

A GRAMMATICAL DESCRIPTION OF THE BUWAL LANGUAGE

Submitted by

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List of Abbreviations

1	1 st person
2	2 nd person
3	3 rd person
ACC	Accomplishment
ACT	Action
ADD	Additive
ANT	Anticipation
ASP	Aspect
ASS	Associative
BEN	Autobenefactive
C	Consonant
COL	Collective
COMPL	Completive
CONF	Confirmation
CONT	Contrastive
COP	Copula
DEF	Definite
DEM	Demonstrative
DET	Determiner
DIST	Distal
DOBJ	Direct object
DUAL	Dual
DUB	Dubitative
EMPH	Emphatic
EXCL	Exclusive
EXIST	Exisistential
FAM	Familiar
GEN	Genitive
fr.	French
ful.	Fulfulde
FUT	Future
HORT	Hortative
IMP	Imperative
INCL	Inclusive
IND	Indefinite
INF	Infinitive

IOBJ	Indirect object
IPFV	Imperfective
IT	Itive
JUS	Jussive
L	Low tone
M	Mid tone
MED	Medial
NEG	Negation
NOM	Nominalisation
PART	Participle
PAT	Patient
PFV	Perfective
PL	Plural
POL	Politeness
POSS	Possessive
PREP	Preposition
PROX	Proximal
PSP	Possessive subject pronoun
Q	Question
QUOT	Quotative
REL	Relative marker
RES	Resumptive
TOP	Topic marker
SBJ	Subject
SG	Singular
SIM	Similtaneity
SPEC	Speculative
INF	Infinitive
IT	Itive
STAT	Stative
TAG	Tag question
TNS	Tense
TOP	Topic
TRANS	Transitivity
V	Vowel
VNT	Ventive
VPt	Verbal particle

Summary

Buwal is a previously little-studied language spoken in the Far North Region of Cameroon, Africa. It belongs to the Central branch of the Chadic language family. There are approximately 10 000 speakers of this language. This thesis is a description of the grammar of Buwal with a particular focus on the phonology, morphology and syntax of various linguistic units such as words, phrases and clauses. From a cross-linguistic and an areal perspective, Buwal exhibits a number of interesting features. As is typical of Chadic languages, Buwal has a large number of consonant phonemes and a reduced vowel system. It could even be argued that Buwal only has one underlying vowel. Buwal exhibits very little nominal morphology. In contrast verbs are often morphologically complex, categories being expressed including tense/aspect, direction, transitivity and auto-benefactive. Core arguments are also expressed on the verb through agreement marking. The majority of Buwal verbs are ambitransitive in that they are able to occur in both intransitive and transitive clauses with no modification of the verb stem. The basic word order of Buwal clauses is SVO/SV, with an indirect object following a direct object. Any clause can have an indirect object as it can play a number of semantic roles such as recipient, benefactive, malefactive, patient and even goal. Negation in Buwal is expressed with a clause final negative particle, a strong areal feature in Central Africa. Also common to the area are sentence final question words which Buwal also has.

This thesis describes all major aspects of the Buwal language, including the phonology, open and closed word classes, noun phrases, TAM and spatial marking, prepositional phrases, declarative and non-declarative clauses, clause combining and pragmatic structures. Numerous examples are given, both elicited and from natural spoken texts. A Buwal lexicon and three interlinearised texts are provided in the appendix.

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This thesis could not have been completed without the assistance and support of many people.

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Statement of Authorship

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis submitted for the award of any other degree or diploma.

No other person's work has been used without due acknowledgement in the main text of the thesis.

The thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

All research procedures reported in the thesis were approved by the Faculty of Humanities and Social Sciences Ethics committee (FHEC No. #947-11). The research was also approved by the Ministry of Scientific Research and Innovation (MINRESI) of the Cameroon government (Permit number: 090 / MINRESI / B00 / C00 / C10 / C12). Fieldwork in the Buwal area was approved by local community leaders, including his excellency Alhaji Haman Mokol, the chief of Gadala, as well as the *Comité de langue et culture Buwal* ('Buwal Language and Culture Committee').

Signed: *M. Viljoen*

Date: *22 / 03 / 13*

Chapter 1 Introduction

The Buwal people live in the Mandara mountains in the Far North Region of Cameroon. The majority live in and near the village Gadala, which spreads around a number of rocky hills and is formed of small neighbourhoods interspersed with fields in which the people grow food. Although only 10km from the main paved road that links the regional capital Maroua with the town of Mokolo, the Buwal spend the majority of time in and near the language area, forming a close-knit community. In recent decades however, the Buwal have become increasingly exposed to the outside world with the introduction of primary schools, churches, medical clinics and most recently electricity to the area. Large markets nearby allow the Buwal to interact with people from other ethnic groups and greater ease of travel has given some the opportunity to travel further afield, even to the large cities of Yaounde and Doula in the south.

To the west of the Buwal live the Gavar people. There has been some uncertainty in the past as to whether the Gavar and the Buwal are distinct ethnic groups. The Mandara Mountains website (www.mandara.info), which provides a bibliography of literature concerning the area and its peoples, associates the two groups and states that ‘it remains unclear whether the Buwal must be seen as a sub-group or whether they form an ethnic group on their own.’ The Buwal and the Gavar however, certainly see themselves as separate ethnic groups even though their respective languages are similar (see Section 1.1.4 for further discussion on this point).

Very little study has been done previously on the Buwal language. This grammar is the first detailed description of the language. As such it should prove of great interest to academic linguists. Furthermore, my hope is that this work will assist the Buwal people in their efforts in developing and preserving their language and culture and that the recognition of their unique identity will give them confidence in finding their place in an increasingly globalised world.

This introduction provides some general information concerning the Buwal language (Section 1.1) and the Buwal people (Section 1.2). The research methodology used is described briefly in Section 1.3. A typological profile of the Buwal language (Section 1.4) summarises some of the interesting features of the language. Finally Section 1.5 gives an outline of the organisation of the thesis.

1.1 The Buwal language

1.1.1 Location and number of speakers

The Buwal language is spoken in and around the village of Gadala which is located in the Far North Region of Cameroon, Mayo-Tsanaga Division, Mokolo Subdivision (see Map 1.1).



Map 1.1: Location of Buwal language area in Cameroon

The majority of Buwal speakers live in or near Gadala but there are smaller populations comprised of a few hundred people who have in recent times settled in towns such as Maroua, Garoua and the cities of Doula and Yaounde, the capital of Cameroon.



Map 1.2: Location of Buwal language area in the Mandara mountains

It is difficult to obtain accurate figures for the number of speakers of Buwal. The SIL Ethnologue (Lewis 2009) gives an 2001 estimate of 7, 000 speakers. With population growth, today there could be up to 10, 000 speakers.

1.1.2 Name of language

The Buwal people refer to their village by the name *Buwal* and their language as *Ma Buwal* (lit. Buwal language). It is said that the name comes from the Buwal verb *baw* ‘to change’ as historically different groups of people came from a variety of directions to settle in the area and changed to become one people. The village has the alternate name *Gadala*. According to Deli Benjamin, the chief’s secretary, the name *Gadala* comes from a Fulfulde word *gadal* meaning ‘magic potion or bark’. The conquering Fulbe gave the mountain this name as the potion saved the Buwal people when the Fulbe tried to impose Islam on them (M. R. T Viljoen 2008: 14). Eventually this became the name by which the village is known by the government administration. Many outsiders also refer to the language as *Gadala* .

1.1.3 Language classification

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, Mbedam (actually pronounced *mbudum*), Mina and Daba. According to Gravina's (2007c: 41) more recent classification of the Biu-Mandara A languages, the Daba subgroup is part of the Centre group of the South branch. The Buwal language is largely uniform throughout the language area but there are some minor variations in the lexicon from place to place.

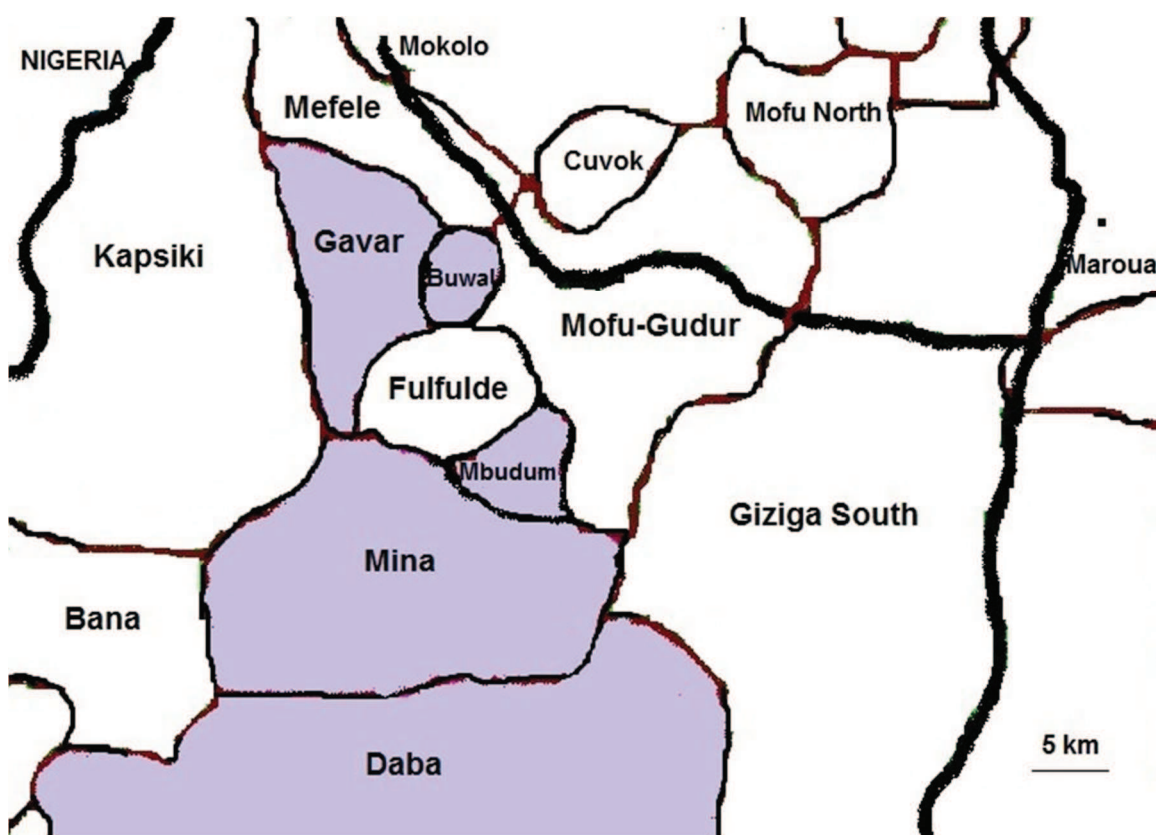
1.1.4 Linguistic relationship with Gavar

There has been some discussion over the years as to whether Gavar and Buwal are distinct languages or sister dialects. Dieu and Barreteau (2000: 65) state that Buwal and Gavar are 82% lexicostatistically 'similar'. In 2000 Brye of SIL Cameroon carried out intelligibility testing of the two languages. He discovered that there was 90% lexicostatistical similarity of a wordlist of 126 words. It was also found that each group could understand about 80-82% of the others' speech (Brye 2000: 8). The present author has observed that when a Gavar person and a Buwal person are together each can speak their own language with the other person understanding. However, it is not clear to what extent intercomprehension is due to the high degree of contact between the two languages. Brye's study was conducted in only one location within each of the language areas, not at varying distances from the language border. A study of this design would help to clarify the issue of relatedness and mutual comprehension. Phonological studies have shown some significant differences in the phonological systems of the two languages (Viljoen 2009; Noukeu 2004). The author has also observed some differences in the lexicon and the grammar. Further study of the Gavar language is needed in order to clarify its relationship with Buwal.

1.1.5 Sociolinguistic situation

1.1.5.1 Multilingualism

The Buwal live in a multilingual environment. They are surrounded by a number of other Chadic languages (see Map 1.3 below). The languages which have the most contact and influence are Gavar to the west and Mofu-Gudur to the east. Fulfulde, the language of the conquering Fulbe (see section 1.2.1 below) has become the most prominent language of wider communication in the area, whilst French is the language of education and government administration.



Map 1.3: Buwal and neighbouring languages (members of the Daba group shaded)

Each of these languages is used in different domains. Buwal is the language predominantly used in the home and around the village, although Buwal who have Islamicised will switch to using Fulfulde in the home as this is seen as the Muslim language. Buwal is commonly used by a group of Buwal speaking together but if someone is present who is not Buwal, Fulfulde or even French will be used.

Fulfulde is a widely known language used in the bigger markets frequented by the Buwal, notably at Zamay, Gawar Winde and Mokolo, where a mixture of ethnic groups can be found. It is also the language of the Baptist and Catholic churches, where services are usually conducted in Fulfulde with some interpretation into Buwal, using the Fulfulde translation of the bible. In the Baptist church in Gadala, however, some parts of the service such as the announcements and sermon may be done in Buwal first with translation given into Fulfulde if needed.

French is the language of education, however as education levels in the area are low, the number of competent French speakers is small and many of these people have moved out of the area to find work. There are currently very few women who know French at all. This may change as the number of children, including girls, who are attending school is increasing.

There is a certain amount of bilingualism with Mofu-Gudur amongst the people to the east of the area where the Buwal and Mofu live side by side and often inter-marry. The Buwal can understand Mbudum to a certain extent but cannot speak it. In recent years a number of Mafa families have moved into the area looking for farming land. However, as they are a minority, the tendency is for them to either learn Buwal or to use Fulfulde with Buwal speakers.

1.1.5.2 Language attitudes

The Buwal generally have a positive attitude towards their language. For the majority of the Buwal it is an intrinsic part of their identity, they enjoy speaking it and they cannot imagine a time when the language may die out. Exceptions are some Buwal who have Islamicised and so want their children to speak Fulfulde, and those who have moved to large cities, who wish for their children to learn French. For example, a young Buwal couple who had been living in Yaounde, whilst on a visit to the village typically spoke to their two-year old daughter in French rather than Buwal.

There is a small but growing interest within the Buwal community in the development of written materials in the language. Much of this interest at present is found amongst those with some education or who are active in the church. In recent years the Buwal have formed two committees to oversee this work: the *Comité de langue est culture buwal*

‘Committee of the Buwal language and culture’ (COLACBU) and the *Association des églises buwals pour la traduction de la Bible* ‘Association of Buwal churches for the translation of the Bible’ (ASEBTRAB). These committees were recognised by the state in the second half of 2011.

1.1.5.3 Literacy

Literacy rates in the area are generally low and are higher amongst men than women. Even those who know how to read and write do not use this skill frequently in their daily lives. The Buwal generally have few books or other literature in their homes. Those children who go to school do not own textbooks but copy notes from the blackboard into exercise books. Christians may have a copy of the Bible in either French or Fulfulde, with the Fulfulde Bible being more common. Cotton growers (see Section 1.2.3) at times read the newspaper produced by SODECOTON (the local cotton company) which is available in both French and Fulfulde. When people write notes to each other French is often used particularly if both have had some education, but Fulfulde is also chosen sometimes. Many people in the village now have mobile phones but it is not clear how popular texting currently is. In the past SODECOTON has been involved in Fulfulde literacy and the Catholic church in French literacy in the area.

An orthography for the Buwal language was developed by the author in consultation with the Buwal community in recent years. See Section 2.8 for a more detailed description of the process used. Literacy in Buwal has been increasing and a number of small books have been produced in the language. Up to this point the main literacy teaching materials available have been transition materials, allowing those who already know how to read French and Fulfulde to transition to reading Buwal. A number of classes have been held under the supervision of COLACBU.

1.1.5.4 Language viability

At present the Buwal language is reasonably strong. It is still the first language learnt by children in the village. The major threat to the language at this time is Fulfulde which is widely spoken. Borrowing of both lexical and grammatical items from Fulfulde into Buwal is taking place. In terms of grammatical items, this is occurring mainly at the level of clause linking devices which either fill a gap or replace a more complex structure.

Often lexical forms borrowed from Fulfulde relate to items which have been recently introduced (e.g. *dala* ‘money’, *derewel* ‘paper, book’). However there are other Buwal lexemes which are being replaced by Fulfulde terms (e.g. *baba* ‘father’, *nebam* ‘oil’). French is not a major threat because education levels are low. Unless people go on to further studies or into teaching there are few opportunities to use the language. The recent introduction of electricity to the village may have some effect on the language if it results in greater consumption of media in the languages of wider communication.

Those Buwal who have migrated to large towns are more motivated to use of languages of wider communication rather than those in the village, due to increased interaction with speakers of other languages. The effect of this displacement is mitigated somewhat by the fact the Buwal tend to live in the same neighbourhood and at times form ethnic associations for mutual support.

1.1.6 Previous linguistic research

There has been very little previous research done 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 Seguin of SIL Cameroon (Seguin 1992) and intelligibility testing with Gavar was carried out by Brye (2000). Two Masters theses on the phonology and nominal morphology of Gavar have been completed in recent times by students at the University of Yaounde I, Noukeu (2004) and Tchikoua (2006) respectively.

The author, as a member of SIL Cameroon, began language work with her family in the Buwal area in mid 2004. This was at the request of the Buwal community and with the permission of the Ministry of Scientific Research and Innovation (MINRESI) of the Cameroonian government. The results of her linguistic research include a phonological description of Buwal (M. H. Viljoen 2009a), orthography statements for the Buwal and Gavar languages (M. H. Viljoen 2009b; M. H. Viljoen et al 2009) and a description of the Buwal verb phrase (M. H. Viljoen 2012). All of these publications were submitted to MINRESI and are available on the SIL Cameroon website. In August 2012, she also presented a paper entitled ‘Negation in Buwal: Order, form and meaning’ at the 7th World Congress of African Linguistics, and has since submitted this paper for publication.

During this time, her husband also produced two ethnographic papers, the first on Buwal names and their usage (M. R. T Viljoen 2005), and the second, a local background survey (M. R. T. Viljoen 2008).

In the wider area, extensive descriptive work has been done by various linguists on Chadic languages, from the West and Central branches in particular. Of these linguists Zygmunt Frajzyngier has been the most prolific. In conjunction with Eric Johnston he wrote a grammar of Mina (2005), a Central Chadic language belonging to the same sub-group as Buwal. Frajzyngier has also published grammars of other Central Chadic languages such as Hdi (2002) and Gidar (2008), the West Chadic languages of Pero (1989) and Mupun (1993), and the East Chadic language of Lele (2001). He has produced numerous articles and books on various grammatical topics with regard to the Chadic language family (1977, 1991, 1996, 2004 & 2011). Daniel Barreteau was another prominent Chadicist whose main interest was the language of Mofu-Gudur (1977 & 1988), but who also published a lexicon of Mafa with Yves Le Bleis (1990). Another important figure in Chadic linguistics, Ekkehard Wolff published a grammar of Lamang (1983a), a Central Chadic language belonging to the same sub-group as Hdi, but spoken in Nigeria. Carl Hoffman's grammar of Margi (1963), also a Central Chadic language, is well known.

Over the years a number of SIL linguists have written descriptions of different aspects of the phonology and grammar of Central Chadic languages spoken in Cameroon. Concerning the languages in proximity to Buwal, Ruth Lienhard and colleagues produced a number of papers on Daba (1975, 1978, 1982 & 1986) while Kenneth Hollingsworth (1991, 1995 & 2004) and James Pohligh (1992) wrote about Mofu-Gudur. The Cameroonian linguist, Ndokobai Dadak, described the verbal morphology of Cuvok for his Masters thesis (2006) and also produced an orthography statement for Mbudum in 2012. A sociolinguistic survey was carried out for Mina by Bradley and Tammy Harvey in 1992 and in the same year James Pohligh published a preliminary statement of the phonemes of the language. Further afield, Erica Hoffman (1990) wrote an preliminary phonology of Bana for her Masters thesis. Linguistic studies have also been published by William Kinnaird on Ouldeme (1999) and Vame (2006), Stephen Anderson and Jeanette Swackhammer (1981) and Elizabeth Jarvis (1982) on Podoko, Catherine Bow (1997 a & b) and Dianne Friesen and Megan Mamalis (2004) on Moloko, Richard Gravina on Mbuko (1999, 2001 a & b, 2003) and Merey (2007a), Joy Ruff on Lagwan (2005), Tony

Smith on Muyang (1999, 2002, 2003), Beat Haller and John Watters on Zulgo (1984) and Anne Whaley Pohl and James Pohl on Mandara (1994). Another researcher, David Smith, described the Kapsiki language for his PhD dissertation (1969). In 2001 James Roberts published a very helpful overview of the phonological features of Central Chadic languages.

While the literature on Central Chadic languages is given more attention in this thesis, some reference is made to descriptions of West Chadic languages. The largest and most studied of these is Hausa. Paul Newman published a reference grammar of this language in 2000 and has also written various books and articles concerning Chadic languages in general (1968, 1977 & 1990). Other researchers who have also studied Hausa include Mahamane Abdoulaye (1992), Georg Ziegelmeyer (2009) and Philip Jagger (1978). Apart from the grammars written by Zygmunt Frajzyngier mentioned above, other descriptions of West Chadic languages referred to in this thesis include Birgit Hellwig's grammar of Goemai (2011a) and Russel Schuh's grammar of Miya (1998). The East Chadic branch appears to be less studied than the Central or West. However, Mary Pearce (1998/99 & 2006) has done some detailed work on tone and the metrical structure in Kera.

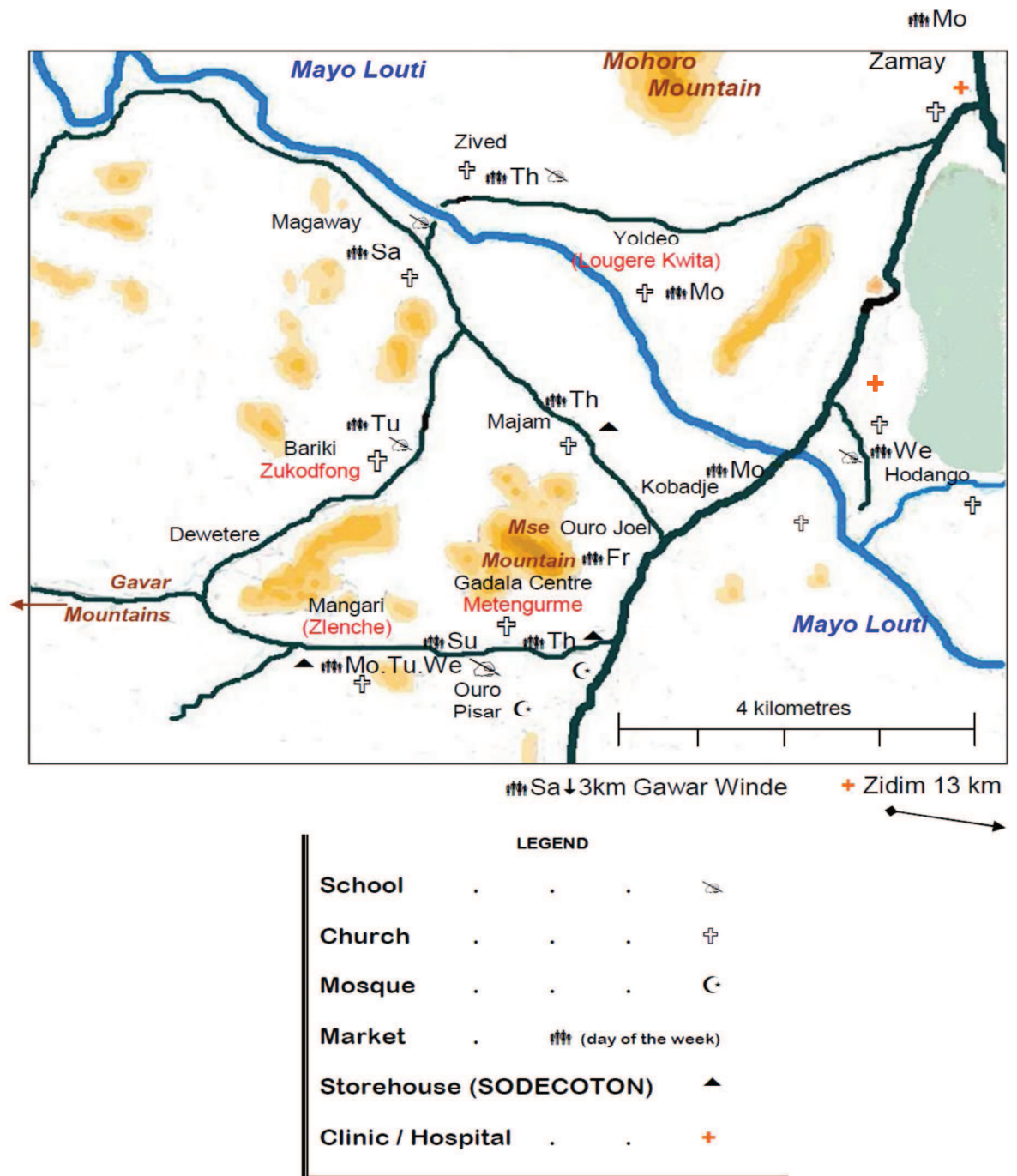
The most prominent non-Chadic language spoken in the area is Fulfulde. In 1974, Dominique Noye produced a language learning book of the dialect spoken in the north of Cameroon, which contains a small lexicon. Zoubko (1996) published a more extensive lexicon. Leslie Stennes (1961) produced a brief study of Fulfulde syntax. Regarding Niger-Congo languages spoken in the vicinity, in this thesis reference is made to Gary Sweetman's (1981) comparative study of Fali dialects and Stefan Elders' (2000) grammar of Mundung.

1.2 The Buwal people

This section gives a brief description of the life and society of the Buwal people. Whilst there are written materials available which describe the general history and culture of the peoples of the North of Cameroon (Boutrais 1984; Hallaire 1991), very little can be found concerning the Buwal or the village of Gadala. Consequently, unless otherwise stated, much of the information given here has come from personal observation on the part of the author or from Buwal informants.

A short history of the Buwal people is given in Section 1.2.1. Section 1.2.2 describes the social structures found in relation to authority, clans, and marriage. Economic practises are dealt with in Section 1.2.3, religion in Section 1.2.4, education in Section 1.2.5 and finally health in Section 1.2.6.

The map of the village and its environs provided in Map 1.4 below will help orient the reader to the various places named in the sections which follow and throughout this thesis. A number of places have more than one name. Alternative names are given in red. The dark lines represent roads and the lighter lines are rivers.



Map 1.4: The village of Gadala and its environs (adapted from M. R. T. Viljoen 2008: 16-17)

1.2.1 History

It is not known exactly how long the Buwal have been settled in the language area. It is said that the first clan to settle there were the *Ghəlay* of whom now very few remain. Later other clans came from different directions to form one group. It is unclear who the original chiefs of Buwal were. There may have been minor chiefs who ruled over particular sections of the area. Certainly many of the clan names are compounds containing the word *bay* 'chief'. Stories are told, however, of conflicts between the *Mazkad* clan and the *Mazay* who came from the Mafa area and sought power. Eventually the *Mazay* prevailed with the help of their relatives, the *Ndelem*, and since then all the Buwal chiefs have come from this clan. The list of *Mazay* chiefs goes back nine generations (M. R. T. Viljoen 2008: 14). Most frequently the chieftom was passed down from father to son, or if not, another member of the clan. When the most recent chief was chosen in 2006 however, there was a departure from tradition as he was elected from among four candidates by the twelve sub-chiefs of the village. These candidates were not all *Mazay*. The successful candidate was *Mazay* and so the tradition of *Mazay* chiefs was preserved.

It seems the Buwal were present when the conquering Fulbe arrived in the 19th century. These Fulbe or Peule were part of the nomadic, Muslim Fulani peoples who spread out across large parts of West Africa. Like many small local tribes in the north of Cameroon the Buwal took refuge in a small group of mountains where they built stone walls to defend themselves against the attacks of the Fulbe who would come on horseback to kill and take slaves. It seems the taking of slaves continued well into the 20th century (www.mandaras.info/HistoryOfSlavery.html). The Fulbe established chiefdoms across the northern part of Cameroon, the nearest to Buwal being at Gawar.

During the period of European colonisation the Buwal continued their traditional way of life in the hills. A story often told reports that at one point white men had heard of Buwal and were looking for the area in order to establish an administrative centre there. When the Buwal heard they were coming they practised some type of magic in order to prevent the white men from finding their mountains. The white men travelled on and eventually established themselves at Mokolo. It is also said that Europeans attempted to establish

themselves in the part of the village called Bariki (see Map 1.4), before being driven away by the hostile Buwal.

The second half of the 20th century brought significant change to the Buwal people, although it was not embraced with much enthusiasm in the early stages. When attempts to introduce schools to the area were made, the Buwal hid their children in caves in the mountains. After Cameroon gained independence in 1960, the Buwal were told they must come down from the mountains and live on the plain or in the valleys. The chief of the time resisted this and was put in prison for a couple of years. When he was released he went to live at Kobadje (see Map 1.4). Meanwhile the other Buwal began to descend from the mountain. They were told to give up wearing traditional animal skins and ornamentation and wear clothes. The entry of the Buwal into the modern world had begun.

1.2.2 Buwal society

1.2.2.1 Authority structures

The authority structures which affect the Buwal can be divided into two broad categories: governmental and traditional. In terms of the national government, Gadala is under the *prefet* (prefect) in charge of the Division of Mayo-Tsanaga, and the *sous-prefet* (sub-prefect) who is responsible for the Mokolo Subdivision. Both of these officials are based in Mokolo. Also found in Mokolo is the police station *gendarmerie* where the Buwal go if they have a problem which surpasses local authority structures.

Over the village of Gadala itself is the chief of Gadala. He is often referred to as the *lawan*, a term borrowed from Fulfulde meaning ‘canton chief’ (Noye 1974: 334). He is a third degree chief and so is under the authority of a higher chief at Mokolo. One of his roles is to hold judgements in order to settle local disputes. He has the power to fine people. To help him in his work there are twelve sub chiefs or *jawro* (Noye 1974: 330) under him, each in charge of a particular neighbourhood. He has other helpers, who the Buwal call *madarlay*^w, who run messages for him, act as security, gather taxes and so forth. Outside Gadala itself, some Buwal live under the authority of the chief of Zamay or the chief of Gawar (M. R. T. Viljoen 2008: 7).

1.2.2.2 Clans

Buwal society is divided into around thirty clan groups (see Viljoen (2008: 16-17) for a full list), the most notable being the Mazay clan from which the chiefs have traditionally come. Members of different clans tend to be located in different parts of the village.

These clans are very important. Each clan has three names: an ordinary name, a male praise (or honorific) name and a female praise name. People are most often addressed by their clan praise name. No marriage or sexual relations are permitted within a clan or with a blood relation. The society is patrilineal in that a child belongs to the father's clan. If the wife leaves the husband, the child will often remain with the father or his relatives.

1.2.2.3 Marriage

Polygamy is widely practised with many men having two or even up to five wives. It seems that traditionally marriages were arranged, the groom's family paying the bride price to the bride's family in advance. These days, however, the most common mode of marriage is elopement. A man will spend time flattering a girl and convincing her to run away with him. Then one night, usually without telling her parents, the girl will leave their compound to join her fiancé (*marpa*) who will then hide her somewhere amongst his relations. A representative of his family will then be sent to the girl's family to negotiate a bride price (*sbe*). There is no marriage ceremony as such. The marriage is official once the bride price has been paid. The bride usually stays hidden away for a month or two and is looked after by a female relation of the groom (*man dma* 'mother of the bride') who feeds her well, washes her with hot water and gives her advice on how to be a good wife.

A girl will normally be married by about twenty and may get married at fifteen or sixteen. Men tend to be a bit older when they first marry. Young married couples often live at first in the compound of the husband's family. Later they may move out and establish a new compound of their own.

Divorce is quite common in Buwal society at present, with wives leaving if they are unhappy or husbands driving away their wives. Any new husband of a previously married woman is required to pay her former husband the bride price. It is possible for a woman to buy her own freedom by paying the bride price herself. She will then live on her own. Such a woman is called *wala uda* 'woman of food'.

1.2.3 Economy

The majority of the Buwal are subsistence farmers, the major crops being sorghum, corn and peanuts. While primarily grown to meet their own needs, part of these crops will be sold for money. To supplement their diet various other crops are grown including rice, beans, Bambara peas, sweet potatoes, yams, pumpkins, okra, sesame and various green leafy vegetables. Certain Buwal will grow specialised crops such as soy and onions for money. The most widespread cash crop in the area is cotton. The cotton growing in the area is organised and overseen by SODECOTON, a Cameroonian cotton company. Seeds and chemicals are given to the cotton farmers on credit and then their cost subtracted from the final payment they receive. The cotton growers are organised into groups (or GICs) which cover a particular neighbourhood. Part of what is earned by a GIC goes into a fund administered by SODECOTON which may be used towards various community projects. In the last couple of years, however, cotton growing in the area has been greatly disturbed by the Nigerians who came over the border in late 2010 and early 2011 offering a much higher price for the cotton and tempted many people away from SODECOTON. This has led to a major rupture with SODECOTON and led to a decline of cotton growing in the area overall.

Farming in the Buwal area is not an easy task. It is mainly done by hand and is back-breaking work. Ploughing using ox or donkey drawn ploughs is common but represents the only regular recourse to mechanical assistance in the fields. Although some fields are close to home, the main fields are usually in the bush, a few kilometres away. Yields depend greatly on the rains, there being only one wet season lasting five months from around May to September. At times caterpillars are a problem. Later when the crops are ready to harvest it is not unknown for thieves to steal them or for herds of cattle to destroy them. This can lead to altercations between farmers and cattle herders.

The Buwal are also involved in raising small numbers of livestock such as sheep, goats, donkeys, chickens and ducks. Those who are better off may also have a number of cattle. The more cattle they have, the richer they are. The Buwal tend not to eat much meat and will mainly slaughter an animal on a special occasion. Otherwise animals are kept for further breeding, selling in the market, or in the case of cattle or donkeys, for farming.

Every day there is a market held in a different locality in the area. Big markets nearby which are frequented by the Buwal are held in Zamay on a Monday, Mokolo on a

Wednesday and Gawar Winde on a Saturday. The main Buwal market is held on Sunday. Smaller local markets on other days are generally social affairs where the main activity is not so much trade as the consumption of sorghum beer and doughnuts.

Some Buwal are involved in various other money making activities such as trade in the local markets and their homes, butchering, the operation of mills for grinding grain, beans or peanuts, school teaching, beer making, selling doughnuts, dressmaking, blacksmithing, potting, shepherding and labouring in other people's fields. There are a number of men who also work as nurses in the local clinic, nearby hospitals or further afield. As the number of motorbikes in the village grows, their owners can use them to make money through transportation. Many young men, seeking adventure and a better life, travel south to the cities of Yaounde and Douala. They often end up working as guards or as meat sellers.

1.2.4 Religion

There is a mixture of religions present in the Buwal area; the local form of African Traditional Religion (Section 1.2.4.1), Islam (Section 1.2.4.2) and Christianity (Section 1.2.4.3).

1.2.4.1 Traditional religion

Although the practise of traditional religion is decreasing due to the influence of Christianity and Islam as well as the modern world, it is still relatively strong, especially amongst the older generation. What follows is a brief account of the traditional religion.

Firstly there is a belief in a supreme God (*gaḥavaḥ*) who is associated with the sky.

Although he is addressed in prayer, more immediate concerns are taken up with the worship of ancestors and the appeasement of nature spirits.

When an old person dies an idol (*k^wle*) in the shape of a clay pot is made representing that person. The person is then prayed to and offerings of food or wine made to them by means of this pot. Similar idols may be made to represent twins, who are thought to have spiritual power for good or evil. The child who follows twins or someone born feet first is considered even more dangerous. Nature spirits (*welbe*) may also be represented by idols,

with offerings being made to them for their appeasement. Another type of idol (*wk̄af*) is made to guard a person's grain storehouse or sleeping hut against thieves or harmful spirits.

Sorcery is not common amongst the Buwal. However, certain people are believed to be sorcerers (*dafad*) from birth. These people are able to astral travel, and have spiritual powers or knowledge which may be used to harm people. There are certain people (*gamzak^w*) who are not sorcerers themselves but have special spiritual insight and are able to discern the identity of a sorcerer.

Blacksmiths (*mka*) are a significant group of people within traditional Buwal society. This group is made up of a number of different blacksmith clans. Women in this group work as potters. Both men and women are a special cast and are not permitted to intermarry with ordinary Buwal (*xtaj*). They may only marry people from other blacksmith clans. The men function as 'priests' within the traditional religion. One of their significant duties is as corpse-carriers (*metew mtse*) during traditional funerals. When an older person dies their body is covered with animal skins and three or four days later a funeral celebration is held in which the deceased is danced around in a sitting position on a blacksmith's shoulders. Male blacksmiths also practise divination (*lambal des*), which they use to inform inquirers about the cause of their problem and how to fix it. It may be that the person has offended a nature spirit and needs to make some kind of sacrifice such as a chicken, goat or something smaller like eggs or grain. Women blacksmiths are involved in mystical healing.

An important part of Buwal traditional religion are the festivals which take place during the dry season. A chief of ceremonies (*bāj k^wók^wàs*), who traditionally is a member of the chiefly clan of Mazay, presides over all these festivals. The first festival is Ghene (*yènè*) which lasts three days. It takes place in October (the first month of the Buwal calendar), just as the dry season is beginning. Ghene celebrates the crops which have been produced during the wet season. The actual harvest is celebrated in January or February with the major festival of Welmbegem (*welmbegem*), which lasts five days. This festival begins in

the early hours of the morning on the first day with people crying out on the mountain and twirling fire. Part of the festival concerns the 'kidnapping of brides' (*lambal dma*). Brides who were married the year before are 'kidnapped' by their families and later returned to their husbands along with much advice on how to be a good wife. After Welmbegem there come the smaller festivals of Hefchek (*xeftsek*) and Deken (*deken*) which concern only specific groups such as the blacksmiths or the chiefly clan.

Finally, in May, the major festival of Damara (*damara*) is held. The purpose of Damara is to prepare the way for the wet season and a new batch of crops. The idea is to rid the village of *damara* 'misfortune' which has accumulated as a result of the sins of its inhabitants. These sins are often of a sexual nature such as sexual relations with a clan member or with a blacksmith. The person who commits such a sin will have the thatched roof of their hut burned and be banished from the village for a year. It is thought that it will not rain if they are permitted to stay. During the festival some straw from the rooves of those who follow the traditions is symbolically burned to rid their home of *damara*. It is important that the Buwal celebrate this festival in a certain order with respect to other nearby ethnic groups as during the festival the *damara* is sent in onwards in a south-westerly direction.

In addition to various specific traditional ceremonies, these festivals are concerned with the drinking of sorghum beer (*mavaw*) along with dancing to the music of roving bands of musicians. These bands are made up of both men and women who sing and play different traditional instruments. The men play drums, such as the *kanḡaḡ* which is slung over the shoulder by means of a strap and is hit with a stick and the smaller *mzar* which carried underneath the arm and hit with the hand. They also play a stringed instrument which is plucked (*gadzambal*), a big flute with finger holes (*talḡ^waj*), a small flute with no holes (*mbawak*) and a horn (*zarak*). Women, on the other hand, have their own instruments such as the pan pipes (*ḡgeḡge*) and the shakers (*mek^wedk^wedē*). Each particular festival has its own songs and instruments.

Another important festival called the Gawla (*gawla*) was traditionally celebrated every two years. In the alternate year, it is celebrated by the Gavar. Its observance amongst the Buwal seems to be dying out. The Gawla took place in Gadala in 2010 but before this it had not occurred for about a decade. It is a type of rite of passage for older Buwal men (for the Gavar it is young men) and much of the ceremony takes place at a particular location in the hills.

1.2.4.2 Islam

Islam was introduced by the conquering Fulbe in the 19th century. The Buwal generally resisted Islamicisation with the result that today Muslims are a minority in the village of Gadala. Many of these Muslims are of Fulbe descent. However, there are some Buwal that have converted to Islam, most notably the current chief of Gadala. There are two small mosques in the village, one in Ouro Pisar (the Buwal refer to the Fulbe as ‘Pisar’) where the majority of Muslims live, and one near the chief’s compound in Ouro Lawan.

1.2.4.3 Christianity

Christianity was introduced to the area around 1974 when the UEBC (Union des Églises Baptistes du Cameroon) sent a Cameroonian evangelist to establish a church in Gadala Centre. This religion has had a significant impact on the younger generation. Early converts experienced some persecution from traditionalists and the first chapel was destroyed. A new church was then established in its current location. This church currently has 200-300 members. A number of smaller churches have been planted in the Buwal and Gavar area, those in Buwal being located at Bariki, Magaway, Majam, Yoldeo and Hodango. The Catholic church has also established itself in the area, although with smaller numbers than the Baptists. There are Catholic churches in Bariki, Zived and Hodango.

1.2.5 Education

Education levels in Buwal are relatively low, although the numbers of children attending school is increasing. There are no secondary schools in the language area. The biggest of the primary schools is a government school located in Gadala Centre which has between 300-400 students. There is another smaller government school located at Hodango.

Smaller parent run schools are located at Bariki, Magaway and Zived. These are usually staffed by 'volunteer' teachers who typically have no formal teaching qualifications but may have done a few years of high school. Local volunteer teachers also teach at the government schools, but the government sends in qualified teachers from the outside as well and pays their salaries. The language of instruction is French.

Although the number of students is increasing, the drop-out rate is high with many parents finding it difficult to pay even the small costs involved or preferring to send their children out to look after the herds. The numbers going to secondary school are even fewer as it is necessary to travel outside of the language area in order to attend. There are two or three secondary schools in Mokolo where a small number of Buwal young people attend. However, there is also much competition in order to gain entry to these schools and it is necessary to board, which adds further costs to the already higher fees. In recent years a new secondary school has opened in Zamay which has given more opportunity for young Buwal students to pursue their education. Very few Buwal have gone on to higher education. Several have done nursing or teaching training. Only one or two have gone on to university.

1.2.6 Health issues

Health issues are a major preoccupation for the Buwal people. There was great rejoicing in the village of Gadala in late 2008 when, after many years of lobbying the government, a medical clinic was opened in the village. Although only manned by nurses and providing basic treatment, it was a great improvement on the previous situation in which the Buwal had to travel 10km either to the Catholic clinic in Zamay or the government clinic in Gawar for medical treatment. For more serious matters the Buwal still need to travel to the mission hospitals run by the UEBC at Zidim and Mokong or the government hospital in Mokolo. Once a month a maternal health clinic is held in the village where mothers can bring their young children to be vaccinated and learn about good health practises. Occasionally there have also been campaigns providing mosquito nets to families with young children.

For many people the cost of travel to the various clinics and hospitals in addition to the cost of treatment discourages them from taking full advantage of these services. They may try traditional remedies, which work at times, or delay seeking medical attention

hoping the sickness will leave on its own. Others engage in traditional practises; visiting the blacksmiths and making sacrifices to appease the spirits who are thought to be causing the illness. Unfortunately people often delay too long and this is sometimes fatal. Malaria is particularly common and seems to be on the increase. It can be very dangerous, especially to young children, but other diseases just as threatening in the area include typhoid, meningitis, rabies and gastroenteritis. In 2010 there was a cholera epidemic in the wider area which affected some Buwal people. AIDS is also becoming an increasing problem in the area, especially as more young men travel to the cities, bringing it back with them.

1.3 Research Methodology

1.3.1 Fieldwork

The language data on which this study was based was collected during roughly five years the author spent living in the village of Gadala between 2004 and 2011. As mentioned in Section 1.1.6, the author and her family, as members of SIL Cameroon, began language work in the Buwal area at the request of the Buwal community. Having observed various language development projects in neighbouring communities, there was enthusiasm amongst certain Buwal leaders that similar work should be done in their language. They sought help in the development of an orthography, in the production of literacy materials and other literature. The Buwal Christians also had a keen interest in translating the Bible into their language. The aim of the project has been to train and equip local people as far as possible in the skills that they need to manage the development of their own language, with the SIL members moving more and more into an advisory role. With this view in mind, the community was encouraged early on to form a language committee to oversee the work. Major decisions on the orthography were made by this group and this committee currently organises the literacy efforts and the sale of books in the Buwal language. Later, a committee of church leaders was formed to oversee the work of Bible translation.

Initially the main focus of the author was on language learning and this was done largely with the help of one adult male language informant (age early 30s). Participant observation also took place along with conversation practise with other members of the community, both men and women. Later some linguistic analysis was done and a

provisional orthography was devised for the Buwal language (see Section 2.8 for more details concerning this process). Some small books were produced.

In 2010 the author was given the opportunity to write a description of the grammar of Buwal in order to fulfil the requirements for a PhD in research at La Trobe University in Melbourne, Australia. As part of these studies a six month field trip to collect more language data, funded by the university, was made to the area in the second half of 2011. A further month-long trip to Cameroon was made in August-September 2012. The purpose of this trip was two-fold: to participate in the 7th World Congress of African Linguistics and to collect any last language data needed for the thesis.

During the field trips in 2011 and 2012 the number of regular language informants increased and involved four men and one woman. Two of the men were aged in their late twenties and the other men and the woman were aged between 30-45. The informants were drawn from among those friends who had previously assisted with the language work and who showed interest and aptitude. All of these informants were from Gadala Centre (see Map 1.4). The men had had some high school education and knew French. The woman had had no schooling and did not speak French.

Different types of language data were collected such as (i) lexical items, (ii) elicited examples and (iii) natural texts.

(i) Lexical items

The sources of the lexical items recorded for this study were natural texts, participant observation and language sessions. Informants were asked to give example sentences for each lexical item once it was identified. Both the lexical items on their own and the example sentences were incorporated into the lexicon. The Buwal lexicon compiled in conjunction with this research currently has close to three thousand entries.

(ii) Elicited examples

Examples of specific grammatical structures were elicited. Often an example of a particular structure based on natural texts or observation was given to the informant and he or she was asked to provide similar examples. Direct translation was avoided as much as possible. Informants were questioned at times concerning their intuitions about the language, what can or cannot be said and in which types of situations certain utterances

may be said. These examples and explanations were written in field notes and some were recorded as sound recordings. In order to investigate the tense/aspect system of Buwal an adapted version of the questionnaires devised by Dahl (2000: 789-815) were used. The Buwal demonstrative system was investigated using an adaptation of the ‘Hidden colour-chips task’ devised by Enfield and Bohnemeyer (2001) for the Max Planck Institute for Psycholinguistics.

(iii) Natural texts

Ninety-nine natural texts of varying lengths and genres have been collected. The majority of these were recorded and then transcribed. However, six of the texts were written by native speakers to put in a book for those learning to read the language. Although many of the texts came from regular language informants, a significant number were provided by other members of the community, the majority being from Gadala Centre. A summary of the number of informants who provided texts according to their age and gender is given in Table 1.1 below.

Table 1.1: Summary of number of Buwal informants providing texts

Gender/Age	<30yrs	30-45yrs	>45yrs
Male	3	9	2
Female	2	2	3
Total	5	11	5

Table 1.2 below summarises the different genres of texts that were collected, their codes and the number of each type in the corpus. Three examples of interlinearised texts are given in Appendix A.

Table 1.2: Summary of genres of Buwal texts

Genre	Code	Number
Conversation	C	18
Descriptive exposition	DE	21
Descriptive procedural	DP	13
Hortatory	HT	8
Narrative fiction	NF	7
Narrative history	NH	16
Prayer	BH	5
Prescriptive procedural	PP	6
Projection	EP	1
Traditional narrative	TN	4

1.3.2 Data Recording

During the language learning phase audio recordings were made using cassettes. These recordings have since been digitalised. Later digital recordings were made using small Sony ICD-PX series digital recorders. From 2011 the majority of recordings have been made with a Zoom H4N digital recorder. Occasionally a Zoom H1 recorder was used. In 2011 a number of videos were also made using a Zoom Q3 HD video recorder.

1.3.3 Data Manipulation

Initially lexical data was entered into the program Toolbox, but this was soon transferred to FLEX (Fieldworks language explorer). Both of these programs have been developed and maintained by SIL international and are available for free from their website. Texts and grammatical examples were also interlinearised using FLEX. Phonetic analysis was done using the program Speech Analyzer.

1.4 Typological profile of the Buwal language

This section gives a brief summary of some of the interesting typological features of the Buwal language, described in more detail in the chapters that follow.

1.4.1 Phonology

Like many Afroasiatic languages, consonants play a more important role in the Buwal phonological system than vowels. There are thirty-nine consonant phonemes, although a number of these are marginal. Unusual consonants from a cross-linguistic point of view, although common in the area, are the implosives, the lateral fricatives and the labial-dental flap. Buwal has a very interesting vowel system which could be argued to involve only one underlying vowel, the various surface forms resulting from localised labialisation effects, a palatalisation prosody operating at word level and the insertion of epenthetic vowels used to break up disallowed consonant clusters. Buwal is a tonal language with three level tones; low, mid and high. The lexical load on tone is not high and there are few minimal pairs. However, tone does interact with grammatical morphemes in the marking of particular grammatical structures. A detailed description of Buwal phonology is found in Chapter 2.

1.4.2 Morphology

In Buwal, different word classes exhibit varying morphological tendencies. The nominal system is mostly isolating. There is very little affixation. The only nominal affix is a plural marker which only occurs with a small set of animate nouns (see Section 3.1.1.5). Some compounding is also possible (see Section 3.1.1.4). Both adjectives and adverbs could also be generally characterised as isolating (see Sections 3.3 & 3.4).

In contrast, verbs are morphologically complex, taking a range of derivational and inflectional affixes (see Sections 3.1.3 & 3.2.1.4). The verbal system therefore could be characterised as synthetic. Buwal is mostly agglutinative in that one morpheme normally carries one meaning. The main exception to this is the subject, direct object and indirect object verbal affixes which code both person and number in a single form.

Buwal is both prefixing and suffixing with a slight preference for suffixation.

Reduplication of syllables or the whole phonological word is very common and found in all the major word classes. Reduplicated forms are generally lexicalised. It is difficult to identify semantic patterns associated with the process because the non-reduplicated counterpart normally does not exist. However, the reduplication of verb roots is used in certain pragmatically marked structures (see Section 11.4). Buwal is predominately a head-marking language.

1.4.3 Syntax

The basic word order of Buwal verbal clauses is SVO/SV (see Section 8.1.1) with an indirect object following a direct object. It is possible, however, for various elements to be topicalised by being moved to the front of a clause followed by an optional topic marker plus a pause (see Section 11.2). Buwal also has verbless clauses in which the subject precedes the predicate (see Section 8.3).

The system of grammatical relations in Buwal is organised according to a nominative/accusative system in that subjects of both transitive and intransitive clauses are treated in the same way. Grammatical relations are coded by both word order and verbal agreement marking (see Section 8.1).

As a corollary to the fact that there is very little nominal morphology, noun phrases in Buwal can be very long. The majority of nominal modifiers (apart from the associative plural marker and certain focus particles) follow the head noun (see Section 5.1). This includes a plural marker *éǵē* which is used with the majority of nouns. A number of constituents may intervene between this marker and the head noun.

Buwal is a prepositional language. A number of complex prepositions are derived from the names of body parts (see Section 4.8.2).

Negation is coded in Buwal by a negative particle occurring at the end of a clause (see Section 9.2). Although typologically unusual, this strategy is common in Central Africa. Also common in the area are clause final question words for both polar and information questions. These follow the negative marker if present. This is consistent with Buwal interrogative clauses (see Section 9.3).

Clauses may be combined in a number of different ways to form complex sentences (Chapter 10). Subordinate clauses can be divided into three types: complement, relative and adverbial. There is no complementiser which marks complement clauses in Buwal, apart from a quotative which marks speech reports. Relative clauses are marked with an invariable relative marker *má*. In addition, the relative marker can be used alone to mark temporal adverbial clauses and in combination with a preposition or an adverb to mark other types of adverbial clauses. Sequential clauses which are marked with a sequential marker are also possible in Buwal. Apart from overt formal marking, simple clause juxtaposition is common and can be used to express a number of different semantic relationships between clauses. Clauses may also be coordinated.

The pragmatically motivated topic- comment structure is very common in Buwal (see Section 11.2). The topic occurs in clause initial position and may be a noun, an adverb, a partial predication or a full clause and is followed by one of four optional topic markers.

1.5 Organisation of thesis

This thesis describes the linguistic units of Buwal from the smallest to the largest. Generally, the form is given first and then its function described. The thesis begins with a

detailed description of the phonology of Buwal (Chapter 2) which covers consonants, vowels, the phonology of loan words and interjections, phonotactics, prosody and finally the Buwal orthography. Word classes are explored in the two chapters which follow; open word classes in Chapter 3 and closed word classes Chapter 4. Open word classes involve nouns, verbs, adjectives and adverbs. Chapter 3 also covers the relevant derivational and inflectional morphology for each of these open classes, plus the morphophonemic variations which occur. Numerous closed word classes are described in Chapter 4, the most significant being pronouns and other pro-forms, determiners, demonstratives, quantifiers and prepositions. This chapter emphasises the forms involved and their distribution. A more detailed description of the function of each form is given in later chapters. Chapter 5 discusses the structure of Buwal noun phrases beginning with basic noun phrases, followed by genitive constructions, appositional noun phrases and finally coordinate noun phrases. The functions of tense, aspect, mode and spatial verbal marking are covered in Chapter 6. This involves both affixes and verbal particles. Chapter 7 summarises the syntactic and semantic functions of prepositional phrases. The three chapters which follow deal with clauses. Declarative clauses, both verbal and verbless, are described in Chapter 8. Chapter 9 covers non-declarative clauses, in particular, imperative, negative and interrogative clauses. Chapter 10 discusses how clauses may be combined, including subordinate clauses such as complement, relative and adverbial clauses. Other clause combining strategies described involve sequential clauses, clause juxtaposition and clause coordination. Finally, various pragmatically marked structures are dealt with in Chapter 11, with particular emphasis on topicalisation, cleft constructions and verb repetition.

Chapter 2 Phonology

2.1 The skeleton of roots

Before moving to a description of consonants and vowels in Buwal it is important to address the notion of the underlying root skeleton. The idea of a consonant skeleton is well known in the study of Semitic languages. It turns out that this could be an equally useful concept in the description of Central Chadic languages. Roberts (2001: 115) states that the underlying structure of lexemes in Central Chadic languages could be said to consist of a consonant skeleton to which other peripheral phonological elements such as vowels, prosodies and tones are then added.

Lexemes in Buwal also follow this pattern. Their underlying structure can be said to consist of a series of consonants and one full vowel phoneme /a/. Unlike certain other Central Chadic languages such as Moloko (Bow 1997a: 25) and Muyang (Smith 1999: 21) in which a root may underlyingly consist of only consonants, all lexical roots in Buwal contain at least one full vowel. In addition, an epenthetic vowel is inserted between the consonants of disallowed consonant clusters. The quality of these vowels is coloured by palatalisation and labialisation effects and tones are also added to give the surface form. The vowel system and rules governing vowel epenthesis will be discussed in more detail later in Sections 2.3 on vowels and 2.6.3 on consonant clusters and the epenthetic vowel. Table 2.1 gives underlying skeleton structures for simple Buwal verb roots.

Table 2.1: Skeleton structures for simple Buwal verb roots

	1V		2V	
	Structure	Example	Structure	Example
1C	Ca	[dè] /dà/ 'prepare/cook'		
2C	CaC	[wēn] /wān/ 'sleep'		
	CCa	[bàʒɛ] /bʒā/ 'bless'		
3C	CCaC	[fə̀dɛx] /fdāx/ 'wake up'	CaCaC	[lɛ̀wɛ̀tʰ] /lāwād/ 'play'
4C	CCCaC	[ɲ̀tə̀bɛ̀l] /ntbàl/ 'tire'	CaCCaC	[gʷə̀rzɛ̀m] /gʷarzàm/ 'get up'

2.2 Consonants

Buwal has a large number of consonant phonemes, with thirty-nine in total. The consonant inventory shown in Table 2.2 is very similar to those found for other Central Chadic languages (Roberts 2001: 95), although larger than that proposed by Newman (1977: 9) for Proto-Chadic.

Table 2.2: 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	ɹ					
Glides			j			w

There are five main places of articulation; labial, alveolar, palatal, velar and labialised velar. Unusual consonants cross-linguistically, which are quite common in Central Chadic

languages, are the implosives and the lateral and velar fricatives. The labial-dental flap /v/ is marginal in that it has only been found in two Buwal words so far, although it also exists in neighbouring languages. The labial-velar plosives also occur infrequently and are only found in a limited number of Central Chadic languages.

2.2.1 Criteria for determining the segmental nature of complex consonants

The inventory in Table 2.2 contains a number of complex consonants. These include the prenasalised plosives, the affricates and the labialised velar consonants. These are analysed here as single segments. There are several arguments supporting this analysis. Table 2.3 summarises the criteria used for each complex consonant type. It can be seen that all four criteria apply to affricates and labialised velars, whereas only two apply to prenasalised plosives. Each criteria is discussed in more detail and examples are given below.

Table 2.3: Criteria for the segmental nature of complex consonants

Consonant Type	Reduplication	Word final position	Reversed order	Epenthetic vowel
Prenasalised plosives	Yes	No	No	Yes
Affricate	Yes	Voiceless only	Yes	Yes
Labialised velars	Yes	Voiceless only	Yes	Yes

(i) The behaviour of complex consonants under reduplication.

Many Buwal lexemes contain reduplication either of a part or a whole phonological word. When the whole word is reduplicated complex consonants such as affricates (2.1a), labialised velars (2.1b) and prenasalised plosives (2.1c) are also reduplicated. (The non-reduplicated form is shown in brackets following the reduplicated form throughout this discussion.)

- (2.1) a. [tsép^ɿtsép^ɿ] /tsáb-tsáb/ (/tsáb/) ‘a bit sour’
 b. [k^wòtsèk^wòtsé] /k^wàtsà-k^wàtsá/ (/k^wàtsà /) ‘here and there’
 c. [m^bér^mbér] /m^bár-m^bár^Y/ (/m^bár^Y /) ‘near’

However, this behaviour is no different from when the word begins with a complex onset. In this case the onset cluster is also reduplicated (2.2).

(2.2)	[tréjtréj]	/tráj-tráj ^Y /	(/tráj ^Y /)	‘dried out’
	[brèʃbrèʃ]	/bràs-bràs ^Y /	(/bràs ^Y /)	‘slow growing’

In leftward CV reduplication only part of the word is reduplicated. The complex consonant is reduplicated for affricates (2.3a), labialised velars (2.3b) and in the majority of cases for prenasalised plosives (2.3c).

(2.3)	a.	[tsə̀tsə̀]	/tsàtsàl/	(/tsàl/)	‘arrange’
	b.	[k ^w ək ^w éʃé]	/k ^w ák ^w ásá ^Y /	(/k ^w ásá ^Y /)	‘kindling’
	c.	[^m bèʒ ^m béʒē]	/ ^m bàz ^m bázā ^Y /	(/ ^m bázā ^Y /)	‘beetle’

When the second syllable begins with a complex onset only the **first** consonant of the cluster is reduplicated (2.4). Such words have the structure C₁V₁.C₁C₂V₁C₃. There are no examples in the corpus of the affricates or the labialised velars being treated as a sequence in relation to this process, indicating that they are unitary phonemes. The last two words under (2.4) are not possible.

(2.4)	[dēdrēs]	/dādrās/	(/drās/)	‘blunten’
	[kèklék]	/kàklák/	(/klák/)	‘cackle’
	[gégrèŋ]	/gágràŋ/	(/gràŋ/)	‘insufficient’
	*[tə̀tsə̀]	/tə̀tsəl/	(/tsəl/)	
	*[k ^w ək ^w éʃé]	/k ^w ək ^w éʃé/	(/k ^w éʃé/)	

Prenasalised plosives exhibit slightly different behaviour under partial reduplication from other complex consonants. While in the majority of cases the whole prenasalised plosive is reduplicated, there are a few words where this is not the case (2.5).

(2.5)	[gè ^ŋ gèr]	/gà ^ŋ gà ^Y /	(/ ^ŋ gà ^Y /)	‘rub’
	[dè ⁿ dèlèŋ]	/dà ⁿ dàlàn ^Y /	(/ ⁿ dàlàn ^Y /)	‘circular’
	[gè ^ŋ glèŋ]	/gà ^ŋ glán/	(/ ^ŋ glán/)	‘praying mantis’

The reduplication of only part of a prenasalised plosive seems to follow the pattern for word medial clusters containing nasals. In these words, the **second** consonant is

reduplicated (2.6) rather than the first. A possible explanation of this behaviour is that the nasal is acting as the coda of the first syllable, giving the structure $C_1VN.C_1VC_2$ rather than $C_1V_1.C_1C_2V_1C_3$ as in the examples under (2.4).

