A grammar of Moloko

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7 The verb complex

Moloko does not have a simple verb word. Rather, Friesen & Mamalis (2008) named this structure the 'verb complex' since affixes and extensions attach to the verb stem that comprises a close phonological unit that is not always one phonological word. The verb complex may be made up of from one to three phonological words as defined by prosody spread and word-final allophones (Section 2.6.1 and Section 2.6.2).

There are two fundamental aspects of Moloko grammar that are expressed in the verb complex. The first is the concept of the point of reference. The point of reference involves both place and time. Actions in Moloko are usually placed with respect to a set locational point of reference, which in normal speech is usually the speaker. In a narrative or other discourse, the speaker can set the point of reference. Verbs are aligned with respect to the locational point of reference by means of directional verbal extensions (Section 7.5.2). These extensions determine the direction of the event with respect to the point of reference, and can be towards the speaker, away from the speaker, or back and forth. Directionals are different from adpositionals (Section 7.5.1), since adpositionals align the action with respect to other elements in the immediate context. The temporal point of reference is set in Moloko by mood and the Perfect. Mood involves what is real or not yet experienced in the world shared by the speaker and his or her audience (realis and irrealis, Section 7.4.3). The speaker and audience are, as it were, walking backwards into the future.[1] What has happened and is happening is 'visible' to them (realis) and they move together into the 'invisible' world behind them (irrealis). The point of reference will be the time of communication in normal speech. However, again in a narrative or other type of discourse, the speaker can set the point of reference (usually to the time the events took place). The Perfect extension is employed whenever the speaker needs to make sure that the hearer understands that an event is already completed before the point of reference, with ongoing effects to that point.

Another fundamental concept in Moloko verbs expressed in the verb complex is expectation, accomplished through mood. The realis world is the realm of the

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[1] I first heard this image at a First Nations languages conference in Canada in 2011 to express an Indigenous view of time.

visible or real; it includes the past and what is present as it happens before the speaker and audience and what is shared knowledge or expectations about the world and how it works. It is presented by the speaker as being real or known – events and states that happened, are happening, or which are part of the expected 'frame' of a situation. Within the realis world, the distinctions coded in verbs are for events that are complete/accomplished (Perfective, Section 7.4.1), incomplete/unachieved (Imperfective, Section 7.4.2), in progress (Section 8.2.1), repeated (three types, Section 7.4.4, Section 7.4.5, Section 7.5.2). The irrealis world is the realm of desire and will and the unknown world of the future. Within that world, verbs in Moloko are marked as to the degree of desire and perhaps the control the speaker has over the accomplishment of the event.

There is no system of tense as such in Moloko (Friesen & Mamalis 2008).[2] Perfective versus Imperfective aspect is expressed through changes in the tone of the subject prefix (Section 7.4.1 and Section 7.4.2). Irrealis mood is differentiated from realis mood by vowel changes in the subject prefix (Section 7.4.3). For the imperative (Section 7.4.2), the subject prefix is absent.

The verb stem as defined in Chapter 6 can take up to two prefixes and only one suffix. Morphemes on the stem include the subject pronominal affixes (a prefix and a suffix for 1P and 2P subjects, Section 7.3.1) and an indirect object pronominal enclitic (Section 7.3.2). Two prefixes are derivational – one prefix nominalises the verb (Section 7.6) and the other subordinates the entire clause in which it occurs (Section 7.7).

Another noteworthy feature is that Moloko has three ways to indicate repeated actions. Reduplication in the root is one of the ways that pluractionals are formed in other Chadic languages (Newman 1990). Contrary to many Chadic languages, Moloko does not have a productive pluractional. Only a few verb stems take the pluractional extension (used for actions that are made up of repetitive motions, Section 7.5.2).[3] However, two kinds of reduplication of the verb stem in Moloko express iterative aspect. Reduplication of a consonant in the stem indicates an iterative action that is habitual (Section 7.4.4) and reduplication of the entire verb word indicates an iterative action that is intermittent (Section 7.4.5). The verbal extensions, which include locational and directional information and Perfect aspect, are also described in this chapter (Section 7.5). They and the indirect object pronominal enclitic are discussed as part of the verb complex because they form a close phonological unit with the verb stem, even though they may sometimes be part of a separate phonological word.

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[2]Bow (1997c) considered tense and mood.

[3]The only stems which take the pluractional which we have so far identified are *a-h=aya* 'he/she grinds,' *a-s=əya* 'he/she cuts,' and *d=əya* 'take many'.

7.1 The phonological structure of the verb word

The phonological structure of the Moloko verb word is interesting in that, although its elements can each be part of a phonological unit with the verb stem, combinations of different elements can cause the entity to be broken into up to three phonological words. Its complexity is especially located in the post-verbal elements of the verb complex. The subject prefix and verb stem are the only necessary parts of the basic inflected verb complex.[4] All other affixes and extensions are structurally optional and are determined by the context and the lexical requirements of the particular verb.

Friesen & Mamalis (2008) discovered that Moloko has three types of verb complexes. The first type of verb complex is one phonological word (Figure 7.1), and occurs when there is no plural suffix (see Section 7.3.1), no indirect object pronominal enclitic (see Section 7.3.2), and no direct object pronominal (see Section 7.3.3). In this case, the extensions (see Section 7.5) cliticise directly to the verb stem.

| subject+ASPECT– | Irrealis– | Verb stem | =adpositional | =directional | =Perfect |
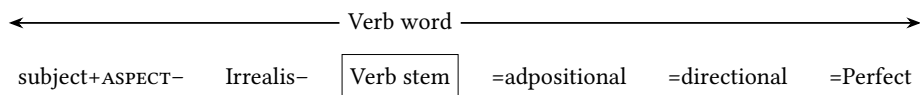
← ———————————— Verb word ————————————— →

Figure 7.1: One phonological word verb complex

In the examples, the verb word is delineated by square brackets.

(1) Gaka ala.
  [g=aka=ala   ]
  do[2S.IMP]=on=to

  'Put some more on!'[5] (lit. do on towards)

(2) Alala va.
  [à-l=ala=va   ]
  3S+PFV-go=to=PRF

  'He came back.'

The second type necessitates two phonological words – a verb word and an 'extension word' – because of the presence of either a direct or indirect object

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[4]The structure of the nominalised or dependent forms of the verb is similar. The derivational prefixes are in the same location as the subject prefix. All other affixes and extensions are possible with the exception of the Perfect extension.

[5]Note that the verb stem is /g -jᵉ/. The palatalisation drops with the extensions.

pronominal (or both). The verb word may have either a subject suffix or an indirect object pronominal enclitic (but not both). The structure of this second verb complex is illustrated in Figure 7.2.
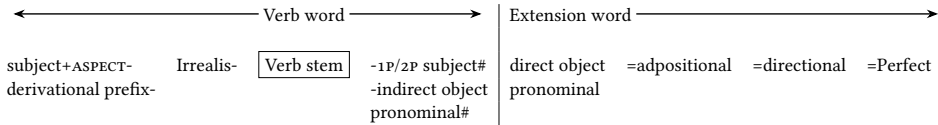
Figure 7.2: Two phonological word verb complex

The word break is initiated by both the direct and indirect object pronominals such that when either is present, there will be a word break. The word break after the 3s indirect object pronominal enclitic is indicated by word-final changes in /n/; in slow speech the 3s indirect object pronominal enclitic /=*an*/ is pronounced [aŋ] (showing word-final changes) even when there are other clitics following the verb word (3, see Section 7.3.2). The word break before the 3s DO pronominal is indicated by the fact that the 3s DO pronominal does not neutralise the prosody on the verb stem, and does not cause the /-j/ suffix to drop (4–5, see Section 7.3.3).[6]

(3) Ambaɗan aka alay.
   verb word   'extension word'
   [à-mbaɗ=aŋ]   [=aka=alaj]
   3s+PFV-change=3s.IO =on=away
   'He/she replied.' (lit. he changed on away)

(4) Aslay na.
   [à-ɬ-aj]   [na]
   3s+PFV-slay-CL   3s.DO
   'He killed it.'

(5) Ege na.
   [ɛ̀-g-ɛ]   [na]
   3s+PFV-do -CL   3s.DO
   'He did it.'

When there is no indirect object pronominal enclitic, the extensions cliticise to the direct object pronominal (6). When both direct and indirect object pronominals are present, again the extensions cliticise to the direct object pronominal (7).

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[6]The first line in each example is the orthographic form. The second is the phonetic form (slow speech) with morpheme breaks.

When there is an indirect object pronominal enclitic but no direct object pronominal, the extensions form a separate phonological word in and of themselves (8, see also 3).

(6)   Abək ta aya va məlama ahan ahay jəyga.
      verb word   'extension word'
      [a-bək]   [ta=aja=va]   məlama=ahaŋ=ahaj dzijga
      3s-invite   3P.DO=PLU=PRF   brothers=3P.POSS=Pl all
      'He had already invited all of his brothers.'

(7)   Akaɗaw na va.
      verb word   'extension word'
      [à-kaɗ=aw]   [na=va]
      3s+PFV-club =1S.IO 3S.DO=PRF
      'He/she has killed it for me.'

(8)   Hor agaw aka ala.
            verb word   'extension word'
      hʷɔr   [à-g=aw]   [=aka=ala]
      woman 3s+PFV-do=3s.IO =on=to
      'The woman liked me [as I liked her].' (lit. she did to me on toward)

The third type of verb complex consists of three phonological words (a verb word, an 'indirect object word,' and an 'extension word'). This type occurs when the verb complex has both a subject suffix and an indirect object pronominal enclitic. Phonological rules will not allow two morphemes suffixed or cliticised to the verb; nor can the indirect object pronominal enclitic commence another word. So, the morpheme *an* is inserted and the indirect object pronominal clitic attaches to the inserted morpheme. The overall structure is then as shown in Figure 7.3.

		Verb word			Indirect object word	Extension word			
subject +ASPECT-	Irrealis-	Verb stem		-1P/2P subject#	an=indirect object pronominal#	direct object pronominal	=adpositional	=directional	=Perfect
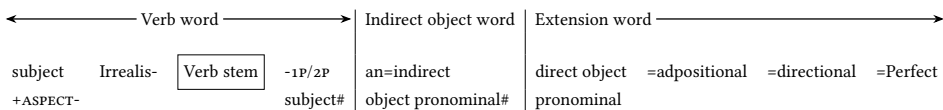
Figure 7.3: Three phonological word verb complex

In (9) and (10), the verb *kəslom* has the 2P imperative suffix attached (*-om*). The indirect object pronominal enclitic and the inserted morpheme *an*. Other extensions must make a third phonological word since there is a word break following the indirect object pronominal enclitic.

(9) Kəslom anan na aka awak.

verb word	'indirect object word'	'extension word'	
[kʊ-ɬ-ɔm]	[an=aŋ]	[na=aka]	awak
2-slay-2P	DAT=3S.IO	3S.DO=on	goat

'You (p) kill another goat for him.' (lit. you slay a goat for him on top of [another time a goat was slain]

(10) Kəslom anan aka awak.

verb word	'indirect object word'	'extension word'	
[kʊ-ɬ-ɔm]	[an=aŋ]	[=aka]	awak
2-kill-2P	DAT=3S.IO	=on	goat

'You kill another goat for him.'

The three types of verb complexes seen in Moloko are shown in Figure 7.4.
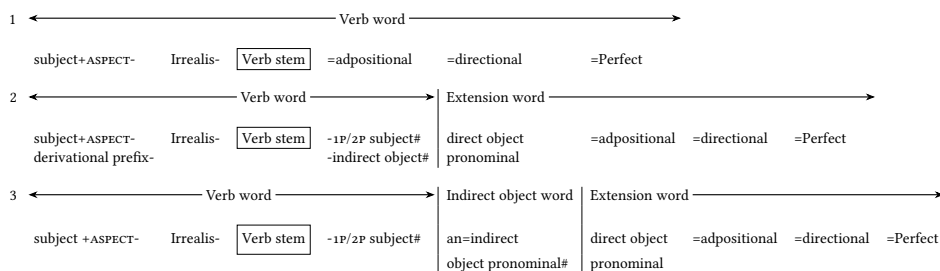
Figure 7.4: Three types of verb complexes

7.2 Imperative

The 2S imperative form is the basic citation form of the verb as the 2S form gives the clearest presentation of the verb stem. The imperative occurs in 2S, 1PIN and 2P forms. The 2S form is simply the verb stem. The plural forms carry suffixes which correspond to their respective subject pronominal suffixes in indicative verb stems (see Section 7.3.1). The singular and plural imperative forms are shown in Table 7.1. (from Friesen & Mamalis 2008).

7.3 Verb complex pronominals

Friesen & Mamalis (2008) showed that the verb complex can carry pronominals that indicate the subject, direct object, and indirect object. These markers in the

Table 7.1: Singular and plural imperative forms

2s form	1P inclusive form	2P form
faɗ	*fəɗ-ok*	*fəɗ-om*
'Put! (2s)'	'Let's put! (1Pɪɴ)'	'Put! (2P)'
zom	*zəm-ok*	*zəm-om*
'Eat! (2s)'	'Let's eat! (1Pɪɴ)'	'Eat! (2P)'
s-e	*s-ok*	*s-om*
'Drink! (2s)'	'Let's drink! (1Pɪɴ)'	'Drink! (2P)'
fat-ay	*fot-ok*	*fot-om*
'Descend! (2s)'	'Let's descend! (1Pɪɴ)'	'Descend! (2P)'

verb complex are all bound forms. They are called pronominals and not just agreement markers because all of them can be the only indication of their referent in the clause. Because the pronominals are present, there is no need for a noun phrase or free pronoun in the clause. Participants are tracked in discourse solely by pronominals, and free pronouns and noun phrases only occur in discourse to introduce a participant or to switch the referent.

Table 7.2 lists all the pronominals. Subject is indicated by a verbal prefix for singular subjects and third person plural. Plural subjects for first and second person are indicated by a combination of a prefix and a suffix. These subject pronominals (discussed in Section 7.3.1) are given in their underlying form because the surface vowel and tone on the prefix is determined by mood and aspect, respectively. Also, the underlying form is given to show the prosody, because the labialisation prosody in the plural subject suffixes will spread over the entire verb stem. The direct object pronominal (Section 7.3.3) only occurs for third person singular and plural. The indirect object pronominal (Section 7.3.2) cliticises to the right edge of the verb stem and the direct object pronominal follows it. In Table 7.2, the independent pronouns are also given for comparison since there are similarities between the free pronoun and its corresponding pronominal.

Table 7.2: Pronominals

Person	Pronominal subject affixes	Indirect object pronominal enclitics	Third person direct object pronominals	Independent pronouns
1S	*n-*	*=aw*		*ne*
2S	*k-*	*=ok*		*nok*
3S	*a- / ma-*[a]	*=an*	*na*	*ndahan*
1P inclusive[b]	*m-...-ok*	*=aloko*		*loko*
1P exclusive[c]	*n-...-om*	*=aləme*		*ləme*
2P	*k-...-om*	*=aləkwəye*		*ləkwəye*
3P	*t-*	*=ata*	*ta*	*təta*

[a]The third person Hortative subject pronominal, see Table 7.12 in Section 7.4.3.
[b]i.e. speaker (+others) + hearer
[c]i.e. speaker + others

7.3.1 Subject pronominal affixes

The subject is always marked on the finite form of the verb, regardless of whether there is a free subject phrase in the clause.[7] In fact, the subject pronominal marker in the verb can be the only indication of subject in the entire clause.[8] As noted in Table 7.3 and Table 7.4 (adapted from Friesen & Mamalis 2008), subject is marked by a prefix or combination of prefix and suffix. In the examples below, the pronominal affixes are bolded. The prefix carries aspectual tone (see Section 7.4), and the vowel quality is influenced by the prosody on the verb stem (see Section 6.6), the presence of the /a-/ prefix (see Section 6.5), and the mood of the verb (see Section 7.4.3). The 1P and 2P suffixes are labialised. This prosody will spread over the entire verb stem.

Bow (1997c) found that a prosody on the verb stem will spread leftwards from the verb stem over the singular subject prefixes. The fact that palatalisation and labialisation spread over the subject prefixes indicates that the subject markers are fully bound to the verb stem and are not separate words. (11) presents the palatalised verb /g^e/ 'do,' and (12) presents the labialised verb /l^o/ 'go.'

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[7]The presence of both subject pronominal and corresponding noun phrase occurs for pragmatic reasons.
[8]In a non-finite verb form, the subject pronominal is absent and the subject of the clause is either understood from the context or indicated by a free pronoun or noun phrase in the clause (Sections 7.6.2, 7.7, and 8.2.3).

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Table 7.3: Conjugations with subject pronominal affixes for /m nzar/ 'see'

Person	Singular	Plural
1	***nə*-*mənjar** *awak* 'I saw a goat'	***mə*-*mənjor*-*ok** *awak* 'we (inclusive) saw a goat' ***nə*-*mənjor*-*om** *awak* 'we (exclusive) saw a goat'
2	***kə*-*mənjar** *awak* 'you saw a goat'	***kə*-*mənjor*-*om** *awak* 'you (plural) saw a goat'
3	***a*-*mənjar** *awak* 'he/she saw a goat'	***tə*-*mənjar** *awak* 'they saw a goat'

Table 7.4: Conjugations with subject pronominal affixes for /h m-j/ 'run'

Person	Singular	Plural
1	***nə*-*həm*-*ay** 'I ran'	***mə*-*həm*-*ok** 'we (inclusive) ran' ***nə*-*həm*-*om** 'we (exclusive) ran'
2	***kə*-*həm*-*ay** 'you ran'	***kə*-*həm*-*om** 'you (plural) ran'
3	***a*-*həm*-*ay** 'he/she ran'	***tə*-*həm*-*ay** 'they ran'

(11)   Nege.
       [nɛ-g-ɛ]
       1s-do-cl
       'I did.'

(12)   Olo.
       [ɔ-lɔ]
       3s-go
       'he/she went.'

Bow (1997c) also discovered that labialisation on the 1P and 2P subject suffixes will spread leftwards from the suffix onto the entire verb word. This fact indicates that these morphemes are fully bound to the verb stem and are not separate words. The verb /ts k-jᵉ/ 'stand', shown in example (13) in its 1s form, loses its palatalisation and becomes labialised when the (labialised) plural suffixes are added (14):

(13)   Necəke.
       nɛ-tʃɪk-ɛ
       1s-stand-cl
       'I stand.'

(14)   Nəcəkom.
       nʊ-tsʊkʷ-ɔm
       1s-stand-1Pᴇx
       'We (exclusive) stand.'

Bow (1997c) also determined that the subject pronominal prefixes in Moloko appear to be toneless. The aspect of the verbal construction will allocate tone to the pronoun. In the Imperfective aspect, the pronoun always takes high tone (see Section 7.4.2). In the Perfective aspect, the pronoun copies the first tone of the root if it is low or mid. If the first tone of the root is high, the pronoun takes on mid tone.

7.3.2 Indirect object pronominal enclitic

An indirect object pronominal enclitic can attach to the verb word to express the indirect object, which is a core argument of the verb. The indirect object in Moloko is the participant that represents the place where the direct object is

directed to – the recipient or beneficiary of the action.[9] In (15), the verb /dz -j/ 'help' takes the indirect object. The indirect object represents the participant who receives the help.

(15)   Ajənaw.
       a-dzən=aw
       3s-help=1s.io
       'He/she helped me.'

The indirect object pronominal enclitic allows the core indirect object argument to be expressed in a prepositional phrase *ana Mana* 'to Mana' (16).

(16)   Ajənan ana Mana.
       a-dzən=aŋ   ana Mana
       3s-help=3s.io DAT Mana
       'He/she helped Mana.'

The indirect object pronominal enclitic can also stand in the place of the prepositional phrase (17).

(17)   Ajə**nan**.
       a-dzən=**aŋ**
       3s-help=3s.io
       'He/she helped him.'

Table 7.5 (adapted from Friesen & Mamalis 2008) shows the verb /v l/ 'give' conjugated for the indirect object argument. The indirect object expresses the recipient.

The indirect object pronominal enclitics are phonologically bound to the verb stem and do not comprise separate words. When an indirect object pronominal cliticises to the verb stem, there are no word-final alternations in the verb stem. Compare the following pairs of examples showing verb stems with and without indirect object pronominal enclitics. When the indirect object pronominal enclitic is attached (19), there is no word-final alternation of /h/ $\rightarrow$ [x] / _#.[10]

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[9]Employing the Agent-Theme-Location analysis developed by DeLancey (1991), the indirect object in Moloko expresses the semantic LOC (see Chapter 9). The direct object pronominal expresses the semantic Theme – the participant that changes position or state (see Section 7.3.3).

[10]See Section 2.6.1, c.f. (18). Likewise, we do not see the word-final process of n $\rightarrow$ [ŋ] / _# between the verb stem and the indirect object pronominal.

Table 7.5: Verb /v l/ 'give' conjugated for indirect object pronominal enclitic

Person	Singular	Plural
1	*a-vəl=**aw*** 'he/she gave to me'	*a-vəl=**aloko*** 'he/she gave to us (inclusive)' *a-vəl=**aləme*** 'he/she gave to us (exclusive)'
2	*a-vəl=**ok*** 'he/she gave to you'	*a-vəl=**aləkwəye*** 'he/she gave to you (plural)'
3	*a-vəl=**an*** 'he/she gave to him/her'	*a-vəl=**ata*** 'he/she gave to them'

(18) Aɓah zana.
  a-ɓax zana
  3s-sew clothing
  'He/she sews clothing.'

(19) Aɓahaw zana.
  a-ɓah=aw   zana
  3s-sew=1s.io clothing
  'He/she sews clothing for me.'

Similarly, the example pairs (20) and (21) illustrate that the /-j/ suffix is dropped when the indirect object pronominal is present (21), indicating that the pronominal is phonologically bound to the stem (see Section 6.3).

(20) Ajay.
  a-dz-aj
  3s-speak-cʟ
  'He/she speaks.'

(21) Ajan.
  a-dz=aŋ
  3s-speak=3s.io
  'He/she speaks to him/her.'

The indirect object pronominal enclitic is not phonologically a true suffix, because the prosody of the indirect object pronominal enclitic does not affect the prosody on the verb stem. Compare (22) and (23) which illustrate the verb stem /s/ conjugated with second person singular and plural indirect objects. If the prosody of the indirect object pronominal enclitic affected the verb stem, one would expect that the /s/ in example (23) would be affected by the palatalisation prosody of the plural indirect object pronominal enclitic and be expressed as [ʃ].

(22) Asok aka ɗaf.
      a-s=ɔk   =aka ɗaf
      3s-please=2s.io =on millet loaf
      'You want to have more millet loaves.' (lit. millet loaf is pleasing to you)

(23) Asaləkwəye aka ɗaf.
      a-s=alʊkʷøjɛ   =aka ɗaf
      3s-please=2p.io =on millet loaf
      'You want to have more millet loaves.' (lit. millet loaf is pleasing to you)

The fact that the indirect object pronominal can attach to verb stems as well as other particles confirms that it is in fact a clitic pronoun. Normally, the indirect object pronominal enclitic attaches directly to the verb stem (24). However, if the plural subject pronominal suffix is required on the verb (25), the indirect object pronominal can no longer attach to the verb, because the verb stem can take only one suffix (see Section 7.1). Instead, the indirect object pronominal cliticises to the particle *an.* This particle may be related to *ana,* the dative preposition 'to.'

(24) Kasl**an** awak.
      ka-ɬ=**aŋ**   awak
      2s-slay=3s.io goat
      'You slay the goat for him.'

(25) Kəslom **anan** awak.
      kə-ɬ-ɔm **an=aŋ**   awak
      2-slay-2p to=3s.io goat
      'You (plural) slay the goat for him.'

There is a word break after the indirect object pronominal enclitic (the phonological words are indicated by square brackets in the examples immediately below). The word break is indicated by the fact that the 3s indirect object pronominal enclitic /=*an*/ in slow speech is pronounced [aŋ] even when there are other

clitics following the verb word (see 26–27). The word-final [ŋ] will delete in fast speech (see Section 2.5.2). These clitics (e.g., the adpositional clitics in these examples, see Section 7.5.1) would otherwise attach to the verb (compare with example 28):

(26) Asan aka ɗaf.
      [a-s=aŋ]   [=aka] ɗaf
      3s-please=3s.io =on   millet loaf
      'He/she wants to have more millet loaves.' (lit. millet loaf is pleasing to him)

(27) Adan aka ɗaf.
      [a-d=aŋ]   [=aka] ɗaf
      3s-prepare=3s.io =on   millet loaf
      'She made more loaves of millet for him.'

(28) Adaka ɗaf.
      [a-d=aka]   ɗaf
      3s-prepare=on millet loaf
      'She made more loaves of millet.'

7.3.3 Third person direct object pronominal

Table 7.2 (from Friesen & Mamalis 2008) shows the direct object (DO) pronominals. The third person DO pronominals replace or double a full noun phrase in a discourse – the *na* (3s.DO) or *ta* (3P.DO) refer back to something in the immediately preceding context. Examples (29) and (30) show two clauses that might occur in a discourse. In (30) the *na* refers back to *sla* 'cow' in (29).

