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The Buwal Verb Phrase

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1. Introduction

1.1 Language background

Buwal is a Chadic language spoken in the Far North region of Cameroon. It is mainly spoken in and around the village of Gadala which is located in the division of Mayo-Tsanaga and the subdivision of Mokolo. Brye (2000: 2) estimated the population as around 7000. The Ethnologue (Lewis 2009) classifies Buwal as Afoasiatic, Chadic, Biu-Mandara, A, A7. Dieu and Renaud (1983: 357) in their *Atlas Linguistique de l'Afrique Centrale-Le Cameroun* give the following classification: Tchadique, Centre-Ouest, Daba, Nord. The other languages of the Daba group are Gavar, Mbudum, Mina and Daba. There has been some discussion over whether Buwal and Gavar (with a slightly larger population) are distinct languages. Studies have shown that the two languages have a high percentage of lexicostatistical similarity and mutual intelligibility (Dieu and Barreteau: 2000: 65; Brye 2000: 8). However, these results may be affected by the frequent contact of the two groups and the speaker of one language is often not able to speak the other however much he may understand. Furthermore, phonological studies have shown some significant differences in the phonological systems of the two languages (Viljoen 2009; Noukeu 2004) and differences in the lexicon and grammar have also been observed (author's fieldnotes). In consequence, at this stage the author is treating Buwal and Gavar as different languages.

1.2 Previous studies

Very little study has been done previously on the Buwal language. Short word lists have been collected for the sake of language classification (Dieu and Barreteau 2000: 65). A Rapid Appraisal survey of the language was done by L. Seguin of SIL Cameroon (Seguin 1992) and intelligibility testing with Gavar was carried out by Brye (2000). In recent years the author has conducted phonological studies and produced an orthography statement for Buwal (Viljoen 2009; Viljoen et al 2009). She is currently writing a description of Buwal grammar for her PhD thesis at La Trobe University in Melbourne, Australia.

1.3 Summary of phonology

Buwal has thirty-nine consonant phonemes. These are listed in Table 1 below. In terms of vowels, Buwal can be analysed as having only one full vowel phoneme /a/ with an epenthetic vowel being inserted to break up disallowed consonant clusters. The ten surface vowels are produced by the effects of palatalisation and labialisation. Only four words were found in the corpus containing long vowels.

An important aspect of Buwal phonology which will relate to the discussion of verb morphology is the 'palatalisation prosody' which affects both the alveolar fricatives and affricates and all vowels within a morpheme. Palatalisation spreads leftwards from suffixes and there is one attested case where it spreads to the right onto a suffix from a verb root. Whilst some other Chadic languages have also been found to have a labialisation prosody operating at the word level, this is not the case for Buwal where labialisation is a localised effect affecting vowels on either side of labialised velar consonants.

Buwal has three levels of underlying tone, low, mid and high. Very few minimal pairs of the same word class have been found; therefore the lexical load is low.

Table 1: Buwal consonant phonemes

	Labial	Alveolar	Palatal	Velar	Labialised Velar	Labial-Velar
Plosive-voiceless	p	t		k	k ^w	kp
Plosive-voiced	b	d		g	g ^w	gb
Plosive – voiced, prenasalised	^m b	ⁿ d		^ŋ g	^ŋ g ^w	^{ŋm} gb
Implosive	ɓ	ɗ				
Fricative – voiceless	f	s		x	x ^w	
Fricative – voiced	v	z		ɣ	ɣ ^w	
Affricate-voiceless		ts				
Affricate-voiced		dz				
Affricate-voiced, prenasalised		ⁿ dz				
Nasal	m	n		ŋ	ŋ ^w	
Lateral approximant		l				
Lateral fricative-voiceless		ɬ				
Lateral fricative-voiced		ɮ				
Trill		r				
Flap	ṿ					
Glides			j			w

1.4 Transcription

The majority of examples in this paper, unless otherwise specified, will be transcribed at the word level and then underneath the words will be broken down into morphemes. At the word level Buwal orthography will be used. Unusual orthographic symbols for various consonant phonemes are listed in Table 2 below. In Buwal orthography four vowels are written: <a>, <e>, <ə> and <u>. Tone is not normally marked except on the perfective aspect marker.

Table 2: Unusual graphemes used in Buwal orthography

Phoneme	Grapheme
ts	c
dz	j
ⁿ dz	nj
^{nm} gb	mgb
ɬ	sl
ʃ	zl
x	h
y	hh
j	y
v	vb

At the morpheme level and when individual word examples are given a semi-phonemic transcription will be used showing all consonant phonemes. Only the full vowel will be represented and the symbol /e/ will be used for this vowel in palatalised words. Tone will be marked.

1.5 Scope of paper

This paper is a brief description of Buwal verbs and verb phrases. It begins with a section on verbs which covers the structure of verb roots (Section 2.1), verbal subclasses (Section 2.2) and verbal morphology (Section 2.3). Section 3 deals with what could be the verb phrase, its structure and the function of the various elements found within it. Complex verb constructions are discussed in Section 4. Finally valency adjusting is covered in Section 5.

1.6 Acknowledgements

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2. The verb

Verbs function as the predicate of verbal clauses (1a & b). In Buwal they can be distinguished from other word classes by their ability to take various verbal affixes such as person/number affixes and ventive, autobenefactive and transitivity suffixes, each of which will be described in more detail in Section 2.3. The verb is highlighted in each of the examples below.

- (1) a. *Hejəye əy kanda kədā a luma .*
xèdzè -jé j- **kā-** ndā kdā á lwmà
person -PL 3PL.SBJ- IPFV- **go** towards PREP1 market(ful.)
'People are going towards the market.' (C16-SN:19)
- b. *Uzəye əy kahanza mbaw .*
wzjé j- **kā-** xān -zā mbàw
children 3PL.SBJ- IPFV- **cry** -TRANS child
'The children are making the child cry.' (GE21-SE:17.7)

2.1 The verb stem

This section describes the phonological structure of Buwal verb stems. Section 2.1.1 deals with the segmental structure of simple verb roots, Section 2.1.2 with verbs derived from adjectives, Section 2.1.3 with reduplicated verb stems and finally underlying tone is covered in Section 2.1.4.

2.1.1 Simple verb roots

Table 3 below summarises skeleton structures found in an inventory of 851 simple verb roots. Skeleton structures include consonants and full vowels but not epenthetic vowels. Verb roots which show reduplication have been excluded as these are considered to be stems. These will be discussed in Section 2.1.3. Simple verb roots exhibit less variety of structures than noun roots in Buwal being either mono or disyllabic. From the table below it can be seen that the most frequent structure is CaC, followed by CCaC and then CaCaC.

Simple verb root structures in Buwal are similar to those found in related languages. For Mina, Frajzyngier and Johnston (2005: 72) found a more limited number of structures for verb roots: CV, CVC, CCVC and CVCVC. In Daba, Leinhard and Wiesemann (1986: 41-42) discovered monosyllabic and disyllabic verbs with the following structures: CV, CVC, CVCV, CVCVC and occasionally CVCCVC. It should be noted, however, that they treat the schwa as a full vowel which reduces the number of structures possible.

Table 3: Summary of skeleton structures for simple verb roots

	1V		2V	
	Skeleton	Example	Skeleton	Example
1C	Ca (26)	<i>dà</i> 'prepare food'		
2C	CaC (458)	<i>wān</i> 'sleep'		
	CCa (9)	<i>bǝā</i> 'bless'		
3C	CCaC (282)	<i>fǝāx</i> 'wake up'	CaCaC (43)	<i>tǝdǝk^w</i> 'descend'
4C	CCCaC (17)	<i>ntǝl</i> 'tire'	CaCCaC (16)	<i>g^wǝrǝm</i> 'get up'

Buwal verb roots are either unpalatalised (2) or palatalised (3) (see Section 1.3 Summary of phonology).

- (2) *bā* 'create'
bām 'munch'
dāvās 'knock down'
g^wǝrǝm 'rise up'
- (3) *dzè* 'elope'
k^wǝts 'sprinkle'
pǝlǝŋ 'come apart'
mǝsk^wǝd 'grind finely'

2.1.2 Verbs derived from adjectives

Buwal has adjectives as a distinct word class. They have many nominal properties but can also function in other ways that ordinary nouns cannot. Sixteen verbs have been found so far whose forms are similar to adjectives. These are listed in Table 4 below. In terms of segments the verbs and adjectives are identical. However, there are certain differences in tone. If it is assumed that the adjectives were derived from verbs then these differences are not completely predictable. On the other hand if the verbs were derived from the adjectives, these tonal differences are more predictable. Low remains low, mid remains mid and high becomes mid. This makes sense because only low and mid tone melodies are found on Buwal verbs (see section 2.1.4). This derivational process is not productive since it cannot be applied to every adjective. In other words, these forms are lexicalised.

Table 4: Buwal verb roots derived from adjectives

Tone	Adjective	Gloss	Tone	Verb	Gloss
L	<i>x^wàs</i>	‘reached’	L	<i>x^wàs</i>	‘reach’
	<i>x^wbàr</i>	‘wide’		<i>x^wbàr</i>	‘widen’
	<i>ndràm</i>	‘pleasing/good tasting’		<i>ndràm</i>	‘please/taste good’
	<i>nt6àl</i>	‘tired’		<i>nt6àl</i>	‘tire’
M	<i>dāj</i>	‘more’	M	<i>dāj</i>	‘surpass’
	<i>g^wār</i>	‘arrived’		<i>g^wār</i>	‘arrive’
	<i>vāŋ</i>	‘arrived’		<i>vāŋ</i>	‘arrive’
H	<i>6é</i>	‘full’	M	<i>6ē</i>	‘fill (solid)’
	<i>fték</i>	‘lost’		<i>ftēk</i>	‘lose’
	<i>yéf</i>	‘full’		<i>yēf</i>	‘fill (liquid)’
	<i>kďāŋ</i>	‘used up’		<i>kďāŋ</i>	‘finish’
	<i>k^wďāp</i>	‘lost’		<i>k^wďāp</i>	‘lose’
	<i>ntāk^w</i>	‘finished’		<i>ntāk^w</i>	‘finish’
	<i>tāɬ</i>	‘complete in number’		<i>tāɬ</i>	‘complete number’
	<i>twād’</i>	‘finished’		<i>twād’</i>	‘finish’
HM	<i>xésēŋ</i>	‘forgotten’	MM	<i>xēsēŋ</i>	‘forget’

2.1.3 Reduplication

As Gravina (2001: 5) found for Mbuko, many verb stems in Buwal can be seen to have developed historically through reduplication of either the whole or part of the phonological word. In a corpus of 546 verbs, 88 reduplicated forms were found. The process of reduplication however, appears to no longer be productive as no semantically linked pairs of verbs where one is a reduplicated form of the other, have as yet been found.

Only three of the reduplicated forms found in the corpus involve a reduplication of a whole phonological word and all of them yield a CVCV structure which was not seen for simple verb roots (3).

- (3) *ndzàndzà* ‘give’
dēdē ‘pour into’
nānā ‘tremble’

The rest involve partial reduplication (4). This process has resulted in a small number of trisyllabic verb stems (5) which are not common in Central Chadic languages. Verbs with three syllables were found by Ndokobai (2006: 50-51) in Cuvok, although he states they are very rare.

(4) *ddrāk^w* 'begin to learn'
sàsàm 'rejoice'
dādrās 'blunten'
tèt>wèd' 'sling'

(5) *yàyàndàr* 'snore'
xàxàndàr 'coagulate'
tètèngèl 'roll around'
sēsēdēm 'slip'

It is difficult to determine what the original semantic motivation for this process may have been. Ndokobai (2006: 52) states that for Cuvok such reduplication signifies a repeated action. Likewise, many of the Buwal reduplicated verb roots contain the idea of a repeated action or an ongoing process as in the examples in (6). However others do not (7).

(6) *nānā* 'tremble'
kàkàd' 'massage'
pàpàs 'spread out bits'
sàsàk 'sift'
ngāngāl 'sway'
dzàdzàr 'filter drop by drop'
jājāx 'melt'

(7) *dàdàb* 'be beautiful'
làlāk 'be afraid'
zàzàk 'rest'
tātāk 'chase'
wāwāj 'close a meeting'

A possible phonological rather than a semantic source of such forms is compensatory reduplication of a following syllable when an initial consonant has been historically lost. Such a process has been suggested for a number of other Central Chadic languages (Gravina 2007b: 4). However this idea would need to be investigated further before it could be said that it provides as explanation for the Buwal data.

2.1.4 Underlying tone

Buwal has three underlying level tones, low (L), mid (M) and high (H). Although all three levels apply to the other major word classes, only mid and low tone can be found on verbs roots. A similar situation to that of Buwal appears to be the case for certain other Central Chadic languages such as Muyang (Smith 2002:8) and Merye (2007a:7).

Any Buwal verb stem, whether monosyllabic, disyllabic or trisyllabic, carries either a /L/ (8) or a /M/ (9) tone melody which applies to all syllables within that stem.

(8)	<i>rà</i>	‘dig’
	<i>vàl</i>	‘give’
	<i>tk^wàd</i>	‘wipe’
	<i>tàdàk^w</i>	‘descend’
	<i>tètèngèl</i>	‘roll on ground’

(9)	<i>grē</i>	‘see’
	<i>xbār</i>	‘wait’
	<i>mpāk</i>	‘close’
	<i>dādrās</i>	‘blunten’
	<i>sēsēdēm</i>	‘slip’

2.2 Verb sub-classes

Verbs in Buwal can be divided into syntactic subclasses according to their valence, or the number of core arguments they occur within a clause (Payne 1997: 170). In a number of Central Chadic languages verb roots could be analysed as being neutral in valence with transitivity simply being indicated by the number of arguments present in the clause (Jarvis 1982: 6; Friesen and Mamalis 2004: 48-49; Ndokobai 2006: 97) or marked by verbal affixes (Kinnaird 2006: 43). In Buwal however, a number of subclasses can be identified; intransitive (Section 2.2.1), ambitransitive (Section 2.2.2), transitive (Section 2.2.3) and transitive with an obligatory object (Section 2.2.4). The majority of verbs in Buwal are ambitransitive, meaning that they can occur in either intransitive or transitive clauses. Furthermore there are no ditransitive verbs as such. Any verb including intransitive verbs (10), can take the indirect object agreement marker which expresses not only recipient but also benefactive, malefactive and patient roles. No verbs have been found which require a locative complement.

(10)	<i>kéndene</i>	<i>aza</i>	<i>a</i>	<i>unaf anta</i>	.		
	ká-	ndā	-ēnē	āzá	á	wnāf	āntā
	PFV-	go	-3SG.OBJ	COMPL	PREP1	heart	3SG.POSS
	‘...it had gone for him into his heart.’						(HT4-SN:27.21)

2.2.1 Intransitive verbs

Intransitive verbs function as the predicate of a verbal clause with one core argument functioning in the grammatical role of subject (11a & b). They can be distinguished from ambitransitive verbs in that they can only take a direct object if the transitivity suffix *-zā* (see Section 2.3.4) is attached to the verb root (12). A similar situation was found in other Chadic languages such as Miya (Schuh 1998: 178), Gidar (Frajzyngier 2008: 134-137) and Mofu-Gudur (Hollingsworth 1995: 10).

- (11) a. *Ujek naka a kadada6* .
 wjēk nākā ā- kā- dàdà6
 hut 1SG.POSS 3SG.SBJ- IPFV- **be.beautiful**
 ‘My house **is beautiful.**’ (GE20-SE:8.2)
- b. *Uzəye na ege əy kawan*
 wzjé nā = égē j- ka- wān
 children 1SG.POSS =PL 3PL.SBJ- IPFV- **sleep**
 ‘My children **are sleeping.**’ (NF4-SN:2.4)
- (12) *Sa dadəbza ujek naka* .
 sā- dàdà6 -zā wjēk nākā
 1SG.SBJ- **be.beautiful** -TRANS hut 1SG.POSS
 ‘I **make** my house **beautiful.**’ (GE20-SE:8.3)

2.2.2 Ambitransitive verbs

The vast majority of verbs in Buwal are ambitransitive (or labile) in that they can occur either with or without a direct object with no variation in the verb stem. They can be divided into two semantic subcategories: (i) agentive and (ii) patientive.

- (i) Agentive ambitransitives are verbs which when used intransitively the subject is the semantic agent and the patient is omitted because it is irrelevant or unimportant (Dixon and Aikhenvald 2000:4). Examples (13 a & b) illustrate one of these verbs being used in intransitive and transitive clauses respectively.

- (13) a. *Sa kadəs* .
 sā- kā- dəs
 1SG.SBJ- IPFV- **cultivate**
 ‘I **am cultivating.**’ (LL14-SE:3)
- b. *Hejəye vedəye cekudè ende əy dəs ghwarnakw.*
 xədzè -jé vēdjé tsék^wdē éndē j- dəs y^warnək^w
 person -PL IND.DET.PL few like.this 3PL.SBJ- **cultivate onion**
 ‘A few people **cultivate onions.**’ (LL17-SE:23)

- (i) Patientive ambitransitives are those verbs in which when used in intransitive clauses the subject has the role of the semantic patient, or the affected participant of the event. The examples below illustrate the use of one of these verbs in an intransitive (14a) and a transitive clause (14b).

(14) a. *A kagal* .
 á- **kā-** **gàl**
 3SG.SBJ- IPFV- **grow**
 ‘It is **growing**.’ (LL30-SE:4)

b. *Hwa ma cekzekey η gal gamtak*
 x^wā mā = càk -zā -ēkēj η **gàl** **gāmtāk**
 2SG REL= help -TRANS -1SG.IOBJ to **raise chicken**
 It’s you who helped me **raise chickens**... (HT4-SN:34.5)

Some patientive ambitransitive verbs express situations that must be brought about by an outside agent and therefore have a ‘passive-like’ meaning (15a). Many agentive ambitransitive verbs can also function as patientive ambitransitives having this type of meaning (15b).