(2.6)	[tséŋtsēt̚]	/tsáŋtsād/	(/ŋtsād/)	‘flea’
	[kɛŋkɛs]	/kánkās/	(/ŋkās/)	‘beans’

It can be argued however that the behaviour of prenasalised plosives differs from that of N+C sequences since in the majority of cases of partial reduplication, the whole prenasalised plosive is reduplicated. Whereas in a N+C sequence both consonants are **never** reduplicated.

(ii) The occurrence of complex consonants in word final position.

In Buwal, consonant clusters are not permitted word finally. In contrast certain complex consonants, such as the voiceless alveolar affricate (2.7a) and the voiceless labialised velar plosive (2.7b), are found in this position.

(2.7)	a.	[hɛts]	/xāts/	‘surround’
	b.	[dök ^w]	/dāk ^w /	‘horse’

(iii) The consonants which form affricates and labialised velars never occur in consonant clusters in the reverse order. This is in contrast with word initial consonant clusters as in the examples below involved nasals (2.8a) and the voiceless alveolar fricative (2.8b).

(2.8)	a.	[ŋvé]	/nvá/	‘excrement’	[vɛnɛ]	/vnɛ/	‘vomit’
		[ŋfɛŋ]	/nsāj ^Y /	‘seed’	[ʃmɛx ^w]	/snāx ^{wY} /	‘tree sp.’
	b.	[sk ^w ɛj]	/sk ^w āj/	‘calabash seed’	[k ^w ɛsɛm]	/k ^w sám/	‘body’
		[pɛk]	/spák ^Y /	‘late’	[pɛsɛr]	/psár/	‘lift off’

Prenasalised plosives appear to be an exception to this rule as it is possible for a voiced plosive to be followed by a nasal (2.9).

(2.9)	[dɛnɛz]	/dnāz/	‘tree sp.’
	[gɛ nɛɣ]	/gnāx/	‘apply’

(iv) An epenthetic vowel is never inserted between the two parts of a complex consonant.

In the following sections evidence of the contrast of Buwal consonant phonemes before a vowel is given and their allophonic variations is discussed. The distribution of consonants in the word and their occurrence in consonant clusters is considered in more detail in the section on phonotactics (Section 2.6).

2.2.2 Plosives

Buwal has a series of voiced and voiceless plosives at the labial, alveolar, velar and labialised velar points of articulation. Labialised velar plosives will be dealt with under Section 2.2.8 on labialised velar consonants.

Examples of contrast of place of articulation and voicing of plosives before a vowel are shown in (2.10-2.12).

(2.10)	[bēt̪]	/bād/	‘deceive’	[pēt̪]	/pād/	‘wrap up’
	[mēbés]	/mābás/	‘shoulder’	[mēpét]	/māpát/	‘morning’

(2.11)	[dèm]	/dām/	‘enter’	[tèm]	/tām/	‘pour’
	[dēdēk]	/dādāk/	‘dirty’	[tētēk]	/tātāk/	‘chase’

(2.12)	[gèdèt̪]	/gādàd/	‘arrow’	[kédèk]	/kádàk/	‘good’
	[hégè̀m]	/hágà̀m/	‘yawn’	[pékè̀m]	/pákà̀m/	‘mouth’

Buwal voiceless plosives are accompanied by some aspiration. This occurs in all possible positions; syllable initial (Figures 2.1 and 2.5), utterance final (Figures 2.1 and 2.5), syllable final (Figures 2.2 and 2.5), following /s/ (Figure 2.3) and preceding a liquid (Figure 2.4). Since it is not phonemically or allophonically significant, I have not included aspiration in the phonetic transcriptions in this chapter.

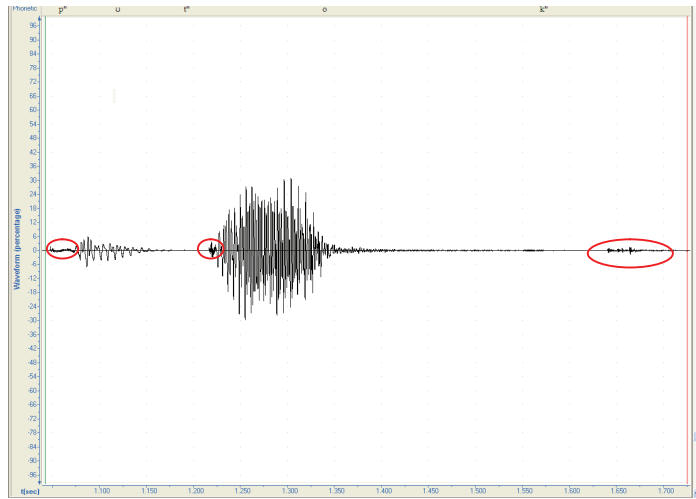


Figure 2.1: Waveform of [pūtōkʷ] ‘tear in passing’ utterance final showing aspiration of word initial, intervocalic, and word final voiceless plosives.

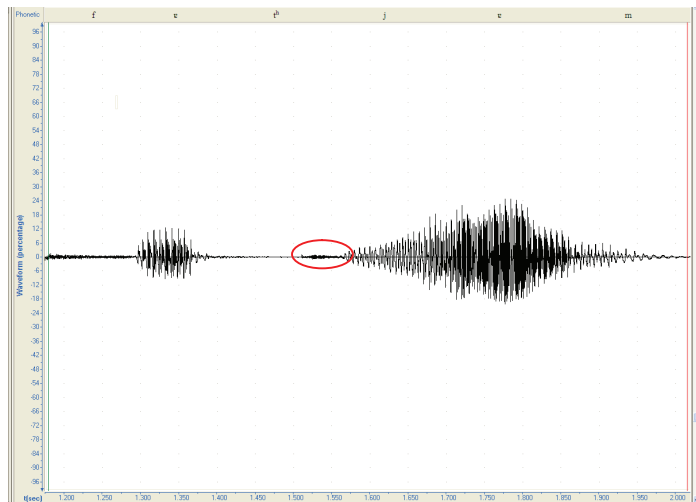


Figure 2.2: Waveform of [fēt] ‘slice’ followed by [jám] ‘also’ showing aspiration of a word final voiceless plosive in a non-pausal position.

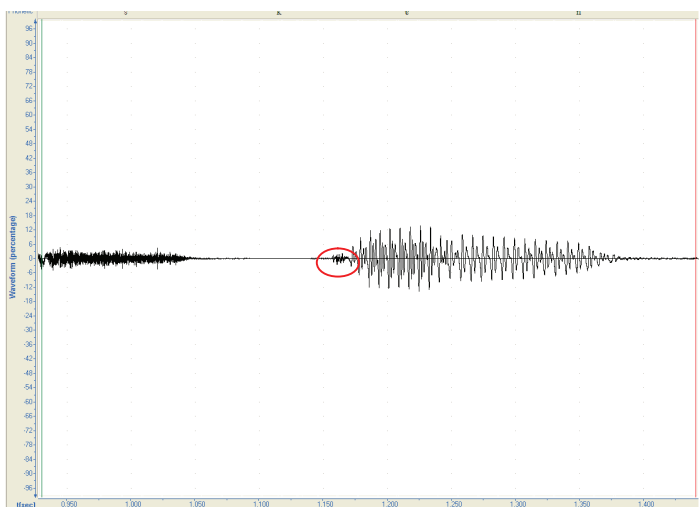


Figure 2.3: Waveform of [skèn] ‘thing’ showing aspiration of the voiceless plosive following /s/.

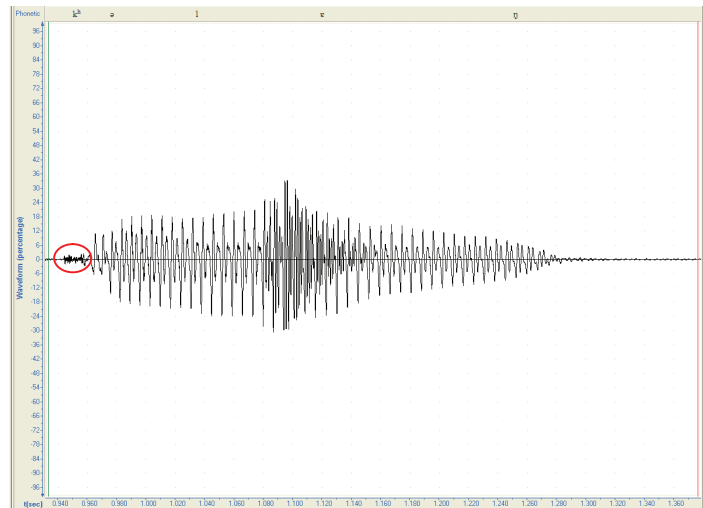


Figure 2.4: Waveform of [kʰlɛŋ] ‘threshing floor’ showing aspiration of a voiceless plosive before a liquid.

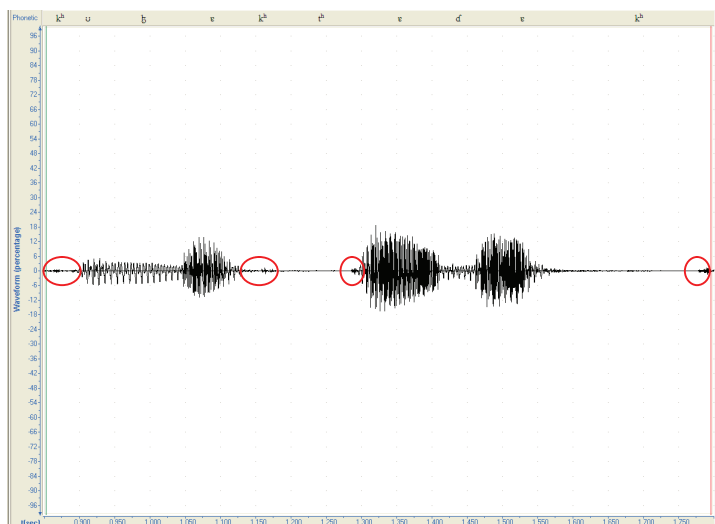


Figure 2.5: Waveform of [kʷùḷḷɛktédɛk] ‘leech’ showing aspiration on a voiceless plosive preceding another.

2.2.3 Implosives

Buwal has two implosives at the labial and the alveolar points of articulation. Implosives are stops which are produced with a lowering of the larynx. However, as Ladefoged and Maddieson (1996: 82) state, this laryngeal setting can vary, with some implosives being produced with a modal (or ‘normal’) voice, while others may be glottalised or tense, and yet others may be produced with complete glottal closure. In fact a number of Chadic languages such as Hausa, Bura, Margi and Ngizim have been observed to have so called ‘creaky voiced’ implosives which are distinguished from voiced plosives by glottal

constriction rather than having an ingressive airstream (Ladefoged and Maddieson 1996: 85-86). The question is, where do Buwal implosives fall on this continuum? Figures 2.6 and 2.7 give examples of waveforms contrasting Buwal implosives with their voiced plosive counterparts in both utterance initial and intervocalic positions.

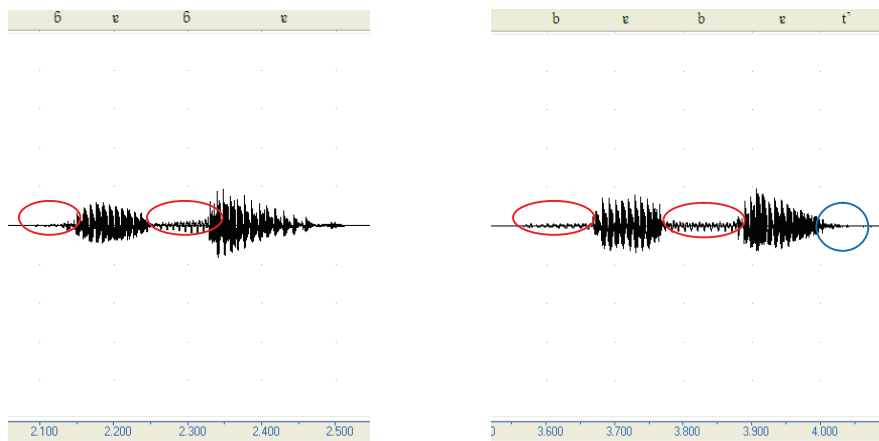


Figure 2.6: Waveform of the words [b̩éḃ̩] ‘deaf-mute’ and [b̩èḃ̩t̩] ‘plough’ contrasting the Buwal bilabial implosive with the voiced bilabial plosive.

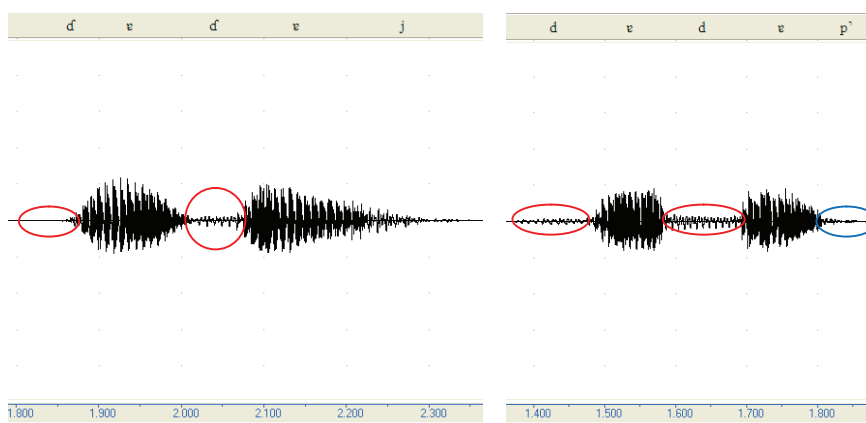


Figure 2.7: Waveform of the words [d̩ḃ̩d̩j̩] ‘prickly grass seeds’ and [d̩ḃ̩d̩p̩] ‘be beautiful’ contrasting the Buwal alveolar implosive with voiced alveolar plosive.

Looking first at the implosives in intervocalic position (Figures 2.6 & 2.7) it can be seen that they are voiced throughout with increasing amplitude, whereas voiced plosives waveforms exhibit a steady level of amplitude throughout the time interval. This pattern fits with what is normally observed for modal voice implosives but does not correspond to ‘creaky-voice’ implosives which are typically voiceless through most of the closure. However implosives at the beginning of the utterance, show significantly less voicing than their voiced counterparts during closure which may indicate a certain amount of glottal restriction. Furthermore it can be observed in the close up of the waveforms

provided in Figure 2.8 that the waveform of the implosive is more irregular in this position than the plosive. This is also indicative of laryngealisation.

Therefore it can be provisionally concluded that Buwal implosives exhibit the properties of ordinary modal voice implosives intervocally but exhibit some glottal restriction or ‘creakiness’ in utterance initial position. A much more in-depth study involving recordings of a number of different speakers would need to be made to come to any firm conclusions.

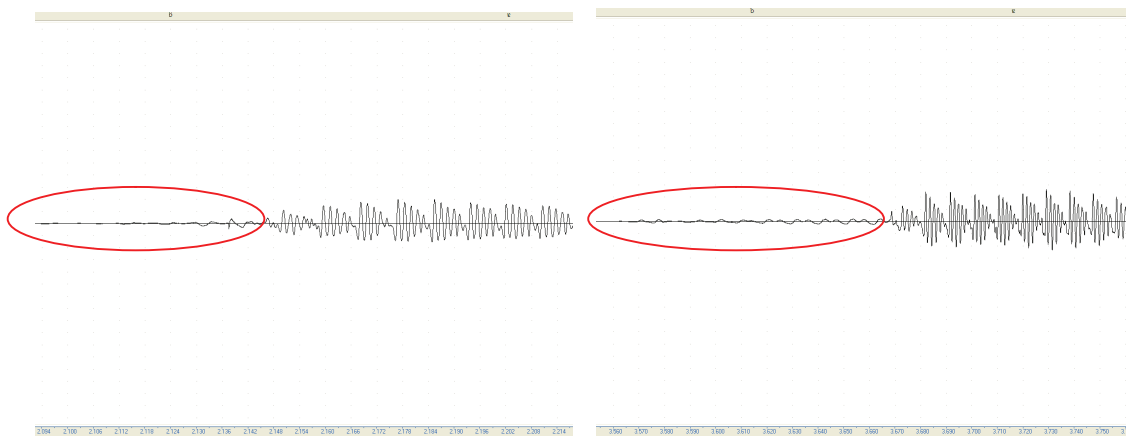


Figure 2.8: Waveform of utterance initial bilabial implosive contrasted with voiced bilabial plosive.

Examples showing contrast of implosives are given in (2.13).

- | | | | | | | |
|--------|---------|---------|---------------|---------|---------|-------------|
| (2.13) | [ɓēs] | /bās/ | ‘laugh’ | [dēs] | /dās/ | ‘cultivate’ |
| | [kérɓē] | /kárɓā/ | ‘even though’ | [sèrdé] | /sàrdá/ | ‘marrow’ |

Examples in (2.14) and (2.15) show the contrast between implosives and plosives.

- | | | | | | | |
|--------|----------|--------|---------|----------|--------|----------------|
| (2.14) | [ɓēs] | /bās/ | ‘laugh’ | [bēs] | /bās/ | ‘light (fire)’ |
| | [hə̀ɓèl] | /xɓàl/ | ‘move’ | [hə̀bēr] | /xbār/ | ‘watch over’ |

- | | | | | | | |
|--------|-----------|---------|----------|----------|--------|--------|
| (2.15) | [dē] | /dā/ | ‘draw’ | [dè] | /dā/ | ‘cook’ |
| | [gə̀dɛ̀k] | /gdɛ̀k/ | ‘reduce’ | [gə̀dèk] | /gdàk/ | ‘far’ |

Figures 2.6 and 2.7 show that when implosives occur word finally voicing decreases rapidly. This indicates that in the word final position implosives are realised phonetically as unreleased plosives (2.16).

(2.16) [jēp̚] /jāḅ/ ‘wash’ [bēt̚] /bād/ ‘deceive’

2.2.4 Fricatives

Buwal has voiceless and voiced fricatives at the labial (2.17), alveolar (2.18) and velar (2.19) points of articulation. Labialised velar fricatives will be discussed under Section 2.2.8 on labialised velar consonants. Buwal also has the voiceless and voiced lateral fricatives (2.20).

Examples in (2.17-2.20) show contrast of fricatives.

(2.17) [fēl] /fāl/ ‘increase’ [vèl] /vāl/ ‘give’
 [fēfèn] /fāfān/ ‘flower’ [zēvèn] /zāvān/ ‘guinea fowl’

(2.18) [sēt̚] /sād/ ‘besmear’ [zét̚] /zād/ ‘not far’
 [sèsèk] /sàsàk/ ‘sift’ [zèzèk] /zàzàk/ ‘rest’

(2.19) [hēdē] /xāḏá^Y/ ‘on it’ [yèdè] /yàḏà^Y/ ‘grass sp.’
 [hèhèⁿdèr] /xàxàⁿdàr/ ‘coagulate’ [yèyèⁿdèr] /yàyàⁿdàr/ ‘snore’

(2.20) [fē] /fā/ ‘arrange’ [ḥē] /ḥā/ ‘cut’
 [fèfèr] /fàfàr/ ‘pursue’ [ḥèḥèr] /ḥàḥàr/ ‘river’

The voiceless velar fricative /x/ has the voiceless glottal fricative [h] as an allophone. These two appear to be in free variation word initially (2.21a), the glottal fricative [h] occurs intervocally and after a consonant (2.21b) and the velar fricative [x] occurs in syllable final position (2.21c).

(2.21) a.	[xēn] ~ [hēn]	/xān/	‘cry, weep’
	[hēʃēŋ] ~ [xēʃēŋ]	/xāsāŋ ^Y /	‘forget’
b.	[séhèl]	/sáxàl/	‘bamboo’
	[pérhém]	/párxám/	‘insufficient’
c.	[fḏḏēx]	/fdāx/	‘wake up’
	[mēxkét ^ʔ]	/māxkád/	‘three’

The alveolar fricatives /s/ and /z/ have the post-alveolar fricatives [ʃ] and [ʒ] as allophones in palatalised morphemes as in (2.22) below.

(2.22) a.	[sèn]	/sàn/	‘know’	[ʃēŋʃēŋ]	/sāŋsāŋ ^Y /	‘shadow’
	[m̄sēr]	/msār/	‘fry’	[m̄ʃét ^ʔ]	/msád ^Y /	‘nastiness’
b.	[zèm]	/zām/	‘eat’	[ʒèŋʒèŋ]	/zàŋzàŋ ^Y /	‘python’
	[bèzèm]	/bzàm/	‘chin’	[ʒì zàm]	/ʒzàm ^Y /	‘mouse sp.’

2.2.5 Affricates

Buwal has the voiceless and voiced alveolar affricates /ts/ and /dz/. Examples showing contrast of alveolar affricates are given in (2.23).

(2.23)	[tsē]	/tsā/	‘put’	[dzē]	/dzā/	‘hit’
	[tsèt̄sèt̄]	/tsàtsàl/	‘arrange’	[dzèdzèr]	/dzàdzàr/	‘filter’

Roberts (2001: 95-96) groups the alveolar affricates with the alveolar fricatives for Central Chadic languages in general, stating that ‘they all involve a sibilant element, which makes their behaviour somewhat different from that of the simple alveolars.’ In Buwal, it is also true that the affricates behave in similar ways to the alveolar fricatives in that they have the post-alveolar affricates [tʃ] and [dʒ] as allophones in palatalised morphemes as in (2.24) below.

(2.24) a.	[tsēm]	/tsām/	‘pick up’	[tʃēm]	/tsām ^Y /	‘defend’
	[tsép̄ ^ʔ tsép̄ ^ʔ]	/tsáb-tsáb/	‘sour’	[tʃép̄ ^ʔ tʃép̄ ^ʔ]	/tsáb tsáb ^Y /	‘sharp’
b.	[dzē]	/dzā/	‘hit’	[dʒē]	/dzā ^Y /	‘elope’
	[dzèdzèk]	/dzàdzàk/	‘heap’	[dʒèdzèk ^w]	/dzàdzàk ^{wY} /	‘regret’

However, affricates also behave like plosives in that only voiceless affricates occur in the word final position, whilst voiced fricatives can occur word-finally (see section 2.6.2).

2.2.6 Nasals

Buwal has a series of nasal phonemes at the labial /m/, alveolar /n/ and velar /ŋ/ points of articulation. There is also a labialised velar nasal /ŋ^w/, which will be discussed in Section 2.2.8.

Examples showing contrast of the labial and alveolar nasals are given in (2.25).

(2.25)	[mē]	/mā/	‘mouth’	[nè]	/nà/	‘ferment’
	[dəmē]	/dmā/	‘bride’	[vènē]	/vnā/	‘vomit’

Roberts (2001: 98) states that in a number of Central Chadic languages velar nasals can often be shown to be non-distinctive. For example [ŋ] may be a syllable final allophone of /n/ or a word final allophone of /^ŋg/. However for Buwal, /ŋ/ needs to be analysed as a phoneme because it contrasts with both /m/ and /n/ in the word final position (2.26). As voiced plosives never occur in word final position, /ŋ/ cannot contrast with /^ŋg/ in this position.

(2.26) a.	[ɕəm]	/ɕàm/	‘ear’
	[ɕèn]	/ɕàn/	‘work’
	[ɕēŋ]	/ɕāŋ/	‘cross’
b.	[zèn]	/zàn ^Y /	‘return’
	[zēŋ]	/zāŋ ^Y /	‘hang up’
c.	[lèm]	/lām ^Y /	‘get, obtain’
	[léŋ]	/lāŋ ^Y /	‘plus’

The alveolar and velar nasals also contrast in word medial position before a voiceless alveolar affricate /ts/.

(2.27) a.	[dēntsé]	/dāntsá/	‘conjunctivitis’
	[tséntsēt ¹]	/tsántsād/	‘flea’

- b. [tʃɛ̃ntʃɛ̃l] /tsāntsāl^Y/ ‘summit’
 [tʃɛ̃ŋtʃɛ̃lɛ̃m] /tsāŋtsālām^Y/ ‘firewood’

However, in the word initial position before a consonant the distinction between the alveolar and velar nasal is neutralised. The alveolar nasal becomes velar before labial and velar consonants (2.28a), it becomes a labialised velar before a labialised velar consonant (2.28b), palatal before a palatalised consonant (2.28c) and occurs in free variation with a velar nasal before an alveolar consonant (2.28d).

- (2.28) a. [ŋvɛ̃] /nvá/ ‘excrement’
 [ŋkɛ̃m] /nkām^Y/ ‘stem’
 b. [ŋ^wk^wɛ̃x] /nk^wáx/ ‘six’
 [ŋ^wh^wɛ̃z] /nh^wɛ̃z/ ‘be drunk’
 c. [ŋʃɛ̃ŋ] /nsāŋ^Y/ ‘seed’
 [ŋtʃɛ̃x] /ntsāx^Y/ ‘groan’
 d. [ŋtɛ̃v] ~ [ntɛ̃v] /ntàv/ ‘sew’
 [ŋsɛ̃l] ~ [nsɛ̃l] /nsāl/ ‘mate’

The tendency for /n/ to become [ŋ] in word initial position before an alveolar consonant only applies when the word is pronounced in isolation. Evidence for this is shown in (2.29) where [ŋ] → [n] when preceded by another word.

- (2.29) [ŋtə̀bɛ̀l] /ntɔ̀l/ ‘tired’

/mbj ntɔ̀l/ → [mbi· ntə̀bɛ̀l]

3SG.STAT tired

‘He is tired’

(LL33-SE:5.1)

There is, however, contrast of an underlying alveolar nasal with the labial nasal in the word initial position before the voiceless alveolar affricate and fricative (2.30).

- (2.30) a. [m̥tsɛ̃] /mtsā/ ‘vagina’
 [ŋtsɛ̃] ~ [ntsɛ̃] /ntsā/ ‘bite’
 b. [m̥ʃɛ̃tʃ] /msád^Y/ ‘nastiness’
 [ŋʃɛ̃ŋ] /nsāŋ^Y/ ‘seed’

It is possible that this type of system has developed historically from one where the velar nasal was simply the phonetic realisation of the alveolar nasal in word final position. This is suggested by the fact that words ending in the velar nasal are more frequent in the corpus. It is possible that word final occurrence of alveolar nasals represents an historic reduction of an underlying NV sequence as Frajzyngier (2008: 36) argues for Gidar.

2.2.7 Prenasalised consonants

Buwal has a set of prenasalised plosives at the labial /^mb/, alveolar /ⁿd/, velar /^ŋg/ and labialised velar /^ŋg^w/ points of articulation as well as the prenasalised voiced alveolar affricate /ⁿdz/. The labialised prenasalised velar plosive will be discussed in Section 2.2.8.

Examples showing contrast of prenasalised consonants with their unnasalised counterparts are given in (2.31) to (2.34).

(2.31)	[^m bēt̪]	/ ^m bād/	‘change’	[bēt̪]	/bād/	‘deceive’
	[^m bé ^m bèz]	/ ^m bá ^m bàz/	‘blood’	[bèbèr]	/bàbàr/	‘roar’
(2.32)	[ⁿ dē]	/ ⁿ dā/	‘go’	[dè]	/dà/	‘prepare’
	[ⁿ dè ⁿ dèlòèk ^w]	/ ⁿ dà ⁿ dàlòk ^{wY} /	‘circular’	[dédèx ^w]	/dádàx ^{wY} /	‘slow’
(2.33)	[ⁿ dʒé]	/ ⁿ dzá ^Y /	‘eye’	[dʒē]	/dzā ^Y /	‘elope’
	[vɛ ⁿ dʒéx]	/vā ⁿ dzáx ^Y /	‘pepper’	[védʒēt̪]	/vádzād ^X /	‘leaf’
(2.34)	[^ŋ gèp̪]	/ ^ŋ gàb/	‘transplant’	[gèp̪]	/gāb/	‘knead’
	[kè ^ŋ gèŋ]	/kā ^ŋ gāŋ/	‘drum’	[hégè̄m]	/xágàm/	‘yawn’

2.2.8 Labialised velar consonants

An interesting aspect of Buwal phonology is the existence of labialised velar consonant phonemes. Newman (1977: 11) notes that proto-Chadic almost certainly had both labialised and palatalised velars. In Buwal the labialised velars include voiceless and voiced plosives /k^w/ and /g^w/, voiceless and voiced fricatives /x^w/ and /ɣ^w/, the prenasalised plosive /^ŋg^w/ and the nasal /ŋ^w/.

Examples of contrast between labialised velar plosives and their non-labialised counterparts are given in (2.35) to (2.37) below.

- | | | | | | | |
|--------|--|--|------------|-----------------------------------|-------------------------|--------------|
| (2.35) | [k ^w ēr] | /k ^w ār/ | ‘pick up’ | [kēr] | /kār/ | ‘fence in’ |
| | [tēk ^w ēr] | /tāk ^w ār/ | ‘roll up’ | [tēkēr] | /tākār/ | ‘turtle’ |
| (2.36) | [g ^w ēr] | /g ^w ār/ | ‘arrive’ | [gēr] | /gār/ | ‘stand’ |
| | [lēg ^w ōdē] | /lāg ^w ādā/ | ‘dust’ | [bārgādāŋ] | /bērgēdēŋ/ | ‘storm’ |
| (2.37) | [^ɰ g ^w ōf] | / ^ɰ g ^w āf/ | ‘throw at’ | [^ɰ gèp ^ɿ] | / ^ɰ gàḍ/ | ‘transplant’ |
| | [mé ^ɰ g ^w ōrlēm] | /má ^ɰ g ^w ārlām/ | ‘throat’ | [mē ^ɰ gérēj] | /mā ^ɰ gárāj/ | ‘butt heads’ |

Like the voiceless velar fricative /x/ (see Section 2.2.4), the labialised voiceless velar fricative /x^w/ has as an allophone the labialised glottal fricative [h^w] which occurs in the intervocalic position and is also in free variation with [x^w] word initially (2.28).

Examples (2.38) and (2.39) show contrasts between labialised velar fricatives and their non-labialised counterparts.

- | | | | | | | |
|--------|---|----------------------|-------------|---|---------|-----------|
| (2.38) | [h ^w òp ^ɿ]~[x ^w òp ^ɿ] | /x ^w àḍ/ | ‘fertilise’ | [hèp ^ɿ]~[xèp ^ɿ] | /xàḍ/ | ‘swallow’ |
| | [ŋ ^w h ^w ōl] | /nx ^w āl/ | ‘dry’ | [séhèl] | /sáxàl/ | ‘bamboo’ |
| (2.39) | [ɣ ^w ōl] | /ɣ ^w āl/ | ‘show’ | [ɣèl] | /ɣàl/ | ‘female’ |
| | [ḍùɣ ^w òm] | /ḍɣ ^w àm/ | ‘cheek’ | [ɣèm] | /ɣàm/ | ‘war’ |

The labialised velar nasal /ŋ^w/, contrasts with its non-labialised counterpart /ŋ/ (see Section 2.2.6) only in the word final position (2.40). Elsewhere it occurs as an allophone of /n/ when followed by a labialised velar consonant (2.41).

- | | | | | | | |
|--------|-------------------------------------|------------------------------------|-----------|--|--------------------------------------|-------------------|
| (2.40) | [dǎlōŋ ^w] | /dlāŋ ^w / | ‘cat’ | [kǎlēŋ] | /klāŋ/ | ‘threshing floor’ |
| | [h ^w ùvōŋ ^w] | /x ^w vāŋ ^w / | ‘compost’ | [vēŋ] | /vāŋ/ | ‘arrive’ |
| (2.41) | [ŋ ^w h ^w ē] | /nx ^w ā/ | ‘goat’ | [g ^w ōŋ ^w k ^w ét ^ɿ] | /g ^w ānk ^w ād/ | ‘caterpillar’ |

In some Central Chadic languages, the presence of labialised velar consonants and rounded vowels has been analysed as being the result of a word level prosody of

labialisation (Roberts 2001: 103-108). This concept is discussed in relation to rules which govern labialisation spread in Buwal in Section 2.3.2. Buwal labialised velar consonants should be considered phonemic because they are found in environments where there is no adjacent rounded vowel (2.42). In these cases they can neither be said to be a result of a labialisation prosody nor caused by the presence of a rounded vowel.

- (2.42) [k^wèŋ] /k^wàŋ/ ‘have diarrhea’
 [dùg^wèɓ] /dg^wàɓ/ ‘small water pot’

2.2.9 Liquids

Buwal has two major liquids, the alveolar lateral approximant /l/ and the alveolar trill /r/, which has the alveolar flap [r] as an allophone in intervocalic position.

Examples of contrasts between liquids are given in (2.43).

- (2.43) a. [lè] /là/ ‘act, do’ [rè] /rà/ ‘dig’
 [lèm] /lám^Y/ ‘get’ [rēx] /rāx^Y/ ‘heal’
 b. [dǝlèz] /dálàz/ ‘trap’ [fǝrém] /fáràm/ ‘horn’
 [ɣǝlé] /ɣālá^Y/ ‘intestines’ [dʒǝrǝ] /dzārā^Y/ ‘locust’

The labio-dental flap /v/ was found in only two Buwal words (2.44) and so it should be regarded as a marginal phoneme. The labio-dental flap has also been reported in nearby Central Chadic languages such as Daba (Lienhard & Giger 1975: 52), Bana (Hofmann 1990: 35), Mbudum (Ndokobai et al 2012: 6) and Gavar (M. H. Viljoen 2009b: 4).

- (2.44) [ɣǝvǝéŋ] /ɣvǝáŋ^Y/ ‘never’
 [ǝvǝé] /wvǝá/ ‘dispersed’

2.2.10 Glides

Buwal has the labial-velar and palatal glides /w/ and /j/. The glides are analysed as consonants in Buwal rather than vowels since they occupy consonantal slots in the phonological structure (see Section 2.6.2).

The examples in (2.45) show the contrasts among glides.

- (2.45) a. [jē] /jā/ ‘say/call’ [wé] /wā/ ‘breast’
 [jèm] /jàm/ ‘water’ [wém] /wám/ ‘ten’
 b. [hējēk] /xājāk/ ‘ground’ [dēwēn] /dāwān/ ‘back’
 [néjé] /nájá^Y/ TAG.CONF [mēwè] /máwà^Y/ ‘new’

Where the glides occur before a consonant in word initial position or between two consonants in word medial position, they are pronounced as slightly lengthened high vowels. In these cases an epenthetic vowel is inserted between the glide and the consonant and then the vowel and the glide fuse to become a semi-long vowel. Barreteau (1988: 162-163) found a similar process in Mofu-Gudur where he reports three acceptable pronunciations for words whose underlying forms begin with /wə/ (2.46).

(2.46) Mofu-Gudur

/wədəz/ ‘tree’ [wùdéz] ~ [w̄ùdéz] ~ [ùdéz]

In Buwal, if a labial-velar glide /w/ occurs before a consonant in word initial position, the resulting surface vowel is [ɔ̄] regardless of whether or not the word is palatalised (2.47).

- (2.47) a. [ùdē] /wdā/ ‘food’ [ōnéf] /wnáf/ ‘heart’
 b. [ùlēt̪] /wlād^Y/ ‘pus’ [ùdʒēk] /wdʒāk^Y/ ‘hut’

However, if /w/ occurs between two consonants in the word medial position and the word is palatalised, the resulting surface vowel is [ɣ̄] (2.48a). In non-palatalised words the surface vowel is [ɔ̄] (2.48b).

- (2.48) a. [t̪̄l̄èk] /twlāk^Y/ ‘circle’ [mēt̪̄l̄ē] /mātwlā^Y/ ‘lie’
 b. [m̄s̄é] /mwsá/ ‘twin’ [h̄l̄w̄l̄ē] /hālwlā/ ‘wall’

The palatal glide /j/ occurs infrequently before a consonant. Where it does occur, the same processes of vowel insertion, heightening and fusion apply (2.49).

- (2.49) [k̄z̄ēŋ] /kjzēŋ/ ‘first-born girl’
 [m̄d̄ēn̄ēk] /mjđānāk/ ‘pigeon’

The most significant example of this is the third person plural subject agreement marker whose underlying form is /j/ but which is pronounced [í] (2.50).¹

(2.50) [í kēhēn] /j kāxān/ ‘they are crying’

The labial-velar glide /w/ also has two other allophones which occur in the word final position. In palatalised words, word final /w/ is fronted to become the labial-palatal glide [ɥ] (2.52).

(2.51) [fèɥ] /sàw^Y/ ‘bear with’
 [dzèkédzèɥ] /dzàkádzàw^Y/ ‘plant sp.’

In non-palatalised words a word final sequence /aw/ is pronounced [o:] (2.53).

(2.52) [dò:] /dāw/ ‘love, want’
 [zèdò:] /zādāw/ ‘night’

2.2.11 Labial-velar plosives

The labial-velar plosives /kp/, /gb/ and /^hmb/ are marginal phonemes in Buwal as they occur only in a small number of words. In all examples except one (2.55b), they occur in the word initial position.

Only one example of the voiceless labial-velar plosive /kp/ was found in the corpus and this occurs in an ideophone (2.53).

(2.53) [kpēŋ] /kpāŋ/ ‘manner of getting something’

¹ Note that this marker is phonologically independent and therefore is written separately. See discussion of word break issues in Section 2.8.3.

The voiced labial-velar plosive /gb/ is more frequent, being found in nine words. The examples under (2.54a) are either ideophones or may have originated as ideophones whereas this could not be said of the examples under (2.54b).

- (2.54) a. [gbék] /gbák/ ‘manner of grabbing something’
 [gbó:] /gbáw/ ‘manner of finishing completely’
 [gbōŋ^w] /gbāŋ^w/ ‘knock(v)’
 [gbēv] /gbāv/ ‘knock a hole in something(v)’
 [gbēɓ] /gbāɓ/ ‘manner of body shining’
- b. [gbèf] /gbàf/ ‘soak through’
 [gbék] /gbák/ ‘two’
 [gbéŋ] /gbáŋ/ ‘very close’
 [gbér] /gbár/ ‘straight’

Eight words containing the prenasalised labial-velar plosive /^{nm}gb/ were found. Five of these are ideophones or may have originated as such (2.55a) and the other three are not (2.55b).

- (2.55) a. [^{nm}gbóx^w] /^{nm}gbáx^w/ ‘noise of something thrown down’
 [^{nm}gbém] /^{nm}gbám/ ‘manner of tipping out something’
 [^{nm}gbèm] /^{nm}gbàm/ ‘manner of growing in bunches’
 [^{nm}gbēk] /^{nm}gbāk/ ‘stop short’
 [^{nm}gbòk^w] /^{nm}gbàk^w/ ‘hit with elbow’
- b. [^{nm}gbé] /^{nm}gbá/ ‘up’
 [^{nm}gbòk^w] /^{nm}gbàk^w/ ‘hump’
 [wētē^{nm}gbé] /wātā^{nm}gbá/ ‘black ant’

Labial-velar plosives are not common in Central Chadic languages. In Kotoko they are allophones of the labial implosive [ɓ] (Roberts 2001: 97). However, in Buwal they need to be analysed as phonemes because they contrast with similar sounds before a vowel (2.56).

- (2.56) a. [gbér] /gbár/ ‘straight’
 [bēr] /bār/ ‘against’
 [bèr] /bàr/ ‘crack’

b. [ʷmbóxʷ]	/ʷmbáxʷ/	‘noise of something thrown down’
[ᵐbóxʷ]	/ᵐbáxʷ/	‘pardon’
[ŋᵔōxʷ]	/nᵔāxʷ/	‘pull apart’

These types of sounds are mainly found in languages around the south-eastern limits of Central Chadic and especially within the Daba group of which Buwal is a part. They seem to occur reasonably frequently in Daba (Lienhard and Giger 1982: 36 & 86) and they are also found in Gavar (Viljoen 2009b: 1-3) and Mbudum (Ndokobai et al 2012: 7).

The likely source of labial-velar plosives in these languages are nearby Niger-Congo languages. They have been found to occur in both Fali (Sweetman 1981: 12) which borders on Daba, and Mundang (Elders 2000: 23) which borders on the Chadic language of Giziga South which then borders on Mina and Mofu-Gudur (Barreteau and Dieu 2000: 64-70) (see language map Figure 1.2). In both Fali and Mundang labial-velar plosives have been found only to occur in word initial position apart from one exceptional ideophone in Mudang (Sweetman 1981: 13; Elders 2000: 23-33).

2.3 Vowels

As mentioned in Section 2.1, Buwal can be analysed as having only one full vowel phoneme /a/ with an epenthetic vowel being inserted to break up disallowed consonant clusters. There is also a second type of inserted vowel which could be referred to as transitional since it occurs at transition breaks between the consonants of allowed clusters. The transitional vowel will not be discussed further in this section. Arguments for the one-vowel analysis as well as a description of the distribution and the difference between the two types of inserted vowels are given in Section 2.6.3.

Both full and epenthetic vowels are coloured by palatalisation and labialisation effects to give rise to at least ten surface forms. These forms are summarised in Table 2.4. Colouring effects from neighbouring consonants giving rise to a large number of phonetic surface vowels has been attested cross-linguistically in a number of languages with vertical vowel systems including Karbadian (Choi 1991) and Marshallese (Choi 1995).

Table 2.4: Surface vowels in Buwal

Underlying form	Surface forms			
	Front		Non-Front	
	Unrounded	Rounded	Unrounded	Rounded
Epenthetic /Ø/	i/ɪ	ɤ	ə	u/ʊ
Full /a/	e/ɛ	œ	ɐ	o/ɔ

How these many surface vowels can arise from one underlying vowel phoneme is summarised with respect to palatalisation and labialisation effects in Table 2.5 and explained more fully in the sections which follow. While Buwal has a palatalisation prosody at the level of the phonological word, labialisation generally affects only vowels adjacent to a labialised velar consonant. In Table 2.5 the surface vowel forms are broadly divided into those which are found in non-palatalised words and those which occur in palatalised words. Within these broad divisions the effects on vowel quality of labialised velar consonants plus the palatal and labial-velar glides are shown.

Table 2.5: Summary of the environments in which surface vowels occur

Underlying form	Surface forms								
	Non-palatalisation				Palatalised				
		__K ^w or K ^w __	__/j/	__/w/ or /w/		__K ^w or K ^w	__/j/	__/w/ /w/	__/w/
/Ø/	[ə]	[ʊ]	[i]	[u]	[ɪ]	[u] or [u]	[i]	[ɤ]	[ʊ]
/a/	[a]	[a], [o] or [ɔ] (_ /r/)	[a]	[a] or [o]	[ɛ]	[œ], [o] or [ɛ]	[e]	[e]	[ɛ]

K^w represents any labialised velar consonant.

It is evident from Table 2.5 that as well as palatalisation and labialisation other conditions also give rise to variations in phonetic vowel quality. These other conditions will also be described in more detail in the sections which follow.

Minimal pairs showing the contrast of the full vowel versus the epenthetic vowel are given in (2.57).

(2.57) [démē]	/dámā/	‘glue’	[dəmē]	/dmā/	‘bride’
[^ŋ gɛ́ ʒɛ́]	/ ^ŋ gáʒā ^Y /	‘knife’	[^ŋ gì ʒɛ́]	/ŋgʒā ^Y /	‘forge’
[tēbɔ̀k ^w]	/tābàk ^{wY} /	‘bat’	[tībɔ̀k ^w]	/tbàk ^w /	‘chaff’
[tēwēr]	/tāwār/	‘walk’	[tòwèr]	/twàr/	‘(be) dizzy’

2.3.1 Palatalisation

At first glance Buwal appears to have vowel harmony. For the majority of morphemes all the vowels are either non-front (2.58) or front (2.59) (see Table 2.4).

(2.58) [mḗlɛ́hɛ́j]	/mā́láháj/	‘mouse’
[ŋkɔ́dɛ́ŋ]	/nkɔ́dāŋ/	‘stone’
[mḗ ⁿ dúwén]	/mā́ ⁿ dwán/	‘rat’
[k ^w ɔ́lɛ́k ^w ɛ́r]	/k ^w ā́lák ^w ar/	‘worn out thing’
(2.59) [mè̀vɛ́dɛ́dɛ́ŋ]	/māvā́dvā́dāŋ ^Y /	‘turtle’
[ŋtīmɛ́k]	/ŋtmāk ^Y /	‘sheep’
[dɛ́dɛ́wɛ́k]	/dā́dwāk ^Y /	‘bitter’
[k ^w ɔ́lɛ́lɛ́]	/k ^w ālālā ^Y /	‘fine’

The concept of prosodies of palatalisation or labialisation, functioning at either the syllable or the word level, provide a more nuanced account of the data. These processes have been found useful to explain the phonological systems of a number of Central Chadic languages such as Mbuko (Gravina 1999: 53), Muyang (Smith 1999: 13-20), Moloko (Bow 1997b: 6), Bana (Hofmann 1990: 56) and Mofu-Gudur (Barreteau 1988: 302). This approach is useful because such prosodies affect not only vowels but also consonants. Palatalisation fronts vowels and also palatalises certain consonants while labialisation produces both rounded vowels and the labialisation of certain consonants (Roberts 2001: 103). These prosodies were postulated by Wolff (1983b: 225) for proto Central Chadic.

In an environment of palatalisation, the full vowel phoneme /a/ is fronted and raised to become [ɛ] and the epenthetic vowel in such words is the front vowel [ɪ]. (What happens to vowels when palatalisation and labialisation effects are combined is discussed in more detail in Section 2.3.2 on labialisation.) The consonants which are affected by

palatalisation are the alveolar fricatives /s/ and /z/ and the alveolar affricates /ts/, /dz/ and /ʎdz/. Under palatalisation they become post-alveolar in the environments described in Sections 2.2.4 and 2.2.5. The effects of palatalisation on vowels and consonants are illustrated by the examples in (2.60).

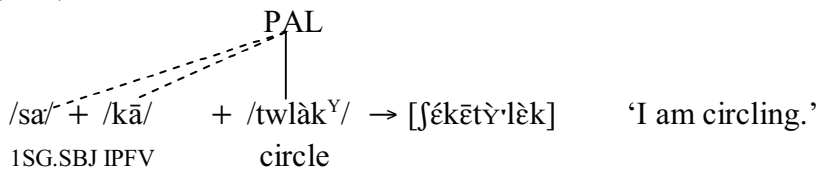
(2.60)	[hēʃēŋ]	/xāsāŋ ^Y / ²	‘forget’
	[ʒēʒēdǎ]	/zāzāǎǎ ^Y /	‘giraffe’
	[tʃétʃýwēr]	/tsátswār ^Y /	‘filter’
	[gèdʒérē]	/gàdzárā ^Y /	‘shorts’
	[dǐbǎ]	/dbá ^Y /	‘termite hill’

Another reason for treating this process as a palatalisation prosody is that it often spreads beyond the the root or affix.

1) Palatalisation spreads leftwards from:

(i) a verb root to its prefixes

(2.61)



Note that in this case the extent of the spread of palatalisation from a verb root onto its prefixes depends on the speaker and the speed of speech. A number of palatalised verb roots were recorded by three different speakers in the frame [sékē___jém] ‘I am ___ing also’.³ Speaker 1 recorded all the palatalised verbs in the corpus, whereas Speaker 2 and 3 only recorded a selection (around forty) of them. Table 2.6 gives the pronunciation of one of these verbs from three different speakers. Each speaker repeated the verb three times. Note that there is variation in palatalisation spread between different tokens from the same speaker.

² A superscript Y at the end of a word is used to represent the palatalisation prosody.

³ The purpose of the frame was to eliminate the effect of an utterance final boundary tone (see Section 2.7.2.1) on the pronunciation of the verb.

Table 2.6: Variation in leftward spread of palatalisation from verb root to prefixes

	Token 1	Token 2	Token 3
Speaker 1	[sékēt̪·lèk]	[sékēt̪·lèk]	[sékēt̪·lèk]
Speaker 2	[sékēt̪·lèk]	[sékēt̪·lèk]	[sékēt̪·lèk]
Speaker 3	[sékēt̪·lèk]	[sékēt̪·lèk]	[ʃékēt̪·lèk]

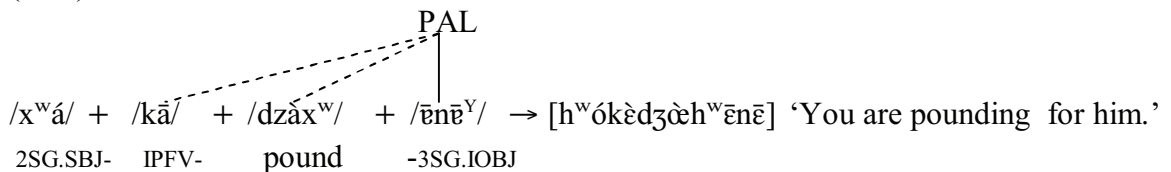
Table 2.7 summarises the extent of palatalisation spread for each speaker for all the verbs recorded in the frame outlined above. The table shows that there is significant variation between speakers. For Speaker 1 a spread of one syllable was preferred. For Speaker 2 the vast majority of tokens showed two syllables of spread but to the vowel only. Speaker 3 showed the most variation though, preferring no spread or spread to one syllable.

Table 2.7: Summary of leftward palatalisation spread from verb roots to prefixes

	Speaker 1 (501 tokens)	Speaker 2 (126 tokens)	Speaker 3 (120 tokens)
No spread	33.1%	-	44.2%
1 syllable	66.3%	1.6%	36.6%
2 syllables (vowel only)	0.6%	98.4%	14.2%
2 syllables (incl. cons)	-	-	5.0%

(ii) a verb suffix to the verb root (and beyond).

(2.62)



Again the extent of palatalisation spread depends on the speaker and speed of speech.

Non-palatalised verbs were recorded in the frame [hʷékē-___-ēnē jém] ‘You are ___ ing for him also’. Table 2.8 shows the variation of palatalisation spread for the verb in (2.62) for the three different speakers.

Table 2.8: Variation in leftward spread of palatalisation from verb suffix

	Token 1	Token 2	Token 3
Speaker 1	[h ^w ókèdzòh ^w ɛnɛ̃]	[h ^w ókèdzòh ^w ɛnɛ̃]	[h ^w ókèdzòh ^w ɛnɛ̃]
Speaker 2	[h ^w ókèdzòh ^w ɛnɛ̃]	[h ^w ókèdzòh ^w ɛnɛ̃]	[h ^w ókèdzòh ^w ɛnɛ̃]
Speaker 3	[h ^w ókèdzòh ^w ɛnɛ̃]	[h ^w ókèdzòh ^w ɛnɛ̃]	[h ^w ókèdzòh ^w ɛnɛ̃]

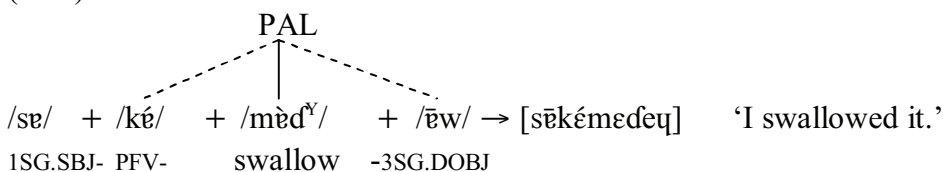
Table 2.9 gives a summary of the palatalisation spread for each speaker for all the verbs recorded by them during this study. Speaker 2 shows the greatest palatalisation spread, most frequently involving two syllables and then three. Speaker 3 has the least spread, preferring no spread followed by spread to one syllable. Speaker 1 on the other hand is somewhere in the middle with palatalisation mostly spreading to one syllable.

Table 2.9: Summary of leftward palatalisation spread from a verbal suffix

	Speaker 1 (57 tokens)	Speaker 2 (60 tokens)	Speaker 3 (57 tokens)
No spread	28.1%	-	49.1%
1 syllable	49.1%	13.3%	35.1%
2 syllables	8.8%	51.7%	15.8%
3 syllables	14.0%	30.0%	-
4 syllables	-	5.0%	-

2) Palatalisation spreads rightward from a verb root onto the 3rd person singular direct object suffix /-ɛ̃w/.

(2.63)



This is the only example of rightward spreading of palatalisation and may be partly due to the heightening effect of the labial-velar glide /w/.

Palatalisation does not normally spread across word boundaries in ordinary speech.

However, a word final open syllable of a previous word may be palatalised. This pattern is in free variation with no palatalisation (2.64). Examples found in natural speech are given in (2.65).

(2.64)

PAL

/mbà mpà^Y/ → [mbè mpè] ~ [mbè mpè]
 child tree fruit (lit. child of tree)

(2.65) a. /k^wáp má dàknàk má dā vádzād^Y mpà^Y/
 cup REL black REL resemble leaf tree
 → [k^wóp mé dèknèk mé dē védzēt¹ m̄pê]
 ‘A cup which is black like tree leaves’ (LL28-SE:20)

b. /skàn vādjá^Y má dā ābā^Y zānáj^Y tsá vákáj^Y/
 thing other REL resemble DEM.MED again TOP which
 → [skèn vīdí: mé d(ē) ēbē zēné tʃé vékéj]
 ‘What are other things like this one?’ (LL3-SE:50)

In sum, it can be said that palatalisation spreads minimally, zero syllables across morpheme boundaries, and maximally to an open syllable of a previous word. Palatalisation does not spread across a pause (2.66).

(2.66) /á dwzá^Y tsá, dàb j dàbākāj^Y wnāf āká.../
 at after TOP calm 3PL.SBJ calm-1SG.IOBJ heart ACC
 → [é d̄yːzé tsé, dèp¹ ì: dèbéké ù.nēf ēké...]
 ‘After that, they calmed me down.’ (NH3-SN:5.6)

As well as the palatalisation prosody, glides also have a local raising effect on vowels. For example before a glide /a/ is pronounced [e] rather than [ɛ] as in the following palatalised words (2.67 a & b).

(2.67) a. [vépéj] /vápáj^Y/ ‘when?’
 [ʒèj] /ʒàj^Y/ ‘meat’
 b. [gēⁿdēu] /gāⁿdāw^Y/ ‘palm’
 [bì ʒèu] /bʒàw^Y/ ‘break out’

Furthermore, alternate pronunciations of certain verb roots beginning with the palatal glide are sometimes heard (2.68). This is not a pervasive process in Buwal, however, as there are many examples of /a/ adjacent to /j/ where the vowel is not heightened (2.69).

(2.68)	[jēk] ~ [jēk]	/jāk/	‘abandon’
	[jēɬ] ~ [jēɬ]	/jāɬ/	‘hatch’
(2.69)	[jèm]	/jàm/	‘water’
	[bēj]	/bāj/	‘chief’

The palatal glide /j/ also has a raising effect on a preceding epenthetic vowel which is then realised as [i] in both palatalised (2.70a) and non-palatalised words (2.70b).

(2.70) a.	[^h gījēj]	/ ^h gjāj ^Y /	‘pap’
	[ùʒījé]	/wʒjáj ^Y /	‘children’
b.	[vījē]	/vjā/	‘wet season’
	[fijēm]	/fjām/	‘weevil’

2.3.2 Labialisation

As mentioned in Section 2.3.1, some Central Chadic languages can be said to have a labialisation prosody which affects both vowels and velar consonants within morphemes. For Buwal this is not the case. In general rounded vowels are only found next to labialized velar consonants or the labial-velar glide /w/.

Labialisation spreads from a labialised velar consonant onto an adjacent vowel within a morpheme so that in non-palatalised words /a/ becomes [o] (or ɔ before /r/) and [œ] in palatalised words. The epenthetic vowel in this situation is mostly pronounced [u]. The rounding effects of the labial-velar glide differ from labialised velar consonants and will therefore be described later in this section.

Under certain conditions labialisation spreads either rightward (A) or leftward (B) to a full vowel within a morpheme.

A) Labialisation spreads to the vowel to the right of a labialised velar consonant in (i) non-utterance final syllables and (ii) utterance final syllables ending in a labial or palatal consonant.

(i) Non-utterance final syllables with a round vowel following a labialised velar consonant are shown in (2.71).

(2.71) [h ^w óśésēp ^ɿ]	/x ^w ásásāḃ/	‘cane rat’
[^ɳ g ^w œfém]	/ ^ɳ g ^w ásám ^Y /	‘ferocity’
[lék ^w ótēj]	/lák ^w átāj/	‘whip(n)’
[g ^w ōdērēk]	/g ^w ādārāk/	‘vulture’
[γ ^w àrnòk ^w]	/γ ^w àrnàk ^w /	‘onion’

(ii) Utterance final syllables beginning with a labialised velar consonant and ending in a labial or palatal consonant containing a round vowel are shown in (2.72). Labial consonants have also been reported to have a rounding effect on vowels in Mofu-Gudur (Barreteau 1998: 274).

(2.72) [k ^w ōp]	/k ^w āp/	‘throw at’
[ḃùγ ^w ōm]	/ḃγ ^w ām/	‘cheek’
[h ^w óh ^w ōp ^ɿ]	/x ^w áx ^w āḃ/	‘debris’
[télg ^w ōj]	/tálg ^w āj/	‘flute’

Labialisation does **not** spread in open syllables (2.73a) and closed syllables with an alveolar or non-labialised velar coda (2.73b) in utterance final position.

(2.73) a.	[mētōk ^w tōk ^w ē]	/mētēk ^w tēk ^w ē/	‘knee’
	[ŋ ^w x ^w ē]	/nx ^w ē/	‘goat’
	[tèrg ^w ē]	/trg ^w ē/	‘granary’
b.	[dèmték ^w ēt ^ɿ]	/dèmték ^w ēd/	‘tree sp.’
	[tʃétʃèŋg ^w ēḃ]	/tsétsè ^ɳ g ^w ēḃ ^Y /	‘sorghum head stalk’
	[k ^w ēγ]	/k ^w ēγ/	‘have diarrhea’
	[k ^w ék]	/k ^w ék/	‘heat’

Vowels which are not rounded in word final syllables before a pause are rounded when followed by another word (2.74).

(2.74) a.	/mātāk ^w tāk ^w ā	nā	ágā ^Y /	→	[mētōk ^w tōk ^w ō nē (é)gē]
	knee	1SG.POSS	PL		
	‘my knees’				

(LL20-SE:30)

b. /ārā k^wák^wàs k^wáw/ → [ērē k^wók^wòs k^wó:]
 COP sacrifice NEG
 ‘It’s not a sacrifice’

In palatalised words in word initial syllables [œ] appears to be in free variation with [o] ([œ] before /r/) (2.75). Out of 84 tokens of words of this type spoken in isolation by one speaker, a third were pronounced with the back vowel. Example (1467) in (2.75) below was recorded on different days, one day the speaker pronounced it with the back vowel, and another day with the front vowel. This type of variation is also reported for Mofu-Gudur (Barreteau 1988: 331).

(2.75) [k^wœk^wēt^ɿ] ~ [k^wók^wēt^ɿ] /k^wāk^wād^Y/ ‘scatter’
 [g^wœb^é] ~ [g^wób^é] /g^wábá^Y/ ‘fresh’
 [ɣ^wœrg^è] ~ [ɣ^wòrg^è] /ɣ^wàrgà^Y/ ‘mushroom’

When a rounded full vowel is followed by /r/ it is pronounced [ɔ] in non-palatalised words (2.76).

(2.76) [tēk^wōrē] /tēk^wērē/ ‘namesake’
 [g^wòrzèm] /g^wèrzèm/ ‘get up’

B) Labialisation will spread leftward if (i) rightward spread is blocked by a syllable boundary or (ii) the onset of a preceding syllable is a labial consonant.

(i) If rightward spread is blocked by a syllable boundary, labialisation spreads leftward from a syllable final labialised velar consonant onto the preceding vowel. Examples are provided in (2.77).

(2.77) [tēb^{òk^w}] /tāb^{èk^w}/ ‘bat’
 [b^{èb^{òx^w}}] /bàb^{àx^w}/ ‘bark (v)’
 [mél^{òk^w}đé] /málàk^wđá^Y/ ‘dung beetle’
 [mēt^{òk^w}t^{òk^w}ē] /mātāk^wtāk^wā/ ‘knee’

(ii) If the onset of the preceding syllable is a labial consonant, the vowel to the left of a labialised velar consonant will be rounded.

(2.78) [fóg ^w ój]	/fág ^w áj/	‘stubbornness’
[vōg ^w úmtét ¹]	/vāg ^w mtád/	‘day after tomorrow’
[mōk ^w óh ^w ōw]	/māk ^w áh ^w āw/	‘log’
[^m bòg ^w òf]	/ ^m bāg ^w āf/	‘house mouse’

Turning now to labialisation spread across morpheme boundaries: when prefixes are attached to a verb root there is some variation in the rules conditioning labialisation spread outlined above. For example, when the 2nd person singular subject agreement prefix /x^wā-/ is attached to the front of a verb, labialisation does not always spread **rightward** onto the vowel as in condition A (i) above. Whether or not it does depends on the following consonant. To investigate this distribution 32 verbs beginning with a variety of consonants were recorded by three different speakers with three repetitions each. It was found that if the following consonant is anything but alveolar, /a/ will be rounded to become [o] (2.79a). If the following consonant is alveolar, /a/ remains unrounded (2.79b). If the palatal glide /j/ occurs as the following consonant, then [ɐ] appears to be in free variation with [o] (2.79c). Out of eighteen such tokens a third were labialised.