(29) Kaslay sla.
      kà-ɬ-aj   ɬa
      2s+pfv-slay-cl cow
      'You slew the cow.'

(30) Kaslay na.
      kà-ɬ-aj   na
      2s+pfv-slay-cl 3s.do
      'You slew it.'

A third person DO pronominal can be the only expression of direct object in a clause if its identity is known in the discourse (30, 32, and 36). The only time that a clause will contain both a third person DO pronominal and a noun phrase that co-refer to the direct object in the clause is when a special focus on the direct object is required ('all his brothers' in 31, 'that fruit-bearing tree' in 38).

(31) Race Story (Friesen 2003).
      Moktonok na, abək **ta** aya va məlama ahan ahay jəyga.
      mɔkʷtɔnɔkʷ na a-bək   **ta**=aja=va   məlama=ahaŋ=ahaj dzijga
      toad   PSP 3s-invite 3p=PLU=PRF brothers=3p.POSS=Pl all
      'The toad, he had already invited all of his brothers.'

We know that the third person DO pronominals are phonologically separate words (not clitics like the other verbal extensions) because the /-j/ suffix does not drop when the DO pronominal is added to a clause (32). Normally the /-j/ suffix drops off when extensions or suffixes are added to the clause (33, see also Section 6.3).

(32) Apaɗay **na**.
      a-paɗ-aj   **na**
      3s-crunch-CL 3s.DO
      'He/she crunches it.'

(33) Apaɗaka.
      a-paɗ=aka
      3s-crunch=on
      'He/she crunches on.'

Another indication that the DO pronominal is phonologically a separate word is that the neutral prosody on the DO pronominal does not affect the prosody of the verb word. Compare (34) and (35). In both examples the verb complex is palatalised in spite of the addition of the DO pronominal. This situation is in contrast to what happens with the Perfect enclitic (see Section 7.5.3).

(34) Nese.
      nɛ-ʃ-ɛ
      1s-drink-CL
      'I drink.'

(35) Nese na.
    nɛ-ʃ-ɛ   na
    1S-drink-CL 3S.DO
    'I drink it.'

A third indication is that word-final changes (like word-final /n/ being realised as [ŋ] (see Section 2.6.1 and example 36) are preserved when followed by *na* or *ta*.

(36) Nəvəlan **na**.
    nə-vəl=aŋ   **na**
    1S-give=3S.IO 3S.DO
    'I gave it to him.'

The normal slot for the DO pronominal is within the verb complex between the verb stem and the directional extension. In each example below, the verb complex is delineated by square brackets and the third person DO pronominal is bolded.

(37) Baba ango avəlan **na** alay ana məze.
    baba=aŋgʷɔ   [a-vəl=aŋ   **na**=alaj]   ana mɪʒɛ
    father=2S.POSS 3S-give=3S.IO 3S.DO=away DAT person
    'Your father gave it to that person.'

Any further verbal extensions will cliticise to a third person DO pronominal. In example (38), the directional extension *=ala* 'toward' cliticises to *na* and vowels will elide resulting in the pronunciation [nala]. See also example (31), where the pluractional and perfect extensions *=aya* and *=va* cliticise to the DO pronominal *ta* to result in the pronunciation [tajava].

(38) Cicada, S. 12
    Tolo [təmənjar **na** ala] mama agwazla nəndəye.
    tɔ-lɔ [tə-mənzar **na**=ala] mama agʷaɮa   nɪndijɛ
    3P-go 3P-see   3S.DO=to mother spp. of tree DEM
    'They went and saw that fruit-bearing tree.'

The first and second person direct objects are expressed by free pronouns (see Section 3.1.1.1) or noun phrases. The free pronouns are distributionally and phonologically distinct from the third person direct object pronominals. The free pronouns occur after the verb complex. Note that they occur after the directional extensions in (39) and (40). In each example, the verb complex is delineated by square brackets and the first or second person independent pronoun is bolded.

(39) [Kazalay] **ne** a kosoko ava ɗaw?
      [ka-z=alaj]   **nɛ** a kɔsɔkʷɔ ava ɗaw
      2s-take=away 1s at market in   Q
      'Will you take me to the market?'

(40) Baba ango [avəlata] **nok** va a ahar ata ava
      baba=aŋgʷɔ   [à-vəl=ata]   **nɔkʷ**=va a ahar=atəta   ava
      father=2s.POSS 3s-give=3P.IO 2s=PRF   at hand=3P.POSS in
      'Your father gave you to them' (lit. your father gave you into their hands)

      waya aməmbeɗe hor ata.
      waja   amɪ-mbɛɗ-ɛ   hʷɔr=atəta
      because DEP-change-CL woman=3P.POSS
      'to become a wife [for their relative].' (lit. because to change their woman)

The 3s pronominal is employed in discourse to track participants (along with the subject and indirect object pronominals, see Sections 7.3.1 and 7.3.2, respectively). Examples (41) and (42) are from the Snake story (see Section 1.4). The snake is introduced with a noun phrase *gogolvan* 'snake' (41). Further on in the narrative, the snake is referred to by the 3s DO pronominal *na* (42).

(41) Snake story, S. 4
      Alala na, gogolvan na, olo alay.
      a-l=la   na gʷɔgʷɔlvaŋ na ɔ̀-lɔ=alaj
      3s-go=to PSP snake   PSP 3s+PFV-go =away
      'Some time later, the snake went.'

(42) Snake story, S. 18
      Ne dəyday məkəɗe na aka.
      nɛ dijdaj   mɪ-kɪɗ-ɛ   na=aka
      1s ID:approximately NOM-kill-CL 3s.DO=on
      'I clubbed it to death (approximately).'

In a clause where the referent is clear, the 3s DO pronominal *na* can sometimes be left out in a clause. Four consecutive lines from a narrative not illustrated in this work are shown in (43). In the narrative, the head of the household brings home some things he bought at the market. He tells his workers to carry the things into the house. In his instructions *horom alay ayva* 'carry [all the things] into the house,' there is no grammatical indication of 'those things.' The absence

of the DO pronominal is indicated in the clause by the symbol Ø. In this case, the referent is clear and is not required in the clause.[11]

(43)   Bahay a hay olo a kosoko ava.
        bahaj a   haj   ɔ-lɔ   a kɔsɔkʷɔ ava
        chief GEN house 3s-go at market in
        'The head of the house went to the market.'

        Askomala ele ahay gam.
        a-sʊkʷɔm=ala ɛlɛ=ahaj gam
        3s-buy=to   thing=Pl many
        'He bought many things.'

        Awəɗakata ele ngəndəye ana ndam slərele ahan ahay, awəy,
        a-wuɗak=ata   ɛlɛ   ŋgɛndijɛ ana ndam ɬɪrɛlɛ=ahaŋ=ahaj awij
        3s-divide=3P.IO thing DEM   DAT people work=3s.POSS=Pl said
        '[When he got home], he divided the things among his workmen, saying,'

        "Horom alay ayva!"
        hʷɔr-ɔm   Ø =alaj   ajva
        carry[IMP]-2P   =away inside house
        '"Carry [all the things] into the house."'

Likewise, in the Cicada story, the direct object (the tree that the chief wanted by his door) is not grammatically indicated in the clause in S. 16 (44). Although the referent is definite, there is no grammatical reference to it in the clause.

(44)   Cicada, S. 16
        Taazala təta bay.
        tàà-z=ala   Ø təta   baj
        3P+HOR-take=to   ability NEG
        'They were not able to bring [the tree].'

Participants can be made prominent in a clause by doubling the reference to them. In (45) from S. 20 of the Cicada story, the tree that the chief desired is indicated twice in a clause, both by the presence of a noun phrase *memele ga*

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[11]The DO pronominal in Moloko does not function in the way Frajzyngier has postulated for some Chadic languages. Frajzyngier & Shay (2008) say that the DO pronoun codes the definiteness of the referent in some Chadic languages. While it is true in Moloko that when the DO pronominal (or any other pronoun) is used, then the referent is definite, the converse is not true. For example, the referent in (43) is definite yet there is no DO pronominal.

ndana 'that tree that you spoke of' and also the 3s DO pronominal (both are bolded in 45). The effect is prominence.

(45)   Cicada, S. 20
       Náamənjar **na** alay **memele ga ndana** əwɗe.
       náá-mənzar **na**=alaj   **mɛmɛlɛ ga   ndana** uwɗɛ
       1s+POT-see 3s.DO=away tree   ADJ DEM   first
       '"First I want to see the tree that you spoke of."'

7.4 Aspect and mood

Friesen & Mamalis (2008) showed that Moloko does not mark verb stems for tense, but uses an aspectual system, looking at realis events as complete (Perfective, see Section 7.4.1) or incomplete (Imperfective, see Section 7.4.2). The vowel in the prefix expresses realis or irrealis mood (see Section 7.4.3). The tonal melody on the subject prefix expresses realis events as Perfective or Imperfective aspect, and expresses the various kinds of irrealis events. Reduplication of a consonant in the verb stem indicates habitual iterative aspect (see Section 7.4.4). Reduplication of the entire verb stem indicates the intermittent iterative aspect – the intermittent repetition of the same action, possibly by the same actor, over a period of time (see Section 7.4.5).[12]

7.4.1 Perfective

The Perfective (PFV) aspect in Moloko is the aspect that presents a realis event as completed (Friesen & Mamalis 2008).[13] The Perfective aspect is indicated by a phonetic low or mid tone on the subject prefix. Verb stems with underlyingly low tone or toneless verb stems have a phonetic low tone if the verb stem begins with a depressor consonant (see Section 6.7.1), and phonetic mid tone otherwise. Verb stems with underlyingly high tone are unaffected by depressor consonants

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[12]Another repeated aspect is the pluractional. The pluractional extension in Moloko indicates an action is back and forth, for example *s=əya* 'sawing' or *h=aya* 'grinding' (Section 7.5.2).

[13]Usually, the term 'Perfective' is used to refer to a situation as a whole, whether it is completed at the time of speaking or not. The situation is viewed in its entirety for Perfective, whereas in Imperfective aspect, the situation is viewed 'from inside.' as an ongoing process (Comrie 1976: 3–4; Payne 1997: 239). R. M. Dixon (2012) refers to verbs expressing completed actions as 'perfect' and those expressing incomplete actions as 'imperfect.' We have used the term 'Perfective' for completed actions in Moloko because there is also a morpheme representing Perfect in Moloko (Section 7.5.3) which collocates with both of these other aspects.

and so the phonetic tone of the subject prefix is mid. Table 7.6 (from Friesen & Mamalis 2008) shows an example from each tone class.

Table 7.6: Perfective tone

Underlying verb stem	Underlying tone of verb stem	Phonetic tone of Perfective verb word	Gloss
/nz a k -j/	H	[nə̄-nzák-áj]	'I found'
/a-p a s/	L, no depressor consonants	[nā-pās-áj]	'I spread (something) out'
/a-d-a r -j/	L, with depressor consonants	[nà-dàr-āj]	'I planted'
/ɮ w -j/	Toneless	[nə̀-ɮə̀w-āj]	'I feared'

The default verbal aspect for the main event line in a narrative is Perfective. Perfective verb forms are found in the main event line clauses expressing the events immediately following the setting sections of narratives. This is seen in the following examples drawn from three different narratives: (46) is from lines 4-6 of the Snake story, (47) is from a story not illustrated in this work, and (48) is from line 6 of the Cicada story. In the examples, Perfective verb forms are bolded. The low tone is marked on the subject pronominal prefix.

(46) Snake, S. 4-6
      Alala na, gogolvan na, **olo alay**.
      a-l=ala   na gʷɔgʷɔlvaŋ na ɔ̀-lɔ=**alaj**
      3s-go=to psp snake   psp 3s+pfv-go=away
      'Some time later, the snake went.'

      Acar a hay kəre ava fo fo fo.
      à-tsar   a haj   kɪrɛ   ava fɔ fɔ fɔ
      3s+pfv-climb at house beams in   id:sound of snake
      'It climbed into the roof of the house *fo fo fo*.'

      Sen ala na, okfom **adəɗala** ɓav.
      ʃɛŋ   =ala na ɔkʷfɔm **à-dəɗ=ala**   ɓav
      id:go =to psp mouse 3s+pfv-fall=to id:sound of falling
      'And walking, a mouse fell *ɓav*!'

(47) Kəlen na, zar ahan na, **enjé** ele ahan ametele.
      kɪlɛŋ na zar=ahaŋ   na ɛ̀-**nʒ-ɛ**   ɛlɛ=ahaŋ   amɛ-tɛl-ɛ
      next psp man=3s.poss psp 3s+pfv-leave-cl thing=3s.poss dep-walk-cl
      'Then, her husband went away to walk;'

Enjé kə delmete aka a slam enen.

ɛ̀-nʒ-ɛ   kə dɛlmɛtɛ aka a ɬam ɛnɛŋ

3S+PFV-leave-CL on place   on at place another

'he left for some place.'

(48) Cicada, S. 6

Albaya ahay ndana kəlen **təngala** ala ma ana bahay.

albaja=ahaj   ndana kɪlɛŋ **tɜ̀-ŋgala**=ala   ma ana bahaj

young man=Pl DEM   then 3P+PFV-return=to word DAT chief

'The above-mentioned young men then took the word (response) to the chief.'

7.4.2 Imperfective

In contrast with the Perfective, the Imperfective aspect (IFV) can refer to a realis event that is incomplete and in the process of happening or to an event that is just about to begin.[14] The subject prefix for the Imperfective form is always high tone and the tone over the verb stem varies according to the underlying tone of the verb stem. Bow (1997c) noted that the high tone on the prefix spreads to the first syllable of an underlyingly low tone verb. In the examples, the high tone of the Imperfective and low tone of Perfective are marked on the subject pronominal prefix. Examples (49–56) are in pairs to show contrast between the tone of the Imperfective (the first of each pair) and the Perfective (the second of each pair). Compare (49) (Imperfective) and (50) (Perfective). Example (49) refers to an event in process of happening (going to the market; already en route).[15]

(49) Kólo amtamay?

kɔ́-lɔ   amtamaj

2S+IFV-go where

'Where are you going?'

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[14]'Imperfective aspect' usually refers to a situation 'from the inside' and is concerned with the internal structure of the situation (Comrie 1976: 4). Perhaps 'incomplete' would be a better name for this aspect in Moloko; however it does not correspond with imperfect as described by R. M. Dixon (2012) in that the action need not begin before the present and be continuing, as R. M. Dixon (2012: 31) notes.

[15]There is also a progressive aspect expressed by a complex verb construction (see Section 8.2.1), but the Imperfective verb form alone can give the idea of an action in progress.

(50) K**o**lo amtamay?
      kɔ̀-lɔ̄   amtamaj
      2S+PFV-go where
      'Where were you?'

(51) and (52) illustrate another Imperfective/Perfective pair. The Imperfective in this case refers to an event in process.

(51) N**á**kaɗ bərek cəcəngehe.
      ná-kàɗ   bɪrɛk tʃɪtʃɪŋgɛhɛ
      1S+IFV-kill brick now

      'I am making bricks (now).'

(52) Nakaɗ bərek cəcəngehe.
      nà-kàɗ   bɪrɛk tʃɪtʃɪŋgɛhɛ
      1S+PFV-kill brick now

      'I made bricks just now.'

(53) is an Imperfective that marks an event about to begin (compare with the Perfective in 54).

(53) N**á**pasay agaban.
      ná-pàs-āj   agabaŋ
      1S+IFV-take away-CL sesame

      'I'm about to take away the sesame seeds.'

(54) N**a**pasay agaban.
      nà-pàs-āj   agabaŋ
      1S+PFV-take away-CL sesame

      'I took away the sesame seeds.'

Likewise, the Imperfective in (55) illustrates an event about to begin (compared with the Perfective in 56).

(55) Cəcəngehe ne awəy, "N**é**ge hay əwla ete."
      tʃɪtʃɪŋgɛhɛ nɛ awij n**ɛ́**-g-ɛ́   haj=uwla   ɛtɛ
      now   1S said 1S+IFV-do-CL house=1S.POSS also

      'Now I said, "I want to/am going to make a house for myself too."'

(56)   Cəcəngehe ne awəy, "Nege hay əwla ete."
       tʃɪtʃɪŋɡɛhɛ nɛ awij nɛ̀-g-ɛ̄   haj=uwla   ɛtɛ
       now   1s said 1s+PFV-do-CL house=1s.POSS also
       'Now I said, "I made a house for myself too."'

Table 7.7 (from Friesen & Mamalis 2008) shows the Imperfective tonal pattern on the same four verb stems as were illustrated in Table 7.6 for the Perfective.

Table 7.7: Imperfective tone

Underlying verb stem	Underlying tone of verb stem	Phonetic tone of verb word	Gloss
/nz a k-aj/	H	[nɔ́-nzák-áj]	'I'm finding'
/a-p a s/	L, no depressor consonants	[ná-pās-áj]	'I'm spreading (something) out'
/a-d-a r-aj/	L, with depressor consonants	[ná-dàr-āj]	'I'm planting'
/ɮ w-aj/	Toneless	[nɔ́-ɮáw-áj]	'I'm fearing'

Table 7.8 (from Friesen & Mamalis 2008) summarises the tone patterns for Perfective and Imperfective tone on stems of different structures though the syllable pattern of the stem does not influence the tone pattern for the different aspects.

In texts, the Imperfective is used whenever the (ongoing) normal state of affairs is being expressed, i.e., the way the world is. All the main verbs are Imperfective in (57–60). They are general statements and not speaking of a particular situation.

(57)   Sləreɛle **áyəɗay** məze.
       ɬɪrɛlɛ **á-jəɗ-aj**   mɪʒɛ
       work 3s+IFV-tire-CL person
       'Work tires people out.'

(58)   Fat **ánah** háy.
       fat **á-nax**   haj
       sun 3s+IFV-ripen millet
       'The sun ripens the millet.'

(59)   **Káslay** awak nə məsləye.
       ká-ɬ-aj   awak nə   mɪ-ɬ-ijɛ
       2s+IFV-slay-CL goat   with NOM-slay-CL
       'You slaughter goats by cutting their throat, and not by any other way.'
       (lit. you slay a goat with slaying)

Table 7.8: Summary of tone patterns in selected verb forms

Underlying tone of verb stem	Structure of verb stem	Perfective (lower tone on subject prefix)	Imperfective (higher tone on subject prefix)
H	/CaC-j/	[nə̄-nzák-áj] 'I found'	[nə́-nzák-áj] 'I am finding'
	/CC/	[nā-mbár] 'I healed'	[ná-mbár] 'I am healing'
		[nā-ɗák] 'I blocked up'	[ná-ɗák] 'I am blocking up'
L no depressor consonants	/a-CaC-j/	[nā-pās-áj] 'I took away'	[ná-pās-áj] 'I am taking away'
	/CaC-j/	[nə̄-tāts-áj] 'I close'	[nə́-tāts-áj] 'I am closing'
	/CC/	[nā-fāɗ] 'I put'	[ná-fāɗ] 'I am putting'
L depressor consonants in verb stem	/a-CaC-j/	[nə̀-dàr-āj] 'I recoil'	[nə́-dàr-āj] 'I am recoiling'
	/CCaC-j/	[nə̀-və̀nàh-āj] 'I vomited'	[nə́-və́nàh-āj] 'I am vomiting'
Toneless	/CaC-j/	[nə̀-ɮàw-āj] 'I feared'	[nə́-ɮáw-āj] 'I am fearing'
	/CC/	[nà-ndàz] 'I pierced'	[ná-ndáz] 'I am piercing'
		[nà-dàɗ] 'I fell'	[ná-dáɗ] 'I am falling'

(60)   **Kákaɗ** okfom nə məkəɗe. **Káslay** bay.

    ká-kaɗ   ɔkʷfɔm nə   mɪ-kɪɗ-ɛ   **ká-ɬ-aj**   baj

    2s+ifv-kill(club) mouse with nom-kill(club)-cl 2s+ifv-slay-cl neg

    'You kill mice by smashing their head; you don't cut their throats.' (lit. you kill a mouse with killing; you don't slay it)

The Imperfective can refer to events that take place at any time, including in the past. In a story set in the past, the idea of an ongoing event that was the context for another event is encoded using the Imperfective verb form combined with the progressive aspect construction (see Section 8.2.1). The Imperfective verb stems are bolded in (61) (a sentence from the introduction of a narrative not illustrated in this work).

(61)   Asa təmənjar zar Məloko andalay **ásəya** ele

    asa tə-mənzar zar   Mʊlɔkʷɔ a-nd=alaj **á-s=ija**   ɛlɛ

    if   3p-see   man Moloko 3s-prg=away 3s+ifv-cut=plu thing

    'If they found a Moloko cutting [his fields]'

    nə zlərgo coco fan na,

    nə   ɮʊrgʷɔ tsɔtsɔ   faŋ   na

    with axe   id:cutting already psp

    'with his axe, *tsotso*'

    təlala təta gam na, tarəbokoy na ala rəbok rəbok.

    tə-l=ala   təta gam na ta-rʊbɔkʷ-ɔj na=ala   rʊbɔkʷ rʊbɔkʷ

    3s-go=to 3p   many psp 3p-hide-cl 3s.do=to id:hide

    'many came stealthily upon him *rəbok, rəbok*.'

In narratives, the Imperfective is found in the introduction to stories to describe the way things were at the beginning of the story.[16] For example, in the Disobedient Girl story, the main verbs in the introduction (lines 1–8) are all Imperfective. The entire story is in Section 1.5; the literal English translation of the introduction is given here with Imperfectives bolded.

    "A story under the silo, they say, the story of the disobedient girl: Long ago, to the Moloko people, God **gives** his blessing. That is, even if they had only sowed a little [millet] like this, it **lasts** them enough for the whole

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[16]As well as Imperfective, verb forms in the progressive aspect Section 8.2.1 and existentials (which do not inflect for aspect, Section 3.4) are found in the setting and conclusion sections of a narrative.

year. While grinding on the grinding stone, they **take** one grain of millet. So, if they **are grinding** it, the flour **multiplies**. Just one grain of millet, it **suffices** for them, and there **are leftovers**. Because, during its grinding, it **multiplies** on the grinding stone."

Imperfectives are also found in the conclusion of the narrative to recount how things turned out at the end of the story. The main verbs in the conclusion of the Disobedient Girl are also Imperfective. The literal English translation of the conclusion (lines 32-38) is given here with Imperfectives bolded (the entire story is in Section 1.5).

"So, ever since that time, finished! The Molokos say that God **gets** angry because of that girl, the disobedient one. Because of all that, God **takes back** his blessing from them. And now, one grain of millet, it **doesn't multiply** anymore. Putting one grain of millet on the grinding stone, it **doesn't multiply** anymore. You must **put on** a lot. It is like this they say, The curse belongs to that young woman who brought this suffering onto the people."

When the Imperfective co-occurs with the Perfect, the verb describes the current state or result of an event (62, see Section 7.5.3).

(62)   Arahəva.
         à-rah=va
         3s+pfv-fill=prf
         'It is full.' (it had filled)

7.4.3 Irrealis mood

Friesen & Mamalis (2008) showed how mood influences the vowel features of the subject pronominal prefix. Moloko has two moods: realis and irrealis. The main formal feature of the irrealis mood is that the vowel in the subject prefix is lengthened. There are three subtypes of irrealis mood, indicated by tone along with the lengthened subject prefix.[17] Tone on the subject prefix has three patterns, and no longer correlates with Perfective or Imperfective aspect in the irrealis mood. Rather, it correlates with the speaker's desire and will. These three types of mood are called Potential, Hortative, and Possible, respectively. Potential mood

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[17]Only two moods were distinguished in previous documents (Friesen & Mamalis 2008; Boyd 2003).

expresses an action desired by the speaker that is under his or her influence to perform. It carries a mild hortatory force for second person forms. Hortative mood expresses an action desired by the speaker to be performed by another who is somehow under his or her influence. Possible mood expresses that an action is desired by the speaker but dependent on the will of another.

The difference between the moods is illustrated in the following narrative situations. The first (63 and 64) illustrates a situation where someone says that he wants the chief to come to him, but he is not sure if the chief will actually come. The fact that the chief's coming is desired by the speaker but dependent on the will of the chief is expressed by the Possible mood in (63), with falling tone on the lengthened subject prefix (bolded). Compare with the response given in (64), where the speaker is sure that the chief will come. The surety is expressed by the Potential mood, with high tone on the lengthened subject prefix (bolded).

(63) Asaw bahay məlala azana **aá**lala ete ɗaw?
      a-s=aw   bahaj mə-l=ala   azana **áà**-l=ala   ɛtɛ   ɗaw
      3s-please=1s.io chief 3s-HOR-go=to maybe 3s+PBL-go=to polite Q
      'I would like the chief to come; maybe he will come (if he wants to).'

(64) **Áa**lala.
      áá-l=ala
      3s+POT-go=to
      'He will come (I am sure).'