(15) a. *Mada dāla a kangaz kwaw tew*
 màdā dālā á- **kā-** **ngàz** k^wāw téw
 if someone 3SG.SBJ- IPFV- **advise** NEG finally
 ‘If in the end someone won’t **be advised**...’ (DE12-SN:4.2)

b. *La ndarey a kadās* .
 lā ndrēj á- **kā-** **dās**
 field millet 3SG.SBJ- IPFV- **cultivate**
 ‘The millet field is **being cultivated**.’ (GE21-SE:16.2)

2.2.3 Transitive verbs

Whilst the majority of verbs in Buwal are ambitransitive there are a small number of verbs which can only occur in transitive clauses i.e. they must take a direct object. In these cases the semantic role of the object is generally non-patient like and the verbs are unable to function as patientive ambitransitives (16 a & b). Examples of such verbs include *bḡāk* ‘slander’, *tsētsēf* ‘consider’, *yēw* ‘trap’, *dzèb* ‘take’, *lām* ‘help’, *rā* ‘insult and *tāl* ‘manage’.

(16) a. *Sa kejeḡ uda a damaw.*
 sá- **kā-** **dzèb** **wdā** á **dámāw**
 1SG.SBJ- IPFV- **take food** PREP1 bush
 ‘I am **taking food** to the bush.’

- b. * *Uda a keje6.*
 wdā á- k̄a- dzè6
 food 3SG.SBJ- IPFV- take
 ‘Food is being taken.’

2.2.4 Transitive with obligatory object

In Buwal there are a number of lexicalised expressions involving a verb plus a noun in the direct object position. These include *pàl tàf* ‘give permission (lit. untie path), *lèm tàf* ‘be able (lit. get path)’ and *sār lā* ‘watch place’. The direct object nominal is not a ‘true’ object in that it cannot be omitted or replaced with a direct object marker (see Section 2.3.1.2), nor can it occur with noun modifiers.

Many such expressions involve body parts (17a & b). Similar expressions have been found in other Central Chadic languages such as Moloko (Friesen and Mamalis 2006: 40), Ouldeme and Vame (Kinnaird 2006: 57-58) and Merey (Gravina 2007a: 14).

- (17) a. *Hejaye vedaye ay ketehzetene*
 xèdzè -jé vèdjé j- k̄a- tēh -zā -ētēnē
 person -PL IND.DET.PL 3SG.SBJ- IPFV- listen -TRANS -3PL.IOBJ
zlam ŋ bay ege .
 ʒàm ŋ bāj =égē
 ear in chief =PL
 ‘Certain people **listen (the ear)** to chiefs.’ (DE8-SN:5.1)

- b. *A kada unaf* .
 á- k̄a dā wnāf
 3SG.SBJ- IPFV- bring heart
 ‘He is unhappy/annoyed.’ (lit. ‘He is **bringing the heart.**’) (LL33-SE:3)

The noun *mā* ‘mouth’ is particularly productive in the formation of new verbs of this type, especially as it has a wide range of meanings including ‘word’, ‘problem’, ‘situation’ and ‘matter’. Some of the new verbs have a fairly transparent meaning, having something to do with speech or a situation. Others are far more idiomatic. Table 5 below contains a list of some of these verbs. Certain verbs are never found alone without *mā* (shaded rows).

Table 5: Buwal *mā* ‘mouth’ verbs

Without <i>mā</i>		With <i>mā</i>	
Verb	Gloss	Verb	Gloss
<i>ḅām</i>	‘munch’	<i>ḅām mā/pákàm*</i>	‘make noise/chatter’
<i>lèm</i>	‘get’	<i>lèm mā</i>	‘meet’
<i>mbāl</i>	‘hold’	<i>mbāl mā</i>	‘hurt’
<i>nāx</i>	‘throw/drop’	<i>nāx mā</i>	‘leave’
		<i>ḡgèl mē</i>	‘meet’
<i>ntsā</i>	‘bite’	<i>ntsā mā</i>	‘bite finger’
<i>ntār</i>	‘pay’	<i>ntār mā</i>	‘support financially’
		<i>pèprèk mā</i>	‘race/compete’
<i>sā</i>	‘drink’	<i>sā mā</i>	‘click tongue’
<i>tsā</i>	‘put’	<i>tsā mā</i>	‘accompany’

**pákàm* is another word for ‘mouth’.

2.3 Verbal morphology

The verbal word in Buwal is a complex, polysynthetic unit and may contain a number of prefixes and suffixes the order of which is shown in Table 6 below. Note that only the verb stem is obligatory.

Table 6: Structure of Buwal verbal word

(SBJ)	(ASP)	(TNS)/ (JUS)	Verb stem	(VNT)	(TRANS)	(BEN)	(1INCL.COL)	(IOBJ)	(DOBJ)

The categories which are marked on the verb include: subject agreement (SBJ), aspect (ASP), tense (TNS), jussive (JUS), ventive direction (VNT), transitivity (TRANS), auto-benefactive (BEN), first person inclusive collective (1INCL.COL), indirect object agreement (IOBJ) and direct object (DOBJ). Each of these will be discussed in the sections which follow.

It is difficult to say for certain whether in Buwal the categories listed above are all phonologically bound to the verb. In nearby languages such as Daba (Leinhard and Weisemann 1986: 43-44) and Mina (Frajzyngier and Johnston 2005: 97 & 106) some participant reference markers are affixes while others are separate words. In Buwal, however, there are a number of indications that person/number markers, as well as other verbal extensions are integrated with the verb to some extent and will therefore be treated here as affixes. These include; palatalisation spread (see Section 1.3), tone variation on subject prefixes according to verbal aspect (see Section 2.3.1) and differentiation of person/number markers from independent pronouns (see Section 2.3.1). Note that in Buwal orthography subject prefixes are written separately whilst all other affixes are attached.

2.3.1 Person/number affixes

Buwal codes the subject, direct object and indirect object on the verb. These affixes are summarised in Table 7 below. Each type of marking will be described in more detail in the sections which follow; subject marking in Section 2.3.1.1, direct object marking in Section 2.3.1.2 and indirect object marking in Section 2.3.1.3. Note that Buwal distinguishes eight different person-number combinations, first person plural being divided into inclusive, exclusive and dual. This has also been found to be the case in a number of other Central Chadic languages in the region such as Mofu-Gudur (Barreteau 1988: 380), Meray (Gravina 2007a: 8) and Mina (Frajzyngier and Johnston 2005: 81).

Table 7: Buwal person/number markers

Person/Number	Subject	Direct Object	Indirect Object	Independent pronouns
1SG	<i>sa-</i>	<i>-ēkēj</i>	<i>-ēkēj</i>	<i>sā</i>
2SG	<i>x^wa-</i>	<i>-āx^wāw</i>	<i>-āx^wāw</i>	<i>x^wā</i>
3SG	<i>a-/Ø-</i>	<i>-āw</i>	<i>-ēnē</i>	<i>mbē</i>
1INCL	<i>xèdze-</i>	<i>-āxèdzè</i>	<i>-āxèdzè</i>	<i>xèdzè</i>
1EXCL	<i>nène/na-</i>	<i>-ēnèj</i>	<i>-ēnèj</i>	<i>nènè</i>
1DUAL	<i>màma/ma-</i>	<i>-āmàw</i>	<i>-āmàw</i>	<i>màmàw</i>
2SG	<i>x^wne-</i>	<i>-āx^wnè</i>	<i>-āx^wnè</i>	<i>x^wnè</i>
3PL	<i>j-</i>	<i>-ātā</i>	<i>-ētēnē</i>	<i>tātā</i>

Many of the forms in Table 7 appear to be related and the majority of person/number combinations for the direct and indirect object markers are identical. This is also the case in Mofu-Gudur (Pohlig 1992: 1), Mina (Frajzyngier and Johnston 2005: 97 & 106) and Mafa (Barreteau and Le Bleis 1990: 47). Many forms are similar to independent pronouns shown in the final column. Payne (1997: 251) notes that participant reference marking almost always arises from a diachronic process of extending free pronouns. For this reason cross-linguistically such markers are often similar in form to the free pronouns. One exception in the case of Buwal to this is the first person singular object markers which are completely different from the independent pronoun. However cognate first person singular object markers have been found in such related languages as Daba (Lienhard and Weisemann 1986: 44), Mina (Frajzyngier and Johnston 2005: 97 & 106) and Gavar (author's fieldnotes). Furthermore in Buwal, the third person singular and plural (shaded rows) have different forms for all three markers. The third person singular forms show no relationship with the independent pronoun. However, the third person plural subject marker *j-* is also used for the subject in verbless clauses. The same form occurs as a third person plural subject marker in Mina (Frajzyngier and Johnston 2005: 81). The Buwal third person plural direct and indirect object markers *-ātā* and *-ētēnē* are likely to have developed diachronically from a phonologically reduced form of the independent pronoun *tātā* 'them'. In natural speech the disyllabic first person exclusive and dual subject forms are frequently reduced to monosyllabic forms. The first person exclusive then loses its palatalisation before non-palatalised verbs. Similar processes may have been involved in the development of the current third person plural object forms.

2.3.1.1 Subject prefixes

Buwal, as is generally the case for Central Chadic languages, has subject agreement prefixes on the verb which precede the verb stem. These are agreement markers rather than pronouns because they are present even when the subject is overtly expressed (18a). These types of markers can also function pronominally as they may constitute the only reference to the particular argument in the clause when the subject is recoverable from the context as in example (18b) below. Other Central Chadic languages which mark subject agreement using prefixes (sometimes combined with suffixes) include Muyang (Smith 2002: 5), Merey (Gravina 2007a: 8), Moloko (Friesen and Mamalis 2004: 20), Vame (Kinnaird 2006: 10) and Gidar (Frajzyngier 2008: 127).

- (18) a. *ŋhwəye tata ege əy wan a bəza* .
 nx^wā -jé tātá =égē j- wān á bzā
 goat -PL 3PL.POSS =PL 3PL.SBJ- sleep PREP1 outside
 ‘Their goats slept outside.’ (NH8-SN:2.2)
- b. *A nda a wata mzla* .
 ā- ndā á wātā mǝǝ
 3SG.SBJ- go PREP1 compound blacksmith
 ‘He goes to the blacksmith's house.’ (DE2-SN:8.4)
 (Nominal subject mentioned three sentences earlier.)

Subject agreement is always marked on the verb except for third person singular when the verb is in the perfective (19a) (see Section 2.3.2.2) or the jussive (19b) (see Section 2.3.7.3) form. In Mina, Frajzyngier and Johnston (2005: 83) also found that the third person singular pronoun is only used in some aspects and moods.

- (19) a. *Káya mesleje anta ege* .
 ká- jā mēlédzè āntā =égē
 PFV- invite neighbour 3SG.POSS =PL
 ‘He had invited his neighbours.’ (TN3-WN:6.3)
- b. *Maḅamḅa yam* .
 mā- ḅām -ḅā jám
 JUS- munch -BEN also
 ‘Let him munch (some) also.’ (DE5-SN:5.2)

2.3.1.2 Direct object suffixes

Buwal direct object suffixes apart from third person plural are pronominal. They are not agreement markers as they do not co-occur with an overt direct object (20 a & b).

(20) a. *A ba ujek a damaw*
 ā- bā wjēk á dāmāw
 3SG.SBJ- create **hut** PREP1 bush
 ‘He built a house in the bush...’ (TN1-SN:1.2)

b. *Nene da mavaw ncene yam .*
 nènè- dà māvāw ntsènè jám
 1EXCL.SBJ- prepare **beer** 1EXCL.POSS also
 ‘We prepare our beer also.’ (DE7-SN:3.1)

They are distinct from the independent pronouns which can occur as a direct object for the purpose of emphasis (21b).

(21) a. *Sa gazlahwaw .*
 sā- gàḷ -āx^wāw
 1SG.SBJ- beat -2SG.DOBJ
 ‘I beat you.’ (GE29-SE:20.1)

b. *Sa gazl hwa .*
 sā- gàḷ x^wā
 1SG.SBJ- beat 2SG
 ‘I beat **you**.’ (GE29-SE:20.2)

The third person direct object markers exhibit unusual behaviour compared to the other persons. Firstly, whilst first and second person direct object suffixes can never be omitted, the third person singular direct object suffix *-āw* often is (22a) and in fact only occurs before a pause (22b). It is not uncommon for direct object markers in Central Chadic languages to not always be present as has been found for Mina (Frajzyngier and Johnston 2005, 98), Merey (Gravina 2007a: 8) and Moloko (Friesen and Mamalis 2004: 38).

(22) a. *A da teked sefe a t̄argwa wese , ca*
 ā- dā tēkēd séfē á trg^{wā} wēsé tsā
 3SG.SBJ- bring calabash unused from granary DEM.DIST put
a ca ata ha .
 ā- tsā á t̄a xā
 3SG.SBJ- **put** PREP1 on head
 ‘She took that unused calabash in the granary, she put (it) on her head.’
 (NF5-SN:2.2)

b. *Uzlaf ben , mawal yam , a paslaw*
 w̄zāf bèn māwāl jám ā- pāf -āw
 idol bedroom man also 3SG.SBJ- pour.libation -3SG.DOBJ
 ‘The bedroom idol, a man also, he pours out a libation to it.’
 (DE2-SN:5.5)

The third person singular direct object suffix is also deleted when other suffixes are attached to the verb (23 a & b).

(23) a. *sa kélem̄ba dala , sa nda , sa*
 s̄a- k̄a- lèm -b̄a dālā s̄a- ndā s̄a-
 1SG.SBJ- PFV- get -BEN money(ful.) 1SG.SBJ- go 1SG.SBJ-
s̄akam̄ba .
 skām -b̄a
 buy -BEN
 ‘...when I have got money, I will go, I will buy myself (it).’ (C6-SN:282)

b. *Əy nahanza*
 j- ná- xān -zā
 3PL.SBJ- FUT- cry -TRANS
 ‘They will make him cry.’ (GE21-SE:17.12)

The distribution of third person plural object suffix *-ātā* differs from the other direct object suffixes. Whilst it may constitute the only reference to the direct object in a clause (24a), it can also co-occur with an overt direct object (24b). This occurs when the direct object is definite, meaning that it is ‘assumed by the speaker to be uniquely identifiable to the hearer’ (Givón 1978: 296). When the direct object is indefinite the object suffix is omitted (24c).

(24) a. *A darata ama zlazlar tewtew .*
 ā- dār -ātā á mā ʒàʒàr téw-téw
 3SG.SBJ- align -3PL.DOBJ PREP1 edge river all
 ‘He aligned them all along the river bank.’ (NF6-WN:2.2)

b. *Sa gamata ṅhwəye Kwada ege ɲ*
 sā- gām -ātā nx^wā -jé k^wádā =égē ɲ
 1SG.SBJ- drive.away -3PL.DOBJ goat -PL Koda =PL PREP2
la naka .
 lā nākā
 field 1SG.POSS
 ‘I drive away **the** goats of Koda from in my field.’ (GE45-SE:5)

c. *Sa gam ṅhwəye hejəye ɲ la naka .*
 sā- gām nx^wā -jé xèdzè -jé ɲ lā nākā
 1SG.SBJ- drive.away goat -PL person -PL PREP2 field 1SG.POSS
 ‘I drive away people's goats from in my field.’ (GE45-SE:6)

2.3.1.3 Indirect object suffixes

Like subject markers, Buwal indirect object markers are agreement markers in that they can co-occur with an overt indirect object (25a). However they can also function pronominally constituting the only reference to the indirect object in the clause (25b).

(25) a. *Əy veletene kan a musa ege .*
 j- vāl -ētēnē kàn á mwsá =égē
 3PL.SBJ- give -3PL.IOBJ thing PREP1 twin =PL
 ‘They give things to twins.’ (DE2-SN:6.3)

b. *Əy fetetene ṅhwəye ege .*
 j- fāt -ētēnē nx^wā -jé =égē
 3PL.SBJ- slaughter -3PL.IOBJ goat -PL =PL
 ‘They slaughter goats for them.’ (DE2-SN:6.5)

In the vast majority of cases in the Buwal corpus the indirect object is marked on the verb even if it is also made explicit within the clause. This was also found to be the case in other Central Chadic languages such as Daba (Lienhard and Wiesemann 1986: 43), Mina (Frajzyngier and Johnston 2005: 111), Mbuko (Gravina 2001: 9), Merey (Gravina 2007: 8), Podoko (Jarvis 1982: 5) and Vame (Kinnaird 2006: 13). However

in Buwal, although it is preferred that the verb carries indirect object marking, it is possible for this marking to be absent (26b). For this to be possible the direct object needs to be expressed. If the direct object is omitted, the indirect object must be marked on the verb (26 c & d). It is not clear at this point when indirect object marking may be omitted. It does not appear to have any correlation with the pragmatic status of the indirect object such as definiteness or referentiality. Language informants stated that examples (26a) and (26b) have the same meaning.

- (26) a. *Sa mbelene urey η zlaŋgan mana* .
 sā- mbāl -ēnē wrèj íj ʒāŋgān mānā
 1SG.SBJ- pluck -3SG.IOBJ vegetables PREP2 sibling mother.1POSS
 ‘I pluck vegetables for my aunt.’ (GE46-SE:5.1)
- b. *Sa mbal urey η zlaŋgan mana* .
 sā- mbāl wrèj íj ʒāŋgān mānā
 1SG.SBJ- pluck vegetables PREP2 sibling mother.1POSS
 ‘I pluck vegetables for my aunt.’ (GE46-SE:5.2)
- c. *Sa mbelene η zlaŋgan mana* .
 sā- mbāl -ēnē íj ʒāŋgān mānā
 1SG.SBJ- pluck -3SG.IOBJ PREP2 sibling mother.1POSS
 ‘I pluck (it) for my aunt.’ (GE46-SE:5.3)
- d. * *Sa mbal η zlaŋgan mana.*
 sā- mbāl íj ʒāŋgān mānā
 1SG.SBJ- pluck PREP2 sibling mother.1POSS
 ‘I pluck (it) for my aunt.’