(2.79) Labialisation spread on the 2nd person singular subject agreement prefix

- a. /x^wā-/ + /bàbàx^w/ → [h^wōbèbòx^w]
 2SG.SBJ- bark
 ‘You bark.’
- /x^wā-/ + /k^wāp/ → [h^wōk^wōp]
 2SG.SBJ- throw at
 ‘You throw at.’
- b. /x^wā-/ + /tāk^wār/ → [h^wētēk^wōr]
 2SG.SBJ- curl up
 ‘You curl up.’
- c. /x^wā-/ + /jàk^w/ → [h^wējòk^w] ~ [h^wōjòk^w]
 2SG.SBJ- shorten
 ‘You shorten.’

As noted under B (ii) above labialisation spreads **leftward** to the preceding syllable within a word if it begins with a labial consonant. This type of rounding effect was investigated for the same 32 verbs as above preceded by the first person dual subject

marker [mèmé-]. It was found that labialisation spread in this instance was weaker than within words. The second vowel of this marker is only optionally rounded before labial and labialised velar consonants (2.80a). When followed by a labial consonant, out of 63 tokens, the vowel was rounded in 21% of cases. When followed by a labialised velar consonant, out of 99 tokens, the vowel was rounded in 42% of cases. It was not rounded at all before palatal or alveolar consonants (2.80b).

- (2.80) a. /mèmé-/ + /bàbàx^w/ → [mèmébèbòx] ~ [mèmó^bbèbòx jém]
 1DUAL.SBJ- bark
 ‘We two bark.’
- /mèmé-/ + /x^wēfēk/ → [mèméh^wēfēk] ~ [mèmó^hh^wēfēk]
 1DUAL.SBJ - gouge
 ‘We two gouge.’
- b. /mèmé-/ + /jàk^w/ → [mèméjòk^w]
 1DUAL.SBJ- shorten
 ‘We two shorten.’
- /mèmé-/ + /srāx^w/ → [mèmésərōx^w]
 1DUAL.SBJ- slide
 ‘We two slide.’

Labialisation may also spread **leftward** from a verbal suffix to a preceding vowel if the preceding consonant is labial, or labialised velar. To investigate this further, recordings were made of seven verbs ending in a vowel and twenty-two verbs ending in consonants of various types with the second person singular and plural object suffixes, [-āh^wō] and [-āhùnè]. Once again, the same three speakers were used and each verb was repeated three times. For verbs ending in an open syllable, the two vowels at the morpheme boundary fuse to form a long vowel which is not rounded at all when preceded by a non-labial consonant (2.81a) and is rounded in 74.1% of cases when preceded by a labial consonant (2.81b).

- (2.81) a. /sā-/ + /jā/ + /-āx^wāw/ → [sējē:h^wō]
 1SG.SBJ- call -2SG.DOBJ
 ‘I call you.’
- b. /sā-/ + /sbà^Y/ + /-āx^wāw/ → [sēj**ib**ē:h^wō]
 1SG.SBJ- pay bride price -2SG.DOBJ
 ‘I pay bride price for you.’

For verbs ending in a non-labial or labialised velar consonant no rounding occurred (2.82a) in the vast majority of cases. The only examples of labialisation spread were from one speaker and occurred when the preceding consonant was velar. For verbs ending in labial and labialised velar consonants, labialisation spread seems to depend on the speaker (2.82b). For two of the three speakers recorded, the vast majority of tokens showed rounding of the vowel in such a situation. For the third speaker only 24.2% of preceding vowels were rounded out of 66 tokens.

- (2.82) a. /sā-/ + /nkràt/ + /-āx^wnà^Y/ → [sēŋkrètə^hwùnè]
 1SG.SBJ- simmer -2PL.IOBJ
 ‘I simmer for you.’
- b. /sā-/ + /ʒāp/ + /-āx^wnà^Y/ → [sèʒəpə^hwùnè] ~ [sèʒəpə^hwùnè]
 1SG.SBJ- speak -2PL.IOBJ
 ‘I speak to you.’

To test leftward labialisation spread across word boundaries, twenty-five genitive constructions with the second noun beginning with a labialised velar consonant were recorded by one speaker. The first noun in each phrase ended with an open syllable whose onset was a consonant with varying place of articulation. It was found that no rounding occurred for non-labial consonants (2.83a). For labial and labialised velar consonants rounding occurred in 40.7% of cases out of 27 tokens (2.83b & c), showing that labialisation spread across word boundaries is relatively weak.

- (2.83) a. /brá^Y/ + /k^wájk^wájē/ → [bré k^wójk^wójē]
 herd hyena
 ‘herd of hyenas’
- b. /ŋfá/ + /^ŋg^wùdē/ → [ŋfó ^ŋg^wùdē] ~ [ŋfè ^ŋg^wùdē]
 flour sorghum and beans
 ‘flour of sorghum and beans’
- c. /ŋ^wh^wā/ + /g^wādžāŋg^wā^Y/ → [ŋ^wh^wō g^wōdžēŋg^wēɾ] ~ [ŋ^wh^wē g^wōdžēŋg^wēɾ]
 goat chicken basket
 ‘goat of chicken basket’

Like palatalisation, labialisation does not spread across a pause (2.84).

- (2.84) [h^wõ:lëkzë, h^wõ:lëkzë kédëk kédëk]
 2SG.SBJ-think-TRANS 2SG.SBJ-think-TRANS well well
 ‘You think about it, you think about it very well.’ (HT2-SN:6.4)

As previously mentioned, the epenthetic vowel is pronounced [u] when in contact with a labialised velar consonant. This is the case for both non-palatalised (2.85a) and palatalised words (2.85b). This is in contrast to Muyang (Smith 1999: 11) where every schwa in an environment that is both palatalised and labialised is pronounced [ɣ]. At the other extreme Bow (1997: 15) states that in Moloko, the schwa cannot bear both palatalisation and labialisation and in this situation is pronounced [ʊ] or [u].

- (2.85) a. [k^wũdëp] /k^wdāp/ ‘lose’
 [dùg^wëʒ] /dɔg^wàʒ/ ‘clay pot’
 b. [ᵑg^wũrëx] /ᵑg^wrāx^Y/ ‘scratch’
 [h^wũⁿdøk^w] /x^wn^dàk^{wY}/ ‘hooked’

Note that [ʊ] is raised to [u] in closed syllables (2.86).

- (2.86) [bùk^wlë] /bk^wlë/ ‘skin’ [túk^wsésër] /tk^wsásār/ ‘dry’

A further effect of labial consonants is to provoke the spreading of labialisation throughout the whole word as illustrated by the examples in (2.87). This only occurs when a labialised velar consonant is present.

- (2.87) [bũdõk^w bũdõk^w] /bdāk^w bdāk^w/ ‘hornbill’
 [h^wũbòf] /x^wbàf/ ‘foam’
 [k^wũsèm] ~ [k^wũsòm] /k^wsàm/ ‘body’
 [x^wõròm] /x^wārām/ ‘bend down’

However, if the vowels are full vowels this labialisation spread may be blocked by an intervening consonant cluster (2.88).

- (2.88) [métsk^wõx^w] /mátsk^wāx^w/ ‘evening’
 [pèrʒòk^w] /pàrʒàk^w/ ‘escape’
 [h^wòrlèv] /x^wàrlàv/ ‘bent’

In Buwal the labial-velar glide /w/ does not have as strong a rounding effect on the full vowel /a/ as it does in many other Central Chadic languages. In most cases an adjacent full vowel is not rounded when in contact with /w/ as in the following examples (2.89).

- (2.89) [dēwēn] /dāwān/ ‘back’
 [lēwēt̚] /lāwād/ ‘play’

There is one example in the data of /a/ being rounded to become [o] following a labial-velar glide /w/ word medially (2.90).

- (2.90) [wòlwèl] /wàlwàl/ ‘lamp’

In this example /a/ is both preceded and followed (in spite of an intervening consonant) by /w/ which may have a greater rounding effect than a single /w/.

A slight rounding effect was also noted for /a/ between two /w/ across a word boundary (2.91).

- (2.91) /wá/ + /wēŋ/ → [wé wēŋ] ~ [wó wéŋ]
 milk vein
 ‘milk of vein’

The situation is different in closed syllables ending with /aw/. As was mentioned in the section 2.2.10 on glides, /aw/ in this case is pronounced [o:].

The epenthetic vowel is pronounced [u] preceding the labial-velar glide in non-palatalised words (2.92a) and [ɥ] in palatalised words (2.92b).

- (2.92) a. [dùwē] /dwā/ ‘debt’
 [zùwēj] /zwāj/ ‘paint’
 b. [br̀wēŋ] /brwāj̣ʸ/ ‘spear’
 [l̀wèt̚ʃ] /lwàtṣʸ/ ‘fireplace’

2.3.3 Long vowels

Only four examples were found in the corpus of words containing long vowels (2.93). As they are so few, long vowels have not been analysed as distinct phonemes in Buwal. However, a few Central Chadic languages have been found to have distinctive long vowels including the nearby languages of Mbudum (Ndokobai et al 2012: 9), Mafa (Roberts 2001: 102) and Mofu-Gudur (Barreteau 1988: 251). These languages may be a possible source of these words in Buwal.

(2.93) [kē:vék]	/kā:vák ^Y /	‘bird sp.’	(alternate: [kēvēvék])
[g ^w é:ḷēm]	/g ^w á:ḷām/	‘hole in tree trunk’	(alternate: [g ^w óḷéḷēm])
[^ɓ gé:ḷō:]	/ ^ɓ gá:ḷāw/	‘plant sp.’	
[džē:džē]	/dzā:dzā/	‘every type’	

For the first two examples listed above, pronunciations which do not contain the long vowel but an extra syllable instead are attested. This may suggest an alternate explanation for the presence of the long vowel. A similar phenomenon occurs for certain words in Mofu-Gudur (Barreteau 1988: 333-334). In connection with Mofu-Gudur, Gravina (2007b: 5-6) notes that phonological material has been lost historically and is then compensated for by either reduplication or vowel lengthening.

2.4 Phonology of loan words

Loan words in Buwal generally come from either Fulfulde or French. There has been longer contact with Fulfulde so its influence has been greater. In terms of phonology, loan words fall into two categories: those which have been unchanged and those which have been modified in some way in order to better fit the phonological system of Buwal.

Among those words which have retained their original form, some already fit within Buwal phonology such as the following example (2.94).

(2.94) [kėj]	‘interjection, no’	(Fulfulde <i>kay</i>)
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Other words contravene the rules of Buwal phonology because they involve; (i) non-conformity to palatalisation patterns, (ii) rounded vowels in non-labialised environments, (iii) word-final schwa, (iv) nasal vowels and (v) long vowels .

(i) Palatalisation patterns were discussed in Section 2.3.1. Buwal does not normally allow unpalatalised consonant next to a front vowel or a palatalised consonant next to a non-front vowel. However, examples of these patterns can be seen in loan words (2.95a). Futhermore a mixture of front and non-front vowels in the one morpheme does not usually occur. Again loan words may exhibit this pattern (2.95b).

- (2.95) a. [séj] ‘except’ (/s/ not palatalised to become [ʃ]) (Fulfulde *sey*)
 [ʃéj] ‘tea’ ([ʃ] occuring before an unpalatalised vowel)
 (Fulfulde *sha’i*)
- b. [nébēm] ‘oil’ (Fulfulde *nebbam*)
 [lèk^wól] ‘school’ (French *l’école*)

(ii) Rounded vowels are normally only found next to labialised velar consonants or the labial-velar glide /w/ (see Section 2.3.2). In loan words they may be found next to other consonants (2.96).

- (2.96) [búndò] ‘well’ (Fulfulde *bunndu*)
 [fú] ‘all’ (Fulfulde *fuu*)

(iii) In Buwal, the nucleus of a word final syllable must always be a full vowel (see Section 2.6.1). Therefore words ending in [ə] are disallowed. However, examples of word-final [ə] in loan words are given in (2.97).

- (2.97) [kílōmé:trə] ‘kilometre’ (French *kilometre*)
 [pēstə:] ‘pastor’ (French *pasteur*)

(iv) Buwal has no nasal vowels, yet they may occasionally be found in loan words (2.98).

- (2.98) [mēgèzĩ] ‘store’ (French *magasin*)

(v) Long vowels in Buwal are rare (see Section 2.3.3). However, they do occur in loan words (2.99).

(2.99) [dèlɛːʒ] ‘concrete slab’ (French *dalage*)

There are other words which have been borrowed and modified to fit with the phonological patterns of Buwal. The types of processes which take place in the assimilation of borrowed words involve; (i) correction of palatalisation patterns, (ii) unrounding of rounded vowels, (iii) vowel lowering, (iv) shortening of long vowels, (v) shortening of long consonants and (vi) elimination of nasal vowels.

(i) In order to assimilate words to the palatalisation patterns found in Buwal (see Section 2.3.1), palatalised consonants are unpalatalised next to non-front vowels and unpalatalised consonants are palatalised next to a front vowel (2.100a). Vowels may also be fronted if the word already contains a front vowel or a palatalised consonant (2.100b).

(2.100)	a.	[ʃɛj]	→	[séj] ⁴	‘tea’	(Fulfulde <i>sha’i</i>)
		[koːsɛj]	→	[k ^w ɔ́ʃɛ]	‘doughnut’	(Fulfulde <i>koosay</i>)
	b.	[dʒɛnːgɛ]	→	[dʒìŋgè]	‘read, study’	(Fulfulde <i>jannga</i>)
		[pɛrɛːdʒɛ]	→	[pɛ̀rèdʒé]	‘doors’	(Fulfulde <i>pareeje</i>)
		[dɛrɛwɔl]	→	[dɛ̀rɛ̀wɛ̀l]	‘paper’	(Fulfulde <i>derewol</i>)

(ii) Rounded vowels which are not next to a labialised velar consonant may become unrounded (2.101).

(2.101)	[tum]	→	[tém]	‘daily, always’	(Fulfulde <i>tum</i>)
	[luːmo]	→	[lúmè]	‘market’	(Fulfulde <i>luumo</i>)
	[dɛrɛwɔl]	→	[dɛ̀rɛ̀wɛ̀l]	‘paper’	(Fulfulde <i>derewol</i>)
	[korowɛl]	→	[kɛ̀rɛ̀wɛ̀l]	‘chair’	(Fulfulde <i>korowal</i>)
	[tol]	→	[tél]	‘corrugated iron’	(French <i>tole</i>)

⁴ Note this is an alternate pronunciation to the one listed in (2.95) where the palatalisation is not corrected.

(iii) A word final schwa or its allophones (see Table 2.4) are lowered to full vowels in word final syllables as in the examples in (2.102).

(2.102)	[sʏkrə]	→	[sú'kēr]	'sugar'	(French <i>sucre</i>)
	[mɛ:trə]	→	[méntêr]	'teacher'	(French <i>maître</i>)
	[mɛʃin]	→	[mèʃēn]	'machine'	(French <i>machine</i>)
	[lɔ:]	→	[lér]	'hour'	(French <i>l'heure</i>)

(iv) As long vowels are rare in Buwal (see Section 2.3.3), in loan words they are often shortened. Examples of this are given in (2.103).

(2.103)	[bɛ:bɛ]	→	[bēbē]	'father'	(Fulfulde <i>baaba</i>)
	[fu:]	→	[fú]	'all'	(Fulfulde <i>fiu</i>)

(v) There are no long consonants in Buwal (see Section 2.2). Therefore in loan words long consonants are usually shortened as in the examples in (2.104).

(2.104)	[nɛb:vɛm]	→	[nébēm]	'oil'	(Fulfulde <i>nebbam</i>)
	[ɓun:du]	→	[ɓúndò]	'well'	(Fulfulde <i>ɓunndu</i>)
	[dʒɛn:gɛ]	→	[dʒìŋgè]	'read, study'	(Fulfulde <i>jannga</i>)
	[sɛm:bɛ]	→	[sémbé]	'strength'	(Fulfulde <i>sembe</i>)

(vi) As there are no nasal vowels in Buwal these may be eliminated by closing the syllable with a nasal (2.105).

(2.105)	[bɛlõ]	→	[bɛlónʷ]	'ball'	(French <i>balon</i>)
	[gɛlõ]	→	[gɛlónʷ]	'bottle'	(French <i>gallon</i>)

2.5 Phonology of interjections and ideophones

Buwal, like other Central Chadic languages has a class of manner adverbs which are often described as 'ideophones' (Schuh 1998: 308-309; Frajzyngier 2001: 164) and which include onomatopoeia. In many languages these types of words have unusual phonological features. In Buwal many ideophones conform to the normal phonological system of the language while others do not. Unusual features found in Buwal ideophones and interjections include; (i) wild changes in pitch, (ii) long vowels and consonants, (iii)

exaggerated aspiration, (iv) the presence of a glottal stop, (v) numerous repetitions, (vi) vowel glides, (vii) nasal vowels, (viii) non-conformity to palatalisation patterns, (ix) non-conformity to labialisation patterns and (x) schwa (or its allophones) in word final syllables.

(i) Buwal has three underlying level tones (see Section 2.7.1), but as expressives, interjections and ideophones may exhibit levels of pitch beyond these tones and also wild changes of pitch within the one morpheme, as in (2.106).

(2.106) [jɛ̀ɛ̀ɛ̀:] ‘noise of rain’

(ii) In Buwal long vowels are rare (see Section 2.3.3) and long consonants do not normally occur (see Section 2.2). However, examples of both of these in interjections and ideophones are given in (2.107).

(2.107) [héɛ̀ɛ̀j] ‘hey!’
[jɛ̀ɛ̀ɛ̀:] ‘noise of rain’
[ᵐbɛ̀ɛ̀ ʒ:é] ‘manner of staring fixedly’
[fɛ̀:ré] ‘manner of running slowly’

(iii) Although normally some aspiration occurs with voiceless plosives (see Section 2.2.2), the aspiration may be exaggerated in ideophones (2.108).

(2.108) [p^hǎh^w] ‘noise of suddenly entering or exiting’

(iv) The glottal stop is not a phoneme in Buwal (see Section 2.2) but it may be heard in interjections (2.109).

(2.109) [ᵐʔᵐ:] hesitation

(v) Numerous repetitions may be used for repeated events or noises. Examples of this are given in (2.110).

- | | | |
|---------|--|----------------------------------|
| (2.110) | [^ɲ gēm ^ɲ gèm ^ɲ gēm ^ɲ gèm] | ‘noise of grinding with a stone’ |
| | [k ^w úǵé k ^w úǵé k ^w úǵé k ^w úǵé] | ‘a bird cry’ |
| | [dīm dīm dīm] | ‘noise of thunder’ |
| | [tēp tēp tēp] | ‘noise of running quickly’ |

(vi) There are normally no vowel glides in Buwal (see Section 2.3). However, they may occur in interjections as in the examples in (2.111).

- | | | |
|---------|--------|---------|
| (2.111) | [ɛ̃ ʔ] | ‘hey?’ |
| | [wóǵ] | ‘whoa!’ |

(vii) Nasal vowels are not phonemic in Buwal (see Section 2.3), but they can sometimes be heard in interjections (2.112).

- | | | |
|---------|--------|--------|
| (2.112) | [ɛ̃ ʔ] | ‘hey?’ |
|---------|--------|--------|

(viii) In ideophones it may be possible to have palatalised consonants next to non-front vowels (2.113a) or a mixture of non-front and front vowels in the one morpheme (2.113). This does not conform to normal palatalisation patterns (see Section 2.3.1).

- | | | |
|---------|--------------------------------|--------------------------|
| (2.113) | a. [kǎʃǵ kátʃǵ kǎʃǵ kətʃǵ....] | ‘cry of the guinea fowl’ |
| | b. [ɛ̃ŋǵ] | ‘noise of flute’ |

(ix) In ideophones it is also possible to find rounded vowels **not** next to labialised velar consonants or labial-velar glide /w/ which is not the normal pattern in Buwal (see Section 2.3.2). Examples of this are given in (2.115).

- | | | |
|---------|---------|-----------------------------|
| (2.114) | [bǒf] | ‘suddenly come out’ |
| | [bǒj] | ‘suddenly’ |
| | [ɛ̃túl] | ‘manner of smoke ascending’ |
| | [ūrǒém] | ‘the fall of one dead’ |

(ix) The schwa and its allophones (see Table 2.4) do not usually occur in word final syllables (see section 2.6.1). However, the examples in (2.114) show that in ideophones this is possible.

- (2.115) [bím] ‘noise of sudden digging’
 [ètúl] ‘manner of smoke ascending’

2.6 Phonotactics

This section begins with a summary of syllable types found in Buwal and their distribution (Section 2.6.1). Then the distribution of consonants is described in Section 2.6.2. Finally, Section 2.6.3 deals with consonant clusters and inserted vowels.

2.6.1 Syllable types

Table 2.10 summarizes the types of syllables found in Buwal.

Table 2.10: Buwal syllable types

Syllable Type	Example
V	[ɛ̃jɛw] /ɛ̃jɛw/ ‘yes’
C	[m̃sɛr] /msɛr/ ‘fry’
CV	[dɛ̃] /dɛ̃/ ‘bring’
CV:	[ŋgɛ:ɬɔ:] /ŋgá:ɬāw/ ‘plant sp.’
CVC	[gɛ̃l] /gɛ̃l/ ‘grow up’
CCV	[brɛ̃] /brɛ̃ ^Y / ‘herd’
CCVC	[plɛ̃m] /plɛ̃m ^Y / ‘sprain (foot)’

Concerning the distribution of Buwal syllable types several remarks can be made.

- (i) V type syllables are only allowed word initially in Buwal and are relatively rare, the majority being found in function words.
- (ii) Syllabic consonants only occur word initially and are limited to nasals, the alveolar trill /r/ and the voiceless alveolar fricative /s/.
- (iii) CV: syllables are rare and only occur word initially.
- (iv) The nucleus of word final syllables must **always** be a full vowel.
- (v) There are no restrictions on the distribution of CV, CCV, CVC and CCVC syllables.

2.6.3 Consonant clusters and the epenthetic vowel

The one-vowel analysis is not new to Central Chadic languages. Newman (1977: 12) states that proto Chadic may have had a two vowel system while Wolff (1983b: 225) take this even further in proposing only one phonemic vowel for proto Central Chadic based on their reconstruction using examples from eight languages in what they call the ‘Wandala-Lamang’ group. Current Central Chadic languages which have been analysed as having only one vowel include Moloko (Bow 1991:11) and Muyang (Smith 1999:11). Barreteau (1988: 405-409) also argues for an epenthetic vowel analysis for Mofu-Gudur, and Ruff (2005: 39-40) proposes a ‘zero-vowel’ analysis for Lagwan.

In this section arguments will be given for the one full vowel analysis of Buwal, specifically that an epenthetic vowel is inserted to break up disallowed consonant clusters. Which consonant clusters are allowed and the rules governing vowel epenthesis will be outlined below.

2.6.3.1 Inserted vowels

Cross-linguistically a number of languages, Kalam (Blevins and Pawley 2010), Tashlhyt Berber (Coleman 2001) and Dutch (Warner et al 2001), have been argued to have inserted or predictable vowels of various types. Hall (2006: 391) distinguishes between and lists properties of two major types of inserted vowels, intrusive and epenthetic. Intrusive vowels could also be called ‘transitional’ vowels or ‘vocoids’. Hall states that intrusive vowels are phonologically invisible, may be optional or highly variable and generally occur in heterorganic clusters (i.e. clusters across syllable borders). They could be regarded as transition breaks between consonants in less marked clusters. Epenthetic vowels on the other hand are phonologically visible, not dependent on speech rate and are inserted in order to repair structures which are cross-linguistically rare. Blevins and Pawley (2010) argue that predictable vowels in Kalam which are the result of historic vowel loss may not neatly fit into either of these two categories. In the case of Buwal, however, Hall’s categories appear to be adequate with both types of inserted vowels being present.

In Buwal both types of inserted vowels share certain properties. These are:

- (i) They do not carry contrastive tone.
- (ii) They do not contrast with a situation where no vowel is present.
- (iii) Their length varies according to the features of the consonants on either side of it.
- (iv) They occur in both homorganic and heterorganic consonant clusters.

The following is a list of properties of the epenthetic vowel which differ from the transitional vowel in Buwal:

- (i) It is restricted to interconsonantal environments, i.e. it doesn't occur in word initial or word final position.
- (ii) Its presence is not dependent on speech rate, or on whether it is preceded by an open syllable.
- (iii) Its quality is affected by palatalisation and labialisation like the full vowel phoneme /a/.
- (iv) It is voiced even when the consonants on either side are voiceless.
- (v) It is inserted to break up marked consonant clusters.

The transitional vowel on the other hand has the following properties:

- (i) It occurs both between consonants and word initially.
- (ii) Its quality is variable but often [ə] even in environments of palatalisation and labialisation.
- (iii) Its length is variable and it may disappear in fast speech or when preceded by an open syllable.
- (iv) It is not voiced when consonants on either side are voiceless.
- (v) It is inserted to aid in the perception of certain consonants.

Considering these lists of properties, neither type of inserted vowel needs to be considered underlying. In both cases their distribution is predictable. Evidence for the above claims is given in the sections which follow on word initial (Section 2.6.3.2) and word medial (Section 2.6.3.3) consonant clusters.

2.6.3.2 Word initial consonant clusters

Not surprisingly there are a more limited number of consonant clusters allowed in the word initial position than word-medially. These can be divided into two types, (i) those which are heterosyllabic and (ii) those which involve complex onsets.

(i) Heterosyllabic word initial consonant clusters include words that begin with either a syllabic nasal, the voiceless alveolar fricative /s/ or a syllabic alveolar trill /r/. Syllabic nasals occur before either plosives or fricatives. In this case an ‘intrusive’ vowel which aids in its perception may be inserted before the nasal. This vowel may be either realised as [ə], [ɐ] or [ɛ] in the environment of palatalisation (2.118).

- (2.116) [ɲp̄k] ~ [əmp̄k] ~ [ɛmp̄k] /mpāk/ ‘shut’
[ɲt̄ɛŋ] ~ [ənt̄ɛŋ] ~ [ɛnt̄ɛŋ] /ntàŋ^Y/ ‘lower’

This inserted vowel disappears when such words are preceded by another word ending in a homorganic nasal. The two nasals are then fused to become one lengthened nasal (2.119).

- (2.117) /ndrɛj ŋg^wájāŋ ntsɛ̀nɛ̀ wɛ̀sɛ̀/ → [ndərɛŋg^wójɛŋ:tʃɛ̀nɛ̀ wɛ̀ʃɛ̀]
corn 1EXCL.POSS DEM.DIST
‘that corn of ours’ (NH12-SN:1.1)

The voiceless alveolar fricative /s/ followed by a voiceless non-alveolar plosive (2.120a) and even the voiceless labial fricative /f/ (2.120b) can be analysed as syllabic rather than a syllable initial cluster because no vowel can be heard between the two consonants. Note that an epenthetic vowel is always voiced.

- (2.118) a. [ʃp̄k] /spák^Y/ ‘late’
[sk̄ɛ̀n] /skàn/ ‘thing’
[sk^wɛ̀j] /sk^wāj/ ‘calabash seed’
b. [sf̄ɛ̀n] /sfân/ ‘breathe’

The voiceless labio-dental fricative could also be considered syllabic in the following example for the same reason (2.121).

(2.119) [fɬən] /fɬàn/ ‘spark’

A schwa is inserted to aid the pronunciation of the syllabic alveolar trill. This is analysed as transitional since it is not rounded whereas the epenthetic vowel would be next to a labialized velar consonant (2.122b). It also disappears when preceded by a vowel (2.122 a & b).

(2.120) a. [r^ədɬɛ] /rdā/ ‘rot’
 /sá-kā-rdā/ → [sé kɛrdɬɛ]
 1SG.SBJ-IPFV-rot
 ‘I am rotting’

b. [r^əg^wɛts] /rg^wàts/ ‘clothes’
 /ārā rg^wàts k^wáw/ → [ɛrɛ rg^wɛts k^wô:]
 COP clothes NEG
 ‘It is not clothes.’

(ii) Allowed complex onsets are limited to obstruents followed by a liquid (2.123). At times a brief transitional vowel can be heard between the consonant and the liquid. Ruff (2005: 41-48) found a similar situation in Lagwan although she proposes zero-vowel insertion in such clusters at the lexical level and then deletion at the post-lexical level.

(2.121) a.	[prɛɬ]	/pràɬ/	‘snatch’	[dɛɬ]	/dràɬ/	‘song’
	[krɛk]	/kràk/	‘tuck into’	[dzrɛɬ ^ɿ]	/dzràd/	‘stir’
	[ⁿ drɛm]	/ ⁿ dràm/	‘please’	[vrɛm]	/vrām/	‘many’
	[s ^ə rɔx ^w]	/srāx ^w /	‘slide’	[h ^ə rɛts]	/xrāts/	‘evaporate’

b. [pləm]	/plām/	‘pull out’	[d°lé]	/dlá/	‘manner’
[k°lō:]	/klāw/	‘hook’	[ts°lék]	/tslák/	‘failure’
[m°b°lēx]	/mblāx/	‘sore’	[flòk ^w]	/flāk ^w /	‘snatch’
[v°lēx]	/vlāx ^Y /	‘bow’	[y°lēj]	/ylāj/	‘clan name’

A longer vowel is inserted between a labialized velar consonant and a following liquid to allow the labialisation to be perceptible (2.124).

(2.122)	[k ^w ùrèt]	/k ^w ràt/	‘strip’
	[^ŋ g ^w ùrēx]	/ ^ŋ g ^w rāx ^Y /	‘scratch’
	[k ^w ùlèp ^ɿ]	/k ^w ùlāp ^ɿ /	‘cover’
	[g ^w ùlèk]	/g ^w lāk/	‘argue’

A transitional vowel following the labialized velar plosive disappears when preceded by an open syllable (2.125).

(2.123)	a. /x ^w ā-k ^w ràt ^Y -ākāj ^Y	^ŋ gālād	g ^w àjáf	ārā/
	2SG.SBJ-strip-1SG.IOBJ	unripe	fruit	guava
		SIM		
		‘You stripped my unripe guavas on the way.’		
		→ [h ^w òk ^w rètēkē ^ŋ gēlēt ^ɿ g ^w òjéf ērê]		
	b. /dálák ^Y ká-k ^w làb	lā	āzá	átā mpà ^Y /
	vine	PRF-cover	place	COMPL on tree
		‘The vine has covered the tree with leaves.’		
		→ [délék kók ^w lèp ^ɿ lē (ē)zé (é)tē mpê]		

The sonority hierarchy clearly has some effect on which clusters are allowed. Sonority decreases in the case of heterosyllabic clusters and increases for complex onsets. In all other word initial clusters an epenthetic vowel is inserted between the consonants whatever their relative sonority may be (2.126).

(2.124)	[bèdēm]	/bdām/	‘cave’	[dèmès]	/dmàs/	‘abdomen’
	[kàvèt ^ɿ]	/kvād/	‘mix’	[dèmbèḷ]	/d ^m bàḷ/	‘tendon’
	[ⁿ dʒ̀wèn]	/ ⁿ dzwàn ^Y /	‘true’	[xèzē]	/xzā/	‘dog’
	[ḷì dā]	/ḷdā ^Y /	‘tooth’	[vìjē]	/vjā/	‘wet season’
	[ḷìncēx ^w]	/snēx ^w Y/	‘tree sp.’	[ḷèlèw]	/ḷlāw/	‘okra’

As mentioned in Section 2.2.10, when a word begins with a glide followed by a consonant, an epenthetic vowel is inserted. This vowel then fuses with the glide to form a semi-long vowel (2.127).

- (2.125) [ù·dē] /wdā/ ‘food’
 [ù·dʒēk] /wdzāk^Y/ ‘house’

The epenthetic vowel differs from the transitional vowels described above. It occurs when preceded by an open syllable even when the resulting consonant cluster would normally be acceptable word medially. For example, in (2.128a) the schwa between the first two consonants of [zəbét] ‘a while’ remains even when preceded by the open syllable of [ndzē] ‘stay’. This occurs even though a [zβ] cluster is possible word medially, for example in the word [yèzβèŋ] ‘yellow’. Example (2.128b) is similar. This is evidence that the epenthetic vowel is phonologically visible.

- (2.126) a. /lá-dzàv ká-ndzā zβát kādā^Y/
 NOM.ACT-assemble PFV-stay a while maybe
 ‘The meeting has lasted a while maybe.’

→ [lédzèv kéndzē zəbét kēdē]

Cf. /yàzβàŋ/ [yèzβèŋ] ‘yellow’

- b. /wālā á ká-tsā gədwā átā lwàts^Y/
 woman 3SG.SBJ IPFV-put pot on fireplace
 ‘The woman is putting the pot on the fire.’

→ [wəl(ē) é kətsē gədú·d(ē) étē lɣwətʃ]

Cf. /ndélwēŋ/ [ndílwēŋ] ‘peanut and beef bones’

The length of the epenthetic vowel varies according to the type of consonants it separates. Inserted vowels, both transitional and epenthetic, separating two consonants at the beginning of a word were measured for one hundred and forty-one nouns. Table 2.12 summarises the results. The transitional vowels are significantly shorter than the epenthetic vowels. For epenthetic vowels the length varies according to consonant type, the shortest being between two obstruents and the longest between two sonorants.

Table 2.11: Variation in length of inserted vowel in word initial CC clusters

Vowel Type	Consonant Types	Average Length (ms)
Transitional	obs + r	28
	obs + l	31
Epenthetic	obs + obs	47
	obs + son	57
	son + obs	63
	son + son	66

The tone of the epenthetic vowel varies according to the consonants it separates. When separating two voiced plosives the tone on the epenthetic vowel is low (2.129a). When one of the consonants is a voiced plosive or fricative, or both are voiced fricatives the tone on the epenthetic vowel is low before low and mid and mid before high (2.129b). If the two consonants are voiceless or one or both is an implosive, nasal, liquid or a glide, the tone on the epenthetic vowel is the same as that which follows (2.129c). Voiced obstruents, apart from implosives, have a lowering effect on the tone of the epenthetic vowel. This is not surprising as they belong to the so-called ‘depressor’ consonants which have been shown to have a significant effect on tone in a number of Chadic languages (Roberts 2001: 110) and as the implosives often belong to the ‘neutral’ set of consonants along with nasals, liquids and glides.

- (2.127) a. [dègè̀v] /dgàv/ ‘tree sp.’
 [gè̀dè̀ŋ] /gdāŋ/ ‘mold’
 [dìbè́] /dbá^Y/ ‘termite hill’
 [gì démfɛ́] /gdámfá^Y/ ‘flour pot’
- b. [tìbè̀k^w] /tbàk^{wY}/ ‘chaff’
 [ɛ̀vè̀r] /ɛ̀vàr^Y/ ‘clearing’
 [gè̀mè̀z] /gmāz/ ‘bellows’
 [xè̀zè̀] /xzā/ ‘dog’
 [vī́ dɛ́] /vdá^Y/ ‘penis’
 [vī́ zɛ́k] /vzák^Y/ ‘slime’
- c. [xè̀tè̀n] /xtàn/ ‘fog’
 [l̀ỳwè̀tʃ] /lwàts^Y/ ‘fireplace’
 [pī́tɛ́] /ptɛ́^Y/ ‘nibble’
 [xə̀mè̀n] /xmēn/ ‘honour’
 [sī́jék] /sják/ ‘anxiety’
 [túwé̀x] /twáx/ ‘good’

Consonant clusters of three consonants can occur at the beginning of a root. For those which begin with a nasal, the nasal is syllabic. An epenthetic vowel may be inserted between the second and third consonants if they do not constitute an allowed complex onset (2.130a).

- (2.128) a. [ɲtʃĩfētʰ] /ntʃfād/ ‘yam’
 b. [ɲtrē] /ntrā/ ‘moon’

A glide between two consonants in word initial consonant clusters is pronounced as semi-long vowel (see Section 2.2.10).

- (2.129) [mūːsé] /mwsá/ ‘twin’
 [mīːdēnēk] /mjɖānāk/ ‘bird sp.’

In general, for other consonants an epenthetic vowel is inserted to produce preferred word medial consonant clusters (see section 2.6.6.3). If all the consonants are obstruents two epenthetic vowels are inserted.

- (2.130) [dòr˦ŋg˦óɮ̥]⁵ /drŋg˦wáɮ̥/ ‘stump’
 [dīfnèk] /dfnàk^Y/ ‘dark’
 [tərg˦wē] /trg˦wā/ ‘grainery’
 [˦d̥yklém] /˦dklám^Y/ ‘silk-cotton tree’
 [vərlèm] /vrlàm/ ‘submerge’
 [pùtòk˦wēs] /ptk˦wās/ ‘gain weight’

2.6.3.3 Word medial consonant clusters

Many more types of consonants clusters are allowed word medially than word initially. The consonants which occur most frequently in word medial consonant clusters are the liquids and then the nasals. Word medial consonant clusters can be divided into the same two types as word initial clusters (see Section 2.6.3.2); (i) heterosyllabic and (ii) those involving complex onsets.

⁵ Note that a brief transitional vowel may be heard between a liquid and a following prenasalised plosive in word medial consonant clusters (see Section 2.6.3.3).

(i) Heterosyllabic consonant clusters

For heterosyllabic consonant clusters, the first consonant is the coda of one syllable, and the second consonant the onset of the next. Table 2.13 summarises the word medial heterosyllabic consonant clusters attested in Buwal. Heterosyllabic clusters which involve the same or decreasing sonority are preferred. This is usually the case for heterosyllabic consonant clusters cross-linguistically.

Table 2.12: Attested heterosyllabic consonant clusters

Consonant types	Attested clusters
obs + obs	kt, k ^w d, dg ^w , tsk ^w
obs + nas	kn
obs + fric	ks
fric + obs	ft, vd, fts, st, sk, sk ^w , sg, sɓ, xk, xd, tɸ
fric + fric	sf, sx, xɬ, xz,
fric + nas	fn
nas + obs	mp, mt, md, mɓ, mts, nt, nts, ŋk, ŋk ^w , ŋts
nas + fric	mf, mɟ, mz, nz
nas + glide	nj
liq + obs	rp, rb, rd, rk, rg, rɓ, rd, rts, rdz, r ^m b, r ⁿ d, r ⁿ g, r ⁿ g ^w , r ⁿ dz ld, lk, lg, lɓ, l ^m b, l ⁿ g ^w
liq + fric	rf, rv, rs, rz, rx, ry, rɬ, rɟ lv, ls, lx, ly
liq + nas	rm
liq + liq	rl
liq + glide	ry, lw
glide + obs	yts, y ⁿ g ^w
glide + liq	yl, wl

The sonority hierarchy which applies in Buwal is as follows:

plosives, affricates, implosives < fricatives < nasals, liquids, glides

Examples which show word medial consonant clusters of the same sonority are given in (2.135a). Those showing decreasing sonority are in (2.135b).

(2.131)	a.	[k ^w ùʒp̄ektédɛk]	/k ^w ʒāk.tádāk/	‘leech’
		[mélœk ^w dé]	/mélēk ^w .dē ^Y /	‘dung beetle’
		[métsk ^w ōx ^w]	/máts.k ^w āx ^w /	‘evening’
		[dèt ^ˀ g ^w ets]	/dād.g ^w àts/	‘Pleiades’
		[hēʃfēŋ]	/xās.fāŋ ^Y /	‘withered’
		[mēbélmé]	/mābál.má ^Y /	‘inarticulate’
		[wénjē]	/wán.jā/	‘trad. song.’
		[gō:lē]	/gāw.lā/	‘trad. festival’
	b.	[bērgēdēŋ]	/bār.gādāŋ/	‘storm’
		[mēxkét ^ˀ]	/māx.kád/	‘three’
		[gèvdē]	/gāv.dā/	‘bead’
		[kēŋkēs]	/kāŋ.kās/	‘beans’
		[gèmʒē]	/gām.ʒā/	‘star’
		[k ^w ójtsélēŋ]	/k ^w ēj.tsélāŋ/	‘sour’

There are two exceptions to the above hierarchy. Firstly, allowed consonant clusters of two obstruents involve an alveolar and a velar consonant. When this is not the case an epenthetic vowel is inserted (2.134).

(2.132) [tétœdēm] /tátdām/ ‘air, wind’

Secondly, a voiceless velar plosive may be followed by an alveolar nasal (2.135a) or a voiceless alveolar fricative (2.135b). According to the sonority hierarchy an epenthetic vowel should be inserted between these two consonants word medially. However, in practice this vowel is very brief. Also native speakers are in disagreement about whether there is a vowel in this position. This may indicate that it is transitional rather than epenthetic.

(2.133)	a.	[dèk ^ˀ nèk]	/dàknàk/	‘black’
		[médzìk ^ˀ né]	/mádzkná ^Y /	‘spit’
		[k ^w ùzōk ^w nē]	/k ^w zāk ^w nā/	‘maternal uncle’
	b.	[túk ^w sésēr]	/tk ^w sásār/	‘dry’

A transitional vowel may also be heard between a liquid and a following prenasalised plosive (2.136).

- (2.134) [kèr^hŋgèf] /kà^hgàf^Y/ ‘bone’
 [ɣ^wòl^hŋg^wòt^h] /ɣ^wàl^hg^wàf/ ‘uproot’

When consonants in word-medial clusters increase in sonority an **epenthetic** vowel is inserted to break up the cluster as in the following examples (2.137). The tone on the epenthetic vowel is predictable. If it occurs between a low and a high tone it is pronounced mid, otherwise it takes the tone of the following syllable.

- (2.135) [dʒèdʒÿwèt^h] /dzàdzwàd/ ‘fly’
 [k^wók^wijèŋ] /k^wák^wjàŋ/ ‘mystery’
 [gégēmēj] /gégmēj/ ‘cotton’

Words that break the above rules involve reduplication (2.138a), compounding (2.138b) or the affixation of the *ma-* nominalising prefix (2.138c).

- (2.136) a. [débdēbè] /dáb^hdābà/ ‘stopper’
 b. [mēpóděkhē] /māp^hdákxā/ ‘bush sweet potato’
 c. [mēg^wúdéŋ] /māg^wdáj^Y/ ‘clitoris’

An epenthetic vowel is also inserted to break up word medial consonant clusters of three consonants. In the resulting structures, heterorganic clusters of falling sonority are preferred. For instance, for the first example under (2.139) below, /m/ becomes the coda of the first syllable. The cluster /tk^w/ is not an acceptable syllable onset, so an epenthetic vowel is inserted between the two consonants.

- (2.137) [dèmtùk^wèl] /dàm.tk^wàl/ ‘pestle’
 [wértʃihèŋ] /wár.tʃxàw^Y/ ‘sneeze’
 [gēr^hkēsēŋ] /gār.ksāŋ/ ‘tic’

As described in Section 2.2.10, when a labial-velar glide occurs between two consonants in the middle of a word, an epenthetic vowel is inserted which then fuses with /w/ to be pronounced [ʊ].

- (2.138) [hēlō·lē] /hālwlā/ ‘wall’
 [mētȳ·lē] /mātwlā^Y/ ‘lie’

(ii) Word medial complex onsets

Word medial consonant clusters which can be considered complex onsets involve an obstruent followed by a liquid. Table 2.14 summarises the word medial complex onsets attested in Buwal.

Table 2.13: Attested word medial complex onsets

Consonant types	Attested clusters
obs + alveolar trill	pr, dr, kr, gr, ^m br, ⁿ dr, ^ŋ gr, vr, sr, zr, ʃr
obs + alveolar lateral	bl, kl, gl, k ^w l, ^ŋ gl, ^ŋ g ^w l, fl, dzl

Examples of word medial complex onsets are given in (2.141). A brief transitional vowel may at times be heard between the two consonants.

- (2.139) [dēdrēs] /dā.drās/ ‘blunten’
 [gē^ŋgréŋ] /gā.^ŋgrāŋ^Y/ ‘harp’
 [kēklék] /kâ.klák/ ‘cackle’
 [zēblē] /zā.βlā/ ‘ghost’
 [ʃēʃ^ŋrēj] /ʃā.ʃrāj/ ‘crawl’
 [sēs^ŋrèk] /sè.srèk/ ‘learn’

As was seen for word initial clusters involving a labialised velar consonant plus a liquid (see Section 2.6.3.2) the transitional vowel is a bit longer to aid in the perception of the rounding (2.142).

- (2.140) [tētēk^wōléʃ] /tētē.k^wlēs^Y/ ‘partridge’
 [tē^ŋg^wōlēŋ] /tā.^ŋg^wlāŋ^Y/ ‘one’

2.6.2 Distribution of consonants

Table 2.11 summarises the distribution of consonants within roots and syllables for Buwal. An X indicates that a consonant has been found to occur in that position, while a blank means that no occurrence was found in the corpus. An R indicates that it only occurs under conditions of reduplication. Consonant clusters will be discussed in Section 2.6.3.

Table 2.14: Buwal consonant distribution

Cons Type	Cons	Root-Initial	Syllable-Initial (Root-medial)	Intervocalic	Syllable-Final (Root-medial)	Root-Final
Plosive	/p/	X	X	X	X	X
	/b/	X	X	X	R	
	/t/	X	X	X		X
	/d/	X	X	X		
	/k/	X	X	X	X	X
	/g/	X	X	X	R	
Implosive	/ɓ/	X	X	X	X	X
	/ɗ/	X	X	X	X	X
Fricative	/f/	X	X	X	X	X
	/v/	X	X	X	X	X
	/s/	X	X	X	X	X
	/z/	X	X	X	X	X
	/ʃ/	X	X	X	X	X
	/ʒ/	X	X	X		X
	/x/	X	X	X	X	X
	/χ/	X	X	X		X
Affricate	/ts/	X	X	X	X	X
	/dz/	X	X	X		
labialised velar	/kʷ/	X	X	X	X	X
	/gʷ/	X	X	X		
	/xʷ/	X	X	X	X	X
	/χʷ/	X	X	X		X
Nasal	/m/	X	X	X	X	X
	/n/	X	X	X	X	X
	/ŋ/				X	X
	/ŋʷ/					X
prenasalised plosive	/ᵐb/	X	X	X		
	/ᵐd/	X	X	X		
	/ᵐg/	X	X	X		
	/ᵐgʷ/	X	X	X		
Liquid	/l/	X	X	X	X	X
	/r/	X	X	X	X	X
	/v/		X	X		
Glide	/j/	X	X	X	X	X
	/w/	X	X	X	X	X
labial-velar plosive	/kp/	X				
	/gb/	X				
	/ᵐᵑgb/	X	X	X		

The following observations can be made about the distribution of consonants within roots and syllables, as reflected in Table 2.11.

(i) Voiced plosives do not occur in the root final position. This appears to be a case of defective distribution and not word final consonant devoicing as word final voiceless plosives are never voiced in a non-pausal situation.

(ii) Voiced obstruents apart from the labial and alveolar voiced fricatives, /v/ and /z/, do not occur in the coda of word medial closed syllables. The only exceptions to this involve reduplication (2.116).

(2.141) [gì dégdē] /gdágdā^Y/ ‘mat’
 [déb dēbè] /dáb dābà/ ‘stopper’

The implosives pattern with the voiceless obstruents in this regard. This is not surprising as Figures 2.6 and 2.7 showed that implosives in syllable final position exhibit rapid devoicing.

(iii) The velar and labialised velar nasals, /ŋ/ and /ŋ^w/, have a very limited distribution within roots as was described in Section 2.2.6 and 2.2.8. They both occur in the root final position and the velar nasal /ŋ/ may occur before the alveolar voiceless affricate /ts/ in the word medial position. They may be heard phonetically in other positions but in these cases they are allophones of the alveolar nasal /n/.

This distribution statement for nasals refers to roots only. When suffixes are added to verb roots ending in a velar nasal, no variation occurs (2.117). Therefore /ŋ/ is not restricted to the syllable-final position within a phonological word.

(2.142) [m^wbēŋ] /m^wbāŋ^Y/ ‘winnow’
 /sā- m^wbēŋ^Y -ānā^Y/ → [sē m^wbēŋēnÉ]
 1SG.SBJ- winnow -3SG.DOBJ
 ‘I winnow for him.’

(iv) The voiceless and voiced labial-velar and prenasalised labial-velar plosives, /kp/, /gb/ and /^ɸmgb/, generally occur in the word initial position. Only one example was found of /^ɸmgb/ occurring in syllable initial position word medially (see Section 2.2.11). This is not surprising considering their marginal status.

(v) The marginal labio-dental flap /v/ has only been found in the intervocalic position.

2.7 Prosody

Prosody encompasses phonological processes that occur at levels higher than the segment. The prosodies of palatalisation and labialisation were already described in Sections 2.3.1 and 2.3.2 respectively. This section deals firstly with tone (Section 2.7.1), focussing particularly on noun (Section 2.7.1.1) and verb (Section 2.7.2.2) roots. Tone in Buwal functions at the level of the syllable. Section 2.7.2 describes various phenomena associated with utterances and intonational phrases such as boundary tones (Section 2.7.2.1), vowel reduction (Section 2.7.2.2) and vowel elision (Section 2.7.2.3).

2.7.1 Tone

Buwal has three underlying level tones, low (L), mid (M) and high (H). All three levels are found on nouns, adjectives and adverbs. Verbs, on the other hand, may only carry either low or mid tone. The following sections describe the tone melodies which have been found on noun and verb roots.

In common with most Central Chadic languages (Roberts 2001: 109), the lexical load for tone in Buwal is not high. However a number of tone minimal pairs were found in the data. Some of these were verbs (2.143).

(2.143)	[lèm]	/lám/	‘help’	[lēm]	/lām/	‘build’
	[tèl]	/tál/	‘manage’	[tēl]	/tāl/	‘boil’
	[bèl]	/bál/	‘chop’	[bēl]	/bāl/	‘have funeral’
	[mètʰ]	/mād ^h /	‘swallow’	[mētʰ]	/mād ^h /	‘swear’

Minimal tone of pairs were also found for nouns. They show a contrast between low and mid (2.144a), mid and high (2.144b) and low and high (2.144c).

- (2.144) a. [vèn] /vàn/ ‘family’ [vèn] /vān/ ‘rain’
 [ʃèn] [ʃèn] /sàŋsàŋ^Y/ ‘dream’ [ʃèn] [ʃèn] /sāŋsāŋ^Y/ ‘shadow’
 b. [lélòx^w] /lālâx^w/ ‘hunting’ [lélòx^w] /lélèx^w/ ‘valley’
 c. [tèbē] /tābā/ ‘middle’ [tèbē] /tābā/ ‘fishing net’
 [ᵐb^olèm] /ᵐblàm/ ‘stranger’ [ᵐb^olém] /ᵐblám/ ‘tree sp.’

Other minimal pairs concern words of different classes such as a noun and an adjective (2.145a), a verb and an adjective (2.145b) and a verb and an adverb (2.145c).

- (2.145) a. [wérwér] /wārwar^Y/ ‘trickery’ [wérwér] /wārwar^Y/ ‘healthy’
 b. [pōx^w] /pāx^w/ ‘cut up’ [pōx^w] /pāx^w/ ‘traced out’
 c. [tēr] /tār/ ‘invite’ [tēr] /tār/ ‘for good’

Grammatical tone also plays a role in Buwal, especially in the verbal system. An example is the difference between the imperfective and the perfective aspect. Each of these is marked with the verbal prefix *ka-* with mid tone for the imperfective (2.146a) and high tone for the perfective (2.146b). Note that the change in tone on the first person singular subject agreement marker *sa-* from high for the imperfective to mid for the perfect is also shown in these examples.

- (2.146) a. [sékèzèzèk] ‘I am resting.’
 b. [sékèzèzèk] ‘I rested.’

Further details about the interaction of tone with other parts of the grammar are given in later chapters. For example, tonal variation within compound nouns and nominalisations is described in Sections 3.1.1.4 and 3.1.3 respectively. Tonal changes which occur on subject agreement markers for various tenses and aspects are summarised in Section 6.1.

In many Chadic languages consonant type has a significant effect on tone. Some languages have depressor consonants (Lamang (Wolff 1987: 200), Masa (Barreteau 1995) and Podoko (Anderson and Swackhammer 1981)) which tend to lower the pitch of the

syllable in which they occur. Kera has both depressor consonants and raiser consonants (Pearce 1998/99), which correspondingly raise the pitch of their syllable. For Buwal depressor consonants have a lowering effect on the tone of epenthetic vowels (see section 2.6.3.2), and a lowering effect on verbal prefixes carrying mid tone (see section 2.7.1.2). No raising or lowering effects due to consonant type have been observed so far on full vowels within roots.

In some Chadic languages metrical structure interacts with the tonal system in terms of tone placement. The metrical structure involved is not stress (as normally understood in terms of higher pitch or intensity) but has to do with syllable weight. For example Pearce (2006) demonstrates that Kera, an Eastern Chadic language, has iambic feet and that for three syllable words the tone bearing unit is the foot, not the syllable. For this reason tone melodies for Buwal roots are given for each syllable structure. In this regard noun roots are more significant as they show a much greater variety of tone melodies.

However in Buwal, it seems there is no interaction between metrical structure and tone corresponding to that found in Kera. This is discussed further towards the end of Section 2.7.1.1.

2.7.1.1 Tone on noun roots

In this section the tone melodies discovered in the data are given for monosyllabic, disyllabic and trisyllabic nouns for each syllable structure found. The tone on nouns was checked using the frame *ārā_____k^wāw* ‘it’s not a ____’. As the tone on syllabic nasals and epenthetic vowels is predictable, they can be ignored for the purposes of assigning a tone melody to a word. Noun roots longer than three syllables either contain reduplication or arguably are complex. Therefore their tone melodies are not given here.

Monosyllabic noun roots in Buwal have three underlying tone melodies: H, M and L.

Table 2.15 gives examples of nouns for each melody and each syllable structure with full vowels.

Table 2.15: Tone melodies on monosyllabic noun roots with full vowels

	CV	CCV	CVC	CCVC
/H/	[wé] /wá/ ‘milk’	[bré] /brá ^y / ‘herd’	[mén] /mán/ ‘mother’	[ⁿ dzrém] / ⁿ dzrám/ ‘palm rat’

/M/	[hē] /xā/ 'head'	[brē] /brā/ 'hip'	[bēj] /bāj/ 'chief'	[k ^o lēŋ] /klāŋ/ 'threshing floor'
/L/	[ndzè] /ndzà/ 'sown last year'	[k ^w ùlè] /k ^w lā ^y / 'idol'	[ʒèn] /ʒàn/ 'work'	[drèf] /dràf/ 'song'

Disyllabic noun roots containing an epenthetic vowel (Table 2.16), a syllabic nasal or both (Table 2.17) are grouped with monosyllabic nouns in terms of their underlying tone melodies.

Table 2.16: Tone melodies on monosyllabic noun roots with epenthetic vowels

	Cv.CV	Cv.CCV	CvC.CV	Cv.CVC	Cv.CCVC	CvC.CVC
/H/	[dìbḗ] /dbá ^Y / ‘termite hill’		[mṹsḗ] /mwsá/ ‘twin’	[dḗbḗr] /dḗár/ ‘gold’	[ndḡk ^w lém] /ndk ^w lám ^Y / ‘silk-cotton tree’	[dṹr ^ṹ ṅg ^w ḗḗ] /drṅg ^w áḗ/ ‘stump’
/M/	[dzḗvḗ] /dzvḗ/ ‘breastbone’	[bṹk ^w lḗ] /bk ^w lā/ ‘skin’	[tḗrg ^w ḗ] /trg ^w ā/ ‘granary’	[k ^w ṹtḡḗk] /k ^w tsāk ^Y / ‘chicken basket’		
/L/	[lḗvḗ] /lvà/ ‘baby sling’			[bḗzḗm] /bzàm/ ‘chin’	[sṹk ^w lòx ^w] /sk ^w làx ^w / ‘in-law’	[kì ^ṹ zḗṅ] /kjàṅ/ ‘firstborn daughter’

Table 2.17: Tone melodies on monosyllabic noun roots with syllabic nasals

	C.CV	C.CCV	C.CVC	C.CCVC	C.CvCVC
/H/	[ḡfḗ] /nfḗ/ ‘flour’		[ḡtsḗtḡ] /mtsád/ ‘tweezers’	[ḡtrók ^w] /ntrák ^w / ‘well’	
/M/	[ḡḗ] /mḡā/ ‘tamarind’	[ḡtrḗ] /ntrā/ ‘moon’	[ḡḗṅ] /nsāṅ ^Y / ‘seed’		[ḡkḗḗṅ] /nkḗṅ/ ‘stone’
/L/	[ḡpḗ] /mpà ^Y / ‘tree’	[ḡkrḗp] /nkrāp/ ‘hide’	[ḡtsḗr] /mtsàr/ ‘nose’	[ḡkrḗm] /nkràm/ ‘dry season’	[ḡtḡwḗ] /ntwàs ^Y / ‘folere seeds’

Disyllabic noun roots with full vowels have all nine possible underlying tone melodies (Table 2.18).

Table 2.18: Tone melodies on disyllabic noun roots with full vowels

	CV.CV	CV.CCV	CVC.CV	CV.CVC	CVV.CVC	CV.CCVC	CVC.CVC
/HH/	[^h gélé] / ^h gélé/ ‘side’		[sárlá] /sárlá/ ‘trousers’	[féré́m] /fáram/ ‘horn’			[tʃémpét̃] /tsámpád̃ ^Y / ‘red monkey’
/MM/	[yēlē] /yēlē/ ‘boundary’	[zē6lē] /zā6lā/ ‘ghost’	[bērlē] /bārlā/ ‘mountain’	[6ēmēm] /6āmām/ ‘bee’			[gēldēm] /gāldām/ ‘pig’
/LL/	[hèdʒè] /xàdzà ^Y / ‘person’		[gèvdè̃] /gàvdà ^Y / ‘tree sp.’	[gèdèt̃] /gàdàd̃/ ‘arrow’			[hèrʒèk̃] /xàrʒàk̃/ ‘lizard’
/HM/	[fétē] /fātā ^Y / ‘pepper’		[wénjē] /wánjā/ ‘song name’	[gédfēŋ] /gédfēŋ/ ‘idiot’	[g ^w é:ʒēm] /g ^w á:ʒām/ ‘tree hole’		[kēŋkēs] /kāŋkās/ ‘beans’
/HL/	[^h gémè] / ^h gámà/ ‘friend’			[pèkēm] /pákām/ ‘mouth’			[ʒérdfēj] /ʒárdáj/ ‘gap’
/MH/	[dēbé] /dābá/ ‘hut’		[dēntsé] /dāntsá/ ‘conjunc- tivitis’	[ʒē ^m béj] /ʒā ^m báj/ ‘staff’	[kē.vék] /kā.vák ^Y / ‘bird sp.’	[zēz ^h rét̃] /zāzrād̃/ ‘worm’	[gēmzók ^w] /gāmzák ^w / ‘rooster’
/ML/				[mēwèl] /māwāl/ ‘man’			[dēm6èʒ] /dām6àʒ/ ‘pumpkin’
/LH/			[sèrdé] /sàrdá/ ‘marrow’	[^m bèwék] / ^m bèwék/ ‘small flute’		[gèŋgléŋ] /gāŋglán/ ‘praying mantis’	[sèrléj] /sàrláj/ ‘rabies’
/LM/	[dzèdzē] /dzàdzā/ ‘grand- parent’	[dèblē] /dāblā/ ‘child after twins’	[gèmlē] /gāmlā/ ‘star’	[dèk ^w ēr] /dāk ^w ār/ ‘shin’		[ⁿ dèblēm] / ⁿ dāblām/ ‘young hen’	[g ^w ōŋ ^w k ^w ét̃] /g ^w āŋk ^w ád̃/ ‘caterpillar’

Again certain noun roots with an epenthetic vowel (Table 2.19) or a syllabic nasal (Table 2.19) can be grouped with the disyllabic nouns according to their tone melodies.

However, a more limited range of melodies was found for such nouns.