Likewise, in (65), the speaker is expressing his wish that a potential attacker will leave him and his family alone. The falling tone on the lengthened subject prefix (bolded) indicates that the speaker is not sure that the person will leave them alone, but it depends on the will of that person (Possible mood).

(65) Adan bay **aá**makay loko émbəzen loko asabay.
      adaŋ   baj **áà**-mak-aj   lɔkʷɔ ɛ-mbɪʒɛŋ   lɔkʷɔ asa-baj
      perhaps NEG 2s+PBL-leave-CL 1Pin 3s+IFV-ruin 1Pin again-NEG
      'Perhaps he will leave us alone; he will not ruin us anymore.'

High tone on the lengthened subject prefix indicates Potential mood (an action desired by the speaker that is under his or her influence to perform, 66 and 68). In the examples, the subject prefix is bolded.

(66) Hajan **nóo**lo a kosoko ava.
hadzaŋ   **nɔ́ɔ́**-lɔ́   a kɔsɔkʷɔ ava
tomorrow 1s+POT-go at market in
'Tomorrow I will go to the market.'

(67) **Ó**lo.
áá-lɔ́
3s+POT-go
'He/she will hopefully go.' (if I have a say in it)

(68) **Káa**zala təta bay.
káá-z=ala   təta   baj
2s+POT-take=to ability NEG
'You cannot bring it.'

Low tone on the lengthened subject prefix indicates Hortative mood (an action desired by the speaker to be performed by another who is somehow under his or her influence, 69–70).

(69) **Moo**lo a kosoko ava.
mɔ̀ɔ̀-lɔ̄   a kɔsɔkʷɔ ava
3s+HOR-go at market in
'He/she should go to the market.'

(70) **Koo**zəmom enen bay.
kɔ̀ɔ̀-zɔ̄m-ɔm   ɛnɛŋ   baj
2P+HOR-eat-2P another NEG
'You (plural) should not eat anything.'

High tone followed by low tone on the lengthened subject prefix indicates Possible mood (an action is desired by the speaker but dependent on the will of another, 71–74).

(71) Epeley epeley ɗəw **noó**lo bay ɗaw?
ɛpɛlɛj   ɛpɛlɛj   ɗuw **nɔ́ɔ̀**-lɔ̄   baj ɗaw
whenever whenever also 1s+PBL-go NEG Q
'Far in the future also, might I not go perhaps?'

(72) **Aálo.**
áà-lɔ̄
3S+PBL-go
'He/she might go.' (it is up to him whether he goes, and I don't know what he is thinking)

(73) Adan bay ɓərav ahan **aándeslen aá**makay məɗəgele ahan.
adaŋ baj ɓərav=ahaŋ **áà-**ndɛɬɛŋ **áà-**māk-aj mɪ-ɗɪgɛl-ɛ
perhaps heart=3S.POSS 3S+PBL-cool 3S+PBL-leave-CL NOM-think-CL

=ahaŋ
=3S.POSS
'Perhaps his heart will cool, and he might leave behind his anger (lit. his thinking).'

(74) **Maá**həzlok asabay bay way.
máà-hʷʊɮ-ɔk   asa-baj   baj waj
1PIN+PBL-destroy-1PIN again-NEG NEG who
'Maybe we won't be destroyed after all.'[18]

The three irrealis moods are illustrated in Table 7.9 for the high tone verb /lᵒ/ 'go.'

Table 7.10 illustrates the low tone verb /tats/ 'close' in all of the realis and irrealis forms.

In first or third person, the Potential mood indicates some measure of confidence on the part of the speaker that the action will be performed, or the state achieved. First note the Imperfective in (75) (with high tone and short vowel on subject prefix) expressing an incomplete action. The Potential mood in (76) (with high tone and long vowel on subject prefix) carries the idea of surety (as does 77).

(75) **Nálo** a kosoko ava.
ná-lɔ́   a kɔsɔkʷɔ ava
1S+IFV-go at market in
'I am going to the market.'

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[18]Note that this 'passive' idea (to be destroyed) is accomplished through the flexible transitivity system in Moloko. The verb means 'destroy' but with the Theme as subject of the verb, the whole clause here expresses a passive idea (Chapter 9).

Table 7.9: Mood for the verb /lᵒ/ 'go'

2s form	3s form
Potential mood	
[káá-l=àlà]	[áá-l=àlà]
2s+POT-go=to	3s+POT-go=to
'You will come.' (I am sure you will come)	'He/she will come.' (I am sure he will come)
Hortative mood	
[kàà-l=àlá]	[mɘ̀-l= àlá]
2s+HOR-go=to	3s+HOR-go=to
'You come now!' (I want you to come)	'He/she should come.' (I want him to come)
Possible mood	
[káà-l=àlà]	[áà-l=àlà]
2s+PBL-go=to	3s+PBL-go=to
'I want you to come (but I am not sure if you will).'	'I want him to come (but am not sure if he will).'

Table 7.10: Realis and irrealis forms of /tats/ 'close'

	2s form	Gloss
Perfective	[kɘ̀-tāts-āj mahaj] 2s+PFV-close-CL door	'You closed the door.'
Imperfective	[kɘ́-tāts-āj mahaj] 2s+IFV-close-CL door	'You are closing the door.'/ 'You are about to close the door.'
Potential	[káá-tāts-āj mahaj] 2s+POT-close-CL door	'I would like you to close the door.'/ 'You should close the door.' / 'You will close the door.'
Hortative	[kàà-tāts-āj mahaj] 2s+HOR-close-CL door	'I strongly suggest you close the door.' / 'You should have already closed the door.'
Possible	[káà-tāts-āj mahaj] 2s+POT-close-CL door	'You might close the door.' / 'I want you to close the door but I don't know if you will.'

(76) **Náalo** a kosoko ava.
      náá-lɔ́   a kɔsɔkʷɔ ava
      1S+POT-go   at market in
      'I will go to the market.'

(77) Asa hay ango andava na mɛ, **áar**əɓay.
      asa haj=aŋgʷɔ   a-ndava na mɛ   **áá**-rəɓ-aj
      if   house=2S.POSS 3S-finish PSP opinion 3S+POT-be beautiful-CL
      'When your house is finished, it will be beautiful.'

Table 7.11 shows a conjugation of the low tone verb /fat-j/ 'descend' in the Potential form.

Table 7.11: Potential form conjugation of /fat -j / 'descend'

Person	Singular	Plural
1	[**náá**-fāt-aj] 1S+POT-descend-CL 'I will go down.'	[**má**-fɔ̄t-ɔkʷ] 1PIN+POT-descend-1PIN 'We will go down.' [**ná**-fɔ̄t-ɔm] 1PIN+POT-descend-1PIN 'We (exclusive) will go down.'
2	[**káá**-fāt-aj] 2S+POT-descend-CL 'I would like you to go down (you should go down).'	[**ká**-fɔ̄t-ɔm] 2P+POT-descend-2P 'You will all go down.'
3	[**áá**-fāt-aj] 3S+POT-descend-CL 'He/she will go down.'	[**táá**-fāt-aj] 3P+POT-descend-CL 'They will go down.'

Table 7.12 shows a conjugation of the low tone verb /fat-j/ 'descend' in the Hortative form. In the Hortative form, the 3s subject prefix is [màà-]. Compared with the Potential form, the Hortative form is a little stronger in terms of its hortatory force (see Section 10.4).

Table 7.13 shows the Possible form of the low tone verb /fat-j/ 'descend.'

Compare the realis imperfective (78), potential (79), and hortatory (80) forms of the high tone verb /z m/ 'eat.' The subject prefixes are bolded.

Table 7.12: Hortative form conjugation of /fat -j / 'descend'

Person	Singular	Plural
1	[**nàà**-fàt-aj] 1S+HOR-descend-CL 'I should go down.'	[**mà**-fɔ̀t-ɔkʷ] 1PIN+HOR-descend-1PIN 'I would like us (inclusive) to go down (we should go down).' **nà**-fɔ̀t-ɔm] 1PIN+HOR-descend-1PIN 'I would like us (exclusive) to go down (we should go down).'
2	**kàà**-fàt-aj] 2S+HOR-descend-CL 'I would like you to go down (you should go down).'	[**kàà**-fɔ̀t-ɔm] 2P+HOR-descend-2P 'I would like you all to go down (you should go down).'
3	[**màà**-fàt-aj] 3S+HOR-descend 'I would like him to go down (he should go down).'	[**tàà**-fàt-aj] 3P+HOR-descend-CL 'I would like them to go down (they should go down).'

(78) **Mə́**zəmok ɗaf.
      mʊ́-zʊm-ɔkʷ   ɗaf
      1PIN+IFV-eat-1P millet loaf
      'We are eating millet loaves.'

(79) Lomala **máa**zəmok ɗaf.
      l-ɔm   =ala **máá**-zʊm-ɔkʷ   ɗaf
      go[IMP]-2P =to   1PIN+POT-eat-1PIN millet loaf
      'Come; I want us to eat food.' (lit. millet loaf)

(80) Lomala **ma**dərok meher.
      l-ɔm   =ala **mà**-dɔ̄r-ɔ́kʷ   mɛhɛr
      go[IMP]-2P =to   1PIN+HOR-pray-1PIN forehead
      'Come; I want us to pray together.'

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Table 7.13: Possible form conjugation of /fat -j / 'descend'

Person	Singular	Plural
1	[**náà**-fàt-aj] 1s+pbl-descend-cl 'I might go down.'	[**máà**-fɔ̀t-ɔkʷ] 1pin+pbl-descend-1pin 'We will go down.' [**náà**-fɔ̀t-ɔm] 1pin+pbl-descend-1pin 'We (exclusive) might go down.'
2	[**káà**-fàt-aj] 2s+pbl-descend-cl 'You might go down.'	[**káà**-fɔ̀t-ɔm] 2p+pbl-descend-2p 'You might all go down.'
3	[**áà**-fàt-aj] 3s+pbl-descend-cl 'He/she might go down.'	[**táà**-fàt-aj] 3p+pbl-descend-cl 'They might go down.'

Table 7.14 (from Friesen & Mamalis 2008) shows the second and third person forms of a verb from each of the tone classes (H, L, toneless) in irrealis and realis moods.

Verb forms in irrealis mood occur in Moloko discourse to express events that might occur. In the Cicada text, some young men go out to bring back a tree that was desired by their chief. The men try but can't bring home the tree (which constitutes contrastive relief for the cicada's success in the end). A negative modal statement relates the unsuccessful attempt by the young men (81, from S.14). The lengthened subject prefix characterising irrealis mood is bolded in (81).

(81) Cicada, S. 16
      Albaya ahay tolo amazala agwazla na, **taa**zala tǝta bay.
      albaja=ahaj   tɔ-lɔ ama-z=ala agʷaƙa   na **tàà**-zaɗ=ala
      young man=Pl 3p-go dep-take=to spp. of tree psp 3p+hor-take=to

      tǝta   baj
      ability neg

      'The young men left to bring back the tree; [but] they were not able to bring [it].'

Table 7.14: Tone of realis and irrealis verb forms

Underlying tone of verb stem		Realis			Irrealis	
		Imperfective tone	Perfective tone	Potential	Hortative	Possible
H	2s form	[kɔ́-nzák-āj] 'you find'	[kɔ̀-nzák-āj] 'you found'	[káá-nzák-āj] 'I would like you to find'	[kàà-nzák-āj] 'you should find'	[káà-nzák-âj] 'you might find'
	3s form	[á-nzák-āj] 'he finds'	[à-nzák-āj] 'he found'	[áá-nzák-āj] 'I would like him to find'	[mɔ̀-nzák-āj] 'he should find'	[máà-nzák-âj] 'he might find'
L	2s form	[kɔ́-tàts-āj] 'you close'	[kɔ̀-tàts-āj] 'you closed'	[káá-tàts-āj] 'I would like you to close'	[kàà-tàts-āj] 'you should close'	[káà-tàts-āj] 'you might close'
	3s form	[áá-tàts-āj] 'he closes'	[à-tàts-āj] 'he closed'	[á-tàts-āj] 'I would like him to close'	[mɔ̀-tàts-āj] 'he should close'	[máà-tàts-āj] 'he might close'
toneless	2s form	[kɔ́-ɓàw-āj] 'you fear'	[kɔ̀-ɓàw-āj] 'you feared'	[káá-ɓàw-āj] 'I would like you to fear'	[kàà-ɓàw-āj] 'you should fear'	[káà-ɓàw-āj] 'you might fear'
	3s form	[á-ɓàw-āj] 'he fears'	[à-ɓàw-āj] 'he feared'	[áá-ɓàw-āj] 'I would like him to fear'	[mà-ɓàw-āj] 'he should fear'	[máà-ɓàw-āj] 'he might fear'

Also, dependent complement clauses represent things that were still future relative to the time of particular events on the event line (see Section 7.7). They encode desired results that might not necessarily happen as illustrated in the examples below.

(82)   Disobedient Girl, S. 13
Asa asok **aməhaya** na, kázaɗ war elé háy bəlen.

asa	à-s=ɔkʷ		**amə-h=aja**		na	ká-zaɗ	war	ɛlɛ
if	3s+PFV-please=2S.IO		DEP+PFV-grind=PLU		PSP	2S+IFV-take	child	eye

haj   bɪlɛŋ
millet one
'If you want to grind, you take only one grain.'

(83)   Cicada, S. 7
Agasaka na ka mahay ango aka **amambese**.

a-gas=aka	na	ka	mahaj=aŋgʷɔ	aka	**amɪ-mbɛʃ-ɛ**
3s-catch=on	PSP	on	door=2S.POSS	on	DEP-rest-CL

'It would please you to have the tree at your door, so that you could rest under it.'

7.4.4 Habitual iterative

The habitual iterative aspect[19] presents the actor(s) performing an action repeatedly as their usual habit. This aspect is formed by the gemination of the onset of the final syllable of the verb word.[20] In a one-consonant root, the root consonant is doubled (84). The verb words showing this aspect are bolded in each of the examples and the reduplicated consonant is underlined.

(84)   Kafta kosoko zlaba na, Məloko anga enen ahay **tóllo** a ləhe.

kafta	kɔsɔkʷɔ	ẑaba	na	Mʊlɔkʷɔ	aŋga	ɛnɛŋ=ahaj	**tɔ́-llɔ**		a
day	market	Dogba	PSP	Moloko	POSS	another=Pl	3P+IFV-go+ITR		at

lɪhɛ
bush
'Each Sunday (the market of Dogba), some Molokos go to [work] their fields.'

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[19]Friesen & Mamalis (2008) called this 'repetitive aspect.' Note that Moloko has two other forms that involve repetition of the same actions – the intermittent iterative (marked by complete reduplication of the verb stem, see Section 7.4.5) and the pluractional (marked by a verbal extension *=aya* or *=əya*, see Section 7.5.2).

[20]There are no examples in the corpus with verbal extensions.

In a CC root with no suffix, the first C of the stem is doubled (85–86).

(85) Tətərak ango nehe na, **káf̱f̱əɗ** ele ango a mogom waya azaɗ merkwe bay
tətərak=aŋgʷɔ nɛhɛ na **ká-f̱f̱əɗ** ɛlɛ=aŋgʷɔ a mɔgʷɔm
shoes=2s.poss here psp 2s+ifv-put+itr thing=2s.poss at home

'Your shoes there, you should put them on (habitually, repeatedly, day after day) at home,'

waja à-zàɗ mɛrkʷɛ baj
because 3s+pfv-take travel neg

'because you can't travel with them.' (lit. it doesn't take travel)

The fact that the reduplicated consonant is on the onset of the final syllable of the verb word (and not a particular consonant in the verb root) is illustrated by (86) and (87), which show the same verb /z mᵒ/ in the 2s and 2p forms. The 2p form has an extra syllable in the verb word because of the 2p subject pronominal suffix. In the 2s form, the reduplicated consonant is *z* – the first consonant of the root. In the 2p form, the reduplicated consonant is *m* – the second consonant of the root. However in both cases, the reduplicated consonant is the consonant at the onset of the final syllable in the verb word.

(86) A məjəvoko ava na, **kózzom** ɗaf.
a mʊdzʊvɔkʷɔ ava na **kʊ́-ẕzʊm** ɗaf
at feast in psp 2s+ifv-eat+itr millet loaf

'During a feast, you eat repeatedly (many times at many people's houses).'

(87) A məjəvoko ava na, **kɔ́zəmmom** ɗaf.
a mʊdzʊvɔkʷɔ ava na **kʊ́-zɔ́m̱m-ɔm** ɗaf
at feast in psp 2+ifv-eat+itr-2p millet loaf

'During a feast, you all eat (many times at many people's houses).'

(88) and (89) also show the reduplication of the onset of the final syllable of the verb word with a /-j / suffix.

(88) Kosoko molom na, ndam pəra ahay **tés̱se** gəzom.
kɔsɔkʷɔ mɔlɔm na ndam pəra=ahaj té-ʃʃ-ɛ́ gʊzɔm
market home psp person idol=Pl 3p+ifv-drink+itr-cl beer

'On market day, the traditionalists drink millet beer (many people, much beer).'

(89) **Adarray** eteme waya gəvah gam.
      à-dàrr̲-āj   ɛtɛmɛ waja   gəvax gam
      3s+PFV-plant+ITR-CL onion because field   lots
      'He/she planted many onions because his field was large.'

7.4.5 Intermittent iterative

The intermittent iterative[21] expresses the idea of the intermittent repetition of the same action, possibly by the same actor, over a period of time.[22] The intermittent iterative is formed by complete reduplication of the verb. Example (90) reflects a remark made by a friend concerning a situation where one duck died, then the owner bought another, and it died, and the situation was repeated four times. In the examples, the verb complex is delimited by square brackets.

(90) Andəbaba ango amət amat.
      andəbaba=aŋgʷɔ [a-mət a-mat]
      duck=2s.POSS   3s-die 3s-die
      'Your ducks keep dying.' (lit. your duck, it dies it dies)

In the elicited example below, the situation is that a group of people has gone to the market and has bought several items from several different vendors. Note that the directional extension *ala* occurs only once, following the second verb.

(91) A kosoko ava na, nəskwəmom nəskwəmom ala.
      a kɔsɔkʷɔ ava na [nʊ-sʊkʷʊm-ɔm nʊ-sʊkʷʊm-ɔm =ala]
      at market in PSP 1s-buy-1PEX   1s-buy-1PEX   =to
      'At the market, we buy and buy.' (lit. at the market, we buy we buy)

7.5 Verbal extensions

Friesen & Mamalis (2008) found that the six verbal extensions in Moloko are a class of morphemes that modify the meaning of the verb. They are clitics which cliticise to the right edge of the verbal complex to form a phonological word.

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[21]Friesen & Mamalis (2008) called this aspect simply "iterative."

[22]Moloko has two other forms that involve repetition of the same actions – the habitual iterative (marked by reduplication of one consonant in the stem, see Section 7.4.4) and the pluractional (marked by a verbal extension *=aya* or *=əya*, see Section 7.5.2).

The verb stem and the extensions may be separated syntactically by the indirect object pronominal clitics and third person DO pronominals (see Sections 7.3.2 and 7.3.3, respectively). The extensions will trigger the loss of any prosody on the verb stem.

In Moloko there are three categories of verbal extensions. Adpositionals (=*aka* 'on' and =*ava* 'in')[23] modify the meaning of the verb with particular reference to the location of the action. Directionals (=*ala* 'toward,' =*ala* 'away,' and =*aya* 'back and forth' or pluractional) add the idea of movement with respect to a particular point of reference. The third category is the Perfect =*va.*

7.5.1 Adpositionals

There are two adpositional enclitics:[24] =*aka* 'on, on top of' and =*ava* 'in.' These extensions give the verb an added sense of the location of the action in the discourse. The extension =*aka* 'on, on top of' (92) resembles the second element of the adposition *kə...aka* 'on.' In like manner, =*ava* 'in' (93) resembles the adposition *a...ava* 'in' (see Section 5.6.2).[25] The corresponding adpositional phrases often co-occur with the adpositionals. In the examples, the adpositions and adpositionals are bolded.

(92) Afəɗ**aka** war elé háy na, **kə** ver **aka**.
      a-fəɗ=**aka**   war ɛlɛ haj   na kə vɛr   **aka**
      3s-place=on child eye millet PSP on stone on

      'She put the grain of millet on the grinding stone.'

(93) Məmət**ava** alay **a** ver **ava**.
      mə-mət=**ava**=alaj **a** vɛr   **ava**
      NOM-die=in=away at room in

      'She died in the room.'

Adpositional extensions are phonological enclitics at the right edge of the verb. Friesen & Mamalis (2008) showed them to be phonologically bound to the verb stem because the /-j/ suffix drops off when the clitic attaches (95) (see also Section 6.3). Compare (94) and (95) which illustrate the verb /g -j $^{\text{e}}$/ 'do.' Note that the

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[23]These locational extensions are the same as the locational clitics on adpositional phrases; see Section 5.6.2.

[24]Friesen & Mamalis (2008) called these "locationals."

[25]Even though the verb in this example has verbal extensions, it is not conjugated for subject since it is a climactic point in the story where nominalised forms are often found (Section 7.6).

/-j/ suffix in the stem drops off when the extension =*aka* is attached (95). Another piece of evidence that the extension is phonologically bound to the verb stem is that the palatisation of the verb stem is neutralised by the extension. There is no adpositional extension and the verb word is palatalised in (94), whereas in (95) the locational extension =*aka* has neutralised the prosody of the entire verb complex.

(94) Tege cəɗoy.
      tɛ-g-ɛ   tsʊɗɔj
      3P-do-CL trick
      'They played a trick.' (lit. they did trick)

(95) Tag**aka** cəɗoy.
      ta-g=**aka** tsʊɗɔj
      3P-do=on trick
      'They played another trick.' (lit. they did trick 'on top' [of when they did it before])

Another piece of evidence that the extensions are phonologically attached to the verb stem is that the word-final allophones of /n/ and /h/, that is [ŋ] and [x], respectively, do not occur in the word-final position in the verb word when the locational is attached. When the extension =*va* cliticises to the verb /r h/ 'fill,' word-final alterations of /h/ do not occur (96). These allophones would be expected if the verb stem and Perfect extension were separate words.

(96) Arah**va** peɗeɗe.
      à-rah=**va**   pɛɗɛɗɛ
      3S+PFV-fill=PRF ID:full
      'It had filled right to the rim.'

The adpositional does not cliticise to the verb in (97) and (98) since the indirect object pronominal enclitic and plural subject suffix both trigger a word-final boundary (see Section 7.1), rendering the adpositional in a separate phonological word. In the examples, the boundaries of the phonological words are indicated by square brackets.

(97) Kanjaw **aka**.
      [ka-nz=aw] [=**aka**]
      2S-sit=1S.IO   =on
      'You are better than me.' (lit. you sit on me)

(98) Nədozlom **ava** a cəveɗ ava nə məze.
       [nə̀-dɔʒ-ɔm]   [=**ava**] a tʃɪvɛɗ ava nə   mɪʒɛ
       1s+PFV-intersect-1PEX =in   in road   in   with person
       'We met a person on the road.'

The extension *=aka* 'on' or 'on top of' also has the metaphorical meaning of 'in addition to,' 'again,' or 'even still' when the action of the verb occurs 'on top of' something that occurred previously; compare the following pair of examples, and note how the *=aka* in (100) looks backward to another instance of the same action in (99).

(99) Dərala.
       dər=ala
       move[2s.IMP]=to
       'Come closer (to me).'

(100) Dər**aka** ala.
        dər=**aka**=ala
        move[2s.IMP]=on=to
        'Come even still closer.'

Using *=aka* in a context where the addressee is eating renders the meaning 'do you want any more 'on top of' what you have already eaten?' (101).

(101) Asok **aka** ɗaw?
        a-s=ɔkʷ   =**aka** ɗaw
        3s-please=2s.IO =on Q
        'Do you want any more?' (lit. is it pleasing to you on?)

With the verb *mbaɗ* 'change,' *=aka* gives an idiomatic meaning to mark a change of speaker; that is, he spoke 'on top of' what the other person had just said.

(102) Ambaɗaŋ **aka**.
        a-mbaɗ=aŋ   =**aka**
        3s-change=3s.IO =on
        'He/she replied.' (lit. he changed to him on)

7.5.2 Directionals

Friesen & Mamalis (2008) found three directional extensions =*ala* 'towards' (103, 104), =*alay* 'away from' (105), and =*aya/=əya* 'back and forth repeated movement' (106). These directionals occur after the verb word and, if present, after the adpositional extensions as seen in (103) and (104). The directionals precede the Perfect (see Section 7.5.3), as seen in (106).

