ø-a-mbo,*
 but hunger(=OBJ) feel-**CR**-1SG-DEP
stroberi imbu hihiri-Ø-a-mbo,
 strawberry two steal-**CR**-1SG-DEP
ser-ihahwa.
 eat-1SG-PAST

‘But then I was hungry (CR), and I stole two strawberries and I ate them.’ (50II)

The phenomenon of ‘clause-skipping’ is very common in Menggwa Dla and other Papuan SR languages. ‘Clause-skipping’ refers to the fact that sometimes a clause is marked as coreferential or disjoint-referential not in relation to the immediately following clause, but in relation to another clause following in the clause chain. In a piece of discourse, some clauses depict foreground events, and some clauses depict background information. Foreground CR clauses often ‘skip’ linearly following background clauses. In the following example, the second clause and the third clause are backgrounded in the discourse; they are marked as CR and DR respectively in relation to their immediately following clause (the third and

fourth clause respectively). The first clause, which is a foreground clause, is marked as CR in relation to the following foreground clause — the fourth clause — rather than the immediately following second clause.

7-114. *pi-a ma-hya-a Ø-numb-a-mbo,* FOREGROUND

go-1SG COMPL-1SG-3FSG:O CR-SEQ-1SG-DEP

‘I would make (the pith) loose (CR),’

CR	<i>ye pi-Ø-o-mbo,</i> BACKGROUND
	then go- <u>CR</u> -3FSG-DEP
	‘then (the pith) would become loose (CR),’
	<i>hupla = mbe ma-ek-wa-mbona,</i> BACKGROUND
	container = INS <u>DR</u> -exist-3FSG-DEP

↓
waplu sa-hya-a hof-a saha-hya-a Ø-numb-a-mbo...
 p.bucket carry-1SG-3FSG:O come-1SG put-1SG-3FSG:O CR-SEQ-1SG-DEP
 ‘and I would take the palm leaf bucket here (CR), and...’ (B)

In the following example, the first clause is the beginning of a discourse section where the main protagonist of the section — *Kariawi* — is introduced. The second clause is also a foreground clause, and it is marked as CR in relation to the following foreground clause — the sixth clause; the third, fourth and fifth clauses are background clauses, and they are ‘skipped’ by the second clause.

another day

rani [kariawi Ø-ah-umu-wu-a-hya] rani ai Ø-hof-u-mbona,

DEM [Kariawicall-3-3MPL-3MPL-3FSG:O-PAST] DEM 3 **CR**-come-3MSG-DEP

‘One day there was this (person) whom they call Kariawi **he_k** came (CR),’

Kariawi Ø-hof-u-mbona,

FOREGROUND

Kariawi **CR**-come-3MSG-DEP

‘**Kariawi_k** came (CR),’

CR

nomola = pa ma-num-ei-mbo gwa, BACKGROUND

children = only **DR**-sit-3FPL-DEP but

‘and only **children_{n+o+p...}** were at home (DR),’

afila hwila rana dofo heli = hi o naho = nambo

father mother DEM secret ceremony = ADS or what = ALL

efya rana po-me-efya-mbona, BACKGROUND

N1FDU:RSUMP DEM go-**DR**-N1FDU-DEP

‘**father and mother the two of them_{l+m}** went to this secret ceremony or something (DR),’

nomola = pa ma-num-ei-mbo, BACKGROUND

children = only **DR**-sit-3FPL-DEP

‘only **the children_{n+o+p...}** were at home (DR),’

rani Kariawi seru-mbo homba-Ø-ya-ti-mbo,

FOREGROUND

DEM Kariawi eat-NOML see-**CR**-3SG-N1FPL:O-DEP

‘and **Kariawi_k** saw them **them_{n+o+p...}** eating (CR), and...’ (A)

Clause-skipping by CR morphemes is very common. There are also cases of DR morphemes skipping clauses to find its other SR pivot. Occasionally there are two DR chain clauses both depicting parts of the same situation, and both are marked as DR in relation to the same third clause, which of course cannot be immediately following both clauses at the same time. In the following example, the first and second clauses depict part of the same situation, and both are marked as DR in relation to the third clause; the first DR chain clause has ‘skipped’ the second clause.

7-116. Solomon *afila sungwani wuli=na po-me-Ø-mbo,*
 Solomon father sick house = ALL go-**DR**-3MSG-DEP
 ‘Solomon’s father_j went to the clinic (DR),’

Solomon = *lofo po-me-Ø-mbo,*
 Solomon = COM go-**DR**-3MSG-DEP
 ‘he_j took Solomon along (DR),’

nesi ufati sa-ka-u-mbo...
 nurse medicine give-3SG-3SG:O-DEP
 ‘and the nurse_k gave him medicine (CR), and...’ (50I)

As seen in all of the examples above, in older speakers’ traditional SR system, a CR or DR chain verb form has to be used even when the subject cross-reference suffixes already indicate that the interclausal subjects are coreferential or disjoint-referential unambiguously. Reference disambiguation is basically not needed when one of the subject suffixes is first or second person, or when the gender features are conflicting. In the examples below, the person-number-gender features of the subject cross-reference suffixes already indicate the coreference (1SG and 1SG in

example 7-117) and disjoint-reference (1SG and 3FSG in example 7-118) of the interclausal subjects. Nevertheless, a CR chain verb is still required in example 7-117, and a DR chain verb form is still required in example 7-118.

7-117. *ye ser-i fã-Ø-hya-a-mbo,*
 then eat-1SG COMPL-**CR**-1SG-3FSG:O-DEP
ap-aha-hi.
 sleep-1SG-PRES:CONT
 ‘I eat (CR), and then I sleep.’ (B)

7-118. *ini. pusi homba-ma-ha-a-mbo,*
 yes cat see-**DR**-1SG-3FSG:O-DEP
hwi=na han-wa-hwa.
 water = ALL go.down-3FSG-PAST
 ‘Yes, I saw the cat_j (DR), it_{jk} went down towards the stream.’ (60III)

Although reference-tracking is often an important function of SR markers (this is especially true of CR markers), reference-tracking is not the primary function of canonical SR systems. The primary function of canonical SR systems is the indication of discourse participant continuity versus discontinuity, i.e. a CR marker indicates that the ‘salient’ participant — the SR pivot — will continue to be foregrounded in a following clause, a DR marker indicates that the ‘salient’ will not be foregrounded in a following clause; see de Sousa (2005, in press) on this.

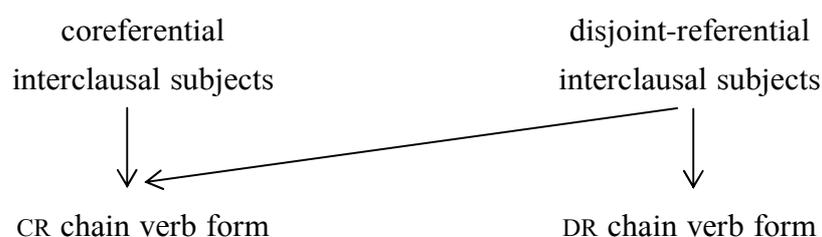
7.2.2.2 Innovative SR system

The function of the SR system is different for speakers of Menggwa Dla who were born since late 1970s. The function of the innovative SR system differs depending on whether the subject cross-reference suffixes (i.e. the SR pivots) can resolve the referentiality of the interclausal subjects or not. The innovative SR system consists of two mutually exclusive sub-systems.