Table 2.19: Tone melodies on disyllabic noun roots with epenthetic vowel

	Cv.CVC.CV	CV.CvC.CV	Cv.CV.CVC	CV.Cv.CVC	CVC.Cv.CVC	CvC.Cv.CVC
/HH/	[gì démfé /gdámfá ^Y / ‘flour pot’					
/MM/	[k ^w ùzòk ^w nē] /k ^w zāk ^w nā/ ‘maternal uncle.1POSS’	[hēlō·lē] /xālwlā/ ‘wall’	[k ^w ùzōŋg ^w ān] /k ^w zāŋg ^w ān/ ‘maternal uncle.3POSS’		[gērksēsēŋ] /gārksāŋ/ ‘tic’	[mī·dēnēk] /mjđānāk/ ‘bird sp.’
/LL/				[dʒèdʒÿwèt ¹] /dzàdzwàd ^Y / ‘fly’	[dèmtùk ^w èl] /dèmtk ^w èl/ ‘pestle’	
/HM/				[gégēmēj] /gágmāj/ ‘cotton’		
/HL/				[k ^w ók ^w ijèŋ] /k ^w ák ^w jàŋ/ ‘mystery’	[wért{īhèŋ] /wértsxèw ^Y / ‘sneeze’	
/MH/			k ^w ùzòk ^w óx ^w /k ^w zāk ^w áx ^w / ‘maternal uncle.2POSS’			

Table 2.20: Tone melodies on disyllabic noun roots with a syllabic nasal

	N.CV.CV	N.CV.CVC
/HH/		[m̀séhéj] /msáxáj/ ‘plant sp.’
/MM/	[ŋ̀tēlē] /ntālā ^Y / ‘pond’	[ŋ̀tēwēl] /ntāwāl/ ‘thigh’
/HL/		[ŋ̀téwèn] /ntáwàn/ ‘type of fruit’

Table 2.21 lists the sixteen tone melodies which were found for trisyllabic noun roots.

Table 2.21: Tone melodies on trisyllabic nouns with full vowels

	CV.CV.CV	CVC.CV.CV	CV.CV.CVC	CV.CVC.CVC	CVC.CV.CVC	CCVC.CVC.CVC
/HHH/	[rékétjé] /rákátsá ^Y / ‘ostrich’	[sénkéré] /sánkára/ ‘mastitis’	[féngéló:] /fánǵáláw/ ‘madness’			
/MMM/	[lèvērē] /lāvārā ^Y / ‘lion’	[vèrvērē] /vārvārā/ ‘plain’	[bèkèlèf] /bākālāf/ ‘buffalo’	[gèḷḷèrvēj] /gāḷḷārvāj/ ‘ligament’	[bèrgèdēŋ] /bārgādāŋ/ ‘storm’	
/LLL/			[dèbèlèj] /dàbàlàj/ ‘ignorant’			
/HHM/	[ⁿ dékétsē] / ⁿ dákátsā/ ‘ankle ring’	[k ^w ójk ^w ójē] /k ^w ájk ^w ájā/ ‘hyena’	[lék ^w ótēj] /lák ^w átāj/ ‘whip’		[kélsésēŋ] /kálsásāŋ/ ‘under ear’	
/HHL/			[pépélèm] /pápàlàŋ/ ‘plank’		[gèrdèdēŋ] /gárdádāŋ/ ‘palate’	[ndrémdeŋ] /ndrámdámḷāj/ ‘large ground pea’
/HLL/				[dzéhèrḷèk] /dzáxàrḷàk/ ‘grass sp.’		
/HMH/	[k ^w ódèk ^w é] /k ^w ádāk ^w á/ ‘sweet potato’		[k ^w ólōŋgój] /k ^w álāŋg ^w áj/ ‘baggage’			
/HML/		[dèbdèbè] /dàbdābà/ ‘stopper’	[yé yē dèk] /yáyādāk ^Y / ‘irritation’			

	CV.CV.CV	CVC.CV.CV	CV.CV.CVC	CV.CVC.CVC	CVC.CV.CVC	CCVC.CVC.CVC
/HLH/	[tétèjé] /tátàjá/ ‘cucumber’	[k ^w úr ^o mbèlè] /k ^w árbàlá/ ‘shea-butter tree’	[xéxèlém] /xáxàlám/ ‘eggshell’		[wélm̀bègém] /wálm̀bàgám ^Y / ‘festival name’	
/MMH/	[tētēné] /tātāná ^Y / ‘horn’		[ḥērēwēj] /ḥārāwáj/ ‘yellow sorghum’		[dèl jē jé] /dālsāsáj ^Y / ‘fruit fly’	
/MHM/	[kēt jéwē] /kācāwā ^Y / ‘grass sp.’	[kēmté jē] /kāmtásā ^Y / ‘grass sp.’	[hē ékēt ¹] /xāfákād ^Y / ‘spoon’		[g ^w ōŋ ^w k ^w ójēx] /g ^w āŋk ^w ájāx/ ‘egg-plant’	
/LLM/	[h ^w òtè ^m bē] /x ^w àtā ^m bā/ ‘rock badger’					
/LMM/	[lèbērē] /lābārā/ ‘story’					
/LLH/		[^o g ^w àrlèlè] / ^o g ^w àrlàlá/ ‘unground grain’	[vèlèŋgét ¹] /vəlàngàd ^Y / ‘calf’			
/LHL/			[džèkédžèq] /dzàkádžàw ^Y / ‘plant sp.’			
/LHM/	[gèdžérē] /gàdzārā ^Y / ‘shorts’	[^m bèž ^m béžē] / ^m bàž ^m bázā ^Y / ‘beetle’	[dèbèbēr] /dàbábār ^Y / ‘clay bed’		[kèrkéjēx] /kàrkájāx/ ‘shell’	
/LMH/			[gèdžéréŋ] /gàdzārāŋ ^Y / ‘tooth decay’		[hèrgēdéŋ] /xàrgādāŋ ^Y / ‘mold’	

Examining the tone melodies found Table 2.20, it is difficult to see any evidence for the kind of system that Pearce (2006) found for Kera where tone is associated with the foot. For example the /HLL/ melody word [dzéhèrǰèk] in the Kera system would be parsed into two feet as follows: (dzéhèr)(ǰèk) with the second syllable being the head of the first iambic foot. It would be expected that the tone on the first two syllables should be the same, but we see here that for Buwal they are different. This is evidence that tone is a feature of the syllable in Buwal not the foot. Furthermore, the fact that pairs such as /HLL/ and /HHL/, /LMM/ and /LLM/ were found indicates that tone is a feature of the syllable rather than the phonological word at least for noun roots.

Only three nouns were found that had an inserted vowel and could be grouped with trisyllabic nouns (2.147). Note that one, ‘leech’ has the tone melody /MHL/ which was not seen for nouns with only full vowels. There were no trisyllabic nouns found beginning with a syllabic nasal.

- (2.147) /MMM/ [pǎdǣktǣwǣj] /pdǎktǎwǎj/ ‘butterfly’
 /MHL/ [k^wùǰǣktǣdǣk] /k^wǰǎktǎdǎk/ ‘leech’
 /MMH/ [tǣtǣk^wùléʃ] /tǎtǎk^wlǎs^Y/ ‘partridge’

At this stage no interaction of metrical structure with the tonal system has been identified in Buwal. However, this would be an interesting area for further investigation.

2.7.1.2 Tone on verb roots

Buwal verb roots carry low or mid tone. Tone on verb roots was checked using the frame *sákā_____jám* ‘I am _____ing also’. This section gives the tone melodies attested for monosyllabic and disyllabic verb roots for each syllable structure.

Table 2.22: Tone melodies on monosyllabic verb roots with full vowels

	CV	CCV	CVC	CCVC
/M/	[tsǣ] /tsǎ/ ‘put’	[grǣ] /grǎ ^Y / ‘see’	[^m bǣŋ] / ^m bǎŋ ^Y / ‘winnow’	[prǣt ^ɿ] /prǎd ^Y / ‘split’
/L/	[rǣ] /rǎ/ ‘dig’		[vǣl] /vǎl/ ‘give’	[ⁿ drǣm] /ndrǎm/ ‘please’

Again, disyllabic verb roots with an epenthetic vowel (Table 2.23) or a syllabic nasal or both (Table 2.24) can be grouped with monosyllabic roots in terms of underlying tone melodies.

Table 2.23: Tone melodies on monosyllabic verb roots with epenthetic vowels

	Cv.CV	Cv.CVC	Cv.CCVC	CvC.CVC	Cv.Cv.CVC
/M/	[vənē] /vnā/ ‘vomit’	[xəbēr] /xbār/ ‘wait’	[dədrōk ^w] /ddrāk ^w / ‘learn’		
/L/	[ʃībè] /sbà ^Y / ‘pay bride-price’	[tùk ^w èt ^ɿ] /tk ^w àd/ ‘wipe’		[vərlèm] /vrlàm/ ‘submerge’	[kìtʃəkèt ^ɿ] /ktskàd ^Y / ‘stumble’

Table 2.24: Tone melodies on monosyllabic verb roots with a syllabic nasal

	C.CV	C.CVC	C.CCVC	C.Cv.CVC
/M/	[ɲtsē] / ntsā/ ‘bite’	[m̩pək] / mpāk/ ‘close’		
/L/		[ɲt̩f] / ntàf ^Y / ‘spit’	[ɲkrèt] / nkràt/ ‘simmer’	[ɲkədò:] / nkɔ̀w/ ‘burn’

The melodies of disyllabic verb roots are spread over the entire verb root. Like monosyllabic verb roots the tone melodies are mid and low (Table 2.25).

Table 2.25: Tone melodies on disyllabic verb roots

	CV.CV	CV.CVC	CV.CCVC	CVC.CVC	CV.Cv.CVC
/M/	[nēnē] /nānā/ ‘tremble’	[hēʃēɲ] /xāsāɲ ^Y / ‘forget’	[dēdrēs] /dādrās/ ‘blunten’	[bēɲkētʃ] /bāɲkātš ^Y / ‘shake strongly’	[gēdəbēɲ] /gādbāɲ/ ‘crawl’
/L/	[ⁿ dzè ⁿ dzè] / ⁿ dzà ⁿ dzà/ ‘give’	[tèdòk ^w] /tādàk ^w / ‘descend’	[sès ^o rèk] /sàsràk/ ‘learn, teach’	[g ^w ərzèm] /g ^w àrzàm/ ‘get up’	[tèt ^Y wèt ^ɿ] /tàtwàd ^Y / ‘sling’

Only four trisyllabic verb roots have been discovered so far. All of them have the same syllable structure CV.CV.CVC and involve reduplication. They exhibit both mid (2.148a) and low tone melodies (2.148b).

- (2.148) a. /M/ [ʃēʃēdām] /sēsēdēm^Y/ ‘slip’
 b. /L/ [tètèɲgèl] /tètèɲgèl^Y/ ‘roll on ground’

One effect of depressor consonants in Buwal is that the mid tone of a verbal prefix is lowered preceeding a voiced obstruent (2.149a). Before other types of consonants the tone remains mid (2.149b).

- (2.149) a. /sá- k̄ā- dàdàr^Y/ → [sékèdèdèr]
 1SG.SBJ- IPFV- wander
 ‘I am wandering.’
- /sá- k̄ā- yām^Y/ → [sékèyēm]
 1SG.SBJ- IPFV- judge
 ‘I am judging.’
- b. /sá- k̄ā- k^wāt^Y/ → [sék̄k^wēt]
 1SG.SBJ- IPFV- sharpen
 ‘I am sharpening.’
- /sá- k̄ā- mād^Y/ → [sékēmēt]
 1SG.SBJ- IPFV- swear
 ‘I am swearing.’

2.7.2 Utterances and intonational Phrases

The following sections describe phonological processes which occur within utterances and intonational phrases in Buwal. Both of these units are bounded on each edge by a pause.

2.7.2.1 Boundary Tones

Buwal has boundary tones which apply to the right edges of utterances and intonational phrases. In this section I present (i) the utterance final boundary tone, (ii) the continuation boundary tone and (iii) variations of final syllable tone before a pause.

(i) Utterance final boundary tone

The utterance right edge boundary tone is low. It combines with an existing lexical tone to produce a falling tone. This applies to statements, whether positive (2.150a and Figure 2.9) or negative (2.150b and Figure 2.10), information questions (2.150c and Figure 2.11), polar questions (2.150d and Figure 2.12) and imperatives (2.150e and Figure 2.13).

(2.150) a. /ārā ṅámà ágā^Y/ → [ɛ̄rɛ̄ ṅgém(ɛ) é̄gɛ̄]
 COP friend PL
 ‘They are friends.’

(NF4-SN:1.2)

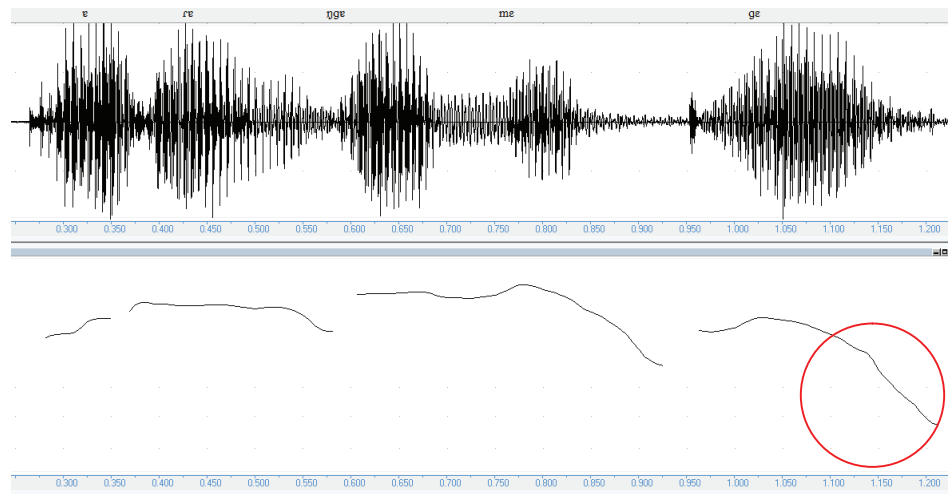


Figure 2.9: Positive statement showing falling intonation at utterance boundary

b. /sā- ndā āká á dāmāw k^wáw/ → [sɛ̄nd(ɛ̄) ɛ̄k(ɛ̄) é̄ dɛ̄mō k^wô:]
 1SG.SBJ- go ACC PREP1 bush NEG
 ‘I didn’t come back from the bush.’

(GE8-SE:1.3)

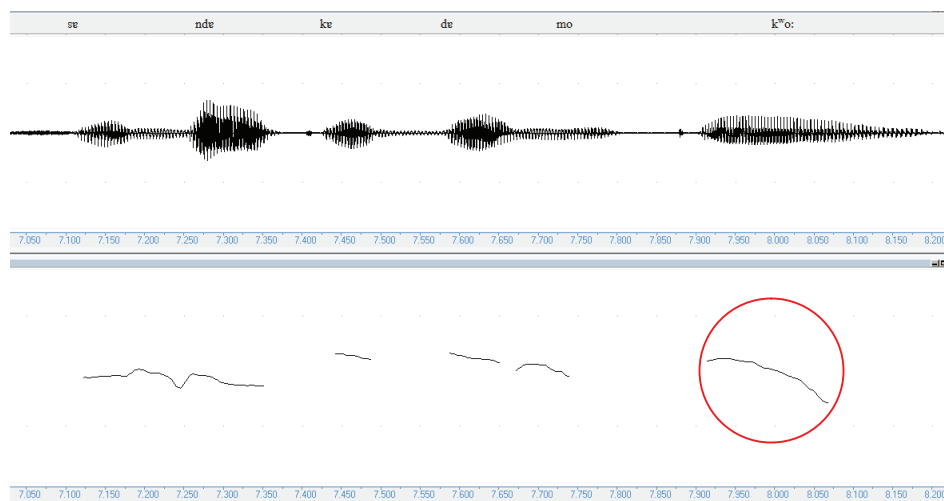


Figure 2.10: Negative statement showing utterance final falling tone

c. /x^wā- ká- wān vāŋgáj/ → [h^wōkékēwēn véŋgəj]

2SG.SBJ- PFV- sleep how

‘How have you slept?’

(GE3-SE:30)

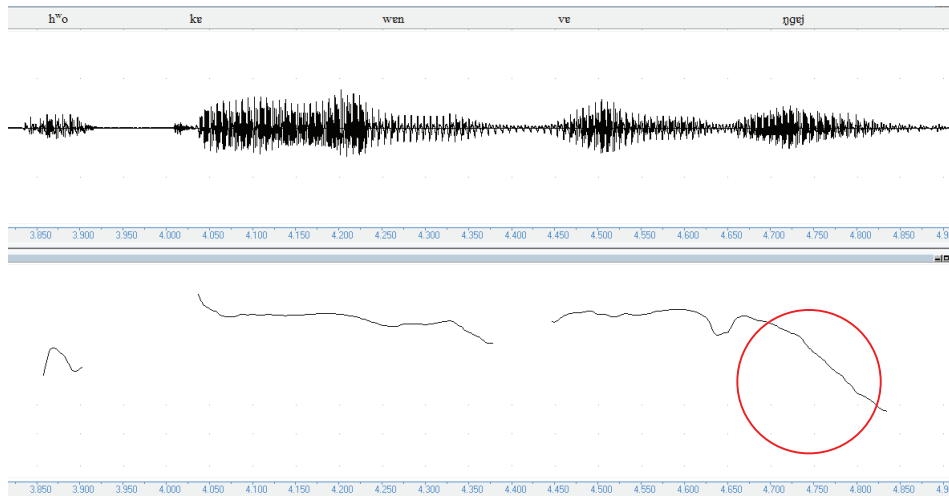


Figure 2.11: Information question showing utterance final falling tone

d. /x^wā- ká- zàm wdā vāw/ → [h^wōkékézèm ù.dē vō:]

2SG.SBJ- PFV- eat food Q

‘Have you eaten food?’

(GE2-SE:4.1)

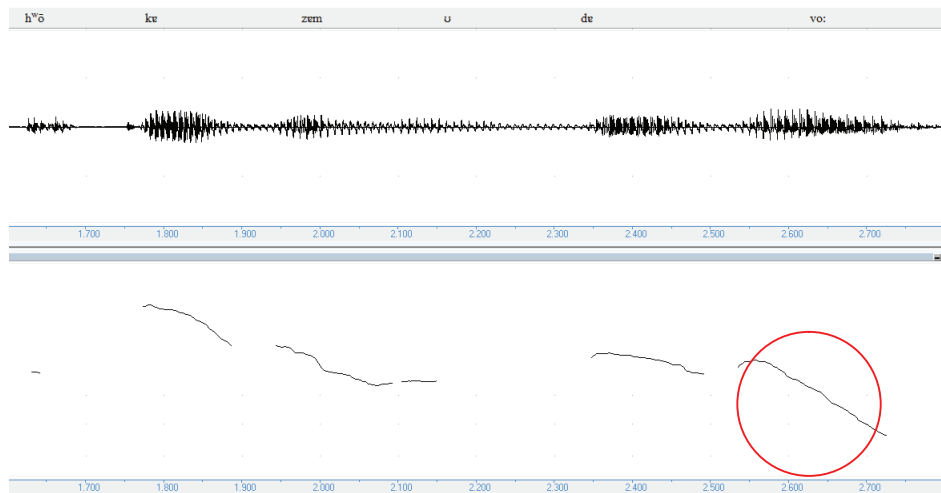


Figure 2.12: Polar question showing utterance final falling intonation

e. /á m̀dzā́/ → [ʔ̥ m̀dz̥ḕr̥]
 arrange terrace wall
 ‘Build a terrace wall.’

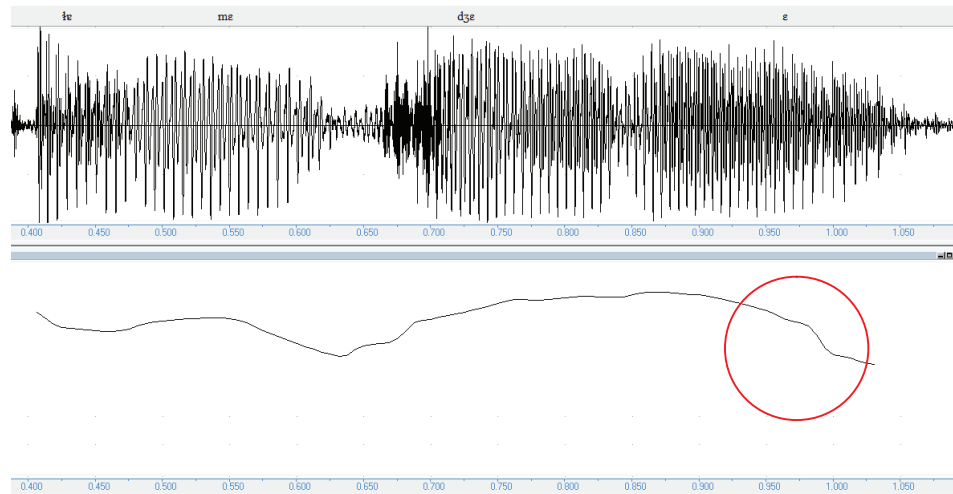


Figure 2.13: Imperative showing utterance final falling tone

(ii) Continuation boundary tone

Within an utterance, continuation intonation is signaled by a high level tone on the last syllable before a pause (2.151 and Figure 2.14).

(2.151)

/á pàs^Y wáⁿdá^Y, dāⁿ ā- dāⁿzā́, jā ā- jā -bā g^wō^mbōk^w já^m/
 at day IND.DET.SG think 3SG.SBJ- think-TRANS invite 3SG.SBJ invite -BEN toad also
 ‘Another day, he thought about it, he invited the toad also.’ (NF4-SN:3.1)

→ [é p̥ɛʃ w̥n̥d̥é, d̥ē̃ ɛ̃ d̥ē̃z̥é, j̥(ɐ) é j̥b̥ɔ̃ g̥^wō^mb̥ōk̥^w j̥ɛ̃m]

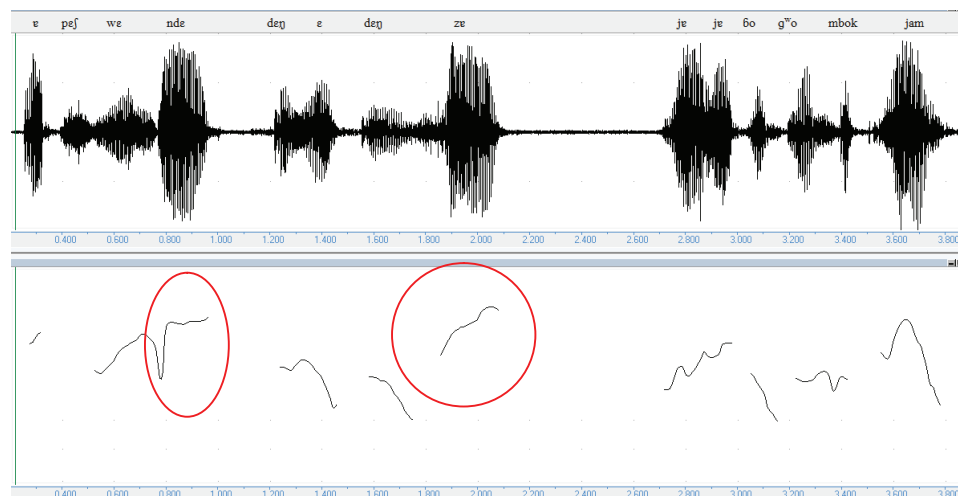


Figure 2.14: High level continuation boundary tone before a pause within an utterance

(iii) Variation of final syllable tone before a pause

The tone on the word final syllable preceding the utterance final low boundary tone may also vary from the underlying non-pausal tone depending on the word class of the final word. For example, nouns which have an underlying low tone on the final syllable (2.152a and Figure 2.15) end in a high falling tone utterance finally (2.152b and Figure 2.16). If the tone on the final syllable of the noun is mid or high it is unchanged.

- (2.152) a. /ārā bzàm k^wáw/ → [ērē bəzəm k^wô:]
 COP chin NEG
 ‘It’s not a chin.’

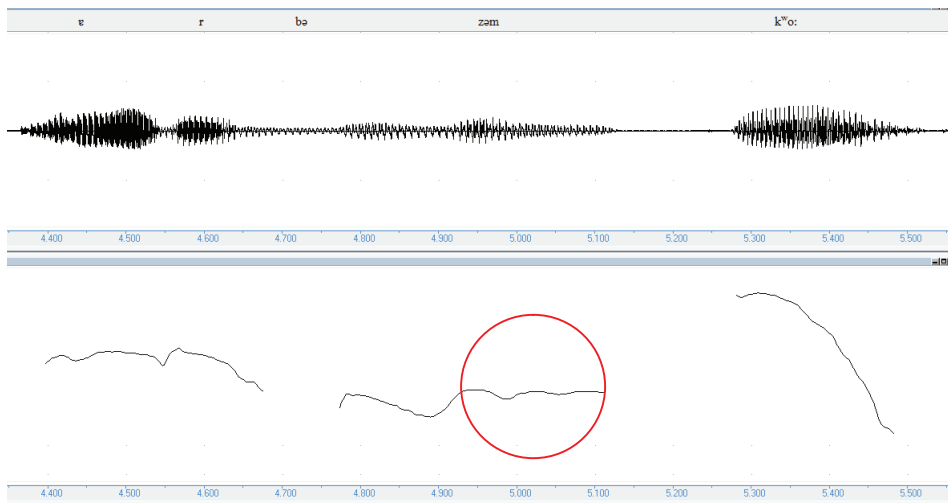


Figure 2.15: Noun with underlying low tone on final syllable non-pausal

- b. /sē- sār bzàm/ → [sēsōr bəzəm]
 1SG.SBJ- look at chin
 ‘I look at a chin.’

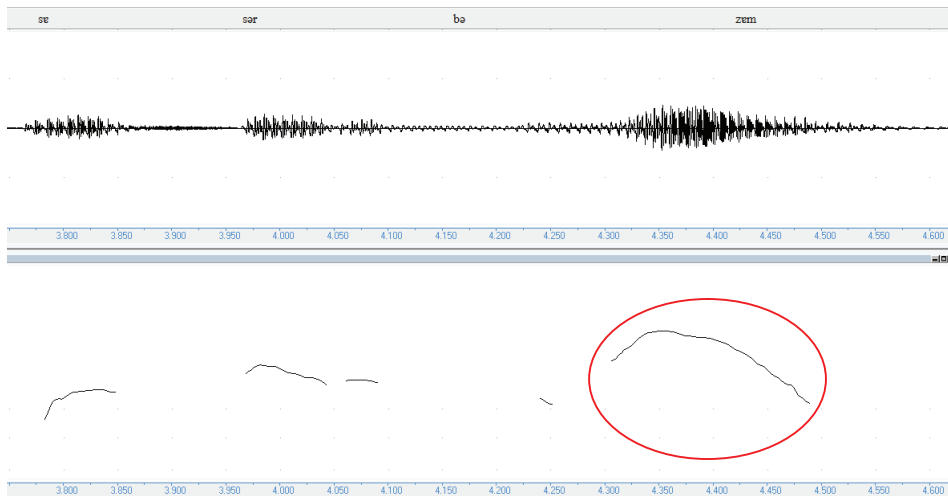


Figure 2.16: Noun with underlying low tone on final syllable before a pause – low becomes high

For verbs, the tone on underlying mid tone verbs (2.153a and Figure 2.17) becomes high before a pause (2.153b and Figure 2.18), whilst low tone remains low.

- (2.153) a. /sá- kǎ- tsǎtsǎx jém/ → [sékǔtsǔtsǔx jém]
 1SG.SBJ- IPFV cut off pieces also
 ‘I am cutting off pieces also.’

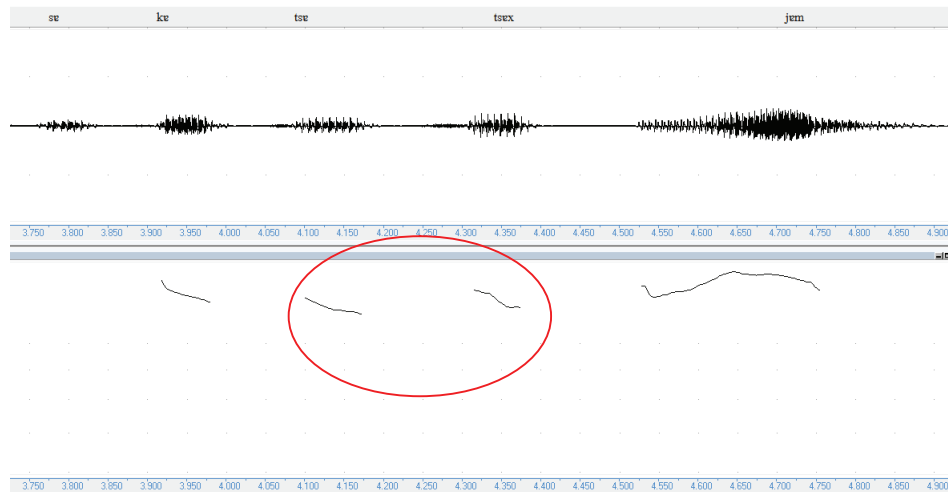


Figure 2.17: Verb with underlying mid tone non-pausal

- b. /ǎ- tsǎtsǎx/ → [ǔ tsǔtsǔx]
 3SG.SBJ- cut off pieces
 ‘He cuts off pieces.’

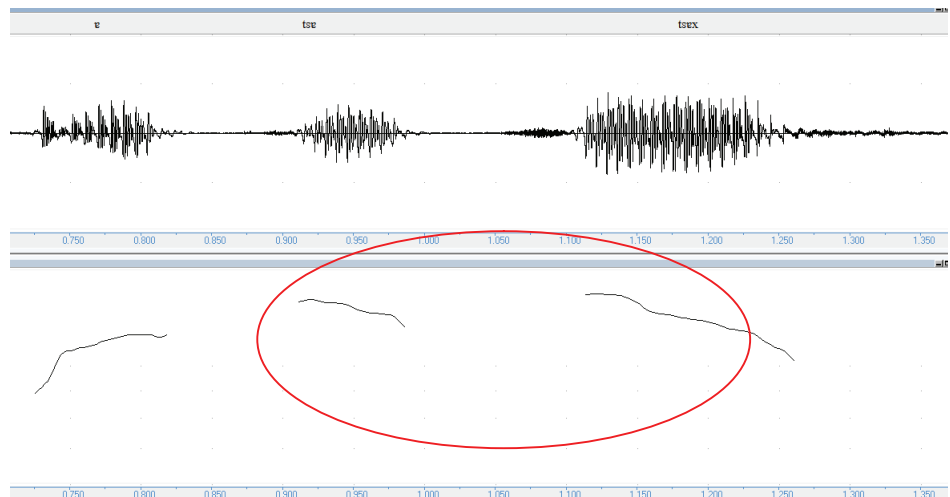


Figure 2.18: Verb with underlying mid tone before a pause – mid becomes high

The tone on adjectives remains the same before a pause.

2.7.2.2 Vowel Reduction

Within an utterance or an intonational phrase, depending on the speed of speech, a process of vowel reduction may occur, especially if the vowel is followed by a continuant consonant. This causes the full vowel phoneme /a/ to be realized as [ə] or the palatalised or labialised versions of this, [ɪ] or [ʊ]. This is illustrated by (2.154) and (2.155) where the vowel in the final syllable of the noun has been reduced before the negation marker *k^wāw*⁶ (2.154a & 2.155a). However, when these same nouns are pronounced before a pause as in (2.154b) and (2.155b), the full vowel is pronounced.

(2.154) a. /ārā bzàm k^wāw/ → [ērē bəzəm k^wô:]
 COP chin NEG
 ‘It’s not a chin.’

b. /sē- sār bzàm/ → [sēsər bəzəm]
 1SG.SBJ- look.at chin
 ‘I look at a chin.’

(2.155) a. /ārā bāsk^wár k^wāw/ → [ērē bēs^wúr k^wô:]
 COP bicycle NEG
 ‘It’s not a bicycle.’

b. /sā sār bāsk^wár/ → [sē sēr bēs^wêr]
 1SG.SBJ- look at bicycle
 ‘I look at a bicycle.’

The faster the speech the more likely vowel reduction is to take place. This is illustrated using three versions of the example sentence (2.156) which was said at three different speeds. For the slow version, no vowel reduction took place. For the medium version only the vowel in the verb *zàm* ‘eat’ was reduced. In the fast version the final vowel in the noun *bāmām* ‘bee’ and the vowel in the preposition *té* were also reduced.

(2.156) /bāmām ká- lām^y kàn tá zàm á wātā g^wā^mbāk^w k^wāw/
 bee PFV- get thing for eat PREP1 home toad NEG
 ‘The bee didn’t get anything to eat at the toads home.’

⁶ Note that the tone on the negation marker becomes high falling before a pause (see also Section 2.7.2.1).

slow: [bēmēm kélèm kèn té zèm é wétē g^wōmbōk^w k^wô]

medium: [bēmēm kélèm kèn té zəm é wétē g^wōmbōk^w k^wô]

fast: [bēmōm kélèm kèn tó zəm é wétē g^wōmbōk^w k^wô]

Vowel reduction may also take place within a single morpheme as in (2.157). The last two examples in the list have a high tone on the syllable containing the reduced vowel followed by a low tone on the next syllable. This is evidence that there is an underlying full vowel, as an epenthetic vowel would carry a low tone in this position (see section 2.6.3.2).

(2.157)	[tīkēt ¹] ~ [tēkēt ¹]	/tēkéd ^Y /	‘calabash’
	[dīdēj]	/dēj déj ^Y /	‘too much’
	[mēk ^w ól ^m mbéŋ]	/mēk ^w él ^m mbéŋ/	‘large ant’
	[ŋ ^w k ^w óríé] ~ [ŋ ^w k ^w óríé]	/ŋ ^w k ^w éríé/	‘puff adder’
	[k ^w ór ^m mbèlé]	/k ^w érm bèlé/	‘shea-butter tree’
	[kír kè m] ~ [kér kè m]	/kér kè m ^Y /	‘dried left-over fufu’

Pre-pausal strengthening was observed by Gravina (2001a: 123) for Mbuko. He found that **any** underlying /a/ became [ə] except before a pause in closed syllables. In contrast, in Buwal the process of vowel reduction tends to take place in closed syllables where the coda is a continuant consonant such as in the following examples of verbs when the transitivity suffix *-zē⁷* is attached to the verb root (2.158).

(2.158)	a.	[gēj]	/gēj/	‘spoil’	
		/gēj/ +	/-zē/	→ gəyzə	→ [gīˈzê] ‘Spoil that!’
		spoil	-TRANS		
	b.	[dō:]	/dēw/	‘want, ask’	
		/dēw/ +	/-zē/	→ dəwzə	→ [dūˈzê] ‘Ask about that!’
		want	-TRANS		
	c.	[sēr]	/sēr/	‘look at, visit’	
		/sēr/ +	/-zē/	→ [sərzê]	‘Visit him/her!’
		look at	-TRANS		

⁷ Note that the mid tone on the transitivity suffix becomes high falling before a pause (see also Section 2.7.2.1).

This process appears to be postlexical as there are variations in pronunciation depending on the speaker. For example for the verb *gēj* ‘spoil’ has the following three versions:

- (2.159) a. [gējzê]
 b. [gēzê]
 c. [gī·zê]

There are a few speakers, especially those who speak French and Fulfulde well, who are aware of the change in the vowel.

2.7.2.3 Vowel Elision

When two vowels come together in a non-pausal situation one is elided. This applies both when an affix is attached to a root and across word boundaries. If the tone on each vowel is different, the vowel with the high tone will be preferred and the other elided as in (2.160) below.

- (2.160) a. /ārā ngámà ágā^Y/ → [ērē ngém(è) égè]
 COP friend PL
 ‘They are friends.’ (NF4-SN:1.2)
- b. /dāmā á tā rā nk^{wā} dājdáj^Y/ → [dēm(ē) é tē rō nk^{wē} dīdēj]
 dirt PREP1 on hand 2SG.POSS too.much
 ‘There is too much dirt on your hand.’ (NF4-SN:3.6)
- c. /xàdzà^Y á ntrā vákáj^Y/ → [hèdz(è) é ntrē vékèj]
 1INCL PREP1 month which
 ‘Which month are we in?’ (LL24-SE:4)

If the tone on both vowels is the same, a palatalised vowel will be preferred over a non-palatalised one (2.161).

- (2.161) a. /dā -ākāj^Y vāmáj^Y/ → [dēkēj véméj]
 bring -1SG.IOBJ what
 ‘bring me whatever...’ (HT7-SN:1.9)
- b. / á pàs^Y wáⁿdá^Y ákā/
 PREP1 day IND.DET.SG EXIST
 ‘There was a certain day....’ (NF4-SN:2.1)

- c. /ánā àbā^Y nyā^Y/ → [én(è) èbè yě,...]
 like DEM.MED DEM.PROX
 ‘Like this...’ (NF4-SN:4.1)

That vowel elision does not occur across a pause boundary is illustrated by (2.162) (pause indicated by a comma < , >):

- (2.162) a. /á dwzá^Y tsá, g^wō^mbōk^w tsá, á- ká- zàm wdā/
 PREP1 after TOP toad TOP 3SG.SBJ- IPFV- eat food
 ‘After that, the toad, he was eating all the food...’ (NF4-SN: 2.13)

→ [é dÿːzɛ́ tsɛ́, g^wō^mbōk^w tsɛ́, ɛ́kɛ̀zɛ̀m ùːd(ɐ)...]

- b. /è- mbāl ɲámà á xādá^Y, ā wārwar^Y/
 3SG.SBJ-catch friend PREP1 on.it PREP1 trickery
 ‘He caught his friend about it, with trickery.’ (NH9-SN:2.2)

→ [ɛ̀mbəl ɲám(è) é hɛ́dɛ́, ɛ́ wɛ̀rwɛ̀r]

Another vowel elision process which occurs in a non-pausal situation is the dropping of the final vowel of the plural suffix *-jɛ^Y* (2.163a). Before a pause this final vowel is pronounced (2.163b)

- (2.163) a. /x^wná^Y xān vāmáj^Y wālā -já^Y mǎzāy ágā^Y/
 2PL.SBJ- cry what woman-PL mazay PL
 ‘What are you crying about, Mazay women?’ (NF2-SN:2.3)

→ [h^wōné hɛ̀n vémé wílíː mɛ̀zɛ́ é gɛ́]

- b. /ánā ɬāp tsá, dmā, wālā -já^Y, xáldmā -já^Y/
 like speech TOP bride woman -PL girl -PL
 ‘That is to say, brides, women, girls...’ (DP2-SN:5.2)

→ [énɛ́ zɛ̀p tsɛ́, dɛ́mɛ́, wílíjɛ́, héldímíjɛ́,...]

2.8 Buwal Orthography

A provisional orthography for Buwal has recently been devised as part of a community-based language development project (M. H. Viljoen et al 2009). While this orthography was based in part on the above phonological analysis, every effort was made to include the language community in both the analysis and decisions made. Easton (2007: 278) in

her PhD thesis on community-based orthography development states: ‘Linguistic analysis is only useful in so far as it supports the goals and desires of the participants in the process...the most important thing a linguist can offer is the gift of empowerment.’ To this end Buwal speakers participated in workshops, in the process of language data collection and transcription and in the discussion of spelling rules. Orthography testing involving one hundred and sixty Buwal speakers sought information about preferred spellings of certain broadly representative words. Of particular concern was how the vowels were to be represented and where an epenthetic vowel should be written. Final decisions on these points plus other spelling rules were discussed with the Buwal language committee (now called the ‘Comité de langue et culture buwal’). A summary of these decisions and a description of the results of the orthography testing are available in M. H. Viljoen et al (2009). Since that time minor adjustments, particularly concerning word break issues, continue to be made by those who are using the orthography in consultation with the author.

What follows is a brief description of Buwal orthography based on M. H. Viljoen et al (2009). Any issues yet to be resolved through community consultation are mentioned. A number of additional issues were identified as a result of examining thirteen pages of text written by native speakers familiar with the orthography.

2.8.1 Alphabet

The Buwal alphabet is largely based on the *Alphabet général des langues Camerounaises* (Tadadjeu and Sadembouo 1979) which in turn is based on the Roman alphabet supplemented by a small number of IPA symbols. Each consonant phoneme is represented by the grapheme listed in alphabetical order in Table 2.26.

Table 2.26: Buwal consonant graphemes

Phoneme	Grapheme		Phoneme	Grapheme	
	Capital	Small		Capital	Small
/b/	B	b	^{/m} gb/	Mgb	mgb
/β/	β	β	/n/	N	n
/ts/	C	c	^{/n} d/	Nd	nd
/d/	D	d	^{/n} dz/	Nj	nj
/dʲ/	Ḑ	ḑ	/ŋ/	Ŋ	ŋ
/f/	F	f	^{/n} g/	Ŋg	ŋg
/g/	G	g	^{/n} g ^w /	Ŋgw	ŋgw
/gb/	Gb	gb	/ŋ ^w /	Ŋw	ŋw
/ɣ/	Gh	gh	/p/	P	p
/ɣ ^w /	Ghw	ghw	/r/	R	R
/g ^w /	Gw	gw	/s/	S	s
/x/	H	h	/ʎ/	Sl	sl
/x ^w /	Hw	hw	/t/	T	t
/dz/	J	j	/v/	V	v
/k/	K	k	/v/	Vb	vb
/kp/	Kp	kp	/w/	W	W
/k ^w /	Kw	kw	/j/	Y	Y
/l/	L	l	/z/	Z	z
/m/	M	m	/ʒ/	Zl	Zl
^{/m} b/	Mb	mb			

Use of these forms was generally readily adopted by speakers although confusion in the written text about whether to write < n > or < ŋ > sometimes arose. This is not surprising given that these two forms are in both phonemic and allophonic distribution in relation to each other (see Section 2.2.6). Additionally, word final glides were at times dropped when not sentence final. The consonants which caused the most confusion were the labialised velars. Native speakers were often not sure where to write < w > . This

problem appears to arise as there is no <o> in the orthography and some speakers have the idea that when they hear [o] in Buwal it should be written <aw> which is not the systematically expected case if this sound occurs next to a labialised velar consonant.

Although Buwal can be analysed as having only one phonemic vowel /a/, four vowels are written in the orthography. These are listed in Table 2.27.

Table 2.27: Buwal vowel graphemes

Phoneme	Grapheme	
	Capital	Small
/ə/	A	a
/e/ + PAL	E	e
Ø (+ PAL)	Ə	ə
Ø + LAB	U	u

The grapheme <e> indicates palatalisation. The schwa <ə> is also written, since it is generally salient to speakers. Including <ə> reduces the number of syllable types new readers need to learn since the alternative would involve syllables with complex onsets. Also the vowel <u>, despite being an allophone of schwa, was included in the orthography as it was preferred during orthography testing (M. H. Viljoen et al 2009: 34).

In the texts written by native speakers a full vowel was written instead of an epenthetic vowel at times. Likewise, occasionally an epenthetic vowel was written in the place of a full vowel. This second situation would often occur in environments where vowel reduction was likely to take place (see Section 2.7.2.2).

2.8.2 Spelling rules

The high frequency use of epenthetic vowels make conventions for their representation critical in the spelling system. A vowel is written between all consonants word initially (2.164), except if the first consonant is a nasal (2.164c), and medially between two obstruents or consonants of increasing sonority (2.165). This rule does not apply in cases of reduplication or compounding (2.166) (M. H. Viljoen et al 2009: 10-12).

- (2.164) a. [prɛʔ] /pràʔ/ <pərasl> ‘snatch’
 b. [plɛm] /plàm/ <pəlam> ‘pull out’
 c. [mpɛk] /mpāk/ <mpak> ‘shut’
- (2.165) a. [zɛʔlɛ] /zɛʔlɛ/ <zaʔəla> ‘ghost’
 b. [gɛgəməj] /gágmāj/ <gagəmaj> ‘cotton’
 c. [tɛtəʔɛm] /tátɔ̀m/ <tatəʔam> ‘wind’
- (2.166) a. [dɛbdɛbɛ] /dábɔ̀bà/ <dabdaba> ‘stopper’
 b. [mɛpəʔdɛkhɛ] /māpɔ̀dákxā/ <mapəʔakha> ‘sweet potato’

The inserted phonetic vowels [ɪ], [i] and [ɣ] are all written with <ə> (2.167).

- (2.167) a. [ɬì dā] /ɬdāɣ^Y/ <zlədeŋ> ‘tooth’
 b. [vìjɛ] /vjā/ <vəya> ‘wet season’
 c. [ʰdʒɣwɛn] /ʰdʒwàn^Y/ <njəwen> ‘truth’
 d. [mɛtɣ·lɛ] /mātwlā^Y/ <metəwle> ‘lie’

The inserted phonetic vowels [ʊ] and [u] are written with <u> (2.168). In the texts written by native speakers there was the occasional word where <ə> was written instead of <u>.

- (2.168) a. [g^wùlɛk] /g^wlāk/ <gulak> ‘argue’
 b. [túk^wsésɛr] /tk^wsásār/ <tuksasar> ‘dry’
 c. [tūwɛt^ɿ] /twād/ <tuwad> ‘finish’
 d. [ù·dʒɛk] /wdzāk^Y/ <ujek> ‘house’
 e. [hɛlō·lɛ] /hālwlā/ <halula> ‘wall’

Note that for all words beginning with syllabic /n/, the nasal is written <ŋ> in the orthography as in (2.169) below. A slight majority of participants in the orthography testing and all the members Buwal language committee preferred this option (M. H. Viljoen et al 2009: 35).

- (2.169) a. [ŋvé] /nvá/ <ŋva> ‘excrement’
 b. [ŋfɛŋ] /ŋfāŋ^Y/ <ŋseŋ> ‘seed’
 c. [ŋtɛv] ~ [ntèv] /ntàv/ <ŋtav> ‘sew’

As tone does not carry a high lexical load in Buwal it is generally not marked in the orthography except to distinguish between imperfective (2.170a) and perfective (2.170b) aspects. Any lexical minimal pairs can be distinguished by the context.

- (2.170) a. /sákāwān/ < sa **k**awan > ‘I am sleeping.’
b. /sākáwān] < sa **k**áwan > ‘I slept.’

In the text written by native speakers the accent on the perfective prefix is sometimes omitted. In general for African languages, it has been found that if a writing system marks tones, many native speakers do not use the tone marks unless they absolutely need to (Bird 1999: 38-39). This may be due in part to a familiarity with the orthographies of non-tonal national languages such as English or French.

2.8.3 Word breaks

There are not many morphophonemic processes in Buwal which can aid in determining word breaks, so at times the choices in this area are somewhat arbitrary. However there are a number of principles that have been identified that contribute to developing conventions in this area. These are: (i) palatalisation spread, (ii) tonal changes and (iii) morphological independence.

(i) Palatalisation spread

Palatalisation spread (see Section 2.3.1) can give an indication of word breaks but since it usually spreads leftwards this does not help to determine if non-palatalised suffixes are phonologically attached or not. Furthermore, palatalisation may spread onto the word final syllable of a preceding word. As a result, it may also be difficult to decide whether a putative prefix is attached or not. This issue is particularly relevant for verbs which can take a variety of inflectional and derivational markers that may or may not be considered phonologically attached. For further discussion of this see Section 3.2.1.4.

The Buwal language committee decided to write the subject agreement markers and the infinitive marker separately but to attach the tense/aspect prefixes, and all inflectional and derivation suffixes (2.171) (M. H. Viljoen et al 2009: 16-17). In written texts, speakers sometimes group the subject agreement marker and the tense/aspect prefix together and

write the rest of the verb separately as an alternate strategy. Vowel changes due to palatalisation spread are represented in the orthography (2.1721). These vowel changes are not always consistently written by speakers and this appears to reflect the fact that the extent of palatalisation spread can vary from speaker to speaker.

- (2.171) a. / ā- ná- lām -ātānā^Y/ → <a nelemetene >
 3SG.SBJ- FUT- build -3SG.IOBJ
 ‘I will build for him.’
- b. /sā- màd^Y -za -ata/ → <sa madzata >
 1SG.SBJ- swallow -TRANS -3PL.DOBJ
 ‘I swallow them..’
- c. /ŋ ntsā/ → <ŋ ŋca >
 INF bite
 ‘to bite’

(ii) Tonal changes

Nominalising prefixes provoke tonal changes in the roots they attach to (see Section 3.1.3) and can be considered phonologically bound. The convention currently is to write nominalisation prefixes along with the root as a unitary orthographic word (Viljoen et al 2009: 16). In texts written by native speakers nominalising prefixes are not attached consistently.

- (2.172) a. /la-rāx^Y/ → [lērēx] → <lereh >
 NOM.ACT- heal
 ‘healing’
- b. /ma- dās/ → [médēs] → <madās >
 NOM- cultivate
 ‘cultivator’

Tonal changes also occur in some compound nouns (see Section 3.1.1.4).

(iii) Morphological independence

Many noun and adjective stems in Buwal are formed through reduplication (see Sections 3.1.1.2 and 3.3.1.2). Modifiers may also be repeated to give an intensive or distributive meaning. If a reduplicated sequence cannot occur independently the reduplicated parts are written together (Viljoen et al 2009: 18). This principle also applies to certain compound nouns where phonological reduction has taken place (see Section 3.1.1.4).

- (2.173) a. /6ár-6ár/ → <6ar6ar> */6ár/
 ‘strong, hard’
- b. /ɣ^wàrɓá-ɣ^wàrɓá/ → <ghwarzlaghwarzla> */ɣ^wàrɓá/
 ‘snail’

Morphemes may also be considered independent if a word can be inserted between the two morphemes in question. This principle is particularly relevant to verbal particles (see Section 4.7) which occur after the direct object, if present (2.175a). My recommendation therefore was that they be written separately even if the direct object is not overtly expressed (2.175b).

- (2.174) a. /x^wā- ká- māj māvāl āzā/ → <hwa kámay mawal aza>
 2SG.SBJ- PFV- choose husband COMPL
 ‘You have chosen a husband.’
- b. /x^wā- ká- māj āzā/ → <hwa kámay aza>
 2SG.SBJ- PFV- choose COMPL
 ‘You have chosen (him).’

However, this recommendation has not yet been explored with the Buwal language committee. Some discussion has taken place with users of the orthography. In the written texts, verbal particles were frequently attached to the verb where there was not an overt direct object. This also occurred with other verb phrase elements such as the possessive subject pronoun (see Section 6.4) and the lexicalised direct object *mā* (see Section 3.2.2.4). It seems that the Buwal speakers see these elements as closely integrated with the verb although they may be phonologically independent.

2.8.4 Vowel elision

When two vowels come together within a word and one is elided, only one vowel is written in the orthography. The full vowel < e > (2.175a) or the epenthetic vowel < u > (2.175b) will be written in preference to < a >.

- (2.175) a. /sā- dà -ānā^Y/ → <sa dene>
 1SG.SBJ- prepare -3SG.IOBJ
 ‘I prepare food for him.’
- b. /sá- kǎ- wlàk/ → <sa kulak>
 1SG.SBJ- IPFV- think
 ‘I am thinking.’

Across word boundaries both vowels are written although only one may be heard. This strategy keeps the word forms consistent and means that the grammar of the language is represented overtly.

- (2.176) /nàná- ndzā á bwāl/ → <nene nja a Buwal>
 1EXCL.SBJ- live PREP1 buwal
 ‘We live in Buwal.’

In the written texts the native speakers would occasionally forget to write the preposition *á* as it is often elided in natural speech.

2.9 Transcription of Buwal language examples

In this chapter both phonetic and phonemic transcriptions of Buwal language examples were given. From now on however, examples within the running text or in lists are transcribed in a semi-phonemic way. There are two differences between the semi-phonemic transcription and the purely phonemic transcription used in this chapter. Firstly, the vowel < e > is written rather than a palatalisation symbol at the end of the word (e.g. *bèrʒèʒé* not *bàrʒàʒá^Y*). Secondly, for prenasalised plosives the nasal is not written as a superscript (e.g. *ndándàdáz* not ⁿ*dáⁿdàdáz*). These changes have been made in order to simplify the reading of the Buwal examples.

For interlinearised examples four lines are given; orthographic, semi-phonemic showing morpheme divisions, gloss and free translation. Where possible the Leipzig glossing rules are followed. When morphemes have been borrowed from other languages this is indicated in the gloss by (ful.) for Fulfulde and (fr.) for French. Free translations are expressed in idiomatic English. A more literal translation is provided in parenthesis if necessary in order to clarify the underlying Buwal structure. Words or morphemes which

illustrate the relevant point being made are bolded. If the source of the example is textual, the code of the text is given (see Table 1.2) followed by either the codes SN (spoken natural) or WN (written natural) and then the paragraph and line number. If the example is elicited, the code SE (spoken elicited) is used. Elicited examples fall into two broad categories; language learning (LL) and grammar examples (GE). Occasional examples are drawn from the example sentences from the Buwal lexicon. In this case the number of the lexical item is given.

Chapter 3 Open word classes

OPEN word classes are typically defined as those having an unlimited membership, which may vary from speaker to speaker (Schachter and Shopen 2007: 3) and to which new members can be readily added (Matthews 1997: 257). This chapter deals with those classes of lexical words in Buwal which meet these criteria. These classes are: nouns (Section 3.1), verbs (Section 3.2), adjectives (Section 3.3) and adverbs (Section 3.4). Each of these word classes, including their various sub-classes, will be discussed in detail in the sections which follow. Firstly though, the criteria which are used to distinguish each of these classes are given in Table 3.1. The grammatical functions of prototypical members (unless explicitly mentioned) of each of the major classes are shown. Cross referencing throughout this chapter will mostly point forwards to places where relevant topics are addressed in great detail in later chapters.

Table 3.1: Summary of the functions of open word classes

	Noun	Verb	Adjective	Adverb
Argument of verbal Clause	X	-	X	-
Complement of preposition	X	X	X	-
Predicate of verbless clause with subject	X	-	X	-
Predicate of verbless clause with COP	X	-	X	-
Head of noun phrase	X	-	X	-
Noun modifier	X	-	X	Focus particles
Predicate of verbal clause	-	X	-	-
Predicate of relative clause	-	X	X	-
Predicate of comparative clause	quality nouns and patient nominalisation	X	X	-
Complement of clause with copula verb	-	-	X	-
Core or clausal modifier	locative and temporal nouns	-	X	X

Table 3.1 above shows that nouns can be distinguished from verbs because they can function as arguments of a verbal clause (Section 8.1), the predicate of a verbless clause (Section 8.2), as the head of a noun phrase (Section 5.1) and as a noun modifier (Section 5.2). Verbs, on the other hand, function as predicates of verbal clauses (Section 8.1) and relative clauses (Section 10.1.4). The properties of nouns and verbs overlap in that they can both function as complements of prepositions and certain property nouns can function as the predicate of comparative clauses just as verbs can (see Section 8.4).

There are a number of words which may function as both nouns and verbs. Those attested so far are listed in (3.1). In the majority of cases the noun expresses the result of the action of the verb. There is no evidence that zero derivation is a productive process in Buwal. These words appear to be lexicalised sets of noun/verb forms. Action nominalisation (see Section 3.1.3.2) which is productive can also form nouns which have a result type meaning.

(3.1) Forms which may function as both nouns and verbs

<i>ḡàk^w</i>	‘lump/make a lump’
<i>yāv</i>	‘pride/boast’
<i>yēm</i>	‘fault/judge’
<i>krēw</i>	‘difficult farming/farm with difficulty’
<i>ḡāp</i>	‘speech/speak’
<i>mbàw</i>	‘child/give birth’
<i>mēd</i>	‘oath/swear’
<i>ḡgès</i>	‘urine/urinate’
<i>sàsàm</i>	‘joy/rejoice’
<i>wān</i>	‘day/sleep’
<i>vāx</i>	‘day/pass the day’
<i>zàzàk</i>	‘rest/rest’

Proto-typical adjectives in Buwal are ‘noun-like’ in that they can function in every way like nouns. They differ from nouns in that they also have some ‘verb-like’ properties. That is, they can function as the predicate of relative (Section 10.1.4) and comparative (Section 8.4) clauses. Furthermore they also have an adverbial function (see Section 3.3.3.1). True adverbs can only function as core (Section 3.4.1) or clausal (Section 3.4.3) modifiers and never as the predicate. Focus particles can also modify nouns (Section 3.4.4).

3.1 Nouns

Prototypical NOUNS express ‘concepts that do not vary appreciably over time’ (Payne 1997: 33). This section gives a description of nouns and their structural properties in Buwal. It begins with the phonological and morphological structure of Buwal nouns (Section 3.1.1). Then nouns are divided into various sub-classes based on their functional characteristics (Section 3.1.2). Finally nominalisations are discussed in Section 3.1.3.

3.1.1 Structure of nouns

This section is concerned with the phonological and morphological structure of Buwal nouns. Section 3.1.1.1 describes the structure of simple noun roots. Complex stems formed through various derivational processes are then presented in the sections which follow. Section 3.1.1.2 examines the phenomenon of reduplication, Section 3.1.1.3 addresses the special possessed form of certain kinship nouns and Section 3.1.1.4 describes lexicalised nominal expressions. Other complex stems are formed using the nominalising prefix *ma-*. These will be discussed later in Section 3.1.3.1. Finally a small set of nouns which are formed through the more inflectional process of plural marking are described in Section 3.1.1.5.

3.1.1.1 Simple noun roots

Table 3.2 summarises the skeleton structures discovered for noun roots in Buwal. Next to each structure is the number of examples found in an inventory of 695 simple nouns. Many nouns have been excluded on the grounds that they involve reduplication, the presence of a possible lexicalised affix or because they are compound nouns. All of these noun types are regarded as stems rather than simple roots.

The most common noun structures in Buwal are CaCaC and CCaC, followed by CaCCaC and CaC. There were no nouns found beginning with a vowel.

Table 3.2: Summary of noun root skeleton structures

	1V		2V		3V	
	Skeleton	Example	Skeleton	Example	Skeleton	Example
1C	Ca (13)	<i>mā</i> 'mouth'				
2C	CaC (63)	<i>ḡām</i> 'ear'	CaCa (58)	<i>wālā</i> 'woman'		
	CCa (43)	<i>dzvā</i> 'breastbone'				
3C	CCaC (150)	<i>bzām</i> 'chin'	CaCaC (150)	<i>dēlēk</i> 'bile'	CaCaCa (19)	<i>lābārā</i> 'story'
			CaCCa (22)	<i>gāvda</i> 'bead'	CaaCaC (3)	<i>ḡārlāw</i> 'plant sp.'
	CCCa (7)	<i>ntrā</i> 'moon'	CCaCa (3)	<i>ntēlē</i> 'pond'		
4C	CCCaC (29)	<i>nkrām</i> 'dry season'	CCaCCa (3)	<i>gdémfé</i> 'flour pot'	CaCaCaC (30)	<i>bākātār</i> 'bag'
			CaCCaC (64)	<i>yāmpāf</i> 'lungs'		
			CCaCaC (7)	<i>ntāwàn</i> 'tree sp.'	CaCCaCa (4)	<i>sāḡkārā</i> 'mastitis'
			CaCCCa (2)	<i>xālwā</i> 'wall'		
5C			CaCCCaC (5)	<i>dāmtk^wāl</i> 'pestle'	CaCaCCaC (4)	<i>gāḡārvāj</i> 'ligament'
			CCCaCaC (1)	<i>mjdānāk</i> 'bird sp.'	CaCCaCaC (12)	<i>bāḡādāḡ</i> 'storm'
6C					CCaCCaCaC (2)	<i>k^wḡāktādāk</i> 'leech'
					CaCCaCCaC (1)	<i>ndrámdámḡāj</i> 'large ground pea'

3.1.1.2 Reduplication

Many Buwal nouns are formed using reduplication of either part or the whole phonological word. There were 105 such nouns found in the corpus in a total corpus of 1226 nouns. Of these nouns 34 were found to have been formed through reduplication of the whole word (see examples listed in 3.2).

(3.2)	<i>pá-pá</i>	‘wing’
	<i>kés-kés</i>	‘bird sp.’
	<i>ɣ^wàrɕá-ɣ^wàrɕá</i>	‘snail’
	<i>sésēk-sésēk</i>	‘tree sp.’

For others only part of the word is reduplicated and these fall under the following types with prefixal CV reduplication being the most common.

(i) Prefixal CV reduplication (44 nouns)

(3.3)	<i>tsā-tsāf</i>	‘plant sp.’
	<i>zē-zēdĕ</i>	‘giraffe’
	<i>ɬā-ɬālāj</i>	‘root’

(ii) Prefixal CVC reduplication (11 nouns)

(3.4)	<i>k^wáj-k^wájá</i>	‘hyena’
	<i>dáb-dábà</i>	‘stopper’
	<i>bēd-bēdēŋ</i>	‘biggest drum’

(iii) Suffixal CV reduplication (14 nouns)

(3.5)	<i>gānā-nā</i>	‘tongue’
	<i>bēlē-lēr</i>	‘tomb stone’
	<i>kālkā-kāk</i>	‘jaw’

(iv) Suffixal CVC reduplication (2 nouns)

(3.6)	<i>kāzám-zám</i>	‘cricket (fatty)’
	<i>kéɕèv-ɕèv</i>	‘swimming’

Reduplication within noun stems no longer appears to be productive and it is difficult to say what its meaning(s) may have been. These types of nouns occur across a number of semantic domains, most noticeably including plant, insect and bird species, body parts and small objects. Some of these reduplications particularly of whole phonological words may have originated in ideophones, as Barreteau (1977: 108-109) found for Mofu-Gudur.