(103)   Kazaka **ala** hor ese.
ka-zaɗ=aka=**ala** hʷɔr   ɛʃɛ
2s-take=on=to   woman again

'You take another wife' (on top of the one you already have).[26] (lit. you take a wife on again)

(104)   Təjapata aka **ala** ana Məloko enen ahay.
tə-dzap=ata   =aka=**ala** ana Mʊlɔkʷɔ ɛnɛŋ=ahaj
3P-group=3s.IO =on=to   DAT Moloko   another=Pl

'They grouped together again against some of the Molokos.' (point of reference is the Molokos)

(105)   Dəraka **alay**.
dər=aka=**alaj**
move[2s.IMP]=on=away

'Move further away (from me).'

(106)   Race story[27]
Moktonok na, abək ta **aya** va məlama ahan ahay jəyga.
mɔkʷtɔnɔkʷ na a-bək   ta=**aja**=va   məlama=ahaŋ=ahaj dzijga
toad   PSP 3s-invite 3P=PLU=PRF brothers=3P.POSS=Pl all

'The toad, he had already invited all of his brothers.' (i.e., he went back and forth to all his brothers, inviting each)

Like the adpositionals, the directionals are phonological clitics at the right edge of the verbal complex. The presence of the enclitics requires that the /-j/ suffix be dropped off (the verb stem in example (104) is /dzap -j/ 'mix'). The neutral prosody of these extensions causes the palatalisation on the verb stem to neutralise. In (107) the verb stem is / nz -j ᵉ/ 'go' with a 3s surface form of [ɛnʒɛ].

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[26]The root-final *ɗ* of the verb *zaɗ* 'take' drops off when affixes and clitics are added (Section 6.2).

[27]Friesen 2003.

(107) Anj**ala**.
a-nz=**ala**
3s-go=to
'He/she is coming.'

Directional extensions orient the event expressed by the verb relative to a centre of reference. In speech, that point of reference is usually the speaker, so actions are seen as going towards the speaker (=*ala*), away from the speaker (=*alay*), or back and forth repeatedly (=*aya*). Compare the following examples of the verb /s kʷ m/ 'buy/sell' with a first person subject. When used with the directional =*ala* 'toward,' the verb means 'buy' (108). When it is used with the directional =*alay* 'away,' it means 'sell' (109).

(108) Nəskom**ala** awak.
nə̀-sʊkʷɔm=**ala**   awak
1s+PFV-buy/sell=to goat
'I bought a goat.'

(109) Nəskom**alay** awak.
nə̀-sʊkʷɔm=**alaj**   awak
1s+PFV-buy/sell=away goat
'I sold my goat.'

The directional =*ala* 'toward' indicates an action that moves toward the centre of reference (see 110 and 112). The directional =*alay* 'away' indicates an action that moves away from that centre (see 111 and 113). Compare the example pairs for /d r/ 'move' (110 and 111) and for /z ɗ/ 'take' (112 and 113). In each example pair, the first shows an action towards the speaker and the second shows an action away from the speaker.

(110) Dər**ala**.
dər=**ala**
move[2s.IMP]=to
'Come closer (to me).'

(111) Dər**alay**.
dər=**alaj**
move[2s.IMP]=away
'Move away (from me).'

(112)   **Za**la eteme.
   zaɗ=**ala**   ɛtɛmɛ
   take[2s.ɪᴍᴘ]=to onion
   'Bring the onion (to me).'

(113)   **Za**lay eteme.
   zaɗ=**alaj**   ɛtɛmɛ
   take[2s.ɪᴍᴘ]=away onion
   'Take the onion away (from me).'

The third directional *=aya* or *=əya* gives the idea of repetitive movement back and forth. This repetitive back and forth movement is called plurational.[28] A few verbs never occur without the plurational and involve regular back and forth movements like sawing (114), grinding (115), or putting many (*d=əya*). For other verbs, adding the directional adds a back and forth movement to the sense. Example (106) above involves the subject going from person to person to invite them to help.

(114)   Zar asəya memele.
   zar a-s=ija   mɛmɛlɛ
   man 3s-saw=ᴘʟᴜ tree
   'The man saws the tree.'

(115)   Aban ahaya háy.
   Abaŋ a-h=aja   haj
   Abang 3s-grind=ᴘʟᴜ millet
   'Abang grinds millet.'

Directionals are a device used in Moloko discourse to help provide cohesion.[29] Directionals keep the hearer oriented to the events of a story and how they relate to a particular spatial point of reference (a place or dominant character). The point of reference may remain constant throughout the whole story or it may change during the story. Selected lines from the Cicada text (116) illustrate how

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[28]A verbal extension or affix is one way of showing plurational actions in other Chadic languages (Newman 1990). The other is reduplication of the verb root. Such verb root reduplication is also seen in Moloko for habitual iterative aspect Section 7.4.4 and intermittent iterative aspect Section 7.4.5.

[29]Other discourse devices which function in cohesion include demonstratives (Section 3.2), the adjectiviser *ga* (Section 5.3), the presupposition marker *na* (Chapter 11), and participant tracking (Section 7.3).

directionals relate main line events to the point of reference which is the chief (or perhaps the place in his compound where he makes the millet beer). The directionals are bolded in the examples. The presence of the two directionals in (119) and (120) is the only way in the story that we know that the cicada brought the tree back to the chief (until the chief thanks him in line 34).

(116)   Cicada, S. 6
        Albaya ahay ndana kəlen təngala**ala** ma ana bahay.
        albaja=ahaj ndana kɪlɛŋ tə̀-ŋgala=**ala**   ma   ana bahaj
        youth=Pl   DEM   then 3P+PFV-return=to word DAT chief
        'The above-mentioned young men then took the word (response) to the chief.' (lit they returned the word to the chief)

(117)   Cicada, S. 12
        Təlo tamənjar na **ala** mama agwazla nəndəye.
        tə̀-lɔ   tà-mənzar na=**ala** mama agʷaẕa   nɪndijɛ
        3P+PFV-go 3P+HOR-see 3S.DO=to mother spp. of tree DEM
        'They went to see [for the chief] that mother-tree.'

(118)   Cicada, S. 16
        Kəlen albaya ahay tolo amaz**ala** agwazla na, taaz**ala** təta bay.
        kɪlɛŋ albaja=ahaj tə̀-lɔ   ama-z=**ala** agʷaẕa   na
        then youth=Pl   3P+PFV-go DEP-take=to spp. of tree PSP
        'And then, the young men left to bring back the tree [to the chief];'

        tàà-z=**ala**   təta   baj
        3P+HOR-take=to ability NEG
        'but they were not able to bring it [to him].'

(119)   Cicada, S. 30
        Amag**ala** ləmes.
        ama-g=**ala** lɪmɛʃ
        DEP-do=to song
        'He was singing towards [the chief's house].' (lit. to do towards a song)

(120)   Cicada, S. 31
        Sen **ala**.
        ʃɛŋ=**ala**
        ID:go=to
        'Going, [he] came [to the chief's house].'

Sometimes the directional *=ala* 'towards' (see see Section 7.5.2) can carry a Perfect kind of idea (an event being completed before a temporal reference point with ongoing effects to that time) but which has a slightly different connotation to the Perfect extension *=va*. Compare (121) and (122). Use of the directional *=ala* 'towards' (121) with the verb /z mᵒ / indicates that the person has already eaten, but at some other location, since the directional gives the idea that food has come to the speaker. Use of the Perfect itself (122) indicates that the person has finished eating (at the place where he is sitting). As such, the directional *=ala* may be in the process of becoming grammaticalised for past tense or a subtype of Perfect.

(121)   Nəzə**mala** toho.
      nə̀-zəm=**ala**   tɔhʷɔ
      1S+PFV-eat=to DEM

      'I already ate over there (some other person's house – before I arrived here).'

(122)   Nəzəm**va** pew.
      nə̀-zəm=**va**   pɛw
      1S+PFV-eat=PRF enough

      'I already ate/ I have eaten enough (here in this place since I arrived here).'

Likewise, the verb /s kʷ m/ 'buy/sell' is given a Perfect idea when it carries the *=ala* extension. In (108), the goat has come to the speaker. There is no Perfect extension *=va* but the idea is accomplished through the directional *=ala*.

(123)   Nəskom na **ala awak**.
      nʊ̀-sʊkʷʊm   na=**ala**   **awak**
      1S+PFV-buy/sell 3S.DO=to goat

      'I bought the goat (and it is mine now).'

7.5.3 Perfect

The final extension is *=va*, the Perfect (Friesen & Mamalis 2008). The Perfect marks events or states as having occurred prior to a particular point of reference, with ongoing effect that continues to that point of reference (Comrie 1976). The Perfect extension is bolded in the examples.

(124) Tawəy, "Ambəɗə**va** anga ləme."
       tawij   à-mbəɗ=**va**   aŋga lɪmɛ
       3P+said 3S+PFV-change=PRF POSS 1PEX
       'They said, "It has become ours!"' (lit. it has changed; belonging to us)

(125) Nasar həraf ɛlɛ nəngehe asabay,
       nà-sar   həraf   ɛlɛ   nɪŋgɛhɛ asa-baj
       1S+PFV-know medicine thing DEM   again-NEG
       'I didn't know how to resolve the problem,'

       waya nəl**va** afa səwpərefe.
       waja   nə̀-l=**va**   afa   suwpɪrɛfɛ
       because 1S+PFV-go=PRF at house of sub prefect
       'because I had already been to the sub-prefect [and he didn't help me].'

(126) Təta na, tanjakə**va** ɛlɛ məzəme.
       təta na tà-nzak=**va**   ɛlɛ   mɪ-ʒɪm-ɛ
       3P   PSP 3P+PFV-find=PRF thing NOM-eat-CL
       'And so they had found something to eat.'

(127) Arahə**va** peɗeɗe.
       à-rah=**va**   pɛɗɛɗɛ
       3S+PFV-fill=PRF ID:full
       'It had filled right to the rim.'

(128) Nəzəm**va**.
       nə̀-zəm=**va**
       1S+PFV-eat=PRF
       'I already ate.'

Unlike the other extensions, the Perfect enclitic has two possible positions in the verb phrase. It can either be phonologically bound to the right edge of the verbal complex (see Section 7.1) or to the right edge of the clause (Chapter 8) after the direct object and adpositionals. In (124–127, 131), =*va* follows the adpositional and directional extensions in the verb complex and precedes other elements in the verb phrase. In (129) and (132), =*va* occurs at the end of the clause, a rarer construction that presumably occurs to underscore the idea that the event is already finished.

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(129)   Disobedient Girl, S. 17

Azləna, hor na, asərkala afa təta **va** na,

akǝna hʷɔr   na à-sərk=ala   afa   təta=**va** na

but   woman PSP 3S+PFV-habitually=to at house of 3P=PRF PSP

'Now, that woman, she was in the habit at their place'

aməhaya háy na, gam.

amə-h=aja   haj   na gam

DEP-grind=PLU millet PSP a lot

'[of] grinding a lot of millet.'

The Perfect extension has neutral prosody itself and causes the loss of palatalisation of the verb stem (compare 130–131 where the stem is /s-jᵉ/). Also, verb stems drop their /-j/ suffix when this extension is present. These features all confirm that =*va* is an enclitic. In (130) without the Perfect, the verb stem is palatalised. When the verb carries the Perfect extension (131), the stem loses its palatalisation.

(130)   Nese gǝzom.

nὲ-ʃ-ε   gʊzɔm

1S+PFV-drink-CL millet beer

'I drank millet beer.'

(131)   Nasa**va** gǝzom.

nà-sa=**va**   gʊzɔm

1S+PFV-drink=PRF millet beer

'I drank millet beer already.'

Notably, palatalisation is lost even when there are intervening words (132), even though the prosody of these words is unaffected.

(132)   Nasa gǝzom **va**.

nà-sa   gʊzɔm=**va**

1S+PFV-drink millet beer=PRF

'I drank millet beer already.'

Likewise (133) illustrates the loss of palatalisation from the root /g-jᵉ/ 'do' when the Perfect is added.

(133) Ləho aga**va**.
       lʊhʷɔ   à-ga=**va**
       late afternoon 3S+PFV-do=PRF
       'It is the cool of the day (after three o'clock).' (lit. late afternoon has done)

Bow (1997c) established that the Perfect extension[30] carries a floating tone. Its underlying tone is HL. She demonstrates the floating tone using two verbs with different tone melodies; the high tone verb /bal-j/ 'wash' (134–135) and the low tone verb /a-dar-j/ 'plant' (136–137), both with the object noun [háj] 'millet.' (134) and (136) show the two clauses without the Perfect for comparison. Comparing (135) with (137) demonstrates that the floating low tone on the Perfect has lowered the tone of 'millet' from high to mid since there is no other low tone apparent that could be responsible for the lowering.

(134) Nə́balay háy.
       [nə́-bál-áj   háj]
       1S+IFV-wash-CL millet
       'I wash the millet.'

(135) Nəbalva háy.
       [nə̄-bál=vá   hāj]
       1S+PFV-wash=PRF millet
       'I washed the millet already.'

(136) Nə́daray háy.
       [nə́-dàr-āj   háj]
       1S+IFV-plant-CL millet
       'I plant the millet.'

(137) Nədarva háy.
       [nə̀-dàr=vā   hāj]
       1S+PFV-plant=PRF millet
       'I planted the millet already.'

The Perfect extension can mark information in a relative clause (Section 5.4.3) as having been accomplished before the information in the main clause, with relevance to the point of reference in the main clause (138).

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[30]Bow (1997c) called it an aspect or tense marker.

(138) War elé háy ngəndəye nok ameze na **va**, bəlen ngəndəye na,
war ɛlɛ haj ŋgɪndijɛ [nɔkʷ amɛ-ʒɛɗ-ɛ na=**va**] bɪlɛŋ ŋgɪndijɛ na
child eye millet DEM 2S DEP-take-CL 3S.DO=PRF one DEM PSP
'That grain that you have taken, that one [grain],'

káahaya kə ver aka.
káá-h=aja kə vɛr aka
2S+POT-grind=PLU on grinding stone on
'grind it on the grinding stone.'

When the Perfect co-occurs with Perfective aspect (124–129, 135, 137), it indicates that the event expressed by the verb took place before the point of reference established in the discourse. When the Perfect co-occurs with Imperfective aspect (139–142), the verb is resultative, referring to an ongoing state that is the result of a previous completed event (filling, becoming tired, ripening, or becoming angry).

(139) Árahə**va**.
á-ráh=**va**
3S+IFV-fill=PRF
'It is full.'

(140) Mana áyəɗə**va**.
Mana á-jəɗ=**va**
Mana 3S-tire=PRF
'Mana is tired.'

(141) Háy ánahə**va**.
haj á-nah=**va**
millet 3S-ripen=PRF
'The millet is ripe.'

(142) Disobedient Girl, S. 33
Məloko ahay tawəy, "Hərmbəlom ága ɓərav **va**
mʊlɔkʷɔ=ahaj tawij Hʊrmbʊlɔm á-ga ɓərav=**va**
Moloko=Pl 3P+said God 3S+IFV-do heart=PRF
'The Molokos say, "God got angry'

> kəwaya war dalay na, amecen sləmay bay ngəndəye."
> kuwaja war dalaj na amɛ-tʃɛŋ ɬəmaj baj ŋgɪndijɛ
> because child girl PSP DEP-hear ear NEG DEM
> 'because of that girl, that one that was disobedient."'

In narrative discourse, the Perfect verbal extension *=va* marks events that occur prior to the events on the main story line, and which supply flashback information to the story. For example, in the setting of the Disobedient Girl story (S. 2), the Perfect marks God giving his blessing to the people. This blessing preceded the events of the story (143) and had an ongoing effect at the time of the story.

(143)   Disobedient Girl, S. 3
Zlezle na, Məloko ahay na, Hərmbəlom ávəlata barka **va**.
ɮlɛɮɛ   na Mʊlɔkʷɔ=ahaj na Hʊrmbʊlɔm á-vəl=ata
long ago PSP Moloko=Pl   PSP God   3s+IFV-send=3P.IO

barka=**va**
blessing=PRF
'Long ago, to the Moloko people, God had given his blessing.'

In the body of the Disobedient Girl story (129 above), the story flashes back to the woman's prior situation, using the Perfect, in order to prepare the reader/hearer for what will happen next in the story. In the body of another fable (the race between the giraffe and the toad, Friesen 2003), the Perfect marks a flashback to a prior action of the toad.

(144)   Macəkəmbay moktonok na, abək ta aya **va**
matsəkəmbaj mɔkʷtɔnɔkʷ na a-bək   ta-aja=**va**
meantime   toad   PSP 3s-invite 3P.DO=PLU=PRF
'In the meantime the toad, he had already invited'

məlama ahan ahay jəyga.
məlama=ahaŋ=ahaj dzijga
brother=3s.POSS=Pl all
'all of his brothers.'

7.6 Nominalised verb form

The nominalised verb form[31] is derived from a verb stem by the addition of the prefix /m-/ plus a palatalised suffix [-ɛ].[32] Syntactically, the nominalised form can pattern as a noun (see Section 7.6.1), and in certain cases it can pattern as a verb, taking some inflectional components such as object suffixes and extensions (see Section 7.6.2). In the examples below, both underlying and nominalised forms are given. The nominalised form indicates an event (race, 145; betrayal, 146) or state (beauty, 147; coldness, 148).

(145) /h-m-j/   [mɪ-hɪm-ɛ]
       'run'   'race'

(146) /tʃafᵉ/   [mɪ- tʃɛf-ɛ]
       'betray'   'betrayal'

(147) /r ɓ-j/   [mɪ-rɪɓ-ɛ]
       'be beautiful' 'beauty'

(148) /ndaɬ-jᵉ/   [mɪ-ndɛɬ-ɛ]
       'make cold'   'coldness'

In the case where a verb stem consists of one single consonant, the nominalised form receives an additional syllable [-ijɛ].

(149) /dz-j/   [mɪ-dʒ-ijɛ]
       'say'   'saying'

(150) /s-jᵉ/   [mɪ-ʃ-ijɛ]
       'drink'   'drinking'

(151) /lᵒ/   [mɪ-l-ijɛ]
       'go'   'going'

If present, the underlying *a-* prefix in a verb stem shows up in the prefix vowel of the nominalised form. The prefix vowel in an *a-* prefix verb is full; in (152) and (153), this full vowel is realised as [ɛ] due to the palatalisation prosody which is part of the nominalising morphology. Compare with (145–148) where [mɪ-] is the prefix for verb stems with no *a-* prefix.

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[31]Friesen & Mamalis (2008) called this form the 'infinitive.'
[32]There is also an irregular nominalisation process that has already been discussed (Section 4.2).

(152)   /a-d a r–aj/   [mɛ-dɛr-ɛ]
        'plant'   'planting'

(153)   /a-d l/   [mɛ-dɪl-ɛ]
        'overtake'   'overtaking'

The tone pattern of the nominalised form reflects the underlying tone of the verb stem. Table 7.15 (from Friesen & Mamalis 2008) illustrates a few nominalised forms that suggest this pattern.

Table 7.15: Nominalised form tone patterns

Tone class	Underlying form	Nominalised form	Imperative	Gloss
High tone verb stems	/nz a k-j /	[mí -nʒɛ̀k-ɛ̀]	[nzák-áj]	'find'
	/ z m ᵒ/	[mí-ʒùm-ɛ̀]	[zɔ́m]	'eat'
Low tone verb stems without depressor consonants	/f ɗ/	[mī-fĭɗ-ɛ̄]	[fāɗ]	'put'
	/tats-j /	[mī-tētʃ-ɛ̄]	[tāts-áj]	'close'
Low tone verb stems with depressor consonants	/v h n-j /	[mī-víhīn-ɛ̄]	[vɔ̀hɔ̀n-āj]	'vomit'
	/a-dar-j /	[mɛ̄-dɛ̄r-ɛ̄]	[dàr-āj]	'plant'
Toneless verb stems	/d ɗ/	[mì-díɗ-ɛ̄]	[dàɗ]	'fall'
	/nd z/	[mì-ndɛ́ʒ-ɛ̄]	[ndàz]	'pierce'

7.6.1 Nominalised form as noun

As a noun, the nominalised form takes modifiers the same as any abstract noun, i.e., quantifier (155) , numeral (156), possessive pronoun (154), demonstrative (157), adjectiviser (158–160) but not plural (see Section 4.2.5). Any argument of the clause can be realised with a nominalisation. The noun phrase is marked off by square brackets and the nominalised form is bolded in the examples.

(154)   [**Məhəme** aloko na], epeley?
        [**mɪ-hɪm-ɛ**=alɔkʷɔ   na] ɛpɛlɛj
        NOM-run-CL=1PIN.POSS PSP when
        'When is our race?' (lit. our running [is] when)

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(155) Disobedient Girl, S. 4

Ávata [**məvəye** haɗa].

á-v=ata   [**mɪ-v-ijɛ**   haɗa]

3S+IFV-spend time=3P.IO NOM-spend time-CL many

'It would last them the whole year.' (lit. it will spend time for them many time-spending[33])

(156) Ege [**məvəye** məko] ehe, nawas háy əwla.

ɛ-g-ɛ   [**mɪ-v-ijɛ**   mʊkʷɔ] ɛhɛ   na-was   haj=uwla

3S-do-CL NOM-spend time-CL six   here 1S-cultivate millet=1S.POSS

'Six years ago (lit. it did six years), I cultivated my millet.'

(157) [**Medəre** nehe na], səlom ga.

[**mɛ-dɪr-ɛ**   nɛhɛ na] sʊlɔm   ga

NOM-plant-CL DEM PSP goodness ADJ

'This planting is good.'

Adjectives can be further derived from a nominalised verb form by adding *ga*, as is true of any noun (Section 4.3). Adjectives that are derived from nominalised verbs express resultant states. For example, the peanuts in (158) are already ground, the woman in (159) is already beautiful, the man is already seated in (160). The nominalised forms are bolded in the examples.

(158) Nadok [andəra **məngəlɗe ga**].

na-d=ɔkʷ   [andəra **mɪ-ŋgɪlɗ-ɛ**   ga]

1S-prepare=2S.IO peanut NOM-grind-CL ADJ

'I made peanut butter (lit. ground peanuts) for you.'

(159) Avəlaw [war dalay **mərəɓe ga**].

a-vəl=aw   [war dalaj   **mɪ-rɪɓ-ɛ**   ga]

3S-give=1S.IO child female NOM-be beautiful-CL ADJ

'He/she gave me a beautiful girl.'

(160) Ndahan [**mənjəye ga**].

ndahaŋ [**mɪ-nʒ-ijɛ**   ga]

3S   NOM-sit-CL ADJ

'He/she [is] seated.'

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[33]The nominalised form of the verb 'spend time' has been lexicalized as 'year.'

It is interesting that noun phrases where the head noun is a nominalised verb behave like a clause when there is a noun modifier. The nominalised verb can be the head of a genitive construction (see Section 5.4.1), a permanent attribution construction (see Section 5.4.2), or an argument in another clause (see Section 12.1.1). In the genitive construction (154 and 164), the second noun represents the subject of the verb stem. In the other constructions (161–162), the second noun represents the direct object of the nominalised verb.

(161)   məbeze háy
        mɪ-bɛʒ-ɛ   haj
        NOM-harvest-CL millet
        'the millet harvest'

(162)   andəra məngəlɗe ga
        andəra mɪ-ŋgɪlɗ-ɛ   ga
        peanut NOM-grind-CL ADJ
        'ground peanuts'

(163)   mənjəye a Mana
        mɪ-nʒ-ijɛ   a   Mana
        NOM-sit-CL GEN Mana
        'Mana's behaviour' (lit. the sitting of Mana)

(164)   **məhəme** aloko
        mɪ-hɪm-ɛ=alɔkʷɔ
        NOM-run-CL=1Pln.POSS
        'our race' (lit. the running of us)

7.6.2 Nominalised form as verb

The nominalised form can fill the verb slot in a clause (discussed further in Section 8.2.3 and Section 9.4). Examples (165) and (166) are full (complete) clauses on the main event line where the verb is in nominalised form. Such clauses are found at the inciting moment and peak of a narrative. The nominalised form is not conjugated for subject or direct object, but the clause may have a subject (the 3s pronoun *ndahan* in 165) or direct object (*yam* 'water' in 165) and other clausal elements. The nominalised form can take verbal extensions (3P indirect object *=ata*, adpositional *=aka* and Perfect *=va* in 165; the adpositional *=ava* and the directional *=alay* in 166).

(165)   Ndahan ngah **mangəhata aka va** yam a ver ahan ava.

       ndahaŋ ŋgah **ma-ŋgəh=ata=aka=va**   jam a vɛr=ahaŋ   ava

       3s   hide NOM-hide=3P.IO=on=PRF water in room=3S.POSS in

       'He had hidden the water in his room' (lit. he hide-hiding water in his room)

(166)   Məmətava alay a ver ava.

       mə-mət=ava=alaj a vɛr   ava

       NOM-die=in=away in room in

       '[She] died in the room.'