There is disagreement amongst Buwal speakers as to whether indirect and direct object marking can co-occur. The only combinations which appear to be possible involve the third person plural direct object marker. One example of this was found in natural spoken data (27). Lienhard and Wiesemann (1986: 45) also found that for Daba indirect and direct object pronouns rarely co-occur but are possible.

- (27) *Ayaw , kule parpar parpar aka* .
 ājāw k^wlè párpār párpār ákā
 yes idol different different EXIST
Sa ŋgadāhwata : *kule uzlaf daba*
 sā- ŋgād -āx^wāw -ātā k^wlè wʒāf dābá
 1SG.SBJ- recount -2SG.IOBJ -3PL.DOBJ idol idol women's.hut
 ‘Yes, there are different types of idols. I will recount them for you: women’s hut idol....’ (DE2-SN:2.1-2)

2.3.1 Tense/aspect prefixes

As in many Chadic languages, aspect plays a more dominant role in Buwal than tense. The major division is between imperfective and perfective aspects. These categories have been defined in different ways by linguists over the years. However, in the case of Buwal, Dahl's (1985: 74-75) notion of perfectivity relating to the boundedness of an event appears to apply well. Imperfective actions are those which are ongoing and so are unbounded. Perfective actions are finished and so are bounded. Unmarked verb forms are unspecified for tense and aspect. Tense in Buwal is generally determined from the context; however, future tense is coded. These primary tense/aspect distinctions are all marked with prefixes on the verbs. Secondary aspects as well as spatial distinctions combine with the primary aspects and tense. These are coded using either verbal suffixes (see Section 2.3.3), various verbal particles (see Section 3.5) or complex verb constructions (see Section 4).

Table 8 summarises the forms of the tense/aspect verbal prefixes found in Buwal. The table also indicates the tonal changes which occur on the subject agreement markers that accompany them and notes whether or not subject is marked on the verb.

Table 8: Buwal tense/aspect prefixes

Aspect/Tense	Affix	Subject marking	Tone on subject markers	
			Monosyllabic	Disyllabic
Imperfective	<i>kā-</i>	Yes	High	Low-High
Perfective	<i>ká-</i>	Not 3SG	Mid	Low-Low
Future	<i>ná-/á-</i>	Yes	Mid	Low-High
Unspecified	unmarked	Yes	Mid	Low-High

Different aspects trigger some variation in tone on the subject agreement markers whilst the tone on the verb root remains invariable. For example, for monosyllabic subject agreement markers (apart from third person plural which is invariable) the tone is mid for unspecified and perfective aspects, but high for imperfective (28).

(28)

Unspecified:	<i>x^wāgàl</i>	[h ^w ōgèl]	‘You grow.’
Perfective:	<i>x^wākágàl</i>	[h ^w ōkégèl]	‘You grew.’
Imperfective:	<i>x^wákāgàl</i>	[h ^w ókēgèl]	‘You are growing.’

For disyllabic subject agreement markers, it is the tone on the second syllable which varies, being high for unspecified and imperfective aspects but low for perfective (29).

(29)

Unspecified:	<i>nèné gàl</i>	[nènéné gèl]	‘We(excl.) grow.’
Perfective:	<i>nènè kágàl</i>	[nènèné kégèl]	‘We(excl.) grew.’
Imperfective:	<i>nèné kāgàl</i>	[nènéné kēgèl]	‘We(excl.) are growing.’

2.3.2.1 Imperfective aspect

The Buwal imperfective marks verbs which express unbounded or ongoing events. Comrie (1976: 25) in his ‘classification of aspectual oppositions’ divides imperfective into habitual and continuous, and then continuous into progressive and non-progressive. The imperfective in Buwal covers all of these functions as will be illustrated by examples (30-32) below. This was also found to be the case for the nearby languages of Kapsiki (Smith 1969: 123) and Mofu-Gudur (Hollingsworth 1991: 244-245). It is possible that the Buwal imperfective prefix *kā-* is diachronically related to the existential marker *ákā* as they both express situations which are ongoing.

(i) Habitual

- (30) *Ata ɲtəra Welmbegem heje kəzam gagəmay ey*
á tā ntrā wélmbègém xèjé- k̄ā- zàm gágmāj éj
 PREP1 on month Welmbegem 1INCL.SBJ- IPFV- eat cotton and
heje kara ɲgəzleŋ .
xèjé- k̄ā- rà ɲgɔ̀zèŋ
 1INCL.SBJ- IPFV- dig peanut
 ‘In January we harvest cotton and digging up peanuts.’ (LL29-SE:2)

(ii) Progressive

- (31) *Sa k̄asə̀rək ma buwal .*
sá- k̄ā- sàsràk mā bwāl
 1SG.SBJ- IPFV- learn language Buwal
 ‘I am learning the buwal language.’ (LL3-SE:3)

(iii) Continuous non-progressive (applies to ‘stative’ verbs)

- (32) *əy k̄asan ɲ ja gajak .*
ǰ- k̄ā- sàŋ ɲ dzā gàdzàk
 3PL.SBJ- IPFV- know INF hit gourd
 ‘...they know how to play the gourd.’ (HT8-SN:13.4)

The Buwal imperfective can be used with past (33a), present (33b) and future time reference (33c).

- (33) a. *Mana a kahan . A ketetengel ata*
 mānā á- **kā-** xān á- **kā-** tètèngèl á tā
 mother.1POSS 3SG.SBJ- **IPFV-** cry 3SG.SBJ- **IPFV-** roll PREP1 on
hayak .
 xājāk
 ground
 ‘My mother was crying. She was rolling around on the ground.’
 (NH3-SN:3.7-8)
- b. *Hejaye na əy kadaw kan ege .*
 xèdzè -jé nā j- **kā-** dāw kàn =égē
 person -PL 1SG.POSS 3PL.SBJ- **IPFV-** want thing =PL
 ‘My people are wanting things.’
 (DE8-SN:2.13)
- c. *Dele a kanah ma a mapat.*
 délē á- **kā-** nāx má á māpát
 Deli 3SG.SBJ- **IPFV-** throw mouth PREP1 morning
 ‘Deli is leaving in the morning.’
 (PROGQ:66)

2.3.2.2 Perfective aspect

In Buwal, verbs marked with the perfective prefix express events which are bounded or finished. Dahl (1985: 79) states that there is a strong tendency for perfective categories to be restricted to past time reference. This is the most frequent use of the perfective in Buwal and can be used with any depth of time (34 a to c).

- (34) a. *a nuna anta wala wese ketegare kándav*
 á nwná āntā wālā wēsé kètègré **ká-** ndāv
 at times.past DEF.DET woman DEM.DIST perhaps **PFV-** fall
a tawse , ketegare kélem kan ata la wese .
 á twsé kètègré **ká-** lèm kàn á tā lā wēsé
 PREP1 there perhaps **PFV-** get thing PREP1 on place DEM.DIST
 ‘...long ago that woman perhaps fell there, perhaps she got something from that place.’
 (DE11-SN:1.2)

b. *a njuna cemey , na kála kwanse a*
 á ndzwná tséméj nà- **ká-** lā k^wànsé á
 at yesterday TOP.CON 1EXCL.SBJ- PFV- do concert(fr.) PREP1
Hwadaŋgaw .
 x^wádáŋgāw
 Hodango
 ‘..yesterday, we did a concert at Hodango.’ (NH2-SN:1.1)

c. *Sa káwan kadak kadak* .
 sā- **ká-** wān kádàk kádàk
 1SG.SBJ- PFV- sleep good good
 ‘I slept well.’ (last night) (LL1-SE:17)

Bybee et al (1994: 95) give a number of differences between perfective aspect and simple past tense two of which help provide evidence that the Buwal perfective prefix is not simply a past tense marker. Firstly they state that perfective contrasts with a non-zero imperfective while a past marker may co-occur with an imperfective marker or on its own marking both perfective and imperfective past. In the case of Buwal the perfective marking cannot co-occur with the imperfective. A second difference is that the perfective can be used for future events, while past cannot. This is also the case in Buwal where it can be used to refer to future events in certain subordinate clauses such as temporal sequence (35a) and conditional (35b), when one event precedes another.

(35) a. *Mar Sa zenha, hune*
 mār sā- zèn -xā x^wnè-
 before 1SG.SBJ- return -VNT.DIST 2PL.SBJ-
káŋtakwza zlan ŋgha aza.
ká- ntāk^w -zā zlà nḡā āzá
 PFV- finish -TRANS work DEM.PROX COMPL
 ‘Before I return, you will have finished this work.’ (FUTQ:18)

b. *Mada mawal kánda aza , nene nanda a*
 màdā māwàl **ká-** ndā āzá nènè- ná- ndā á
 if husband PFV- come COMPL 1EXCL.SBJ- FUT- go PREP1
egə̀lə̀yz .
 egljz
 church(fr.)
 ‘If my husband has come, we will go to church.’ (LL36-SE:5)

The perfective may also be used for background information describing events which have taken place previous to the main time line (36). In this way it can function like a perfect/anterior signaling that ‘the situation occurs prior to the reference time and is relevant to the situation at the reference time’ (Bybee et al 1994: 54). However for several reasons I have chosen to analyse this prefix as ‘perfective’ rather than ‘perfect’. Firstly it can be used to refer to events which are finished but have no particular present relevance (34b). Secondly, as previously mentioned, it contrasts with the imperfective marker and cannot co-occur with it indicating strong perfective semantics. Finally in narratives, while more frequently the unmarked verb form is used for a sequence of events (see Section 2.3.2.3), it is also possible for a series of verbs marked with the perfective to be used in this way particularly when referring to events which actually happened. It is possible that this marker began as a perfect in the past and has been developing into an perfective marker while keeping some of its perfect functions, a common process cross-linguistically (Dahl 1985:189).

- (36) *Bay mbal a mbelene ḡhwa leḡ manda , a nda .*
 bāy mbāl ā- mbāl -ēnē nx^wā léḡ mándá ā- ndā
 chief catch 3SG.SBJ- catch -3SG.IOBJ goat plus salt(ful.) 3SG.SBJ- go
Fagwalakw wende kamac ara mbe aka yam .
 fāḡ^wālāk^w wéndé ká- māt̥s á rā mbē ákā jám
 leper IND.DET.SG PFV- die PREP1 side 3SG EXIST also
A nda , fətar a fətar aza .
 ā- ndā ft̥ar ā- ft̥ar āzà
 3SG.SBJ- go dig.up 3SG.SBJ- dig IT
 ‘The chief caught a goat for him plus salt, he went. There was another leper
 that **had died** in his neighbourhood also. He went, he dug it up.’
 (TN1-SN:2.12-3.2)

The Buwal perfective marker may be cognate with the infinitive marker *kə* found in Mina (Frajzyngier and Johnston 2005: 243) or *ka* in Daba (Lienhard and Weisemann 1986: 47). Frajzyngier and Johnston (2005: 194) state that in Mina *kə* can be used to code what they call the dependent past tense.

2.3.2.3 Unspecified aspect

The unmarked form of the verb is unspecified for tense and aspect, which must be determined from the context. Consequently it can be used with past (37a), present (37b) and even future time reference, for imminent events (37c). The unmarked verb form can be used for both bounded (37a) and unbounded events (37 b & c).

- (37) a. *Əy ca bay mewè ata wan ɲsələd' ɲtəra*
 j- tsā bāy méwè á tā wān ɲsléd' ntrā
 3PL.SBJ- **put** chief new PREP1 on day seven month
Mahwaraw .
 māx^wàràw
 Mohoro
 'They **put** a new chief in place on the seventh of September.' (NH7-SN:1.1)
- b. *Na han benjer kéreheney aza a*
 ná- xān béndzēr ká- rēh -ēnèj āzá á
 1EXCL.SBJ- **mourn** squirrel PFV- save -1EXCL.IOBJ COMPL PREP1
dəbe .
 dbé
 termite.mound
 'We **are mourning** that the squirrel saved himself on us in the termite mound.' (NF2-SN:2.5)
- c. *Sa ghwalzahwaw səkan ma əy kala*
 sā- y^wāl -zā -āx^wāw skàn má= j- kā- lā
 1SG.SBJ- **explain** -TRANS -2SG.IOBJ thing REL= 3PL.SBJ- IPFV- do
a kule ege .
 á k^wlè =égē
 PREP1 idol =PL
 'I **will explain** to you things that they do with idols.' (DE2-SN:4)

The unmarked form of the verb is frequently used for sequential events in narratives (38). In these cases the aspect is already known from the context.

- (38) *Aya ɲhel wese , a ndaha , a dam a ujek*
 ājā nxèl wēsé ā- ndā -xā ā- dām á wjĕk
 so thief DEM.DIST 3SG.SBJ- **come** -VNT 3SG.SBJ- **enter** PREP1 hut
ɲgama anta wese , a ɲgwaf ma ujek .
 ɲgámà āntā wēsé ā- ɲg^wāf mā wjĕk
 friend 3SG.POSS DEM.DIST 3SG.SBJ- **break.down** mouth hut
 'Then that thief, he **came**, he **entered** that friend of his' hut, he **broke down** the door.' (NH9-SN:3.4)

The unmarked verb form also has a generic use (39a). According to Dahl (1985: 99) generic sentences ‘describe the typical or characteristic properties of a species, a kind or individual.’

- (39) a. *Pataw ege əy la pakam vekey ?*
 pátáw = égē j- lā pákàm vékéj
 Cat =PL 3PL.SBJ- **do** noise which
 ‘Which noise **do** cats make?’
- Əy han.*
 j- xān
 3PL.SBJ- **cry**
 ‘They **cry**.’ (FUTQ:98)

- b. *hejəye ma a nuna anta ege ca , əy lawar*
 xèdzè -jé má= á nwná āntā = égē tsá j- tawār
 person -PL REL= PREP1 times.past DEF.DET =PL TOP 3PL.SBJ- **travel**
ca a berjeŋ .
 tsá á bèrdzēŋ
 TOP PREP1 donkey
 ‘...people of the old days, they **would travel** with donkeys.’ (HT6-SN:5.13)

2.3.2.4 Future tense

The Buwal future marker has two variants *ná-* and *á-*, the first of which occurs more frequently in the corpus. There does not appear to be any difference in meaning between the two markers. Gavar has *á-* but not *ná-* and therefore is a likely source of this form. It is possible that the future prefix *ná-* developed diachronically from the verb *ndā* ‘go’. Another possible source of the Buwal marker is Mofu-Gudur which has the near future prefix *da-* (Barreteau 1988: 381).

Dahl’s prototypical future (1985: 108) involves the semantic features of intention, prediction and future time reference. The future prefix in Buwal aligns well with this in that it marks events with future reference involving both intention (40 a & b) and prediction (41 a & b). The label ‘future’ is used in this case rather than a modal label such as ‘irrealis’ because in general the speaker believes that the event expressed by the verb will take place.

- (40) a. *Sa nanda a Maruwa ata wan mahkad’ .*
 sā- ná- ndā á marwa á tā wān māxkád’
 1SG.SBJ- FUT- **go** PREP1 Maroua PREP1 on day three
 ‘I **will go** to Maroua in three days.’ (LL18-SE:43)

b. *sa abanahwaw la ma a dɔmas aza* .
 sã- á- bãn -ãx^wãw lã má= á dmàs āzá
 1SG.SBJ- FUT- wash -2SG.IOBJ place REL= PREP1 belly COMPL
 ‘...I **will wash** for you first the place in your belly.’ (NF3-SN:4.10)

(41) a. *A dɔwze anta , vɔrezl a netev aza mgba*
 á dwzé āntā vrèḷ̥ ã- ná- tɛv āzà ŋmgbà
 PREP1 after DEF.DET millet.husk 3SG.SBJ- FUT- ascend IT up.there
ata ha .
 á tã xã
 PREP1 on head
 ‘Afterwards, the millet husks **will go up** towards the top.’ (PP4-SN:1.3)

b. *hal tata cemey , a ala ŋkwaɓ ŋ ha zeney* .
 xāl tātá tséméj ã- á- lã nk^wãɓ ŋ xã zēnéj
 girl 3PL.POSS TOP.CON 3SG.SBJ- FUT- do brain in head again
 ‘...as for their daughter, she **will become** nice as well.’ (Based on the fact that the parents are nice.) (DE19-SN:8.2)

Verbs marked with future can also be used in conditional clauses (42).

(42) *Kaw vayay maghwalza mada kánja ŋ bay*
 káw vājáj mã- y^wāl -zã màdã ká- ndzã ŋ bãy
 even(ful.) who JUS- explain -TRANS if PFV- be PREP2 chief
ca , a neletene a hejaye ca vemey ?
 tsá ã- ná- lã -ētēnē á xèdzè -jé tsá véméj
 TOP 3SG.SBJ- FUT- do -3PL.IOBJ PREP1 person -PL TOP what
 ‘Let each one explain, if they become chief, what he **will do** for people.’
 (NH7-SN:3.6)

The Buwal future can also be used to refer to events in the past occurring after the time line of the narrative but before the time of speech. These events may or may not have actually happened. In example (43a) Galdok did eventually become chief. However in (43b) they did not swear (take an oath) on Tuesday because something happened before hand which made it unnecessary.