The examples in (3.7) show that reduplicated forms may have been used to describe the cry of a particular bird or animal or some type of repeated movement.

- (3.7) *bdāk^w-bdāk^w* ‘hornbill’
kédě-kédě ‘tickling’
bèrdè-bèrdé ‘billowing dust’

Example (3.8) is the name of a game which has been derived from a verb *ndēw* ‘throw up in air and catch’. The game involves throwing stones into the air and catching them. The reduplication is a reflection of the fact that this action occurs numerous times, just as a verb is repeated to indicate repeated action (see Section 11.4.2).

- (3.8) *ndēw-ndēw* ‘game played with stones’

Where only a part of a word is reduplicated as in (3.3) and (3.5), this may at times be a case of compensatory lengthening due to historic loss of phonological material. Gravina (2007b: 4-5) demonstrates that this has occurred for certain words in a range of Central Chadic languages such as Zulgo, Mafa, Mofu-Gudur, Bana, Sukur, Merey, Cuvok, Mofu North, Giziga and Mbuko.

3.1.1.3 Possessed kinship nouns

Kinship terms in Buwal can be divided between those that reflect possessor person distinctions (for example *mānā* ‘mother.1POSS’, *mātsāx^w* ‘mother.2POSS’ and *mámán* ‘mother.3POSS’), and those that do not. For instance *dzèdzē* ‘grandparent’ is invariant. Of the nine kinship terms in my corpus, four show possessor person alternation. A complete list with the corresponding alternations is given in Table 3.3. Similar terms have been found in neighbouring languages such as Mofu-Gudur (Barreteau 1977: 109-110) and Mina (Frajzyngier and Johnston 2005: 51-53).

Table 3.3: Buwal possessed kinship terms

Kinship Term	General term	1st person (my, ours)	2 nd person (yours (sg or pl))	3rd person (his/hers, theirs)
Mother	<i>mán</i>	<i>mānā</i>	<i>mātsāx^w</i>	<i>mámán</i>
Father	<i>tsèn</i>	<i>vānā</i>	<i>tsèx^w</i>	<i>tsèn</i>
Sibling	<i>ḡāṅgān</i>	<i>ḡānā</i>	<i>ḡānāx^w</i>	<i>ḡāṅgān</i>
Maternal uncle	<i>k^wzāṅg^wān</i>	<i>k^wzāk^wnā</i>	<i>k^wzāk^wáx^w</i>	<i>k^wzāṅg^wān</i>

For the majority of the forms the stems are similar for each kinship category. The suppletive form *vānā* ‘father.1POSS’ is probably derived from *vān* meaning ‘family’ or ‘relation’. The possessed kinship terms may have resulted from an historical fusion of a noun plus a possessive pronoun. The final one or two segments of these words bear some phonological resemblance to the possessive pronouns *nākā* ‘my’, *nk^wā* ‘your’ and *āntā* ‘his/her’. For example, labialisation unites the 2nd person possessive pronoun and the second person kinship terms. It is difficult however, to determine morpheme boundaries as the stems do not remain identical across the possessed forms. This suggests that these forms are now lexicalized.

Possessed kinship nouns can co-occur with free possessive pronouns corresponding in person values (3.9). Analysis of the text corpus shows that in the vast majority of cases the possessed kinship noun occurs without the independent possessive pronoun (86% of cases). Plural possessive pronouns (11% of cases) are used slightly more often than singular (3% of cases). It thus seems that the default interpretation of possessed kinship nouns is that the possessor is singular and so plural possessive pronouns are used to clarify the plurality of the possessor (3.9).

- (3.9) *Maman tata a ngaya : « Cehw nkune*
mámán tātá ā- ngājā tsèx^w nk^wnè
mother.3POSS 3PL.POSS 3SG.SBJ- saying father.2POSS 2PL.POSS
a kadam a daba naka kwaw eze .
á- kā- dām á dābá nākā k^wāw ézē
 3SG.SBJ- IPFV- enter PREP1 women's.hut 1SG.POSS NEG therefore
 ‘**Their mother** said, “Therefore **your father** is not coming into my hut.”’
 (HT4-WN:3.5)

When the possessor is overtly expressed by its own noun phrase, the general kinship term is used (3.10).

- (3.10) *cen mbaw , ey man mbaw , əy nda , əy*
tsèn mbàw éj mán mbàw j- ndā j-
father child and mother child 3PL.SBJ- go 3PL.SBJ-
mpemene haldəma
mpàm -ēnē xáldmā
 look.for -3SG.IOBJ girl
 ‘...the **father** of the child, and the **mother** of the child, they go, they look
 for a girl for him...’
 (DE19-SN:3.1)

3.1.1.4 Lexicalised nominal expressions

This section presents those nominal expressions in Buwal which appear by virtue of phonological or semantic changes to have become lexicalised. There are three types of expressions to be addressed here; (a) where the noun involves a bound element, (b) there has been phonological reduction of a phrase and (c) the meaning is unpredictably related to a genitive construction.

(a) The noun involves a bound element

Examples of nouns with bound elements are given in (3.11). The bound element is underlined. It is possible that in the past these elements may have been able to occur independently but have since been lexicalised.

(3.11)

<i>gàdwdā</i>	‘fufu cooking pot’	<i>wdā</i>	‘fufu’
<i>gèdwrèj</i>	‘sauce cooking pot’	<i>wrèj</i>	‘sauce’
<i>ngàrwālā</i>	‘co-wife’	<i>wālā</i>	‘wife/woman’
<i>mbèntsērēw</i>	‘catfish’	<i>mbàw</i>	‘child’

(b) Phonological reduction of a phrase

A Buwal speaker provided the expansions of the compounds found in (3.12) below.

(3.12) a. <i>tàksájám</i>	‘cup’	←	<i>tēkēd má á tā sā jàm</i> calabash REL= PREP1 on drink water ‘calabash for drinking water’
b. <i>tàktrg^{wā}</i>	‘granary calabash’	←	<i>tēkēd mālā trg^{wā}</i> calabash GEN granary ‘calabash for grainery’
c. <i>tākázwdā</i>	‘fufu calabash’	←	<i>tēkēd má á tā zàm wdā</i> calabash REL= PREP1 on eat fufu ‘calabash for eating fufu’
d. <i>mbèndzwēn</i>	‘shepherd’	←	<i>mbā má kēnjèn kàn égē</i> child REL= IPFV-follow animal =PL ‘child who follows animals’
e. <i>sāmbwá</i>	‘armpit’	←	<i>á skā mbàw wá</i> PREP1 underneath child breast ‘underneath the child of the breast’
f. <i>sāxá</i>	‘nape of neck’	←	<i>á skā xā</i> PREP1 underneath head ‘underneath the head’

(c) Unpredictable meaning

Certain compounds consist of two recognisable nouns but the compound has a different meaning from the corresponding genitive construction (3.13). Further evidence of lexicalisation in these examples is the tonal change which occurs within the compounds as opposed to no tonal change on associated nouns (see Section 5.2). These tonal changes are not entirely predictable, although they all involve raising. For examples (3.13 a & b) the mid tone on the first noun of the compound is raised to high. In example (3.13c) the

tone on both syllables of the second noun are raised, mid to high and low to mid. These tonal changes within compounds may be an interesting area for further study.

- (3.13) a. *xáldmā* ‘girl/daughter’ vs. *xāl dmā* ‘daughter of bride’
daughter bride
- b. *xéndrèj* ‘malaria’ vs. *xā ndrèj* ‘head of sorghum’
head sorghum
- c. *mbàmáwāl* ‘boy’ vs. *mbà māvāl* ‘child of man’
child man

3.1.1.5 Plural marking for some animate nouns

Buwal has two ways of marking plural, a plural clitic *égē* (see Section 4.5) which occurs towards the end of the noun phrase and a plural suffix *-jé* which attaches to the noun. Plural marking in general will be discussed in Section 5.1.6 of the chapter on noun phrases. In terms of noun structure it should be noted that the plural suffix *-jé* is used only with a small set of animate nouns encompassing both humans and domestic animals (see Table 3.4). Not all items in these semantic categories mark plural in this way. For example the plural of ‘woman’ *wālā* contains the suffix *wēljé* whilst the plural of ‘man’ *māvāl*, *māvāl égē* uses the enclitic. Also the noun ‘chicken’ *gāmtāk* may be marked either way: *gēmtjé* or *gāmtāk égē*. The noun ‘child’ *mbāv* is highlighted in Table 3.4 below because it has an irregular plural *wzjé*. The plural of the indefinite determiner ‘another’ *wéndé* (see Section 4.2.1) takes the plural suffix as well as a stem modification to become *vēdjé*.

Table 3.4: Animate nouns which take the plural suffix

Category	Gloss	Singular	Plural
Human	person	<i>xèdzè</i>	<i>xèdzjé</i>
	woman	<i>wālā</i>	<i>wēljé</i>
	child	<i>mbàw</i>	<i>wzjé</i>
	girl	<i>xáldmá</i>	<i>xéldmjé</i>
	blacksmith	<i>mḥā</i>	<i>mḥjé</i>
Domestic animals	goat	<i>nx^wā</i>	<i>nx^wjé</i>
	ox	<i>ḥā</i>	<i>ḥjé</i>
	sheep	<i>ntmēk</i>	<i>ntmjé</i>
	chicken	<i>gāmtāk</i>	<i>gēmtjé</i>
	kid	<i>mbà xētsēkē</i>	<i>wzjé xētsjé</i>

Evidence that the plural marker *-jé* is phonologically attached to the noun includes the fact that palatalisation spreads leftwards from it to the noun stem, changing the vowel from /a/ to [e] (see Section 2.3.1 for more on palatalisation spread). Furthermore, the noun stems are modified such that the final rhyme is deleted indicating that the suffix is phonologically bound. The last three nouns in Table 3.4 end in *Vk(V)*. This sequence is elided when the plural suffix is attached. The sequence *-Vk* could perhaps be an ancient suffix. Schuh (1981: 19) states that *-k* is a proto-Chadic determiner.

There is more than one possible source for the Buwal plural suffix *-jé*. Newman (1990: 28-35) states that the plural suffix **-i* or **-ai* occurs in all four branches of Chadic and that in Biu-Mandara it tends to occur with a small set of basic words. This is suggestive of a Proto-Chadic origin for *-jé*. Newman also goes on to say that *-e* plurals are probably derived from **-i* or **-ai* by secondary phonological developments. Gavar also has the plural suffix *-i*. As in Buwal, it is used with a small number of animate nouns (Tchikoua 2006: 24-26).

On the other hand, Frajzyngier (1991: 236-237), argues that plural markers in Chadic are not inflectional and have been derived from 3rd person pronouns, deictics, anaphors and definite markers. For Mina (Frajzyngier and Johnston 2005: 60-63) he shows that plural is marked by *-yî* attached to the noun root, the end of the noun phrase or both. He assumes

that as its form is identical with the third-person plural independent pronoun, this may be a likely source for this marker. In Buwal, the third person plural subject agreement marker is also *j* which may be a possible source of the plural suffix *-jé*. This is an issue which cannot be resolved without a greater knowledge of the languages of the Daba subgroup of Central Chadic to which Buwal belongs.

3.1.2 Noun sub-classes

This section divides nouns into sub-classes according to their syntactic function and the constituents of the noun phrase they can host (see Section 5.1). Section 3.1.2.1 begins with common nouns, which could be considered prototypical as they can fulfill all nominal syntactic functions. Section 3.1.2.2 discusses mass nouns. Locative nouns and temporal nouns are described in Sections 3.1.2.3 and 3.1.2.4 respectively. Finally, relational nouns are presented in Section 3.1.2.5.

3.1.2.1 Common nouns

COMMON nouns are prototypical nouns in Buwal and make up the largest sub-class of Buwal nouns. They can fulfill all the syntactic functions for nouns given in Table 3.1 such as argument of a verbal clause (Section 8.1.1), complement of a prepositional phrase (Section 7.2.1), predicate of a verbless clause (Section 8.2.1), head of a noun phrase with the possibility of hosting all other noun phrase constituents (Section 5.1), and noun modifier (Section 5.2.1). Semantic categories of common nouns include human (3.14a), animate (3.14b) and inanimate (3.14c) nouns.

- | | | |
|-----------|---------------------------------------|------------------|
| (3.14) a. | <i>xèdzè</i> | ‘person’ |
| | <i>wālā</i> | ‘woman’ |
| | <i>māwāl</i> | ‘man’ |
| | <i>mḡā</i> | ‘blacksmith’ |
| | <i>xtāj</i> | ‘non-blacksmith’ |
| b. | <i>nx^{wā}</i> | ‘goat’ |
| | <i>g^{wāmbāk^w}</i> | ‘toad’ |
| | <i>g^{wādārāk}</i> | ‘vulture’ |
| | <i>x^{wzàm}</i> | ‘crocodile’ |
| | <i>dzèdzwèd</i> | ‘fly’ |

- c. *wjēk* ‘hut’
dg^wàǰ ‘clay pot’
ŋgéǰē ‘knife’
k^wālá ‘tobacco pipe’
rg^wâts ‘clothes’

Personal names are included in the category of common in Buwal. This is because personal names function like other common nouns and can occur with all types of modifiers. There are many people with the same name so at times modifiers such as possessive pronouns or demonstratives are used in helping to differentiate one person from another (3.15).

- (3.15) *A va wese ata lambaw , ata la*
á vā wēsé á tā lá- mbàw á tā lā
 PREP1 year DEM.DIST PREP1 on NOM.ACT- give.birth PREP1 on do
dāmas Kwanay naka .
dmàs k^wánáj nākā
 pregnancy Konay 1SG.POSS
 ‘In that year of the birth, of (my) pregnancy with my Konay ’.
 (NH6-SN:3.1)

Buwal people may have a number of different names. These have been described in detail by M. R. T. Viljoen (2005) and include clan names, honorific names, circumstantial names, religious names, nicknames and birth order names. A person’s birth order name is considered their main name. These are listed in Table 3.5 below.

Table 3.5: Buwal birth order names

Order	Male	Female
1	<i>g^wéndzè</i>	<i>kjzàŋ</i>
2	<i>zràj/zrà</i>	<i>màsámbà</i>
3	<i>délē</i>	<i>g^wādám</i>
4	<i>k^wánáj</i>	
5	<i>k^wēdzé</i>	
6	<i>k^wátādáj</i>	
7	<i>dáwāy</i>	
8	<i>k^wádā</i>	
9	<i>k^wájáj</i>	
10	<i>k^wátsàbá</i>	

3.1.2.2 Mass nouns

Trask (1993: 168) defines a MASS NOUN as one ‘whose meaning is perceived to be anything other than a distinct countable entity...’ Mass nouns in Buwal cannot be modified by a numeral. They may either denote (a) a substance or (b) an abstract concept.

(a) Examples of substances are given in (3.16) below.

(3.16)

<i>vān</i>	‘rain’
<i>vāk^w</i>	‘sand’
<i>jām</i>	‘water’
<i>māvāw</i>	‘beer’
<i>tátdām</i>	‘air, wind’

Some substances can be made countable by adding a measurement term (3.17).

(3.17)	<i>lebēc</i>		<i>vakw</i>	<i>gbak</i>	
	lá-	ḃèts	vāk ^w	gbák	
	NOM.ACT-	assemble	sand	two	
	‘Two groups of sand.’				(Fieldnotes)

Substances cannot be modified by the quantifier *vrām* ‘many’ but must use *dākālá* ‘a lot’.

When they occur with the plural marker, the meaning is ‘different types of’ (3.18). Schuh (1998: 199) found a similar situation in Miya.

(3.18)	əy	nda	,	əy	dene		<i>mavaw ege</i>	a	<i>mna</i>	.
	j	ndā	j	dā	-ēnē	māvāw	=égē	á	mnā	
	3PL.SBJ-	go	3PL.SBJ-	bring	-3SG.IOBJ	beer	=PL	PREP1	inside	
	‘They go, they bring different types of beer inside.’									(DE2-SN:9.2)

(b) An ABSTRACT concept may be a state of affairs, an activity or a quality (Trask 1993: 168). Unlike substances, in Buwal abstract nouns do not take the plural marker. Examples of Buwal abstract nouns are given in (3.19) below.

(3.19)		
<i>wēr-wēr</i>		‘trickery’
<i>sàsàm</i>		‘joy’
<i>yāv</i>		‘boasting/admiration’
<i>k^wétsér</i>		‘intelligence’
<i>zxāj</i>		‘good fortune, ease’

Many nouns designating personality traits are polysemous with a count noun referring to a person having that trait (3.20).

(3.20)		
<i>ngrèŋ</i>		‘greed/greedy person’
<i>màsáwlāx</i>		‘delinquency/delinquent’
<i>klèŋ</i>		‘wisdom/wise person’

Certain nouns designating qualities such personality traits can be used in comparative constructions (3.21) (see Section 8.4).

(3.21)	<i>Wala</i>	<i>ŋkwa</i>	<i>pa</i>	<i>ŋ</i>	<i>kwecer</i>	<i>aha</i>	<i>mala</i>	<i>naka</i>	.
	wālā	nk ^w ā	pá	ŋ	k ^w étsér	á	xā	mālā	nākā
	wife	2SG.POSS	at.a.level	PREP2	intelligence	PREP1	over	GEN	1SG.POSS
	‘Your wife is more intelligent than mine.’							(GE16-SE:45.4)	
	(lit. ‘Your wife is at a level in intelligence over mine.’)								

3.1.2.3 Locative nouns

LOCATIVE nouns are those which designate a place. Some examples of Buwal locative nouns are given in (3.22) below.

(3.22)		
<i>dámāw</i>		‘bush’
<i>wātā</i>		‘compound/home’
<i>wjēk</i>		‘hut’
<i>bārlā</i>		‘mountain’
<i>lā</i>		‘field/place’

Locative nouns may be distinguished by their behaviour from those which are not. When referring to a location, locative nouns in Buwal are frequently preceded by the preposition *á* ‘at, to, from’ (3.23a) or *ŋ* ‘in, into, from in’ (3.23b), depending on the nature of the place.

(3.23) a. *A ba ujek a damaw*
 ā- bā wdzēk á dámāw
 3SG.SBJ- make hut PREP1 bush
 ‘He made a house **in the bush.**’ (TN1-SN:1.2)

b. *hejəye əy nja ŋ barla , əy kadāw*
 xèjè -jé j ndzā ŋ bārlā j kā- dāw
 person -PL 3PL.SBJ- live PREP2 mountain 3PL.SBJ- IPFV- want
 ŋ nja ŋ varvara kwaw .
 ŋ ndzā ŋ vārvārā k^wāw
 INF live PREP2 plain NEG
 ‘...people lived **in the mountains**, they didn't want to live **on the plain.**’ (DE15-WN:1)

Other prepositions may also be used with locative nouns in particular contexts (3.24).

(3.24) *A kaŋgaba ndərey asa la ende .*
 ā- kā- ŋgā -bā ndrèj á sā lā éndē
 3SG.SBJ- IPFV- break -BEN sorghum PREP1 under field like.this.PROX
 ‘He was breaking sorghum for himself **under the field**¹ like this.’ (C16-SN:23.2)

Common nouns in locative function are preceded by the complex preposition *á mā* ‘at the edge of’ which is derived from the word for ‘mouth’ *mā* (3.25) (see Section 4.8.2).

Frajzyngier (1989: 176) found a similar use for the word ‘mouth’ in Pero and also states that ‘mouth’ codes the edge of an object in Gidar (Frajzyngier 2008: 91).

¹ The expression ‘under the field’ is used when the crops are fully grown.

- (3.25) *Sa hwas ama tepe*
 sā- x^wàs á mā tépē
 1SG.SBJ- reach PREP1 edge termite
 ‘I reach **the edge of the termite (mound)**...’ (DP4-SN:1.4)

Human nouns in locative function are preceded by the complex preposition *á rā* ‘at the side of’ which is derived from the word for ‘hand’ *rā* (3.26) (see Section 4.8.2). A similar construction has been reported for Mina (Frajzyngier and Johnston 2005: 148-150).

- (3.26) *A ndaha , a səkamaw , ara*
 ā- ndā -xā ā- skām -āw á rā
 3SG.SBJ- go -VNT.DIST 3SG.SBJ- sell -3SG.DOBJ PREP1 side
heje wende
xèdzè wéndé
 person IND.DET.SG
 ‘He came, he sold it, **at a certain person’s place**...’ (NH9-SN:3.6)

When repeated, locative nouns can be used adverbially without being preceded by a preposition to give a distributive meaning (3.27).

- (3.27) *dəmas əy kadəmas ara taf taf taf vaŋ a*
 dmàs j- kā- dmàs ārá tàf tàf tàf vāŋ á
 dance 3PL.SBJ- IPFV- dance SIM **road road road** arrived PREP1
wata .
 wātā
 compound
 ‘...they were dancing **all along the road** arriving at the compound.’
 (NH7-SN:7.4)

Place names can be considered a sub-set of locative nouns (3.29a). Examples of Buwal place names are given in (3.28) below (see Figure 1.3 for the location of these places). They are more limited in their function than other locative nouns. For example they cannot function as a direct or an indirect object in a verbal clause, nor can they be modified by adjectives or numerals.

(3.28)

<i>bwāl</i>	‘Buwal’
<i>ḥēntsé</i>	‘Ldenche (Mangari)’
<i>zk^wādḥāṅ^w</i>	‘Zukodfong (Bariki)’
<i>gāvār</i>	‘Gavar’
<i>zāmāj</i>	‘Zamai’

When a place name occurs with the plural enclitic *égē* it designates the people of that place (3.29b).

- (3.29) a. *na* *nja* *a* *Buwal* .
 ná- *ndzā* *á* *bwāl*
 1EXCL.SBJ- stay PREP1 **Buwal**
 ‘...we stayed **in Buwal**.’ (NH11-SN:1.6)
- b. *Buwal ege* *əy* *kadāw* *ŋ* *dā* *gham*
 bwāl = *égē* *ǰ-* *kā-* *dāw* *ǰ* *dā* *yām*
 Buwal =PL 3PL.SBJ- IPFV- want INF draw war
 ‘**The Buwal people** were wanting to make (lit. draw) war...’ (NH11-SN:2.7)

3.1.2.4 Temporal Nouns

TEMPORAL words express some notion of time. In Buwal such words mostly belong to the category of ‘noun’ although there are also a few temporal adjectives and adverbs (see Sections 3.3.2 and 3.4.1). Temporal nouns in Buwal are similar to locative nouns in so far as they are often preceded by a preposition, usually the general preposition *á*. They can be divided into two major groups on functional grounds.

(a) Group 1

The temporal nouns belonging to Group 1 are listed in Table 3.6, along with names of days of the week and months of the year, described in more detail below.

Table 3.6: Group 1 temporal nouns

Temporal nouns	Gloss
<i>vjā</i>	‘wet season’
<i>nkràm</i>	‘dry season’
<i>mésfé</i>	‘harvest season’
<i>wālāŋ</i>	‘period’
<i>pès/wān/vāx</i> ²	‘day’
<i>zàdāw</i>	‘night’
<i>ntrā</i> ³	‘month’
<i>vā</i>	‘year’

These are the closest to prototypical nouns. They can function as clausal arguments, as predicates and be modified by most noun modifiers. However they cannot be modified with adjectives or function as the indirect object. Furthermore, for semantic reasons the shaded nouns cannot be possessed whereas the unshaded ones can (3.30).

- (3.30) *Va anta vanay ?*
vā āntā vánáj
year 3SG.POSS how.many
 ‘How old is he (lit. **his years** are how many)?’ (LL28-SE:44)

Group 1 temporal nouns can also function adverbially without being preceded by a preposition when modified by a demonstrative (3.31a) or an adjective (3.31b). Like locative nouns (see Section 3.1.2.3), group 1 temporal nouns can also be repeated to give a distributive meaning (3.31c).

- (3.31) a. *Walaŋ ŋgha , tatədām a kamađ dakala .*
wālāŋ nyā tátdām á- kā- māđ dākālá
period DEM.PROX wind 3SG.SBJ- IPFV- be.cold a.lot
 ‘(During) this period, the wind is very cold.’ (GE27-SE:33.5)
- b. *Ŋtara jeh , sa kéweneye .*
ntrā dzéx sā- ká- wān -ējē
month whole 1SG.SBJ- PFV- lie -PART
 ‘The whole month, I have been lying down.’ (GE27-SE:17)

² The word *pès* also means ‘sun’, the word *wān* ‘sleep’ and *vāx* ‘pass the day’.

³ The word *ntrā* also means ‘moon’.

- c. *pēs pēs əy kavah ŋ bədam a təwse .*
pès pès j- kā- vāx ɨ́ bdām á twsé
day day 3PL.SBJ- IPFV- spend.time PREP1 cave PREP1 there
 ‘...**all day** they were passing time in the cave there.’ (C18-SN:133.4)

In Buwal the names of the days of the week and the months of the year are compounds based on the typical head-modifier structure (see Section 5.2.1.1), the head being a temporal noun. The names of the days of the week in Buwal are listed in Table 3.7 and are based on where the market is held on a particular day. They typically are formed by combining the temporal noun *pès* ‘day’ with *lwmà* ‘market’ (from Fulfulde *luumo* (Noye 1974: 334)) and then a place name. The one exception to this pattern is ‘Wednesday’ which is borrowed from the Fulfulde *alarba* (Noye 1974: 129). Note also that the Buwal name for ‘Saturday’ makes use of the word *nkèf* meaning ‘abandoned compound’. This is a translation of Fulfulde term *winde* which is contained in the name of place where the Saturday market is held, Gawar Winde (see Figure 1.3).

Table 3.7: Buwal days of the week

Day	Buwal name of day	Gloss
Monday	<i>pès lwmà zāmāj</i>	‘Zamay market day’
Tuesday	<i>pès lwmà mǎfaw</i>	‘Mofu market day’
Wednesday	<i>pès lwmà lǎrbà</i>	‘Wednesday market day’
Thursday	<i>pès lwmà gāvār</i>	‘Gavar market day’
Friday	<i>pès lwmà gāzāwā</i>	‘Gazawa market day’
Saturday	<i>pès lwmà nkèf</i>	‘Gawar Winde market day’
Sunday	<i>pès lwmà bwāl</i>	‘Buwal market day’

Table 3.8 lists the names of the months in Buwal. Some of the months of the year are named after the names of festivals celebrated around that time, others the names of nearby ethnic groups. The word for ‘month’ *ntrā* is simply followed by the relevant name. In other cases an ordinal number (see Section 3.1.3.1) is used as a post-head modifier to give the ‘seventh month’, the eighth month’ etc.

Table 3.8: Buwal months of the year

Month	Buwal name of month	Gloss	Name Category
October	<i>ntrā bwāl</i>	‘month of Buwal’	Ethnic group
November	<i>ntrā vārāw</i>	‘month of Varo’ ⁴	
December	<i>ntrā mātákám</i>	‘month of Matakam’ ⁵	
January	<i>ntrā wélm̀bègém</i>	‘month of Welmbegem’	Festival
February	<i>ntrā dékèn</i>	‘month of Deken’	
March	<i>ntrā dāmārā</i>	‘month of Damara’	
April	<i>ntrā mēnsléđ</i>	‘seventh month’	Ordinal number
May	<i>ntrā mādžámāxkád</i>	‘eighth month’	
June	<i>ntrā mādžáfád</i>	‘ninth month’	
July	<i>ntrā māvám</i>	‘tenth month’	
August	<i>ntrā sárḃáwá</i>	‘month of danger’ ⁶	
September	<i>ntrā mǎx^wàràw</i>	‘month of Mohoro’	Ethnic group

Note that in the Buwal calendar, the first month of the year is October, which they name after themselves. This is the month of rest before the harvest. When questioned, local informants say that the months follow the lunar cycle but due to the influence of the western calendar they are unclear now as to exactly how it works.

Festival names can also be classed as group 1 temporal nouns. Examples of Buwal festival names are given in (3.32). It is only possible for festival names to be modified by plural possessive pronouns and not singular. Perhaps this is because festivals are community events and so cannot be possessed by one person alone.

(3.32)

<i>wélm̀bègém</i>	‘Welmbegem’
<i>dāmārā</i>	‘Damara (misfortune)’
<i>yènè</i>	‘Ghene’
<i>xēftsék</i>	‘Hefcek’
<i>dékèn</i>	‘Deken’

⁴ The name *vārāw* is what the Buwal called the Mbudum people.

⁵ The name *mātákám* is what the Buwal call the Mafa people.

⁶ August is called the dangerous month as it is the month in which people are the most at risk of dying. People are working hard in the fields, there is generally a lack of food at this time and, being the height of the wet season, insects and various diseases are more prevalent.

(b) Group 2

The second group of temporal nouns listed in Table 3.9 are less like prototypical nouns since they cannot function as predicates in verbless clauses, nor can they be modified by the associative plural, adjectives, possessive pronouns or quantifiers.

Table 3.9: Group 2 temporal nouns

Temporal nouns	Gloss
<i>mpát</i>	‘tomorrow’
<i>vāg^wmtád</i>	‘day after tomorrow’
<i>māpát</i>	‘morning’
<i>mátsk^wāx^w</i>	‘evening’
<i>tāmbācá</i>	‘today’
<i>ndzwná</i>	‘yesterday’
<i>váwātsà</i>	‘this year’
<i>mbárná</i>	‘day before yesterday’
<i>nwná</i>	‘last year’
<i>māk^wdá</i>	‘next year’
<i>ntsné</i>	‘earlier’
<i>kètsè</i>	‘a bit later’
<i>tāmā⁷</i>	‘later/future’
<i>dwzé</i>	‘after/late’

The word *váwātsà* ‘this year’ is likely to be a compound formed from *vā* ‘year’ plus an archaic demonstrative. Possible cognate forms are reported in Gavar, the proximal demonstrative being *watsə* and the distal demonstrative *watsa* (Tchikoua 2006: 54-55). If the proximal demonstrative was used in the formation of this compound, the final schwa may have undergone a process of vowel lowering as the schwa is disallowed in word final syllables in Buwal.

⁷ Note that *tāmā* ‘front’ and *dwzé* ‘behind’ can be used either with a spatial meaning (see Section 3.1.2.5) or a temporal meaning. This is quite common cross-linguistically (Haspelmath 1997b: 56-63). What is unusual is that rather than ‘front’ corresponding with ‘before’ and ‘behind’ with ‘after’ as would be expected, only ‘behind/after’ fits this pattern. ‘Front’ is used for events which will occur in the future. This can be explained by the two different ways of looking at time. If the observer is seen to be moving through time then future events are in front or ahead. Whereas if time is thought to be moving then later events can be conceived of as being ‘behind’ earlier ones. ‘Before’ is expressed using a subordinator *már* (see Section 4.14.1.3).

Only the shaded nouns in Table 3.9 can function as a core argument of a verbal clause and then only as the subject (3.33a). They can also function as obliques and in this case are preceded by a preposition (3.33b). All the nouns which are not shaded Table 3.9 above must be preceded by the preposition *á*. The temporal noun *vāg^wmtád* ‘day after tomorrow’ is **never** preceded by a preposition. This is shown in example (3.35) below.

- (3.33) a. *Aya mapat kázlarha* , *a kanda anta*
 ājā **māpát** ká- ɣàr -xā á- kā- ndā āntā
 so **morning** PFV- open -VNT.DIST 3SG.SBJ- IPFV- go 3SG.POSS
beŋ
bēŋ
 early.morning
 ‘So when **the morning** had begun (lit. opened), he left early...’
 (NH9-SE:4.1)

- b. *A mapat meŋ pay ata la anta ma*
 á **māpát** mēŋ páj á tā lā āntā má
 PREP1 **morning** antelope arrived PREP1 on place DEF.DET REL=
əy zlap
ǰ- ɣāp
 3PL.SBJ- speak
 ‘**In the morning** the antelope arrived at the place where they said...’
 (NF6-WN:2.3)

Group 2 temporal nouns are noun-like in that they can be modified by the definite (3.34a) and indefinite determiners (3.34b).

- (3.34) a. *A mpat anta zadāw zadāw əy kadəmas* .
 á **mpát** āntā zādāw zādāw ǰ- kā- dmàs
 PREP1 **tomorrow** DEF.DET night night 3PL.SBJ- IPFV- dance
 ‘**The next day**, all night they were dancing.’
 (NH7-SN:7.8)
- b. *Nene vaŋha a nuna wende* .
 nèné- vāŋ -xā á **nwná** wéndé
 1EXCL.SBJ- arrive -VNT.PROX PREP1 **last.year** IND.DET.SG
 ‘We arrived here **the year before last**.’
 (LL18-SE:41)

In addition, while *tāmbācá* ‘today’, *ndzwná* ‘yesterday’ and *váwātsà* ‘this year’ are necessarily singular, all the rest can take the plural marker (3.35).

- (3.35) *Hwa nda vepey ? Vagumtad ege .*
x^wā- ndā vépéj vāg^wmtád = égē
 2SG.SBJ- go when **day.after.tomorrow** =PL
 ‘When do you go? **Sometime after tomorrow.**’ (GE26-SE:30.1-2)

It is possible for some temporal nouns to modify another temporal noun (3.36 a & b).

- (3.36) a. *Sa da uda a pes mackwahw .*
sā- dà wdā á pès mátsk^wāx^w
 1SG.SBJ- prepare food PREP1 **day evening**
 ‘I prepare food during the **afternoon.**’ (LL18-SE:52)
- b. *Sey a kece pes .*
séj á kètsè pès
 except PREP1 **a.bit.later day**
 ‘See you (lit. except) a **bit later during the day.**’ (LL2-SE:7)

3.1.2.5 Relational Nouns

RELATIONAL nouns define the location of one entity in relation to another. Buwal relational nouns are listed in Table 3.10. The shaded forms in the table indicate those relational nouns clearly derived from body part terms. This is a very common path of development for body part terms in African languages (Heine 1989).

Table 3.10: Buwal relational nouns

Relational noun	Gloss	Conceptual domain
<i>tāmā</i>	‘face, front, forwards’	OBJECT, SPACE\OBJECT, SPACE, DIRECTION
<i>dwzé</i>	‘behind, backwards’	SPACE\OBJECT, SPACE, DIRECTION
<i>xā</i>	‘head, top, above’	OBJECT, OBJECT/SPACE, SPACE
<i>mándzràf</i>	‘backside, bottom, below’	OBJECT, OBJECT/SPACE, SPACE
<i>dāwān</i>	‘back, outside part’	OBJECT, OBJECT/SPACE
<i>dmàs</i>	‘belly, inside part’	OBJECT, OBJECT/SPACE
<i>wnáf</i>	‘heart, centre’	OBJECT, OBJECT/SPACE
<i>wlā</i>	‘neck’	OBJECT, OBJECT/SPACE
<i>k^wsàm</i>	‘body/form’	OBJECT, OBJECT/SPACE
<i>ḥāṅgāl</i>	‘side, sideways’	SPACE\OBJECT, SPACE, DIRECTION
<i>xḥār</i>	‘beside (close, may touch)’	SPACE
<i>tābā</i>	‘middle, among, between’	OBJECT/SPACE, SPACE
<i>bār</i>	‘surface, against’	SPACE\OBJECT, SPACE
<i>mēdēdē</i>	‘point, opening’	OBJECT/SPACE
<i>máḥàm</i>	‘edge’	OBJECT/SPACE
<i>ndāṅ^w</i>	‘bottom/base’	OBJECT/SPACE
<i>ndāw</i>	‘bottom/base’	OBJECT/SPACE
<i>mádādāk^w</i>	‘bottom/base’	OBJECT/SPACE
<i>kvā</i>	‘side, part’	OBJECT/SPACE

Relational nouns may cover several different conceptual domains. Heine (1989: 101) lists four major domains which may be found in the development from object to space (3.37).

(3.37) Heine’s Stages in the Development of Object to Space

Stage		Conceptual Domain
0	Body part of X	OBJECT
I	Subpart of X, spatially defined	OBJECT/SPACE
II	Space as part of and adjacent to	SPACE/OBJECT
III	Space adjacent to X	SPACE

In Table 3.10 I have specified which conceptual domain each relational noun in Buwal may cover. I have also added the domain DIRECTION which includes concepts such as forwards, backwards and sideways.

The degree of grammaticalisation of body part relational nouns in Buwal varies. Some, *dmàs* ‘belly’, *wnáf* ‘heart’ and *wlā* ‘neck’ for instance, have only extended so far as to refer to a subpart of X; whilst others such as *tāmā* ‘face’, *xā* ‘head’ and *mándzràf* ‘backside’ have fully developed to include the meaning of the space adjacent to X. Interestingly *xā* ‘head/above’ and *mándzràf* ‘backside/below’ can refer to space on a horizontal as well as on a vertical plane. On the horizontal *xā* is on the ‘up’ side and *mándzràf* is on the ‘down’ side, where down is the direction that water flows.

Note that the notion of ‘front’ for ‘frontless’ objects in Buwal does not correspond to the English idea of the part facing the speaker or deictic centre but rather, as Heine (1989: 87) found for many African languages, it is the part facing in the same direction as the speaker. Example (3.38) and the corresponding picture in Figure 3.1, illustrate the Buwal concept of ‘front’. The person is walking in the direction of a house that he is looking for. The speaker describes the house as being in ‘front of’ meaning **after** the peanut field.

- (3.38) *Ujek wende a tama la ngəzleŋ ca, ara mbe .*
 wdzēk wéndé á tāmā lā ngɔzɛŋ tsá ārā mbé
 house IND.DET.SG PREP1 **front field peanut** TOP COP 3SG
 ‘A house in **front of the peanut field**, that’s (lit. it’s) it.’ (LL6-SN:55)

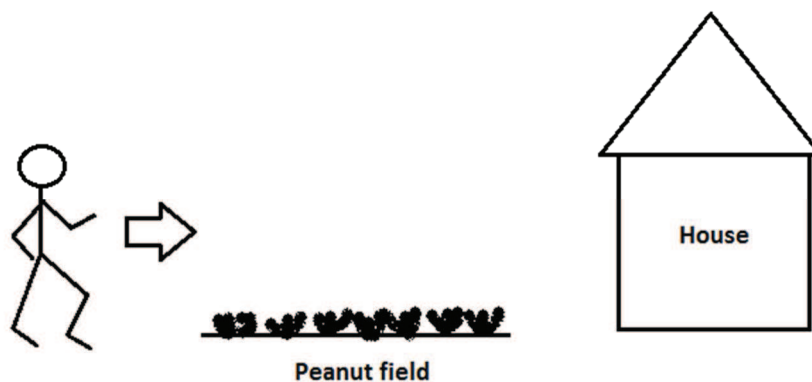


Figure 3.1: Illustration of example (3.38) showing the Buwal conception of ‘front’

Relational nouns function in almost every way like common nouns. Where they differ is that when functioning as modifiers they can only modify other relational nouns (3.39).

- (3.39)

<i>tàbā mándzràf</i>	‘the middle of the bottom’
<i>tàbā máǰàm</i>	‘the middle of the edge’
<i>ǰāǰgāl máǰàm</i>	‘the side of the edge’

Relational nouns are distinguished from complex prepositions (see Section 4.8.2) because when they are followed by a pronoun it is always possessive (3.40), and not independent.

(3.40) *Ma ma hune kazlap ege cemey , manja mana*
mā má xné- kǎ- zǰǎp =égē tséméj mà- ndzā mànā
 word REL= 2PL.SBJ- IPFV- speak =PL TOP.CON JUS- stay (hesitation)
ǰ taba ǰkune .
ǰ tǎbā nk^wnè
 PREP2 middle 2PL.POSS
 ‘But the words that you speak, let them stay between you (lit. **in the middle of you**).’
 (DE17-SN:4.3)

3.1.3 Nominalisation

This section describes the different types of nominalisations which occur in Buwal. Nominalisations involving the prefix *ma-* are dealt with in Section 3.1.3.1. Action nominalisations are described in Section 3.1.3.2 and location nominalisations addressed in Section 3.1.3.3.

3.1.3.1 The nominaliser *ma*

Buwal has many nouns beginning with the prefix *ma-*. The tone on this prefix varies depending on the tone of the stem. The prefix is high before a low tone, mid before a high tone and low before a mid tone. This variation in tone is evidence that the prefix is phonologically attached to the stem.

The prefix is used to form (a) agent and (b) patient nominalisations from verbs and (c) ordinal numbers from numerals. There are also (d) lexicalised nouns historically derived from ideophones, other nouns and adjectives.

According to Greenberg (1966: 48), the prefix *m-* is a common nominaliser used to form nouns of place, instrument and agent in Chadic languages and in Afro-asiatic in general. In West Chadic languages, diachronically related forms are commonly used to derive nouns of agent and have varying other functions depending on the language. For example the formation of instrument and location nouns plus modifiers in Hausa (Newman 2000: 51-60), possessor, stative and genitive nouns plus the marking of relative clauses in Miya (Schuh 1988: 260-276) and pronouns and modifiers in Goemai (Hellwig 2011a: 122-133).

Similar prefixes are also found in certain Central Chadic languages. For Gidar, Frajzyngier (2008: 85) describes what he calls the nominal attributive marker *ma-* which derives nouns having the property X where X is a verb or an adjective. Gidar also has nouns with dependent stems that only occur with this prefix. Mina has an agentive prefix *mə̀-* which can derive nouns from verbs, numerals or other nouns (Frajzyngier and Johnston 2005: 38-39). Barreteau (1977: 102-106) reports a large number of nouns beginning with *ma-* in Mofu-Gudur, many of which he was able to analyse as derivations from ideophones, verbs and nouns. These were principally agent, instrument and place nouns but there were also nouns belonging to other semantic categories as well. The *ma-* prefix is also used in Mofu-Gudur for the formation of verbal nouns and passive participles.

Note that the relative marker in Buwal also has the form *ma*. It can be distinguished from the nominalising prefix since its tone is invariable, always being high. See Section 4.14.1.2 for more details.

(a) Agent nominalisation

An AGENT NOMINALISATION ‘refers to the agent of the nominalised verb’ (Payne 1997: 226). In Buwal, the most productive use of the *ma-* prefix is in the formation of agent nouns from verbs (3.41). Often the object of the verb is part of the construction (3.42). On low-tone verbs the tone remains low whilst on mid-tone verbs it becomes high. The resulting noun has the meaning ‘the one who...’. These nominalisations often refer to a person’s occupation.

(3.41)

<i>máràk</i>	‘begger’	<i>ràk</i>	‘ask/beg’
<i>mádàs</i>	‘farmer’	<i>dàs</i>	‘cultivate’
<i>méjtswèr</i>	‘traveler’	<i>ntswèr</i>	‘travel’
<i>mālám</i>	‘potter’	<i>lām</i>	‘build’

(3.42)

<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 (3.43a) or a predicate of a verbless clause (3.43b).

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

b. *Ara magam zəye ege* .
ā**rā** **mā-** **gám** **ǰā** **-jé** = **égē**
 COP NOM- **drive.away** **ox** -PL =PL
 ‘They are oxen drivers.’ (GE28-SE:1)

(b) Patient nominalisation

Payne (1997: 227) defines a PATIENT NOMINALISATION as referring to the patient of the nominalised verb. The verb may be either intransitive (Section 3.2.2.1) or ambitransitive (Section 3.2.2.2), 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 (3.44a). If the verb root carries low tone, the tone on the inserted vowel is high and the tone on both reduplicated verbs is low (3.44b).

(3.44) a.	<i>màgājāgāj</i>	‘the spoilt one’	<i>gāj</i>	‘spoil’
	<i>màwānāwān</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>mádâsádâs</i>	‘the cultivated one’	<i>dâs</i>	‘cultivate’
	<i>mágàlágàl</i>	‘the grown one’	<i>gàl</i>	‘grow’

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. In Buwal however, the above structure should be considered a nominalisation rather than a type of relative clause construction. Firstly, the reduplicated verb form with an 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 always has a high tone.

In Buwal, patient nominalisations function like common nouns in many ways. They can be used to modify other nouns (3.45 a & b), they can function as the head of a noun phrase (3.45c), as a clausal argument (3.45d), as the complement of a preposition (3.45e) and as the predicate of a verbless clause (3.45f).

(3.45) a.	<i>Ləzlaw magazlagazl</i>	<i>ndəram a taba zley .</i>
	ʒləw má- gəʒ <á>	gəʒ ndrəm á tábā ʒèj
	okra NOM- beat <NOM.PAT>	beat good PREP1 middle meat
	‘Beaten okra is good mixed with meat (lit. in the middle of meat).’	
	(GE9-SE:1)	
b.	<i>Əy kázam zley gamtak mamsaramsar</i>	.
	ʒ- ká- zəm ʒèj gāmták mà- msār <ā>	msār
	3PL.SBJ- PFV- eat meat	chicken NOM- fry <NOM.PAT> fry
	‘They ate fried chicken.’	
	(LL25-SE:27)	
c.	<i>Maŋhwaləŋhwal</i>	<i>ma sa ŋhwal a</i>
	mà- nx ^w āl -ā- nx ^w ál	má= sâ- nx ^w āl á
	NOM- dry <NOM.PAT>	dry REL= 1SG.SBJ- dry PREP1
	<i>njuna</i>	.
	ndzwná	
	yesterday	
	‘The dried one which I dried yesterday.’	
	(GE9-SE:15)	

- d. *Wende ma , hwa njefza*
wéndé má hwā- ndzēf –zā
IND.DET.SG TOP.EMPH 2SG.SBJ- smell -TRANS
menjefenjef .
mà- ndzēf <ā> ndzéf
NOM- smell <NOM.PAT> smell
‘Even another one, you smell **the smelly one.**’ (DE9-SN:2.17)
- e. *Əy nja ca a mesekwesekw* .
j- ndzā tsá á **mà- sēk^w <ā> sék^w**
3PL.SBJ- live TOP PREP1 **NOM- tense <NOM.PAT> tense**
‘They live, with tension.’ (DE12-SN:10.2)
- f. *Ara magazlagazl* .
ārá **má- gàḷ <a > gàḷ**
COP NOM- beat <NOM.PAT> beat
‘He is (a) beaten one.’ (GE9-SE:13)

Like other nouns designating qualities (see Section 3.1.2.2), patient nominalisations can function as the predicate of a comparative clause (3.46).

- (3.46) *Uda ŋgha pa η madada*
wdā nyā pá íj **má- dà <á > dà**
food DEM.PROX at.a.level in **NOM- cook <NOM.PAT> cook**
aha ma a njuna .
á xā **má= á ndzwná**
PREP1 over REL= PREP1 yesterday
‘This food is more cooked than yesterday's.’ (GE16-SE:33)
(lit. ‘This food is at a level in **cookedness** over that of yesterday.’)

(c) Ordinal numbers

Ordinal numbers are formed by attaching the nominaliser *ma-* to a cardinal number (see Section 4.4.1) as in Table 3.11 below. This process derives noun-like words which have the meaning ‘second one’, ‘third one’ and so forth. Note that ‘first one’ is formed by

attaching *ma-* to the adjective *mpàr* ‘first’ rather than the cardinal numeral *téŋg^wlèŋ* ‘one’.

Note also *māták^wád* ‘last one’ can also be grouped with the ordinal numbers.

Table 3.11: Buwal ordinal numbers

Ordinal numeral	Gloss
<i>mámpàr</i>	‘first one’
<i>māgbák</i>	‘second one’
<i>māmāxkád</i>	‘third one’
<i>mānfád</i>	‘fourth one’
<i>màdzābán</i>	‘fifth one’
<i>mānk^wáx</i>	‘sixth one’
<i>mēnsléd</i>	‘seventh one’
<i>mādzámāxkád</i>	‘eighth one’
<i>mādzáfád</i>	‘ninth one’
<i>māwám</i>	‘tenth one’
<i>māták^wád</i>	‘last one’

Ordinal numbers can function as the head of a noun phrase (3.47a) or as noun modifiers (3.47b). When followed by the definite determiner (see Section 4.2.2), the construction has an adverbial meaning of ‘firstly’, ‘secondly’ and so forth (3.47c).

- (3.47) a. *mampar fagwalakw ege əy ndaha*
má- mpàr fāg^wālāk^w =égē j- ndā -xā
 NOM- first leper =PL 3PL.SBJ- go -VNT.DIST
 ‘...the first of the lepers came...’ (HT4-SN:33.2)

- b. *a kadāw ŋ ca wala magbak .*
á- kā- dāw íj tsā wālā mā- gbák
 3SG.SBJ- IPFV- want INF put wife NOM- two
 ‘He wants to marry (lit. put) a second wife.’ (HT3-SN:1.1)

- c. *Manfad anta heje das mewzel .*
mā- nfád āntā xèdzé dās méwzēl
 NOM- four DEF.DET 1INCL.SBJ cultivate removal of excess plants
 ‘Fourthly, we separate out excess plants.’ (LL25-SE:5)

(d) Lexicalised *ma-* nominalisation

Like Mofu-Gudur (Barreteau 1977: 102-106), Buwal has many nouns with the prefix *ma-* which have historically been derived from different word classes. They include the semantic categories of plants, small creatures, types of people, physical defects and diseases, place and clan names, objects, annoyances and locations among others. For a number of these derivations it is clear that the stem can still occur on its own (3.48-50), although the meaning of the nominalisation may be somewhat unpredictable.

(3.48) *ma-* + noun

<i>mādārlāŋ^w</i>	‘assistant’	<i>dārlāŋ^w</i>	‘youth’
<i>māk^wsām</i>	‘semen’	<i>k^wsām</i>	‘body’
<i>māk^wāh^wāw</i>	‘log’	<i>k^wāh^wāw</i>	‘fire’
<i>métètèk^w</i>	‘poor person’	<i>tètèk^w</i>	‘poverty’

(3.49) *ma-* + adjective

<i>māxājŋg^wāw</i>	‘grass sp.’	<i>xājŋg^wāw</i>	‘dry and stiff’
<i>máx^wèrsèk^w</i>	‘bud’	<i>x^wèrsèk^w</i>	‘small and short’
<i>mázàx^w</i>	‘navel’	<i>zàx^w</i>	‘long/tall’

(3.50) *ma-* + Ideophone

<i>mèk^wēdk^wēdē</i>	‘rattle’	<i>k^wēdk^wēdē</i>	‘noise made by rattle’
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Other lexicalised nominalisations have been formed from verbs based on agent nominalisations (see (a)). They are lexicalised insofar as they refer to very specific objects rather than a general agent (3.51).

(3.51) *ma-* + Verb

<i>mētéŋ^w</i>	‘metal flint’ (lit. ‘one that lights fires’)	<i>tēŋ^w</i>	‘light fire with a metal flint’		
<i>mādzā bākālāf</i>	‘green mamba’ (lit. ‘one that kills the buffalo’)	<i>dzā</i>	‘kill’	<i>bākālāf</i>	‘buffalo’
<i>mémèd^w zézèk^w</i>	‘heron’ (lit. ‘one that swallows the snake’)	<i>méd^w</i>	‘swallow’	<i>zézèk^w</i>	‘snake’
<i>māpdāk^w xā</i>	‘bush sweet potato’ (lit. ‘one that slices the head’)	<i>pdāk^w</i>	‘slice’	<i>xā</i>	‘head’

Some nouns are formed in an irregular way from verbs. For example partial reduplication has occurred in example (3.52a). In example (3.52b) the vowel of the prefix has been elided and the initial consonant of the stem devoiced.

(3.52) a.	<i>mènēnēs</i>	‘fried bean leaves’	<i>nēs</i>	‘fry leaves’
b.	<i>młād</i>	‘broom’	<i>ḥād</i>	‘sweep’

For a number of lexicalised *ma-* nominalisations, part of the stem may be identified but the meaning of the rest has been lost (3.53).

(3.53)	<i>mādāngáḥàm</i>	‘deaf person’	<i>dāngá</i>	?	<i>ḥàm</i>	‘ear’
	<i>māndzándzāx^wjām</i>	‘spitting cobra’	<i>ndzándzāx^w</i>	?	<i>jām</i>	‘water’
	<i>mávàḥg^wàn</i>	‘miserly person’	<i>vàl</i>	‘give’	<i>ḥg^wàn</i>	?
	<i>mémbèrvétékēm</i>	‘dragonfly’	<i>mbèr</i>	‘fly’	<i>vétékēm</i>	?

For many other nouns of this type the stem can no longer be identified (3.54).

(3.54)	<i>māvājvāj</i>	‘red squirrel’
	<i>māmbáx^wālām</i>	‘envy’
	<i>mātsáḥàj</i>	‘head ornament’
	<i>mēsémélèvéḥ</i>	‘first time mother’
	<i>mādzádzráv</i>	‘waterfall’

3.1.3.2 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’. In Buwal the action nominalisation is marked by the prefix *la-*. This process 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 3.1.3.1(a). 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 (3.55). As for agent nominalisations, an action nominalisation may incorporate an object (3.56).

(3.55)	<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’		
(3.56)	<i>lǎdzàv vǎgèm</i>	‘flock of birds’	<i>dzàv</i>	‘assemble’	<i>vǎgèm</i>	‘bird’
	<i>lǎbèz tàf</i>	‘fork in road’	<i>bèz</i>	‘divide’	<i>tàf</i>	‘path/road’
	<i>lǎǎzá vdě</i>	‘circumcision’	<i>ǎzá</i>	‘cut’	<i>vdě</i>	‘penis’

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 depends on verbal semantics. Some action nouns may mean either the action (3.57a) or the result (3.57b) depending on the context.

(3.57)	a.	<i>Lacaf</i>	<i>bəyk</i>	<i>ŋkwa</i>	,	<i>a</i>	<i>kalahwaw</i>		
		lā-	tsáf	<i>bjk</i>	<i>nk^wā</i>	<i>á-</i>	<i>kā-</i>	<i>lā</i>	<i>-āx^wāw</i>
		NOM.ACT-	decorate	pen(fr.)	2SG.POSS	3SG.SBJ-	IPFV-	do	-2SG.IOBJ
		<i>masagal kwaw</i>	<i>vaw</i>	?					
		<i>māságāl</i>	<i>k^wāw</i>	<i>vāw</i>					
		laziness	NEG	Q					
		‘Decorating (with) your pen, doesn’t it make you lazy?’							(GE28-SE:15)
	b.	<i>Lacaf</i>	<i>rəgwac</i>	<i>ŋkwa</i>	<i>a</i>				
		lā-	tsáf	<i>rg^wàts</i>	<i>nk^wā</i>	<i>á-</i>			
		NOM.ACT-	decorate	clothes	2SG.POSS	3SG.SBJ-			
		<i>kendəremzekey</i>							
		<i>kā-</i>	<i>ndràm</i>	<i>-zā</i>	<i>-ēkēj</i>				
		IPFV-	please	-TRANS	-1SG.IOBJ				
		‘The decoration of your clothes is pleasing to me.’							(GE28-SE:14)

Other action nominalisations can only mean the action (3.58a) because the result is coded in a noun which has the same form as the verb root ((3.8b) and see introduction to this chapter).

- (3.58) a. *Lambaw ca , a kambal ma .*
 lá- mbàw tsá á- kã- mbãl mã
 NOM.ACT- give.birth TOP 3SG.SBJ- IPFV- hold mouth
 ‘Giving birth, it hurts (lit. holds the mouth).’ (GE28-SE:35)
- b. *Hwa nelem mbaw sey hwa nda ŋ*
 x^wã- ná- lèm mbàw séj x^wã- ndã ŋ
 2SG.SBJ- FUT- get child except 2SG.SBJ- go INF
daza la ŋkwa aza .
 dã -zã lã nk^wã āzã
 make.sacrifice.to -TRANS place 2SG.POSS COMPL
 ‘You will get a **child** only when you first go to make a sacrifice to your place.’ (DE11-SE:1.7)

Action nominalisations generally function like common nouns. They can function as arguments of verbal clauses (3.59a) (though not as an indirect object for obvious semantic reasons), as subjects of verbless clauses (3.59b) and can be modified by various noun modifiers (3.57, 3.59 a to c). If the meaning encodes a result they can also be pluralised or counted.

- (3.59) a. *gazlavay a velene lanja ma tantan*
 gãḷãvãj ā- vâl -ēnē lã- ndzá má tantãŋ
 God 3SG.SBJ- give -3SG.IOBJ NOM.ACT- dwell REL= good
 ‘...God gives him a **dwelling which is good.**’ (DP1-SN:4.2)
- b. *lara dala aka .*
 lã- rá dālã ákã
 NOM.ACT- insult someone EXIST
 ‘There is **insulting people.**’ (DE12-SN:2.6)
 (lit. ‘**The insulting of someone** exists.’)

- c. *Ladās* *ma a dɔvar*, *a mbal ma ŋ*
lá- dās má á dvàr *ā- mbāl má ń*
 NOM.ACT- cultivate REL= PREP1 hoe 3SG.SBJ- hold mouth PREP2
dawan.
dāwān
 back
 ‘Farming (which is) with the hoe, it hurts (lit. holds the mouth) the back.’
 (GE40-SE:6.2)

Buwal has an infinitive form of the verb whose functions overlap with the action nominalisation. However, the functions of the infinitive are much more limited and infinitives can not head a noun phrase. Infinitives will be discussed further in Section 10.1.14.

3.1.3.3 Location nominalisation

A LOCATION NOMINALISATION designates ‘a place’ where ‘verb’ happens (Comrie and Thompson 2007: 340). Buwal is 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 *lā* 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 (3.60 & 3.61). Like other nominalisations the direct object may be incorporated into the expression in some cases (3.61).

- | | | | | | | |
|--------|-------------------|-------------------------|--------------|---------------|-------------|----------|
| (3.60) | <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>lédéŋ</i> | ‘standing place’ | <i>dēŋ</i> | ‘stand’ | | |
| | <i>lāzàzàk</i> | ‘resting place’ | <i>zàzàk</i> | ‘rest’ | | |
| (3.61) | <i>lādzá zləj</i> | ‘killing place of meat’ | <i>dzā</i> | ‘kill’ | <i>zləj</i> | ‘meat’ |
| | <i>lēbér zlap</i> | ‘preaching place’ | <i>bēr</i> | ‘announce’ | <i>zlap</i> | ‘speech’ |

Location nominalisations function like common nouns; as complements of prepositions (3.62a), predicates of verbless clauses (3.62b) and heads of noun phrases (3.62b).

- (3.62) a. *Yaw , a nda pa ata laja zley wese* .
 jàw ā- ndā pá á tā lā dzá lèj wésé
 so 3SG.SBJ- go at.a.level PREP1 on **place** **kill** **meat** DEM.DIST
 ‘So, she went to the level of **that place of killing game**.’ (NF5-SN: 3.1)
- b. *Ara laban ncene* .
 ārā lā bān ntsènè
 COP **place** **bathe** 1EXCL.POSS
 ‘It’s **our place of bathing**.’ (GE28-SE:45)

3.2 Verbs

Schachter and Shopen (2007: 9) state that VERBS is the word class ‘in which occur most of the words that express actions, processes and the like.’ This section gives a description of verbs and their structural properties in Buwal. Section 3.2.1 describes the phonological and morphological structure of Buwal verbs. The functional sub-classes of verbs are presented in Section 3.2.2.

3.2.1 Structure of verbs

The structure of verb roots is simpler than for nouns (Section 3.1.1.1) being either mono or disyllabic (Section 3.2.1.1). There are a number of verb stems which appear to have been derived from adjectives. These will be discussed in Section 3.2.1.2. Another derivational process used in the formation of verb stems is reduplication. Such stems will be described in Section 3.2.1.3. The verbal word has very complex morphology. The structure of the verbal word and the various affixes the verb can take is covered in Section 3.2.1.4.

3.2.1.1 Simple verb roots

Table 3.12 summarises the skeleton structures found in an inventory of 851 simple verb roots. Verb roots which show reduplication have been excluded as these are considered to be stems. These are discussed in the Section 3.2.1.2. Simple verb roots exhibit less variety

of structures than noun roots (see Table 3.2) being either mono or disyllabic. The most frequent structure is CaC, followed by CCaC and then CaCaC. Verb roots carry either low or mid tone melodies. See Section 2.7.1.2 for more detail.