7.6.3 Verb focus construction

The nominalised form of a verb is used in an idiomatic construction that functions to bring focus on the verb. The verb focus construction is composed of an inflected verb followed by an adpositional phrase (see Section 5.6.1) containing the same verb in nominalised form. (167) shows the construction *nəskom nə məskwəme* 'I really did buy it' (lit. I bought [it] with buying). This construction specifies that the action is done 'by means of' or 'by actually' doing something (to the exclusion of all other possibilities). It is used by the speaker to contest a real or implied challenge of the validity of what has been said. In (167), the speaker is saying that he actually bought a particular item, i.e. he didn't steal it and nobody gave it to him. Likewise, (168–170) illustrate other verbs in this construction.

(167)   Awəy, "Nəskom **nə məskwəme**."

       awij nʊ-sʊkʷɔm **nə**   **mɪ-søkʷøm-ɛ**

       said 1s-buy   with NOM-buy-CL

       'He said, "I actually bought it."' (lit. I bought it with buying)

(168)   Káslay awak **nə məsləye**.

       ká-ɬ-aj   awak **nə**   **mɪ-ɬ-ijɛ**

       2s+IFV-slay-CL goat with NOM-slay-CL

       'You kill goats by cutting their throat and not by any other way' (lit. you slay a goat with slaying)

(169)   Kákaɗ okfom **nə məkəɗe**. Káslay bay.

       ká-kaɗ   ɔkʷfɔm **nə**   **mɪ-kɪɗ-ɛ**   ká-ɬ-aj   baj

       2s+IFV-kill(club) mouse with NOM-kill(club)-CL 2s+IFV-slay-CL NEG

       'You kill mice by smashing their head; you don't cut their throats.'

(170) Kándaz **nə məndəze** awak aŋa pəra.

ká-ndaz   **nə**   **mɪ-ndɪʒ-ɛ**   awak aŋga pəra

2s+ɪꜰᴠ-kill(pierce) with ɴᴏᴍ-kill(pierce)-ᴄʟ goat   ᴘᴏss idol

'You kill a goat for the idols by piercing it (you don't cut its throat).' (lit. you kill with killing a goat that belongs to an idol)

7.7 Dependent verb forms

A dependent verb form is formed by prefixing *am-* to the verb stem, palatalisation, and the suffix *-e* (or *-əye* for verb roots of one syllable). Historically, this construction may involve the nominalised form (see Section 7.6) preceded by the preposition *a* 'to.'[34] In any case it acts as a single unit now. Table 7.16 shows examples of the dependent verb form for stems of each underlying prosody. The table gives the underlying form, the third person singular form, the nominalised form, and the dependent form.

Table 7.16: Dependent verb forms

Underlying form	Gloss	3s form	Nominalised form	Dependent form
/h m-j/	'run'	*a-həm-ay*	*mə-həm-e*	*amə-həm-e*
/ d-jᵉ/	'prepare'	*e-d-e*	*mə-d-əye*	*amə-d-əye*
/s kʷ m/	'buy'/'sell'	*a-səkom*	*mə-skwəm-e*	*amə-skwəm-e[a]*

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[a]Note that the labialised consonant /kʷ/ keeps its labialisation even when the word is palatalised (Section 2.2.2).

There are no subject inflections on the dependent verb form; the subject is determined either by the subject of the matrix clause (a gap for subject is marked as Ø in 171, 173, and 174) or a pronoun within the dependent clause indicating subject (172–176). The dependent form of the verb may receive object suffixes and extensions. The dependent verb form is used when clauses that carry an imperfective or unfinished idea are embedded in other constructions. The clause structure is illustrated in Figure 7.5.

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[34]Crosslinguistic studies reveal that locatives can give rise to Imperfectives (Comrie 1976: 103; Bybee, Perkins & Pagliuca 1994: 142; Heine & Kuteva 2002: 99).

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(subject pronoun)	**Dependent verb plus extensions expressing event**	(direct object noun phrase)	(oblique adpositional phrase)	(adverb)

Figure 7.5: Constituent order in dependent clauses

The types of clauses that employ dependent verb forms are:

- Relative clauses (Section 5.4.3)

- Adverbial clauses (Section 12.2)

- Complement clauses (Section 12.1)

The relative clause is a noun phrase modifier (171–176). In the examples in this section, the dependent verb is bolded and the dependent clause is marked with square brackets.

(171) Disobedient Girl, S. 38
 War dalay ga ngendəye
 war   dalaj ga   ŋgɛndijɛ
 child girl   ADJ DEM
 'that young woman '

 [**amazata aka ala** avəya nengehe ana məze ahay na.]
 [Ø **ama-z=ata=aka=ala**   avija   nɛŋgɛhɛ ana mɪʒɛ=ahaj na]
   DEP-carry=3P.IO=on=to suffering DEM   DAT person=Pl PSP
 'that had brought this suffering to the people.'

(172) Tasan oko ana hay [ata **aməgəye na va**].
 ta-s-aŋ   ɔkʷɔ ana haj[=atəta   **amɪ-g-ijɛ   na=va**]
 3P-cut=3S.DO fire   DAT house =3P.POSS DEP-do-CL 3S.DO=PRF
 'They (the attackers) set fire to the house that the others had built (lit. their house to prepare).'

Adverbial clauses in Moloko are subordinate temporal clauses that are embedded in the main clause as the first (173) or last (174) element.

(173) [Aməhaya həmbo na], anday asakala wəsekeke.
[Ø **amə-h=aja** hʊmbɔ na] a-ndaj a-sak =ala wuʃɛkɛkɛ
    DEP-grind=PLU flour   PSP 3S-PRG 3S-multiply =to ID:multiply

'While [she] was grinding the flour, [the millet] was multiplying *wəshekeke*.'

(174) Cicada, S. 16
Kələn albaya ahay tolo [**amazala** agwazla na].
kɪlɛŋ albaja=ahaj tɔ-lɔ [Ø **ama-z=ala** agʷaẓa na]
then young men=Pl 3P-go   DEP-take=to spp. of tree PSP

'Then the young men went to try to bring back the tree [to the chief].'

The complement clause can function as the subject (175) or the direct object (176) of the matrix verb.

(175) Asaŋ [**amadata aka va** azan].
a-s=aŋ   [Ø **ama-d=ata=aka=va**   azaŋ]
3S-please=3S.IO   DEP-prepare=3P.IO=on=PRF temptation

'He wanted to tempt them.' (lit. to prepare a temptation for them [is] pleasing to him)

(176) Məkəɗ va azla tazlan [alǝme **aməzləge** va].
mə-kəɗ va aẓa ta-ẓ=aŋ   [alɪmɛ   **amɪ-ẓɪg-ɛ**   va]
NOM-kill body now 3P-begin=3S.IO 1PEX.POSS DEP-plant-CL body

'Combat now, they began to fight with us.' (lit. killing body now, they started it, our planting bodies)

8 Verb phrase

The verb phrase is the third of four chapters that concern the Moloko verb. Chapter 6 explores the structural features of the verb root and stem. Chapter 7 discusses what we have called the verb complex, which is a phonological unit consisting of the verb stem plus the pronominal affixes and enclitics, aspect/mood markings, and verbal extensions. These components are closely phonologically bound even though they may comprise from one to three phonological words. The chapter also covers derived forms. Chapter 9 describes verb types and transitivity. Moloko has a flexible valence system which allows variations in the transitivity of a given verb with no morphological marking. This chapter[1] concerns the structure and functions of the verb phrase. Section 8.1 describes the constituents of the verb phrase and their order. Section 8.2 shows auxiliary verb constructions where two verbs form a syntactic unit.

8.1 Verb phrase constituents

The verb phrase in Moloko is centred around the verb complex (bolded in Figure 8.1, cf. Chapter 7). Other elements are all optional and occur in the order diagrammed in Figure 8.1.

(Auxiliary)	**Verb complex**	(Noun phrase or 'body-part')	(Adpositional phrases)	(Adverb)	(Ideophone or negative)

Figure 8.1: Moloko verb phrase constituents

The auxiliary verbs include the progressive (see Section 8.2.1), the verb *lo* 'go' when used as an auxiliary (see Section 8.2.2), and the verb stem or ideophone in its construction (see Section 8.2.3).

Direct objects follow immediately after the verb complex and are expressed as noun phrases (bolded in 1 and 5) or 'body-part' incorporated nouns (bolded in 2; see Section 9.2.5). Adpositional phrases (underlined in 2–6, see Section 5.6) and then adverbs (italicised in 4 and 5; see Section 3.5) or ideophone (italicised in 1

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[1] This chapter is adapted from Friesen & Mamalis (2008).

and 6; see Section 3.6) follow after the direct object. The verb phrase is delimited by square brackets in the examples below.

(1) Hҽmbo ga [anday asak **ele ahan** *wҽsekeke*].
     hʊmbɔ ga [a-ndaj a-sak   **ɛlɛ=ahaŋ**   *wuʃɛkɛkɛ*]
     flour   ADJ 3S-PRG 3S-multiply thing=3S.POSS ID:multiply
     'The flour was multiplying all by itself (lit. its things), *wҽshekeke*.'

(2) [Tandalay talala tҽzlҽgҽ **va** <u>ana Mҽloko ahay</u>].
     [ta-nd=alaj   ta-l=ala tҽ-ʐ̝ҽg-ҽ   **va**   <u>ana Mҽlɔkʷɔ =aɦaj</u>]
     3P-PRG=away 3P-go=to 3P-throw-CL body DAT Moloko=Pl
     'They were coming and fighting with the Molokos.' (lit. they were coming they threw body to Molokos)

(3) [Enjé <u>kҽ delmete aka</u> <u>a slam enen</u>].
     [ɛ-ndʒ-ɛ   kҽ dҽlmɛtɛ aka a ʃam ҽɦɛŋ]
     3S-leave-CL on neighbor on   at place another
     'He left to go to his neighbor at some other place.'

(4) [Názaɗ <u>a dҽray ava</u> *sawan*].
     [ná-zaɗ   a dҽraj aʋa *sawaŋ*]
     1S+IFV-carry at head in   without help
     'I can carry it on my head myself!'

(5) [Nҽvҽlan **yam** <u>ana Mana</u> *zayҽhha*].
     [nə́-vҽl=aŋ   **jam** ana Mana *zajҽx=xa*]
     1S+PFV-give=3S.IO water DAT Mana   care=ADV
     'I gave water to Mana carefully.'

(6) [Azlҽgalay <u>a vҽlo</u> *zor*].
     [a-ʐ̝ҽg   =alaj a vʊlɔ *zɔr*]
     3S-throw =away at above ID:throwing
     'She threw [the pestle] up high, *zor*.'

Radford (1981: 69) gives diagnostic criteria for determining whether a given string of words is a sentence constituent or not. Following these criteria, all of the above elements are part of the verb phrase as a constituent of the clause. The elements of the verb phrase behave distributionally as a single structural unit that does not permit intrusion of parenthetical elements internally, but rather only

at the boundaries. For Moloko, the distribution of adverbs, emphatic interrogative pronouns, ideophones, the Perfect enclitic, and the manner of fronting all attest to the unity of the verb phrase as described above. Only the presupposition marker can intrude into the verb phrase, and only in a particular construction. Each of these factors is discussed below.

Some temporal adverbs (bolded in 7–8) can occur first in the clause or last in the verb phrase , but not in the interior of the verb phrase. Likewise, emphatic interrogative pronouns (bolded in 9) occur first or last in the clause (see Section 10.3.5).

(7) **Egəne** [nólo a kosoko ava].
     ɛgɪnɛ [nɔ́-lɔ   a kɔsɔkʷɔ ava]
     today 1s+ifv-go at market in
     'Today I will go to the market.'

(8) [Nólo a kosoko ava **egəne**].
     [nɔ́-lɔ   a kɔsɔkʷɔ ava **ɛgɪnɛ**]
     1s+ifv-go at market in   today
     'I will go to the market today.'

(9) **Wa** [amazaw ala agwazla ana ne na] **way**?
     wa [ama-z=aw   =ala agʷaʐa   ana nɛ na] **waj**
     who dep-take=1s.io =to spp. of tree dat 1s psp who
     'Who can I find to bring me this tree?'

Ideophones have only three slots within the clause: First in the clause (10),[2] first in verb phrase (11, see Section 8.2.3),[3] last in verb phrase (12). The ideophones are italicised in the examples.

(10) Snake, S. 13
     Kaləw [nazala ezlere əwla].
     kaluw   [nà-z=ala   ɛʐɛrɛ=uwla]
     id:take quickly 1s+pfv-take=to spear=1s.poss
     'I quickly took my spear.'

---

[2]Note that an ideophone that is first in the clause is sometimes delimited by *na* (19).

[3]When the ideophone is first in the verb phrase it necessitates the nominalised form of the verb Section 8.2.3.

(11) Cicada, S. 15
Ndahan [*gədok mədəye gəzom*].
ndahaŋ [*gʊdɔkʷ*   mɪ-d-ijɛ   gʊzɔm]
3s   ID:prepare beer NOM-prepare-CL beer
'He *gədok* made millet beer.'

(12) Snake, S. 5
[Acar a hay kəre ava *fo fo fo*].
[à-tsar   a haj   kɪrɛ   ava *fɔ fɔ fɔ*]
3s+PFV-climb at house beams in ID:sound of snake
'[The snake] climbed into the beams in the roof *fo fo fo*.'

The distribution and influence of the Perfect enclitic =*va* also attests to the unity of the post-verbal elements in the verb phrase. The Perfect enclitic =*va* (bolded in 13–16), can either cliticise to the end of the verb complex (13) or the end of the entire verb phrase (14–16). The phonological influence of the Perfect extends across the entire verb phrase since its presence in either post-verbal or phrase-final position causes a neutralisation of the prosody on the verb stem (see Section 7.5.3).

(13) Values, S. 6
[Tahata na **va** kə deftere aka].
[tà-h=ata   na=**va**   kə dɛftɛrɛ aka]
3P+PFV-tell=3P.IO 3s.DO=PRF on book   on
'They have already told them in the book.'

(14) Disobedient Girl, S. 34
Waya ndana Hərmbəlom [ázata aka barka ahan **va**].
waja   ndana Hʊrmbʊlɔm [á-z=ata=aka   barka=ahaŋ=**va**
because DEM   God   3s+IFV-take=3P.IO=on blessing=3s.POSS=PRF
'Because of that, God had taken back his blessing from them.'

(15) Baba ango [avəlata nok **va** a ahar ata ava].
baba=aŋgʷɔ [a-vəl=ata   nɔkʷ =**va** a ahar=atəta   ava]
father=2s.POSS 3s-give=3P.IO 2s   =PRF at hand=3P.POSS in
'Your father gave you into their hands [to be a wife for one of them].'

(16) Nde hor na, [asərkala afa təta **va**]. . .
      ndɛ hʷɔr   na [a-sərk=ala   afa   təta   =**va**]
      so woman PSP 3S-habitually=to at house of 3P.POSS =PRF
      'Now, that woman, she was in the habit at their house of . . .'

Only certain elements in the verb phrase can be fronted in the clause and
marked with the presupposition marker *na* (see Section 11.2 for the explanation
of this construction). The fact that some elements cannot be fronted indicates that
they are closely bound to the verb phrase structure. These elements include the
'body-part' incorporated noun (cf. Section 9.3), the negative (see Section 10.2.1),
and adverbs which are bound to the negative. Some of these elements are from
the far right edge of the verb phrase. The elements that may be fronted are un-
derlined in (17–19) and include direct object and oblique (17), derived adverb (18),
indirect object and ideophone (19).

(17) Values, S. 13
      <u>A məsəyon ava na</u> ele ahay aməwəsle na, [tége bay].
      a məsijɔŋ ava na ɛlɛ =ahaj amə-wuł-ɛ   na [tɛ́-g-ɛ   baj]
      at mission in PSP thing=Pl DEP-forbid-CL PSP 3P+IFV-do-CL NEG
      'In the church, these things that they have forbidden, they don't do.'

(18) Values, S. 39
      <u>Pepenna na</u>, [takaɗ sla].
      pɛpɛŋ   ŋa   na [tà-kaɗ   ła]
      long ago =ADV PSP 3P+PFV-kill cow
      'Long ago, they killed cows.'

(19) Values, S. 3
      <u>Səwat na</u>, təta a məsəyon na ava nəndəye na,
      suwat   na təta a məsijɔŋ na ava nəndijɛ na
      ID:disperse PSP 3P at mission PSP in DEM   PSP
      'As the people go home from church,' (lit. disperse, they in the mission
      there),'

      [pester áhata], "Ey, ele nehe na, kógom bay!"
      [pɛʃtɛr á-h=ata]   ɛj ɛlɛ   nɛhɛ na kɔ́-gʷ-ɔm   baj
      pastor 3S+IFV-tell=3P.IO hey thing DEM PSP 2+IFV-do-2P NEG
      'the Pastor told them, "Hey! These things, don't do them!"'

The only construction where an external element can appear to break up the verb phrase is the focus construction (20–22) (see Section 11.5) where the presupposition marker *na* can appear to break up parts of the verb phrase. However the structural unity of the verb phrase unit is not challenged since *na* can occur only once within the verb phrase in this construction and only in one position – immediately before the final focussed element. *Na* does not intrude into any other position. In each of (20–22), the penultimate placing of *na* (bolded) functions to make the final element of the verb phrase more prominent. In each example, only the verb phrase containing *na* is delimited by square brackets and the part delimited by *na* is underlined. In (20), *na* occurs in the adverbial clause just before the verb phrase-final adverb *gam* 'much,' making prominent the fact that the woman was going to grind *a lot* of millet. In (21), *na* occurs in the matrix clause just before the adpositional phrase (*ka mahay ango aka* 'by your door'), highlighting the desire to have the tree by the chief's door. In (22) the final element of the verb phrase *anga way* 'belonging to whom' is highlighted in the rhetorical question which focussed on the fact that the people obeyed neither God's word nor that of the elders.

(20)   Disobedient Girl, S. 17
       Azləna, hor **na**, asərkala afa təta va **na**,
       aǰəna hʷɔr   **na** [à-sərk=ala   afa   təta=va **na**]
       but   woman PSP 3S+PFV-habitually=to at place of 3P=PRF PSP
       'Now, that woman, she was in the habit at their place'

       [aməhaya háy **na** gam].
       [amə-h=aja   həj **na** gam]
        DEP-grind=PLU millet PSP a lot
       '[of] grinding a lot of millet.'

(21)   Cicada, S. 7
       Mama agwazla ava a ləhe **na**, malan ga **na**,
       mama agʷaǰa   ava a lɪhɛ **na** malaŋ ga **na**
       mother spp. of tree EXT at bush PSP large   ADJ PSP
       'There is a mother-tree in the bush, a big one,'

       [agasaka **na** ka mahay ango aka] aməmbese.
       [à-gas=aka   **na** ka mahaj=aŋgʷɔ aka] àmɪ-mbɛʃ-ɛ
       3S+PFV-get=on PSP on door=2S.POSS on   DEP-rest-CL
       '[and] it would please you to have that tree at your door, [so that you could] rest [under it].'

(22) Values, S. 29

Hərmbəlom **na**, amaɗaslava ala məze **na**, ndahan ese **na**,

Hʊrmbʊlɔm	**na**	ama-ɗaɫ=ava=ala	mɪʒɛ	**na**	ndahaŋ	ɛʃɛ	**na**
God	PSP	DEP-multiply=in=to	person	PSP	3S	again	PSP

'God, the one who mltiplied the people, him again,'

[kagas ma Hərmbəlom na asabay] **na**,

[ka-gas	ma	Hʊrmbʊlɔm	na	asa-baj]	**na**
2S-catch	word	God	PSP	again-NEG	PSP

'[if] you no longer accept the word of God,'

[káagas **na** anga way]?

[káá-gas	**na**	anga	waj]
2S+POT-catch	PSP	POSS	who

'You won't listen to anyone.' (lit. 'whose [word] will you accept?')

8.2 Auxiliary verb constructions

In an auxiliary verb construction in Moloko, two verbs (or a verb plus an ideophone) form a syntactic unit and, consequently, have the same subject. The second verb is the main verb in the construction. Together the two verbs comprise the head of just one clause, with only one set of core participants and obliques that semantically are related to the second (main) verb.

This section presents three auxiliary verb constructions. In the first two constructions, both main and auxiliary verbs are inflected. These constructions express progressive aspect (Section 8.2.1) and movement from one place to another (Section 8.2.2). The third construction consists of a verb stem or ideophone plus the main verb which is in the nominalised form (Section 8.2.3). We consider this third construction to be an auxiliary construction even though the verb stem/ideophone does not carry much of the inflectional information normally associated with auxiliaries (stems and ideophones carry neither subject and object agreement nor aspect and mode marking).[4] However, the verb stem/ideophone construction demonstrates the same structure as the progressive and movement auxiliary constructions and the stem/ideophone functions as an auxiliary in that it adds grammatical information to the main verb.

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[4]These criteria for verb auxiliaries are given by Payne (1997: 84).

8.2.1 Progressive auxiliary

Friesen & Mamalis (2008) found that the progressive expresses the idea of an action in progress, an event that doesn't take place all at once.[5] It is formed with *nday* 'to be' (see Section 9.2.1) plus the main verb (23–25). The auxiliary *nday* occurs as the first of two verbs in a verb phrase. The main verb takes all subject affixes and also any inflections or obliques. In the examples, the progressive is bolded and the verb phrase is delimited by square brackets.

(23) Mala [**anday**ége slərele].
      Mala [**a-ndaj** ɛ́-g-ɛ   ɬɪrɛlɛ]
      Mala 3s-PRG 3s+IFV-do-CL work

      'Mala is working (in the process of doing work).'

(24) Mana [**anday** ólo a kosoko ava].
      Mana [**a-ndaj** ɔ́-lɔ   a kɔsɔkʷɔ ava]
      Mana 3s-PRG 3s+IFV-go at market in

      'Mana is going to the market.' (lit. he is currently at going to the market)

(25) Apazan nanjakay nok, [**kanday** kəhaya háy].
      apazaŋ   nà-nzak-aj   nɔkʷ [**ka-ndaj** kɜ̀-h=aja   haj]
      yesterday 1s+PFV-find-CL 2s   2s-PRG   2s+PFV-grind=PLU millet

      'Yesterday when I found you, you were grinding millet.'

Both of the verbs are marked for subject. In plural forms that take subject prefix and suffix (1P and 2P, 26 and 27), *nday* takes subject prefixes only.[6]

(26) [**Nondoy** nombosom va].
      [**nɔ-ndɔj** nɔ-mbɔs-ɔm va]
      1s-PRG   1P-rest-1PEX body

      'We are resting.'

(27) [**Nondoy** nodorom amsoko].
      [**nɔ-ndɔj** nɔ-dɔr-ɔm   amsɔkʷɔ]
      1s-PRG   1P-plant-1PEX dry season millet

      'We (exclusive) are planting dry season millet.'

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[5]Note that the verb *nday* can occur alone as the main verb of a clause Section 9.2.1. When it does, the complement expresses the location of the subject. For example, *Hawa anday a mogom* 'Hawa is at home'.

[6]Some Moloko say that the plural form is *nondomoy*, but most use the reduced form.

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The progressive auxiliary does not co-occur with the Perfect enclitic (see Section 7.5.3), nor does the iterative reduplicative construction (see Section 7.4.5) combine with the progressive auxiliary.

In discourse, progressive aspect is used to mark an event that is in progress in a Moloko text. It is not necessarily in the background, but indicates durative or ongoing dynamic events. In the Cicada setting (28), there is a progressive in a tail-head link (see Section 11.1.3) showing what the young men were doing when they found the tree.

(28)   Cicada, S. 3-5
        Albaya ahay aba.
        albaja=ahaj   aba
        young man=Pl EXT
        'There were some young men.'

        Tánday tə́talay a ləhe.
        tá-ndaj   tə́-tal-aj   a lɪhɛ
        3P+IFV-PRG 3P+IFV-walk-CL at bush
        'They were walking in the bush.'

        Tánday tə́talay a ləhe na,
        tá-ndaj   tə́-tal-aj   a lɪhɛ na
        3P+IFV-PRG 3P+IFV-walk-CL at bush PSP
        '[As] they were walking in the bush,'

        tolo tənjakay agwazla malan ga a ləhe.
        tə̀-lɔ   tə̀-nzak-aj   agʷaɮa   malaŋ ga a lɪhɛ
        3P+PFV-go 3P+PFV-find-CL spp. of tree large   ADJ at bush
        'they went and found a large tree (a particular species) in the bush.'

Also, progressives are used in expository texts that give the ongoing state of the world and show reasons for the way things are. Example (29) from the Disobedient Girl story shows the entire reported speech when the husband explains to his wife the way things work for the Moloko. For most of the explanation, the verbs are Imperfective (see Section 7.4.2). However, the reason that the millet multiplied – namely, that God used to multiply millet for the Moloko – is given in the final line of his speech. The verb form for the reason is progressive (bolded in the example). Here, the progressive is marking an important ongoing event.