Sub-system 1

When the person-number-gender information of the two subject cross-reference suffixes already unambiguously indicates that the two subjects are coreferential or disjoint-referential (this happens when one of the cross-reference suffixes is first or second person, or when the gender features of the two suffixes do not match), CR chain verb forms are SR-neutral, i.e. they do not monitor the referentiality of the references between clauses. Reversely, disjoint-referential subjects can be indicated by either CR verb forms or DR verb forms. CR can be thought of as an unmarked chain verb form, and DR chain verb forms are optionally used when the interclausal subjects are disjoint-referential.

Figure 7.4 Relationship from function to form in Sub-system 1 of the Innovative SR system



In example 7-119, the CR verb form *hofahiambo* ‘I trip over and...’ is used because the interclausal subjects are coreferential (both being 1SG). However, in example 7-120, the same CR verb form *hofahiambo* is used in the first clause, but the interclausal subjects are actually disjoint-referential (1SG and 3MSG). The fact is that the CR verb form in examples 7-119 and 7-120 are SR-neutral; the SR-neutral use of these CR verb form is licensed by the fact that the subject cross-reference suffixes on the two verbs have already indicated that the two subjects are coreferential and disjoint-referential respectively. While the use of a DR verb form like *hofahi-me-aha-mbo* (fall-DR-1SG-DEP) is also grammatical in example 7-120, most younger speakers would use a CR verb form in a situation like this.¹⁶

7-119. *hofahi-Ø-a-mbo,*

fall-CR-1SG-DEP

sumbu-aha-hwa.

laugh-1SG-PAST

‘I tripped over and I laughed.’

7-120. *hofahi-Ø-a-mbo,*

fall-CR-1SG-DEP

yoambo sumbu-Ø-hwa.

1SG:OBJ laugh-3MSG-PAST

‘I tripped over and **he** laughed at me.’ (90I)

¹⁶Also notice that example 7-120 is not a case of clause-skipping — clause-skipping only occurs within clause-chains. In example 7-120, the second clause is already the final independent clause of the clause chain; there is no clause to ‘skip’ to.

The following are two more examples. Since the subject cross-reference suffixes already indicate the disjoint-reference of the subjects between clauses, most younger speakers would use CR chain verb forms rather than DR chain verb forms in cases like these.

7-121. Peter *atimbati-Ø-u-mbona*,
 Peter sneeze-CR-3MSG-DEP
bahu pi-wa-hwa.
 flying.fox go-3FSG-PAST
 ‘Peter sneezed and the flying fox flew away.’ (80IV)

7-122. *aya ifali kwemi-Ø-Ø-mbo*,
 father spear take-CR-3MSG-DEP
yo = amba aha yowala ifali tamnya kwami-Ø-a-mbo,
 I = too 1SG:RSUMP 1SG:GEN spear small:MASS take-CR-1SG-DEP
 ‘Father took spears with him, I too took my own small spears, and...’ (N)

It is also grammatical to use DR chain verb forms when the interclausal subjects are disjoint-referential. Nevertheless, most younger speakers only use DR chain verb forms to emphasise discourse discontinuity of some sort (in addition to participant discontinuity; see also §7.5 on how *-mbona* tends to correlate with discourse discontinuity). For instance, in the following example, a CR chain verb like *pi-Ø-u-mbona* (go-CR-3MSG-DEP) can be used in the first clause, but the younger speaker used the DR chain verb form *po-me-Ø-mbona* (go-DR-3MSG-DEP)¹⁷

¹⁷ The verb stem *po-* is an irregular DR chain verb stem of the verb lexeme *pi* ‘go’ (class I) (§7.2.1).

presumably because of the contrastive focus, or alternatively the disruption in spatial continuity (i.e. the spatial settings of the two clauses has changed).

7-123. *dukumi po-me-Ø-mbona,*
 valley go-**DR**-3MSG-DEP
yo lohama roŋgo pi-aha-hwa.
 1 ridge along go-**1SG**-PAST
 ‘**He** went to the valley, and **I** went along the ridge.’ (N)

In the following example, the younger speaker may have used the DR verb form to emphasise the termination of the direct quote (i.e. mark the boundary between the direct quote and his own speech).¹⁸

7-124. *mi “... bani kaha-wa-a-Ø!” me-h-wa-mbo,*
 mother “... sago chop-2SG-3FSG:O-IMP” **DR**-say-**3FSG**-DEP
pi-Ø-hwa.
 go-**3MSG**-PAST
 ‘**Mother** said “... you chop sago!” and **he** went.’ (80I)

Cross-linguistically, it is not uncommon to see DR markers being used to indicate kinds of discourse discontinuity like temporal and spatial discontinuity when the interclausal subjects are actually coreferential (see, e.g. Roberts 1988, Stirling 1993).

¹⁸ In example 7-124, the verb stem *h-* is an irregular DR chain verb stem of the verb lexeme *hwafo* ‘say’ (class I) (§7.2.1).

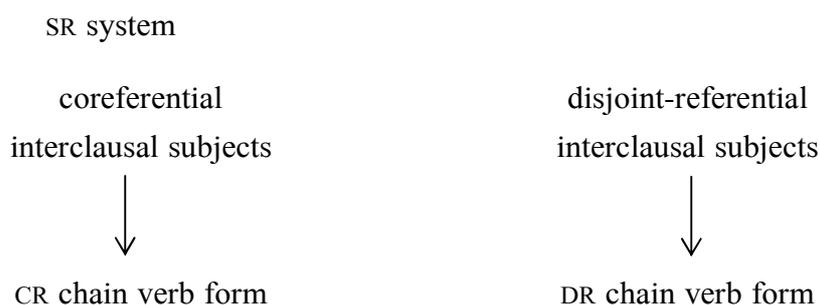
Sub-system 1 of the innovative SR system is comparable to systems of ‘general discourse continuity markers’ like the ones in Bauzi (Briley 1997).¹⁹ The CR markers in Menggwa Dla are comparable with the continuity markers in Bauzi which indicate discourse continuity in general (which need not include participant continuity). The DR markers in Menggwa Dla indicate both participant discontinuity and at least one other kind of discourse discontinuity, whereas the discontinuity markers in Bauzi indicate any one kind of discourse discontinuity. Other examples of general discourse continuity markers include the systems in Central Pomo (Mithun 1993) and Koasati (Rising 1992), both spoken in North America.

Sub-system 2

When the person-number-gender information of the two subject cross-reference suffixes is not sufficient in resolving whether the two subjects are coreferential or disjoint-referential (this happens when the two cross-reference suffixes are both third person and when the gender features are not conflicting), coreferential interclausal subjects are obligatorily indicated by CR verb forms, and disjoint-referential interclausal subjects are obligatorily indicated by DR verb forms. In effect, the traditional SR system is being retained by younger speakers in this restricted context.

¹⁹ Briley describes the system in Bauzi as a switch-reference system. Nevertheless, the ‘same actor’ marker can be used when the references are disjoint-referential and the ‘different actor’ markers can be used when the references are coreferential. This is obviously not a SR system, as the primary function of SR systems is the indication of participant continuity versus discontinuity; while the DR markers may be used to indicate other kinds of discourse discontinuity, the CR markers would always indicate participant continuity. The analysis of the system in Buazi as a system of general discourse continuity markers is mine.