(43) a. *Ma Gazlakw a nanja η bay wese ca*
 má= gáǰàk^w á- ná- ndzā íj bāy wēsé tsá
 REL= Galdok 3SG.SBJ- FUT- be PREP2 chief DEM.DIST TOP
Gala Mazay ca kamac akwaw , mbəy a nje .
 gálā māzāj tsá ká- mātš ák^wāw mbj á ndzé
 Gala Mazay TOP PFV- die NEG.EXIST 3SG.STAT PREP1 eye
 ‘When Galdok **was going to become** that chief, Gala Mazay hadn’t died, he
 was alive.’ (NH13-SN:5.1)

b. *A təwse ca kedē əy nemedza a pes*
 á twsé tsá kēdě j- ná- mēđ -zā á pès
 PREP1 there TOP perhaps 3PL.SBJ- FUT- swear -TRANS PREP1 day
luma Mafaw .
 lwmà mǎfaw
 market(ful.) Mofu
 ‘At that time, they were perhaps going to swear on Tuesday.’ (NH8-SN:7.17)

The future marker can be combined with the imperfective aspect marker *kā-* to indicate unbounded future events (44 a & b). The future and perfective markers cannot co-occur.

(44) a. *mama kanajav akwaw*
 māmá- kā- ná- dzàv ák^wāw
 1DUAL.SBJ- IPFV- FUT- assemble NEG.EXIST
 ‘...we two **will not be coming together** (anytime)...’ (HT1-SN:8.4)

b. *Ata ma əy kaampak ca , ja a ja*
 á tā má= j- kā- á- mpāk tsá dzā ā- dzā
 PREP1 on REL= 3PL.SBJ- IPFV- FUT- shut TOP hit 3SG.SBJ- hit
mbahw
 mbáx^w
 pardon
 ‘As they **would be imprisoning** him, he pleaded forgiveness...’
 (NH8-SN:12.3)

2.3.3 Ventive suffixes

Directional markers are frequently found in Central Chadic languages. The most common markers code movement towards or away from the speaker or some other deictic centre. These have been labelled in a variety of ways but here these directions will be called ‘ventive’ and ‘itive’ respectively. A number of Central Chadic languages including Daba (Lienhard and Wiesemann 1986: 46), Mbuko (Gravina 2001: 7), Muyang (Smith 2002: 17), Cuvok (Ndokobai 2006: 82) and Moloko (Friesen and Mamalis 2004: 36) code both these directions. Others, such as Merey (Gravina 2007: 14), Gidar (Frajzyngier 2008: 196) and Mofu-Gudur (Barreteau 1988: 382), only have ventive markers.

Buwal has two directional suffixes $-\bar{a}$ and $-h\bar{a}$ which follow the verb root, both of which express ventive direction. Itive direction is expressed with a separate verbal particle which will be described in Section 3.2. The fact that the ventive suffixes can co-occur indicates that they are not in a paradigmatic relationship and that their meanings are not opposite. Other languages in the same subgroup as Buwal, such as Daba (Lienhard and Wiesemann 1986: 45) and Mina (Frajzyngier and Johnston 2005: 171), have a directional suffix which is clearly related to the Buwal ventive suffixes. In these languages, however, there is just one suffix with allomorphs which are phonologically determined. Whilst the two ventive suffixes in Buwal may have been allomorphs at some stage in the past, they have now developed slightly different meanings $-\bar{a}$ being proximal and $-h\bar{a}$ being distal. Furthermore, their occurrence is not phonologically conditioned. For these reasons the Buwal ventive suffixes are analysed as two separate morphemes.

The Buwal ventive suffixes code movement towards a deictic reference point. For verbs of movement, the movement is assumed to be away from or neutral with respect to the deictic reference point (45a) unless the verb is marked with a ventive suffix (45b).

- (45) a. *Dam a ujek* .
 dàm á wjĕk
 enter PREP1 hut
 ‘Go into the house.’ (LL10-SE:12)
 (Speaker is outside.)

- b. *Dam^{ha} a bəza* .
 dàm -xā á bzā
 come.out -VNT.DIST PREP1 outside
 ‘Come outside.’ (LL10-SE:13)
 (Speaker is outside.)

The deictic reference point may be the location of the speaker (46a), the subject (46b) or some other salient location within a discourse (46c).

(46) a. *na ndaha , na nja a Buwal .*
 ná- ndā -xā ná- ndzā á bwāl
 1EXCL.SBJ- go -VNT 1EXCL.SBJ- stay PREP1 Buwal
 ‘...we came, we stayed in Buwal.’ (NH11-SN:1.6)
 (Speaker is located in the Buwal village.)

b. *a njewa ra heje fagwalakw .*
 ā- ndzèw -ā rā xèdzè fāg^wālāk^w
 3SG.SBJ- pull -VNT.PROX hand person leper
 ‘...he pulled out (towards him) the hand of the leper.’ (TN1-SN:5.8)

c. *Mana a ja ula . A zenha , a*
 mānā ā- dzā wlá ā- zèn -xā ā-
 mother.1POSS 3SG.SBJ- hit voice 3SG.SBJ- return -VNT.DIST 3SG.SBJ-
baw ata mana zeney .
 bāw á tā mānā zēnéj
 turn PREP1 on mother.1POSS again
 ‘My mother cried out. He came back, turned on my mother as well.’
 (NH3-SN:2.11-12)

The Buwal ventive markers are not restricted to verbs of movement, but can be used with any activity verb with the meaning that the event takes place in some other location followed by some kind of movement towards the reference location. In (47a) the subject is still at the location ‘the market’ and has not yet returned. Examples (47 b & c) where a ventive suffix is attached to the verb imply that the subject has returned to the reference point. These examples also illustrate the difference between the proximal and the ventive suffixes. The speaker is in the Buwal village. In (47b) the market is nearby in the Buwal village whereas in (47c) the market is further away in Zamay around 10km from the Buwal village. Language informants say that it is not possible to use the proximal ventive suffix in this case.

(47) a. *A səkam ŋkələf a luma .*
 ā- skām nklèf á lwmà
 3SG.SBJ- buy fish PREP1 market(ful.)
 ‘He buys fish at the market.’ (GE51-SE:3.20)
 (He is still there.)

b. *A səkama ŋkələf a luma Buwal ete .*
 ā- skām -ā nklèf á lwmà bwāl á tē
 3SG.SBJ- buy -VNT.PROX fish PREP1 market(ful.) Buwal PREP1 here
 ‘He bought fish at the Buwal market here.’ (GE51-SE:3.11)
 (He has returned.)

- c. A *səkamha* *ŋkələf a luma Zamay .*
 ā- skām -xā nklēf á lwma zāmāj
 3SG.SBJ- buy -VNT.DIST fish PREP1 market(ful.) Zamay
 ‘He bought fish at the Zamay market.’ (GE51-SE:3.10)
 (He has returned.)

The concept of distance can be temporal as well as spatial (48).

- (48) a. A *nagwarzama* *a tambaca a Yawundey .*
 ā- ná- g^wàrzàm -ā á tām̄bācá á jawndeĵ
 3SG.SBJ- FUT- get.up -VNT.PROX at today PREP1 Yaoude
 ‘He will leave today from Yaoude.’ (GE51-SE:14.2)

- b. A *nagwarzama* *vagumtad’ .*
 ā- ná- g^wàrzàm -xā vāg^wmtád
 3SG.SBJ- FUT- get.up -VNT.DIST day.after.tomorrow
 ‘He will leave tomorrow.’ (GE51-SE:14.3)

In the past and present, ventive directional markers can give an inceptive aspectual meaning marking the beginning of a situation which then goes on to last some time (49 a & b).

- (49) a. A *nuna anta ma Mazkad’ ege əy njaha*
 á nwná āntā má = mǎzkád’ =égē j- ndzā -xā
 PREP1 times.past DEF.DET REL= Mazkad =PL 3PL.SBJ- be -VNT.DIST
ŋ bay a Buwal .
 ŋj bāy á bwāl
 PREP2 chief PREP1 Buwal
 ‘In olden times, when the Mazkad clan came to be chiefs in Buwal.’
 (NH10-WN:1.1)
- b. *Mesfe a laha , heje ja Welmbegem .*
 mésfé ā- lā -xā xèjé- dzā wélmbègém
 harvest 3SG.SBJ- do -VNT.DIST 1INCL.SBJ- hit Welmbegem
 ‘When the harvest comes, we celebrate Welmbegem.’ (DE7-SN:1.1)

In reference to future time the ventive suffixes can be used with a temporal sense to identify prospective events (50). Time is seen as moving towards the present (Comrie 1976: 106).

- (50) *Sa nanda a Maruwa ata luma ma*
 sā- ná- ndā á marwa á tā lwmà má=
 1SG.SBJ- FUT- go PREP1 Maroua PREP1 on market(ful.) REL=
kandaha
 kā- ndā -xā
 IPFV- go -VNT.DIST
 ‘I will go to Maroua next week.’ (LL18-SE:44)

It is possible for the proximal and distal ventive markers to co-occur. In this case the implication is that the situation lasts some time (51).

- (51) a. *A kasəkamaha ŋkələf a luma*
 á- kā- skām -ā -xā nkləf á lwmà
 3SG.SBJ- IPFV- buy -VNT.PROX -VNT.DIST fish PREP1 market(ful.)
 ‘He is buying fish from the market (and will return).’ (GE51-SE:3.16)
 (He left a few days ago and hasn’t come back yet.)
- b. *əy nda enge ca , əy nda ŋ*
 j- ndā á ŋgē tsá j- ndā ŋ
 3PL.SBJ- go PREP1 over.there TOP 3PL.SBJ- go INF
lawadaha
 lāwād -ā -xā
 play -VNT.PROX -VNT.DIST
 ‘...they go over there, they go to play there awhile (before returning)...’
 (HT8-SN:7.8)

2.3.4 Transitivity suffix

The Buwal transitivity suffix *-zā* has various functions relating to the adjustment of the transitivity of the clause. Before describing these functions it is necessary first of all to consider how transitivity is defined. This will also be helpful in the description of valency adjusting process in Section 2.5. There is firstly a strictly ‘syntactic’ view of transitivity or valence which relates to the number of core (or obligatory) arguments present in a clause (Payne 1997: 170; Dixon and Aikhenvald 2000: 2; LaPolla et al 2011: 476). This view has been found inadequate to explain the diversity of patterns related to transitivity cross-linguistically. Therefore various semantic approaches have been developed. One example is ‘semantic valance’ which Payne (1997: 169) defines as the ‘number of participants that must be ‘on-stage’ in the scene expressed by the verb.’ Not all of these participants may be overtly expressed. Another view was proposed by Hopper and Thomson (1980: 251) who state that transitivity ‘is traditionally understood as a global property of an entire clause, such

that an activity is ‘carried-over’ or transferred from an agent to a patient.’ They identified a number of parameters which correlate with degrees of transitivity, the number of participants being only one of these (Hopper and Thomson 1980: 252). In their view two clauses may have the same number of participants and yet have a different degree of transitivity. LaPolla et al (2011: 474) argue that what Hopper and Thomson are really talking about is the **effectiveness** of the event rather than the transitivity.

The Buwal transitivity suffix *-zā* has number of functions which result in a change in the transitivity of a clause. It firstly functions as a causative, which allows an intransitive verb to take a second core argument (52b & 53b). This leads to an increase in the **syntactic** valency of the clause. The verb now takes a direct object, the former S now becoming O. The resulting construction expresses direct causation where the agent is himself involved in the action. Such causative markers have been found in a number of Central Chadic languages including Vame (Kinnaird 2006: 46), Muyang (Smith 2002: 10), Merey (Gravina 2007: 16), Mafa (Barreteau and Le Bléis 1990: 44-45) and Gidar (Frajzyngier 2008: 169).

(52) a. *Sa nja ata papalam .*
 sā- ndzā á tā pápálám
 1SG.SBJ- sit PREP1 on plank
 ‘I sit on a plank.’ (LL57-SE:35)

b. *Bay a nda , a njaza ŋ karawal ata*
 bāy ā- ndā ā- ndzā -zā íj kārāwāl á tā
 chief 3SG.SBJ- go 3SG.SBJ- sit -TRANS PREP2 chair(ful.) PREP1 on
lanja .
 lā ndzá
 place sit
 ‘The chief went, he **seated** him in a chair on the sitting place.’ (NH7-SN:6.5)

(53) a. *Həza a babahw ata ŋhwa .*
 xzā ā- bābāx^w á tā nx^wā
 dog 3SG.SBJ- bark PREP1 on goat
 ‘The dog **barked** at the goat.’ (GE20-SE:1.3)

b. *Hwa babahwza həza anta ka ŋ vay ?*
 x^wā- bābāx^w -zā xzā āntā ká íj vāj
 2SG.SBJ- bark -TRANS dog DEF.DET ANT PREP2 where
 ‘You **made the dog bark**, what for?’ (GE20-SE:1.1)

Certain agentive ambitransitive verbs when used intransitively can also take the transitive suffix with a causative meaning (54c). These include *bàbàr* ‘roar/make roar’, *bāx* ‘cry out/make cry out’, *dmàs* ‘dance/make dance’, *ḡāp* ‘speak/make speak (e.g. a radio)’ and *sàsràk* ‘learn/teach’.

(54) a. *Mba a kahan* .
 mbà á- k̄ā- xān
 child 3SG.SBJ- IPFV- cry
 ‘The child is **crying**.’ (GE21-SE:17.1)

b. *Hejaye əy kahan mce* .
 xèdzè -jé j- k̄ā- xān mtsè
 person -PL 3PL.SBJ- IPFV- cry corpse
 ‘People are **mourning the deceased**.’ (GE21-SE:17.2)

c. *Uzaye əy kahanza mbaw* .
 wzjé j- k̄ā- xān -zā mbàw
 children 3PL.SBJ- IPFV- cry -TRANS child
 ‘The children are **making the child cry**.’ (GE21-SE:17.7)

However, I have chosen not to label this morpheme as ‘causative’ but rather the more neutral ‘transitivity suffix’ as it can also attach to transitive verbs without a change in the number of arguments in the clause. It is the **semantic** transitivity or effectiveness in the sense of Hopper and Thomson (1980) which is affected in these cases. A similar situation was found by Hollingsworth (1995: 12) for the neighbouring language of Mofu-Gudur and since the form of this suffix is *-da*, it is likely these two forms are related. A similar suffix with the same form was also reported by Ndokobai (2006: 83) for Cuvok. In the case of Buwal, the use of the transitivity suffix may have a variety of semantic effects which are described below. These effects are not entirely predictable although there appears to be a correlation to some extent with verbal semantics. This would be an interesting area for further study.

Causative morphemes which have non-valency-increasing functions are not uncommon cross-linguistically (Kittilä 2009: 68; Aikhenvald 2011: 86). Kittilä (2009) distinguishes between two different semantic effects of such morphemes, ‘agentivisation’ and ‘transitivisation’. Agentivisation involves a change in agency which comprises of volitionality, control, willingness and purposefulness of the action (p 79). One of non-valency-increasing functions of the Buwal transitivity suffix when attached to transitive verbs is to increase the agency of the subject. The agentivising function seems apply to verbs which take non-patientive type objects such as theme, content, stimulus, desire etc. This can lead to changes in meaning when the transitivity suffix is added to certain verbs (55 a & b, 56 a & b).

(55) a. *A kanah ηseŋ a uley .*
 á- **kā-** **nāx** nsēŋ á wlèj
 3SG.SBJ- **IPFV-** **drop** seed PREP1 hole
 ‘He is **dropping** the seed into the hole.’ (LL30-SE:2)

b. *əy nahza gajak wese η kwahwaw .*
 j- **nāx** **-zā** gàdzàk wēsé íj k^wāh^wāw
 3PL.SBJ- **drop** **-TRANS** gourd DEM.DIST PREP2 fire
 ‘...they **threw** that gourd into the fire.’ (NH4-SN:1.1)

(56) a. *Sa je6 mba naka η lupital .*
 sā- **dzè6** mbà nākā íj lwpjtal
 1SG.SBJ- **take** child 1SG.POSS PREP2 hospital(fr.)
 ‘I take my child to the hospital.’ (GE23-SE:3.2)
 (Not physically carrying. Either he is in front of you or you have already taken him there and left him there.)

b. *Sa je6za mba naka η lupital .*
 sā- **dzè6** **-zā** mbà nākā íj lwpjtal
 1SG.SBJ- **take** **-TRANS** child 1SG.POSS PREP2 hospital(fr.)
 ‘I take my child to the hospital.’ (GE23-SE:3.1)
 (Actually carrying the child.)

Other examples of the types of meaning changes that can occur are listed in (57) below.

(57)	<i>dèŋ</i>	‘think/worry’	<i>dèŋzā</i>	‘reflect/decide’
	<i>bād’</i>	‘flatter’	<i>bād’zā</i>	‘deceive’
	<i>dāw</i>	‘want’	<i>dāwzā</i>	‘ask’
	<i>sār</i>	‘look at’	<i>sārzā</i>	‘visit/examine’
	<i>ḡāp</i>	‘speak’	<i>ḡāpzā</i>	‘greet’
	<i>ndāw</i>	‘come upon’	<i>ndāwzā</i>	‘find (while looking)’
	<i>bàx</i>	‘hide’	<i>bàxzā</i>	‘store/put aside’
	<i>dā</i>	‘bring/get’	<i>dāzā</i>	‘bring somewhere’
	<i>gām</i>	‘drive away’	<i>gāmzā</i>	‘push away/over’
	<i>ntsàk^w</i>	‘push’	<i>ntsàk^wzā</i>	‘push away/get rid of’
	<i>tsāk</i>	‘contribute’	<i>tsākzā</i>	‘help’
	<i>làn</i>	‘imitate/try’	<i>lànzā</i>	‘try on/make an effort’
	<i>tsā mā</i>	‘accompany’	<i>tsāzā mā</i>	‘guide’

Interacting with the function of agentivisation above is the notion of ‘individuation’ and ‘affectedness’ of the object. This corresponds with Kittilä’s (2009: 83) notion of transitivity. According to Hopper and Thomson (1980: 253), individuation ‘refers to the distinctness of the patient from the A and to its distinctness from its own background.’ Those referents which are proper nouns, human/animate, concrete, singular, count or referential/definite are more highly individuated than those having the correspondingly opposite properties. In the case of Buwal, referentiality appears to be the key property in this respect, triggering the use of the transitivity suffix (58b & 59b).