(29)   Disobedient Girl, S. 13
       Awəy,
       awij
       'He said,'

       "Hor golo, afa ləme na, mənjəye aləme na, kəyga ehe:
       hʷɔr   gʷɔlɔ afa   lɪmɛ na mɪ-nʒ-ijɛ=alɪmɛ   na kijga
       woman HON   at place 1PEX PSP NOM-sit-CL=1PEX.POSS PSP like this

       ɛhɛ
       here
       '"My dear wife, here at our (exclusive) place, it is like this:'

       asa asok aməhaya na,
       asa à-s=ɔkʷ   amə-h=aja   na
       if   3S+PFV-please=2S.IO DEP-grind=PLU PSP
       'If you want to grind,'

       kázaɗ war elé a háy bəlen.
       ká-zaɗ   war ɛlɛ a   haj   bɪlɛŋ
       2S+IFV-take child eye GEN millet one
       'you take only one grain.'

       War elé háy bəlen ga nəndəye nok amezəɗe na,
       war ɛlɛ haj   bɪlɛŋ ga nɪndijɛ nɔkʷ amɛ-ʒɪɗ-ɛ   na
       child eye millet one ADJ DEM   2S   DEP-take-CL PSP
       'That one grain that you have taken,'

       káhaya na kə ver aka.
       ká-h=aja   na   kə vɛr   aka
       2S+IFV-grind=PLU 3S.DO on grinding stone on
       'grind it on the grinding stone.'

       Ánjaloko de pew.
       á-nz=alɔkʷɔ   dɛ pɛw
       3S+IFV-suffice=1PIN.IO just enough
       'It will suffice for all of us just enough.'

       Ádaloko ha ámbaɗ ese.
       á-d=alɔkʷɔ   ha á-mbaɗ   ɛʃɛ
       3S+IFV-prepare=1PIN.IO until 3S+IFV-left over again
       'It will make food for all of us, until there is some left over.'

Waya a məhaya ahan ava na,
waja   a mə-h=aja=ahaŋ   ava na
because at NOM-grind=PLU=3S.POSS in   PSP

'Because, while you grind (lit. because in its grinding),

Hərmbəlom **anday** ásakaləme na aka."
Hʊrmbʊlɔm **a-ndaj** á-sak=alɪmɛ   na   aka
God   3S-PROG 3S+IFV-multiply=1PEX.IO 3S.DO on

'God is multiplying it for us."'

Progressives are also found in the peak section of a narrative where they function to slow down the events and draw the reader into the action. Example (30) shows the entire peak section of the Disobedient Girl. In the story (shown in its entirety in Section 1.5), there is a battle between the disobedient girl and the millet itself. The millet has a supernatural ability to expand, and eventually triumphs over the girl. Verbs in the progressive form (bolded in the example) mark the ongoing multiplication of the millet (S. 23) while the girl is grinding as well as the girl's ongoing grinding (S. 25) while the room is filling up with flour.

(30) Disobedient Girl, S. 20
      Jo madala háy na, gam.
      dzɔ   ma-d=ala   haj   na gam
      ID:take NOM-prepare=to millet PSP a lot

      '[She] prepared lots of millet.'

      S. 21
      Ndahan bah məbehe háy ahan
      ndahaŋ bax mɪ-bɛh-ɛ   haj=ahaŋ
      3S   pour NOM-pour-CL millet=3S.POSS

      'She poured her millet'

      amadala na kə ver aka azla.
      ama-d=ala   na kə vɛr   aka aʐa
      DEP-prepare=to 3S.DO on stone on   now

      'to prepare it on the grinding stone.'

      S. 22
      Njəw njəw njəw aməhaya azla.
      nzuw nzuw nzuw amə-h=aja   aʐa
      ID:grind   DEP-grind=PLU now

      '*Njəw njəw njəw* [she] ground [the millet] now.'

S. 23

Həmbo na ɗəw **anday ásak ásak ásak**.

hʊmbɔ na   ɗuw **a-ndaj á-sak   á-sak   á-sak**

flour   PSP also 3S-PRG 3S+IFV-multiply 3S+IFV-multiply 3S+IFV-multiply

'The flour, it was multiplying [and] multiplying [and] multiplying.

S. 24

Ndahan na, ndahan aka njəw njəw njəw.

ndahaŋ na   ndahaŋ aka   nzuw nzuw nzuw

3S   PSP 3S   EXT+on ID:grind

'And she, she is grinding some more *njəw njəw njəw*.'

S. 25

Anday ahaya nə məzere ləmes ga.

à-ndaj   à-h=aja   nə   mɪ-ʒɛr-ɛ   lɪmɛʃ ga

3S+PFV-PRG 3S+PFV-grind=PLU with NOM-do well-CL song ADJ

'She is grinding while singing well.'

S. 26

Alala na, ver na árah mbaf, nə həmbo na,

a-l=ala   na vɛr   na á-rəx   mbaf   nə   hʊmbɔ na

3S-go=to PSP room PSP 3S+IFV-fill ID:up to the roof with flour   PSP

'After a while, the room, it filled up to the roof with the flour.'

ɗək məɗəkaka alay ana hor na,

ɗək mə-ɗək=aka=alaj   ana hʷɔr   na

plug NOM-plug=on=away DAT woman PSP

'[The flour] suffocated the woman (lit. plugged [the room] for the woman [so there was no place for her to even breathe]).'

nata ndahan dəɓəsolək məmətava alay a hoɗ a hay na ava.

nata   ndahaŋ dʊɓʊsɔlʊk   mə-mət=ava=alaj   a hʷɔɗ   a

and then 3S   ID:collapse/die NOM-die=in=away at stomach GEN

haj   na ava

house PSP in

'And she collapsed *dəɓəsolək*, dying inside the house.'

8.2.2 Movement auxiliary

The verb *lo* 'go' is often found together with a second verb within the same verb phrase to express the idea of movement from one place to another, in order to accomplish the event expressed by the main verb (Friesen & Mamalis 2008). In (31–34), both verbs are conjugated, but only the second takes extensions or other verb phrase elements. In the examples, the verb *lo* is bolded and the verb phrase is delimited by square brackets.

(31)   Cicada, S. 5
       [**Tə-lo** tənjakay agwazla malan ga a ləhe].
       [**tə̀-lɔ**   tə̀-nzak-aj   agʷaƙa   malaŋ ga a lɪhɛ]
       3P+PFV-go 3P+PFV-find-CL spp. of tree large   ADJ to bush
       'They went and found a large tree (a particular species) in the bush.'

(32)   Values, S. 18
       [**Ólo** ában ana baba ahan].
       [**ɔ́-lɔ**   á-b=aŋ   ana baba=ahaŋ]
       3S+IFV-go 3S+IFV-hit=3S.IO DAT father=3S.POSS
       'He goes and hits his father.'

(33)   Values, S. 19
       [**Ólo** ápaɗay məze nə madan].
       [**ɔ́-lɔ**   á-paɗ-aj   mɪʒɛ   nə   madaŋ]
       3S+IFV-go 3S+IFV-crunch-CL person with magic
       'He goes and eats someone with sorcery.'

(34)   [**Lohom** komənjɔrom na ala gəvah na].
       [**lɔh-ɔm**   kɔ-mʊnzɔr-ɔm na=ala   gəvax na]
       go[IMP]-2P 2P-see-2P   3S.DO=to field   PSP
       'Go [and] you will see that field.'

8.2.3 Stem plus ideophone auxiliary

Friesen & Mamalis (2008) discovered that pivotal events at the high points in a narrative may be coded with a particular verb phrase construction in which an ideophone or the uninflected stem form of a verb is followed by the main verb in its nominalised form (35–37, see Section 7.6.2). In the stem plus verb construction, the stem and main verb are normally formed from the same verb root. Note that it is the stem that is used in the construction (not the root) since the /-j/ suffix is present (37). Neither the main verb nor the auxiliary is inflected for subject, and

the clause often has no noun phrase to indicate subject (35, 38–40, 44). When a subject noun phrase is present, it can only be a full free pronoun (36–37, 41–43, 45). The main verb can have direct and indirect object pronominals and other extensions (36 and 37). In the following examples, the verb phrase is delimited by square brackets and the verb stem plus ideophone are bolded.

(35)　[**Bah məbehe** kə ver aka azla].
　　　[**bax mɪ-bɛh-ɛ**　　kə vɛr　aka aʒa]
　　　pour NOM-pour-CL on stone on　now

　　　'[She] poured [the grains of millet] on the grinding stone.' (lit. pour, pouring on the grinding stone now)

(36)　Ndahan [**ngah mangəhata aka va** yam a ver ahan ava].
　　　ndahaŋ [**ŋgax ma-ŋgəh=ata=aka=va**　jam　a vɛr=ahaŋ　　ava]
　　　3s　　　hide　NOM-hide=3P.IO=on=PRF water at room=3S.POSS in

　　　'He had hidden the water in his room.'

(37)　Ndahan [**ngay mangaka alay** pərgom ahay].
　　　ndahaŋ [**ŋg-aj**　　　　　**ma-ŋg=aka=alaj**
　　　3s　　　make with grass-CL NOM-make with grass=on=away

　　　pʊrgʷɔm=ahaj]
　　　trap=Pl
　　　'He made the traps out of grass.'

(38)　Disobedient Girl, S. 12
　　　Sen ala na zar ahan na,
　　　ʃɛn=ala　na zar=ahaŋ　　na
　　　ID:go=to PSP man=3S.POSS PSP
　　　'Then, her husband,'

　　　[**dək mədəkan na** mənjəye ata].
　　　[**dək**　　**mə-dək=aŋ**　　na　mɪ-nʒ-ijɛ=atəta]
　　　instruct NOM-instruct=3S.IO 3S.DO NOM-sit-CL=3P.POSS
　　　'instructed her in their habits (lit. instructing their sitting).'

　　In the case that there is an ideophone auxiliary (39–42), the ideophone occurs in the same slot as the verb stem auxiliary. Note that these ideophones are from entirely different roots than the verb stems.

　　　　　　　　　　　　　　　　　　　　　　　　Draft of July 7, 2017, 16:53

(39) Disobedient Girl, S. 20

[**Jo madala** háy na gam].

[**dzɔ**   **ma-d=ala**   haj   na gam]

ID:take NOM-prepare=to millet PSP a lot

'[She] prepared lots of millet.'

(40) Disobedient Girl, S. 28

[**Pok mapalay** mahay na],

[**pɔk**   **ma-p=alaj**   mahaj na]

ID:open NOM-open=away door   PSP

'[He] opened the door [and looked around];'

həmbo [árah na a hoɗ a hay ava].

hʊmbɔ [á-rax   na   a hʷɔɗ   a   haj   ava]

flour   3s+IFV-fill 3s.DO at stomach GEN house in

'the flour filled the house.'

(41) Ndahan [**vəh məngwəlva** a ɗəwer ahan ava].

ndahaŋ [**vəh**   **mə-ŋgʷul=va**   a ɗuwɛr=ahaŋ ava]

3s   ID:return NOM-return=PRF at sleep=3s.POSS in

'He had already gone back to sleep.'

(42) Nata ndahan [**pək mapata aka va** pərgom ahay na].

nata ndahaŋ [**pək**   **ma-p=ata=aka=va**   pʊrgʷɔm=ahaj na]

also 3s   ID:open NOM-open=3P.IO=on=PRF trap=Pl   PSP

'He opened the traps.'

(43) Disobedient Girl, S. 26

Nata ndahan [**dəɓəsolək məmətava** alay a hoɗ a hay na ava].

nata   ndahaŋ [**dʊɓʊsɔlɔk**   **mə-mət=ava=alaj** a hʷɔɗ   a

and then 3s   ID:collapse/die NOM-die=in=away at stomach GEN

haj   na ava]

house PSP in

'And she collapsed, dying inside the house.'

(44) Disobedient Girl, S. 31

[**Babək mələye na**].

[**babək** **mɪ-l-ijɛ**   na]

ID:bury NOM-bury-CL 3s.DO

'She was buried.' (lit. burying it)

(45) Snake, S. 18
   Ne [**dəyday məkəɗe na aka**].
   nɛ [**dijdaj   mɪ-kɪɗ-ɛ   na=aka**]
   1S ID:approximately NOM-kill-CL 3S.DO=on
   'I clubbed it to death.' (lit. I approximately killing it on)

The stem or ideophone plus verb constructions mark significant events at the inciting moment and in the peak of a Moloko narrative. Example (38) is from the inciting moment of the Disobedient Girl story when the man instructs his wife. In the peak, the construction is seen when the woman prepares a lot of millet after having decided to disobey him (39), when she pours a lot of millet on the grinding stone (39), and when the millet suffocates her and she dies (43). In the dénouement there is another ideophone plus nominalised form construction when the husband opens the door and finds her (40). There are no other nominalised forms that fill the main verb slot in this text.

Because the subject, direct object, and indirect object are optional for this construction, the construction can be used in Moloko discourse as a narrative device to reduce the number of explicit grammatical relations in a clause (cf. Sections 3.6.3 and 9.4). The participants become indefinite in the construction and must be inferred from the context. The effect is to draw the hearer into the action of the moment. In (35), (39), and (40), the construction is completely non-inflected for subject and has zero grammatical relations. The narrative effect is that in (35) and (39), the hearer only knows that someone is pouring something onto the grinding stone. In (40), it is as if the hearer is with the husband, looking into the house to find the woman. Likewise, in (44), the verb *maləye* 'bury' is non-conjugated for subject, making those who buried the dead woman 'out of sight' in the narrative.

9 Verb types and transitivity

The way Moloko expresses transitivity is one of its remarkable features. Friesen & Mamalis (2008) reported that Moloko verb lexemes are underspecified with respect to transitivity. This chapter extends and deepens their work. Almost every Moloko verb can occur in clauses which are intransitive, transitive, or bitransitive and therefore cannot be classed as belonging to any one transitivity type. Even clauses with no grammatical arguments exist – a transitivity of zero. The unique way that the semantics of the verb are realised by the affixes and extensions is one of the things that shows the genius of the language.

It is important to understand four important features of Moloko verbs with respect to transitivity. The first is that there are two kinds of transitive constructions in Moloko and an Agent-Theme-Location semantic analysis is necessary to interpret these two constructions (Section 9.1). For transitive clauses, the grammatical relations of Moloko verbs directly and uniformly reflect the semantic picture. Subject expresses Agent. Direct object expresses semantic Theme, the core participant that literally or metaphorically changes state or position. Indirect object expresses semantic Location (LOC) which can be (depending on the verb type) either a literal or a metaphorical LOC (recipient or beneficiary).[1]

The second feature is that most Moloko verbs are ambitransitive – the same verb with the same morphology may occur in clauses that are bitransitive, transitive, or intransitive. Moloko verbs are divided into classes based on the type of transitive and ditransitive construction(s) that the verb has (Section 9.2). The third feature of Moloko verbs with respect to transitivity is that some verbs exhibit noun incorporation (Section 9.3). The final feature of Moloko verbs is that there are clauses with zero transitivity (Section 9.4).

With the exception of the reciprocal (see Section 9.2.5), there are no affixes, extensions, or particles that express changes in transitivity as might be expected in a Chadic language.[2] In Moloko, it is the number and type of grammatical relations that a verb has that reflects the semantics of the construction.

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[1]This semantic picture holds for bitransitive clauses (Sections 9.2.4 and 9.2.5). For intransitive clauses, the subject can correspond to a range of semantic roles; it can be any one of Agent, Theme, or LOC (Sections 9.2.4.2 and 9.2.5).

[2]Causative verbal extensions, for example, are widespread in Chadic languages (Newman 1977: 276).

9.1 Two kinds of transitive clauses

Moloko has two kinds of transitive clauses – transitive clauses with subject and direct object (1–2) and transitive clauses with subject and indirect object (3–4). These two grammatically different transitive clauses illustrate that the semantics of Moloko verbs allows three core participants (represented by subject, direct object, and indirect object). Moloko verbs do not have just Agent-Patient semantic frames for events. In this work we follow an Agent-Theme-Location analysis, as developed by DeLancey (1991), in which 'Location' (LOC) has a particular definition. Indirect object always expresses semantic LOC – the participant that represents the place where the Theme is directed to. As such the indirect object can express (depending on the verb type, see Sections 9.2.3–9.2.5) the recipient or beneficiary of the event. Direct object always expresses semantic Theme, the core participant that changes position or state because of the event. Subject in transitive clauses expresses the Agent.

It is the verbal pronominals that best illustrate the grammar of the two types of transitive clauses because the grammatical distinction between direct and indirect object is expressed by a core pronominal (the direct object pronominal and the indirect object pronominal enclitic). Note that when the indirect object is a noun phrase, it is inside a prepositional phrase. The indirect object prepositional phrase in Moloko is not a syntactic oblique, however, because the pronominals indicate that it represents a core participant of the event. For this reason, most of the examples are given in pairs in this chapter. The first example in each pair shows full noun phrase arguments for each core participant. The second example in each pair shows the same clause with all core participants represented by verbal pronominals. Pronominals are bolded in the second example in each pair.

Examples (1) and (2) show a transitive clause with subject (*Mana*) and direct object (*awak* 'goat' in 1, *na* 3s direct object pronominal in 2).

(1)   Mana aslay awak.
Mana a-ɬ-aj   awak
Mana 3s-slay-CL goat
'Mana slays a goat.'

(2)   **A**slay **na**.
a-ɬ-aj   **na**
3s-slay-CL 3s.DO
'He slays it.'

Examples (3) and (4) show a transitive clause with subject (*Mana*) and indirect object (*ana kəra* 'to dog' in 3, =*an* 'to him' in 4).

(3) Mana aɓan ana kəra.
 Mana a-ɓ=aŋ   ana kəra
 Mana 3s-hit=3s.io dat dog
 'Mana hits a dog.' (lit. he hits to him to dog)

(4) Aɓan.
 a-ɓ=aŋ
 3s-hit=3s.io
 'He hits him.' (lit. he hits to him)

Crosslinguistic studies might lead one to expect a verb like 'hit' to take a direct object; however verbs in Moloko require an Agent-Theme-loc semantic model to explain their behaviour. The indirect object *kəra* 'dog' is the semantic loc – here the recipient of the action – the participant that represents the place where the Theme (the hit) is directed to. The participant that changes position or state in this event (the hit) is implicit in verbs of this type (see Section 9.2.3).

Returning to the transitive clause with subject and direct object (1 and 2), the direct object *awak* 'goat' is the Theme – the participant that changes position or state because of an event (it is slain).

9.2 Verb types

Most Moloko verbs are ambitransitive (i.e., labile) in that they can occur in intransitive, transitive, and sometimes bitransitive clauses with no morphological change in the verb complex (except of course the addition of the appropriate pronominals, Section 7.3).[3] Nevertheless, they can be divided into classes that exhibit different morphological and syntactic patterns relating/with respect to transitivity. Verbs are classified here as to the maximum number of grammatical relations that the verb can take as well as the type of grammatical relations:

- Group 1: Verbs that can only be intransitive (Section 9.2.1)

- Group 2: Verbs that can be transitive with direct object (Section 9.2.2)

- Group 3: Verbs that can be transitive with indirect object (Section 9.2.3)

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[3]Some verbs in related Chadic languages can also be ambitransitive. These include Cuvok (Ndokobai 2006), Buwal (Viljoen 2013), and Vame (Kinnaird 2006).

- Group 4: Verbs that can be bitransitive (Section 9.2.4)

- Group 5: Transfer verbs (Section 9.2.5)

Examples are given in pairs in this chapter, first with full noun phrase arguments and then the same clause is given with the noun phrases replaced by pronominals. Examples with pronominals are necessary because the centrality of the distinction of verb types in Moloko is more apparent from the pronominals, especially for the indirect object. The indirect object can be expressed with a core pronominal within the verb complex, or a full noun phrase within an adpositional phrase.

9.2.1 Group 1: Verbs that can only be intransitive

Only one verb in Moloko can never take an object (neither direct nor indirect). The locational clause contains the verb *nday*. It states that the subject is presently located somewhere (5–6). An explicit free noun phrase subject is not required when this verb is the main predicate since the subject is indicated in the verb prefix; however an adpositional phrase giving the location is required and follows the verb. This same verb functions as a progressive aspect auxiliary (see Section 8.2.1).[4]

(5) Hawa **anday** a mogom.
     Hawa **a-ndaj**   a mɔgʷɔm
     Hawa 3s-be.located at home
     'Hawa is at home.'

(6) **Anday** a Marva.
     a-ndaj a marva
     3s-be   at Maroua
     'She is in Maroua.'

9.2.2 Group 2: Verbs that can be transitive with direct object

Clauses with reflexive-causative verbs can have either one core argument (subject) or two core arguments (subject and direct object). We have never found

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[4]It is interesting that the locational extension =*aka* is also used to express progressive aspect
Section 7.5.1.

these verbs in a context where they take an indirect object as third core argument.

Verbs from this class express reflexive actions when in an intransitive clause (action is to self; 7) and causative actions when in a transitive clause with a direct object (action is to direct object; 8).

(7) Mana enjé a mogom.
Mana ɛ̀-nʒ-ɛ́ a mɔgʷɔm
Mana 3s+PFV-leave-CL at home
'Mana went home.' (lit. Mana left to home)

(8) Mana enjé awak a mogom.
Mana ɛ̀-nʒ-ɛ́ awak a mɔgʷɔm
Mana 3s+PFV-leave-CL goat at home
'Mana took the goat home.' (lit. Mana left goat to home)

Table 9.1 presents the morphology and clause structures for sample verbs in this category, across both intransitive and transitive clause constructions.

9.2.3 Group 3: Verbs that can be transitive with indirect object

Some transitive verbs in Moloko never take a direct object but rather have only what we have been referring to as an indirect object in this work. These verbs express experience, feeling, or emotion. The indirect object expresses the semantic LOC (recipient, beneficiary, experiencer) of the event. A semantic core participant that moves or undergoes a change of state or is in a state (Theme) may be implicit or be lexicalised into the verb.

The verb *rəɓ-ay* 'to be beautiful' involves a thing and its quality (9–10), and the person whose opinion or perception is being cited is coded as the indirect object. In an intransitive clause, the subject (*dalay* 'girl') is at the state of being beautiful. In a transitive clause (with an indirect object), the subject (*dalay* 'girl') is felt to be beautiful by the indirect object (=*aw* 'to me').

(9) Dalay arəɓay.
dalaj a-rəɓ-aj
girl 3s-be beautiful-CL
'The girl is beautiful.'

Table 9.1: Group 2 verbs

Intransitive	Transitive
Hawa e-nj-é Hawa 3s+pfv-leave-cl 'Hawa is gone.' (lit. Hawa left)	*Hawa e-nj-é awak a mogom* Hawa 3s+pfv-leave-cl goat at home 'Hawa took the goat home.'
e-nj-é 3s+pfv-leave-cl 'She left.'	*e-nj-é na a mogom* 3s+pfv-leave-cl 3s.do at home 'She took it home.'
Hawa a-həɓ-ay Hawa 3s+pfv-dance-cl 'Hawa danced.'	*məwta a-həɓ-ay məze* car 3s+pfv-dance-cl person 'The car shook people up.' (lit. the car danced people)
a-həɓ-ay 3s+pfv-dance-cl 'She danced.'	*a-həɓ-ay na* 3s+pfv-dance-cl 3s.do 'It shook him.'
Hawa e-cək-e Hawa 3s+pfv-stand-cl 'Hawa stood up.'	*Hawa e-cək-e zar* Hawa 3s+pfv-stand-cl man 'Hawa helped the man to stand up.' (lit. Hawa stood man)
e-cək-e 3s+pfv-stand-cl 'She stood up.'	*e-cək-e na* 3s+pfv-stand-cl 3s.do 'She stood him up.'
Hawa a-yəɗ-ə=va Hawa 3s+pfv-tire-cl =prf 'Hawa is tired.'	*slərele a-yəɗ-ay Hawa* work 3s+pfv-tire-cl Hawa 'Work tired Hawa out.'
Hawa á-yəɗ-ay Hawa 3s+ifv-tire-cl 'Hawa can/might get tired.' (lit. Hawa tires)	

(10) Dalay arəɓaw.
dalaj a-rəɓ=aw
girl   3s-be beautiful=1s.io
'The girl is beautiful to me.'

The experience verb /ts r/ 'taste good' is grammatically expressed in (11) as the subject *ɗaf* 'millet loaf' tastes good to the semantic LOC expressed by the indirect object (the pronominal enclitic *=aw* 'to me').

(11) Ɗaf acaraw.
ɗaf   à-tsar=aw
millet loaf 3s+PFV-taste good=1s.io
'Millet loaf tasted good to me.'

Likewise with the verb /g r -j/ 'fear' (12), the elephant causes fear at the LOC 'the children.'

(12) Mbelele agarata ana babəza ahay.
mbɛlɛlɛ   à-gar=ata   ana babəza=ahaj
elephant 3s+PFV-fear=3P.io DAT children=PL
'The children are afraid of the elephant.'

The verbs /dz n-j/ 'help,' /ɓ-j/ 'hit,' and /s/ 'please' are also in this group of verbs. The receiver of the help or hit is expressed by the indirect object which is affected positively (in the case of help) or negatively (in the case of hit) by the event. For these verbs, the semantic Theme (the hit or the help) never appears as a direct object since it is part of the meaning of these verbs. Table 9.2 presents examples of verbs of this type.