Figure 7.5 Relationship from function to form in Sub-system 2 of the Innovative



In the following example, all three subject suffixes are third person singular, and the gender features are not conflicting. The use of CR verb forms in this case necessarily indicates the coreference of the interclausal subjects.²⁰

7-125. *ai dukwa-Ø-ya-a-mbo,*

3 wake.up-CR-3SG-3FSG:O-DEP

Hilari = *mbo homba-Ø-i-Ø-mbona,*

Hilario = OBJ see-CR-3MSG-3MSG:O-DEP

alani-Ø-hwa.

cry-3MSG-PAST

‘He_j woke up (CR), he_j saw Hilari_k (CR), and he_{j/*k} cried.’ (90III)

In a similar situation, if the interclausal subjects are meant to be disjoint-referential, then a DR verb form must be used; a CR verb form cannot be used in this situation because CR verb forms are no longer SR-neutral (as the person-number-gender features of the subject cannot disambiguate whether the subjects are coreferential or not).

²⁰ In example 7-125, the verb *dukwefi* ‘wake up’ (class IIB) is monovalent; the object suffix *-a* (3FSG:O) in the first clause of example 7-125 is semantically empty (§5.3.2.2). For class IIB of cross-reference suffixes, gender is marked for 3SG subjects only when the object is 3MSG (§5.2.2).

Sub-system 2 of the innovative SR system is comparable with so-called ‘third-person SR systems’ like the interclausal reference tracking systems in Eskimo-Aleut languages (e.g. Bergsland 1994, 1997 for Aleut; Woodbury 1983 for Central Yup’ik) and certain Tupí-Guaraní languages like Guajajára (Jensen 1997, 1998). In ‘third-person SR systems’, functional CR versus DR marking is only available when the ‘SR’ pivot of the marked clause is third person. The primary function of third-person SR systems is clearly reference-tracking rather than the indication of reference continuity versus discontinuity, and hence they are not SR systems. The rationale of having functional CR versus DR markings only for third person references is that reference disambiguation is often needed for third person references, but seldom needed for first and second person references (see de Sousa 2005, in press). Sub-system 2 of the innovative SR system in Menggwa Dla is more restrictive than the third-person SR systems mentioned above; in younger speakers’ Menggwa Dla, functional CR versus DR marking is available only when both subjects are third person and with agreeing number and gender.

7.2.2.3 Referential overlap

Referential overlap refers to cases where the interclausal references have some — but not all — referents in common. This most usually happens when there is a mismatch in the number features of the interclausal subjects, e.g. ‘they_{j+k+1} ...’, ‘he_k...’, ‘I...’, ‘We...’. Roberts (1997: 157-158) mentions that amongst Papuan SR languages, there are languages where all cases of referential overlap are marked as CR (e.g. Angave), and there are languages where cases of referential overlap are variously marked as CR and DR depending on person of the SR pivot (e.g. Waskia, Kewa; clauses with a first person SR pivot are more likely to be marked as CR, and

7-131. *mome Nangani afile=lofo mome ilohwe (< ilo-hwa-a-hi)*

together Nangn father=COM together work-1DU-3FSG:O-SIM

Ø-num-ehi-mbo, subject = 1DU

CR-sit-1DU-DEP

Nangani afile fa-Ø-ya-a-mbo... subject = 3SG

Nangn father leave-CR-3SG-3FSG:O-DEP

‘(I_i) together with Nangn’s father_j **we**_{i+j} worked and lived (here), and

Nangn’s father_j left...’ (S)

Younger speakers:

7-132. *Ø-han-yehi-Ø,* subject = 1DU

CR-go.down-1DU-DEP

wamla imbu fa-ha-a-hwa. subject = 1SG

betel.nut two pick.betel.nut-1SG-3FSG:O-DEP

‘**We**_{i+j} went down, and I picked two bunches of betel nuts.’ (N)

7-133. *ye wuli=mbe fa-hwa-a Ø-numb-ehi-mbo,* subject = 1DU

then house=INS leave-1DU-3FSG:O CR-SEQ-1DU-DEP

aya ifali kwemi-Ø-Ø-mbo... subject = 3MSG

father spear take-CR-3MSG-DEP

‘Then **we**_{i+j} left the house, and then **father_j** took spears...’ (N)

7-134. “*wangu = pa no*” *sa-Ø-hwa-a-mbo*, subject = 1DU
 “sparrow = only COP:3FSG” say-CR-1DU-3FSG:O-DEP
 “*a yanu*” *sa-Ø-hu-a-mbo...* subject = 1PL
 “ah enough” say-CR-1PL-3FSG:O-DEP
 “‘Its is only sparrows (that we got),’ said **we two** _{i+j}, ‘ah that’s OK,’ said **we**
all _{i+j+k+l...} ...’ (N)

7-135. *aya alani-Ø-Ø-mbo*, subject = 3MSG
 father cried-CR-3MSG-DEP
naho = nambo pi-efye-hwa. subject = 3FDU
 what = ALL say-N1FDU-PAST
 ‘**Father** _j cried, and **the two of them** _{j+k} went somewhere.’ (90II)

In cases of referential overlap, DR chain verb forms are usually used to emphasise kinds of discourse discontinuity. For instance, the DR chain verb form is used in example 7-136 to emphasise the discontinuity in spatial setting; the DR chain verb form in example 7-137 is used to emphasise the end point of the quoted speech.

7-136. *Kamby = hi klo-ma-hwa-a-mbo*, subject = 1DU
 Kamberatoro = ADS separate-DR-1DU-3FSG:O-DEP
ye hof-aha-mbi. subject = 1SG
 then come-1SG-PRES:TRANSN
 ‘**We** _{i+j} separated at Kamberatoro and **I** came (here).’ (60I)

7-137. "... *butya-hwa-a-Ø*" *me-h-u-mbona*, subject = 3MSG
 "... hit.with.stick-1DU-3FSG:O-IMP" *DR-say-3MSG-DEP*
tikyawi ap-ehye-hwa. subject = 1DU
 small sleep-1DU-PAST
 'He_j said "... we will catch (sparrows)" and we two_{j+k} slept a little bit.' (N)

7.2.3 Hypothetical protases

Protases, in other words the 'if' clauses of conditional sentences, can be marked in two different ways. Simple indicative protases, of which the truth value can be true or false, are expressed as irrealis *-hwani* clauses (§7.1.2). On the other hand, hypothetical protases, in other words protases of which the polarity must be false based on real word knowledge, are indicated by chain clauses. The dependency suffix (§7.5) of a hypothetical protasis chain verb is usually *-mbona*, but *-mbo* can be used as well. Hypothetical protasis often have counterfactual apodoses which carries the *-naho* counterfactual suffix (see §6.3.4 for more examples). The following exemplifies some hypothetical protases.

7-138. *hwahwa-Ø-a-mbona, wanu ma-sa-ŋga-u-naho.*
 know-CR-1SG-DEP money NEG:IR-give-1SG-3SG:O-CNTR
 'If I had known, I would not have given him/her the money.'
 (*hwahwa* 'know' class I, *sefi* (*sa-/ da-*) 'give' class III)

7-139. *rani amani sama-ma-ya-a-mbona, sungwani-me-u-naho.*

DEM good cook-DR-3SG-3FSG:O-DEP be.sick-NEG:IR-3MSG-CNTR

‘If it was well cooked, he would not be sick.’

(*samefi* (*sama-*) ‘cook’ class IIB, *sungwani* ‘be sick’ class I)

7-140. *pi boke-me-Ø-mbo, kyambe yo efa Amanab =na*

go NEG:R-DR-3MSG-DEP tomorrow 1 1PL:RSUMP Amanab = ALL

po-l-emby-efu.

go:FUT-LIG-SMR:1NSG-1PL

‘If he did not come, we would (have to) go to Amanab tomorrow.’