Table 3.12: 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>bḡā</i> 'bless'		
3C	CCaC (282)	<i>fdāx</i> 'wake up'	CaCaC (43)	<i>tàdāk^w</i> 'descend'
4C	CCCaC (17)	<i>ntbāl</i> 'tire'	CaCCaC (16)	<i>g^warzàm</i> 'get up'

3.2.1.2 Verbs derived from adjectives

Sixteen verbs have been found so far whose forms are related to adjectives. These are listed in Table 3.13. 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 although some patterns can be observed. Verbs with low tone on the root retain low tone on the adjective. Mid tone verb roots however, may either give high or mid tone adjectives. If on the other hand 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 2.7.1.2). This derivational process is not productive since it cannot be applied to every adjective. These forms are therefore understood to be lexicalised.

Table 3.13: Buwal verb roots derived from adjectives

Tone	Verb	Gloss	Tone	Adjective	Gloss
L	<i>x^wàs</i>	‘reach’	L	<i>x^wàs</i>	‘reached’
	<i>x^wbàr</i>	‘widen’		<i>x^wbàr</i>	‘wide’
	<i>ndrà̃m</i>	‘please/taste good’		<i>ndrà̃m</i>	‘pleasing/good tasting’
	<i>ntbàl</i>	‘tire’		<i>ntbàl</i>	‘tired’
	<i>drèḷ</i>	‘surround’		<i>drèḷ</i>	‘around’
M	<i>dāj</i>	‘surpass’	M	<i>dāj</i>	‘more’
	<i>g^wār</i>	‘arrive’		<i>g^wār</i>	‘arrived’
	<i>vāŋ</i>	‘arrive’		<i>vāŋ</i>	‘arrived’
M	<i>bē</i>	‘fill (solid)’	H	<i>bé</i>	‘full’
	<i>ftēk</i>	‘lose’		<i>fték</i>	‘lost’
	<i>yēf</i>	‘fill (liquid)’		<i>yéf</i>	‘full’
	<i>kdāŋ</i>	‘finish’		<i>kdāŋ</i>	‘used up’
	<i>k^wdāp</i>	‘lose’		<i>k^wdāp</i>	‘lost’
	<i>ntāk^w</i>	‘finish’		<i>ntāk^w</i>	‘finished’
	<i>tāł</i>	‘complete number’		<i>táł</i>	‘complete in number’
	<i>klāj</i>	‘complete number’		<i>klāj</i>	‘complete in number’
	<i>twād</i>	‘finish’		<i>twád</i>	‘finished’
	<i>gā</i>	‘load up’		<i>gá</i>	‘sufficient’
MM	<i>xēsēŋ</i>	‘forget’	HM	<i>xésēŋ</i>	‘forgotten’

3.2.1.3 Reduplication

Like noun and adjective stems (see Sections 3.1.1.2 and 3.3.1.2), many Buwal verb stems show reduplication of either the whole or a part of the phonological word. In a corpus of 546 verbs, 88 reduplicated forms were found.

Only three of the reduplicated forms found in the Buwal corpus involve reduplication of a whole phonological word and all of them yield a CaCa structure which was not seen for simple verb roots (3.63).

- (3.63) *ndzà-ndzà* ‘give’
dē-dē ‘pour into’
nā-nā ‘tremble’

Partial reduplication falls under two types; (i) prefixal C reduplication of which there are only two examples, and (ii) prefixal CV reduplication. This latter pattern applies to the vast majority of reduplicated verbs.

(i) Prefixal C reduplication (2)

- (3.64) *ḥ-ḥāw* ‘lay something down on’
d-drāk^w ‘begin to learn’

(ii) Prefixal CV reduplication (83)

- (3.65) *pā-pāḥ* ‘shell’
sà-sàm ‘rejoice’
dā-drās ‘blunten’
tè-twèd ‘sling’

Note that prefixal CV of reduplication has produced four three syllable verbs (3.66).

- (3.66) *yà-yàndàr* ‘snore’
xà-xàndàr ‘coagulate’
tè-tèṅgèl ‘roll on ground’
sē-sēdēm ‘slip’

As was the case with nouns, it is difficult to determine what the original semantic motivation for this process may have been. Ndokobai (2006: 52) states that for Cuvok reduplication signifies a repeated action. Many of the Buwal reduplicated verb roots contain the idea of a repeated action or an ongoing process as in the examples in (3.67). However others do not (3.68)

- (3.67) *nānā* ‘tremble’
kàkàd ‘massage’
pàpàs ‘spread out bits’
sàsàk ‘sift’
ṅgāṅgāl ‘sway’
dzàdzàr ‘filter drop by drop’
jājāx ‘melt’

(3.68) <i>dàdàb</i>	‘be beautiful’
<i>làlàk</i>	‘be afraid’
<i>zàzàk</i>	‘rest’
<i>tātāk</i>	‘chase’
<i>wāwāj</i>	‘close a meeting’

The process of reduplication appears to no longer be productive as the non-reduplicated forms do not exist as independent verbs. However, certain reduplicated verb stems in Buwal have apparently cognate forms in the neighbouring language of Gavar (see Table 3.14) which do not exhibit reduplication.

Table 3.14: Gavar cognates of Buwal reduplicated verb roots

Gloss	Buwal verb stem	Gavar verb stem
‘bark’	<i>bàbàx^w</i>	<i>bah</i>
‘blunten’	<i>dādrās</i>	<i>das</i>
‘learn’	<i>ddrāk^w</i>	<i>drak^w</i>
‘snore’	<i>yàyàndàr</i>	<i>yəðən</i>
‘suck’	<i>sēsēb</i>	<i>seb</i>
‘teach’	<i>sàsràk</i>	<i>srək</i>

3.2.1.4 The verbal word

Verbal morphology in Buwal is quite rich. The structure of the Buwal inflected verb is given in Table 3.15. Note that only the verb stem is obligatory.

Table 3.15: 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: (a) person/number (subject (SBJ), direct object (DOBJ) and indirect object (IOBJ) (b) tense/aspect (TNS/ASP), (c) jussive (JUS), (d) ventive direction (VNT), (e) transitivity (TRANS), (f) auto-benefactive (BEN) and (i) first person inclusive collective (1INCL.COL). Each of these markers are briefly described in the sections which follow.

It is difficult to say for certain whether the categories listed above are all phonologically bound to the verb. In nearby languages such as Daba (Lienhard and Wiesemann 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 certain other verbal extensions, are integrated with the verb to some extent and will therefore be treated here as affixes. These include: (i) palatalisation spread, (ii) tone variation, and (iii) differentiation from independent pronouns.

(i) Palatalisation spread

As mentioned in Section 2.3.1 palatalisation may spread from verb stems to verbal prefixes, especially monosyllabic prefixes with a (C)V structure. This applies particularly to the singular subject prefixes *sa-*, *x^wa-* and *a-* (see Table 3.16 below for a full list of person/number affixes), the tense/aspect prefixes (3.69) and the jussive prefix.

Palatalisation can also spread from verbal suffixes onto the verb stem and beyond. The third person singular and plural indirect object suffixes *-ēnē* and *-ētēnē*, as well as the first person inclusive object suffix *-ēnēj*, show a strong effect in this regard. However, the first person inclusive and second person plural object markers *-āxèdzè* and *-āx^wnè* do not.

Palatalisation also spreads rightwards from a verb stem to the third person singular direct object suffix *-āw*. Therefore palatalisation spread provides evidence for the affixal nature of at least the singular subject prefixes, the tense/aspect prefixes, the third person indirect object suffixes, the third person singular direct object suffix and the jussive prefix.

(ii) Tone variation

The tone on the final syllable of the subject prefixes for all except third person plural varies according to the aspect marked on the verb (see Section 6.1 for further discussion). This is evidence that the subject prefixes are in some way phonologically bound to the verb.

(iii) Differentiation from independent pronouns

Independent pronouns can be used as clausal arguments for emphasis (see Section 4.1.1.1). Buwal object markers can be differentiated from independent pronouns in that they are all preceded by *ā*. It is rare for a word to begin with a vowel in Buwal (see Section 2.6.1). This is further evidence that object markers are phonologically attached to the verb. This is in contrast with object markers which are considered separate words in

Daba (Lienhard and Wiesemann 1986: 44) and Mina (Frajzyngier and Johnston 2005: 97 & 106).

(a) Person/number marking

Buwal codes the subject, direct object and indirect object on the verb. These markers are summarised in Table 3.16 along with independent pronouns which do not vary their forms in relation to case.

Table 3.16: Buwal person/number markers

Person/Number	Subject	Direct Object	Indirect Object	Independent
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-</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>-ēnēj</i>	<i>-ēnēj</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>ǰ-</i>	<i>-ātā</i>	<i>-ētēnē</i>	<i>tātā</i>

Many of the forms in Table 3.16 appear to be related and the majority of person/number combinations for the direct and indirect object markers are identical. 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. Cognate first person singular object markers have been found in such related languages as Daba (Lienhard and Wiesemann 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 *ǰ-* is also used in verbless clauses (see Section 4.1.1.2). 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’. Phonological reduction is observed in natural speech for the disyllabic first person exclusive and dual subject forms which 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.

(b) Tense/Aspect marking

Buwal has three tense/aspect prefixes which follow the subject agreement marker and precede the verb root. These are listed in (3.69). Their functions will be described further in Section 6.1.

- (3.69) *kā-* imperfective (IPFV)
ká- perfective (PFV)
ná-/á- future (FUT)

Only the imperfective marker and the future marker may co-occur. In this case the future marker follows the imperfective marker (3.70 a & b).

- (3.70) a. *gazlavay kálaza mama **kana**jav*
*gāḷāvāj ká- lā -zā māmá- **kā- ná-** dzàv*
 God PFV- do -TRANS IDUAL.SBJ- IPFV- FUT- come.together
akwaw
ák^waw
 NEG.EXIST
 ‘...God has made it (so that) we will not be coming together...’
 (HT1-SN:8.4)

- b. *Van a kaadā akwaw , ey metes a*
vān á- k̄ā- á- dā ák^wāw éj mētēs á-
 rain 3SG.SBJ- IPFV- FUT- rain NEG.EXIST and hunger 3SG.SBJ-
laha .
lā -xā
 do -VNT.DIST
 ‘The rain will not fall (lit. be falling), and hunger will happen.’
 (LL56-SE:13)

It is difficult to say for certain how these markers developed diachronically. The imperfective marker *k̄ā-* is shared with the neighbouring language of Gavar (author’s fieldnotes) but it is not found in other languages of the subgroup. It is possible that this marker is related to the existential marker *ák̄ā* as they express situations which are ongoing.

The perfective marker may be related to the infinitive marker *kə* found in both Mina (Frajzyngier and Johnston 2005: 243) and Mbudum (Ndokobai et al 2012: 14) or *ka* in Daba (Lienhard and Wiesemann 1986: 47). In Mina *kə* can also be used to code the dependent past tense (Frajzyngier and Johnston 2005: 194) and in Buwal it has been observed that the perfective form of the verb is most frequently used with past time reference (see Section 6.1.2).

The Buwal future marker has two variants *ná-* and *á-*, the first of which occurs more frequently in the corpus. Gavar has *á-* but not *ná-* and therefore is a likely source of the form *á-*. A possible cognate of *ná-* is found in Mina where the dependent future is marked with *nkə* or *nəkə*. Frajzyngier and Johnston (2005: 180) say the Mina future marker may be a complex construction consisting of the location preposition *nə* followed by the infinitive marker. Another possible source of the Buwal marker *ná-* is Mofu-Gudur which has the near future prefix *da-* (Barreteau 1988: 381).

(c) Jussive prefix

The JUSSIVE prefix *mā-* occurs on verbs in third person imperative clauses (see Section 9.1.3). It precedes the verb root and does not co-occur with the tense/aspect prefixes.

When the subject is third person singular, the subject agreement marker is also omitted (3.71a). However it does occur for third person plural (3.71b).

- (3.71) a. *Gwambakw wende manda η daheje kwahwaw .*
g^wāmbāk^w wéndé mā- ndā η dā -āxèdzè k^wāh^wāw
 toad IND.DET.SG JUS- go INF bring -1INCL.IOBJ fire
 ‘Let a toad go to bring us fire.’ (NF6-SN:3.5)

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

The jussive form of the verb can be distinguished from the agent nominalisation, also with the form *ma-*, by tone. The tone on the jussive prefix is always mid and the tone on the verb root remains unchanged (3.72 a & b), whereas for the agent nominalisation the tone on the prefix and the verb root vary (3.79 a & b) (see Section 3.1.3.1).

- (3.72) a. *Zlepene mazlap .*
ǰāp -ēnē mā- ǰāp
 say -3SG.IOBJ JUS- speak
 ‘Tell him to speak (lit. let him speak).’ (GE1-SE:20)
- b. *Magal gamtak.*
mā- gəl gāmtāk
 JUS- raise chicken
 ‘Let him raise chickens.’ (Verb Paradigms)

- (3.73) a. *mazlap*
 mā- ʒáp
 NOM- speak
 ‘speaker’ (GE1-SE:18)
- b. *magal*
 má- gál
 NOM- raise
 ‘one who raises (animals)’ (GE1-SE:17)

Mina has an apparently cognate marker with the form *má*, which has a similar function to the Buwal jussive prefix. Frajzyngier and Johnston (2005: 239) label the form in Mina ‘debitive’.

(d) Ventive direction

Buwal has two directional suffixes *-ā* and *-hā* which follow the verb root (3.74 a & b). Both of these express VENTIVE direction meaning movement towards a reference point. The suffix *-ā* is proximal and the suffix *-hā* is distal. The meaning and functions of these suffixes will be discussed in more detail in Section 6.2.1.

- (3.74) a. *Aya* , *dād* *a* *dādā* *zley* , *la* *a* *la*
 ājā dād ā- dād -ā ʒèj lā ā- lā
 so take.out 3SG.SBJ- take.out -VNT.PROX meat add 3SG.SBJ- add
manda *a* *hedè* .
 mándá á xēdē
 salt(ful.) PREP1 on.it
 ‘Then he took out the meat (lit. **towards himself**), he added salt to it.’
 (TN1-SN:5.4)

- b. *Hejəye əy kanda^{ha}* , əy
 xèdzè -jé j- kã- ndã -xã j-
 person -PL 3PL.SBJ- IPFV- go -VNT.DIST 3PL.SBJ-
kanda^{ha} *Buwal ege tewtew* , əy
 kã- ndã -xã bwāl =égē téw-téw j-
 IPFV- go -VNT.DIST Buwal =PL all 3PL.SBJ-
jam^{ha} *ŋ lekwal* .
 dzām -xã íj lèk^wál
 assemble -VNT.DIST PREP2 school(fr.)
 ‘People were **coming**, they were **coming**, all the Buwal people, they
 gathered (lit. **towards here**) at the school.’ (NH7-SN:1.2)

The proximal and distal ventive markers can co-occur, the proximal preceding the distal (3.75) (see Section 6.2.1 for further discussion).

- (3.75) *hwa kélem ŋ mbalaha* *varvara ŋ hayak*
 x^wã- kã- lèm íj mbāl -ã -xã vārvarā íj xājāk
 2SG.SBJ- PFV- get INF grab -VNT.PROX -VNT.DIST land INF country
ŋkwa a wata səkwaw
 nk^wã á wātā sk^wāw
 2SG.POSS PREP1 home NEG
 ‘...you didn’t get to grab land (lit. **to yourself**) in your country at home...’
 (HT2-SN:4.1)

Other languages in the same subgroup as Buwal, such as Daba and Mina, 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. For example Frajzyngier and Johnston (2005: 171) refer to a ‘goal-orientation extension’ in Mina that has the form *-a* in phrase internal position and *-aha* in phrase final position. The ventive suffix in Daba has three allomorphs; *-aha* following a consonant, *-ha* after a vowel and *-a* before a complement (Lienhard and Wiesemann 1986: 45). Whilst the two ventive suffixes in Buwal may have been allomorphs at some stage in the past, they have now developed slightly different meanings. Furthermore both forms

can be found in all the phonological environments listed above. For these reasons the Buwal ventive suffixes are analysed as two separate morphemes.

(e) Transitivity suffix

The TRANSITIVITY suffix *-zā* has various functions relating to the adjustment of the transitivity of the clause. These functions will be described in detail in section 8.1.3.1. As was shown in Table 3.15 (Section 3.2.1.4), the transitivity suffix follows the directional suffixes (3.76a) and precedes the auto-benefactive marker (3.76b).

- (3.76) a. *Mpakhaza* *ma* *ujek aka* .
 mpāk -xā -zā mā wjĕk āká
 close -VNT.DIST -TRANS mouth hut ACC
 ‘Close the door (lit. mouth of hut) a little (before returning).’
(GE52-SE:14.6)

- b. *A zahzaba* , *a zahzaba* *ŋ*
 ā- zāx -zā -bā ā- zāx -zā -bā íj
 3SG.SBJ- pour -TRANS -BEN 3SG.SBJ- pour -TRANS -BEN PREP2
takazuda *anta* *wese* .
 tàkázwdā āntā wēsé
 calabash.for.fufu 3SG.POSS DEM.DIST
 ‘She keeps on pouring (it) into that calabash of hers (to her benefit).’
(DP9-SN:1.5)

Neither Mina (Frajzyngier and Johnston 2005) or Daba (Lienhard and Wiesemann 1986) show similar forms, although a cognate form exists in Gavar (author’s fieldnotes). The most likely source of this marker is from Mofu-Gudur which has a causative extension *-da* (Hollingsworth 1995: 12). A similar suffix with the same form was also reported by Ndokobai (2006: 83) for Cuvok.

(f) Auto-benefactive marking

Buwal has an AUTO-BENEFACTIVE 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 (3.77a) and indirect object (3.77b) suffixes.

- (3.77) a. *Heje kasanbata ka va ?*
 xèjé- k̄- s̄n -b̄ -ā̄ k̄ v̄w
 1INCL.SBJ- IMPF- know -BEN -3PL.DOBJ DUB Q
 ‘Do we know them (to our benefit) maybe?’ (C9-SE:178)
- b. *Sa zembene ṅhwəye .*
 s̄- z̄m -b̄ -ē̄ n̄x̄w̄ -j̄
 1SG.SBJ- eat -BEN -3SG.IOBJ goat -PL
 ‘I shepherd goats for him (to my benefit).’ (GE44-SE:3.8)

The auto-benefactive marker usually precedes the first person inclusive collective marker (3.78a) but may follow it with no change in meaning (3.78b).

- (3.78) a. *Na ṅgha heje kazambakwaw uda*
 n̄ n̄ȳ xèjé- k̄- z̄m -b̄ -āk̄^w w̄d̄
 now DEM.PROX 1INCL.SBJ- IPFV- eat -BEN -1INCL.COL food
tewtew .
 téw-téw
 all
 ‘Right now we are all eating food together (to our benefit).’ (GE22-SE:3.9)
- b. *Na ṅgha heje kazamakwawba uda*
 n̄ n̄ȳ xèjé- k̄- z̄m -āk̄^w -b̄ w̄d̄
 now DEM.PROX 1INCL.SBJ- IPFV- eat -1INCL.COL -BEN food
tewtew .
 téw-téw
 all
 ‘Right now we are all eating food together (to our benefit).’
 (GE22-SE:3.10)

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. Hdi has what Frajzyngier (2002: 198-204) calls an ‘applicative’ extension with a potentially related form *vá*. This form has a similar function to the auto-benefactive marker in Buwal.

(g) 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 (3.79a). When this suffix is omitted the activity is understood as being done by each individual separately (3.79b)

- (3.79) a. *A makudá heje nalamakwa ujek tewtew .*
 á māk^wđá xèjé- ná- lām -āk^{wā} wjĕk 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 makudá heje nalam ujek tewtew .*
 á māk^wđá xèjé- ná- lām wjĕk téw-téw
 PREP1 next.year 1INCL.SBJ- FUT- build hut all
 ‘Next year we will all build a house (**separately**).’ (GE22-SE:3.4)

This collective suffix precedes both the direct (3.80a) and indirect object (3.80b) markers.

- (3.80) a. *Heje zamakwata ŋhwəye .*
 xèjé- zàm -āk^{wā} -ātā nx^{wā} -jé
 1INCL.SBJ- eat -1INCL.COL -3PL.DOBJ goat -PL
 ‘We shepherd the goats together.’ (GE44-SE:3.14)
- b. *Heje zamakwene ŋhwəye .*
 xèjé- zàm -āk^{wā} -ēnē nx^{wā} -jé
 1INCL.SBJ- eat -1INCL.COL -3SG.IOBJ goat -PL
 ‘We shepherd goats for him together.’ (GE44-SE:3.15)

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.

There are certain co-occurrence restrictions which apply to these verbal affixes. In declarative clauses it is possible for subject, aspect and tense to all be marked on the verb

(3.81a). However, third person singular subject agreement cannot be marked for the perfective aspect (3.81b) or the jussive mood (3.81c).

- (3.81) a. *Sa kanasəkamha səkan akwaw* .
 sá- ká- ná- skām -xā skàn ák^wāw
 1SG.SBJ- IPFV- FUT- buy -VNT thing NEG.EXIST
 ‘I will not be buying anything.’ (LL13-SN:17)
- b. *Mana kála mavaw a pes luma Gavar* .
 mānā ká- lā mávāw á pès lwmà gāvār
 mother.1POSS PFV- make beer PREP1 day market(ful.) Gavar
 ‘My mother made beer on Thursday.’ (NH3-SN:1.4)
- c. *Kaw vayay maghwalza zlam anta* .
 káw vājáj mā- ɣ^wāl -zā ʎàm āntā
 even(ful.) who JUS- show -TRANS name 3SG.POSS
 Each person should introduce themselves. (NH7-SN:3.5)

Only the first person inclusive subject agreement can co-occur with the first person inclusive collective maker (3.82).

- (3.82) *Heje zamakwa ɲhwəye* .
 xèjé zàm -āk^wā nx^wā -jé
 1INCL.SBJ eat -1INCL.COL goat -PL
 ‘We shepherd goats together.’ (GE44-SE:3.11)

Most of the verbal suffixes appear to be able to co-occur although it is rare to find a verb in natural spoken text with more than two suffixes. The examples in (3.83) come from elicited data. Example (3.83a) shows the ventive markers co-occurring with both the transitivity and a direct object marker. The auto-benefactive marker can occur with the transitivity marker and an indirect object marker (3.83b). The first person inclusive collective marker can co-occur with indirect object marking (3.83c) and the auto-benefactive marker (3.83c).

- (3.83) a. *Sa zamahazata ηhwəye .*
 sā- zàm -ā -xā -zā -ātā nx^{wā} -jé
 1SG.SBJ- eat -VNT.PROX -VNT.DIST -TRANS -3PL.DOBJ goat -PL
 ‘I shepherd the goats there a bit (before returning).’ (GE44-SE:3.3)
- b. *Sa kenejeɓzabəhwaw , kwaw*
 sá- k̄ā- ná- dzèɓ -zā -bā -āx^{wāw} k^{wāw}
 1SG.SBJ- IPFV- FUT- transport -TRANS BEN -2SG.IOBJ NEG
vaw ?
vāw
 Q
 ‘I will be transporting it for you (to my benefit), won't I?’ (GE44-SE:1)
- c. *Heje zamakwene ηhwəye .*
 xèjé zàm -āk^{wāw} -ēnē nx^{wā} -jé
 1INCL.SBJ eat -1INCL.COL -3SG.IOBJ goat -PL
 ‘We shepherd goats for him together.’ (GE44-SE:3.15)
- d. *Heje kazambakwa uda ca , hwa nda η*
 xèjé k̄ā- zàm -bā -āk^{wā} wdā tsá x^{wā}- ndā η
 1INCL.SBJ IPFV- eat BEN -1INCL.COL food TOP 2SG.SBJ- go INF
la vemey ?
lā véméj
 do what
 ‘We are eating food together (to our benefit), what are you going to do?’
 (GE44-SE:4.10)

There is disagreement amongst speakers as to whether indirect and direct object marking can co-occur. The third person singular direct object suffix *-āw* (3.84a) never occurs with any other verbal suffixes (3.84b).

- (3.84) a. *Kan ngha sa kadāwaw .*
 kàn nyā sá- k̄ā- dāw -āw
 thing DEM.PROX 1SG.SBJ- IPFV- want -3SG.DOBJ
 ‘This thing, I want it.’ (DE20-SN:2.9)

- b. *Kaw wende , sa daw6a .*
kāw wéndé sā- dāw -6ā
 even(ful.) IND.DET.SG 1SG.SBJ- want BEN
 ‘Even another, I want (it) for myself.’ (GE35-SE:16)

The only combinations of indirect and direct object marking which appear to be possible involve the third person plural direct object marker. Not all Buwal speakers accept this. However, one example was found in natural spoken data (3.85).

- (3.85) *Ayaw , kule parpar parpar aka . Sa*
ājāw kʷlè párpār párpār ákā sā-
 yes idol different different EXIST 1SG.SBJ-
ngadahwata : kule uzlaf daba
ngād -āxʷāw -ātā kʷlè wʰāf dābá
 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)

3.2.2 Verb sub-classes

Verbs in Buwal can be divided into syntactic sub-classes according to their VALENCE, or the number of core arguments they occur with in a clause (Payne 1997: 170). These subclasses are; intransitive (Section 3.2.2.1), ambitransitive (Section 3.2.2.2), transitive (Section 3.2.2.3) and transitive with lexically specified objects (Section 3.2.2.4). The majority of verbs in Buwal are ambitransitive, making up 80% of the verbs in the corpus. The percentage of intransitive verbs in the corpus is 16% while transitive verbs constitute only 4%. There are no ditransitive verbs as such. Any verb, including intransitive verbs, can take the indirect object marker which expresses not only recipient but also benefactive, malefactive and patient roles. No verbs have been found which require a locative complement.

3.2.2.1 Intransitive verbs

Payne (1997: 171) defines an INTRANSITIVE verb as ‘one that describes a property, state or situation involving only one participant.’ In Buwal such verbs function as the predicate of

a verbal clause with one core argument functioning in the grammatical role of subject (3.86 a & b) (see Section 8.1.2.1). Intransitive verbs in Buwal can only take a direct object if the transitivity suffix *-zā* is attached to the verb root (3.86c) (see Section 8.1.3.1). 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).

- (3.86) a. *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)
- b. *Həza a babahw ata ŋhwa .*
 xzā ā- bābàx^w á tā nx^wā
 dog 3SG.SBJ- bark PREP1 on goat
 ‘**The dog barked** at the goat.’ (GE20-SE:1.3)
- c. *Ata pes ata pes sa babahwza həza ege .*
 á tā pès á tā pès sā- bābàx^w -zā xzā =égē
 PREP1 on day PREP1 on day 1SG.SBJ- bark -TRANS dog =PL
 ‘Every day **I make dogs bark.**’ (GE20-SE:1.2)

Intransitive verbs in Buwal cover a number of semantic types: voluntary motion (*gādbāŋ* ‘crawl’), involuntary motion (*sēsēdēm* ‘slip’), position (*dēŋ* ‘stand’), noise production (*ntsēx* ‘groan’), bodily function (*ŋgēs* ‘urinate’), dynamic activity (*lāwād* ‘play’), reciprocal activity (*g^wlāk* ‘argue’), state (*dādàb* ‘be beautiful’), process resulting in a change of state (*nā* ‘ripen/ferment’) and emotion (*sàsàm* ‘rejoice’).

3.2.2.2 Ambitransitive verbs

Buwal, like many Chadic languages such as Cuvok (Ndokobai 2006: 98), Moloko (Friesen and Mamalis 2004: 48), Vame (Kinnaird 2006: 43) and Goemai (Hellwig 2011: 182), has a large group of verbs which can occur either with or without a direct object with no variation in the verb stem. Such verbs may be called AMBITRANSITIVE or LABILE

(Dixon and Aikhenvald 2000: 4). Ambitransitive verbs in Buwal can be divided into two semantic subcategories; (a) agentive and (b) patientive.

(a) Agentive ambitransitive verbs

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: 5). They cover such semantic types as: action processes – patient overtly affected (*dmàs* ‘dance/trample’), actions – patient not overtly affected (*fēfēk^w* ‘whistle/whistle something’), emotion (*xān* ‘cry/mourn something’) and cognition (*xēsēŋ* ‘forget, forget something’).

The examples below illustrate agentive ambitransitive verbs being used in intransitive (3.87 & 3.88a) and transitive (3.87 & 3.88b) clauses respectively.

(3.87) a. *Sa kadas* .
 sá- **kā-** **dās**
 1SG.SBJ- IPFV- **cultivate**
 ‘I am cultivating.’ (LL14-SE:3)

b. *Hejəye vedəye cekudē ende əy dās*
xèdzè -jé vèdjé tsék^wdē éndē j- dās
 person -PL IND.DET.PL few like.this.PROX 3PL.SBJ- **cultivate**
ghwarnakw.
ɣ^warnàk^w
onion
 ‘A few people cultivate onions.’ (LL17-SE:23)

(3.88) a. *A kahan ende* .
 á- **kā-** **xān** éndē
 3SG.SBJ- IPFV- **cry** like.this.PROX
 ‘He is crying like this.’ (C12-SN:108.5)

b. *əy han ŋgwav tata.*
 j- **xān** **ŋg^wàv** **tāta**
 3PL.SBJ- **mourn suffering** 3PL.POSS
 ‘...they mourn their sufferings.’ (DE17-SN:1.2)

- b. *La ndərey a kaɗas* .
 lā ndrèj á- kâ- dās
 field sorghum 3SG.SBJ- IPFV- cultivate
 ‘The sorghum field is being cultivated.’ (GE21-SE:16.2)
- c. *Mce a kahan* .
 mtsè á- kâ- xān
 corpse 3SG.SBJ- IPFV- mourn
 ‘The deceased is being mourned.’ (GE21-SE:17.4)

3.2.2.3 Transitive verbs

Payne (1997: 171) defines a TRANSITIVE verb as ‘one that describes a relation between two participants such that one of the participants acts towards or upon the other’. Strictly speaking, transitive verbs always occur in transitive clauses with at least two nominal arguments, one functioning as grammatical subject and the other as the direct object (see section 8.1.2.2). For true transitive verbs in Buwal the semantic role of the object is generally non-patient like and the verbs are unable to function as patientive ambitransitives. This is illustrated by the examples below. Examples (3.91 & 3.92a) shows transitive verbs occurring in transitive clauses. Intransitive clauses where the direct object has become the subject are not possible (3.91 & 3.92b). Other examples of transitive verbs include: *bɕāk* ‘slander’, *tsētsef* ‘consider’, *yēw* ‘trap’, *lām* ‘help’, *rā* ‘insult and *tāl* ‘manage’.

- (3.91) a. *Hwa kecem zɔmbay* .
 x^wā- kâ- tsēm ɕāmbáj
 2SG.SBJ- IPFV- defend.with staff
 ‘You are defending with a staff.’ (GE50-SE:11.1)
- b. **Zɔmbay a kecem*.
 ɕāmbáj á- kâ- cēm
 staff 3SG.SBJ- IPFV- defend.with
 ‘The staff is being defended with.’ (Fieldnotes)

(3.92) a. *Sa kejeḅ uda a damaw.*
 sá- k̄- dzèḅ wdā á dāmāw
 1SG.SBJ- IPFV- **Take food** PREP1 bush
 ‘I am **taking food** to the bush.’ (Fieldnotes)

b. **Uda a kejeḅ.*
 wdā á- k̄- dzèḅ
 food 3SG.SBJ- IPFV- **take**
 ‘Food is **being taken**.’ (Fieldnotes)

3.2.2.4 Transitive verbs with lexically specified objects

In Buwal there are a number of lexicalised expressions involving a verb plus a particular 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 as found with ordinary transitive verbs (see Section 3.2.2.3) in that it cannot be replaced with a direct object marker (see Section 8.1.1.2), nor can it be modified by noun modifiers (3.93a). If on the other hand the direct object is a ‘true’ object then the meaning of the expression changes (3.93 b & c).

(3.93) a. *Sa pal taf .*
 sā- pàl tàf
 1SG.SBJ- **untie path**
 ‘I **give permission**.’ (GE50-SE:5.1)

b. *Sa palaw .*
 sā- pàl -āw
 1SG.SBJ- **untie** -3SG.DOBJ
 ‘I **untie it**.’ (GE50-SE:5.3)
 (‘It’ refers to something tied up. It does not refer to ‘path’)

c. *Sa pal taf ŋkwa .*
 sā- pàl tàf nk^wā
 1SG.SBJ- **untie path** 2SG.POSS
 ‘I untie your path.’ (GE50-SE:5.5)
 (Only if it is a path blocked with a tied rope.)

Many such expressions involve body parts (3.94 a & 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).

- (3.94) a. *Hejəye vedəye əy ketehzetene*
 xèdzè -jé vèdjé j- **kā-** **tēh** -zā -ētēnē
 person -PL IND.DET.PL 3SG.SBJ- IPFV- **listen** -TRANS -3PL.IOBJ
zlam ŋ bay ege .
ɣàm íj bāj =égē
ear PREP2 chief =PL
 ‘Certain people **listen** (lit. **the ear**) to chiefs.’ (DE8-SN:5.1)
- b. *A kada unaf* .
 á- **kā** **dā** **wnāf**
 3SG.SBJ- IPFV- **bring heart**
 ‘He is unhappy/annoyed.’ (LL33-SE:3)

Table 3.17 contains a list of verbs where the object is the noun *mā* ‘mouth’.

Table 3.17: Buwal *mā* ‘mouth’ verbs

Without <i>mā</i>		With <i>mā</i>	
Verb	Gloss	Verb	Gloss
<i>bām</i>	‘munch’	<i>bām 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>ŋgèl mē</i>	‘meet’
<i>ntsā</i>	‘bite’	<i>ntsā mā</i>	‘bite finger’
<i>ntàr</i>	‘pay’	<i>ntàr 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’.

The noun *mā* ‘mouth’ is particularly productive in the formation of new verbs, 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. Certain verbs are never found independently without *mā* (indicated by the shaded rows).

3.3 Adjectives

Traditionally ADJECTIVES are defined semantically as denoting property concepts such as qualities or attributes (Schachter and Shopen 2007: 13). Payne (1997: 63) focuses on the modifying function of adjectives and defines them as words ‘that can be used in a noun phrase to specify some property of the head noun of a phrase.’ In many languages such property concepts can be expressed either by nouns or verbs (Payne 1997: 63), making ‘adjectives’ an interesting area for cross-linguistic comparison.

Buwal has a large class of adjectives which can be distinguished from both nouns and verbs. As well as functioning as noun modifiers these forms exhibit nominal, verbal and even adverbial properties (see Table 3.1). Section 3.3.1 deals with the phonological and morphological properties of adjectives, including simple adjective roots plus adjective stems formed through various derivational processes. The semantic domains covered by Buwal adjectives are summarised in Section 3.3.2. Adjectives may be divided into a number of functional sub-classes which are described in Section 3.3.3. Together these functional properties provide evidence that adjectives form a distinct word class.

3.3.1 Structure of adjectives

This section describes the structure of Buwal adjectives beginning with simple roots in Section 3.3.1.1. Reduplicated stems are discussed in Section 3.3.1.2 and lexicalised adjectival expressions in Section 3.3.1.3. Finally, the approximative suffix, which can attach to adjectives denoting a quality which is in a sense ‘measurable’, is discussed in Section 3.3.1.4.

3.3.1.1 Simple adjective roots

The skeleton structures for 110 simple adjectival roots is given in Table 3.18 below. Any adjectives which could be said to have been formed through derivational processes have been excluded as these would be considered stems rather than roots. Simple adjective roots have a similar, though slightly less numerous, range of syllable structures as noun roots (see Table 3.2). The most frequent structures are CaC and CaCCaC, followed then CCaC. This order differs to that for nouns where CaCaC and CCaC were the most frequent structures (see Section 3.1.1.1).

Table 3.18: Summary of skeleton structures of simple adjective roots

	1V		2V		3V	
	Skeleton	Example	Skeleton	Example	Skeleton	Example
1C	Ca (2)	<i>ndzé</i> 'raw'				
2C	CaC (21)	<i>déf</i> 'short'	CaCa (7)	<i>méwè</i> 'new'		
	CCa (3)	<i>vrè</i> 'red'				
3C	CCaC (15)	' <i>gdàk</i> ' 'far'	CaCaC (13)	<i>kádàk</i> 'good'	CaCaCa (3)	<i>kévējē</i> 'ancient'
			CaCCa (1)	<i>méth^wé</i> 'true'		
	CCCa (1)	<i>msrā</i> 'old'	CCaCa (1)	<i>zk^wānā</i> 'recovered'		
4C	CCCaC (6)	<i>ḡrmbàd'</i> 'sticky'	CaCCaC (21)	<i>yàzbāṅ</i> 'yellow'	CaCaCaC (7)	<i>yàḡàlāw</i> 'bad to eat'
			CCaCaC (1)	<i>k^wstàlāx</i> 'messy'		
5C			CaCCCaC (2)	<i>métrséṅ^w</i> 'naked'	CaCaCCaC (1)	<i>zētélvēṅ</i> 'up high'
					CaCCaCaC (5)	<i>tàxṭādāj</i> 'flat'

3.3.1.2 Reduplication

Like noun and verb stems (see Sections 3.1.1.2 & 3.2.1.2), a large number of Buwal adjectives are formed using reduplication of either part or the whole phonological word. In most cases it is no longer possible to identify the resulting form with another non-

reduplicated word. The few exceptions are given in (3.99) below. It is also not clear what the original semantic motivation for the reduplication may have been. Out of a corpus of 221 adjectives, 94 of these show some type of reduplication. Of these adjectives 66 were found to have been formed through reduplication of the whole word (3.95).

(3.95)		
<i>dě-dě</i>		‘appropriate’
<i>bár-bár</i>		‘salty’
<i>k^wléd-k^wléd</i>		‘smooth’
<i>ɣ^wéḥék-ɣ^wéḥék</i>		‘clean’

For others only part of the word is reduplicated and these fall under the following types with suffixal CV reduplication being the most common.

(i) Prefixal CV reduplication (5 adjectives)

(3.96)		
<i>fě-fě</i>		‘thin’
<i>pé-pěděk</i>		‘white’
<i>tá-ták^wdāf</i>		‘thick(liquid)’

(ii) Prefixal CVC reduplication (1 adjective)

(3.97)		
<i>tēs-tēsēs</i>		‘thickly sprouting’

(iii) Suffixal CV reduplication (22 adjectives)

(3.98)		
<i>fātā-tā</i>		‘vast’
<i>tsé-lé-lèw</i>		‘thin(liquid)’
<i>bárdā-dāk</i>		‘slightly sour’

There are two adjectives which have clearly been derived through reduplication of a whole word of a different class, firstly a verb (3.99a) and secondly a noun (3.99b). Two

other adjectives have been formed by the reduplication of part of a verb (3.99c) and part of an adverb (3.99d) respectively.

(3.99) a.	<i>kwēt</i>	‘sharpen’	<i>k^wét-k^wét</i>	‘sharp’
b.	<i>védzēd’</i>	‘leaf/vegetation’	<i>védzēd’-védzēd’</i>	‘green’
c.	<i>mèsk^wèd’</i>	‘grind finely’	<i>k^wédk^wéd’</i>	‘finely ground’
d.	<i>brèsé</i>	‘slowly (grow)’	<i>brésbrés</i>	‘slow growing’

3.3.1.3 Lexicalised adjectival expressions

The formation of adjectives by lexicalisation is a very restricted strategy in Buwal. Similitive demonstratives are formed through lexicalisation of phrases. These will be discussed in Section 4.3.4. Two other examples are shown in (3.100 a & b) below.

(3.100) a.	<i>k^wlā</i>	‘able’	+	<i>sk^wāw</i>	NEG			
	→	<i>k^wlāsk^wāw</i>			‘sick (lit. not able)’			
b.	<i>nk^wāb</i>	‘brain’	+	<i>íj</i>	PREP2	+	<i>xā</i>	‘head’
	→	<i>nk^wāb íj xā</i>						‘sensible, nice (lit. brain in head)’

Evidence that the form in (3.100a) has lexicalised, and is no longer simply the adjective *k^wlā* ‘able’ followed by the negation marker *sk^wāw*, is demonstrated by the fact that it can be followed by another negation marker (3.101a). That the form in (3.100b) is lexicalised and is now functioning as an adjective, is indicated by the fact that it can function as the predicate of a relative clause (3.101b). This would not be possible if it were functioning as a noun modified by a prepositional phrase (see Table 3.1).

(3.101) a.	<i>Kay</i>	,	<i>sa</i>		<i>kulaskwaw akwaw</i>	.	
	<i>káj</i>		<i>sā</i>		<i>k^wlāsk^wāw</i>	<i>ák^wāw</i>	
	no!		1SG.STAT		sick	NEG.EXIST	
	No, I am not sick .’						(LL15-SE:13)

- b. *Əy sarza dāla ma ŋkwaɓ ŋ ha ŋ*
 ǰ- sār -zā dālā má= nk^wāb ǰ xā ǰ
 3PL.SBJ- look.at -TRANS someone REL= **brain** PREP2 **head** PREP2
 taba tata .
 tàbā tātá
 middle 3PL.POSS
 ‘They look at someone **who is sensible** among them.’ (DE8-SN:1.3)

3.3.1.4 Approximative suffix

Buwal has an approximative suffix which attaches to adjectives. Its form doubles the last segment of the root, whether consonant or vowel, and adds a word final high tone *á*. The tone melody on the adjective root is also low no matter what the underlying melody on the root without the suffix may be (3.102).

- (3.102) a. *dàknàk* ‘black’ *dàknàk:á* ‘blackish’
 b. *gālābā* ‘better’ *gālābà:á* ‘a little better’
 c. *yéf* ‘full’ *yèf:á* ‘fullish’

The approximative suffix cannot be used with all adjectives but only those which are concerned with qualities that can be measured, such as size, colour or taste. It seems difficult to predict whether the meaning of an adjective with this suffix denotes more or less of the quality in question. I was informed by a native speaker that the forms in (3.103a) all mean a bit more, whilst the forms in (3.103b) all mean a bit less. It can be seen that the examples in (3.103a) all have to do with measurement whereas the examples in (3.103b) are internal qualities which are more difficult to measure. However, this will need to be investigated further before a firm hypothesis can be reached.

- (3.103) a. *zbát* ‘a certain time’ *zbát:á* ‘bit longer than a certain time’
 x^wádǎk ‘average amount’ *x^wádǎk:á* ‘more than an average amount’
 dzèm ‘tall/long’ *dzèm:á* ‘bit longer’
 déf ‘short’ *dēf:á* ‘bit shorter’
 b. *pépēdék* ‘white’ *pèpèdèk:á* ‘less white/off-white’
 yéf ‘completely full’ *yèf:á* ‘not completely full’
 ndék^wndék^w ‘sweet’ *ndèk^wndèk^w:á* ‘less sweet’
 brdzālǎx^w ‘sloped’ *brdzàlǎx^w:á* ‘less sloped’

3.3.2 Semantic domains of adjectives

Buwal has a large class of adjectives covering a range of semantic domains. Some examples of these, largely categorised according to the domains given by Dixon (2004: 3-5) can be found in Table 3.19 below.

Table 3.19: Semantic domains of Buwal adjectives

Semantic Domain	Adjective	Gloss
Age	<i>méwè</i>	‘new’
	<i>msrā</i>	‘old’
Colour	<i>dàknàk</i>	‘black’
	<i>vrè</i>	‘red’
Pattern	<i>g^wzlèx</i>	‘striped’
Difficulty	<i>gdàŋ</i>	‘difficult’
Dimension	<i>dàkàl</i>	‘big, important (person)’
	<i>dzèm</i>	‘long/tall’
	<i>léb-léβ</i>	‘narrow’
	<i>x^wbàr</i>	‘wide’
	<i>x^wdzàŋ^w-x^wdzàŋ^w</i>	‘deep’
Physical Property	<i>ŋéŋŋéŋ</i>	‘spherical’
	<i>bár-bár</i>	‘hard/strong/difficult’
	<i>kéf-kéf</i>	‘light’
	<i>yén-yén</i>	‘sweet’
	<i>ntbàl</i>	‘tired’
	<i>yéf</i>	‘full’
Position	<i>mbér-mbér</i>	‘near’
	<i>gdàk</i>	‘far’
	<i>vāŋ</i>	‘arrived’
Time	<i>ḥēḥē</i>	‘long ago’
	<i>tlám</i>	‘recent’
	<i>nà</i>	‘now’
Qualification	<i>dědě</i>	‘appropriate’
	<i>ndzwèn</i>	‘true’
	<i>ndràŋ</i>	‘pleasing’
Similarity	<i>mbēmbē</i>	‘same’
	<i>ndál</i>	‘equal’
	<i>párpār</i>	‘different’
Value	<i>tāŋtāŋ</i>	‘good/honest’
	<i>frāw-frāw</i>	‘a bit strange’

Human propensity terms may either be nouns such as *srāx* ‘jealousy’ and *k^wétsér* ‘intelligence’ or verbs such as *sàsàm* ‘rejoice/be happy’ and *dzèjèk^w* ‘regret/be sorry’.

Speed tends to be expressed by adverbs such as *ktsáj* ‘fast’ and *zàjá-zàjá* ‘slowly/carefully’.

Buwal has four basic colour terms ‘black’ (blue and green), ‘white’, ‘red’ (pink and orange) and ‘yellow’ (the colour of a baby’s urine). As seen in (3.99b) above, ‘green’ is derived from the word for ‘leaves’ or ‘vegetation’. There are also a number of other colour terms associated with various shades of grey, brown, darkness etc. which are found in nature. Terms related to patterns that may be seen on animals or in the sky such as ‘stripy’ and ‘patchy’ are also found.

3.3.3 Adjective sub-classes

This section describes the functional characteristics of different adjective sub-classes in Buwal. Prototypical adjectives are presented in Section 3.3.3.1. There are a small number of adjectives which are less ‘noun-like’ than others since their nominal functions are far more restricted. These are discussed in Section 3.3.3.2. Finally, Section 3.3.3.3 deals with resultative participles. These are deverbal adjectives with a number of properties in common with ordinary adjectives.

3.3.3.1 Prototypical adjectives

This section presents the range of functions that proto-typical adjectives in Buwal can fill. Table 3.1 illustrates how their distributional flexibility allows us to distinguish them as a class. Buwal proto-typical adjectives have properties which are ‘noun-like’. They can function as nouns meaning something with that quality or the quality itself. In this way they can occur as a topic (3.104a), as subject of a verbal clause (but not as direct or indirect object) (3.104b), subject of a verbless clause (3.104c) as complement of a preposition (3.104d), as subject of a verbless clause (3.104e) and as predicate of a verbless clause without or with the copula (3.104f & g).

- (3.104)a. *Barbar* ca , tuwah η dās .
bar-bár tsá twáx η dās
strong TOP good INF cultivate
 ‘Strength, is good for farming.’ (GE39-SE: 4)
- b. *Pepedék* a kaṅta nje .
pépédék á- ká- ntā ndzé
white 3SG.SBJ- IPFV- take eye
 ‘Whiteness is coving (lit. taking) the eye.’ (GE39-SE:39)
- c. *Ŋtəbal* aka , kwaw cay .
ntbàl ákā k^wāw tsáj
tiredness EXIST NEG TAG.EMPH
 ‘(Farming), makes you tired, doesn’t it!’ (C8-SN:90)
 (lit. **Tiredness** exists, doesn’t it!’)
- d. Əy valahwaw wala ata *taṅtaṅ* ŋkwa .
 j- vâl -āx^wāw wālā á tā **tāṅ-tāṅ** nk^wā
 3PL.SBJ- give -2SG.IOBJ wife PREP1 on **good** 2SG.POSS
 ‘They give you a wife because of **your goodness.**’ (GE39-SE:17)
- e. *barbar* ŋcene akwaw
bar-bār ŋtsènè ák^wāw
strong 1EXCL.POSS NEG(EX)
 ‘We don’t have any **strength.**’ (BH5-SN:1.5)
- f. *Ujek* naka *mbermber* .
 wjĕk nākā **mbér-mbér**
 hut 1SG.POSS **near**
 ‘My house is **near(by).**’ (GE39-SE:32.1)
- g. *Ara jem* ma kaghavzahwaw .
 arā **dzèm** má= ká- yāv -zā -āx^wāw
 PRED **tall** REL= IPFV- boast TRANS -2SG.DOBJ
 ‘It’s **height** that is making you boast.’ (GE39-SE:24)

As can be seen from these examples adjectives can also function as the head of noun phrases being modified by such noun phrase elements as possessive pronouns (3.104 d & e) and relative clauses (3.104g). They can take the associative plural (3.105a) (see Section

4.5.2), be modified by demonstratives (3.105b), other nouns (3.105c) and prepositional phrases with nominal (3.105d) and verbal complements (3.105e).

(3.105)a. *Ata pepedek ey dakonak* , əy kajav kwaw .
 ātā pépédék éj dākṇàk j- kâ- dzàv k^wāw
 ASS.PL white and black 3PL.SBJ- IPFV- come.together NEG
 ‘White and black, they are opposite (lit. don’t come together).’
 (GE39-SE:48)

b. *Jem wese ca* , sa dāw kwaw .
 dzèm wēsé tsá sâ- dâw k^wāw
 tall DEM.DIST TOP 1SG.SBJ- want NEG
 ‘I don’t want to be that tall (lit. **That height**, I don’t want it.)’
 (GE39-SE:53)

c. *Mbermber ujek nkwa ege deydey* .
 mbér-mbér wjĕk nk^wā =égē dējdēj
 near hut 2SG.POSS =PL too.much
 ‘Your huts are too near’
 (lit. ‘**The nearness of your huts** is too much.’)
 (GE39-SE:57)

d. *Ndekwndekwa a ma aka* .
 ndék^w-ndék^w á mā ákâ
 sweet PREP1 inside EXIST
 ‘There is **sweetness in it**.’
 (lit. ‘**Sweetness in it** exists.’)
 (C11-SN:80.2)

e. *Ijkadāŋ ŋ la* , tuwah ŋ dar mejere .
 nkḁāŋ ŋ lā twáx ŋ dār mēdzērē
 rock PREP2 field good INF align terrace.wall
 ‘Rocks in field(s) are **good for building terrace wall(s)**.’ (GE40-SE:3.1)

Adjectives can be distinguished from ordinary nouns by their additional functions; (i) predicate of a relative clause, (ii) predicates of comparative and superlative constructions, (iii) complements of copula verbs and (iv) general adjuncts.

(i) Predicate of a relative clause

Adjectives can modify nouns either directly (3.106a) or within a relative clause (3.106b).

The relative clause is used when the noun is specific. Similarly for Lele, Frajzyngier (2001: 89-90) found that forms with the relativiser refer to specific objects or events

whilst forms without it refer to any potential noun with such attributes. Whilst nouns can also modify other nouns, they cannot function as the predicate of a relative clause. This function is one that adjectives share with verbs.

(3.106)a. *Ujek mbermber ama lekwal ca , tuwah .*
 wjĕk mbér-mbér á mā lèk^wál tsá twáx
 hut near PREP1 edge school TOP good
 ‘A house close to (lit. near to the edge) of the school is good.’
 (GE39-SE:62.1)

b. *Ujek ma mbermber ege , a vecey ?*
 wjĕk má = mbér-mbér = égē á vétséj
 hut REL= near =PL PREP1 whose
 ‘The houses which are near(by), whose are they?’
 (GE39-SE:62.2)

(ii) Predicate of comparative and superlative constructions (see Section 8.4).
 Adjectives occur as predicate of comparative (3.107) and superlative (3.108) constructions.

(3.107)a. *Sa pa ŋ pəzek aha hwa .*
 sā pá ŋ pzék^w á xā x^wā
 1SG.STAT at.a.level PREP2 small PREP1 over 2SG
 ‘I am smaller than you.’
 (lit. ‘I am at a level in **smallness** over you.’)
 (LL51-SE:2)

b. *Hwa pa ma jem aha sa .*
 x^wā pá má = dzèm á xā sā
 2SG.STAT at.a.level REL= tall PREP1 over 1SG
 ‘You are taller than me.’
 (lit. ‘You are at a level which is **tall** over me.’)
 (GE16-SE:9.2)

(3.108) a. *ŋhwa mbəy ma pa ŋ dakal .*
 nx^wā mbj má = pá ŋ dākāl
 goat 3SG.STAT REL= at.a.level PREP2 big
 ‘The goat is the biggest.’
 (lit. ‘The goat is the one at a level in **bigness**.’)
 (GE43-SE:40)

- b. *hejəye ma pa ma dakal dakal ege cemey* ,
xèdzè -jé má= pá má= dākāl dākāl =égē tséméj
 person -PL REL= at.a.level REL= **big big** =PL TOP.CONT
əy kázam merewrey
j- ká- zàm mèrēwrēj
 3PL.SBJ- PFV- eat rice
 ‘...but the most important leaders, they ate rice...’ (NH2-SN:7.3)
 (lit. ‘...the people who are at a level which is **very big**...’)

Adjectives can be differentiated from property nouns, which can also function as predicates of comparative clauses (see Section 3.1.2.2), by the fact that when the construction involves a relative clause (as in example 3.107b) the noun on its own is not possible. It must be preceded by a verb (3.109).

- (3.109) *Wala ŋkwa pa ma la ghav aha mala*
wālā nk^wā pá má= lā yāv á xā mālā
 wife 2SG.POSS at.a.level REL= **do boastfulness** PREP1 over GEN
naka .
nākā
 1SG.POSS
 ‘Your wife is doing more boasting than mine.’ (GE16-SE:45.10)
 (lit. ‘Your wife is at a level which is **doing boastfulness** more than mine.’)

Verbs can also function as predicates of comparative clauses (see Section 8.4). Adjectives can be differentiated from verbs by their lack verbal morphology such as tense/aspect markers, even when describing situations in the past or the future (see Section 8.2.1).

(iii) Complement of copula verbs

Another way in which adjectives differ from ordinary nouns is that they can function directly as a complement of the copula verbs *ndzā* ‘sit, stay, be’ (3.110a) and *lā* ‘do, become’ (3.110b) (see Section 8.3).

- (3.110)a. *A nja ɓarɓar .*
 ā- ndzā ɓār-ɓār
 3SG.SBJ- be **hard**
 ‘It is **hard**.’ (LL35-SE:18)
- b. *A la werwer .*
 ā- lā wér-wér
 3SG.SBJ- become **healthy**
 ‘He becomes **well**.’ (DE2-SN:8.12)

In such constructions ordinary nouns must be preceded by a preposition (3.111 a & b).

- (3.111)a. *Hwa nja ana tɓekw , ketegore .*
 x^wā- ndzā ánā tɓèk^w kètègré
 2SG.SBJ- be **like chaff** perhaps
 ‘You are **like chaff**, perhaps.’ (DE14-SN:12.3)
- b. *La ŋ ŋama naka !*
 lā ŋ ŋámà nākā
 become **PREP2 friend** 1SG.POSS
 ‘Become my friend!’ (GE15-SE:53)
 (lit. ‘Become into my friend’)

(iv) General adjunct constructions

Buwal adjectives can function both as secondary predicates and as adverbs. A SECONDARY PREDICATE occurs in clauses that contain two predicative constituents and assigns an attribute to one of the participants of the main clause (Schultze-Berndt and Himmelmann 2004: 59 -60). ADVERBIALS on the other hand are oriented towards the event rather than the participant (Schultze-Berndt and Himmelmann 2004: 79). In Buwal, both secondary predicate and adverbial constructions have the same morphosyntactic structure which can be referred to by the cover term GENERAL ADJUNCT CONSTRUCTION (Schultze-Berndt and Himmelmann 2004: 79) .

Adjectives can function as secondary predicates, both as depictives and resultatives. Schultze-Berndt and Himmelmann (2004: 65-66) differentiate depictives from resultatives semantically by stating that DEPICTIVES designate a state of affairs which holds

at the same time as the event coded by the main predicate (3.112), while RESULTATIVES designate an eventuality which is a consequence of this event (3.113).

(3.112) a. *Urey zley a kendəremzekey yafyaf.*
 wrèj ʒèj á- kǎ- ndràm -zǎ -èkèj **jáf-jáf**
 sauce meat 3SB.SBJ- IPFV- please -TRANS -3SG.IOBJ **delicious**
 ‘Meat sauce pleases me, **delicious.**’ (2064)

b. *Heje kézen aza tasl a wata.*
 xèdzè- kǎ- zèn āzǎ **tǎl** á wātǎ
 1INCL.SBJ- PFV- return COMPL **complete** PREP1 home
 ‘We have returned home all together (lit. **complete in number.**)’ (2572)

(3.113) a. *Dala kǎgal anta bəlahw.*
 dǎlǎ kǎ- gǎl āntǎ **blǎx^w**
 someone PFV- grow 3SG.POSS **solid**
 ‘Someone has grown up with a **solid build.**’ (1968)

b. *Zla zla a zlene zley be a taktərgwa anta*
 ʒǎ ʒǎ ā- ʒǎ -ènē ʒèj **bé** á tǎktrg^wǎ āntǎ
 cut cut 3SG.SBJ- cut -3SG.IOBJ meat **full** PREP1 calabash 3SG.POSS
 wese
 wēsé
 DEM.DIST
 ‘He cut up the meat, filling (lit. **full** into) her calabash.’ (NF5-SN:3.12)

Adjectives can also function as adverbs (3.114).

(3.114) a. *Sa kéjçəwerha kadak.*
 sǎ- kǎ- ntswèr -xǎ **kádǎk**
 1SG.SBJ- PFV- travel -VNT.PROX **good**
 ‘I travelled **well.**’ (1696)

b. *Zla fəyakw fəyakw .*
 ʒǎ **fjǎk^w** **fjǎk^w**
 cut **fine** **fine**
 ‘Cut it **very finely.**’ (LL35-SE:29)

- c. *gwaygwaya kánda ndrám vaw*
g^wājg^wājā ká- ndā ndrám vāw
 celebration PFV- go **pleasing** Q
 ‘...did the celebration go **in a pleasing way**?’ (C1-SN:1)

Adjectives are often repeated to give either an intensive (3.114b & 3.115a) or distributive (3.115b) meaning.

- (3.115)a. *Əy kala dəraf kadak kadak kadak .*
ǰ- kā- lā drəf kádàk kádàk kádàk
 3PL.SBJ- IPFV- do song **good good good**
 ‘They sang very very well.’ (C1-SN:4.3)

- b. *Ata macahw ey baba ŋkwa əy jem jem .*
ātā mātsāx^w éǰ bābā nk^wā ǰ dzèm dzèm
 ASS.PL mother.2POSS and father 2SG.POSS 3PL.STAT **tall tall**
 ‘Both your mother and father are **tall**.’ (GE15-SE:80)

3.3.3.2 Non-prototypical adjectives

Non-prototypical adjectives in Buwal share some but not all the properties of ordinary adjectives. Many of the adjectives which are in a derivational relationship with verbs (see Section 3.2.1.2) fall into this category. It is difficult to clearly characterise such adjectives as one group according to their functions as they form a kind of continuum from more prototypical to less prototypical. In general, non-prototypical adjectives differ from ordinary adjectives in that they do not have as many noun-like properties. For example, many of them cannot function as arguments of a verbal clause or as predicates introduced by the copula *ārā*. Some may function as arguments only if modified by another noun phrase constituent (3.116 a & b).

- (3.116)a. *Fətek anta a kalalakzaheje .*
fék āntā á- kā- lələk -zā -āxèdzè
lost 3SG.POSS 3SG.SBJ- IPFV- be.afraid -TRANS -1INCL.IOBJ
 ‘**His loss** is making us afraid.’ (GE65-SE:8.1)

- b. *Heseŋ ma a njuna* , *dála kándaha*
xésēŋ má= á ndzwná dālā ká- ndā -xā
forgotten REL= PREP1 **yesterday** someone PFV- go -VNT.DIST
ŋ mpam akwaw .
ŋ mpàm ák^wāw
 INF look.for NEG.EXIST
 ‘The thing that was forgotten yesterday, noone came to look for (it).’
 (lit. ‘**The forgotten which is of yesterday**, someone didn’t come to look
 for (it)’) (GE65-SE:11)

The limits on which noun phrase constituents can occur with non-prototypical adjectives vary according to the adjective. The group listed in (3.117) below can only be modified by the definite determiner (3.118).

- (3.117) *k^wlá* ‘able’
łáb ‘ready/almost’
dǎk ‘gone’
páj ‘arrived’

- (3.118)a. *Kula anta ca* , *vaŋgay* ?
k^wlá āntā tsá váŋgáj
able DEF.DET TOP how
 ‘Is he capable?’
 (lit. ‘How is **the ability**?’) (GE66-SE:51)

- b. *Słab anta ca* , *vepey* ?
łáb āntā tsá vépéj
ready DEF.DET TOP when
 ‘When will it be ready?’ (GE66-SE:52)
 (lit. When is **the readiness**?)

The non-prototypical adjective *dāj* ‘more’ has no noun-like properties.