(58) a. *Sa tam yam* .
 sā- *tàm jàm*
 1SG.SBJ- **pour.out** **water**
 ‘I **pour out** water.’ (GE21-SE:2.1)
 (Any water)

b. *Sa tamza yam* .
 sā- *tàm -zā jàm*
 1SG.SBJ- **pour.out** -TRANS **water**
 ‘I **pour out** the water.’ (GE21-SE:2.2)
 (Particular water)

(59) a. *Sa dam serek η gejere naka* .
 sā- *dàm sérēk íj gèdzérē nākā*
 1SG.SBJ- **enter string** PREP2 shorts 1SG.POSS
 ‘I **enter string** into my shorts.’ (GE21-SE:12.2)
 (Whichever string)

b. *Sa damza serek η gejere naka* .
 sā- *dàm -zā sérēk íj gèdzérē nākā*
 1SG.SBJ- **enter** -TRANS **string** PREP2 shorts 1SG.POSS
 ‘I **enter the string** into my shorts.’ (GE21-SE:12.3)
 (We can see the string.)

The affectedness of the object interacts with the notion of telicity in which an action is viewed from its endpoint (Hopper and Thomson 1980: 252). If the activity is completed, then the object is more completely affected than if the action is still ongoing. This notion may help to explain the examples below in which the form of the verb with the transitivity suffix indicates that the action is finished (60b), whereas without the transitivity suffix the action is not yet complete (60a).

(60) a. *Sa ɓar ujek naka aka .*
 sã- ɓàr wjĕk nākā āká
 1SG.SBJ- **crack** hut 1SG.POSS ACC
 ‘I **crack** my hut.’ (GE21-SE:4.5)
 (Still doing it.)

b. *Sa ɓarza ujek naka aka .*
 sã- ɓàr -zā wjĕk nākā āká
 1SG.SBJ- **crack** -TRANS hut 1SG.POSS ACC
 ‘I **cracked** my hut.’ (GE21-SE:4.4)
 (Already finished.)

All the functions of the transitivity suffix described so far involve an **increase** in either the syntactic or semantic transitivity of the clause. However the Buwal transitivity suffix may also be used to **decrease** semantic transitivity, being used with an ‘attenuative’ sense for many verbs in transitive clauses. This use indicates that an action is only attempted and therefore the object is only partially affected. Suffixes with a similar meaning have also been found in other Central Chadic languages such as Kapsiki (Smith 1969: 115), Cuvok (Ndokobai 2006: 83) and Mafa (Barreteau and Le Bleis 1990: 46). The type of polysemy found in Buwal is unusual although Wolff (1983: 115) also found that one of the causative verbal extensions could convey the idea of the action being done ‘a little’ in Lamang.

In Buwal many of the verbs which take the transitivity suffix with the attenuative meaning involve objects which are patient-like in that they are changed in some way as a result of the action (61b). Such verbs include *lām* ‘build’, *tsāp* ‘render’, *dās* ‘cultivate’, *rāk* ‘ask for’, *zām* ‘eat’, *bān* ‘wash’, *ɓàn* ‘taste’, *mpāk* ‘close’, *dād* ‘pull out’ and *skèn* ‘grind’.

(61) a. *Sa ɓabàɗ la .*
 sã- ɓàbàɗ lā
 1SG.SBJ- **plow** field
 ‘I **plow** the field.’ (GE21-SE:14.1)

b. *Sa ɓabàɗza la .*
 sã- ɓàbàɗ -zā lā
 1SG.SBJ- plow -TRANS field
 ‘I **plow** the field **a bit**.’ (GE21-SE:14.5)

However, the attenuative use is also found with verbs which have objects with non-patient-like semantic roles (62b) for example *tēh* ‘listen’, *dzĕjĕk^w* ‘regret’ and *nkàp* ‘wait for’.

- (62) a. *Sa kefefekw dəraf .*
 sá- kǎ- fēfēk^w dràf
 1SG.SBJ- IPFV- **whistle** song
 ‘I am whistling a song.’ (GE50-SE:9.1)
 (I know the song.)
- b. *A kefefekwza dəraf .*
 á- kǎ- fēfēk^w -zā dràf
 3SG.SBJ- IPFV- **whistle** -TRANS song
 ‘He is **trying to whistle** a song.’ (GE50-SE:9.2)
 (He is learning the song.)

Another construction which makes use of the attenuative meaning of the transitivity suffix involves the co-occurrence of indirect object agreement marking. This gives the idea that the subject is participating with others in a particular activity for their benefit and so is only doing part of the task (63 a & b).

- (63) a. *Sa kehenzene banay a mesleje*
 sá- kǎ- xān -zā -ēnē banaj á mēlédzè
 1SG.SBJ- IPFV- **cry** -TRANS -3SG.IOBJ suffering(ful.) PREP1 neighbour
naka .
 nākā
 1SG.POSS
 ‘I am **mourning sufferings** for my neighbour **in a group**.’ (GE21-SE:17.5)
- b. *Sa cekzene a mana ŋ tew kan .*
 sǎ- tsák -zā -ēnē á mǎnā ǰ tēw kàn
 1SG.SBJ- **help** -TRANS -3SG.IOBJ PREP1 mother.3POSS INF carry thing
 ‘I **help** my mother to carry something.’ (GE21-SE:25.2)
 (Both are carrying it at the same time.)

2.3.5 Autobenefactive suffix

Buwal has an autobenefactive suffix *-bā* which indicates that the action encoded by the verb is beneficial in some way to the subject. It can occur with all persons in subject position and with both direct (64a) and indirect object suffixes (64b). The fact that it can co-occur with an indirect object which refers to a person other than the subject is evidence that this is not the same as an indirect object reflexive marker although it does occur in IO reflexive constructions (see Section 5.2).

(64) a. *Heje kasanbata ka va ?*
 xèjé- k̄a- s̄an -b̄ā -ā-tā ká vāw
 1INCL.SBJ- IPFV- know -BEN -3PL.DOBJ DUB Q
 ‘Do we know them (to our benefit) maybe?’ (C9-SE:178)

b. *Sa zembene ṅhwəye .*
 s̄ā- z̄am -b̄ā -ēnē n̄x^wā -jé
 1SG.SBJ- eat -BEN -3SG.IOBJ goat -PL
 ‘I shepherd goats for him (to my benefit).’ (GE44-SE:3.8)

A similar marker with the same form is found in Gavar (author’s fieldnotes) but is not reported to date for the other languages of the subgroup. Markers with a similar function have also been reported for Hdi (Frajzyngier 2002: 198-204), Kapsiki (Smith 1969: 113) and Lamang (Wolff 1983: 119-120).

2.3.6 First person inclusive collective suffix

The Buwal first person inclusive collective suffix *-ak^wā* co-occurs only with a first person inclusive subject and indicates that an activity is being done together as a group (65a). When this suffix is omitted the activity is understood as being done by each individual separately (65b)

(65) a. *A makudā heje nalamakwa ujek tewtew .*
 á m̄āk^wđā xèjé- ná- lām -āk^wā wjēk téw-téw
 PREP1 next.year 1INCL.SBJ- FUT- build -1INCL.COL hut all
 ‘Next year we will all build a house **together**.’ (GE22-SE:3.3)

b. *A makudā heje nalam ujek tewtew .*
 á m̄āk^wđā xèjé- ná- lām wjēk téw-téw
 PREP1 next.year 1INCL.SBJ- FUT- build hut all
 ‘Next year we will all build a house (**separately**).’ (GE22-SE:3.4)

The first person inclusive collective suffix is likely to have come from Mofu-Gudur which has a first person dual subject suffix with the same form (Barreteau 1988: 380). Cuvok (Ndokobai 2006: 64) also has a similar suffix for first person inclusive subject.

2.3.7 Imperative mood

In Buwal, imperative mood is marked on the verb. How this mood is marked is summarised in Table 9 below. Imperatives in Buwal can be divided into three major types according to the type of marking found and the person referred to. These types do not overlap; therefore they could be regarded as one paradigm. However, since the marking strategies and semantics are different for each type, the three types will be

For the second person plural, the subject agreement marker is obligatory (68 a & b).

- (68) a. *hune kwakwa6 ma a yam a yam* .
x^wne- k^wāk^wā6 mā á jàm á jàm
 2PL.SBJ- rinse.quickly mouth PREP1 water PREP1 water
 ‘...rinse out your mouths with water.’ (NF2-SN:1.8)

- b. *Hune gazl kwaw !*
x^wné- gàł̥ k^wāw
 2PL.SBJ- beat NEG
 ‘Don’t beat (him)!’ (C1-SN:46.3)

2.3.7.2 Hortative

In Buwal the hortative involves the first person dual and the first person plural inclusive. In first person plural inclusive hortative clauses, the verb ‘go’ is treated differently to other verbs. For all verbs except ‘go’, the first person plural inclusive hortative is formed by placing the preposition *ŋ*, which is used to form the infinitive (see Section 4.1), before the verb stem. The first person inclusive collective suffix *-āk^wā* (see Section 2.3.6) is also attached to the verb stem (69 a & b).

- (69) a. *ŋ tewakwa ujek na eze* .
ŋ tēw -āk^wā wjēk nà ézē
 INF carry -1INCL.COL hut now therefore
 ‘Let’s carry the house (ie. the roof) now therefore.’ (DP7-SN:2.6)

- b. *ŋ lamakwa ujek tewtew !*
ŋ lām -āk^wā wjēk tēw-tēw
 INF build -1INCL.COL hut all
 ‘Let’s all build a house.’ (LL10-SE:64)

In Buwal has a special hortative form of the verb ‘go’, *āzā*. The first person inclusive collective suffix is attached to the stem as for other verbs but there is no infinitive marker (70 a & b). The non-hortative stem is *ndā*. Mina (Frajzyngier and Johnston 2005: 242) and Kapsiki (Smith 1969: 129) also have irregular stems for hortative ‘go’.

- (70) a. *Azakwa ŋ jakwa vejed’ a damaw* .
āzā -āk^wā ŋ dzā -āk^wā védzēd’ á dāmāw
 go.HORT -1INCL.COL INF cut -1INCL.COL vegetation PREP1 bush
 ‘Let’s go to cut vegetation in the bush!’ (DE7-SN:5.2)

- b. *Azakwa* *ama* *yam* .
 āzā -*āk^wā* *á* *mā* *jàm*
 go.HORT -1INCL.COL PREP1 edge water
 ‘Let's go to the edge of the water!’ (DE18-SN:8.9)

In contrast to other verbs, *āzā* can host the imperfective marker *kā-* (71b) and the jussive marker *mā-* (71c) with resulting variations in meaning.

- (71) a. *Azakwa* .
 āzā -*āk^wā*
 go.HORT -1INCL.COL
 ‘Let's go!’ (GE22-SE:4.2)
 (The speaker is encouraging others to go on ahead.)

- b. *Kazakwa* .
 kā- *āzā* -*āk^wā*
 IPFV- go.HORT -1INCL.COL
 ‘Let's be going!’ (GE22-SE:4.3)
 (Stronger. Very much an order.)

- c. *Mazakwa* .
 mā- *āzā* -*āk^wā*
 JUS- go.HORT -1INCL.COL
 ‘Let's go!’ (GE22-SE:4.3)
 (Less strong. Inviting everyone to go together.)

It is possible for *āzā* to occur followed by another verb in the infinitive form which carries the first person inclusive collective suffix. In this case for *āzā* the suffix is optional (70a & 72).

- (72) *Aza* *ŋ* *sasarakakwa* *dəraf* *ara* *tata* .
 āzā *ŋ* *sàsràk* -*āk^wā* *dràf* *á* *rā* *tātā*
 go.HORT INF learn -1INCL.COL song PREP1 side 3PL
 ‘Let's go to learn songs with them.’ (HT8-SN:13.3)

Only the special hortative stem *āzā* ‘go’ can take the first person dual hortative suffix. The stem can either occur alone (73a) or preceded by the imperfective (73b) or the jussive prefixes (73c).

(73) a. *Azaw*

āzā -W

go.HORT -1DUAL.HORT

‘Let the two of us go!’

(GE22-SE:5.2)

b. *Kazaw*

kā- āzā -W

IPFV- go.HORT -1DUAL.HORT

‘Let the two of us be going!’

(GE22-SE:5.3)

c. *Mazaw*

mā- āzā -W

JUS- go.HORT -1DUAL.HORT

‘Let the two of us go!’

(GE22-SE:5.4)

In natural speech glides are often dropped in a non-pausal position and so the first person dual hortative suffix is often not heard. This would be the case with examples such as (74 a & b).

(74) a. *Maza*

a wata

mā- āzā -W

á wātā

JUS- go.HORT 1DUAL.HORT PREP1 compound

‘Let us two go home!’

(NF3-SN:4.3)

b. *Kaza*

ama

gezleŋ may

cemey?

kā- āzā -W

á

mā

gēžéŋ

máj

tséméj

IPFV- go.HORT -1DUAL.HORT

PREP1

edge

summit

TAG.IMP.POL

TOP.CON

‘Let us two go to the edge of the summit shall we?’

(NF2-SN:4.4)

To form a hortative for first person dual with any other verb the hortative form of the verb ‘go’ is followed by the infinitive. Example (75b) involves no movement which is evidence that this structure has become grammaticalised.

(75) a. *Kaza*

ŋ pepərek ma !

kā- āzā -W

íj

pèprèk mā

IPFV- go.HORT -1DUAL.HORT INF race

‘Let the two of us be having a race !’

(NF6-WN:1.1)

b. *Kaza* *ŋ ulakza* .
 k̄ā- āzā -w íj wɫàk -zā
 IPFV- go.HORT -DUAL.HORT INF think -TRANS
 ‘Let the two of us be thinking about it.’ (GE22-SE:5.10)

2.3.7.3 Jussive

Third person singular and plural imperatives are marked with the jussive prefix *mā-*. For third person singular the subject agreement marker is omitted (76a), but for third person plural is it included (76b). Mina has an apparently cognate marker with the form *mā*, which has a similar function to the Buwal jussive prefix (Frajzyngier and Johnston 2005: 239).

(76) a. *Gazlavay māvalahwaw matakan a tama* .
 gāɭāvāj mā- vāl -āx^wāw matakān á tāmā
 God JUS- give -2SG.IOBJ IND.DET PREP1 front
 ‘May God give you another in the future...’ (HT1-SN:8.5)

b. *Əy megəre zlan ŋtakwaw* .
 j- mā- grē ɭàn ntàk^wāw
 3PL.SBJ- JUS- see work 1INCL.POSS
 ‘Let them see our work.’ (HT8-SN:7.6)

The jussive can be used to express both orders (77a) and wishes (77b).

(77) a. *Kaw vayay maghwälza zlam anta* .
 káw vājáj mā- y^wāl -zā ɭàm āntā
 even(ful.) who JUS- show -TRANS name 3SG.POSS
 ‘Let everyone introduce his name.’ (NH7-SN:3.5)

b. *Əy mala werwer , əy madəmas gwaygwaya ndəram* .
 j- mā- lā wér-wér j- mā- dmàs g^wājg^wājā ndràm
 3PL.SBJ- JUS- do healthy 3PL.SBJ- JUS- dance festival pleasing
 ‘May they become healthy, may they dance the festival well.’ (BH2-SN:3.7)

The jussive form of the verb can be distinguished from the agent nominalisation (see Section 2.4.1.1), also marked by *ma-*, by tone. The tone on the jussive prefix is always mid and the tone on the verb root remains unchanged (78 a & b), whereas for the agent nominalisation the tone on the prefix and the verb root vary (79 a & b).

- | | | | | | |
|------|-----------------|------------|---------------|--|-------------|
| (80) | <i>màràk</i> | 'begger' | <i>ràk</i> | | 'ask/beg' |
| | <i>mádàs</i> | 'farmer' | <i>dàs</i> | | 'cultivate' |
| | <i>méɲtswèr</i> | 'traveler' | <i>ntswèr</i> | | 'travel' |
| | <i>mālám</i> | 'potter' | <i>lām</i> | | 'build' |
-
- | | | | | | | |
|------|--------------------------------|------------------|------------|----------------|--------------------------|-----------|
| (81) | <i>mādá k^wlè</i> | 'pagan' | <i>dā</i> | 'sacrifice to' | <i>k^wlè</i> | 'idol' |
| | <i>mādzá rg^wàts</i> | 'tailor/weaver' | <i>dzā</i> | 'hit' | <i>rg^wàts</i> | 'clothes' |
| | <i>mālám wdzēk</i> | 'builder' | <i>lām</i> | 'build' | <i>wdzēk</i> | 'house' |
| | <i>mètèw mtsé</i> | 'corpse carrier' | <i>tèw</i> | 'carry' | <i>mtsè</i> | 'corpse' |

Agent nominalisations function in every way like common nouns; for example as a core argument of a verbal clause (82a) or a predicate of a verbless clause (82b).

- (82) a. *Madas ege əy kazazak* .
má- dās = égē j- kā- zàzàk
 NOM- cultivate =PL 3PL.SBJ- IPFV- rest
 'The farmers are resting.' (GE28-SE:2)

- b. Ara *magam zbye ege* .
 ārā **mā- gám** **ɓā -jé** = égē
 COP NOM- drive.away ox -PL =PL
 'They are oxen drivers.' (GE28-SE:1)

2.4.1.2 Patient nominalisation

Payne (1997: 227) defines a patient nominalisation as referring to the patient of the nominalised verb. The verb may be either intransitive or ambitransitive, where the subject is a patient. In Buwal patient nominalisations are formed when the prefix *ma-* is attached and the verb root is reduplicated with a vowel inserted between the two verb roots. When the tone on the verb root is mid, the tone on the inserted vowel is mid and the tone on the second reduplicated verb is high (83a). If the verb root carries low tone, the tone on the inserted vowel is high and the tone on both reduplicated verbs is low (83b).