(*pi* (*pi-/ po-*) ‘go’ class I)

7.3 Non-finite chain clauses and verbal noun phrases

Non-finite chain clauses and verbal nouns are rare in natural discourse. Non-finite chain verbs and verbal nouns are formally nearly identical; non-finite chain verbs are formed with a non-finite verb stem (§5.1.1), an optional ‘posterior’ suffix *-mba*, and a dependency suffix *-Ø ~ -mbo ~ -mbona*; verbal nouns are formed with a non-finite verb stem, an optional posterior suffix *-mba*, and a nominalising suffix *-Ø ~ -mbo*. In addition, verbal noun phrases can also take certain case clitics (§4.5). Neither non-finite chain verbs nor verbal carry cross-reference suffixes (§5.2). The meaning of the ‘posterior’ suffix *-mba* is different depending on whether it is used on non-finite chain verbs or verbal nouns, see §7.3.1 and §7.3.2 respectively.

7.3.1 Non-finite chain clauses

Most usually, non-finite chain clauses are sentence-medial; sentence-medial non-finite chain clauses are discussed in §7.3.1.1. Very occasionally, non-finite chain clauses exist at the end of a sentence and are not followed by a finite verb; sentence-final non-finite chain clauses are discussed in §7.3.1.2.

7.3.1.1 Sentence-medial non-finite chain clauses

Non-finite chain clause is like an impersonal version of chain clauses (§7.2). Non-finite chain verbs do not carry cross-referencing, and non-finite chain clauses are used when the subject reference is non-specific or low in ‘newsworthiness’, e.g. non-human subjects of clauses depicting background information. Similar to CR (coreferential) chain verbs, non-finite chain verbs can also be serialised with the completive verb *fēfi* ~ *mefi*²¹ and sequential verb *nungu* (§7.4), both in their non-finite forms, e.g. *seru mefi nungu-mbo* ‘after finishing eating’. On non-finite chain verbs, *-mba* signifies posteriority in relation to the situation of the preceding clause of the non-finite clause chain, and that the situation of the *-mba* clause has a longer temporal span.

7-141. *byali wapu semi nungu-mbo,*

strainer bucket take SEQ-DEP

bani numu-a = nambo pi-mba-mbo, hafu-Ø...

sago sit-place = ALL go-POST-DEP arrive-DEP

‘(People) take strainers and buckets, and (they) go to the place where sago palms are grown, and (they) arrive...’ (B)

²¹ The other completive verb – *me* (class I) – is not used in non-finite chain clauses; see §7.4.

Non-finite chain verbs do not carry switch-reference suffixes (§5.2) like chain clauses do (§7.2). Nonetheless, non-finite chain verbs require that their subject to be coreferential or referentially-overlapping with the subject of a clause along the non-finite clause chain, most usually the immediately following clause (see below). A non-finite clause chain is usually ended by an independent clause (§6) or a realis *-hwani* ‘when’ subordinate clause (§7.1.2); realis *-hwani* ‘when’ subordinate clauses are used adjacent to non-finite chain clauses, and the subject of a realis *-hwani* ‘when’ clause is always disjoint-referential with the subject of its matrix clause.

In the following example, the non-finite chain clause *wangu harifimbo numwahwani* ‘the sparrows enter and stay’ is subordinate to the matrix clause *butyahwa* ‘let us catch them’. Notice the change of subject between the second clause *numwahwani* ‘when they stay’ and the third clause *butyahwa* ‘let us catch them’

7-142. [*wangu harifi-mbo, num-wa-hwani,*] *butya-hwa-a-Ø.*

[sparrow enter-DEP sit-3FSG-when] hit.with.stick-1DU-3FSG:O-DEP

‘When the sparrows enter (the cave) and stay there, we will catch them.’ (N)

Although lacking SR markings, ‘clause skipping’ (§7.2.2) is also found with non-finite chain clauses. In the following example, the second clause — a non-finite chain clause — and the third clause — a realis *-hwani* ‘when’ subordinate clause — form a non-finite clause chain; the entire non-finite clause chain is subordinate to the

fourth clause, which is another non-finite chain clause. The subject of the first clause — also a non-finite chain clause — is coreferential with the subject of the fourth clause, rather than the subject of the second or third clauses which are subordinate to the fourth clause. In other words, the first clause has ‘skipped’ the linearly following second and third clauses.

7-143. *kahefi nungu-mbo,*

chop SEQ-DEP

‘(People) chop (the sago palms),’

.....
[hofahi-Ø,

[fall-DEP

[‘(the sago palms) fall,’

.....
hoho = hi ek-wa-hwani,]

ground = ADS exist-3FSG-when]

‘and when (the sago palms) lie on the ground,’]

.....
palangi = nambo hwela numuli-Ø,

machete = ALL skin remove-DEP

‘(people) remove the bark (of the sago palms) with machetes...’

.....
wepi mefi nungu-mbo,

clean COMPL SEQ-DEP

‘and after (they) finish clearing (‘clean’) the exterior (of the palms)... (B)

A non-finite chain clause can also be followed by a chain clause (§7.2) and vice versa. In the example below, the non-specific referent set of the subject reference of the first clause — a non-finite chain clause — properly includes the first

person singular referent of the subject reference of the second clause, which is a chain clause.

7-144. *ahala =na =pa hya imbu safo tamako =nambo kikifi nungu-mbo,*

root = ALL = only INTJ two half axe = ALL chop SEQ-DEP

kala-hya-a Ø-numb-a-mbo,

split-1SG-3FSG:O CR-SEQ-1SG-DEP

‘(People) chop the sago palm into two halves (from the top) to the root with an axe, and I would split the sago palm (into two halves), and...’ (B)

In the following example, the first clause, which is a chain clause, is followed by a non-finite chain clause. As the subject referents has not changed between the two clauses, a coreferential chain verb (§7.2.1) is used in the chain clause.

7-145. ... *gihali me-Ø-wa-mbo,*

hungry COMPL-CR-3FSG-DEP

ilo-mbo hwambo tamako semi nungu-mbo...

be.like.so-NOML be.the.case axe take SEQ-DEP

‘(People) are hungry, and so they take axes, and ...’ (B)

All copular chain clauses are non-finite chain clauses; copulas (§6.4) cannot be used in chain clauses (§7.2). The non-finite chain copula (§6.4) in a non-finite chain clause is a suffixed with a dependency suffix *-Ø ~ -mbo ~ -mbona* (§7.5) like other non-finite chain verbs. However, the subject of a non-finite copular clause is

‘transparent’ towards the subject coreference requirement of non-finite chain clauses and switch-reference of chain clauses (§7.2.2).

7-146. *ai=na tumali hupla ambya rungu pipi-me-Ø-mbo,*

3 = TOP pandanus container hole inside hide-DR-3MSG-DEP

ra nu-mbo,

DEM COP-DEP

pupla-Ø-wu-a-Ø,

break-CR-N1MPL-3FSG:O-DEP

‘He was hiding in a hole inside a pandanus trunk, and that being the case, they broke the hole, and...’ (A)

7-147. *yamu bena hafa-hwa-a Ø-numb-ehi-mbo,*

Yamu side go.pass-1DU-3FSG:O CR-SEQ-1DU-DEP

rani=hi nu-mbo,

DEM = ADS COP-DEP

“hwangu wami gak-yehi-Ø” sa-Ø-hwa-a-mbo,

“cave above go.up:FUT-1DU-JUS” think-CR-1DU-3FSG:O-DEP

‘We went across to Yamu (Creak), and being there, we though “let us go up to the cave,” and...’ (N)

7-148. *saftu=mbe nu-mbo,*

Saturday = INS COP-DEP

simbu ye wuli=nambo pi-ehye-hwa.

morning then house = ALL go-1DU-PAST

‘It was on Saturday, and we went home in the morning.’ (N)

7.3.1.2 Sentence-final non-finite chain clauses

Occasionally, non-finite chain clauses are found at the end of a sentence.