Note that an intransitive clause appears to be ungrammatical for the verbs /ɓ-j/ 'hit' and /s/ 'please' (13–14).

(13) a. Hawa áɓan ana kəra.
Hawa á-ɓ=aŋ   ana kəra
Hawa 3s+IFV-hit=3s.io DAT dog
'Hawa hits the dog.'

  b. áɓan.
á-ɓ=aŋ
3s+IFV-hit=3s.io
'She hits it.'

Table 9.2: Group 3 verbs

Intransitive	Transitive
Hawa à-rəɓ-aj Hawa 3s+PFV-be beautiful-CL 'Hawa was beautiful.'	*hʷɔr à-rəɓ=an ana Mana* Hawa 3s+PFV-be beautiful =3s.IO DAT Mana 'The woman was beautiful to Mana.'
a-rəɓ-ay 3s+PFV-be beautiful-CL 'She was beautiful.'	*a-rəɓ=an* Hawa 3s+PFV-be beautiful =3s.IO 'She was beautiful to him.'
ɗaf a-car millet loaf 3s+PFV-taste good 'Millet loaf tasted good.'	*ɗaf a-car=an ana Mana* millet loaf 3s+PFV-taste good=3s.IO DAT Mana 'Millet loaf tasted good to Mana.'
a-car 3s+PFV-taste good 'It tasted good.'	*a-car=an* 3s+PFV-taste good=3s.IO 'It tasted good to him.'
Mana a-gar-ay Mana 3s+PFV-fear-CL 'Mana was afraid.'	*mbelele a-gar=an ana Mana* elephant 3s+PFV-fear=3s.IO DAT Mana 'An elephant made Mana afraid.'
a-gar-ay 3s+PFV-fear-CL 'He was afraid.'	*a-gar=an* 3s+PFV-fear-CL=3s.IO 'It made him afraid.'
fat á-war sun 3s+IFV-hurt 'The sun hurts.'	*fat á-wal=an ana Mana* sun 3s+IFV-hurt=3s.IO DAT Mana 'The sun hurts Mana.' (lit. The sun hurts to Mana)
á-war 3s+IFV-hurt 'It hurts.'	*á-wal=an* 3s+IFV-hurt=3s.IO 'It hurts him.'
Mana á-ɗas Mana 3s+IFV-be heavy 'Mana is honourable.' (lit. Mana is heavy).	*Mana á-ɗəs=an ana Hərmbəlom* Mana 3s+IFV-be heavy=3s.IO DAT God 'Hawa honours God.' (lit. Hawa honours to God)
á-ɗas 3s+IFV-be heavy 'He is honourable.'	*á-ɗəs=an* 3s+IFV-be heavy=3s.IO 'He honours him.'
Hawa á-jən-ay Hawa 3s+IFV-help-CL 'Hawa helps (Hawa is a helpful person.'	*Hawa á-jən=an ana Mana* Hawa 3s+IFV-help =3s.IO DAT Mana 'Hawa helps Mana.'
á-jən-ay 3s+IFV-help-CL 'She is a helpful person.'	*á-jən=an* 3s+IFV-help =3s.IO 'She helps him.'

(14) a. Sese ásan ana Mana.
ʃɛʃɛ   á-s=aŋ   ana Mana
meat 3s+ifv-please=3s.io dat Mana
'Meat is pleasing to Mana.'

b. ásan.
á-s=aŋ
3s+ifv-please =3s.io
'It pleases him.'

9.2.4 Group 4: Verbs that can be bitransitive

Verbs that can occur in bitransitive clauses with subject, direct object, and indirect object can also occur in intransitive clauses (subject only) and transitive clauses (subject and direct object). When present, the indirect object always expresses the benefactive or malefactive.

The semantics of transitive and bitransitive clauses is uniform for these verbs – subject always expresses semantic Agent, direct object always expresses semantic Theme, and indirect object always expresses semantic loc (typically Beneficiary or Maleficiary). Intransitive clauses are more flexible in that the subject can express either Agent or Theme for some verbs. Transitive and bitransitive clauses are discussed for these verbs in Section 9.2.4.1 and intransitive clauses are discussed in Section 9.2.4.2.

9.2.4.1 Group 4 verbs in transitive and bitransitive clauses

The verb *p-ay* 'open' illustrates this verb type. In a transitive clause (15), the subject (*Mana*) performs the action on the direct object (*mahay* 'door').

(15) Mana apay mahay.
Mana à-p-aj   mahaj
Mana 3s+pfv-open-cl door
'He/she opened the door.'

In a bitransitive clause (16), the action done to the direct object is for the benefit of the indirect object.

(16) Mana apan mahay ana Hawa.
Mana à-p=aŋ   mahaj ana Hawa
Mana 3s+pfv-open=3s.io door   dat Hawa
'Mana opened the door for Hawa.'

The verb *mənjar* 'see' occurs in intransitive, transitive, and bitransitive clauses. In a transitive clause (17), the subject (*Mala*) sees the direct object (*awak* 'goat').[5]

(17) Mala ámənjar awak.
Mala á-mənzar   awak
Mala 3s+ɪꜰᴠ-see goat
'Mala sees a goat.'

In a bitransitive clause (18), the subject (*Mala*) sees the direct object (*awak* 'goat') on behalf of the indirect object beneficiary (*bahay* 'chief'). The chief is the metaphorical ʟᴏᴄ to which the action is directed.

(18) Mala olo amənjaran awak ana bahay.
Mala ɔ-lɔ   a-mənzar=aŋ awak ana bahaj
Mala 3s-go 3s-see=3s.ɪᴏ goat ᴅᴀᴛ chief
'Mala went to see a person's goat in the chief's place.'

For the verb /h/ 'say' (19), the subject *Mana* says the utterance (expressed by the direct object pronominal *na*) to *Hawa*.

(19) Mana ahan na ana Hawa.
Mana à-h=aŋ   na   ana Hawa
Mana 3s+ᴘꜰᴠ-say=3s.ɪᴏ 3s.ᴅᴏ ᴅᴀᴛ Hawa
'Mana told it to Hawa.'

Table 9.3 presents examples of this verb type with benefactive indirect object.

For some transitive verbs of this type, the indirect object (when present) marks the malefactive of the event. The indirect object will be negatively affected by the event. For the verb *paɗ-ay* 'eat' in (20) the subject (*awak* 'goat') ate the direct object (*háy* 'millet'), incurring a negative effect on the indirect object (*=aw* 'to me').[6]

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[5]The indirect object 'goat' undergoes a change of state from being unseen to being seen at a particular ʟᴏᴄ.

[6]This phenomenon is also known as possessor raising or external possession. We consider that the semantics for this construction in Moloko are malefactive rather than possessive because a possessive construction can also be employed (without an indirect object): *awak a-paɗ-ay na háy əwla =va,* 'the goat ate my millet'. The construction with an indirect object connects the millet to its owner with less precision than the possessive construction, and concentrates on the loss that the owner incurred (due to the damages done to his millet field) rather than the fact that he owned the field.

Table 9.3: Group 4 verbs where IO expresses benefactive

Intransitive	Transitive
Hawa a-bah yam	*Hawa a-bah=an yam ana Mana*
Hawa 3s+PFV-pour water	Hawa 3s+PFV-pour=3s.IO water DAT Mana
'Hawa poured water.'	'Hawa poured water for Mana.'
a-bah na	*a-bah=an na*
3s+PFV-pour 3s.DO	3s+PFV-pour=3s.IO 3s.DO
'She poured it.'	'She poured it for him.'
Mana a-sl-ay awak	*Mana a-sl=an awak ana bahay*
Mana 3s+PFV-slay-CL goat	Mana 3s+PFV-slay=3s.IO goat DAT chief
'Mana slaughtered a goat.'	'Mana slaughtered the goat for the chief.'
a-sl-ay na	*a-sl=an na*
3s+PFV-slay-CL 3s.DO	3s+PFV-slay=3s.IO 3s.DO
'He slaughtered it.'	'He slaughtered it for him.'
Hawa e-d-e ɗaf	*Hawa a-d=an ɗaf ana Mana*
Hawa 3s+PFV-make-CL millet loaf	Hawa 3s+PFV-make=3s.IO millet loaf DAT Mana
'Hawa made millet loaf.'	'Hawa made millet loaf for Mana.'
e-d-e na	*a-d=an na*
3s+PFV-make-CL 3s.DO	3s+PFV-make=3s.IO 3s.DO
'She made it.'	'She made it for him.'
Hawa a-bal-ay zana	*Hawa a-bal=an zana ana Mana*
Hawa 3s+PFV-wash-CL clothes	Hawa 3s+PFV-wash=3s.IO clothes DAT Mana
'Hawa washed clothes.'	'Hawa washed clothes for Mana.'
a-bal-ay na	*a-bal=an na*
3s+PFV-wash-CL 3s.DO	3s+PFV-wash=3s.IO 3s.DO
'She washed it.'	'She washed it for him.'
Hawa a-rah cafəgal	*Hawa a-rah=an cafəgal ana Mana*
Hawa 3s+PFV-fill bucket	Hawa 3s+PFV-slay=3s.IO bucket DAT Mana
'Hawa poured the bucket.'	'Hawa poured the bucket for Mana.'
a-rah na	*a-rah=an na*
3s+PFV-fill 3s.DO	3s+PFV-fill=3s.IO 3s.DO
'She filled it.'	'She filled it for him.'
Mala á-mənjar awak	*Mala a-mənjar=an awak ana bahay*
Mala 3s+IFV-see goat	Mala 3s-see=3s.IO goat DAT chief
'Mala sees a goat.'	'Mala saw someone's goat for the chief.'
á-mənjar na	*a-mənjar=an na*
3s+IFV-see 3s.DO	3s-see=3s.IO 3s.DO
'He sees it.'	'He saw it for him.'

(20)   Awak apaɗ**aw** na háy va.
        awak a-paɗ=**aw**   na   haj=va
        goat 3s-crunch=1s.io 3s.do millet=prf
        'The goat has eaten my millet.' (lit. the goat has eaten to me the millet)

The indirect object also expresses the malefactive with the verbs *mbəzen* 'ruin'
(21) and *cen* 'understand' (22). In (21) the subject (*sla=ahay* 'the cows') have ru-
ined the direct object (*gəvah* 'the field') with a negative effect on the indirect
object (=*aloko* 'to us').

(21)   Sla ahaj təmbəzaloko na gəvah va.
        ɬa=ahaj tə́-mbəz=alɔkʷɔ   na   gəvah=va
        cow=Pl 3p+pfv-ruin=1Pin.io 3s.do field=prf
        'The cows have ruined our field.' (lit. The cows have ruined to us the field)

Example (22) shows a bitransitive clause with the verb *cen* 'hear'/'understand.'
The subject (*a-* 3s subject pronominal) didn't understand the direct object (*ma
=əwla* 'my words') with a negative effect on the indirect object (=*aw* 'to me').[7]

(22)   Acaw aka va ma əwla bay.
        à-ts=aw   =aka=va ma=uwla   baj
        3s+pfv-understand=1s.io =on=prf word=1s.poss neg
        'He/she didn't understand my words.' (lit. he had understood on my
        words not)

Table 9.4 provides examples of group 4 verbs where the indirect object ex-
presses the malefactive.

Moloko uses a transitive clause with a third person plural subject pronominal
when the identity of the Agent is unimportant or unknown in the discourse. The
literal meaning of (23) is 'They are greeting you,' but this construction is used
even when the person greeting is singular and the speaker knows who it is but
doesn't want to say.[8] Example (24) is from the Disobedient Girl text (see Sec-
tion 1.5). The example literally means 'they brought her out' but the identity of
those who carried her is unimportant in the story.

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[7]Note that phonetically the word-final /n/ drops off when the indirect object clitic attaches.

[8]The verb /h-j/ 'say' shows incorporation of the 'body-part' noun *ma* 'word/mouth' (Section 9.3).

Table 9.4: Group 4 verbs where IO expresses malefactive

Transitive	Bitransitive
awak a-paɗ-ay háy goat 3S+PFV-crunch-CL millet 'The goat ate the millet.'	*awak a-paɗ=**aw** na háy=va* goat 3S-crunch=1S.IO 3S.DO millet=PRF 'The goat has eaten my millet.'
a-paɗ-ay na 3S+PFV-crunch-CL 3S.DO 'He ate it.'	*a-paɗ=**aw** na=va* 3S-crunch=1S.IO 3S.DO=PRF 'The goat has eaten it to me.' (the goat has eaten it and I am affected)
avar e-mbezen háy rain 3S-ruin millet 'The rain ruined the millet.'	*sla a-mbəz=aloko na gəvah=va* cow 3S+PFV-ruin=1PIN.IO 3S.DO field=PRF 'The cow has ruined our field.'
e-mbezen na 3S-ruin 3S.DO 'It ruined it.'	*a-mbəz=aloko na=va* 3S+PFV-ruin=1PIN.IO 3S.DO=PRF 'It has ruined it for us.'
awak a-zom háy goat 3S+PFV-eat millet 'The goat ate millet.'	*awak a-zom=an háy a Mana* goat 3S+PFV-eat=3S.IO millet GEN Mana 'The goat ate Mana's millet.' (lit. the goat ate to him millet of Mana).'
a-zom na 3S+PFV-eat 3S.DO 'He ate it.'	*a-zom=an na* 3S+PFV-eat=3S.IO 3S.DO 'It ate it, affecting him.'

(23) Tahok ma.
      ta-h=ɔkʷ   ma
      3P-tell=2S.IO mouth
      'You are being greeted.' (lit. they are telling word to you)

(24)   Disobedient Girl, S. 30
        Tazlərav na ala.
        tà-ƙərav   na=ala
        3P+PFV-exit 3S.DO=to
        'She was brought out [of the house].' (lit. they brought her out)

9.2.4.2 Group 4 verbs in intransitive clauses

There are two semantic possibilities for intransitive clauses of Group 4 verbs in
Perfective aspect. Subject can be the semantic Agent or the semantic Theme.
Some verbs have both possibilities, but for other verbs, subject can express only
Agent or only Theme. For the verb *d-e* 'prepare,' the subject of an intransitive
clause is the semantic Agent (25) and the semantic Theme is unspecified.

(25)   Hawa ede.
        Hawa ɛ̀-d-ɛ
        Hawa 3S+PFV-prepare-CL
        'Hawa made [something].'

With *cen* 'hear,' an intransitive clause in Perfective aspect (26) expresses an
event where the subject hears and understands (what they hear/understand may
not be explicit in the clause).

(26)   Mana ecen.
        Mana ɛ̀-tʃɛŋ
        Mana 3S+PFV-understand
        'Mana heard/understood (something).'

In contrast, for the verb *p-ay* 'open,' the subject of an intransitive clause is the
semantic Theme which is affected by the action (27). More examples are shown
in Table 9.5.

(27)   Mahay apay.
        mahaj à-p-aj
        door   3S+PFV-open-CL
        'The door opened.'

There is also a difference between the Imperfective, Perfective, and Perfect in
an intransitive clause that doesn't hold for transitive and bitransitive clauses.[9] In

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[9]Intransitive clauses with transfer verbs Section 9.2.5 also show this semantic picture.

intransitive clauses for these verbs, Imperfective aspect indicates that the subject is at the state of being potentially able to do or submit to the action (more of an irrealis idea) while Perfect is a resultative state. In contrast, for transitive and bitransitive clauses, Imperfective aspect expresses an incomplete event (see Section 7.4.2) and the Perfect expresses that the event was completed prior to a point of reference (see Section 7.5.3). For example, an intransitive clause with the verb /p -j/ 'open' expresses an event with an unspecified Agent when the verb is Perfective: 'the door opened' (28).

(28) Mahay apay.
      mahaj à-p-aj
      door 3S+PFV-open-CL
      'The door opened.'

Likewise with the verb /b h/ 'pour,' water 'is poured' (29).

(29) Yam abah.
      jam   à-bax
      water 3S+PFV-pour
      'Water poured.'

If the verb is Imperfective, the clause means that the door is able to be opened, i.e., it is not locked (30).

(30) Mahay ápay.
      mahaj á-p-aj
      door 3S+IFV-open-CL
      'The door opens.'

In the Perfect, the clause means that the door is open (i.e., someone has already opened it, 31).

Table 9.5: Group 4 Intransitive clauses

Perfective	Imperfective	Perfect
zom 'eat'		
Mana a-zəm Mana 3s+PFV-eat 'Mana ate [something].'	*Mana á-zom* Mana 3s+IFV-eat 'Mana is about to eat [something].'	*Mana a-zəm=va* Mana 3s+PFV-eat=PRF 'Mana ate [something] already.'
	háy á-zom millet 3s+IFV-eat 'There are insects in the millet.' (lit. millet eats)	*háy á-zəm=va* millet 3s+IFV-eat=PRF 'The millet has been eaten.'
sl-ay 'slaughter'		
Mana a-sl-ay Mana 3s+PFV-slay-CL 'Mana slaughtered [something].'	*Mana á-sl-ay* Mana 3s+IFV-slay-CL 'Mana is about to slaughter [something].'	*Mana a-sla =va* Mana 3s+PFV-slay=PRF 'Mana has slaughtered [something].'
	awak á-sl-ay goat 3s+IFV-slay-CL 'The goat is good for slaughtering.'	*awak a-sla=va* goat 3s+PFV-slay=PRF 'The goat has been slaughtered.'
s-e 'drink'		
Mana e-s-e Mana 3s+PFV-drink-CL 'Mana drank [something].'	Mana é-s-e Mana 3s+IFV-drink-CL 'Mana is about to drink [something].'	

Perfective	Imperfective	Perfect
	yam é-s-e water 3s+IFV-drink-CL 'The water is drinkable.' (lit. water drinks).	*yam a-sə=va* water 3s+PFV-drink=PRF 'The water has been drunk.'

bal-aj 'wash'

Perfective	Imperfective	Perfect
Hawa a-bal-ay Hawa 3s+PFV-wash-CL 'Hawa washed [herself].'	*Hawa á-bal-ay* Hawa 3s+IFV-wash-CL 'Hawa washes [herself].'	*Hawa a-bal =va* Hawa 3s+PFV-wash =PRF 'Hawa is washed.'
	zana á-bal-ay cloth 3s+IFV-wash-CL 'The cloth can be washed.' (lit. the cloth washes)	*zana a-bal=va* cloth 3s+PFV-wash=PRF 'The cloth is clean.' (washed)

p-ay 'open'

Perfective	Imperfective	Perfect
mahaj a-p-ay door 3s+PFV-open-CL 'The door opened.'	*mahay á-p-ay* door 3s+IFV-open-CL 'The door opens.' (is able to open)	*mahay a-p=va* door 3s-open=PRF 'The door is open.'

bax 'pour'

Perfective	Imperfective	Perfect
yam a-bah water 3s+PFV-pour 'Water poured.'	*yam á-bah* water 3s+IFV-pour 'Water is able to be poured.' (lit. water pours)	*yam a-bah=va* water 3s-pour=PRF 'Water is poured out.'

mbɪʒɛŋ 'ruin'

Perfective	Imperfective	Perfect
háy e-mbəzen millet 3s+PFV-ruin 'The millet ruined.'	*háy á-mbəzen* millet 3s+IFV-ruin 'The millet is ruining.'	*háy á-mbəzə=va* millet 3s+IFV-ruin=PRF 'The millet has ruined.'

(31) Mahay apava.
mahaj a-pa=va
door 3s-open=PRF
'The door is open.'

Imperfective aspect in an intransitive clause presents a situation where a state or capability is expressed. For the verb *mənjar* 'see,' an intransitive clause in Imperfective aspect (32) can have an abilitative sense in that the subject *Mala* is able to see. It can also mean that the subject is visible (subject expresses semantic Theme).

(32) Mala ámənjar.
Mala á-mənzar
Mala 3s+IFV-see
'Mala sees.' (i.e. he is not blind) / 'Mala can be seen.'

Table 9.5 presents examples of Group 4 verbs in intransitive clauses. The corresponding transitive forms for most of these verbs are discussed in Section 9.2.4.1. The three columns show Perfective, Imperfective, and Perfect forms of the verbs. Perfective aspect (column 1) expresses either an action that the Agent did (with an unexpressed Theme) or an event that happened to the Theme (with an unexpressed Agent). Imperfective aspect (column 2) indicates readiness of the Agent to do the action or expresses ability of the Theme to submit to the action. The Perfect (column 3) expresses a resultative – a finished action or the state resulting from the event. For some verbs, the subject can express either Agent or Theme (*zom, slay, se, balay, pay*). For others, the subject of an intransitive clause can only express Theme (*bah, mbəzen*).

9.2.5 Group 5: Transfer verbs

Three transfer verbs in Moloko are notable. They are *dəbənay* 'learn/teach,' *skom* 'buy/sell,' and *vəl* 'give.' These verbs are especially labile in terms of their semantic expression in that a transitive clause can have *either* a direct or an indirect object.

The verb *vəl* 'give' is shown in a bitransitive clause in (33). The subject (*bahay* 'chief') transfers the direct object (*dalay* 'girl') to the indirect object (*Mana*).

(33) Bahay avəlan dalay ana Mana.
bahaj à-vəl=aŋ   dalaj ana Mana
chief 3s+PFV-give=3s.IO girl DAT Mana
'The chief gave the girl to Mana (in marriage).'

When *vəl* 'give' occurs in a transitive clause, the second core argument can be either a direct object (34) or an indirect object (35). In (34), the chief is marrying off his daughter to an unspecified suitor. The subject (*bahay* 'chief') transfers the direct object (*dalay* 'girl') to someone who is unspecified in the clause.

(34) Bahay ávar dalay.
      bahaj á-var   dalaj
      chief 3S+IFV-give girl

      'The chief is marrying off his daughter [to someone].' (lit. chief gives girl)

In (35), the subject (*bahay* 'chief') transfers something or someone to the indirect object (*Mana*). What he gave would probably be specified in the immediate context, but is out of sight in this clause.

(35) Bahay avəlan ana Mana.
      bahaj à-vəl=aŋ   ana Mana
      chief 3S+PFV-give=3S.IO DAT Mana

      'The chief gave [something] to Mana.'

When the verb *vəl* 'give' occurs in an intransitive negative clause (Imperfective, 36), it expresses that the subject is in the state of not giving anything to anyone, or not being the giving kind.[10] Without the negative marker, the meaning would probably be 'the chief is the giving kind.'[11]

(36) Bahay ávar bay.
      bahaj á-var   baj
      chief 3S+IFV-give NEG

      'The chief is not the giving kind.' (lit. chief doesn't give)

The verb *dəbənay* 'learn'/'teach' occurs in transitive and bitransitive clauses.[12] In bitransitive clauses illustrated by (37), the subject (*bahay* 'chief') transfers the direct object (*Məloko* 'Moloko language') to the indirect object (*ana babəza ahay* 'to the children').[13]

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[10]Note the phonological change of the final consonant (*r* becomes *l* when there is a suffix, see Section 6.2).

[11]This is a specific example from a text. We have not seen one-participant clauses for this verb type in Perfective aspect. The semantics of one-participant clauses for group four verbs is discussed in Section 9.2.4.2.

[12]We found no clauses with one core participant for this verb.

[13]The indirect object is expressed in an adpositional phrase as well as the verbal pronominal extension *=ata* 'to them.' The indirect object expresses the recipient or beneficiary of the event.

(37) Bahay adəbənata Məloko ana babəza ahay.
      bahaj a-dəbən=ata   Mʊlɔkʷɔ ana babəza=ahaj
      chief 3s-learn=3P.IO Moloko DAT children=Pl
      'The chief teaches Moloko to the children.'

In transitive clauses with subject and direct object (38), the subject (*babəza ahay* 'children') transfers the direct object (*Məloko* 'Moloko language') to self.

(38) Babəza ahay tədəbənay Məloko.
      babəza=ahaj tə-dəbən-aj Mʊlɔkʷɔ
      children=Pl 3P-learn-CL Moloko
      'The children learn Moloko.'

(39) illustrates a transitive clause with subject and indirect object. The subject (*Məloko* 'Moloko language;' the semantic Theme) is transferred to the indirect object (=*ok* 'to you').

(39) Məloko adəbənok na jajak.
      Mʊlɔkʷɔ a-dəbən=ɔkʷ   na dzadzak
      Moloko 3s-learn=2s.IO PSP fast
      'Moloko is easy for you to learn.' (lit. Moloko learns to you quickly)

The verb *skom* 'buy'/'sell' is also a transfer verb with two semantic LOCs. The event of buy/sell is accomplished through transfer of the Theme from one LOC to another. In a bitransitive clause (40), the subject (*nə-* 'I') causes the direct object (*awak* 'goat') to go to the indirect object (*ana Mana* 'to Mana').

(40) Nəskoman awak ana Mana.
      nə-sʊkʷɔm=aŋ   awak ana Mana
      1s-buy/sell=3s.IO goat DAT Mana
      'I sell a goat to Mana.'