- | | | | | |
|---------|--|----------------------|-------------------------|------------|
| (83) a. | <i>màgājāgáj</i> | 'the spoilt one' | <i>gāj</i> | 'spoil' |
| | <i>màwānāwán</i> | 'the lying down one' | <i>wān</i> | 'lie down' |
| | <i>màŋx^wālāŋx^wál</i> | 'the dried one' | <i>ŋx^wāl</i> | 'dry' |
-
- | | | | | |
|----|--|----------------------|-------------------------|-------------|
| b. | <i>mádzàx^wádzàx^w</i> | 'the pounded one' | <i>dzàx^w</i> | 'pound' |
| | <i>mádàsádàs</i> | 'the cultivated one' | <i>dàs</i> | 'cultivate' |
| | <i>mágàlágàl</i> | 'the grown one' | <i>gàl</i> | 'grow' |

Patient nominalisations can function in like a common noun; for example as the head of a noun phrase (84a) or core argument in a verbal clause (84b).

(84) a. *Magayagay* *ŋkwa wese* , *werwer yam*
mà- gāj <ā> gáj nk^wā wēsé wér-wér jám
 NOM- spoil <NOM.PAT> spoil 2SG.POSS DEM.DIST healthy also
vaw ?
vāw
 Q
 ‘That handicap (i.e. the spoilt one) of yours, is it well also?’ (GE9-SE:10)

b. *Wende ma* , *hwa njefza*
wéndé má hwā- ndzēf -zā
 another TOP.EMPH 2SG.SBJ- smell -TRANS
menjefenjef .
mà- ndzēf <ā> ndzéf
 NOM- smell <NOM.PAT> smell
 ‘Another one, you smell the smelly one.’ (DE9-SN:2.17)

Frajzyngier and Johnston (2005: 74-75) found a similar structure in Mina although they interpret it as ‘verb reduplication in the relative clause’ and state that it is used as a modifier in attributive constructions. Similarly, in Buwal patient nominalisations are also commonly used to modify other nouns (85 a & b). However, any noun can function in this way. Patient nominalisations can be distinguished from headless relative clauses in that firstly, the reduplicated verb form with intervening vowel cannot occur on its own without the *ma-* prefix. Furthermore, the tone on the prefix varies indicating that it is phonologically attached unlike the relative marker, which although also has the form *ma*, always has a high tone.

(85) a. *Ləzlaw magazlagazl* *ndəram a taba zley* .
ɣlāw má- gàɣ <á> gàɣ ndràm á tàbā ɣèj
okra NOM- **beat** <NOM.PAT> **beat** good PREP1 middle meat
 ‘Beaten okra is good to eat mixed with meat.’ (GE9-SE:1)

b. *Əy kázam zley gamtak mamsamsar* .
ǰ- ká- zàm ɣèj gāmták mà- msār <ā> msár
 3PL.SBJ- PFV- eat meat **chicken** NOM- **fry** <NOM.PAT> **fry**
 ‘They ate fried chicken.’ (LL25-SE:27)

2.4.1.3 Action nominalisation

Payne (1997: 224) defines an action nominalisation as referring to ‘the action, usually abstract expressed by the verb root.’ This type of nominalisation occurs reasonably often in Chadic languages and is sometimes called the ‘gerund’. Action nominalisations in Buwal may also carry the sense of the result of the action expressed by the verb. Schuh (1998: 112) made a similar observation for gerunds in Miya. Whether the meaning is the action or the result of the action is depends on verbal semantics.

In Buwal the action nominalisation is marked by the prefix *la-* and is very productive, with action nouns being generated from any verb. The tone pattern for this prefix and its verb root follows the same pattern as for the agent nominalisation discussed in Section 2.4.1.3. When the verb root carries a low tone, it remains low and the tone on the prefix is high. When the verb root carries a mid tone, its tone changes to high and the tone on the prefix is mid (86). As for agent nominalisations, an action nominalisation may incorporate an object (87).

(86)	<i>lǎŋgàz</i>	‘advice/punishment’	<i>ŋgàz</i>	‘advise/punish’		
	<i>lāmár</i>	‘beginning’	<i>mār</i>	‘begin’		
	<i>lēwéd</i>	‘light’	<i>wéd</i>	‘shine’		
(87)	<i>lǎdzàv</i> <i>vgèm</i>	‘flock of birds’	<i>dzàv</i>	‘assemble’	<i>vgèm</i>	‘bird’
	<i>lèbèz</i> <i>tàf</i>	‘fork in road’	<i>bèz</i>	‘divide’	<i>tàf</i>	‘path/road’
	<i>lǎzǎ</i> <i>vdě</i>	‘circumcism’	<i>zǎ</i>	‘cut’	<i>vdě</i>	‘penis’

Action nominalisations generally function like common nouns. They can function as arguments of verbal clauses (88a), though not as indirect object for obvious semantic reasons, as subjects of verbless clauses (88b) and can be modified by various noun modifiers (88a-c). However, only if the meaning encodes a result can they be pluralised or counted.

(88) a.	<i>gazlavay</i>	<i>a</i>	<i>velene</i>	<i>lanja</i>	<i>ma</i>	<i>taŋtaŋ</i>		
	<i>gǎzǎváj</i>	<i>ǎ-</i>	<i>vál</i>	<i>-ēnē</i>	<i>lǎ-</i>	<i>ndzá má</i>	<i>tǎŋtǎŋ</i>	
	God	3SG.SBJ-	give	-3SG.IOBJ	NOM.ACT-	dwell	REL=	good
	‘...God gives him a dwelling which is good.’						(DP1-SN:4.2)	
b.	<i>lara</i>	<i>dala</i>	<i>aka</i>	.				
	<i>lǎ-</i>	<i>rǎ</i>	<i>dǎlǎ</i>	<i>ákǎ</i>				
	NOM.ACT-	insult	someone	EXIST				
	‘The insulting of people exists.’						(DE12-SN:2.6)	

c. <i>Ladās</i>	<i>ma a davar , a</i>	<i>mbal ma ŋ dawan .</i>
lá-	dās má á dvār ā-	mbāl má ń dāwān
NOM.ACT-	cultivate REL= PREP1 hoe	3SG.SBJ- hurt PREP2 back
‘Farming which is with the hoe, it hurts the back.’		(GE40-SE:6.2)

Buwal also has an infinitive form of the verb whose functions overlap with the action nominalisation though are more limited. The infinitive will be discussed further in Section 4.1.

2.4.1.4 Location nominalisation

Some languages create a noun from a verb meaning ‘a place’ where ‘verb’ happens (Comrie and Thompson 1993: 355). Buwal is also able to do this by forming a compound of the noun *lā* ‘place’ with the verb root. The tonal pattern of this nominalisation differs from the action nominalisation in that the tone on *la* is always mid. The tone on the verb root varies in the same way as has been seen for other types of nominalisations above, with mid becoming high and low staying low. This process is not productive and is only used in a small number of cases. Locative nominalisations discovered so far are listed below (89 & 90). Like other nominalisations the direct object may follow (90).

(89)	<i>lābán</i>	‘washing place’	<i>bān</i>	‘bathe, wash’		
	<i>lāxbár</i>	‘waiting place’	<i>xbār</i>	‘wait’		
	<i>lādár</i>	‘aligned place’	<i>dār</i>	‘align’		
	<i>lānjá</i>	‘seat’	<i>ndzā</i>	‘sit’		
	<i>lāwán</i>	‘bed’	<i>wān</i>	‘sleep’		
	<i>lēdéŋ</i>	‘standing place’	<i>dēŋ</i>	‘stand’		
	<i>lāzàzàk</i>	‘resting place’	<i>zàzàk</i>	‘rest’		
(90)	<i>lādzá zlèj</i>	‘killing place of meat’	<i>dzā</i>	‘kill’	<i>zlèj</i>	‘meat’
	<i>lēbér zlāp</i>	‘preaching place’	<i>bēr</i>	‘announce’	<i>zlāp</i>	‘speech’

Location nominalisations function like common nouns; for example as complements of prepositions (91a), predicates of verbless clauses (91b) and heads of noun phrases (91b).

(91) a.	<i>Yaw , a</i>	<i>nda pa ata</i>	<i>laja</i>	<i>zley wese</i>	.
	jàw ā-	ndā pá á tā lā	dzá	ʒèj wésé	
	SO	3SG.SBJ- go level	PREP1 on place	kill meat	DEM.DIST
	‘So, she went to the level of that meat killing place .’				(NF5-SN: 3.1)

- b. *Ara laban ηcene* .
 ārā lā bān ntsènè
 COP place bathe 1EXCL.POSS
 ‘It’s our bathing place.’ (GE28-SE:45)

2.4.2 Resultative participle

Whilst Keenan and Dryer state that Chadic languages are typically ‘passiveless’ (2007: 329), a number of Chadic languages have been said to have participles or stative verb forms of some type. For some languages they are thought of as being ‘nominal’, having noun-like properties as for Miya (Schuh 1998: 110) or being formed partly with nominalising type morphology as for Goemai (Hellwig 2011: 132), Cuvok (Ndokobai 2006: 79-81) and Mina (Frajzyngier and Johnston 2005: 72-72).

Buwal has what can be called ‘resultative participles’. These are verbal adjectives expressing a state which is a result of a previous event (Haspelmath 1994: 159). In Buwal, resultative participles are more verb-like than noun-like in that they are formed by attaching the perfective aspect maker *ká-* to the front of a verb stem and the participle suffix *-ējē* to the end. They also often occur with the completive marker *āzá* (92b). They are formed from patientive intransitive (92a) or ambitransitive (92b) verbs (see Sections 2.2.1 & 2.2.2) as their agents are affected by the action and therefore their resulting state can be described.

- (92) a. *əy kénjeye*
 j- ká- ndzā -ējē
 3PL.SBJ- PFV- sit PART
 ‘They were seated.’ (TN3-WN:3.3)

- b. *Mada kəsakeneye aza kwedkwed tew ca* ,
 màdā ká- skèn -ējē āzá k^wédk^wéd téw tsá
 if PFV- grind -PART COMPL very.fine completely TOP
weləye ca , əy sasam ata hwa
 wālā -jé tsá j- sàsàm á tā x^wā
 woman -PL TOP 3PL.SBJ- be.happy PREP1 on 2SG
 ‘If it has been ground very finely, the women, they are happy with you...’
 (DE3-SE:4.1)

Note that the transitivity suffix (see Section 2.3.4) may be attached to the verb root (93 a & b).

(93) a. *La kébebedze* *aza* .
 lā ká- bàbàd' -zā -ējē āzá
 field PFV- plow -TRANS -PART COMPL
 'The field has been ploughed a bit.' (GE21-SE:14.12)

b. *Mba kéhenze* *aza* .
 mbà ká- xān -zā -ējē āzá
 child PFV- cry -TRANS -PART COMPL
 'The child has been made to cry.' (GE21-SE:17.4)

3. The verb phrase

It is difficult in Buwal to find clear evidence for the verb phrase as a syntactic unit. For the purposes of this paper, however, the verb phrase is taken as consisting of the elements shown in Table 10 below. Each of these elements will be described in further detail in the sections which follow. The only obligatory element is the verb (see Section 2). It may be followed by a possessive subject pronoun (PSP) which is only used in intransitive clauses (see Section 3.1), an itive (IT) marker (Section 3.2), a direct object (Section 3.3) and an indirect object (Section 3.4). Various verbal particles may occur following either the direct or the indirect object. These will be dealt with in Section 3.5. As adverbs and negation operate at a clausal level, they will not be included in this description.

Table 10: Order of constituents within the Buwal verb phrase

Verb	(PSP)	(IT)	(DOBJ)	(VPt)	(IOBJ)	(VPt)
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3.1 Possessive subject pronoun

In Buwal a verb occurring in an intransitive clause, as well as being marked for the subject may be followed by a possessive pronoun which agrees in person and number with that subject (94a & b). This possessive pronoun will precede the itive marker if present (94b). Many Chadic languages such as Mina (Frajzyngier and Johnston 2005: 86-90), Hausa (Newman 2001: 479), Miya (Schuh 1998: 149), Pero, Tera and Margi (Frajzyngier 1977) have a similar construction and these pronouns are commonly known by Chadicists as 'intransitive copy pronouns' (ICPs) (Storch et al 2011: 5). In some languages they resemble object pronouns, whilst in others, possessive pronouns. For Buwal I am following Frajzyngier in using the term 'possessive subject pronouns' which he has used in reference to such Chadic languages as Mina (Frajzyngier and Johnston 2005: 86-91) and Wandala (Frajzyngier 2011: 47-64). This is because they have exactly the same form as possessive pronouns and can occur in imperative clauses with no subject marking (94c) and therefore cannot be said to be copying anything.

- (94) a. *Benjer a ŋgaya : « Hune ma kasanaw ,*
 béndzēr ā- ŋgājā x^wnè ma= kā- sàñ -āw
 squirrel 3SG.SBJ- saying 2PL.STAT REL= IPFV- know -3SG.DOBJ
sa nda naka .
 sā- ndā **nākā**
 1SG.SBJ- go 1SG.POSS
 ‘The squirrel said, “You are the ones who know it, I’m leaving.”’
 (NF6-SN:4.7)
- b. *Tew ende a pepedēf , a hey anta aza səkwa !*
 téw éndē ā- pépédéf ā- xēj **āntā** āzà sk^wá
 finally like.this 3SG.SBJ- scamper 3SG.SBJ- flee 3SG.POSS IT Q.FAM
 ‘Finally like this he scampered, he fled from there didn’t he!’ (NF2-SN:5.1)
- c. *Fətek ŋkune .*
 ftēk **nk^wnè**
 lose 2PL.POSS
 ‘Lose yourselves.’ (GE15-SE:61)

The function of ICPs or PSPs appears to vary depending on the language. In Buwal, possessive subject pronouns only occur in intransitive clauses. They are not obligatory however, so are not markers of intransitivity. Many of the verbs they co-occur with have ‘middle’ type semantics, such as verbs of movement like *ndā* ‘go’, *dàm* ‘enter/exit’, *dèdèr* ‘wander’, *zèn* ‘return and *ndàv* ‘fall’ (95a), or change of state like *bāw* ‘change’, *màts* ‘die’, *gāj* ‘spoil’ and *gàl* ‘grow’ (95b). Frajzyngier and Johnston found a similar situation in Mina (2005: 86-91). However, in Buwal PSPs can co-occur with any patientive intransitive or ambitransitive verb (95c).

- (95) a. *heje kededer ŋtakwaw .*
 xèjé- **kā-** **dèdèr** **ntàk^wàw**
 1INCL.SBJ- IPFV- **wander** 1INCL.POSS
 ‘...we are wandering.’ (HT4-SN:30.13)
- b. *Kágal anta tew cemey , əy dene a*
ká- **gàl** **āntā** téw tséméj j- **dā** -ēnē á
 PFV- **grow** 3SG.POSS finally TOP.CON 3PL.SBJ- bring -3SG.IOBJ PREP1
mba tata eze .
 mbà tātá ézē
 child 3PL.POSS therefore
 ‘When she has completely grown up, they bring her to their son therefore.’
 (DE19-SN:3.5)

- c. *Dala kácak anta* .
 dālā ká- tsāk āntā
 money(ful.) PFV- contribute 3SG.POSS
 ‘Money has been contributed.’ (GE21-SE:25.10)

In Buwal, while the possessive subject pronoun may have diachronically functioned as a type of middle marker, it has now developed the function of coding the modality of ‘mirativity’. This mirative function of possessive pronouns was also recognised by Hellwig (2011: 74) for the West Chadic language Goemai, and is also found in a number of languages of the Jukunoid subgroup of East-Benue Congo (Koops 2011: 107; Storch 2011:94-96) which have had considerable contact with Chadic languages. Aikhenvald (2004: 20) defines mirativity as ‘a category manifesting ‘unexpected information’ with overtones of surprise and admiration’. In Buwal however this surprise is not always positive as this construction can express that something is occurring in spite of wishes to the contrary (96b & 97b).

- (96) a. *Uda a kada* .
 wdā á- ká- dà
 food 3SG.SBJ- IPFV- cook
 ‘The food is cooking.’ (GE47-SE:6.1)
 (It is cooking how you want it to.)

- b. *Uda a kada anta* .
 wdā á- ká- dà āntā
 food 3SG.SBJ- IPFV- cook 3SG.POSS
 ‘The food is cooking!’ (GE47-SE:6.2)
 (You don’t want it to cook quickly but it does.)

- (97) a. *Sa kándav* .
 sã- ká- ndàv
 1SG.SBJ- PFV- fall
 ‘I have fallen.’ (GE47-SE:9.1)
 (I wanted to fall.)

- b. *Sa kándav naka* .
 sã- ká- ndàv nākā
 1SG.SBJ- PFV- fall 1SG.POSS
 ‘I have fallen!’ (GE47-SE:9.2)
 (Something made me fall.)

The use of the possessive subject pronoun can also express surprise in that the event is unexpected. This may be because it is difficult and will take an increase in agency overcome the obstacles. In many cases, particularly when the subject is not ‘agent-like’ as in (98b) the construction with the possessive subject pronoun means that it is possible that the action be done if some force is used. Example (99b) shows an increase in agency as the people themselves planned to assemble, it did not randomly happen.

(98) a. *M6a a kabac* .
 m6ā á- kā- bāts
 tamarind 3SG.SBJ- IPFV- crush
 ‘The tamarind is being crushed.’ (GE47-SE:13.1)

b. *M6a a bac anta* .
 m6ā ā- bāts āntā
 tamarind 3SG.SBJ- crush 3SG.POSS
 ‘The tamarind can be crushed.’ (GE47-SE:13.2)

(99) a. *Hejəye əy kébec* .
 xèdzè -jé j- ká- bèts
 person -PL 3PL.SBJ- PFV- assemble
 ‘The people have assembled.’ (GE47-SE:4.4)
 (Possibly unplanned.)

b. *Hejəye əy kébec tata* .
 xèdzè -jé j- ká- bèts tātá
 person -PL 3PL.SBJ- PFV- assemble 3PL.POSS
 ‘The people have assembled themselves.’ (GE47-SE:4.3)
 (Planned ahead of time.)