These non-finite chain clauses are not verbal noun phrases (§7.3.2) as the non-finite chain clauses are not limited for the types of arguments they can have, unlike verbal noun phrases which can only have one ‘argument’.

Sentence final non-posterior non-finite chain clauses convey instructions:

7-149. *hwi = lofo yarifi-Ø.*

water = COM stir.sago-DEP

‘Stir sago with water.’

7-150. *hutumu = hi bahefi-mbo.*

leaf = ADS cut.put-DEP

‘Cut and distribute (food) on the (big) leaves.’

On the other hand, sentence-final posterior non-finite chain clauses are often used in place of jussive verb forms (§6.3.1) or positive semi-realis verb forms (§6.2).

For instance:

Sentence-final posterior non-finite chain verb:

7-151. *pi-mba-mbo ~ pi-mba-Ø.*

go-POST-DEP go-POST-DEP

‘(I/ we/ you/ someone) will go.’

Jussive mood:

7-152. *pi-efu-Ø!*

go-1PL-DEP

‘Let’s go (now)!’

Positive semi-realis mood:

7-153. *po-l-efu* *samby-efu.*

go:FUT-LIG-1PL POS:SMR-1PL

‘We will go.’

Semi-realis verb forms convey the speaker’s absolute certainty that the situation will occur in the future, and jussive forms convey slight coercion. On the other hand, posterior chain verbs — which depict situations posterior to the time of utterance — are relatively polite in that they are semantically vague; they do not indicate the speaker’s attitude towards the proposition (i.e. devoid of modal meaning), and the actor of the situation does not have to be expressed. The following are other examples of sentence-final non-finite chain clauses.

7-154. (*hwalfèhi pi-me-wi-mbo,*) *ilo-mba-mbo.*

(woman go-DR-N1FPL-DEP) work-POST-DEP

‘(When) the women leave, (we) will work.’

7-155. *a yo [humbli-me-aha-mbo hoho-hi-a-hya]*

ah 1 [hear-DR-1SG-DEP tell-N1FPL-3FSG:O-PAST]

amamo = la hwafo hoho-mba-Ø.

moon = GEN story tell-POST-DEP

‘Ah I will tell you the moon’s story which I heard them telling.’ (A)

7.3.2 Verbal noun phrases

Verbal nouns are nominalised forms of verbs, akin to gerunds in English. Verbal nouns are formed with a non-finite verb stem (§5.1.1), followed by an optional posterior suffix *-mba*, and then by a nominalisation suffix *-Ø ~ -mbo*. Verbal nouns are subcategorised for semantic arguments like verbs, but only one argument can be expressed in a verbal noun phrase (see below). Verbal noun phrases can be used as core grammatical relations or oblique relations, and verbal noun phrases can take certain nominal clitics (§4.5; see below). In the following example, *wamla seru-mbo* ‘betel nut chewing’ is a verbal noun phrase.

7-156. [*wamla seru-mbo*] = *nambo yafu hamblu-wa-hwa.*

[betel.nut eat-NOML] = ALL tooth be.red-3FSG-PAST

‘The teeth have become red due to [betel nut chewing].’

Verbal noun phrases in Menggwa Dla share similarities with gerundial phrases in English. Like English gerundial phrases, verbal noun phrases in Menggwa Dla can depict general situations or particular instances of the situation. For instance, the verbal noun phrase *wamla seru-mbo* ‘betel nut chewing’ in example 7-156 above can mean betel nut chewing in general, or one particular

instance of betel nut chewing. Nevertheless, unlike gerundial phrases and more like noun incorporation, only one semantic argument can be expressed in the verbal noun phrase, and that expression must be in its citation form (i.e. not case-marked).²² For instance, *hwi* ‘water’ in the verbal noun phrase *hwi ti* ‘getting rid of water’ below cannot take an object case =*mbo* (§4.5.1) (*hwi ti* can be translated literally as ‘water-riding’).

7-157. [*hwi ti-Ø*] *fa-hya-a* *Ø-numb-a-mbo*,
 [water get.rid-NOML] finish-1SG-3FSG:O CR-SEQ-1SG-DEP
 ‘After I finished getting rid of the water...’ (B)

Also like noun incorporation in English, when a verbal noun is subcategorised for two semantic arguments, only the ‘object’ argument (§5.3.3) can be expressed in the verbal noun phrase, as shown in the examples above. When a verbal noun is subcategorised for only one semantic argument, that lone argument (which would be expressed as a subject if it were a clause; §5.3.3) can be expressed in the verbal noun phrase, as shown in the example below.

7-158. [*tu kwa klei-mba-Ø*] *sa-hwa-a-mbo*,
 [bird MOD fence-POST-NOML] think-1DU-3FSG:O-DEP
 ‘We thought [maybe the birds will be building their nests], and...’ (N)

Also shown in the example above is the posterior suffix *-mba*. In verbal noun phrases, the posterior suffix *-mba* signifies that the situation of its own phrase

²² The fact that the argument expressions cannot be case-marked within verbal noun phrases also indicates that the verbal noun phrases are not (dependent) clauses.

occurred after (or is imagined to occur after) the situation of the main clause.

(Contrast this with the usage of *-mba* with non-finite chain verbs; see §7.3.1.) The following are more examples of *-mba*.

7-159. *[[nimi wami] pi-mba-mbo] sa-hwa-a-mbo, pi-ehye-hya.*

[[mountain above] go-POST-NOML] think-1DU-3FSG:O-DEP go-1DU-PAST:FOC

‘We thought of [going up the mountain], and we went.’ (N)

7-160. *apa simbu=na [bani kahefi-mba-mbo] gihali(=mbo) me-wa-mbo,*

daytime morning [sago chop-POST-NOML] hunger(=OBJ) finish-3FSG-DEP

lit. ‘In the morning [before one chops sago] one gets (‘finish’) hungry...’ (B)

When the verbal noun phrase situation started at the same time or before the matrix clause situation, the posterior suffix *-mba* is not used on the verbal noun. In example 7-161 below, the ‘eating’ situation of the verbal noun phrase begins before the ‘seeing’ situation of the matrix clause. Also notice that *seru-mbo* ‘eating’ is cross-referenced on the verb as non-first person feminine plural (N1FPL) in example 7-161. A verbal noun takes on the person-number-gender features of its ‘subject’ if it has one argument, and the ‘object’ if it has two arguments. In example 7-161, *seru-mbo* ‘eating’ is feminine as the agent reference (the ‘subject’) is feminine (the referents can be recovered from the discourse as being a group of females plus males). If the agents of the eating situation in the following example are all male, then the verbal noun would be cross-referenced as masculine, as shown in example 7-162.

7-161. *rani Kariawi [seru-mbo] homba-ya-ti-mbo,*

that Kariawi [eat-NOML] see-3SG-N1FPL:O-DEP

‘Kariawi saw them eating, and...’ (A)

7-162. *rani Kariawi [seru-mbo] homba-i-mo-mbo,*

that Kariawi [eat-NOML] see-3SG-N1MPL:O-DEP

‘Kariawi saw them (male) eating, and...’

The posterior suffix *-mba* is also not used when the matrix clause depicts a habitual situation, as demonstrated in example 7-157 above and also in example 7-163 below. Example 7-163 below also demonstrates a serialised verbal noun construction. Like verbs, verbal nouns can also be serialised; *hwatu seru* can be literally translated as *find-eating*.