In a transitive clause with direct object (41), the subject (*nə-* 'I') transfers the direct object (*awak* 'goat') to self. We found no intransitive clauses for this verb.

(41) Nəskomala awak.
      nə-sʊkʷɔm=ala awak
      1s-buy/sell=to goat
      'I bought a goat.'

The verb *hay* 'speak' also appears to be in this class, but we have not found this verb in all contexts. In (42), Mana caused what he said (*na* 'it') to go to the men.

(42)   Mana ahata na va ana zawər ahay.
      Mana à-h=ata   na=va   ana zawər=ahaj
      Mana 3s+PFV-speak=3P.IO 3s.DO=PRF DAT men=Pl
      'Mana has already told it to the men.'

Table 9.6 presents examples of these transfer verbs in intransitive, transitive, and bitransitive clauses.

A fourth participant is possible for the verb *vəl* 'give' and appears as an oblique adjunct. When there is both a Beneficiary and a Recipient (which is the core LOC), a preposition (*kəla*) plus one of the possessive pronouns (see Section 3.1.2) mark the benefactive. In (43) the subject ('you,' 2s imperative verb) transfers the direct object (*dala* 'money') to the indirect object (*=an* 'to him' and *ana Mana* 'to Mana') for the benefit of the person expressed by a possessive pronoun in the oblique prepositional phrase (*kəla əwla* 'my benefit,' bolded in the examples).

(43)   Və**lan** dala **kəla əwla** ana Mala.
      vəl=**aŋ**   dala   **kəla=uwla**   ana Mala
      give=3s.IO money for (benefactive)=1s.POSS DAT Mala
      'Give Mala the money for me (lit. my benefit).'

In (44) the subject pronominal (*a-* '3s') transfers the direct object (*awak* 'goat') to the indirect object (pronominal enclitic *=ok* 'to you') for the benefit of the pronoun in the oblique (*kəla =əwla* 'my benefit').

(44)   Avə**lok** awak **kəla əwla**.
      a-vəl=**ɔk**ʷ   awak **kəla=uwla**
      3s-give=2s.IO goat   for (benefactive)=1s.POSS
      'He/she gave you the goat on my behalf (lit. my benefit).'

9.3 "Body-part" verbs (noun incorporation)

Friesen & Mamalis (2008) identified a unique group of verb constructions in Moloko. In these constructions, a special, sometimes phonologically reduced noun form that represents a part of the body is incorporated into the verb phrase. This

Table 9.6: Group 5 verbs

Intransitive	Transitive with direct object	Transitive with indirect object	Bitransitive
Hawa á-var bay Hawa 3s+IFV-give NEG 'Hawa is not the giving kind.' (lit. Hawa doesn't give)	*Hawa á-var yam* Hawa 3s+IFV-give water 'Hawa gives water [to someone].'	*Hawa à-vəl=an ana Mana* Hawa 3s+PFV-give=3s.IO DAT Mana 'Hawa gave [something] to Mana.'	*Hawa à-vəl=an yam ana Mana* Hawa 3s+PFV-give=3s.IO water DAT Mana 'Hawa gave water to Mana.'
á-var bay 3s+IFV-give NEG 'She is not the giving kind.'	*á-var na* 3s+IFV-give 3s.DO 'She gives it [to someone].'	*à-vəl=an* 3s+PFV-give=3s.IO 'She gave [something] to him.'	*à-vəl=an na* 3s+PFV-give=3s.IO 3s.DO 'She gave it to him.'
	babaza=ahay tə-dəbən-ay Maloko children=Pl 3P-learn-CL Moloko 'The children learn Moloko.'	*Maloko a-dəbən=ok na jajak* Moloko 3s-learn=2s.IO PSP fast 'Moloko is easy for you to learn.' (lit.Moloko learns to you quickly)	*bahay a-dəbən=ata* chief 3s-learn =3P.IO Moloko *ana babaza=ahaj* DAT children =Pl 'The chief teaches Moloko to the children.'
	na-skom=ala awak 1s-buy/sell=to goat 'I bought a goat.'		*na-skom=an awak ana Mana* 1s-buy/sell=3s.IO goat DAT Mana 'I sell a goat to Mana.'
Mana a-h-ay bay Mana 3s-tell-CL NEG 'Mana doesn't say.'			*Hawa a-h=an ma ana Mana* Hawa 3s-tell=3s.IO mouth DAT Mana 'Hawa greets Mana.'

is a case of noun incorporation where these *body-part* nouns are closely associated with the verb complex and their incorporation changes the lexical characteristics of the verb. These body-part nouns include *ma* 'mouth,' (45, Section 9.3.3), *elé* 'eye,' (46, Section 9.3.1), *sləmay* 'ear,' (47, Section 9.3.2), and *va* or *har* 'body,' (48, 49, Sections 9.3.4 and 9.3.5, respectively). These nouns can be incorporated into transitive or bitransitive verbs from the types in Sections 9.2.2 and 9.2.3.

(45) Ataraŋ aka **ma** ana war ese.
a-tar=aŋ　　=aka **ma**　ana war ɛʃɛ
3s-call=3s.io =on　mouth DAT child again
'He/she calls the child again.' (lit. he calls mouth to him to the child again)

(46) Mala amənjar **elé**.
Mala a-mənzar **ɛlɛ**
Mala 3s-see　　eye
'Mala looks around attentively.'

(47) Acaka va **sləmay** ana mama ahan bay.
a-ts=aka=va　　**ɬəmaj** ana mama=ahaŋ　　baj
3s-hear=on=PRF ear　　DAT mother=3s.POSS NEG
'He/she is disobedient to his mother.' (he disobeys his mother)[14]

(48) Tandalay talala təzləge **va** ana Mәloko ahay.
ta-ndalaj ta-l=ala　tı-ʤıg-ɛ　　**va**　ana Mʊlɔkʷɔ=ahaj
3P-PRG　　3P-go=to 3P-throw-CL body DAT Moloko=Pl
'They were coming and fighting with the Molokos.' (lit. they were coming they threw body to Molokos)

(49) Ma ango agəsaw **har**.
ma=aŋgʷɔ　a-gəs=aw　　**har**
word=2s.POSS 3s-catch=1s.io body
'It pleases me.' (lit. it catches body to me)

The body-part noun follows directly after all other elements in the verb complex. It appears to be in the same position as any other noun phrase direct object in the verb phrase (see Chapter 8); however it is in more tightly bound to the verb

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[14]Note that the word-final /n/ is deleted on the root /ts nᵉ/when the verbal extension is attached Section 2.6.1.

complex than a noun phrase. The body-part noun does not fill the DO pronominal slot, because verbal extensions that follow the DO pronominal in the Moloko verb complex precede the body-part (see 45 and 47 which each have an adpositional extension, see Section 7.5.1). It is not phonologically bound to the verb since, unlike the Perfect verbal extension =*va* which is part of the verb complex, the body-part *va* does not neutralise the prosody on the verb stem (48). However, the incorporated noun is grammatically closer to the verb complex than a noun phrase direct object would be because the body-part can never be separated from the verb complex. The body-part can never be fronted in the clause (see Section 8.1). Nor can the body-part be separated from the verb complex by the presupposition marker. Both of these situations can occur for noun phrase direct objects and are illustrated in Section 11.2 (29 and 30).

Incorporation of the body-part noun never co-occurs with another direct object or with the DO pronominal *na*. A transitive clause with subject, indirect object and incorporated body-part noun can occur where the indirect object expresses semantic LOC (sometimes metaphorical).

This section is organised by body-part plus verb collocations:

- *elé* 'eye' (Section 9.3.1). Used with verbs of seeing.

- *sləmay* 'ear' (Section 9.3.2). Collocates with verbs of cognition.

- *ma* 'mouth' (Section 9.3.3). *Ma* also can mean 'word' or 'language.' Used with verbs of speaking.

- *va* 'body' (Section 9.3.4). *Va* is phonologically reduced from *hərva* 'body.' Used to form reciprocal actions.

- *har* 'body' (Section 9.3.5). *Har* is also phonologically reduced from *hərva* 'body.'

Note that there are Moloko idioms that employ body parts with the verb *g-e* 'do.' To get angry is to 'do heart' (50).

(50)   Ege ɓərav.
       ɛ-g-ɛ   ɓərav
       3s-do-CL heart
       'He/she is angry.' (lit. he/she does heart)

The idiom for 'think' is literally 'do brain' (51).

(51) Ge endeɓ!
     g-ɛ   ɛndɛɓ
     do[2s.imp]-cl brain
     'Think!' (lit. do brain)

9.3.1 *elé* 'eye'

The body-part noun *elé* 'eye' collocates with some verbs to lexicalise the engagement of the eyes and reduce the focus on what is seen. This body-part word is used in its full form. For example, the verb *mənjar* normally means 'see' (see Table 9.7). With the incorporation of *elé* (52– 53), the verb plus body-part construction has a more active experiential meaning in that the subject of the clause (*Mala*) is looking around attentively. Since there can be no direct object, there is no explicit referential object as stimulus – the speaker is vague about what exactly Mala will look at.

(52) Mala amənjar **elé**.
     Mala a-mənzar **ɛlɛ**
     Mala 3s-see   eye
     'Mala looks around attentively.'

(53) Mala olo amәmәnzәre **elé** a lәhe.
     Mala ɔ-lɔ   amɪ-mɪnʒɪrɛ **ɛlɛ** a lɪhɛ
     Mala 3s-go dep-see   eye at bush
     'Mala went to see his fields.' (lit. Mala went to see in the bush)

With the verb *har* 'carry' (54), the addition of *elé* also gives an entirely new lexical item – expressing the idea of looking around intensively or studying every square inch (see Table 9.7.).

(54) Nolo nahar **elé** a gәvah әwla ava jәyga.
     nɔ-lɔ na-har   **ɛlɛ** a gәvax=uwla ava dzijga
     1s-go 1s-carry eye at field=1s.poss in   all
     'I go [and] look around my whole field.' (lit. I carry eye in my field all)

Table 9.7 compares examples with and without the body-part.

Table 9.7: Selected verbs with and without the incorporation of elé 'eye'

Clause without body-part	Clause with body-part
Mana a-mənjar war	*a-mənjar **elé***
Mana 3s-see child	3s-see eye
'Mana sees the child.'	'He/she looks around intently.'
Mana a-har eteme a dəray ava	*ka-har=aka **elé** a gəvah=ango ava jəyga*
Mana 3s-carry onion in head in	2s-carry=on eye at field=2s.poss in all
'Mana carries onions on [his] head.'	'You look around your whole field.'

9.3.2 *sləmay* 'ear'

A second body-part noun is *sləmay* 'ear' which collocates with some cognition verbs. This body-part noun is used in its full form. Like *elé* 'eye,' it adds a new, more active lexical meaning to the verb with which it collocates.

For example, the normal lexical meaning of the verb *cen* is 'hear' or 'understand' (55) and the verb is bitransitive (see Section 9.2.4). The incorporation of the body-part *sləmay* 'ear' gives a much more active or intensive idea – not just hear and understand someone, but also listen to them or obey them (56). The focus is on the fact that the person is benefitting from using his ears to intently listen, rather than on the person speaking or the content of their message.

(55)   Mana écen bay.
       Mana ɛ́-tʃɛŋ   baj
       Mana 3s+ifv-hear neg
       'Mana is deaf/doesn't understand.'

(56)   Mana écen **sləmay** bay.
       Mana ɛ́-tʃɛŋ   **ɬəmaj** baj
       Mana 3s+ifv-hear ear   neg
       'Mana is deaf/disobedient.'

  Examples are in Table 9.8.

Table 9.8: Selected verbs of cognition with and without incorporation of sləmay 'ear'

Clause without 'body-part'	Clause with body-part
Mana a-c=aw =aka ma=əwla bay	*Mana a-c=aka=va **sləmay** ana mama=ahan bay*
Mana 3s-hear=1s.io =on word/mouth=1s.poss neg	Mana 3s-hear=on=prf ear dat mother=3s.poss neg
'Mana didn't understand my words.'	'Mana is disobedient to his mother.'
	(lit. Mana doesn't hear ear to his mother)

9.3.3   *ma* 'mouth'

The 'body-part' noun *ma* 'mouth' (which also means 'word' and 'language') collocates with some speech verbs. It is found in its full form in the verb plus body-part constructions. Example (57) shows the verb *hay* 'say' with the body-part noun *ma* 'mouth.'

(57)   Tahok ma.
       ta-h=ɔkʷ   ma
       3p-tell=2s.io mouth

       'You are being greeted.' (lit. they are telling word to you)

The example pairs shown in Table 9.9 illustrate its use with three speaking verbs; *taray* 'call,' *hay* 'say' and *jay* 'speak.' Examples are shown with the direct object pronominal *na* (column 1) and with *ma* 'mouth' (column 2). With the body-part incorporation, there can be no other direct object.

A similar creation of new lexical meaning occurs with verbs that are normally not speech verbs but that become speech verbs when they collocate with *ma*. The verbs *sok-oy* 'point,' *zom* 'eat,' and *njakay* 'find' are shown in Table 9.10. The incorporation of *ma* with *sok-oy* 'point' gives a particular manner of communication: *sokoy ma* 'whisper.' Incorporation of *ma* with the verb *zom* 'eat' gives the idea of helping someone else to eat. Incorporation of *ma* with *njakay* 'find' yields an expression 'to find trouble.'

Table 9.9: Selected speech verbs with and without *ma* 'mouth' as direct object

Transitive clause	Clause with 'body-part' incorporation
Mana a-tar-ay	*Mana a-tar=an* ***ma*** *ana* Hawa
Mana 3s-call-cl	Mana 3s-call=3s.io mouth/word DAT Hawa
'Mana calls out.'	'Mana calls to Hawa.'
a-tar-ay	*a-tar=an ma*
3s-call-cl	3s-call=3s.io mouth/word
'He calls out.'	'He calls to her.'
Mana a-h-ay bay	Mana *a-h=an* ***ma*** *ana* Hawa
Mana 3s-tell-cl NEG	Mana 3s-tell=3s.io mouth/word DAT Hawa
'Mana doesn't say.'	'Mana greets Hawa.'
a-h-ay bay	*a-h=an* ***ma***
3s-tell-cl NEG	3s-tell=3s.io mouth/word
'He doesn't say.'	'He greets her.'
Mana a-j-ay	Mana *a-j-ay* ***ma***
Mana 3s+PFV-speak-cl	Mana 3s+PFV-speak-cl mouth/word
'Mana speaks!'	'Mana greets.'
a-j-ay	*a-j-ay* ***ma***
3s+PFV-speak-cl	3s+PFV-speak-cl mouth/word
'He speaks!'	'He greets.'

Table 9.10: Selected non-speech verbs that collocate with ma.

Transitive clause	Clause with body part incorporation
Hawa a-sok-oy ahar Hawa 3s-point-CL hand 'Hawa points.'[a]	*Hawa a-sok-oy* **ma** Hawa 3s-point-CL mouth/word 'Hawa whispers.'
Hawa o-zom ɗaf Hawa 3s-eat millet loaf 'Hawa eats millet loaf.'	*Hawa a-zəm=an* **ma** *ana bahay* Hawa 3s-eat=3s.IO mouth/word DAT chief 'Hawa fed the chief.' (made him eat)
o-zom na 3s-eat 3s.DO 'She eats it.'	*a-zəm=an* **ma** 3s-eat=3s.IO mouth/word 'She fed him.'
Hawa a-njak-ay asak =ahan Hawa 3s-find-CL foot=3s.POSS 'Hawa gives birth.' (lit. Hawa finds her feet)[b]	*Hawa a-njak-ay* **ma** Hawa 3s-find-CL mouth/word 'Hawa is in trouble.' (lit. she finds mouth/word)
a-njak-ay na 3s-find-CL 3s.DO 'She finds it.'	*a-njak-ay* **ma** 3s-find-CL mouth/word 'Here comes trouble.'

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[a]Perhaps *ahar* 'hand' is another body-part direct object that acts as semantic Theme. We found no other verbs that collocate with *ahar*.

[b]Although *asak* 'foot' is another body part, this is not a case of noun incorporation since *asak* is a noun (in a possession construction with *=ahan*) and not within the verb complex as is *ma* 'mouth.'

9.3.4 *va* 'body'

There are two different phonologically reduced forms of the word *hərva* 'body' – *va* and *har*. When collocated with certain verbs, the verb plus incorporated body-part takes on a new lexical meaning. This is a non-productive process found with only a few verbs.

The first reduced form of *hərva* 'body' is *va*.[15] This body-part is used for forming reciprocals with plural subjects of a few verbs in a context of killing and loving (*zləge* 'throw' 58–59, *kaɗ* 'kill by clubbing' 60, and *ndaɗay* 'need,' 61). The body-part *va* indicates that the plural subjects are performing the actions against one another.

(58)   Tandalay talala təzləgə **va** ana Məloko ahay.
        ta-nd=alaj   ta-l =ala tɪ-k̑ɪg-ɛ   **va**   ana Mʊlɔkʷɔ=ahaj
        3ᴘ-ᴘʀɢ=away 3ᴘ-go =to   3ᴘ-throw-ᴄʟ body ᴅᴀᴛ Moloko=Pl
        'They were coming and fighting with the Molokos.' (lit. they were coming they threw body to Molokos)

(59)   Kafta məze ahay təzləgə **va** va na, nəwəɗokom ala dəray.
        kafta mɪʒɛ =ahaj tɪ-k̑ɪgɪ   **va**   =va na nu-wuɗɔkʷ-ɔm =ala
        day   person =Pl   3ᴘ-throw body =ᴘʀꜰ ᴘsᴘ 1s-separate-1ᴘᴇx =to

        dəraj
        head
        'On the day that they had finished fighting each other, we separated as equals.'

(60)   Takaɗ **va**.
        ta-kaɗ **va**
        3ᴘ-kill body
        'They kill each other.' (lit. they kill.by.clubbing body)

The body-part *va* 'body' occurs twice in the clause expressing the reciprocal idea of loving one another in (61) – as incorporated noun and also as the noun phrase within an adpositional phrase (*va* is bolded in the example).

(61)   Kondoɗom **va** a **va** ava.
        kɔ-ndɔɗ-ɔm **va**   a **va**   ava
        2ᴘ-need-2ᴘ body at body in
        'Love one another.' (lit. need body in the body)

Table 9.11 compares transitive clauses with a direct object and clauses with the same verbs collocated with the body-part. To facilitate comparison between the incorporated body-part *va* and the direct object pronominal extension *na*, the

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[15]Note that there are three homophones of *va* which one must take care to distinguish: [=*va*] 'perfect,' [*va*] 'body,' and [*ava*] 'in'. They all can occur immediately following the verb stem.

examples in the table are given in pairs. The first example in each pair shows the full noun phrase, and the second example in the pair shows the same clause with only pronominal affixes and extensions. The body-part *va* is bolded.

Table 9.11: Selected verbs with and without the body-part va 'body'

Transitive clause	Clause with body-part incorporation
Məloko =ahay tə-zləg-e hay Moloko =Pl 3P-sow-CL millet 'Moloko people sow/throw millet.'	*kəra=ahay tə-zləg-e **va*** dog=Pl 3P-sow-CL body 'Dogs fight each other.'
tə-zləg-e na 3P-SOW-CL 3S.DO 'They sow/throw it.'	*tə-zləg-e **va*** 3P-SOW-CL body 'They fight each other.'
babəza=ahay ta-kaɗ kəra children=Pl 3P-club dog 'The children kill a dog.'	*məze=ahay ta-kaɗ **va*** person=Pl 3P-club body 'The people kill each other.'
ta-kaɗ na 3P-club 3S.DO 'They kill it.'	*ta-kaɗ **va*** 3P-club body 'They kill each other.'
loko na ko-ndoɗ-om baba=aloko 1PIN PSP 1PIN-love-1PIN father=1PIN.POSS 'We (for our part) love our father.'	*loko na ko-ndoɗ-om **va*** 1PIN PSP 1PIN −love-1PIN body 'We (for our part) love one another.'
ko-ndoɗ-om na 1PIN −love-1PIN 3S.DO 'We love him.'	*ko-ndoɗ-om **va*** 1PIN −love-1PIN body 'We love one another.'

The verb *zaɗ* 'take' also can incorporate the body-part *va* 'body.' The normal lexical meaning of the verb *zaɗ* is 'take' but the combination *zaɗ va* (62 and 63) carries the idea of 'resemble' or 'look like' and occurs with singular as well as plural subjects. With a plural subject (63), the clause has a reciprocal idea – the subjects resemble each other.

(62) Məlama ango azaɗ **va** nə nok.
      məlama=aŋʷɔ a-zaɗ **va** nə   nɔkʷ
      sibling=2s.POSS 3s-take body with 2s
      'Your sibling resembles you.' (lit. your sibling takes body with you)

(63) Məlama ango ahay jəyga tazaɗ **va**.
      məlama=aŋʷɔ=ahaj dʒijga ta-zaɗ **va**
      sibling=2s.POSS=Pl   all   3P-take body
      'All your siblings look alike.' (lit. siblings take [each other's] body)

The body part *va* can also collocate with other verbs. For example *embesen* means 'he/she breathes,' but *embesen va* means 'he/she is resting' (64).

(64) Embesen va kə cəveɗ aka.
      ɛ-mbɛʃɛŋ va   kə tʃɪvɛɗ aka
      3s-breathe body on road   on
      'He rests enroute [to somewhere].'

9.3.5 *har* 'body'

A second reduced form of *hərva*, *har* 'body,' demonstrates another non-productive collocation with some verbs. With the verb *wəɗakay*, which normally means 'divide,' the incorporation of *har* gives a new lexical meaning containing the idea of the participants dispersing (lit. a reflexive idea of 'dividing themselves up' 65).

(65) Values, S. 16
      Tə́lala, a həlan ga ava ese, təwəɗakala **har** a məsəyon ava.
      tə́-l=ala   a həlaŋ ga ava ɛʃɛ   tú-wuɗak=ala **har** a mʊsijɔŋ
      3P-go+IFV=to at back ADJ in   again 3P-divide+IFV=to body at mission
      ava
      in
      'They come [home] again, they disperse after church.'

With the verb *gas* which normally means 'catch,' *har* gives the lexical idea of pleasing, which is located at the indirect object (66).

(66) Membese va nə nok egəne na, agəsaw **har** ava gam.

mɛ-mbɛʃ-ɛ   va   nə   nɔkʷ   ɛgɪnɛ   na   a-gəs=aw   **har**=va   gam

NOM-breathe-CL body with 2S   today PSP 3S-catch=1S.IO body=PRF a lot

'Spending time with you today pleased me a lot.' (lit. it catches body to me)

9.4 Clauses with zero grammatical arguments

There are clauses in Moloko with no grammatically explicit arguments - these clauses have a transitivity of zero.[16] Nominalised and dependent verb forms are not inflected for subject (see Sections 7.6 and 7.7, respectively). When they also carry no DO or IO pronominal, the clause has zero transitivity. The use of verb forms with no grammatical relations has a discourse function to temporarily take participants out of sight. In the Disobedient Girl story peak episode S. 22 (67), the dependent verb *aməhaya* 'grinding,' is unconjugated for subject, direct object, and indirect object. The effect is to keep the participants out of sight as the events unfold and increase vividness as the audience is drawn into the story. All the audience hears is the sound of grinding. The millet is expanding, filling the room and the disobedient girl is lost inside it as she is being suffocated by the millet.

(67) Disobedient Girl, S. 22

Njəw njəw njəw aməhaya azla.

nzuw nzuw nzuw amə-h=aja   aʒa

ID:grind   DEP-grind=PLU now

'*Njəw njəw njəw* [she] ground [the millet] now.'

Likewise in line S. 15 of the Snake story (68), the nominalised form of the verb 'to penetrate' occurs with neither DO nor indirect object pronominals. The climactic moment when the storyteller spears the snake is in a clause with zero transitivity. Participants are out of sight in the discourse.

(68) Snake story, S. 15

Mecesle mbəraɓ!

mɛ-tʃɛɬ-ɛ   mbəraɓ

NOM-penetrate-CL ID:penetrate

'It penetrated, *mbəraɓ*!'

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[16]The ideophone clause can also have zero transitivity (Section 3.6.3). See also zero transitivity in nominalised forms, Section 8.2.3.

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A grammar of Moloko

Mana Samuel, Mana Djeme Isaac, and Ali Gaston have been involved in their communities in linguistics, language development and translation. They are Moloko speakers and between them they also speak French, Fulfulde, Guiziga, Muyang, and Hausa. Together with the Moloko Language and Translation committees they have produced several books in the Moloko language. Dianne Friesen, a linguist with SIL International, joined them in 1999, studied the language, and helped in producing the books. Together they produced this grammar. It came out of hours spent at friends' houses hearing and recording stories, hours spent listening to the tapes and transcribing the stories, then translating them and studying the language through them. Time was spent together and with others speaking the language and talking about it, translating resources and talking to people about them. Grammar discoveries were made in the office, in the fields while working, and at gatherings. In the process, the four have become more and more passionate about the Moloko language and are eager to share their knowledge about it with others.

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