Properties which non-prototypical adjectives do share with ordinary adjectives include their uses as noun modifiers both directly (3.119a) and within a relative clause (3.119b), as predicate of a verbless clause without a copula (3.119c). They can be modified by a

prepositional phrase (3.119 d & e) and function as adverb (3.119e). Some of them can function as the predicate of comparative clause (3.199f).

- (3.119)a. *Dala dāk , manda fāt .*
dālā dāk mā- ndā fāt
someone gone JUS go for.good
 ‘Someone (who has) gone, let him go for good.’ (GE66-SE:67.2)
- b. *Dala ma slab , hwa labaza ara .*
dālā má= ɬáb x^wā- làb -ā -zā ārá
someone REL= ready 2SG.SBJ- send -VNT.PROX -TRANS SIM
 ‘Someone who is ready, you (should) send him on the way.’ (GE66-SE:65.1)
- c. *mbəy vaŋ mgbà ama Welbe .*
mbj vāŋ ŋmgbà á mā wēlbē
3SG.STAT arrived up.there PREP1 edge.of Welbe
 ‘...he (lit. was) arrived up there next to Welbe.’ (NH16-SN:1.5)
- d. *Mbəy slab ŋ mac .*
mbj ɬáb ɲ mātš
3SG.STAT ready INF die
 ‘He is ready to die.’ (GE1-SE:3)
- e. *hwa daw ŋ bam pakam day aha mawal kwaw .*
x^wā- daw ɲ bām pákàm dāj á xā māwàl k^wāw
2SG.SBJ- want INF munch mouth more PREP1 over man NEG
 ‘You shouldn’t chatter (lit. munch mouth) more than a man.’ (HT1-SN:4.1)
- f. *Sa pa ŋ slab aha hwa .*
sā pá ɲ ɬáb á xā x^wā
1SG.STAT at.a.level PREP2 ready PREP1 over 2SG
 ‘I am more ready than you.’ (GE16-SE:46.2)
 (lit. ‘I am at a level in readiness over you.’)

The majority of non-prototypical adjectives cannot function as the complement of a copula verb. Of the adjectives listed in (3.117) above, only *k^wlá* ‘able’ can function as the complement of a copula verb and then only with the verb *lā* ‘do, become’ (3.120).

- (3.120) *A kala kula η mbal ge səkwaw .*
 á- k̄ā- lā kʷlá íj mbāl gē skʷāw
 3SG.SBJ- **IPFV-** **do able** INF hold house NEG
 ‘He is growing unable to take care of his household’ (DE12-SN:5.4)
 (lit. ‘He is **becoming** not **able** to hold his house.’)

3.3.3.3 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). Buwal resultative participles are verb-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 (3.121a). They also often occur with the completive marker *āzā* (3.121b). They are formed from S=O intransitive (3.121a) or ambitransitive (3.121b) verbs (see Section 3.2.2) as their agents are affected by the action and therefore their resulting state can be described.

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

- b. *Mada kēsakeneye 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 (i.e. flour) has been ground very finely, the women, they are happy
 with you...’ (DE3-SE:4.1)

Note that the transitivity suffix (see Section 8.1.3.1) may be attached to the verb root (3.122 a & b).

- (3.122)a. *La kébedzeye 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 kéhenzeye aza .*
 mbà ká- xān -zā -ējē āzá
 child PFV- cry -TRANS -PART COMPL
 ‘The child has been made to cry.’ (GE21-SE:17.4)

In Buwal resultative participles are adjective-like in that they can function as noun modifiers (3.123a), predicates of verbless clauses (3.123b), of relative clauses (3.123c) and comparative constructions (3.123d) and as depictive secondary predicates (3.123e). They can also be modified by prepositional phrases (3.123 b, c & d). They do not appear to have any noun-like functions.

- (3.123)a. *hwa ndewzene a egəlyz kélemeye*
 x^wā- ndàw -zā -ēnē á egljz ká- lām -ējē
 2SG.SBJ- find TRANS -3SG.IOBJ PREP1 church PFV- build -PART
 ‘...you (will) find a church (recently) built...’ (PP2-SN:4.2)

- b. *Mbøy kénjeye η la anta ende* ,
 mbj ká- ndzā -ējē η lā āntā éndē
 3SG.STAT PFV- sit PART PREP2 field 3SG.POSS like.this.PROX
kaw a kagal akwaw .
 káw á- kā- gəl ák^wāw
 even 3SG.SUBJ- IPFV- grow NEG.EXIST
 ‘It (the cotton) is stagnant (lit. **sitting**) in its field like this, it isn't even growing.’ (C7-SN:17)
- c. *ujek vedaye ma kéjeye a tal aka yam* .
 wdzēk vēdjé má= ká- dzā -ējē á tal ákā jám
 hut certain REL= PFV- hit PART PREP1 iron.sheets EXIST also
 ‘...there are also some huts **which are rooved** with iron.’ (DE4-SN:1.4)
- d. *Uda pa η kédeye aha ma a njuna* .
 wdā pá η ká- dà -ējē á xā má= á ndzwná
 food level in PFV- cook PART PREP1 over REL= PREP1 yesterday
 ‘The food is more cooked more than that of yesterday.’ (GE43-SE:21.1)
 (lit. ‘The food is **at a level in cookedness** over that of yesterday.’)
- e. *a kalaza labara kénjeye yam*
 a- ká- lā -zā làbārā ká- ndzā -ējē jám
 3SG.SBJ- IPFV- do TRANS chatter PFV- sit PART also
 ‘...she was chatting (while) **sitting** also...’ (C5-SN:47.2)

Whilst the meaning of resultative participles is similar to the patient nominalisations described in Section 3.1.3.1, the difference is that patient nominalisations are used for general referents (3.124a) while resultative participles are used for specific referents (3.124b).

- (3.124)a. *Dekey ngəzlej madada* .
 dā -ēkēj ngɣèn má- dà -á- dà
 bring -1SG.DOBJ peanut NOM- cook -NOM.PAT- cook
 ‘Bring me cooked peanuts.’ (GE14-SE:2)

- b. *Dekey* *ngəzleŋ ma kédeye* *wese* .
 dā -ēkēj ngɔ̀zèŋ má= ká- dà -ējē wēsé
 bring -1SG.DOBJ peanut REL= PFV- cook PART DEM.DIST
 ‘Bring me those peanuts which are cooked.’ (GE14-SE:1)

3.4 Adverbs

ADVERBS represent a word class that is very difficult to define typologically. Typically they are said to be modifiers of non-nominal constituents. Such constituents may be the sentence, the verb or verb phrase, or modifiers such as adjectives or other adverbs (Schachter and Shopen 2007: 20; Haspelmath 2001: 16543). In Buwal two other word classes can function adverbially. Many adjectives can function as adverbs without any special marking (see Section 3.3.3.1(iv)), a common situation cross-linguistically (Haspelmath 2001: 16544). Locative and temporal nouns in Buwal can also be used adverbially (see Sections 3.1.2.3 & 3.1.2.4). In addition, a distinct class of adverbs can also be said to exist in Buwal based on their syntactic functions (see Table 3.1).

Buwal adverbs can be divided into four sub-classes according to their scope following Van Valin and LaPolla’s (1997: 26-27) description of the clause as having a layered structure consisting of a nucleus which contains the predicating element, the core which is the nucleus plus core arguments and the periphery where time or locative adverbials are found. They demonstrate that various operators modify or have scope over different layers of the clause (1997: 40-52). The first sub-class of Buwal adverbs has scope over the core of the clause (Section 3.4.1) and is by far the largest sub-class. Some linguists may consider these verb or verb phrase modifiers. This sub-class is the only one which is truly ‘open’. There is also an intensifier (Section 3.4.2) which may have scope over the core or modify other adjectives or adverbs. Clausal adverbs (Section 3.4.3) modify the whole clause or proposition. Finally, focus particles (see Section 3.4.4) may have scope over a variety of different levels and may modify nouns as well as various other clause constituents. The sections which follow describe the prototypical functions of the different sub-classes of adverbs. Several adverbs have properties spread across more than one sub-class. These will be discussed in the relevant sections.

The phonological structure of adverbs will not be discussed in depth here. They are mostly morphologically simple, reflecting a similar range of structures as simple adjective roots

(see Section 3.1.1.1). Like the other major word classes (see Sections 3.1.1.2, 3.2.1.3 & 3.3.1.2), some adverb stems can be seen to have been formed through reduplication (see (3.25a) for an example). Any structural peculiarities relevant to a particular sub-class will be mentioned in the appropriate section.

3.4.1 Core adverbs

Core adverbs modify the core of a clause and can occur in a variety of positions within the clause with no change in meaning such as (i) the left periphery of the sentence (3.125a), (ii) immediately preceding the verb if subject topicalised (3.125b), (iii) immediately following the verb if no direct object present (3.125c), (iv) between the direct and indirect object (3.125d), (v) following the indirect object (3.125e) or (vi) following an oblique argument (3.125f).

- (3.125) a. *Vəlaŋvəlaŋ* , *a nda* , *mbəy hwas* .
 vləŋvələn̄ ā- ndā mbj̄ x^wàs
walking.quickly 3SG.SBJ- go 3SG.STAT reached
 ‘Walking quickly, he goes, he has reached (the place).’ (GE54-SE:3.2)
- b. *Ndərey naka* , *celele* *kádav aza* .
 ndrèj nākā tsélélé ká- dāv āzá
 sorghum 1SG.POSS **not.one.missing** PFV- sprout COMPL
 ‘My sorghum, each seed has sprouted without exception (lit. **not one missing**, it has sprouted).’ (GE54-SE:4.3)
- c. *Sa nda kelek* .
 sā- ndā kèlèk
 1SG.SBJ- go **beforehand**
 ‘I go on **beforehand**.’ (GE54-SE:23.1)
- d. *Sa nevelene* *uda kəcaŋ ŋ mba naka* .
 sā- ná- vəl -ēnē wdā ktsán̄ ŋ mbà nākā
 1SG.SBJ- FUT- give -3SG.IOBJ food **fast** PREP2 child 1SG.POSS
 ‘I will give food to my child **fast**.’ (GE54-SE:17.5)

- e. *Sa kevelene uda a mba naka*
 sá- kǎ- vǎl -ēnē wdā á mbà nākā
 1SG.SBJ- IPFV- give -3SG.IOBJ food PREP1 child 1SG.POSS
kwagwa .
k^wág^wá
for.the.moment
 ‘I am giving food to my child **for the moment.**’ (GE54-SE:18.9)
- f. *Sa nda a wata fāt* .
 sǎ- ndā á wātā fāt
 1SG.SBJ- go PREP1 home **for.good**
 ‘I go home to stay (lit. **for good**).’ (GE54-SE:8.2)

Repetition of the adverb results in an intensification of the meaning (3.126 a & b).

- (3.126)a. *Sa nda kǎcaŋ a wata* .
 sǎ- ndā **ktsánj** á wātā
 1SG.SBJ- go **fast** PREP1 home
 ‘I go home **fast.**’ (GE54-SE:30.1)
- b. *Sa nda kǎcaŋ kǎcaŋ a wata* .
 sǎ- ndā **ktsánj ktsánj** á wātā
 1SG.SBJ- go **fast fast** PREP1 home
 ‘I go home **very fast.**’ (GE54-SE:30.2)

According to Schachter and Shopen (2007: 20), cross-linguistically modifiers of verbs or verb phrases commonly express time, place, direction or manner. Buwal time expressions are commonly based on temporal nouns (Section 3.1.2.4) or adjectives (Section 3.3.2). In addition there are a number of core adverbs, that express something about the temporal nature of an event such as *béŋ* ‘once during a period’, *kèlĕk* ‘beforehand’ (3.125c), *k^wág^wá* ‘for the moment’ (3.125e), *fāt* ‘for good’ (3.125f), *tár* ‘for good’ and *xáxá* ‘regularly’. Several adverbs of this type are borrowed from Fulfulde, including *sám* ‘always’ (3.127a) and *tám* ‘daily’ (3.127c) (Fulfulde: *tum/tuma*). As in Fulfulde (Zoubko 1996: 14), in Buwal when *sám* ‘always’ is combined with negation the meaning is ‘never’ (3.127b).

- (3.127)a. *Hwa zlenzeney ma lahlah sam* .
 x^{wā}- ɬàn -zā -ēnèj má = lách-lách sám
 2SG.SBJ- taste -TRANS -1EXCL.DOBJ REL= pleasant **always(ful.)**
 ‘May you have us taste good weather **always.**’ (BH2-SN:2.4)
- b. *Sam sa kada uda akwaw* .
 sám sá- kâ- dà wdâ ák^{wā}w
always(ful.) 1SG.SBJ- IPFV- prepare food NEG.EXIST
 ‘I **never** prepare food.’ (LL38-SE:3)
 (lit. ‘Always I do not prepare food.’)
- c. *Ebe ca , tam sa ndaba ara hwa*
 èbè tsá tám sâ- ndâ -bâ á rā x^{wā}
 DEM.MED TOP **daily(ful.)** 1SG.SBJ- go -BEN PREP1 side 2SG
 ‘Like this, daily I (will) go to you...’ (C6-SN:278)

Place and direction in Buwal are either expressed with a locative or a relational noun (Sections 3.2.1.3 & 3.1.2.5) or an adjective (Section 3.3.2). The most common semantic type of core adverbs are those expressing manner (3.125 a, b & d). A subset of these are commonly referred to as IDEOPHONES in African linguistics (Schachter and Shopen 2007: 21) and are found in Buwal, as in many African languages. Newman (1968: 107) defines ideophones as ‘a phonologically peculiar set of descriptive or qualificative words.’ He notes that the syntactic functions of these words must be studied for individual languages since such words usually belong to sub-classes of different major word classes (p 108). It could be argued that Buwal has some ideophonic adjectives. However, most commonly ideophones function as core adverbs that may (but do not always) have unusual phonological features (see Section 2.5) and have close semantic links with particular actions. This means that Buwal ideophones are often limited to co-occurring with specific verbs and, given this predictability, at times the verb may be completely elided. This is illustrated by the two examples below which are taken from the same text several clauses apart. Example (3.128a) shows the ideophone *tsâftsâlâv* ‘falling without warning’ co-occurring with the verb *ndâv* ‘fall’. In (3.128b) the verb is omitted, only a variant of the same ideophone occurs.

- (3.128)a. *Baba na cafcav a ndav anta*
bābā nā tsàftsàlāv ā- ndāv āntā
 father(ful.) 1SG.POSS **falling.without.warning** 3SG.SBJ- **fall** 3SG.POSS
ata hayak .
á tā xājāk
 PREP1 on ground
 ‘My father **fell** to the ground **without warning**.’ (NH3-SN:2.8)
- b. *Mana javjalav ata hayak zeney .*
mānā dzàvdzàlāv á tā xājāk zēnéj
 mother.1POSS **falling.without.warning** PREP1 on ground again
 ‘My mother **fell** to the ground **without warning** as well.’ (NH3-SN:2.14)

Table 3.20 below lists some further examples of Buwal ideophones with their glosses. Some of these represent noises or describe some kind of movement. Also included in the table are examples of verbs they commonly occur with. Many ideophones can co-occur with more than one verb. This is evidence that the situation in Buwal is similar to that found by Newman (1968: 113) for the West Chadic language Tera in which similar types of adverbs are not tied to particular words but are clearly limited by semantic compatibility.

Table 3.20: Buwal ideophones

Ideophone	Gloss	Corresponding Verbs
<i>āk^w</i> [ōk ^w]	‘movement of horse’	<i>xēj</i> ‘run’, <i>mbèr</i> ‘jump’
<i>àtṵl</i> [ètūl]	‘smoke rising’	<i>tèv</i> ‘ascend’, <i>dbàs</i> ‘billow’, <i>gār</i> ‘stand/stop’, <i>dēŋ</i> ‘stand’
<i>báf</i> [bóf]	‘suddenly come out’	<i>dàmhā</i> ‘come out’, <i>ntàd</i> ‘dive’
<i>bérdék</i>	‘escaping’	<i>xēj</i> ‘run’, <i>mbèr</i> ‘jump’, <i>ndā</i> ‘go’, <i>jār</i> ‘flee’, <i>pàŋzàk^w</i> ‘escape’
<i>bép</i>	‘throwing away’	<i>nāx</i> ‘drop/throw away’, <i>ftēk</i> ‘lose’, <i>vàl</i> ‘give’
<i>tsdāv</i>	‘jumping of a toad’	<i>ndā</i> ‘go’, <i>mbèr</i> ‘jump’, <i>xēj</i> ‘run’ (car)
<i>dàp</i>	‘noise of hitting’	<i>gàŋ</i> ‘beat’, <i>dzā</i> ‘hit’
<i>dḅár</i>	‘fixing something to something’	<i>ḅāl</i> ‘shoot’, <i>nēnēw</i> ‘spear something’, <i>mbāl</i> ‘catch/hold’
<i>dkàj</i>	‘wander aimlessly’	<i>dèdèr</i> ‘wander’, <i>ndā</i> ‘go’, <i>xēj</i> ‘run’, <i>zèn</i> ‘return’
<i>pḅŋg^wāŋ^w</i>	‘rolling’	<i>xēj</i> ‘run’, <i>tàtŋg^wàl</i> ‘roll’

If any clause contains two core modifiers they either occur in different places within the clause (3.129a) or there is a pause between the two (3.129b).

(3.129)a. *Vəlaŋvəlaŋ* , a *nda kəcaŋ* .
vlaŋvlaŋ ā- *ndā ktsáŋ*
walking.quickly 3SG.SBJ- go **fast**
 ‘Walking quickly, he went fast.’ (GE56-SE:9.1)

b. *Perce* , *delele* , a *gwarzam* .
pértsé *délélé* ā- *g^wàrzàm*
manner.of.getting.up **direct** 3SG.SBJ- rise.up
 ‘Getting up, directly, he got up.’ (GE56-SE:11.4)

3.4.2 Intensifier

The Buwal intensifier *māmbāzá* ‘so much’, while functioning as a core modifier (3.130a), has some additional properties that distinguish it from other core adverbs. The intensifier

can function as a degree adverb modifying both adjectives (3.130b) and other adverbs (3.130c). Certain quantifiers such as *dàkālá* ‘a lot’ and *tsék^wdē* ‘a little’ can also function in a similar way (see Section 4.4.3). The adverb *māmbāzá* always follows the word it is modifying so that in (3.130b) and (3.130c) its scope is another modifier but in (3.130a) its scope is the core. If the intensifier is functioning as a core modifier and another core adverb is present there will be a pause between the two adverbs (3.130d). Unlike other core adverbs, the intensifier cannot occur at the left periphery of the clause (see Section 3.4.1).

- (3.130) a. *Tatədam a kamaðaheje mambaza akwaw* .
 tátđám á- ká- māđ -āxèdzè **māmbāzá** ák^wāw
 wind 3SG.SBJ- IPFV- cold -1INCL.DOBJ **so.much** NEG.EXIST
 ‘The wind is not making us **so** cold.’ (GE54-SE:19.1)
- b. *Barbar mambaza* .
 bár-bár **māmbāzá**
 hard **so.much**
 ‘It’s **so** hard.’ (C12-SN:80.1)
- c. *A kehey kəcaŋ mambaza* .
 á- ká- xēj ktsáj **māmbāzá**
 3SG.SBJ- IPFV- run fast **so.much**
 ‘He is running **so** fast.’ (GE56-SE:5.1)
- d. *A kehey mambaza , haha* .
 á- ká- xēj **māmbāzá** xáxá
 3SG.SBJ- IPFV- run **so.much** regularly
 ‘He is running **so much**, regularly.’ (GE56-SE:5.3)

3.4.3 Clausal adverbs

Clausal adverbs are those which modify a whole clause or proposition. In Buwal they occur either clause initially or clause finally (3.131a) after any objects or adjuncts (3.131b). They tend to be short words of only one or two syllables.

(3.131) a. *Tew* , *pereje* *ca* , *kázlaza* , *a* *ηgwaf* ,
téw *pērédzé* *tsá* *ká-* *ǰā* *-zā* *ā-* *ηg^wāf*
finally door(ful.) TOP PFV- cut -TRANS 3SG.SBJ- break.down
ηgwaf , *ηgwaf* *káηgwafza*
ηg^wāf *ηg^wāf* *ká-* *ηg^wāf* *-zā*
break.down break.down PFV- break.down -TRANS
‘**Finally**, the door, he cut it, he kept on breaking it down, he broke it
down...’ (C10-SN:8.8)

b. *Dəvar* *ege* *tewtew* , *əy* *baslata* *a* *vəzekw* *war* .
dvàr =égē *téw-téw* *ǰ-* *ǰàł* *-ātā* *á* *vzék* **wár**
hoe =PL all 3PL.SBJ- forge -3PL.DOBJ PREP1 slime **still**
‘All hoes, they forge them with slime **still**.’ (DP9-SN:4.12)

In final position clausal adverbs also follow the existential marker (see Section 4.10) (3.132a) and the negation marker (see Section 4.11) (3.132b).

(3.132)a. *Hejəye* *əy* *kazam* *uda* *aka* *eze* .
xèdzè *-jé* *ǰ-* *kā-* *zàm* *wdā* *ákā* **ézē**
person -PL 3PL.SBJ- IPFV- eat food EXIST **therefore**
‘There are people who are **therefore** eating food.’ (GE38-SE:24.1)

b. *kusam* *anta* *a* *kanda* *kwaw* *war* .
k^wsàm *āntā* *á-* *kā-* *ndā* *k^wáw* **wár**
body 3SG.POSS 3SG.SBJ- IPFV- go NEG **still**
‘...his body **still** wasn’t well (lit. going).’ (NH14-SN:2.17)

Certain clausal adverbs can also occur before the existential or negation markers changing their scope to the core and therefore the resulting meaning of the clause. Adverbs that can behave in this way include: *jám* ‘also’, *zēnéj* ‘again’, *téw* ‘finally, completely’, *éndē* ‘like this’ and *ézē* ‘therefore’. For example in (3.133a) where *éndē* ‘like this’ occurs after the existential marker, the meaning is very general. However in (3.133b), the speaker is specifically demonstrating how the people are eating.

(3.133) a. *Hejəye əy kazam uda aka ende* .
 xèdzè -jé j- k̄ā- zàm wdā ákā éndē
 person -PL 3PL.SBJ- IPFV- eat food EXIST **like.this.PROX**
 ‘**Like this**, there are people who are eating food.’ (GE38-SE:23.1)

b. *Hejəye əy kazam uda ende aka* .
 xèdzè -jé j- k̄ā- zàm wdā éndē ákā
 person -PL 3PL.SBJ- IPFV- eat food **like.this.PROX** EXIST
 ‘There are people who eat food **like this**.’ (GE38-SE:23.2)

In example (3.134a) the negation is within the scope of the adverb and the meaning is that the speaker has not been to the market and still does not want to go. In example (3.134b) the negation is not within the scope of the adverb so that this clause implies that the speaker has been to the market but does not want to go again.

(3.134)a. *Sa d̄aw ŋ nda a luma kwaw zeney* .
 s̄ā- d̄aw ń ndā á l̄wmà k^wāw zēnéj
 1SG.SBJ- want INF go to market(ful.) NEG **again**
 ‘I **still** don't want to go to the market.’ (GE53-SE:2)

b. *Sa d̄aw ŋ nda a luma zeney kwaw* .
 s̄ā- d̄aw ń ndā á l̄wmà zēnéj k^wāw
 1SG.SBJ- want INF go to market(ful.) **again** NEG
 ‘I don't want to go to the market **again**.’ (GE53-SE:1)

More than one clausal adverb can occur within a clause if they are semantically compatible (3.135).

(3.135) *Sa nda a wata war zeney* .
 s̄ā- ndā á wātā wár zēnéj
 1SG.SBJ- go PREP1 home **still again**
 ‘I am **still** going home **as well**.’ (GE56-SE:3.2)

In Buwal, clausal adverbs can be divided into three major semantic types: (i) modal, (ii) linking and (iii) demonstrative.

- (i) According to Payne (1997: 244) MODE ‘describes the speaker’s attitude towards a situation, including the speaker’s belief in its reality or likelihood.’ In Buwal, a number of modal distinctions are expressed using adverbs. Buwal modal adverbs are summarised in Table 3.21 below and example clauses given in (3.136).

Table 3.21: Buwal modal clausal adverbs

Adverb	Gloss	Modality ⁸
<i>k^wlák^w</i>	‘obligatorily’	Deontic - obligative
<i>xāŋgá</i>	‘as if/it seems’	Epistemic - assumptive
<i>kēcé</i>	‘perhaps/maybe’	Epistemic - speculative
<i>kātà</i>		
<i>gré⁹</i>		
<i>kētègré</i>		
<i>āvá</i>	‘hopefully’	Optative
<i>wárbá</i>	‘fortunately’	Desiderative
<i>ndzwèn¹⁰</i>	‘true’	Epistemic – veridical
<i>ŋgērè</i>	‘true’	

- (3.136) a. *Kulakw* , *hwa namac yam* .
k^wlák^w x^wā- ná- m̀ats jám
obligatorily 2SG.SBJ- FUT- die also
‘**Obligatorily**, you will die also.’ (GE58-SE:4.1)
- b. *Kédène yam aza a mana haŋga* .
ká- d̄ã -ēnē j̀am āzá á mānā xāŋgá
PRF- draw -3SG.IOBJ water COMPL PREP1 mother.1POSS **it.seems**
‘She has already drawn water for my mother **it seems**.’ (GE48-SE:7.10)
- c. *Kata uzəye əy kaja ula akwaw vaw ?*
kātà wzjé j- k̄ā- dzā wlā ák^wāw vāw
perhaps children 3PL.SBJ- IPFV- hit voice NEG.EXIST Q
‘**Perhaps** the children weren’t crying out?’ (C10-SN:11.2)

⁸ Terminology taken from Palmer 2001.

⁹ Note that the adverb *gré* is derived from the verb *grē* ‘see’ and that *kētègré* is a compound consisting of *kātà* plus *gré*.

¹⁰ Note that *ndzwèn* and *ŋgērè* are in fact adjectives which can function as clausal adverbs.

- d. *kaw sa kampam kusam akwaw ɲgara .*
káw sá- kâ- mpàm k^wsàm ák^wāw ɲgārá
 even 1SG.SBJ- IPFV- look.for fight NEG.EXIST **true**
 ‘...I am **truly** not even looking for a fight.’ (C13-SN:26)

- (ii) Linking adverbs semantically link a clause with some other clause, or part of the discourse. These are listed in Table 3.22 and examples given in (3.137 & 3.138).

Table 3.22: Buwal linking adverbs

Adverb	Gloss	Semantic Link
<i>ājā</i>	‘then, so’	temporal sequence
<i>āmbá</i>	‘then’	temporal sequence
<i>éndzèkēdē¹¹</i>	‘however’	contrast
<i>évèlè</i>	‘although/even so’	concession
<i>ézē</i>	‘therefore’	consequence
<i>jám</i>	‘also’	addition
<i>kárbā</i>	‘even though’	concession
<i>kdē</i>	‘however/so’	contrast/consequence
<i>téw</i>	‘finally’	temporal conclusion
<i>wár</i>	‘still’	temporal continuation
<i>zēnéj</i>	‘again/as well’	addition

Linking adverbs differ from conjunctions and subordinating morphemes (see Section 4.14) in that they can vary their position within the clause. Like other clausal adverbs, linking adverbs can occur in clause initial (3.137 a & b) or clause final (3.138 a & b) position.

- (3.137)a. *ɲgama anta wese a kandaha a wata*
ɲgámà āntā wēsé ā- kâ- ndā -xā á wātā
 friend 3SG.POSS DEM.DIST 3SG.SBJ- IPFV- go -VNT.DIST PREP1 home
anta , əy kasa mavaw , əy kazam kan
āntā j- kâ- sâ mávāw j- kâ- zàm kàn
 3SG.POSS 3PL.SBJ- IPFV- drink beer 3PL.SBJ- IPFV- eat thing

¹¹ It is possible that the adverb *éndzèkēdē* ‘however’ is a compound formed from *āndzā* ‘if’ plus *kēdē* ‘perhaps’.

kadak . Enjekede a nda , a mbal ngama a hedé
kádàk éndzèkēdē ā- ndā ā- mbāl ngámà á xēdé
 good however 3SG.SBJ- go 3SG.SBJ- catch friend PREP1 on.it
a werwer .

á wēr-wēr

PREP1 trickery

‘...that friend of his was coming to his home, they drank beer, they ate good things. **However** he came to catch his friend out by it with trickery.’

(NH9-SN:2.1-2)

b. *A tambaca damaw anta gway , ... , sa nda aza vaw ?*

á tāmācá dāmāw āntā g^wāj sā- ndā āzà vāw

PREP1 today bush DEF.DET pal 1SG.SBJ- go DUB Q

Karba lelej kála ca gway .

kárbā lēlēj ká- lā tsá g^wāj

even.though humidity PFV- do TOP pal

‘Today, the bush, pal,...will I really go?... **Even though** moisture has come, pal.’

(C2-SN:4 & 5.2)

(3.138) a. *əy zlepenē ma , a kalamza*

ǰ- ɬāp -ēnē mā á- kā- lām -zā

3PL.SBJ- speak -3SG.IOBJ problem 3SG.SBJ- IPFV- accept -TRANS

səkwaw , na ŋgha ca, mbəy ma kala marava

sk^wāw nà nyā tsá mbǰ má = kā- lā máràvá

NEG now DEM.PROX TOP 3SG.STAT REL= IPFV- do regret

wese eze

wēsé ézē

DEM.DIST **therefore**

‘...they told him the problem, he didn’t accept it, as for now, he is

therefore the one who has (lit. is doing) those regrets.’ (C5-SN:80)

- b. *Ca vəya anta ca ma nawdum ca ,*
tsá vjā āntā tsá má= nawdwm tsá
 TOP wet.season DEF.DET TOP REL= very.difficult(ful.) TOP
ɲtəra mala Sarbawa ɲgha ... Na ca Mahwaraw
ntrā mālā sárɓáwá nyā nà tsá māx^wàràw
 month GEN dangerous DEM.PROX now TOP Mohoro
kánda aza tew ca wese , ana ndərey ɲgwayaŋ
ká- ndā āzá téw tsá wēsé ánā ndrèj ɲg^wájāŋ
 PFV- come COMPL **finally** TOP DEM.DIST like corn
ma ata razl ege , əy kaŋtak tew .
má= á tā ràɓ =égē j- ká- ntāk téw
 REL= PREP1 on cut =PL 3PL.SBJ- IPFV- crush **finally**
 ‘As for the wet season, it is this month of August which is very
 difficult, ... Now, September has **finally** come, the corn, for
 example, which is being cut (lit. which is for cutting), they are
finally crushing it (to eat).’ (C7-SN:67 & 71)

Note that the modal adverbs *xāŋgá* ‘as if’ and *kēdē* ‘perhaps’ can also be used as linking adverbs expressing hypothetical manner (see Section 10.1.5.3) and counterfactual condition respectively (see Section 10.1.5.6).

- (iii) The proximal, medial and distal similative demonstratives *éndē* ‘like this.PROX’, *ándālā* ‘like this.MED’ and *ándwsé* ‘like that’(see Section 4.3.4), like other adjectives, can function adverbially, both as core adverbs (3.133a & 3.139a) and clausal adverbs (3.133b & 3.139b).

- (3.139) a. *Dala wende ca , a kalamza andwse*
dālā wéndé tsá á- ká- lām -zā ándwsé
 someone IND.DET.SG TOP 3SG.SBJ- IPFV- accept -TRANS **like.that**
səkwaw .
sk^wāw
 NEG
 ‘Another person, he wouldn’t accept it **like that.**’ (C10-SN:45)

- b. *Andɔwse* , *andɔwse* , *səkan ma ata zam a wata*
ándwsé ándwsé skàn má= á tā zàm á wātā
like.that like.that thing REL= PREP1 on eat PREP1 home
anta askwaw .
ántā ásk^wāw
 3SG.POSS NEG.EXIST
 ‘**Like that, like that**, there was nothing to eat at his house.’
 (TN3-WN:1.5)

There is also another demonstrative adverb *énē* ‘like that’ which cannot function as an adjective or as a core adverb, but only as a clausal adverb (3.140 a & b).

- (3.140)a. *Sa kédene yam akwaw ene* , *a*
sā- ká- dā -ēnē jàm ák^wāw éné ā-
 1SG.SBJ- PFV- draw -3SG.IOBJ water NEG.EXIST **like.that** 3SG.SBJ-
ghwad , *a ya* .
ɣ^wàd ā- jā
 get.angry 3SG.SBJ- say
 ‘When I haven't drawn water for him **like that**, he gets angry, he says.’
 (GE55-SE:1.5)

- b. *Ene* , *sa ndaha a wata nkwa* , *hwa*
éné sā- ndā -xā á wātā nk^wā x^wā
like.that 1SG.SBJ- come -VNT.DIST PREP1 home 2SG.POSS 2SG.STAT
a wata akwaw .
á wātā ák^wāw
 PREP1 compound NEG.EXIST
 ‘**Like that**, I came to your house, you weren't at home.’ (GE55-SE:1.6)

3.4.4 Focus particles

FOCUS PARTICLES are a sub-class of adverbs which interact with the focused part of the sentence where they occur (König 1991: 3). They can occur in a wide variety of positions within a clause. According to König (1991:10-11) they have the following properties: (a)

they focus on a specific part of the sentence, (b) they combine with a specific constituent and (c) they have a specific semantic scope.

In Buwal a number of words could be categorised as focus particles as they can modify a number of different clause constituents including nouns. Some of these were seen in the previous section, functioning as clausal adverbs. Focus particles in Buwal can be divided into a number of types based on their distribution: (i) those that precede the constituent over which they have scope (ii) those that follow the constituent over which they have scope (iii) those that either precede or follow the constituent over which they have scope.

- (i) Those particles that precede the constituent over which they have scope include: *káw* ‘even’, *séj* ‘except/only’ (both borrowed from Fulfulde), *jāŋ* ‘only’, *xāŋgá* ‘as if/like’ (see also Section 3.4.3), *vānván* ‘especially’ and *tsēlēbē* ‘how much more’. Some of these particles can modify a greater variety of constituents than others. For example *káw* ‘even’ can mark concessive conditional clauses (3.141a) (see also Section 10.1.5.6), modify a single clause (3.141b), a prepositional phrase (3.141c), a noun (3.141d), modify interrogative proforms (3.141e) (see also Section 4.1.4) and also existential negation (3.141f) (see also Section 9.2.5).

- (3.141)a. *kaw mba naka kála gay ca , hune*
káw mbà nākā ká- lā gāj tsá x^wné-
even(ful.) child 1SG.POSS PFV- do sin TOP 2PL.SBJ-
velekey .
vàl -ēkēj
 give -1SG.IOBJ
 ‘...**even** if my child has committed a sin, give (him) to me.’ (C10-SN:28.2)

- b. *kaw kéndewzene a dala*
káw ká- -zā -ēnē á dālā
even(ful.) PFV- find -TRANS -3SG.IOBJ PREP1 money(ful.)
akwaw .
ák^wāw
 NEG.EXIST
 ‘... he didn’t **even** find any money.’ (C10-SN:10.2)

- c. *kaw ana wala ma , hwa gəre ca a nda*
káw ánā wālā má x^{wā}- grē tsá ā- ndā
even(ful.) like wife TOP.EMPH 2SG.SBJ- see TOP 3SG.SBJ- go
anta .
āntā
 3SG.POSS
 ‘...for example **even** the wife, you see, she leaves.’ (DE12-SN:10.4)
- d. *kaw uzəye ŋkwa ege , a mpat əy*
káw wɔjé nk^{wā} =égē á mpát j-
even(ful.) children 2SG.POSS =PL PREP1 tomorrow 3PL.SBJ-
nanja a sasam
ná- ndzā á sàsàm
 FUT- live PREP1 joy
 ‘...**even** your children, tomorrow they will live in joy...’ (DE12-SN:7.12)
- e. *Kaw vepey əy nda ca ara hwa .*
káw vépéj j- ndā tsá á rā x^{wā}
even(ful.) when 3PL.SBJ- go TOP PREP1 side 2SG
 ‘Always (lit. **even** when) they will go to your place.’ (DE3-SN:4.5)
- f. *Sa kasan ŋ dāsba kaw akwaw .*
sá- kā- sàñ íj dās -bā káw ák^{wā}w
 1SG.SBJ- IPFV- know INF cultivate -BEN **even(ful.)** NEG.EXIST
 ‘I don't know how to cultivate (not) **even** a little bit.’ (GE32-SE:2)

The particle *séj* ‘except/only’ however is more limited. It can modify a whole clause giving a meaning of obligation (3.142a), or it may modify a prepositional phrase (3.142b) or a noun (3.142c).

- (3.142)a. *Sey heje rakba gazlavay .*
séj xèjé- ràk -bā gāǰāvāj
except(ful.) 1INCL.SBJ- pray -BEN God
 ‘We **must** pray to God.’ (C12-SN:146)

- b. *A nda η sa yam sey η taker*
 ā- ndā íj sā jàm séj íj tkèr
 3SG.SBJ- go INF drink water **only(ful.)** PREP2 well
 ‘He would **only** go to drink water from well(s) ...’ (TN5-SN:4.2)¹²
- c. *Ayaw , sa kásəkamha ηkələf ara akwaw ,*
 ājāw sā- ká- skām -xā nklèf ārá ák^wāw
 yes 1SG.SBJ- PFV- buy -VNT.DIST fish SIM NEG.EXIST
sey kwese .
séj k^wésē
only(ful.) doughnut
 ‘Yes, I didn’t buy any fish at the same time, **only** doughnuts.’
 (LL13-SE:14)

Other focus particles most frequently function as noun modifiers (3.143 a & b).

- (3.143)a. *a mena ca yaη vəzekw wese .*
 ā- mèn -ā tsá jāη vžék^w wēsé
 3SG.SBJ- be.left -VNT.PROX TOP **only** ore DEM.DIST
 ‘...it is left, **only** that ore.’ (DP9-SN:5.4)
- b. *Hwa kula η səkam kwaw ca , celebe sa vaw ?*
 x^wā k^wlá íj skām k^wāw tsá tsələbē sā vāw
 2SG.STAT able INF buy NEG TOP **how.much.more** 1SG Q
 ‘(If) you are not able to buy it, how could (lit. **how much more**) I?’
 (GE48-SE:4.7)

- (ii) Focus particles that follow are *jám* ‘also’, *zēnéj* ‘again/as well’ and *wár* ‘still’. It was seen in Section 3.4.3 that all of these may also function as clausal modifiers. The first two may also function as core adverbs. All three can also function as noun modifiers (3.144 a to c).

- (3.144) a. *Uzlaf ben , mawal yam , a paslaw .*
 wžāf bèn māvāl jām ā- pāł -āw
 idol bedroom man **also** 3SG.SBJ- pour.libation -3SG.DOBJ
 ‘The bedroom idol, a man **also**, he pours out libation to it.’ (DE2-SN:5.5)

¹² This sentence concerns a giant who was too big to drink out of a cup and so could only drink from a well.

b. *Yaw hejəye vedəye zeney , əy kanda*
jàw xèdzè -jé vèdjé zēnéj j- kà- ndā
 so(ful.) person -PL IND.DET.PL **as.well** 3PL.SBJ- IPFV- go
ara malam ege .
á rā málàm =égē
 PREP1 side fulbe =PL
 ‘So other people **as well**, they go to the Muslims.’ (DE14-SN:4.1)

c. *Sa yam war ma , ma kanacahwaw ma*
sā jām wár má má= kà- ná- tsā -āx^wāw mā
 1SG **also still** TOP.EMPH REL= IPFV- FUT- put -2SG.IOBJ mouth
ŋ ŋges a zadāw vayay ka vaw ?
ŋj ŋgès á zàdāw vājáj ká vāw
 INF urinate PREP1 night who SPEC Q
 ‘Even me as well, will I possibly be the one to accompany you at night to urinate?’ (GE55-SE:3.3)
 (lit. ‘**Even me also still**, who will be accompanying you to urinate at night maybe?’)

(iii) The adverbs meaning ‘perhaps/maybe’ which were shown in Section 3.4.3 as functioning as clausal adverbs, can also modify other parts of the clause. In this case they most frequently precede (3.145a) but may also follow (3.145b) the constituent they modify.

(3.145) a. *Hwa nada la , ketegore a ntəmek ,*
x^wā- ná- dā lā kētègré á ntmək
 2SG.SBJ- FUT- make.sacrifice.to place **perhaps** PREP1 sheep
ketegore a gamtak , ketegore a ŋhwa .
kētègré á gāmtāk kētègré á nx^wā
perhaps PREP1 chicken **perhaps** PREP1 goat
 ‘You will make a sacrifice to the place, **perhaps** with a sheep, **perhaps** with a chicken, **perhaps** with a goat.’ (DE11-SN:1.8)

b. *Bay Jemere wese gare .*
bāy dzemere wēsé gré
 chief Jemere DEM.DIST **maybe**
 ‘That chief Jemere, **maybe**.’ (NH6-SN:1.11)

Chapter 4 Closed word classes

This chapter summarises the types of closed word classes which are found in Buwal. It begins with pronouns and other pro-forms in Section 4.1. Section 4.2 describes determiners while demonstratives are covered in Section 4.3. Quantifiers, including numerals are dealt with in Section 4.4. Plural markers are discussed in Section 4.5. Section 4.6 discusses the associative marker and Section 4.7, various verbal particles. Different types of prepositions are covered in Section 4.8. The copula and the existential marker are dealt with in Sections 4.9 and 4.10 respectively. Section 4.11 addresses the different negation markers and Section 4.12, the question marker. The last three sections cover modal particles (Section 4.13), conjunctions (Section 4.14) and topic markers (Section 4.15). The forms and syntactic functions of each closed class are described. Cross-referencing points the reader to later sections in the thesis which provide more detail.

4.1 Pronouns and other pro-forms

Schachter and Shopen (2007: 24) define PRO-FORM as ‘a cover term for several closed classes of words which...are used as substitutes for words belonging to open classes, or for larger constituents.’ Cross-linguistically, the most common type is the PRONOUN which replaces a noun or a noun phrase. In Buwal, these can be divided into various types which will be described below: personal (Section 4.1.1), indefinite (Section 4.1.2) and possessive (Section 4.1.3). Demonstrative pronouns are discussed separately under Section 4.3 on demonstratives (see Section 4.3.1). Interrogative pronouns are covered in a separate section including all interrogative pro-forms (Section 4.1.5). Pro-clauses and pro-sentences are described in Sections 4.1.5 and 4.1.6 respectively.

4.1.1 Personal pronouns

According to Schachter and Shopen (2007: 24) PERSONAL PRONOUNS are ‘words used to refer to the speaker, the person spoken to, other persons and things whose referents are presumed to be clear from the context.’ In Buwal there are two main types of personal pronouns, independent and stative pronouns, which are used in verbless clauses. Their functions will be discussed in more detail in Sections 4.1.1.1 and 4.1.1.2. Their forms are

given Table 4.1 below. Also included for comparison are the subject agreement markers which form part of the verbal word (also see Section 3.2.1.4).

Table 4.1: Buwal personal pronouns

Person/Number	Independent Pronouns	Stative Pronouns	Subject Agreement
1SG	<i>sā</i>	<i>sā</i>	<i>sa-</i>
2SG	<i>x^wā</i>	<i>x^wā</i>	<i>x^wa-</i>
3SG	<i>mbē</i>	<i>mbj̄</i>	<i>a-</i>
1INCL	<i>xèdzè</i>	<i>xèdzè</i>	<i>xèdze-</i>
1EXCL	<i>nènè</i>	<i>nènè</i>	<i>nène/na-</i>
1DUAL	<i>màmàw</i>	<i>màmàw</i>	<i>màma/ma-</i>
2PL	<i>x^wnè</i>	<i>x^wnè</i>	<i>x^wne-</i>
3PL	<i>tātā</i>	<i>j̄/(tātā)</i>	<i>J</i>

The table shows that unlike many West Chadic languages such as Miya (Schuh 1998: 187), Hausa (Newman 2000: 476-483), Lele (Frajzyngier 2001a: 100), Mupun (Frajzyngier 1993: 84) and Goemai (Hellwig 2011: 88), Buwal does not have the category of gender in its pronominal system. Such a category has been found in Gidar (Frajzyngier 2008: 126) but overall it does not appear to be common in Central Chadic languages.

Buwal does distinguish between three categories of 1st person plural; inclusive, dual and exclusive. INCLUSIVE is equivalent to ‘us all’ including both the speaker and those with him and those being addressed. DUAL meaning ‘us two’ is also inclusive but in this case there are only two people concerned, the speaker and the hearer. EXCLUSIVE refers only to the speaker and those with him but **not** those being addressed. Such a system is also found in nearby languages such as Gavar (author’s fieldnotes), Mina (Frajzyngier and Johnston 2005: 81), Mofu-Gudur (Barreteau 1988:380) and Merey (Gravina 2007a: 5), as well as the East Chadic language of Lele (Frajzyngier 2001: 100) and the West Chadic language of Margi (Hoffmann 1963:72). Other Central Chadic languages such as Hdi (Frajzyngier 2002: 124), Cuvok (Ndokobai 2006: 64), Daba (Lienhard and Wiesemann 1986:44), Mbuko (Gravina 2001: 13), Moloko (Friesen and Mamalis 2004: 20), and Muyang (Smith 2002: 6) have the inclusive/exclusive distinction without a dual.

The forms for the series of independent and stative pronouns plus the subject agreement prefixes are the same for all persons except third person singular and plural¹ (and for the options of reduced forms of the first person exclusive and dual subject agreement prefixes). These are found in the shaded rows of Table 4.1 above. For third person singular it can be seen that the independent and stative pronouns, *mbē* and *mb̄j* are related whilst the subject agreement marker *a-* which attaches to verbs is completely different in form. For third person plural on the other hand, it is the stative pronoun and the subject agreement marker which have the same form *j̄*, whilst the independent pronoun *tātā* is different. In fact, *tātā* may be alternatively used in certain verbless clauses (see Section 4.1.1.2 below). For certain other Central Chadic languages, such as Hdi (Frajzyngier 2002: 343) and Mina (Frajzyngier and Johnston 2005: 274-275), subject pronouns in verbless clauses may be drawn from a combination of the verbal and the independent set.

4.1.1.1 Independent pronouns

INDEPENDENT PRONOUNS replace nouns or noun phrases and as expected have many of the same functions as nouns. For example they can function as arguments in verbal clauses such as subject (4.1a), direct object (4.1b), indirect object (4.1c) and oblique (4.1d) All core arguments are marked on the verb, allowing Buwal to typically function as a pro-drop language (see Section 8.1.1) Independent pronouns are used for emphasis (4.1a, b & c). When functioning as subject the independent pronoun is topicalised, being followed by a pause or topic marker (4.1a). When functioning as the direct object either the marker or the independent pronoun will occur but not both as shown in (4.1b).

- (4.1) a. *sa* , *sa* *ŋgazaw* .
 sā *sā-* *ŋgàz* *-āw*
 1SG 1SG.SBJ- advise -3SG.DOBJ
 ‘...**me**, I advise him.’ (HT3-SN:2.2)

¹ Note that the tone on the final syllable of the subject agreement marker varies according to the tense/aspect of the verb (see Section 6.1).

- b. *Sa gazlaw* .
 s̄a- ḡaḷḷ -āw
 1SG.SBJ- beat -3SG.DOBJ
 ‘I beat him.’
Sa gazl mbe .
 s̄a- ḡaḷḷ mbē
 1SG.SBJ- beat 3SG
 ‘I beat **him**.’ (GE29-WE:18.1-2)
- c. *Sa veletene gamtak* .
 s̄a- v̄al -ētēnē ḡamtāk
 1SG.SBJ- give -3PL.IOBJ chicken
 ‘I give them the chicken.’
Sa veletene gamtak ŋ tata .
 s̄a- v̄al -ētēnē ḡamtāk ŋ tātā
 1SG.SBJ- give -3PL.IOBJ chicken PREP2 3PL
 ‘I give a chicken to **them**.’ (GE29-WE:24:1-2)
- d. *Əy d̄omas a mbe* .
 j- dmàs á mbē
 3PL.SBJ- dance PREP1 3SG
 ‘They dance with **it**.’ (DE2-SN:7.4)

Like nouns, independent personal pronouns can also function as the predicate of a verbless clause (4.2 a & b) and the subject of an existential clause (4.2c) (see Section 8.2.2).

- (4.2) a. *Ara mbe* .
 ārā mbē
 PRED 3SG
 ‘It’s him.’ (GE29-WE:32)
- b. *Madās ege , tata* .
 má- d̄às =égē tātā
 NOM- cultivate =PL 3PL
 ‘The farmers, (it’s) them.’ (GE29-WE:34)

- c. *Tata aka* .
 tātā ákā
 3PL EXIST
 ‘They exist.’ (GE29-WE:15)

Independent personal pronouns may also function as the heads of noun phrases occurring with noun modifiers such as demonstratives (4.3a) and relative clauses (4.3b).

- (4.3) a. *kədə heje lem ndərey ana tata wese vaw ?*
 kdê xèjé- lèm ndrèj ánā tātā wēsé vāw
 however 1INCL.SBJ- get sorghum like 3PL DEM.DIST Q
 ‘...however did we get sorghum like **those ones?**’ (C7-SN:27)

- b. *Ara mbe ma kasokam ndərey* .
 ārā mbē má= kā- skām ndrèj
 COP 3SG REL= IPFV- buy sorghum
 ‘It's **him who is buying the sorghum.**’ (GE15-SE:86)

Independent personal pronouns differ from ordinary nouns in that they cannot modify other nouns. In this case a possessive pronoun is used (see Section 4.1.3).

4.1.1.2 Stative pronouns

STATIVE PRONOUNS function as the subject of verbless clauses where the predicate may be a noun (4.4a), an adjective (4.4b) or a prepositional phrase (4.4c) (see Section 8.2.1). These pronouns are used in expressing states of affairs.

- (4.4) a. *Sa haldoma* .
 sā xáldmā
 1SG.STAT girl
 ‘I am a girl.’ (GE15-SE:41.1)
- b. *Heje mende aka , mbəy bəlahw ana ndaw matab* .
 xèdzè méndé ákā mbj blàx^w ánā ndàw mátāb
 person IND.DET.SG EXIST 3SG.STAT solid like base baobab
 ‘There is a person, he is as solid as the trunk of a baobab tree.’ (GE43-SE:6)

- c. *Əy ata mpe .*
ǰ á tā mpè
 3PL.STAT PREP1 on tree
 They are in (lit. on) a tree. (GE15-SE:47.1)

For third person plural either *ǰ* or *tātā* may be used as the subject of a verbless clause where the predicate is a numeral (4.5), a quantifier (4.6) or an adjective (4.7). However, *tātā* cannot function as the subject of a verbless clause where the predicate is a noun or a prepositional phrase.

- (4.5) a. *Əy gbak .*
ǰ gbák
 3PL.STAT two
 ‘There were two of them (lit. **they were** two).’ (C18-SN:84.1)
- b. *Tata mahkad’ .*
tātā māxkád
 3PL three
 ‘There are three of them (lit. **they are** three).’ (GE29-SE:5)
- (4.6) a. *Mazkad’ ege əy vəram*
mazkad’ =égē ǰ vrām
 Mazkad =PL 3PL.STAT many
 ‘The Mazkad people, there are many of them (lit. **they are** many).’ (NH10-WN:6.2)
- b. *Tata dakala .*
tātā dākālá
 3PL a.lot
 ‘There are a lot of them (lit. **they are** a lot).’ (GE29-WE:8)
- (4.7) a. *Ata macahw ey baba ŋkwa əy jem jem .*
ātā mātšāx^w éj bābā nk^{wā} ǰ dzèm dzèm
 ASS.PL mother.2POSS and father 2SG.POSS 3PL.STAT tall tall
 ‘Your mother and father, **they are** both tall.’ (GE15-SE: 80)

- b. *Tata jem jem* .
tātā dzèm dzèm
 3PL tall tall
 ‘They are tall.’ (GE29-SE:9)

The stative pronoun is the same as the independent pronoun or the subject agreement marker in verbal clauses for the majority of the forms in the paradigm as shown in Table 4.1. The third person singular stative pronoun *mb̄j* is distinctive while third person plural varies in its alignment with the other two series of forms. To my knowledge no other Chadic language has been found that uses unique pronominal forms in verbless clauses. One possible exception is Ndokobai’s (2006: 65) report that the first person singular pronoun in Cuvok takes a palatal glide in final position in copula type contexts but that this glide is dropped in verbal clauses. This is perhaps similar to the labio-velar glide being dropped in verbal clauses for the first person dual in Buwal (see Table 4.1 above).

The third person singular stative pronoun *mb̄j* is similar in form to the independent personal pronoun *mbē*. Whilst some native Buwal speakers say these two pronouns are the same, others insist that they are different. This is perhaps an indication that some process of language change is underway. One possible explanation is phonological. In Mina, Frajzyngier and Johnston (2005: 275) state that the third person pronominal subject in equational clauses is coded by the anaphor *mbí* for human nouns. In Buwal, it seems that the third person singular independent and stative pronouns have been derived from the same form, probably *mbi*. In the case of the independent pronoun, which frequently occurs before a pause, the vowel has undergone vowel lowering. This is to be expected since Buwal does not tolerate high vowels in word final syllables. The stative pronoun, on the other hand, never occurs before a pause and so its vowel has retained the original pronunciation. However, in Buwal, even when no pause follows there is a difference in vowel quality between the two pronouns. Preliminary evidence for this difference is given in Figure 4.1 below. Each pronoun was recorded for one speaker preceding five different quantifiers: *tsék^wdē* ‘a little/few’, *dàkālā* ‘a lot’, *dējédj* ‘too much’, *párxám* ‘insufficient’ and *tété* ‘average/enough’. For the stative pronoun, the frame *mb̄j* _____ ‘he is _____’ was used while the independent pronoun was recorded in the frame *nènékālā*

Ẹ̀gàn á mbē _____ ‘we are doing work with him _____’. Each sentence was recorded three times. Figure 4.1 is an F2-F1 chart of the average first and second formants of the vowel in the pronoun for each sentence. It can be seen that the pitch of F1 is slightly lower, indicating a higher tongue position for *mb̄j* compared with *mbē*. The pitch of F2 is generally higher for *mb̄j*, indicating that the tongue is further forward than for *mbē*. More recordings of a number of different speakers would need to be made To reach a firmer conclusion.

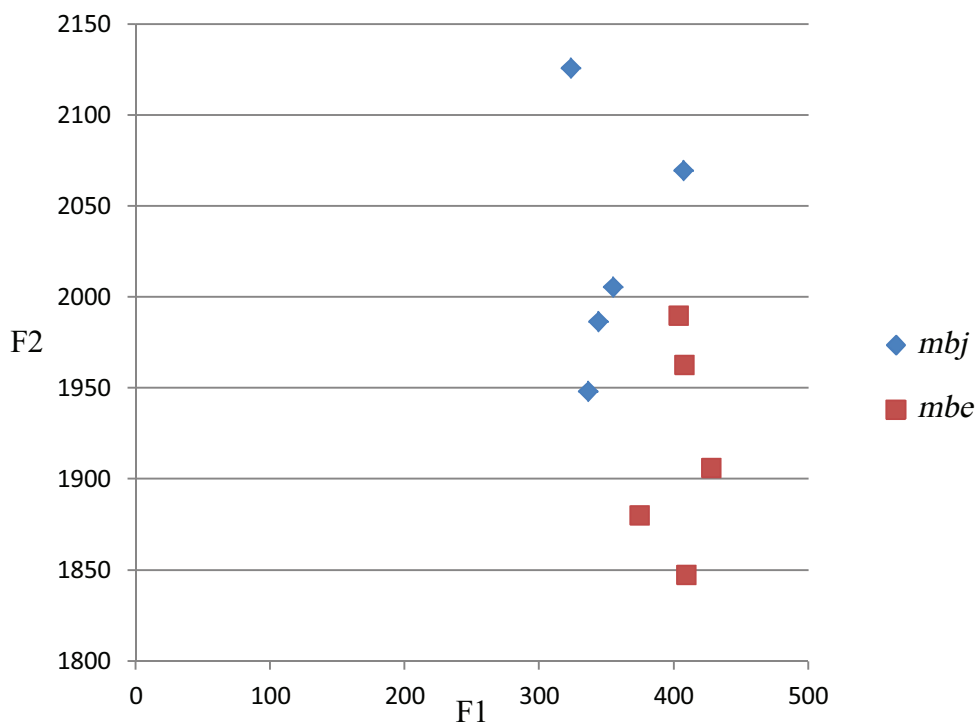


Figure 4.1: Contrasting formants of the vowel of the 3rd person stative pronoun *mb̄j* 3SG vs the independent pronoun *mbē*.

4.1.2 Indefinite pronouns

Haspelmath (1997a: 11) defines INDEFINITE PRONOUNS as ‘such pronouns whose main function is to express indefinite reference.’ The main semantic and pragmatic functional distinctions of indefinite pronouns in cross-linguistic perspective according to Haspelmath’s (1997a: 52) framework are summarised in Table 4.2 below, along with relevant forms in Buwal. The functional distinctions are divided broadly into specific and non-specific. To Haspelmath (1997a: 38) an expression is SPECIFIC ‘if the speaker presupposes the existence and unique indentifiability of its referent.’ For specific

expressions the speaker may or may not know the identity of the referent. NON-SPECIFIC expressions can occur in three different contexts: irrealis, negative polarity and free choice. IRREALIS mode ‘makes no claims with respect to the actuality of the event or situation described’ (Payne 1997: 244). NEGATIVE POLARITY can include, negative, conditional and interrogative clauses (Haspelmath 1997a: 33). The meaning of FREE CHOICE is ‘any’ which is similar to universal quantifiers in many contexts (Haspelmath 1997a: 48).

Table 4.2: Buwal words which fulfil various functions of indefinite pronouns.

Functional Distinctions		Human	Thing	Place
specific	known to speaker	<i>mānāŋ</i> ‘so and so’ <i>xèdzè</i> ‘person’	<i>skàn</i> ‘thing’	<i>lā</i> ‘place’
	unknown to speaker	<i>dālā</i> ‘someone’		
non-specific	irrealis context	<i>dālā</i> ‘someone’ <i>xèdzè</i> ‘person’		
	negative polarity	<i>dālā</i> ‘someone’		
	free choice	<i>dālā</i> ‘someone’ <i>xèdzè</i> ‘person’		

Not all the Buwal forms in Table 4.2 are restricted to the expression of indefinite reference. Only two of them, *dālā* ‘someone’ and *mānāŋ* ‘so and so’, both referring to human nouns, could be considered ‘real’ indefinite pronouns. The others: *xèdzè* ‘person’, *skàn* ‘thing’ and *lā* ‘place’, are generic nouns which may be used in place of an indefinite pronoun in some, or all of its typical functions. According to Haspelmath (1997: 52-53), this is a common strategy cross-linguistically.

Table 4.2 above shows that the indefinite pronoun *dālā* ‘someone’ may designate a specific or non-specific referent. However, if the person is specific, he or she must be unknown to the speaker (4.8a). When non-specific, *dālā* ‘someone’ can occur in an irrealis context (4.8b), in an environment of negative polarity (4.8c) and for free choice (4.9d).

- (4.8) a. *sa ghwalzahwaw labara dala ey ngama*
 s̄a- y^wāl -zā -āx^wāw l̄abārā **dālā** éj ngámà
 1SG.SBJ- explain TRANS -2SG.IOBJ story **someone** and friend
anta ηhel .
 āntā nxèl
 3SG.POSS thief
 ‘I will explain to you the story of **someone** and his friend the thief.’
 (NH9-SN:1)
- b. *Bay yam baw , ara dala ma kaḥwaz kwaw .*
 bāy jám bāw ārā **dālā** má= k̄a- nh^wàz k^wāw
 chief also TOP.ADD COP **someone** REL= IPFV- get.drunk NEG
 ‘A chief also, he is not **someone** who gets drunk.’ (DE8-SN:2.18)
- c. *Dala kula η jeney akwaw .*
dālā k^wlā́ ή dzā -ēnèj ák^wāw
someone able INF kill -1EXCL.DOBJ NEG.EXIST
 ‘**Noone** was able to kill us.’ (NH11-SN:2.2)
 (lit. ‘**Someone** could not kill us.’)
- d. *Dala ma kadaw η san sakan varam cemey ,*
dālā má= k̄a- d̄aw ή s̄an sk̄an vr̄am tséméj
someone REL= IPFV- want INF know thing many TOP.CON
 a *nda mpam ma aza a Maruwa*
 ā- ndā mpàm mā āzá á marwa
 3SG.SBJ- go look.for word COMPL PREP1 Maroua
 ‘**Anyone** (lit. **someone**) who wants to know many things...’
 (DE16-WN:5.2)

In terms of grammatical function, the indefinite pronoun *dālā* functions like other nouns as an argument of a verbal clause (4.8d), subject of a verbless clause (4.8c), predicate of a verbless clause (4.8b) and head of a noun phrase (4.8b & d). It occurs with all noun phrase constituents except for the plural marker, numerals apart from ‘one’, and quantifiers, since it is always singular. The indefinite pronoun can also modify other nouns (4.8a).