7-163. *mni amblwa =na =pa hya [hwatu seru-mbo] =pa*

just outside = ALL = only INJT [find eat-NOML] = only

hri-ya-a fâ-ya-a kaku-Ø-u-Ø,

come.out-3SG-3FSG:O leave-3SG-3FSG:O walk-CR-3MSG-DEP

‘It only came out to search (for things) to eat...’ (A)

Verbal nouns cannot take the object case clitic *=mbo*, e.g. *seru-mbo =mbo* (eat-NOML = OBJ) is ungrammatical. Nevertheless, the nominalising suffix *-mbo* is not an object case clitic, as the nominalising suffix *-mbo* can also be used when the verbal noun phrase is the subject or topic of the clause (objects in topic position cannot take the object clitic *=mbo*; §4.5.6).

7-164. [tafoko fofo-mbo]=na amani no.

[cigarette blow-NOML]=TOP good COP:3FSG

‘Smoking cigarettes is good.’

Verbal noun phrases can take the focus clitics (§4.5.7) of =*amba* ‘too’ and =*pa* ‘only’ (example 7-163 above), and also certain semantic cases: allative case =*na(mbo)* (§4.5.3) indicates reason or purpose (example 7-156 above), adessive case =*hi* (§4.5.3) indicates simultaneity (examples 7-165 and 7-166 below), and abessive case =*mboka* (§4.5.5) indicates negativity (example 7-166 below). (The final clauses of the following sentences are non-finite chain clauses; see §7.3.1.2 for the sentence final non-finite chain clauses; see footnote 9 in §3.1.1 for reasons why these nominal clitics used on verbal noun phrases are nominal clitics rather than verbal tense-aspect-mood affixes.)

7-165. [hufwa-mbo]=hi yarifi-Ø.

[be.hot-NOML]=ADS stir.sago-DEP

‘Stir the sago while (it) is hot.’

7-166. [efifi-Ø]=mboka=hi pi-mba-mbo.

[become.dark-NOML]=ABSS=ADS go-POST-DEP

‘(Let us) go before it gets dark.’

lit. ‘While it has not got dark, there is future-going.’

7.4 The completive and sequential grammatical verbs

As lexical verbs, *fēfi* (*fā-*) (class IIB) means ‘leave’, *mefi* (*ma-*) (class IIB) means ‘finish’ (bivalent), *me* (class I) means ‘finish’ (monovalent) and *nunḡu* (*nu(ḡg/mb)-*) means ‘stand’. As grammatical verbs, *fēfi* ~ *mefi/me* indicate completive aspect and *nunḡu* indicates interclausal sequentiality on CR chain clauses (§7.2) and non-finite chain clauses (§7.3.1).²³ The grammatical verbs are serialised to lexical verbs, and the whole serial verb construction is marked by a single dependency suffix *-Ø* ~ *-mbo* ~ *-mbona* (§7.5) at the end. When both the completive verb *fēfi* ~ *mefi/me* and the sequential verb *nunḡu* are serialised with a lexical verb, *fēfi* ~ *mefi/me* precedes *nunḡu*. In a non-finite chain clause, non-finite verb forms are used throughout the serial verb construction.

7-167. *apu mefi nunḡu-Ø*,

sleep COMPL SEQ-DEP

‘After waking (‘finished sleeping’) ...’

7-168. *kahefi nunḡu-mbo*,

chop SEQ-DEP

‘After chopping ...’

In a chain clause, the entire serial verb must share the same arguments, i.e. the person-number-gender features of all the subject cross-reference suffixes must agree, and the person-number-gender features of all the object cross-reference

²³ In non-finite chain verbs, *fēfi* and *mefi* (class IIB) are used and *me* (Class I) is not used (§7.3.1). The completive and sequential verbs cannot be used on DR chain verbs (§7.2.1), subordinate verbs (§7.1) and independent verbs (§6).

suffixes. The sequential verb *nun̄gu* and the preceding verb in the serial verb construction (either the completive verb *fefi* ~ *mefi*/ *me* or the lexical verb) must be finite, i.e. both verbs must have finite verb stems and each carrying their own cross-reference suffix(es); *homba-hya-ni* in examples 7-171 and *fa-hya-ni* in example 7-172 below are examples. On the other hand, the lexical verb which precedes the completive verb *fefi* ~ *mefi*/ *me* can be either finite or non-finite; *ser-i* in example and *homba-hya-ni* in example are finite, and *seru* in example 7-170 and *homba* in example 7-172 below are non-finite.

7-169. *ser-i fa-Ø-hya-a-mbo,*

eat-1SG COMPL-CR-1SG-3FSG:O-DEP

‘I ate it, and ...’ (*seru* (*ser-/ det-*) ‘eat’ class IH)

7-170. *seru fa-Ø-hya-a-mbo,*²⁴

eat COMPL-CR-1SG-3FSG:O-DEP

‘I ate it, and ...’

7-171. *homba-hya-ni Ø-numb-a-mbo,*

see-1SG-2SG:O CR-SEQ-1SG-DEP

‘I saw you, and ...’ (*homba* ‘see’ class II)

²⁴ The non-finite verb *seru* cannot be a verbal noun which functions as the object of *fahyambo*; verbal nouns have a nominalising suffix which freely alternates between *-Ø* and *-mbo*, and *seru* cannot be suffixed with *-mbo*.

7-172. *homba(-hya-ni) fa-hya-ni* *Ø-numb-a-mbo,*

see(-1SG-2SG:O) COMPL-1SG-2SG:O CR-SEQ-1SG-DEP

‘After I saw you ...’

The completive verb *fēfi (fā-)* (class IIB) is more commonly used in the western villages of Wanngurinda and Menggwai; the completive verbs *mefi (ma-)* (class IIB) and *me* (class I) are more commonly used in the eastern villages of Menggau, Wahai N^o1 and Wahai N^o2 (Ambofahwa). For people who usually use *mefi (ma-)* and *me*, the monovalent *me* (class I) is used in chain clauses when the lexical verb has one argument, and the bivalent *mefi (ma-)* (class IIB) is used in chain clauses when the lexical verb has two arguments.²⁵ For people who usually use *fēfi (fā-)*, *fēfi (fā-)* is used regardless of the valence of the lexical verb.

Monovalent *me* (class I):

7-173. *bapli = hi* *hupo-a* ***me-a*** *Ø-numb-a-mbo,*

head = ADS put.on.head-1SG COMPL-1SG CR-SEQ-1SG-DEP

‘I put it on top of my head...’ (B)

Bivalent *mefi (ma-)* (class IIB):

7-174. *pi-a* ***ma-hya-a*** *Ø-numb-a-mbo,*

go-1SG COMPL-1SG-3FSG:O CR-SEQ-1SG-DEP

‘I make it go, and...’ (B)²⁶

²⁵ Cases of the completive verb being used in zero-valent and trivalent clauses have not been encountered.

²⁶ The use the bivalent *mefi* with the verb *pi (pi-/ po-)* ‘go’ (class I) also indicates that the lexical verb has a bivalent causative meaning (§5.3.3).

Monovalent *fēfi* (*fā-*) (class IIB):

7-175. *ap-ehi* ***fā-hwa-a*** *Ø- numb-ehi-mbo,*

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

‘After we slept, then...’ (N)

Bivalent *fēfi* (*fā-*) (class IIB):

7-176. *imbumamu =pa yari =na* *ser-yehi* ***fā-hwa-a*** *Ø- numb-ehi-mbo,*

three = only sago = ALL sleep-1DU COMPL-1DU-3FSG:O CR-SEQ-1DU-DEP

‘We only ate three of them with sago, and...’ (N)

The completive verb indicates that the situation is ‘completed in entirety’.