3.2 Itive marker

Buwal has an itive marker *ázà* which codes movement away from a deictic centre (100a). It is very similar in form to the completive marker *āzá* (see Section 3.5.1 below) however they can be distinguished in that they have a different tone melody as well as a different distribution. The itive maker precedes a direct object while the completive marker follows it, so in fact both can occur in the one clause (100b).

(100)a. *Sa dam aza a bəza* .
 sā- dām ázà á bzā
 1SG.SBJ- exit IT PREP1 outside
 ‘I come **out** to the outside.’ (NF2-SN:4.16)

- b. *Hwa cawal aza várezl aza* .
 x^wā- tsāwāl ázà vrèḷ ázá
 2SG.SBJ- scoop IT millet.husk COMPL
 ‘You scoop **out** the millet husks first.’ (PP4-SN:1.4)

Unlike for the ventive suffixes (see Section 2.3.3) the deictic reference point of *ázà* is always some place other than the location of the speaker. As a result, it is possible for these two types of marking to co-occur (101 a & b). In this case there are two deictic reference points, the itive marker referring to the location where the movement begins, and the ventive suffix referring to the location where the movement ends.

- (101) a. *Hune tadakw^{ha} aza ata hayak* .
 x^wné- tàdàk^w -xā ázà á tā xājāk
 2PL.SBJ- descend -VNT.DIST IT PREP1 on ground
 ‘You come **down from there** onto the ground here!’ (NH6-SN:1.12)

- b. *a zena aza η ηgəzle η nda η basl dəvar* .
 ā- zèn -ā ázà í ηgḷē í ndā í bāt dvār
 3SG.SBJ- return -VNT.PROX IT PREP2 forge INF go INF forge hoe
 ‘...he returns **from there** into the forge to go to forge a hoe.’ (DP9-SN:4.6)

Like the ventive markers the itive marker can occur with non-movement verbs. In this case the construction implies that there is movement away from the place where the activity is conducted (102 a & b). Examples (102 b & c) contrast the meaning of the same clause with and without the itive marker where no movement is implied. Note also that the itive marker can co-occur with a prepositional phrase coding the source location (102b).

- (102) a. *Mbal aza gamtak* .
 mbāl ázà gāmtāk
 catch IT chicken
 ‘Catch the chicken and bring it away!’ (GE52-SE:18.1)
 (Addressee near the chicken. He catches it and brings it away with him.)

- b. *Sa saken aza ndərey mavaw a masen* .
 sā- skèn ázà ndrèj māvāw á māsēn
 1SG.SBJ- grind IT millet beer PREP1 mill(fr.)
 ‘I grind beer millet the mill and come away.’ (GE52-SE:20.1)
 (The millet is brought away from there. Said in some other place (e.g. on the road.)

- c. *Sa sàken ndàrey mavaw a masen .*
 sà- skèn ndrèj māvāw á māsēn
 1SG.SBJ- grind millet beer PREP1 mill(fr.)
 ‘I crush beer millet at the mill.’ (GE52-SE:26.2)
 (Said whilst at the mill.)

Unlike the ventive suffixes, the itive marker does not appear to have developed any temporal meaning.

3.3 Direct object

A direct object noun phrase normally immediately follows the verb (103a) although it is possible for the itive marker (see Section 3.2) to interpose in between (103b). It also precedes any verbal particles (103c).

- (103) a. *A ba ujek a damaw*
 ā- bā wjēk á dāmāw
 3SG.SBJ- create **hut** PREP1 bush
 ‘He built a house in the bush...’ (TN1-SN:1.2)

- b. *A wata əy tew aza bay .*
 á wātā j- tēw āzà bāy
 at compound 3PL.SBJ- carry IT **chief**
 ‘At the compound they carried the chief away.’ (NH7-SN:7.5)
 (from the horse he was riding)

- c. *əy kala dəraf ara .*
 j- kā- lā dráf ārá
 3PL.SBJ- IPFV- do song SIM
 ‘...they are singing songs at the same time.’ (DP1-SN:5.2)

3.4 Indirect object

An indirect object noun phrase follows the direct object, if there is one, and is preceded by either the preposition *á* or *ǰ* (105 a & b). It is difficult to determine exactly when either preposition should be used. At times it appears to depend on speaker preference as examples can be found of the same verbs in a similar context having an indirect object being preceded by either preposition (104 a & b). Certain language informants feel that there is a difference between the two but find it hard to say what it is. One Buwal speaker preferred *á* when the indirect object has a benefactive role (105a) and *ǰ* when it has a recipient role (105b). Others felt that *á* is

used when the action is either finished or currently being done and *ŋ* for future actions which are being contemplated. Therefore in (105a) the speaker is currently ploughing the field and in (105b) he has not yet started. More work needs to be done in examining the use of each preposition in natural data in order to come up with a clearer answer to this question.

(104) a. *sa zlepene a heje anta* .
 sā- ʒāp -ēnē á xèdzè āntā
 1SG.SBJ- speak -3SG.IOBJ **PREP1** person DEF.DET
 ‘...I spoke to the person.’ (NH3-SN:4.3)

b. *gwambakw a zlepene ŋ meŋ*
 g^wāmbāk^w ā- ʒāp -ēnē ŋ mēŋ
 toad 3SG.SBJ- say -3SG.IOBJ **PREP1** antelope
 ‘...the toad spoke to the antelope...’ (NF6-WN:1.1)

(105) a. *Sa bebedēne la a vana* .
 sā- bàbàd’ -ēnē lā á vāná
 1SG.SBJ- plough -3SG.IOBJ field **PREP1** father.1POSS
 ‘I plough the field for my father.’ (it’s already his) (GE21-SE:14.9)

b. *Sa bebedēne la ŋ vana* .
 sā- bàbàd’ -ēnē lā ŋ vāná
 1SG.SBJ- plough -3SG.IOBJ field **PREP2** father.1POSS
 ‘I plough the field for my father.’ (to give to him) (GE21-SE:14.8)

3.5 Verbal particles

Buwal has four verbal particles which are in a paradigmatic relationship and code various aspectual distinctions. All of these particles can co-occur with any of the primary tense/aspect distinctions (see Section 2.3.2) and also in imperative clauses. They are listed in Table 11 below and will be described in more detail in the sections which follow.

Table 11: Buwal verbal particles

Marker	Form
Completive	<i>āzá</i>
Simultaneity	<i>ārā</i>
Accomplishment	<i>āká</i>
Anticipation	<i>ká</i>

The examples in (106) illustrate the difference in meaning of the four particles when used with the verb *skām* ‘buy/sell’. The completive marker *āzá* in example (106a) indicates that the subject will finish selling fish at the market and then go on to do something else. According to language informants the verb must be interpreted as ‘sell’ in this example rather than ‘buy’. In example (106b) the marker of simultaneity *ārá* indicates that the fish will be bought at the same time as doing something else, in this case travelling home. The accomplishment marker *āká* in example (106c) indicates that the subject has just come from buying fish at the market. In this case it is coding retrospective aspect. Finally the marker of anticipation *ká* in example (106d) expresses the idea that the fish is bought ahead of time in case it may run out.

(106) a. *Sa səkam ŋkələf **aza** a luma .*
 sā- skām nklèf **āzá** á lwmà
 1SG.SBJ- sell fish COMPL PREP1 market(ful.)
 ‘I sell fish first at the market.’ (GE52-SE:2.3)

b. *Sa səkam ŋkələf **ara** a wata .*
 sā- skām nklèf **ārá** á wātā
 1SG.SBJ- buy fish SIM PREP1 compound
 ‘I buy fish on the way home.’ (GE52-SE:2.1)

c. *Sa səkam ŋkələf **aka** a luma .*
 sā- skām nklèf **āká** á lwmà
 1SG.SBJ- buy fish ACC PREP1 market(ful.)
 ‘I just came back from buying fish at the market.’ (GE52-SE:2.2)

d. *Sa səkam ŋkələf **ka** a luma .*
 sā- skām nklèf **ká** á lwmà
 1SG.SBJ- buy fish ANT PREP1 market(ful.)
 ‘I buy fish in advance at the market.’ (GE52-SE:2.4)

Verbal particles frequently follow the direct object but may follow the indirect object with a resulting change in meaning. For example (107a) could be said if for example the mother is sick and so the speaker closes the door to keep out the wind. Example (107b) could be said if the mother has forgotten to close the door.

(107) a. *Sa mpekene ma ujek **ka** a mana .*
 sā- mpāk -ēnē mā wjēk **ká** á mānā
 1SG.SBJ- close -3SG.IOBJ mouth hut ANT PREP1 mother
 ‘I close the door **in advance**, for my mother.’ (GE52-SE:1.14)

- b. *Sa mpekene ma ujek a mana ka* .
 sā- mpāk -ēnē mā wjēk á mánā **ká**
 1SG.SBJ- close -3SG.IOBJ mouth hut PREP1 mother.3POSS ANT
 ‘I close the door for my mother **in advance**.’ (GE52-SE:1.15)

3.5.1 Completive marker

The Buwal completive marker *āzá* could be said to code terminative aspect or the endpoint of an event. It implies that one event must end before another can begin and could loosely be translated as ‘already’ for past events (108a) and ‘first’ for present and future events (108b).

- (108) a. *əy kébecata aza , əy ŋgadāta*
 j- **ká-** **ḃèts** -**ātā** **āzá** j- ŋgād’ -**ātā**
 3PL.SBJ- PFV- **gather** -3PL.DOBJ **COMPL** 3PL.SBJ- count -3PL.DOBJ
eze .
ézē
 therefore
 ‘They have **already** gathered them, therefore they count them.’ (DP6-SN:3.5)
- b. *əy kampak menjevek aza mar a nda a*
 j- **kā-** **mpàm** mēndzēvēk **āzá** már ā- ndā á
 3PL.SBJ- IPFV- **look.for** remedy **COMPL** before 3SG.SBJ- go PREP1
lupital anta ege aka .
lwpjtal āntā = égē ákā
 hospital(fr.) DEF.DET =PL EXIST
 ‘...there are those who are looking for remedies **first** before he goes to the hospitals.’ (DE9-SN:4.4)

Completive markers have also been found in other nearby Central Chadic languages such as Cuvok (Ndokobai 2006: 58) and Mofu-Gudur (Hollingsworth 1991: 245-246). The Buwal completive marker corresponds closely in form and function to what Frajzyngier and Johnston (2005: 249-259) call the ‘end-of-event’ marker in Mina which has the form *za* in phrase final position and carries polar tone. In fact in Buwal when there is no overt direct object expressed in the clause the completive marker loses the initial *ā* and cliticizes to the verb root (109b).

(109) a. *Sa kábal mpe aza* .
 sā- ká- bàl mpè **āzá**
 1SG.SBJ- PFV- chop tree **COMPL**
 ‘I finished cutting the tree.’ (GE23-SE:4.4)

b. *Sa kábalza* .
 sā- ká- bàl =**zá**
 1SG.SBJ- PFV- chop =**COMPL**
 ‘I finished chopping (it).’ (GE23-SE:4.3)

3.5.2 Marker of simultaneity

The marker of simultaneity *ārá* indicates that the activity expressed by the verb is carried out at the same time as another activity, often expressed by the previous clause or understood by the context. It is often used when the subject is going somewhere and doing something else along the way (110a) but can be used for all simultaneous actions (110b). The Buwal marker of simultaneity *ārá* is likely to be related to the dependent habitual in Mina which has the form *ra* in phrase final position (Frajzyngier and Johnston 2005: 203).

(110) a. *A nezenha , a nanda , a*
 ā- ná- zèn -xā ā- ná- ndā ā-
 3SG.SBJ- FUT- return -VNT.DIST 3SG.SBJ- FUT- go 3SG.SBJ-
nasarza ara .
 ná- sār -zā **ārá**
 FUT- look.at -TRANS **SIM**
 ‘He will come back, he will go, he will visit him **on the way**.’ (HT6-SN:6.10)

b. *Kaw əy kada kule wese ca , əy*
 káw j- ká- dā k^wlè wēsé tsá j-
 even 3PL.SBJ- IPFV- make.sacrifice idol DEM.DIST TOP 3PL.SBJ-
kayaza gazlavay ara a mna .
 ká- jā -zā gāḷāvāj **ārá** á mnā
 IPFV- call -TRANS God **SIM** PREP1 inside
 ‘Even if they are making sacrifices to that idol, they are calling on God **at the same time**.’ (DE2-SE:18.5)

3.5.3 Marker of accomplishment

The marker of accomplishment *āká* is used to mark actions which occur over a period of time and proceed towards a terminus (Vendler 1957: 146). This may involve movement from one fixed point to another, the final location being the terminus. For example (111 a & b) illustrate the meaning of the verb *dēŋ* ‘stand’ without and with the accomplishment marker. In Example (111a) there is no movement, while in example (111b) the child moves from the sitting to the standing position.

- (111) a. *A təwse , kaw vayay ca a dēŋ ama ujek*
 á twsé káw vājáj tsá ā- dēŋ á mā wjēk
 PREP1 there even who TOP 3SG.SBJ- stand PREP1 edge hut
tata ,
tātá
 3PL.POSS
 ‘Then each one **stands** in front of his booth..’ (DP6-SN:2.5)
- b. *Mba a dēŋ aka ŋ ca sarla.*
 Mbàw ā- dēŋ āká ŋ tsā sárlá
 Child 3SG.SBJ- stand ACC INF put trousers
 ‘The child **stands up** to put on his trousers.’ (169)

Other examples which illustrate the use of this marker are found in (112) below. Examples (112 a & b) involve movement as in (111b) above. Example (112c) does not involve movement but in this case the terminus is the finished decoration.

- (112) a. *a nawan aka ana gamtak ma aha nesle*
 ā- ná- wān āká ánā gámťák mā = á xā nēťē
 3SG.SBJ- FUT- lie ACC like chicken REL= at over egg
 ‘...he will **lie down** like a chicken which is over eggs...’ (HT5-SN:2.6)
- b. *Ja6 kwap aka !*
 dzà6 k^wāp āká
 turn cup ACC
 ‘**Turn** the cup **over**!’ (LL10-SE:61)
- c. *Wala mzla a kacaf gaduda aka .*
 wālā mļā á- kā- tsāf gādwdā āká
 woman blacksmith 3SG.SBJ- IPFV- decorate cooking.pot ACC
 ‘The blacksmith woman is decorating the clay pot.’ (LL17-SE:90)

The marker of accomplishment can also be used to code ‘retrospective aspect’ which is, according to Frawley (1992: 321), ‘a point immediately subsequent to the endpoint of an event.’ In other words, something which has ‘just’ happened (113 a & b).

(113) a. *Sa zamaha uda aka a wata .*
 sā- zàm -ā -xā wdā **āká** á wātā
 1SG.SBJ- eat -VNT.PROX -VNT.DIST food ACC PREP1 compound
 ‘I **just** came from eating at home.’ (GE52-SE:3.1)

b. *Sa zam uda aka tɔlam , amba sa zɔme lahan .*
 sā- zàm wdā **āká** tlám āmbá sā- ɔmē lā- xán
 1SG.SBJ- eat food ACC recent then 1SG.SBJ- hear NOM.ACT- cry
 ‘I **just** finished eating food, then I heard crying.’ (GE52-SE:3.2)

The Buwal marker of accomplishment may be related to certain similar forms in Mina which carry spatial meanings such as the locative adverb *kà* ‘here’ and the spatial specifier *kə* which codes ‘location or movement within a contained space’ (Frajzyngier and Johnston 2005: 138, 142).

3.5.4 Marker of anticipation

The marker of anticipation *ká* marks an action which is done ahead of time with a possible future situation in view (114 a to c). It is often used for actions which are done in advance as preparation for a future activity as in example (114c) below where a woman puts food on the shelf ahead of time for her children to eat.

(114) a. *Sa səkam ɲkələf ka a luma .*
 sā- skām nklèf **ká** á lwmà
 1SG.SBJ- buy fish ANT PREP1 market(ful.)
 ‘I buy fish **in advance** at the market.’ (GE52-SE:2.4)
 (Otherwise it might run out.)

b. *Sa kádapɔa ka a ɲkusaf .*
 sā- ká- dáp -bā **ká** á nksāf
 1SG.SBJ- PFV- cover -BEN ANT PREP1 grass
 ‘I covered (it) **for the time being** with grass.’ (DE4-SE:6.2)
 (One day I will cover the hut with roofing iron.)

c. *Ca a cetene uda a uzəye anta ege ka*
 tsā ā- tsā -ētēnē wdā á wzjé āntā =égē **ká**
 put 3SG.SBJ- put -3PL.IOBJ food PREP1 children 3SG.POSS =PL ANT
ata zləmbal .
 á tā ʒmbàl
 PREP1 on shelf
 ‘She put the food for her children **ahead of time** on the shelf.’ (TN4-SN:3.2)

4. Complex verb constructions

4.1 Infinitive

In Central Chadic languages the infinitive may be formed in different ways and have a variety of functions. Some Central Chadic languages such as Mofu-Gudur (Pohlig 1992: 1-2), Merey (Gravina 2007: 14), Vame (Kinnaird 2006: 39), Moloko (Friesen and Mamalis 2004: 23-24), Cuvok (Ndokobai 2006: 76) and Gidar (Frajzyngier 2008: 120-122), have a combined infinitive/nominal form of the verb. This is not the case for Buwal which has distinct infinitival form of the verb. It consists of the verb root plus any of the verbal suffixes, preceded by the preposition *ɲ*. It is never marked for tense and aspect.

The infinitive is more restricted in its functions than the action nominalisation (see section 2.4.1.3). Some of their grammatical functions overlap but the resulting meaning differs at times. For example, both can function as the topic of a clause (115 a & b).

(115) a. *ɲ ɲcəwɛr ata pes ata pes , a*
 ɲ ntswɛr á tā pès á tā pès á-
 INF **travel** PREP1 on day PREP1 on day 3SG.SBJ-
kendəremzekey .
 kā- ndràm -zā -ēkēj
 IPFV- please -TRANS -1SG.IOBJ
 ‘**To travel** every day, it pleases me.’ (GE1-SE:25)

b. *Lacaf ma a wata ɲkwa , a*
 lā- tsáf má= á wātā nk^wā á-
 NOM.ACT- **decorate** REL= PREP1 compound 2SG.POSS 3SG.SBJ-
kadadaɓ .
 kā- dādàɓ
 IPFV- be.beautiful
 ‘The **decoration** which is at your house, it is beautiful.’ (GE28-SE:13)

Both may also function as a noun modifier (116 a & b). In this case the infinitive expresses the purpose of the head noun.

(116) a. *a rakha ndərey mavəday səkan ŋ zam askwaw .*
 ā- rāk -xā ndrèj màvdāj skàn ń zàm ásk^wāw
 3SG.SBJ- ask -VNT.DIST millet because thing INF eat NEG.EXIST
 ‘...she asked for millet because there was nothing **to eat.**’ (TN3-WN:1.6)

b. *Zlam lambaw ŋkwa vemey ?*
 ɓàm lá- mbàw nk^wā véméj
 name NOM.ACT give.birth 2SG.POSS what
 ‘What is your **birth** name?’ (LL50-SE:2)

They both may also function as an object complement (117 a, b & c).

(117) a. *Sa kasan ŋ dās ghwarnakw .*
 sá- kā- sàñ ń dās ɣ^wàrnàk^w
 1SG.SBJ- IPFV- know INF cultivate onion
 ‘I know how **to cultivate onions.**’ (GE28-SE:50)

b. *A dāw ŋ ŋtawahwaw .*
 ā- dāw ń ntāw -āx^wāw
 3SG.SBJ- want INF whip -2SG.DOBJ
 ‘He wanted **to whip you.**’ (C16-SN:16)

c. *Ŋgama a dāw lacak ca vaŋgay ?*
 ŋgámà ā- dāw lá- tsàk tsá váŋgáj
 friend 3SG.SBJ- ask NOM.ACT help TOP how
 ‘How does a friend ask for **help?**’ (LL47-SE:45)

However only the infinitive may be used in purpose adverbial clauses (118 a & b).

(118) a. *hejəye əy kánda aza ŋ njen ŋgas*
 xèdzè -jé j- ká- ndā āzá ń ndzèn ŋgās
 person -PL 3PL.SBJ- PFV- come COMPL INF follow foot
 ‘...people had already come **to follow the footprints...**’ (NH9-SN:4.3)

b. *Na nda ŋ rakahwaw*
ná- ndā ń rāk -āx^wāw
 1EXCL.SBJ- come INF pray -2SG.DOBJ
 ‘We come to pray to you...’

(BH1-SN:1.5)

4.2 Highlighted form

In Buwal there is a form of the verb which involves reduplication of the verb root with all verbal affixes being attached to the second root. The second verb root carries its underlying tone whilst the first root carries the tone melody mid-high no matter what the underlying melody may be. This is illustrated by the examples found in Table 12 below which are phonetic transcriptions of recordings made of the reduplicated form of certain Buwal verb roots. Note that in these examples the third person singular subject agreement prefix is attached to the second root.

Table 12: Reduplicated forms of Buwal verbs

Underlying Tone	Verb Root	Reduplicated form	Gloss
M	[bēn]	[bén ēbēn]	‘he washes’
	[tsētsēx]	[tsētséx ētsētsēx]	‘he cuts off pieces’
	[ʃēʃēdām]	[ʃēʃēdām ēʃēʃēdām]	‘he slips’
L	[gèʒ]	[géʒ ēgèʒ]	‘he beats’
	[dèdèʒ]	[dédéʒ ēdèdèʒ]	‘he heaps up’
	[tètèŋgè]	[tētēŋgél ētètèŋgè]	‘he rolls around’

This construction is not a case of an ideophone, or manner adverb being formed from a verb root. The reduplicated verb root is restricted in this case to a position immediately preceding the conjugated verb whereas ideophones can occur in a number of different positions within the clause.

The reduplicated verb form is frequently used for highlighted events which may be climactic or involve a certain degree of intentionality or some kind of extended process. Frajzyngier and Johnston (2005: 188-191) found a similar reduplicated verb form in Mina which they argue is a past tense found in pragmatically independent clauses. The Buwal construction however shows a number of differences in form and function from the one found in Mina. Firstly, in Mina a nominal subject is inserted between the two verb roots whereas for Buwal a nominal subject occurs before the first verb root (119).

(119) *Bay mbal a mbelene ŋhwa leŋ manda*
bāy mbál ā- mbāl -ēnē nx^wā léŋ mándá
 chief grab 3SG.SBJ- grab -3SG.IOBJ goat plus salt(ful.)
 ‘The chief grabbed him a goat plus salt...’

(TN1-SN:2.12)

In terms of function unlike Mina the Buwal form is not restricted to events in the past (120 a & c). Furthermore, although most frequently the verb is unmarked for tense and aspect (119 & 120), examples have also been found with the imperfective (120b) and the future (120c).

(120) a. *Sa tal ca mana , dā sa dā yam*
sā- tāl tsá mānā dā sā- dā jam
 1SG.SBJ- prepare.hot.drink TOP (hesitation) **draw** 1SG.SBJ- **draw** water
aza mpar ŋ keserwal .
āzá mpàr ɲ kēsèrwál
 COMPL first PREP2 saucepan(fr.)
 ‘I prepare (it) like so, um, I first **put** some water in a pot.’ (DP5-SN:2)

b. *dəmas əy kadəmas ara taf taf taf vaŋ a wata .*
dmàs j- kā- dmàs ará tàf tàf tàf vāŋ á wātā
dance 3PL.SBJ- IPFV- **dance** SIM path path path arrive PREP1 home
 ‘...they were dancing all along the path until they reached home.’
 (NH7-SN:7.4)

c. *Dam hwa nadamha a mapat ca a bay .*
dàm x^wā- ná- dàm -xā á māpát tsá á bāy
enter 2SG.SBJ- FUT- **enter** -VNT.DIST PREP1 morning TOP PREP1 chief
 ‘You will enter in the morning, to the chief’s house.’ (TN1-SN:6.4)

Finally, unlike the Mina construction, the Buwal reduplicated form may occur in negative clauses (121).

(121) *Sa kasan ana ebe ca , nja a nja a*
sā- kā- sàñ ánā èbè tsá ndzā ā- ndzā á
 1SG.SBJ- IPFV- know like DEM.MED TOP **dwell** 3SG.SBJ- **dwell** PREP1
wata naka kwaw .
wātā nākā k^wāw
 home 1SG.POSS NEG
 ‘If I had known it was like this, she wouldn’t have lived at my home.’
 (TN5-SN:5.7)

4.3 Pluractional

Pluractional aspect indicates that an action is repeated a number of times. A number of Central Chadic languages such as Vame (Kinnaird 2006: 31-21), Cuvok (Ndokobai 2006: 58), Moloko (Friesen and Mamalis 2004: 33) and Hdi (Frajzyngier 2002: 108-110) have special pluractional form of the verb often involving reduplication of part of the verb root. In Buwal however, plurality of action is coded by two or more leftward reduplications of the verb root (122 a & b). As with the reduplicated form described in the previous section, any affixation occurs on the final verb root. Mina has a similar structure (Frajzyngier and Johnston 2005: 191).

- (122) a. *Gazl gazl a gazl a ŋgene ja a*
gàḷḷ gàḷḷ ā- gàḷḷ ā- ŋgā -ēnē dzā á
 beat beat 3SG.SBJ- beat 3SG.SBJ- apply -3SG.IOBJ hit PREP1
mana zeney .
mānā zēnéj
 mother.1POSS again
 ‘He beat a number of times, he struck my mother as well.’(NH3-SN:2.13)

- b. *Kwec kwec kwec kwec kwec kwec kwec*
kʷèts kʷèts kʷèts kʷèts kʷèts kʷèts kʷèts
 sprinkle sprinkle sprinkle sprinkle sprinkle sprinkle sprinkle
a kwec yam a hedê .
ā- kʷèts jām á xēdê
 3SG.SBJ- sprinkle water PREP1 on.it
 ‘He sprinkled water on it numerous times.’ (TN1-SN:5.9)

A nominal subject occurs before the first verb root (123).

- (123) *Uzaye wese ege ndad' ndad' ay ndad' ŋkədaŋ wese aza .*
wzjé wēsé =égē ndàd' ndàd' j- ndàd' nkɔ̀dāŋ wēsé āzā
 children DEM.DIST =PL align align 3PL.SBJ- align stone DEM.DIST COMPL
 ‘Those children first aligned those stones.’ (TN4-WN:4.3)

5. Valency adjusting

As was discussed in section 2.3.4 transitivity or valency can be defined in a number of ways. Syntactic valence relates to the number of core arguments expressed in the clause. Semantic valence on the other hand refers to the number of participants in the event which may or may not be overtly expressed. Buwal has a number of structures which result in a reduction in semantic valence without a corresponding reduction in

syntactic valence. These include the impersonal (Section 5.1), the reflexive (Section 5.2) and the reciprocal (Section 5.3).

5.1 Impersonal

Where other languages may use a passive construction, Buwal uses the third person plural subject to express an impersonal meaning where the person who did the action is unknown or it is not important to make it explicit. This type of strategy is common in Chadic and has been found in other Central Chadic languages such as Mina (Frajzyngier and Johnston 2005: 83), Muyaŋ (Smith 2002: 11), Vame (Kinnaird 2006: 47), Merey (Gravina 2007: 12) and Moloko (Friesen and Mamalis 2004: 50). The subject may be expressed by the third person plural subject agreement prefix alone (124a) or in combination with the noun *xèdzjé* ‘people’ (124b).

(124) a. *əy la menjevek ege ca parpar parpar parpar .*
j- lā mēndzēvēk =égē tsá párpār párpār párpār
 3PL.SBJ- make medicine =PL TOP different different different
 ‘They make remedies in different ways.’ (DE9-SN:2.1)

b. *Hejəye əy kéŋhelene ŋhwa mesleje naka*
xèdzè -jé j- ká- nxèl -ēnē nx^wā mētédzè nākā
 person -PL 3PL.SBJ- PFV- steal -3SG.IOBJ goat neighbour 1SG.POSS
aza .
āzá
 COMPL
 ‘People have stolen my neighbour's goat.’ (GE46-SE:4.11)

The first person plural inclusive subject prefix can also be used to express a type of impersonal meaning when it is referring to what people do in general (125).

(125) *Ata ŋtəra Welmbegem heje kazam gagəmay ey*
á tā ntrā wélmbègém xèdzé- ká- zàm gágmāj éj
 PREP1 on month Welmbegem 1INCL.SBJ- IPFV- eat cotton and
heje kara ŋgəzleŋ .
xèdzé- ká- rà ŋgʒèŋ
 1INCL.SBJ- IPFV- dig peanut
 ‘In January we harvest cotton and dig up peanuts.’ (LL29-SE:2)

5.2 Reflexive

According to Payne (1997: 198), a ‘prototypical reflexive construction is one in which the subject and the object are the same entity.’ A number of Central Chadic languages such as Gidar (Frajzyngier 2008: 166 & 176), Mina (Frajzyngier and Johnston 2005: 101 & 114), Hdi (Frajzyngier 2002: 195 & 197), Mbuko (Gravina 2001: 21), Muyang (Smith 2002: 10) and Merey (Gravina 2007: 13) use the word ‘body’ or some derivative thereof to code **both** the reflexive and the reciprocal. However in Buwal whilst ‘body’ is indeed used for reciprocal (see Section 5.3), the typical reflexive construction involves the noun *hā* ‘head’ followed by a possessive pronoun which matches the subject in person/number in the direct object position (126 a & b). This strategy appears to be common in West rather than Central Chadic languages being found in such languages as Miya (Schuh 1990: 240), Hausa (Newman 2000: 522) and Margi (Hoffmann 1963: 105).

- (126) a. *Hejəye ma mpam bay ege wese , əʝ*
 xèdzè -jé má= mpàm bāy = égē wēsé j̄-
 person -PL REL= look.for chiefdom =PL DEM.DIST 3PL.SBJ-
ghwalza ha tata .
 ɣ^wāl -zā xā tātá
 show -TRANS **head** 3PL.POSS
 ‘Those people who looked to be chief, **they** introduced **themselves**.’
 (NH7-SN:3.10)
- b. *Kábawza ha anta aza η gadaŋ* .
 ká- bāw -zā xā āntā āzá ń gádāŋ
 PRV- change -TRANS **head** 3SG.POSS COMPL PREP2 idiot
 ‘**He** changed **himself** into an idiot.’
 (HT6-SN:9.6)

Reflexives which code coreferentially of the subject and the indirect object are coded by the autobenefactive suffix *-bā* (see Section 2.3.5) plus an independent pronoun occurring in the indirect object position (127). A similar construction was found in Hdi by Frajzyngier (2002: 196).

- (127) *Sa dāw η səkamba ηhwa η sa* .
 sā- dāw ń skām -bā nX^wā ń sā
 1SG.SBJ- want INF buy -BEN goat PREP2 1SG
 ‘**I** want to buy a goat **for myself**.’
 (GE46-SE:11.2)

Emphatic reflexives which emphasise ‘that a reference is to a particular reference alone’ (Payne 1997: 203) are expressed in Buwal using the noun *hā* ‘head’ followed by a possessive pronoun and preceded by the preposition *á* (128).

- (128) A *lam ləwec a ha anta* .
 ā- lām lwèts á xā āntā
 3SG.SBJ- build fireplace **PREP1** **head** 3SG.POSS
 ‘He builds a fireplace **himself**.’ (GE49-SE:2)

5.3 Reciprocal

Payne (1997: 200-201) defines a prototypical reciprocal clause as one ‘in which two participants equally act upon each other.’ This type of reciprocal is often called ‘strong’ (Evans 2008: 40). In Buwal strong reciprocals are expressed by simply using the noun *k^wsàm* ‘body’ in the direct object position (129 a & b). This has also been found to be the case in such Central Chadic languages as Moloko (Friesen and Mamalis 2004, 41), Muyang (Smith 2002, 10) and Mbuko (Gravina 2001b, 21).

- (129) a. *əy kaŋcakw kusam* .
 ǰ- kā- ntsàk^w k^wsàm
 3PL.SBJ- IPFV- push **body**
 ‘...they were pushing **each other**.’ (NH3-SN:4.2)
- b. *ŋgama ege əy kaŋgaz kusam* .
 ŋgámà =égē ǰ- kā- ŋgàz k^wsàm
 friend =PL 3PL.SBJ- IPFV- advise **body**
 ‘Friends advise **each other**.’ (LL47-SE:16)

If there are more than two people in the group *k^wsàm* ‘body’ is followed by the plural marker *égē* (130).

- (130) *əy ya kusam ege* .
 ǰ- jā k^wsàm =égē
 3PL.SBJ- invite **body** =PL
 ‘They invite **each other**.’ (LL47-SE:4)

This construction can also be used for asymmetrical reciprocity in which mutual relations do not hold (Evans 2008: 40) as in example (131) where only one person is chasing or following.

- (131) *əy katatak kusam* .
 ǰ- kā- tātāk k^wsàm
 3PL.SBJ- IPFV- chase **body**
 ‘They are chasing **each other**.’ (GE49-SE:16)

Indirect reciprocity, in which the subject and the indirect object are coreferential, is expressed by the phrase *ŋ t̄abā t̄atá* ‘amongst them’ (132).

(132)	<i>əy</i>	<i>kaval</i>	<i>gemtəye</i>	<i>ŋ</i>	<i>taba</i>	<i>tata</i>	.
	ǰ-	kā-	vəl	gāmtāk	-jé	ŋ	t̄abā t̄atá
	3PL.SBJ-	IPFV-	give	chicken	-PL	PREP2	middle 3PL.POSS
	‘They give chickens to each other. ’						(GE49-SE:18)

6. Abbreviations

ACC	Accomplishment
ACT	Action
ANT	Anticipation
ASP	Aspect
BEN	Autobenefactive
C	Consonant
COL	Collective
COMPL	Completive
CONT	Contrast
COP	Copula
DEF	Definite
DEM	Demonstrative
DET	Determiner
DIST	Distal
DOBJ	Direct object
EXIST	Exisitional
FAM	Familiar
fr.	French
ful.	Fulfulde
FUT	Future
HORT	Hortative
IPFV	Imperfective
IND	Indefinite
INF	Infinitive
IOBJ	Indirect object
JUS	Jussive
L	Low tone
M	Mid tone
MED	Medial
NEG	Negation
NOM	Nominalisation
PART	Participle
PAT	Patient
PFV	Perfective
PL	Plural
POSS	Possessive
PREP	Preposition
PROX	Proximal
PSP	Possessive subject pronoun
Q	Interrogative
REL	Relative marker

TOP	Topic marker
SBJ	Subject
SBJV	Subjunctive marker
SG	Singular
SIM	Similtaneity
IT	Itive
STAT	Stative pronoun
TNS	Tense
TOP	Topic
TRANS	Transitivity
V	Vowel
VNT	Ventive
VPt	Verbal particle
1DUEL	First person dual
1EXCL	First person exclusive
1INCL	First person inclusive
1SG	First person singular
2SG	Second person sungular
2PL	Second person plural
3SG	Third person singular
3PL	Third person plural

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