The completive verb is most usually used with atelic verbs. Nonetheless, it is grammatical to use the completive verb with any lexical verbs, except that the lexical verbs *fēfi* ‘leave’ cannot be serialised with the grammatical verb *fēfi*, and *mefi/ me* ‘finish’ cannot be serialised with the grammatical verbs *mefi/ me*. In the following example, *fēfi* indicates that a participant (the subject) has experienced a complete change of location. Without *fēfi*, the meaning of *hri* ‘emerge’ could potentially be that the moon has emerged a little bit out of the water.

7-177. *amamo rani baya hri-ya-a* ***Ø-fa-ya-a-mbona,***

moon that side emerge-3SG-3FSG:O CR-COMPL-3SG-3FSG:O-DEP

Ø-hahof-u-mbona,

CR-go.up-3MSG-DEP

‘The moon came out (‘completely emerged’) of that place, and went up, and...’ (A)

In the following example, *fěfi* indicates that the intended completion point of the situation has been reached, i.e. the undergoers had made a conscious decision of getting up before the situation of the next clause begins. Without *fěfi*, the meaning of *apu* ‘sleep’ could potentially be that the undergoers did the action of the next clause while lying down or half awake.

7-178. *tikyawi ap-ehi Ø-fa-hwa-a-mbo,*

small sleep-1DU CR-COMPL-1DU-3FSG:O-DEP

sumbli ulyambo [...] butya-hwa-a-Ø.

night perfect [...] hit.with.stick-1DU-3FSG:O-IMP

‘We will take a small nap, and then at midnight [...] we will catch (the sparrows by hitting them with sticks).’ (N)

Similarly, in the following example, *fěfi* indicates that the intended completion point of the situation has been reached: that the person has stolen everything that was intended.

7-179. *rani amni baya tupam nyawi hihiri fa-Ø-ya-a-Ø,*

DEM garden side thing person steal COMPL-CR-3SG-3FSG:O-DEP

pi-wa-hi no.

go-3FSG-PRES:CONT COP:3FSG

‘Someone has stolen things from the garden and is leaving.’ (A)

In the following example, *fēfi* signifies that the stimulus has been entirely sensed by the experiencer. Without *fēfi*, the meaning could potentially be that the moon was partially seen by the person.

7-180. *hwi = mbe homba-i-Ø fā-i-Ø Ø-nung-u-mbo,*

water = INS see-3MSG-3MSG:O COMPL-3MSG-3MSG:O CR-SEQ-3MSG-DEP

[*o dani da-tupam dewahi*] = *na ah-Ø-Ø-ya-a-mbo,*

[oh this this-thing must] = TOP think-CR-3-3SG-3FSG:O-DEP

‘Having seen him in the water, he thought that it must be this thing (that was stealing)...’ (A)

In the following example, *fēfi* in the second clause indicates that the undergoers have been entirely affected. Without *fēfi*, an alternative interpretation is that not all the eggs were eaten.

7-181. *fufā-Ø-hwa-a-Ø,*

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

ser-yehi fā-hwa-a Ø-numb-ehi-mbo,

eat-1DU COMPL-1DU-3FSG:O CR-SEQ-1DU-DEP

‘We cooked the eggs, and after we have eaten them...’ (N)

The class I verb *nungu* has *nung-* as the finite verb stem when followed by a rounded segment (*u*, *o* or *w*), and *numb-* when followed by an unrounded segment. The verb *nungu* is rather polysemous; the prototypical lexical meaning of *nungu* is ‘stand’. Another meaning of *nungu* is ‘be born’.

7-182. *akani numb-afu-Ø!*

there stand-2SG-IMP

‘Stand there!’

7-183. *Kamby =hi numb-aha-hya.*

Kamberatoro = ADS be.born-1SG-PAST:FOC

‘I was born in Kamberatoro.’

The verb *nungu* also has a more general meaning of ‘do’ or ‘say’.

7-184. “awe” *aya nung-u-mbo...*

“no” father say-3MSG-DEP

“‘No,” father said...’ (N)

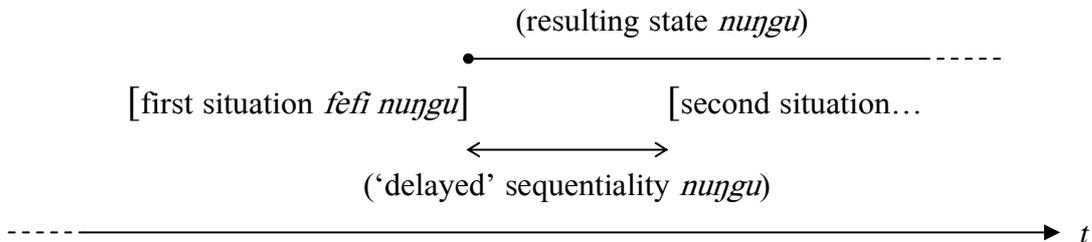
7-185. *iro =hya =hi numb-ei-hya hya no gwa...*

like.that = ABL = ADS do-3MSG-PAST:FOC INTJ COP:3SG but

‘They did it like that, but then...’ (A)

When used as a grammatical verb, the grammatical verb *nungu* — other than indicating interclausal sequentiality — also conveys a sense of ‘being in a resulting state which has continuous relevance’. Firstly, the sequential verb *nungu* signifies that the situation of the following chain clause is not immediately following the situation of its clause. In other words, *nungu* entails a small length of time when the resulting state occurs before the beginning of the subsequent situation.

addition to sequentiality, *nun̄gu* also indicate a resulting state of continuing relevance, and *fefi-nun̄gu ~ me(fi) nun̄gu* indicates a resulting state after the completion of the situation, i.e. perfect ‘aspect’.



In the following examples, *fefi nun̄gu ~ mefi nun̄gu* indicates a state resulting from the situation depicted by the lexical verb, and that the following situation occurs sequentially but not immediately.

7-187. *wepi mefi nun̄gu-mbo,*

clean COMPL SEQ-DEP

ahala = na = pa hya imbu safo tamako = nambo kikifi nun̄gu-mbo,

stem = ALL = only EMPH two half axe = ALL chop SEQ-DEP

‘(People) chop the sago palm into two halves (from the top) to the root with an axe, and I would split the sago palm (into two halves), and...’

7-188. *hwi = mbe homba-i-Ø fa-i-Ø Ø-nung-u-mbo,*

water = INS see-3MSG-3MSG:O COMPL-3MSG-3MSG:O CR-SEQ-3MSG-DEP

[*o dani da-tupam dewahi*] = *na ah-Ø-Ø-ya-a-mbo,*

[oh this this-thing must] = TOP think-CR-3-3SG-3FSG:O-DEP

‘Having seen him in the water, he thought that it must be this thing (that was stealing), and...’ (A) (repeated from example 7-180 above)

7-189. *ap-ehi fa-hwa-a Ø-numb-ehi-mbo,*

sleep-1DU COMPL-1DU-3MSG:O CR-SEQ-1DU-DEP

ye [pi-mbo] murua = mbe sumbli rani murua = mbe me-wa-mbo

then [go-NOML] middle = INS night that middle = INS finish:DR-3FSG-DEP

ye har-yehye-hwa.

then enter-1DU-PAST

‘Having slept, in the middle of the trip at midnight (*sumbli mewambo*) we entered (the cave).’ (N)

Like the perfect ‘aspect’ in English, *fèfi nungu ~ mèfi nungu* in Menggwa Dla conveys the continuous relevance of the resulting state. Because of this, the situation depicted by the clause following a *fèfi nungu ~ mèfi nungu* clause cannot be contradictory with the resulting state. In the example 7-190 below, which is constructed based on 7-177 above, having *nunggu* after *fèfi* is unnatural — because *fèfi nungu* indicates that the moon continues to exist in the place where it has just come out to, whereas the second clause indicates that the moon went somewhere else.

7-190. ?*amamo rani baya hri-ya-a* *fa-ya-a* *Ø-nung-u-mbona,*

moon that side emerge-3SG-3FSG:O COMPL-3SG-3FSG:O CR-SEQ-3MSG-DEP

Ø-hahof-u-mbona,

CR-go.up-3MSG-DEP

? ‘The moon had come out of that place, and went up somewhere else,
and...’

How do simplex chain verbs/ non-finite chain verbs compare with verbs serialised with the completive verb and/ or the sequential verb? Simplex chain verbs/ non-finite chain verbs are not marked for interclausal temporal relations; the only temporal requirement is that the situation of the following clause has to begin after the inchoation point of the situation of the simplex chain verb/ non-finite chain verb. Hence, the use of a simplex chain verb or simplex non-finite chain verb can give the impression that the situation of the following clause is simultaneous with that of its own clause.

7-191. *ser-i* *fa-Ø-hya-a-mbo,*

eat-1SG COMPL-CR-1SG-3FSG:O-DEP

ufati *simi-aha-hwa.*

medicine drink-1SG-PAST

‘I ate, and then I took the medicine.’

7-192. *ser-i-mbo*,

eat-1SG-DEP

ufati simi-aha-hwa.

medicine drink-1SG-PAST

‘(While) I was eating, and I took the medicine.’/

‘I ate, and then I took the medicine.’

If simultaneity is emphasised, a *-hi* subordinate clause (§7.1.3) can be used.

7-193. *ser-iha-hi*,

eat-1SG-DEP

ufati simi-aha-hwa.

medicine drink-1SG-PAST

‘While I was eating, I took the medicine.’

7.5 The dependency suffix

The dependency suffix is used on chain verbs (§7.2) and non-finite chain verbs (§7.3.1) to indicate their status as dependent verbs, and the dependency suffixes come in the form of *-Ø*, *-mbo* or *-mbona*. The suffix *-Ø* and *-mbo* are used interchangeably on CR chain verbs and non-finite chain verbs, and the suffix *-mbo* and *-mbona* are used interchangeably on DR chain verbs. The suffix *-Ø* is very occasionally used with DR chain verbs, but DR chain verbs with a *-Ø* dependency suffix do not seem to differ in function from other DR chain verbs. On the other hand, *-mbona* used on CR chain verbs or non-finite chain verbs tends to indicate some sort of discourse discontinuity other than participant discontinuity (similar to

how younger speakers use DR chain verb forms to emphasise kinds of discourse discontinuity; §7.2.2.2). With discourse discontinuity rarer than discourse continuity in natural discourse, the zero phonological form $-\emptyset$ and the longer phonological form *-mbona* are perhaps iconic towards discourse continuity and discontinuity, respectively, which they tend to be associated with.

The following are some examples of *-mbona* used with CR chain verbs; they are all from the text *amamola hwafo* ‘the story of the moon’ (appendix 1). In these CR chain verbs, while the CR morpheme indicates participant continuity, the ‘discontinuity’ dependency suffix *-mbona* indicates some kind of discourse discontinuity other than participant discontinuity. In the following example, *-mbona* indicates that the situation of the next clause is not sequential, i.e. temporal discontinuity.

7-194. *hwi = mbe* \emptyset -num-u-***mbona***,

water = INS CR-sit-3SG-DEP

mni amblwa = na pa hya [hwatu seru-mbo] = pa

only outside = ALL only EMPH [find eat-NOML] = only

hri-ya-a fa-ya-a kaku- \emptyset -u- \emptyset ,

come.out-3SG-3FSG:O leave-3SG-3FSG:O walk-CR-3MSG-DEP

‘(The moon) lived in the water, and it only come out to find things to eat, and...’ (A)

In the following example, the subjects of the second and the third clause are disjoint-referential; the CR morpheme of the second clause indicates that the subject

— the moon — will again be foregrounded later in the clause chain (i.e. the third clause is ‘skipped’). The ‘discontinuity’ dependency suffix *-mbona* in the second clause marks the termination of a discourse section; the next clause is the beginning of another discourse section where the next major protagonist of the text — the ‘father of the garden’ — is introduced. The ‘father of the garden’ will remain as the salient foreground participant before ‘the moon’ becomes the major protagonist again (all within the same clause-chain).

7-195. *ani a [num-wa-mbi] fla = mbe numu-a = mbe Ø-ser-u-Ø,*

there ah [sit-3FSG-PRES] place = INS sit-place = INS CR-eat-3MSG-DEP

ser-u Ø-num-u-la-mbona,

eat-3MSG CR-sit-3MSG-LIG-DEP

sunḡu amni = la afile ai Ø-hof-u-Ø,

later garden = GEN father 3 CR-come-3MSG-DEP

‘(The moon) eats at (his) abode the place where he lives, he eats and lives, and later the garden’s father he came, and...’ (A)²⁷

In the following example, participant continuity has been maintained in all three clauses. However, *-mbona* is used in the first two clauses because of the disruption in the flow of spatial continuity (i.e. the spatial settings of the three clauses are significantly different).

²⁷ The masculine *amamo* ‘moon’ is cross-referenced as feminine in the subordinate verb *num-wa-mbi*. This 3FSG cross reference suffix *-wa* is said to be ‘gender-neutral’, i.e. its gender feature ‘does not count’. See §5.2.4.

7-196. *amamo rani baya hri-ya-a*

fa-Ø-ya-a-mbona,

moon that side come.out-3SG-3FSG:O COMPL-CR-3SG-3FSG:O-DEP

‘The moon came out from there,’

Ø-hahof-u-mbona,

CR-go.up-3MSG-DEP

‘he went up,’

ye sini = mbe pe-u-mbi rani.

then sky = INS be.gone-3SG-PRES:STAT that

‘and he stays in the sky ever since.’ (A)

The dependency suffix *-mbo* is obviously grammaticalised from the object case clitic *=mbo* (§4.5.1); cross-linguistically it is common for case clitics to be grammaticalised as markers of dependent clauses (see discussions in §6.1). As for the dependency suffix *-mbona*, this is likely to be bimorphemic: *-mbo* and *-na*. There are two nominal clitics in the shape of *na*: the topic clitic *=na* (§4.5.7) and the allative case clitic *=na ~ =nambo* (§4.5.3). Another word with the shape *na* is the conjunction *na* ‘and’ (§3.2.6). (However, this conjunction *na* may not be a native word; it is likely to be a loanword from Tok Pisin.) Currently, it is inconclusive as to which may be the origin of *na* in *-mbona*. Careful study of the corresponding dependency suffixes in Dla proper may shed light to this problem. Unfortunately, at the moment it is not clear to me what exactly the forms of the dependency suffixes are in Dla proper (but at least it is known that the topic clitic and allative case clitic in Dla proper are not homophonous: *=nya* and *=na(mbo)* respectively). Another question about the dependency suffixes in Menggwa Dla is why *na* itself is not used as a dependency suffix, and why *na* must follow rather than

precede *mbo* to function as a dependency suffixes. Before these questions are answered, I leave *-mbona* as not further analysable morphologically.