When the speaker knows the identity of the person but wishes to hide it, the name is replaced with *mānāŋ* ‘so and so’ (4.9 a & b). The implication, however, is that the person’s identity has been revealed by someone else to others. In example (4.9a) the speaker is quoting a man accused of theft, who in denying his guilt, reveals the name of the actual thief. In (4.9b) the speaker quotes a young woman who is revealing to her parents the identity of the man she wished to marry.

- (4.9) a. *Ma ŋhel ŋhwa ma , ara manaj .*
 má= nxèl nx^wā má ārā mānāŋ
 REL= steal goat TOP.EMPH COP **so.and.so**
 ‘The one who stole the goat, it’s **so and so.**’ (NH8-SN:11.8)
- b. *Mba manaj ca sa may ca tuwah vaw ?*
 mbà mānāŋ tsá sã- māj tsá twáx vāw
 child **so.and.so** TOP 1SG.SBJ- choose TOP good Q
 ‘The child of **so and so**, (if) I choose (him), is it good?’ (HT1-SN:9.5)

In Buwal, the generic noun *xèdzè* ‘person’, whilst functioning like any common noun, can replace an indefinite pronoun in certain functions. For example it is used for a specific referent when known to the speaker (4.10a). Its use differs from *mānāŋ* ‘so and so’, in that it is not necessary that the identity of the person be hidden, as example (4.10a) illustrates. Here the identity of the person is immediately given. When the referent is non-specific, *xèdzè* ‘person’ can be used in an irrealis (4.10b) or a free choice (4.10c) context.

- (4.10) a. *Heje wende , budakwbudakw pay eze .*
xèdzè wéndé bdāk^w-bdāk^w páj ézē
person IND.DET.SG hornbill arrived therefore
 ‘Therefore another **person**, the hornbill, arrived.’ (NF2-SN:2.1)
- b. *Ana dāla ma zam duwa heje wende ,*
 ánā dālā má= zàm dwā *xèdzè* wéndé
 like someone REL= eat debt **person** IND.DET.SG
 ‘Like someone who is in debt to a certain **person**...’ (DE16-WN:2.3)

- c. *Heje ma kadāw ŋ zam uda , manda a wata*
xèdzè má= k̄- d̄aw íj zàm wdā mā- ndā á wātā
person REL= IPFV- want INF eat food JUS- go PREP1 home
naka .
nākā
 1SG.POSS
 ‘**Anyone** (lit. a **person**) who wants to eat food, let him go to my
 home.’ (GE30-SE:48.3)

The generic nouns *skàn* (*kàn*) ‘thing’ (4.11) and *lā* ‘place’ (4.12) parallel the use of *xèdzè* ‘person’, except that they can also represent an entity which is specific and unknown (4.11a & 4.12a) and occur in an environment of negative polarity (4.11b & 4.12b).

- (4.11) a. *Səkan a keŋcekey ata dawan* .
skàn á- k̄- ntsā -ēkēj á tā dāwān
thing 3SG.SBJ- IPFV- bite -1SG.IOBJ PREP1 on back
 ‘**Something** is biting me on the back.’ (GE30-SE:24)
 (lit. ‘A **thing** is biting me on the back.’)
- b. *səkan ma ata zam a wata anta askwaw* .
skàn má= á tā zàm á wātā āntā ásk^wāw
thing REL= PREP1 on eat PREP1 home 3SG.POSS NEG.EXIST
 ‘...there was **nothing** to eat at his house.’ (TN3-WN:1.5)
 (lit. ‘...a **thing** to eat at his house did not exist’)
- (4.12) a. *Sa nda ata la* .
sā- ndā á tā lā
 1SG.SBJ- go PREP1 on **place**
 ‘I go **somewhere**.’ (GE30-SE:38)
 (lit. ‘I go to a **place**.’)
- b. *Sa nda ata la akwaw* .
sā- ndā á tā lā ák^wāw
 1SG.SBJ- go PREP1 on **place** NEG.EXIST
 ‘I am not going **anywhere**.’ (GE30-SE:39)
 (lit. ‘I do not go to a **place**.’)

Other indefinite pronouns are derived from interrogative pronouns. These are described further in Section 4.1.4.

4.1.3 Possessive pronouns

Trask (1993: 212) defines a POSSESSIVE PRONOUN as ‘a determiner which functions as the possessive form of a pronoun.’ In Buwal such pronouns replace a noun or noun phrase functioning as a noun modifier with the semantic role of possessor. Buwal possessive pronouns are listed in Table 4.3 below.

Table 4.3: Buwal possessive pronouns

Person/Number	Possessive Pronoun
1SG	<i>nākā/nā*</i>
2SG	<i>nk^wā</i>
3SG	<i>āntā</i>
1INCL	<i>ntāk^wāw</i>
1EXCL	<i>ntsènè</i>
1DUAL	<i>ntmàw</i>
2PL	<i>nk^wnè</i>
3PL	<i>tātá</i>

*The contracted form of the first person singular possessive pronoun is used frequently in natural speech.

Note that there are some formal similarities of possessive pronouns with the independent pronouns found in Table 4.1. For example, the second person possessive pronouns, both singular *nk^wā* and plural *nk^wnè* are very similar to the independent pronouns, *x^wā* and *x^wnè* respectively. The labialised velar fricative /x^w/ is simply replaced with a plosive /k^w/ and a nasal is added word initially. The first person exclusive and dual possessive pronouns, *ntsènè* and *ntmàw* both have the equivalent word final syllable as the independent pronouns *nènè* and *màmàw*. Finally the third person plural possessive pronoun *tātá* differs only in tone from its independent counterpart *tātā*.

Possessive pronouns modify nouns (4.13).

(4.13) a. *Ŋgama naka* , sewew
 ŋgámà nākā sēw -āw
 friend 1SG.POSS bear.with -3SG.DOBJ
 ‘My friend, bear with it.’ (HT3-SN:5.6)

b. *Ara baskwar ŋkune* .
 ārā bāsk^wār nk^wnè
 COP bicycle 2PL.POSS
 ‘It’s your bicycle.’ (LL19-SE:28)

Possessive pronouns can modify numerals (4.14), as Frajzyngier (1989: 148) found was also the case for Pero.

(4.14) a. *Hwa tenguleŋ ŋkwa* , *hwa ma*
 x^wā téng^wlèŋ nk^wā x^wā má=
 2SG.STAT one 2SG.POSS 2SG REL=
kezlepeney .
 kā- zlāp -zā -ēnèj
 IPFV- speak TRANS -1EXCL.DOBJ
 ‘You alone (lit. one of you), (it’s) you who is speaking to us.’ (BH2-SN:3.4)

b. *əy javahune gbak ŋkune* .
 j- dzàv -āx^wnè gbák nk^wnè
 3PL.SBJ- gather -2PL.DOBJ two 2PL.POSS
 ‘They gather the two of you.’ (DE12-SN:14.8)

The third person singular possessive pronoun can also function as definite determiner. This function will be described in more detail in Section 4.2.2.

Possessive pronouns which agree with the subject may also follow a verb coding mirative modality (4.15). This function will be described further in Section 6.4.

(4.15) *aya nda əy nda tata eze* .
 ājā ndā j- ndā tātá ézē
 then go 3PL.SBJ- go 3PL.POSS therefore
 ‘So then they left.’ (NH3-SN:7.5)

When a possessive pronoun follows either the preposition *á* ‘to/at’ or the genitive marker *mālā* (see Section 4.6), the resulting construction has the meaning of an INDEPENDENT POSSESSIVE ‘mine’, ‘yours’, ‘his’ etc. This independent possessive can then function like any other noun. It can be topicalised (4.16a), function as a core argument of a verbal clause (4.16b), as a complement of a prepositional phrase (4.16c), as a predicate of a verbless clause (4.16d) and as head of a noun phrase (4.16 b & e).

- (4.16) a. *A ŋkwa ca , hwa reh , ujek kághwaram akwaw.*
á nk^wā tsá x^wā- rēh wjēk ká- ɣ^wàrà̀m ák^wāw
 PREP1 2SG.POSS TOP 2SG.SBJ- save hut PFV- collapse NEG.EXIST
 ‘As for yours, you were saved, your house didn’t collapse.’ (GE34-WE:2)
- b. *Sa naɲtar mala ŋcene tewtew*
sā- ná- ntà̀r mālā ntsènè téw-téw
 1SG.SBJ- FUT- pay GEN 1EXCL.POSS all
 ‘I will pay **all of ours**...’ (NH9-SN:6.13)
- c. *Iɲte naka ŋgha a nja ana mala anta .*
nté nākā nyā ā- ndzā ánā mālā āntā
 shoe 1SG.POSS DEM.PROX 3SG.SBJ- be like GEN 3SG.POSS
 ‘These shoes of mine are like **his**.’ (GE43-WE:47)
- d. *Iɲhwa ŋgha ca , ara mala naka .*
nx^wā nyā tsá ārā mālā nākā
 goat DEM.PROX TOP PRED GEN 1SG.POSS
 ‘As for this goat, it’s **mine**.’ (GE15-SE:27)
- e. *A ŋkune vedbye , əy reh .*
á nk^wnè vēdjé j- rēh
 PREP1 2PL.POSS IND.DET.PL 3PL.SBJ- save
 ‘**Certain ones of yours**, they were saved.’ (GE34-SE:12)

4.1.4 Interrogative pro-forms

INTERROGATIVE PROFORMS are words like ‘what, who, where, when’ etc. which are used in questions (Schachter & Shopen 2007: 33). They often cut across word class categories so

that in Buwal, for example, there are interrogative pronouns, an interrogative pronominal, and interrogative pro-adverbs. A complete list of Buwal interrogative pro-forms is given in Table 4.4, grouped according to which word class they replace. The majority begin with /v/ and end in /j/. The one exception is *kátáj* ‘where (location/proximate destination)’. Apart from *váj* ‘where (distal destination)’ they are disyllabic. They also all carry high tone.

Table 4.4: Buwal interrogative pro-forms

Part-of-speech	Pro-form	Gloss	Referent
Noun	<i>véméj</i>	what(why)	non-human
	<i>vájáj</i>	who	human
	<i>vékéj</i>	which	category
	<i>vétséj</i>	whose	possessor
	<i>váj</i>	where	destination (distal)
	<i>kátáj</i>	where	location, destination (proximate)
Numeral	<i>vánáj</i>	how many	number
Adjective/Adverb	<i>vángáj</i>	how	state/manner
Adverb	<i>vépéj</i>	when	time
	<i>màvāj véméj/ á t̄ā véméj</i>	why	reason/cause
	<i>ń váj</i>	for what purpose	purpose

The interrogative pro-forms meaning ‘where’, *kátáj* and *váj*, have been included with interrogative pronouns as they replace a locative noun (see Section 3.1.2.3) and are always preceded by the preposition *á* ‘to/at’ (4.17e). The interrogative pro-forms expressing reason or purpose (shaded in the table) are complex, consisting of a preposition followed by a simple interrogative pronoun.

A major function of Buwal interrogative pro-forms is the formation of content questions (4.17). These questions will be discussed in more detail in Section 9.3.2.

- (4.17) a. *Hwa caf a vemey, benjer ?*
 x^{wā}- tsāf á **véméj** béndzèr
 2SG.SBJ- decorate PREP1 **what** squirrel
 ‘**What** did you decorate with, Squirrel?’ (NF2-SN:3.5)

- b. *hwa da zeney vayay ?*
 x^wā- dā zēnéj vājáj
 2SG.SBJ- bring again **who**
 ‘**Who** will you bring again?’ (BH2-SN:3.5)
- c. *Gwaygwaya a la wan vanay ?*
 g^wājg^wājā ā- lā wān vánáj
 festival 3SG.SBJ- do day **how.many**
 ‘**How many** days does the festival last?’ (LL46-SE:15)
- d. *Hwa mbal urey vecey ?*
 x^wā- mbāl wrèj vétséj
 2SG.SBJ- pluck vegetables **whose**
 ‘**Whose** vegetables are you trimming?’ (LL17-SE:50)
- e. *Hwa nda a vay ?*
 x^wā- ndā á vāj
 2SG.SBJ- go **PREP1 where**
 ‘**Where** are you going?’ (LL5-SE:10)

Haspelmath (1997: 180) states that in many languages indefinite pronouns are identical to interrogative pronouns. In Buwal, interrogatives can function as indefinites giving non-specific free choice readings such ‘whatever’, ‘whoever’, ‘whichever’ and so forth (4.18).

- (4.18) a. *Kan ma a kadāw vemey cemey , a*
 kàn má= á- kā- dāw véméj tséméj ā-
 thing REL= 3SG.SBJ- IPFV- want **what** TOP.CON 3SG.SBJ-
ghweleney .
 γ^wàl –ēnèj
 show -1EXCL.IOBJ
 ‘**Whatever** thing he wants, he shows us.’ (NH1-SN:4.4)
- b. *Ma ŋta ha gamzakw vayay ca , əy nda*
 má= ntā xā gāmzák^w vājáj tsá j- ndā
 REL= take head rooster **who** TOP 3PL.SBJ- go
 ‘**Whoever** won (lit. took the head of the rooster), they go...’ (DP6-SN:3.6)

- c. *ha ata mbəlam vekey a katay*
xá á tā mblàm vékéj á kátáj
 until PREP1 on ethnic.group **which** PREP1 **where**
 ‘...up to whichever ethnic groups **whenever**...’ (BH3-SN:2.8)
- d. *Wan vanay vanay , hejəye əy kada*
wān vánáj vánáj xèdzè -jé j- kǎ- dǎ
 day **how.many how.many** person PL 3PL.SBJ- IPFV- bring
kan
kàn
 thing
 ‘**However** many days, people bring things...’ (HT4-SN:34.4)
- e. *ma anta vangay , a təwse , zen əy zen aza*
mǎ āntǎ vǎngáj á twsé zèn j- zèn āzà
 situation DEF.DET **how** PREP1 there return 3PL.SBJ- return IT
a wata .
á wātǎ
 PREP1 home
 ‘**However** the situation (was), at that time, they returned home from there.’
 (NH8-SN:6.4)

Although a number of interrogative pro-forms replace nouns, they cannot occur with any nominal modifiers (see Table 5.2, Section 5.1.1). They can however be preceded by the associative plural marker *ātā* (4.19) (see Section 4.5.2).

- (4.19) *Ata vemey ? Ata rəgwac ey ɲte .*
ātǎ véméj ātǎ rǧ^wats éj nté
 ASS.PL **what** ASS.PL clothes and shoe
 ‘**What are they?** ‘Clothes and shoes.’ (GE25-SE:16:1-2)

When an interrogative is preceded by the scalar focus particle *káw* ‘even’, the result is a type of indefinite pronoun with a similar meaning to a universal quantifier ‘everything’, ‘everyone’ and so forth (4.20). Haspelmath (1997: 157-158) found this to be quite common cross-linguistically. Frajzyngier reports similar expressions in Hdi (2002: 78)

and Mina (2005: 66) which begin with a form *kwá* (or *kó*). Fulfulde interrogatives preceded by *koo* ‘even’ also have a universal or indefinite meaning (Stennes 1961: 44; Noye 1974: 126).

- (4.20) a. *Kaw vemey* ca , ara gazlavay ma ghwelzetene .
 káw vé méj tsá ārā gāḷāvāj má= ɣ^wāl -zā -ētēnē
 even what TOP COP God REL= show TRANS -3PL.IOBJ
 ‘Everything, it’s God who showed them.’ (C9-SN:138.2)
- b. *Kaw vayay* maghwalza zlam anta .
 káw vájáj mā- ɣ^wāl -zā ḷàm āntā
 even who JUS show TRANS name 3SG.POSS
 ‘Let everyone introduce his name.’ (NH7-SN:3.5)
- c. *Dekey kaw vekey* ege .
 dā -ēkēj káw vékéj =égē
 bring -1SG.IOBJ even which =PL
 ‘Bring me every type.’ (GE37-SE:25)
- d. *Na jam kaw vepey* ete nghe
 ná- dzām káw vépéj á tē nyē
 1EXCL.SBJ- assemble even when PREP1 here DEM.PROX
 ‘We always assemble here.’ (BH1-SN:5.2)
- e. *kaw a katay* , a nalahune ma
 káw á kátáj ā- ná- lā -āx^wnè mā
 even PREP1 where 3SG.SBJ- FUT- do -2PL.IOBJ situation
ma tantan .
 má= tāŋ-tāŋ
 REL= good
 ‘...everywhere, he will do good things for you.’ (NH7-SN:4.8)

Universal quantifiers formed from the interrogation pronouns *vé méj* ‘what’, *vájáj* ‘who’ and *vékéj* ‘which’, can function like any noun as a topic (4.20a), as core arguments of verbal clauses (4.20 b & c) and as a predicate of a verbless clause (4.21a). Unlike plain interrogatives, universal quantifiers may function as the head of a noun phrase and occur

with various noun phrase constituents such as the plural marker (4.20c), possessive pronouns (4.21b) and relative clauses (4.21c). They cannot be modified by a numeral or a quantifier.

(4.21) a. *Ara kaw vekey* .
 ārā káw vékéj
 COP even which
 ‘It’s every type.’ (GE37-SE:23)

b. *Kaw vayay naka a kanda ata tar ŋkwa*
 káw vājáj nākā á- kā- ndā á tā tar nk^{wā}
 even who 1SG.POSS 3SG.SBJ- IPFV- go PREP1 on chore 2SG.POSS
akwaw .
 ák^{wā}w
 NEG.EXIST
 ‘None of my people is going to your working bee.’ (GE37-SE:27)
 (lit. ‘Everyone of mine is not going to your working bee.’)

c. *Kaw vemey ma hwa daza a tambaca* ,
 káw véméj má = x^{wā}- dā -zā á tām̄bācá
 even what REL= 2SG.SBJ- bring TRANS PREP1 today
ghwelzekey .
 y^{wāl} -zā -ēkēj
 show TRANS -1SG.IOBJ
 ‘Everything that you brought today, show me.’ (GE37-SE:35)

4.1.5 Pro-clauses

According to Schachter and Shopen (2007: 32) a common type of pro-clause is the question tag. Buwal has a number of different question tags (see Section 9.3.3). The first of these is the confirmation tag marker *néjé*. This markers occurs clause finally (4.22).

(4.22) *hwa kédene ma neye ?*
 x^{wā}- ká- dā -ēnē mā néjé
 2SG.SBJ- PFV- bring -3SG.IOBJ problem TAG.CONF
 ‘...you caused her problems, didn’t you?’ (C17-SN:4)

There are also two imperative tag question markers, *ménégē* and *máj* or *má*. Both these markers also occur in clause final position (4.23 a & b).

(4.23) a. *mabahba* *aza* *menege* ?
 mā- *bāh* -*bā* *āzā* **ménégē**
 JUS- shelter -BEN COMPL TAG.IMP
 ‘...let him shelter himself first, **can’t he?**’ (TN1-SN:4.10)

 b. *njekey* *ndarey* *ŋ* *zamba* *may* ?
 ndzè -*ēkēj* *ndrèj* *ŋ* *zàm* -*bā* **máj**
 give -1SG.IOBJ sorghum INF eat -BEN TAG.IMP.POL
 ‘...give me sorghum to eat, **won’t you?**’ (C3-SN:47)

4.1.6 Pro-sentences

Schachter and Shopen (2007: 31) define PRO-SENTENCES as words which are ‘used in answering questions, and which are understood as equivalent to affirmative and negative sentences respectively.’ Buwal has a number of different pro-sentences. Firstly, there is the affirmative pro-sentence *ājāw* ‘yes’. The corresponding negative pro-sentence is *ŋyè* ‘no’. The existential negative marker *ák^wāw* (see Section 4.10.2), and the interjection *káj* which is borrowed from Fulfulde, can also function as negative pro-sentences. The use of each of these pro-sentences will be described further in Section 9.3.1.5. These pro-sentences can occur either as a complete utterance (4.24b), or preposed to a clause which confirms or denies the questioned proposition (4.25b).

(4.24) a. *Hwa* *kélem* *ŋ* *ŋteretene* *akwaw* *vaw* ?
 x^wā- ká- *lèm* *ŋ* *ntàr* -*ētēnē* *ák^wāw* *vāw*
 2SG.SBJ- PFV- get INF pay -3PL.IOBJ NEG.EXIST Q
 ‘Didn’t you get to pay them?’

 b. *Ayaw* .
 ājāw
 yes
 ‘Yes.’ (C5-SN:21-22)

(4.25) a. *Hwa kazam uda vaw ?*
 x^wā- k̄ā- zàm wdā vāw
 2SG.SBJ- IPFV- eat food Q
 ‘Are you eating food?’

b. *Ŋghe , sa sa yam .*
 ŋyè s̄ā- s̄ā jàm
 no 1SG.SBJ- drink water
 ‘No, I am drinking water.’

(GE5-SE:8.1-2)

4.2 Determiners

Matthews (1997: 95) defines a DETERMINER as ‘any class of grammatical units characterised by ones that are seen as limiting the potential referent of a noun phrase.’ This class may include articles, demonstratives and possessives. Buwal possessives were covered in Section 4.1.3 and demonstratives will be addressed Section 4.3. Buwal has determiners which cover some of the functions articles have in other languages. Buwal indefinite determiners are described in section 4.2.1. Section 4.2.2 discusses the definite determiner which has the same form as the third person singular possessive pronoun.

4.2.1 Indefinite determiners

INDEFINITE DETERMINERS in Buwal are used to introduce new participants into a discourse. These are listed in (4.26). Similar determiners have been found in other Chadic languages such as Miya (Schuh 1998: 216-221). Schuh refers to them as ‘indefinite referentials’. In Hausa (Newman 2000: 153-154) calls them ‘specific indefinite demonstratives’.

(4.26) Buwal indefinite determiners

<i>wéndé/méndé</i>	‘a certain/another’
<i>vēdjé</i>	‘certain/some/another’
<i>mátákān</i>	‘another’

The indefinite determiner *vēdjé* is the plural of *wéndé*. These determiners may be used to introduce new participants into the discourse (4.27a & 4.28) or contrast with a previously

mentioned participant (4.27a & 4.28). When used with the meaning of ‘another’ they refer to alternates which are not necessarily of the same type.

(4.27) a. *Aya* , *fagwalakw wende* *aka* .
 ājā *fāg^wálák^w* *wéndé* *ákā*
 so **leper** IND.DET.SG EXIST
 ‘So, there was a **certain leper.**’ (TN1-SN:1.1)

b. *Fagwalakw wende* *kámac* *ara* *mbe* *aka* *yam* .
fāg^wálák^w *wéndé* *ká-* *màts* *á* *rā* *mbē* *ákā* *jám*
leper IND.DET.SG PFV- *die* *at side* 3SG EXIST also
 ‘There was also **another leper** who had died in his neighbourhood.’
 (TN1-SN:3.1)

(4.28) *Amba Mazkad ege vedeye* *əy* *wed* *kəda* *ŋ*
 āmbá **mazkad** =égē *vēdjé* *j-* *wēd* *kdā* *ŋ*
 then **Mazkad** =PL IND.DET.PL 3PL.SBJ- *disperse* *towards* PREP2
Gavar , *vedeye* *kəda* *a* *Magaway* , *vedeye* *kəda*
 gāvār *vēdjé* *kdā* *á* *màgāwáj* *vēdjé* *kdā*
Gavar IND.DET.PL *towards* PREP1 *Magaway* IND.DET.PL *towards*
a *Watamgba* , *tewtew* *a* *Buwal* .
 á *wàtāngbá* *téw-téw* á *bwāl*
 PREP1 *Watamgba* *all* PREP1 *Buwal*
 ‘Then **some Mazkad people** dispersed towards the Gavar territory, **others**
 towards Magaway, **others** towards Watamgba, everywhere in the Buwal
 territory.’ (NH10-WN:6.1)

In contrast, the indefinite determiner *mátákān* ‘another’ can only be used in the contrastive sense meaning a different one of the **same** type (4.29). In other words, *wéndé* signals that the referent may be unknown whereas for *mátákān* it is known. *Mátákān* does not have a special plural form but is pluralised with the plural enclitic *égē* (see Section 4.5.1).

- (4.29) *A nda anta ŋ la matakān zeney .*
 ā- ndā āntā ŋ lā mātākān zēnéj
 3SG.SBJ- go 3SG.POSS PREP2 **place** IND.DET again
 ‘She goes to **another place** as well.’ (DP9-SN:1.8)

All of these determiners can be used alone as pronouns. They can be topicalised (4.30a), function as arguments of a verbal clause (4.30 b, c & f), complement of a preposition (4.30b), predicate of a verbless clause (4.30e) and as the head of a noun phrase (4.30 f & g).

- (4.30) a. *Wende ca hwa bam aka .*
 wéndé tsá x^{wā}- bām ákā
 IND.DET.SG TOP 2SG.SBJ- munch EXIST
 ‘There is **another one**, you munch (it).’ (DE9-SN:2.11)
- b. *Wende kadam anta a uley .*
 wéndé ká- dām āntā á wlèj
another PFV- enter 3SG.POSS PREP1 hole
 ‘**Another one** entered into a hole.’ (GE35-SE:4)
- c. *Gazlavay mavalahwaw matakān a tama .*
 gāḷḷāvāj mā- vāl -āx^{wāw} mātākān á tāmā
 God JUS give -2SG.IOBJ IND.DET PREP1 front
 ‘May God give you **another one** in the future.’ (HT1-SN:8.5)
- d. *Velene a wende .*
 vāl -ēnē á wéndé
 give -3SG.IOBJ PREP1 IND.DET.SG
 ‘Give it to another.’ (GE35-SE:8)
- e. *Ara vedeye .*
 ārā vēdjé
 COP IND.DET.PL
 ‘It's **others**.’ (GE35-SE:12)

- f. *Data vedbye anta ege* , *sa*
dā -ātā vēdjé āntā =égē sā-
bring -3PL.DOBJ IND.DET.PL DEF.DET =PL 1SG.SBJ-
ghwelzetene .
ɣ^wāl -zā -ētēnē
show TRANS -3PL.IOBJ
‘Bring **the others**, I will show (them) to them.’ (GE35-SE:20)
- g. *Wende ma sa gare a njuna ca* , *ebe*
wéndé má= sā- grē á ndzwná tsá èbè
IND.DET.SG REL= 1SG.SBJ- see PREP1 yesterday TOP DEM.MED
kwaw .
k^wāw
NEG
‘There was another one that I saw yesterday, but it’s not this one.’
(lit. ‘**Another one** that I saw yesterday, not this one.’) (GE35-SE:22)

Some of the functions of indefinite determiners overlap with the indefinite pronoun *dālā* ‘someone’ with respect to Haspelmath’s functional distinctions of indefinites given in Table 4.2 (Section 4.1.2) since they can be used in specific-unknown to speaker contexts (4.30d) as well as non-specific irrealis contexts (4.30c). Where they differ is that indefinite determiners can have referents that are both specific and known (4.26 b, f & g). They cannot express free choice.

4.2.2 Definite determiner

Buwal has the definite determiner *āntā* which has the same form as the third person singular possessive pronoun (see Section 4.1.3). Givon (1978: 296) defines DEFINITE as ‘assumed by the speaker to be uniquely identifiable to the hearer’. The use of a possessive pronoun as an identifiability marker has been observed in a number of languages including other Afro-asiatic languages such as Kambaata (Treis 2008: 353-356), Amharic (Leslau 1995: 50: 156) and the nearby Central Chadic languages of Daba and Mazagway Hidi (Giger 2010: personal communication). In Bata also, Boyd (2007: 65) notes that what he calls the ‘general demonstrative’ is identical to the third person singular masculine possessive pronoun. A marker similar to the Buwal definite determiner was

found by Frajzyngier and Johnston (2005: 328-334) for Mina. They called it the ‘deduced reference marker’. They state that it ‘...instructs the listener to identify the referent through a process of deduction using knowledge from a variety of sources, including the listener’s cognitive system, the speech environment and previous discourse.’ This marker has the form *tá* (*táj* word finally) which is very similar to the 3rd person possessive pronoun in Buwal. However in Mina the 3rd person possessive pronoun is completely different, being *ηgəη*. Interestingly, the rest of the Mina possessive pronouns (Frajzyngier and Johnston 2005: 49) are cognate with the Buwal set. Therefore it is likely that the third person possessive pronoun in Mina is a recent innovation and the deduced reference marker there may also have been derived from a possessive.

Fraurud (2001) discussed the phenomenon of possessive pronouns being used like definite markers in Uralic languages. She suggests that rather than thinking of possessives as grammaticalising to become definite articles (which she argues is a rather Eurocentric viewpoint), it would be better to think of a different type of possessive which can be used to express some of the semantic/pragmatic features which definite articles express in other languages such as English. Nikolaeva (2003), also in relation to Uralic languages, speaks of one of the main functions of the uses of possessive affixes as being to express identifiability. A referent may be identifiable because it has been previously mentioned in the discourse or based on the situational or larger context. Interestingly, although other possessive affixes may be used in Uralic with a different meaning, Nikolaeva states that identifiability can only be expressed by means of the 3rd person singular possessive affix. This notion of identifiability also seems to fit well with how the definite determiner is used in Buwal.

In functional terms, the definite determiner *āntā* in Buwal lines up fairly well with the characteristics of Fraurud’s (2001: 261) second type of possessive. It is used for (i) direct anaphor, (ii) associative anaphor, (iii) immediate situation, (iv) larger situation and (v) discourse deixis.

- (i) Direct anaphoric use – referent previously mentioned.

- (4.31) *Hwa baw taf ma kəɗá uza , taf anta a*
 x^wā- bāw t̄af má kɗē wzā t̄af āntā ā-
 2SG.SBJ- turn **path** REL= towards down **path** DEF.DET 3SG.SBJ-
baw , a nda ta ŋ lekwal .
 bāw ā- ndā tá ŋ lèk^wál
 turn 3SG.SBJ- go through PREP2 school
 ‘You turn on the **path** which goes down, **the path** turns, it goes through
 the school.’ (PP2-SN:3.6)

(ii) Associative anaphoric use – referent associated with another previously mentioned.

- (4.32) *Mala ghwaf aka . Mada hwa kája dala ,*
 mālā y^wáf ákā mādā x^wā- ká- jā dālā
 GEN **killing.sickness** EXIST if 2SG.SBJ- PFV- kill someone
hwa zam menjevek anta .
 x^wā- zàm mēndzēvēk āntā
 2SG.SBJ- eat **medicine** DEF.DET
 ‘There is one (remedy) for the **sickness caused by killing someone**. If you
 have killed someone, you eat **this remedy**.’ (DE9-SN:1.8-1.9)

(iii) Immediate situation use – referent located in the situational context.

- (4.33) *Ma ŋga teked anta vayay ?*
 mā- ŋgā tēkēd āntā vājáj
 REL= break **calabash** DEF.DET who
 ‘Who broke **the calabash**?’ (LL28-SE:2)

(iv) Larger situation use – referent identifiable from larger situational context such as time or place. In the example below, the anchor for ‘times past’ is the present.

(4. 34) A *nawna anta benjer a keretene*
 á **náwná** **ántā** béndzēr ā- kǎ- rà -ētēnē
 PREP1 **times.past** DEF.DET squirrel 3SG.SBJ- IPFV- dig -3PL.IOBJ
ŋgəzleŋ weləye mazay ege aza .
 ŋgɬèŋ wālā -jé mǎzāj =égē āzá
 peanut woman -PL Mazay =PL COMPL
 ‘In **the olden times**, the squirrel was digging up the Mazay womens’
 peanuts.’ (NF2-SN:1.1)

(v) Discourse deixis, abstract object reference – anchor may be an event, proposition etc.

(4. 35) A *dəwze anta əy zlepetene , əy gwarzam .*
 á **dwzé** **ántā** j- ɬǎp -ētēnē j- g^wǎrzām
 PREP1 **after** DEF.DET 3PL.SBJ- speak -3PL.IOBJ 3PL.SBJ- get.up
 ‘**Afterwards**, they spoke to them, they stood up.’ (NH7-SN:3.4)

The definite determiner differs from indefinite determiners in that it cannot function pronominally but always modifies a noun. Furthermore, it is distinguished from the third person singular possessive pronoun by two distinctive distributional properties. Firstly it can co-occur with another possessive pronoun (4.36a) including the third person singular (4.36b). It can also be used with independent pronouns (4.36c).

(4.36) a. *Ca hwa nda , hwa ja aza kǎŋgǎŋ ŋkwa anta ara*
 tsá x^wǎ- ndā x^wǎ- dzā āzá kǎŋgǎŋ nk^wǎ **ántā** ārá
 TOP 2SG.SBJ- come 2SG.SBJ- hit SRC **drum** 2SG.POSS DEF.DET SIM
ca vaŋgay ?
 tsá váŋgáj
 TOP how
 ‘How can you come here while playing your drum?’ (NF4-SN: 2.10)
 (lit. ‘So you come, you hit **the drum of yours** along the way, how?)

b. *Ujek anta anta , a kaghwaram .*
 wjĕk **ántā** **ántā** á- kǎ- y^wǎràŋm
hut 3SG.POSS DEF.DET 3SG.SBJ- IPFV- collapse
 ‘**The hut of his**, it is colapsing.’ (GE67-SE:5.1)

- c. *Sey ara bay madakal ma mgba anta*
séj á rā bāy má= dākāl má= ŋmgbà āntā
 except PREP1 side chief REL= big REL= up.there DEF.DET
ende , heje teh ara mbe anta ende .
éndē xèjé- tēh á rā mbē āntā éndē
 like.this 1INCL.SBJ- wait PREP1 side 3SG DEF.DET like.this
 ‘Only next to the big chief, on high like this, we wait next to **him** like this.’
 (C5-SN:86.2)

Like nominal demonstratives (4.3.1) the definite determiner may follow temporal expressions (4.37a), other demonstratives (4.37b) and even indefinite determiners (4.37c).

- (4.37) a. *Ama na anta ca , ma kasan ŋ zam ŋhwəye*
àmá nà āntā tsá má= kā- sàñ íj zàm nx^wā -jé
 but(ful.) **now** DEF.DET TOP REL= IPFV- know INF eat goat -PL
zeney vayay ?
zēnéj vājáj
 again who
 ‘But **now**, who knows how to look after goats anymore?’
 (‘Now’ was recently mentioned by the speaker.) (C15-SN:38)
- b. *a pes wese , a pes wese anta əy*
á pès wēsé á pès wēsé āntā j-
 PREP1 day DEM.DIST PREP1 **day** DEM.DIST DEF.DET 3PL.SBJ-
kádaza ara .
ká- dā -zā ārá
 PFV- bring TRANS SIM
 ‘...on that day, on **that day**, they brought him along.’ (C10-SN:22)
- c. *Daza wende anta , sa sarza .*
dā -zā wéndé āntā sa- sār -zā
 bring TRANS IND.DET.SG DEF.DET 1SG.SBJ- look.at TRANS
 ‘Bring **the other**, I (will) look at it.’ (GE35-SE:19)

This last example, plus the fact that nominal demonstratives can also modify indefinite identifiers (see example (4.50), Section 4.3.1) gives an interesting insight into the Buwal

conception of indefiniteness and definiteness. On their own, indefinite determiners express referentiality. The referent is assumed to exist ‘in a particular universe of discourse’ (Givón 1978: 293) but also that it is not identifiable to the hearer (see Section 4.2.1). The definite determiner, on the other hand, expresses both referentiality and definiteness in that the referent is assumed to be identifiable to the hearer. When the two are combined however as in (4.47c) above the meaning is what Givón (1978: 296) refers to as ‘non-definite’ in that while the referent is assumed to exist, the identity is not an essential part of the message. One Buwal informant described the meaning as knowing the thing but having forgotten its name.

The fact that the form of the definite determiner and the third person singular possessive pronoun are identical can lead to ambiguity in contexts that allow either interpretation. For example, the sentence in (4.38), because ‘woman’ and ‘wife’ are the same lexeme in Buwal, it is not clear whether *wālā āntā* means ‘the woman’ or ‘his wife’.

- (4.38) *Fəlakw* , *heje wese a dene wala anta*
 flàk^w xèdzè wēsé ā- dā –ēnē **wālā āntā**
 snatch person DEM.DIST 3SG.SBJ- bring -3SG.IOBJ **woman DEF.DET**
aza pa ŋ bay .
 āzá pá íj bāy
 COMPL at.a.level PREP2 chief
 ‘Snatching her, that person brought **the woman** (or **his wife**) right to the chief.’
 (TN1-SN:6.5)

4.3 Demonstratives

Demonstratives encode relationships of DEIXIS. According to Diessel (1999: 35), deictic expressions ‘are linguistic elements whose interpretation makes crucial reference to some aspect of the speech situation.’ They ‘point’ to something. Demonstratives have a deictic function in a spatial sense. Matthews (1997: 91) defines a DEMONSTRATIVE as ‘a word whose basic role is to locate a referent in relation to a speaker, an addressee or some other person.’ Buwal has four different types of demonstratives: nominal demonstratives (section 4.3.1), locative demonstratives (section 4.3.2), demonstrative identifiers (section 4.3.3) and similative demonstratives (4.3.4). These terms will be defined and described in

more detail in the sections which follow. However, their forms are summarised for comparison in Table 4.5 below.

Table 4.5: Buwal demonstratives

Distance	Nominal	Locative	Identifier	Similitive
Proximal	<i>nyā/nyē</i>	<i>tē</i>	<i>tsák^{wá}</i>	<i>éndē</i>
Medial	<i>èbè</i>	<i>ngē</i>	<i>tsáw</i>	<i>ándālà</i>
Distal - visible	<i>wēsé</i>	<i>twsé</i>	<i>tsáw</i>	<i>ándwsé</i>
Distal - not visible	<i>wēsé</i>	<i>twsé</i>	-	<i>ándwsé</i>
Up	-	-	<i>ngmbà</i>	-
Down	-	-	<i>wzà</i>	-

Buwal has a largely person-oriented demonstrative system. PROXIMAL demonstratives refer to locations near the speaker. MEDIAL demonstratives refer to locations equidistant from both the speaker and the addressee, while DISTAL demonstratives can refer to locations either close to the addressee (and therefore visible) or far away and not visible. Note that the medial and distal (visible) demonstrative identifiers have the same form. However, there is no demonstrative identifier for locations which are not visible.

Table 4.5 shows that some forms are related. For example one language informant reported that the proximal and distal locative demonstratives, *tē* ‘here’ and *twsé* ‘there’, are contractions of *á tā ngē* ‘on this one’ and *á tā wēsé* ‘on that one’ respectively. The fact that *tē* ‘here’, while often followed by the proximal nominal demonstrative *ngē* ‘this’, can now occur independently is evidence that the form has become lexicalised (4.39a). That the form *twsé* ‘there’ is also now lexicalised is demonstrated by the fact that it can be followed by another distal nominal demonstrative *wēsé* ‘that’ (4.39b).

- (4. 39) a. *ŋhwəye vedəye a wata juraw ete a*
 nx^{wā} -jé vēdjé á wātā dzwrāw á tē á
 goat -PL IND.DET.PL PREP1 compound sub-chief PREP1 **here** PREP1
Zukwadfājw aka .
 zk^{wādfāj}^w ákā
 Zukodfong EXIST
 ‘There are some goats at the sub-chief’s compound, **here** in Zukodfong.’

(NH8-SN:3.5)

- b. A *təwse wese* , *uzəye əy kasan ŋ zam*
 á *twsé wésé* *wzjé j- kā- sàñ í zàm*
 PREP1 **there** DEM.DIST children -3PL.SBJ IPFV- know INF eat
ŋhwəye kwaw .
 nx^wā -jé k^wāw
 goat -PL NEG
 ‘**There in that place**, children don’t know how to watch over (lit. eat)
 goats.’ (GE36-SE:11)

The similative demonstratives are also related to the nominal demonstratives. The same informant stated that *éndē* ‘like this (PROX)’ is derived from *á ndā nyē* ‘it goes this one’, *ándālā* ‘like this (MED)’ from *ā ndā á lā nyā* ‘it goes to this place’ and *ándwsé* ‘like that (DIST)’ from *ā ndā wésé* ‘it goes that one’. These forms are historically best viewed as lexicalised expressions involving tonal changes as well as a certain amount of contraction (see Sections 3.1.1.4 and 3.3.1.3). Furthermore, whilst *éndē* ‘like this (PROX)’ and *ándālā* ‘like this (MED)’ are often followed by the proximal nominal demonstratives *nyē* ‘this’ and *nyā* ‘this’ respectively, they can also occur alone (4.40).

- (4. 40) a. A *nja ende* .
 ā- *ndzā éndē*
 3SG.SBJ- be **like.this.PROX**
 ‘It is **like this**.’ (NH3-SN:8.4)
- b. *Ndərey naka mbəy andala* .
 ndrèj *nākā mbj ándālā*
 sorghum 1SG.POSS 3SG.STAT **like.this.MED**
 ‘My sorghum is **like this**.’ (GE36-SE:42)

4.3.1 Nominal demonstratives

According to Diessel (1999:60) most languages use the same form as independent demonstrative pronouns and demonstrative determiners. This is the case for Buwal. Diessel refers to such forms as ‘adnominal demonstrative pronouns’. I have chosen,

however to follow Dixon's (2003: 62) terminology of NOMINAL demonstrative as it is simpler. This section covers the (i) meaning, (ii) distribution and (iii) pragmatic functions of nominal demonstratives in Buwal.

(i) Meaning

Buwal has three nominal demonstratives, proximal, medial and distal (see Table 4.5). The examples in (4.41) below contrast the meaning of these three different types. Proximal refers to locations close to the speaker (4.41a), medial, locations a short distance from both speaker and addressee (4.41b) and distal, locations close to the addressee (4.41c).

- (4.41) a. *Wata* *ŋgha* , *a* *Haman* .
 wātā nyā á xaman
 compound DEM.PROX PREP1 Haman
 ‘**This** compound is Haman's.’ (GE36-SE:32)
 (Speaker and addressee are both **in** the compound.)
- b. *Wata* *ebe* , *a* *Haman* .
 wātā èbè á xaman
 compound DEM.MED PREP1 Haman
 ‘**This** compound is Haman's.’ (GE36-SE:30)
 (The compound is at some distance from both the speaker and the hearer.)
- c. *Wata* *wese* , *a* *Haman* .
 wātā wēsé á xaman
 compound DEM.DIST PREP1 Haman
 ‘**That** compound is Haman's.’ (GE36-SE:31)
 (The speaker is far, the addressee is close to the compound.)

The distal demonstrative *wēsé* ‘that’ can also be used to express contrast (4.42a) or refer to something which is not visible and is a long distance away (4.42b).

(4.42) a. *Njabá ata lanja wese . Hwa daw η*
 ndzā -bā á tā lā ndzá wēsé x^{wā}- daw íj
 sit BEN PREP1 on place sit DEM.DIST 2SG.SBJ- want INF
nja ata ebe ηghe kwaw .
 ndzā á tā èbè nyē k^{wā}w
 sit PREP1 on DEM.MED DEM.PROX NEG
 ‘Sit on **that** chair. You don’t want to sit on this one.’ (GE36-SE:1.1-2)

b. *Hwa kanda kɔdā uza cemey ,*
 x^{wā}- kā- ndā kɔdā wzà tséméj
 2SG.SBJ- IPFV- go towards down.there TOP.CON
gamata ata ηhwəye ey ηtəməye ege
 gām -ātā ātā nx^{wā} -jé éj ntmēk -jé =égē
 drive.away -3PL.DOBJ ASS.PL goat -PL and sheep -PL =PL
ma kazam η la wese .
 má= kā- zàm íj lā wēsé
 REL= IPFV- eat PREP2 field DEM.DIST
 ‘(When) you are going down there, drive away the goats and the sheep that are eating in **that** field.’ (GE25-SE:1)

The proximal nominal demonstrative has two forms, *nyā* and *nyē*. It is difficult to determine whether there is a genuine meaning difference between them. Certain language informants told me that with *nyā* you can be holding the object or pointing to it but with *nyē* you can only point. However, both forms can be used when handing something to someone (4.43 a & b) which seems to contradict this idea.

(4.43) a. *Ŋgha , cabá η pakam .*
nyā tsā -bā íj pákàm
 DEM.PROX put BEN PREP2 mouth
 ‘**Here**, put it in your mouth.’ (DP10-SN:2.9)
 (When handing someone a doughnut.)

- b. *ŋghe eze weləye Mazay ege*
nyē ézē wālā -jé mǎzāj =égē
 DEM.PROX therefore woman -PL Mazay =PL
 ‘Here therefore, Mazay women.’ (NF2-SN:2.14)
 (When offering a squirrel which had been caught.)

The distribution of these two forms appears to be partly influenced by phonological concerns, *nyā* tending to follow unpalatalised words and *nyē* palatalised (see Section 2.3.1 for the discussion on palatalisation). In the corpus out of 288 instances of *nyā*, only 32 occurred following palatalised words. For *nyē* however, the contrast is even more striking with only one example of it following an unpalatalised word out of 208 instances.

(ii) Distribution

As well as modifying nouns (4.41), Buwal nominal demonstratives can occur alone, functioning as pronouns (4.44) and as the heads of noun phrases (4.45). They can be modified by all noun phrase elements apart from other nouns or possessive pronouns. A possessor needs to be preceded by a preposition to be able to modify a demonstrative pronoun (4.46).

- (4.44) a. *Tewene yam wese a ŋgha* .
tèw -ēnè jàm wēsé á nyā
 carry -3SG.IOBJ water DEM.DIST PREP1 DEM.PROX
 ‘Carry that water to **this person** (lit. **this one**).’ (GE36-SE:19)
 (The water is near the addressee, the recipient is near the speaker.)

- b. *Sa dāw ebe kwaw* .
sā- dāw èbè k^wáw
 1SG.SBJ- want DEM.MED NEG
 ‘I don’t want **this one**.’ (LL13-SE:39)
 (Indicating the thing not wanted.)

- c. *Tewene yam ŋgha a wese* .
tèw -ēnē jàm nyā á wēsé
 carry -3SG.IOBJ water DEM.PROX PREP1 DEM.DIST
 ‘Carry this water to **that person** (lit. **that one**).’ (GE36-SE:20)
 (The water is near the speaker, the recipient is near the addressee.)

- (4.45) a. *Ŋgha ege gbak* .
nyā =égē gbák
 DEM.PROX =PL two
 ‘There are two of **these ones**.’ (GE36-SE:27)
 (lit. ‘**These ones** are two.’)
- b. *Ebe ege ca , əy kededè mavaw a mna* .
èbè =égē tsá j- kã- dēdē māvāw á mnā
 DEM.MED =PL TOP 3PL.SBJ- IPFV- pour.into beer PREP1 inside
 ‘**These ones**, they pour beer inside.’ (DE2-SN:13.2)
- c. *Wese ege mahkad* .
wēsé =égē mākád
 DEM.DIST =PL three
 ‘There are three of **those ones**.’ (GE36-SE:28)
 (lit. ‘**Those ones** are three.’)
- (4.46) a. *ŋghe a mana*
nyē á mānā
 DEM.PROX PREP1 mother.1POSS
 ‘**this one** of my mother's’ (GE36-SE:59)
- b. *ebe a mana*
èbè á mānā
 DEM.MED PREP1 mother.1POSS
 ‘**this one** of my mother's’ (GE36-SE:60)
- c. *wese a naka*
wēsé á nākā
 DEM.DIST PREP1 1SG.POSS
 ‘**that one** of mine’ (GE36-SE:57)

The proximal and distal demonstratives, while they can function as pronouns, more frequently modify other nouns. This fits with Himmelmann’s hypothesis that the pronominal use of demonstratives is in general less frequent than the adnominal (or adjectival) use (Himmelmann 1996: 218). The medial demonstrative *èbè*, however, has some unusual characteristics. It functions much more frequently as a pronoun rather than

a modifier. It can only refer to things, whereas the proximal and distal demonstratives can also refer to a place (4.47) or even a time (4.48).

- (4.47) a. *Əy njew aza a wata bay ata la ŋgha .*
 j- ndzèw āzà á wātā bāy á tā lā nyā
 3PL.SBJ- drag IT PREP1 home chief PREP1 on **place** DEM.PROX
 ‘They dragged him away to the chief’s home in **this place**.’ (NH8-SN:8.7)
- b. *ketegəre kélem kan ata la wese .*
 kètègré ká- lèm kàn á tā lā wēsé
 perhaps PFV- get thing PREP1 on **place** DEM.DIST
 ‘Perhaps she had got something from **that place**.’ (DE11-SN:1.2)
- (4.48) a. *na ŋgha menjevek ege a kefətek anta*
 nà nyā mēndzēvēk =égē ā- ká- ftek āntā
now DEM.MED medicine =PL 3SG.SBJ- IPFV- lose 3SG.POSS
 ‘...**now** remedies are being lost.’ (DE9-SN:4.5)
- b. *A va wese ata lambaw ,*
 á vā wēsé á tā lá- mbàw
 PREP1 **year** DEM.DIS PREP1 on NOM.ACT- give.birth
 ‘In **that year** of the birth...’ (NH6-SN:3.1)

Certain nominal demonstratives can co-occur. The proximal can be followed by the distal (4.49a) and the medial by the proximal (4.49b) or the distal (4.49c). The proximal and distal nominal demonstratives can also modify other types of demonstratives. Examples of this are given in relevant sections.

- (4.49) a. *Ujek ŋgha wese , sa kája a mbe yam ,*
 wjĕk nyā wēsé sa- ká- dzā á mbē jám
 hut DEM.PROX DEM.DIST 1SG.SBJ- PFV- hit PREP1 3SG also
 ‘**This** hut, I rooved (lit. hit) it with it (the money) also...’ (C3-SN:13)
- b. *Ebe ŋghe mawal naka kwaw .*
 èbè nyē māwàl nākā k^wāw
 DEM.MED DEM.PROX husband 1SG.POSS NEG
 ‘**This one** is not my husband.’ (HT7-SN:1.10)

- c. *Ebe wese* , əy mbazaw .
 èbè wēsé j- mbàz -āw
 DEM.MED DEM.DIST 3PL.SBJ- blow -3SG.DOBJ
 ‘That one, they blow it.’ (DE10-SN:3.3)

Nominal demonstratives, like the definite determiner (see Section 4.2.2) may also modify indefinite determiners (4.50).

- (4.50) *Benjer a dawza gwambakw wende wese ma*
 béndzēr ā- dāw -zā g^wāmbāk^w wéndé wēsé má =
 squirrel 3SG.SBJ- ask TRANS toad IND.DET.SG DEM.DIS REL=
letene vemey ?
 lā -ētēnē vemej
 do -3PL.IOBJ what
 ‘The squirrel asked **that certain** toad, what happened to them?’ (NF6-WN:4.4)

(iii) Pragmatic Functions

Buwal nominal demonstratives serve a number of pragmatic functions. For example, a very common use for the distal nominal demonstrative *wēsé* ‘that’ is as a previous reference marker. This could also be described as an ANAPHORIC use, where the demonstrative is co-referential with a noun phrase which has been already mentioned in the discourse (Diessel 1999: 95). It may occur with another noun (4.51a) or alone as a noun phrase in its own right (4.51b). This demonstrative can also be used for what Himmelmann (1996: 230) calls RECOGNITIONAL USE, where the referent is identified via shared knowledge only (4.51c).

(4.51) a. *Ya əy ya hejəye ma kampam bay ege ...*
jā j- jā xèdzè -jé má= kā- mpàm bāy =égē
 call 3PL.SBJ- call person -PL REL= IPFV- look.for chiefdom =PL

Hejəye ma mpam bay ege wese , əy
xèdzè -jé má= mpàm bāj =égē wēsé j-
 person -PL REL= look.for chiefdom =PL DEM.DIS 3PL.SBJ-
ghwalza ha tata .

ɣ^wəl -zā xā tātá
 show TRANS head 3PL.POSS

‘They called the people who were looking for the chiefdom... **Those people who looked for the chiefdom** introduced themselves.’

(NH7-SN:3.1&10)

b. *Sey mavaw , mavaw ca wese ŋkədəh .*
séj mávāw mávāw tsá wēsé nkďēx

except beer beer TOP DEM.DIS crime

‘If it wasn’t for beer, beer, **that one** (brings) crime.’

(DE5-SN:1.11)

c. *Mba naka wese ca , sey a*
mbà nākā wēsé tsá séj á-

child 1SG.POSS DEM.DIST TOP except 3SG.SBJ-

kembelene ma ende .

kā- mbāl -ēnē mā éndē

IPFV- hold -3SG.IOBJ mouth like.this.PROX

‘**That child of mine**, it is only hurting him (lit. holding the mouth for him) like this.’

(C12-SN:14)

(The child has not been previously mentioned in the discourse but both the speaker and the addressee are aware of his existence.)

The proximal (4.52) and medial (4.53) nominal demonstratives can also be used anaphorically although this is not as common.

(4.52) *Mazay a mayba anta aza mahkad' . Kan*
 māzāj ā- māj -bā āntā āzá māxkád kàn
 Mazay 3SG.SBJ- choose BEN 3SG.POSS COMPL three **thing**
me tewtew ngħa, a veletene η hejəye
 má= téw-téw nyā ā- vāl -ētēnē ń xèdzè -jé
 REL= all DEM.PROX 3SG.SBJ- give -3PL.IOBJ PREP2 person -PL
ma dā għam ege .
 má= dā yàm =égē
 REL= draw war =PL
 ‘The Mazay chooses first three (animals). **All these things**, he gives to the soldiers.’
 (NH11-SN:3.4)

(4.53) *Yaw , mada uzəye mawal ege ca , əy*
 jàw màdā wzjé māvāl =égē tsá j-
 so if children man =PL TOP 3PL.SBJ-
nabadəhwaw ca vəram , sa ya , ebe
 ná- bàd -āx^wāw tsá vrām sā- jā èbè
 FUT- flatter -2SG.DOBJ TOP many 1SG.SBJ- say DEM.MED
ngħe a kandaha , ebe ngħe a
 nyē á- kā- ndā -xā èbè nyē á-
 DEM.PROX 3SG.SBJ- IPFV- go VNT DEM.MED DEM.PROX 3SG.SBJ-
kandaha .
 kā- ndā -xā
 IPFV- go VNT
 ‘So, if many young men will flatter you, I say, **this one** is coming, **this one** is coming.’
 (HT1-SN:7.1)

All three nominal demonstratives may also be used as DISCOURSE DEICTICS (4.54). Diessel (1999: 101) states that discourse deictic demonstratives ‘focus the hearer’s attention on aspects of meaning, expressed by a clause, a sentence, a paragraph, or an entire story.’ Discourse deictics can be both ANAPHORIC, referring to the previous discourse (4.54 b & c), and CATAPHORIC, referring to the discourse which follows (4.54a).

- (4.54) a. *ŋgha* , *heje* *ndaha* *ete* .
nyā *xèdzé* *ndā* -*xā* *á* *tē*
 DEM.PROX 1INCL.SBJ go -VNT.DIST PREP1 here
 ‘In **this way**, we came here.’ (NH5-SN:2.1)
 (Goes on to explain how the Buwal came to live on the mountain.)
- b. *Sa* *sanaba* *ca* *pa* *ata* *ebe* .
sā- *sàn* -*ā* -*bā* *tsá* *pá* *á* *tā* *èbè*
 1SG.SBJ- know -VNT.PROX BEN TOP at.a.level PREP1 on DEM.MED
 ‘(What) I know is at **this level**.’ (NF2-SN:6.1)
 (Referring to the portion of history just recounted.)
- c. *Wese* *cemey* , *mawal* *ŋkwa* *a* *nasasam* *ata*
wēsé *tséméj* *màwàl* *nk^wā* *ā-* *ná-* *sàsàm* *á* *tā*
 DEM.DIS TOP husband 2SG.POSS 3SG.SBJ- FUT- rejoice PREP1 on
hwa .
x^wā
 2SG
 ‘In **that way**, your husband will rejoice over you.’ (HT1-SN:5.3)
 (After describing how to make a husband happy.)

4.3.2 Locative demonstratives

LOCATIVE DEMONSTRATIVES are equivalent to what Diessel (1999: 74) calls ‘demonstrative adverbs’. He states they are ‘primarily used to indicate the location of the event or situation that is expressed by a co-occurring verb’. In Buwal locative demonstratives are always preceded by the preposition *á* ‘at’ (see Section 4.8.1). This use of a preposition is not uncommon cross-linguistically according to Dixon (2003: 70). Buwal locative demonstratives refer to a locative noun (see Section 3.1.2.3) rather than a prepositional phrase expressing a location. As they are not adverbs, they will not be referred to as such. This section discusses the (i) meaning, (ii) distribution and (iii) pragmatic functions of Buwal locative demonstratives.

(i) Meaning

As shown in Table 4.5, Buwal has three locative demonstratives, proximal, medial and distal. The proximal locative demonstrative *tē* ‘here’ refers to the place where the speaker

currently is at the time of speech (4.55a). This may refer to a large scale location such as a country or a more locally defined area such as a neighbourhood (4.55b) right down to a specific location within a room. The medial locative demonstrative *ɲgē* ‘over there’ refers to a place that is a bit further away from both speaker and hearer (4.55c). If it cannot be seen, the name of the place must be specified or the direction it is in be pointed to (4.55d). Finally the distal locative demonstrative *twsé* ‘there’ can either refer to a place near the addressee (4.55e) or a place a long distance away which is not visible (4.55f).

- (4.55) a. *Njefza mcar kəda ete ma » a ya .*
 ndzèf -zā mtsàr kdā á tē má ā- jā
 smell TRANS nose towards PREP1 here TAG.HORT 3SG.SBJ- say
 ‘“Smell (the nose) towards **here**, won't you?” he said.’ (NF3-SN:2.7)
- b. *Hagda anta kánda a Buwal ete*
 hagda āntā ká- ndā á bwāl á tē
 Hagda DEF.DET PFV- come PREP1 Buwal PREP1 here
 ‘This Hagda has come to Buwal **here**...’ (NH14-SN:3.1)
- c. *Aya , ca nda ɲ ɲtaba lanja enge .*
 ājā tsá ndā ɲ ntā -bā lā ndzá á ɲgē
 so TOP go INF take BEN place sit PREP1 over.there
 ‘So, go and take a seat **over there**.’ (C11-SN:32)
- d. *əy la sat enge a Watamgba*
 j- lā sāt á ɲgē á wātāmbá
 3PL.SBJ- do up.to PREP1 over.there PREP1 Watamgba
enge .
 á ɲgē
 PREP1 over.there
 ‘...they did (it) up to **over there** at Watamgba **over there**.’ (C18-SN:99)
- e. *Ujek anta a təwse .*
 wjèk āntā á twsé
 hut 3SG.POSS PREP1 there
 ‘His house is **there**.’ (GE36-SE:7)
 (Where the addressee is.)

- f. *kaw sa a tɔwse akwaw ca , kághwadáta*
káw sá á twsé ák^wāw tsá ká- y^wəd -ātā
 even 1SG.STAT **PREP1 there** NEG.EXIST TOP PFV- anger -3PL.DOBJ
aza yam.
āzá jám
 COMPL also
 ‘Even though I wasn’t **there**, he angered them also.’ (NH3-SN:6.14)

(ii) Distribution

Buwal locative demonstratives can function adverbially (4.55 a & d; 4.56 a, b, d & e), as predicate of a verbless clause (4.55 e & f; 4.56c), or as noun modifiers (4.55 b & c).

Locative demonstratives can be followed by nominal demonstratives. The proximal and medial locative demonstratives, *tē* ‘here’ (4.56 a & b) and *ɲgē* ‘over there’ (4.56 c & d) can be followed by both the proximal and distal nominal demonstratives. The distal locative demonstrative *twsé* ‘there’ however, can only co-occur with the distal nominal demonstrative (4.56e).

- (4. 56) a. *Ete ɲghe , hwa gwarzam aka ete*
á tē nyē x^wā- g^wərzàm áká á tē
PREP1 here DEM.PROX 2SG.SBJ- get.up ACC PREP1 here
ɲghe .
nyē
DEM.PROX
 ‘**Right here**, you leave (lit. get up) from **right here**.’ (PP2-SN:1.1)
- b. *Ete wese , mamaw a wata ɲkwa .*
á tē wēsé màmàw á wātā nk^wā
PREP1 here DEM.DIST 1DUAL.STAT PREP1 home 2SG.POSS
 ‘**Right here**, we two are at your home.’ (GE36-SE:4)
- c. *Muta ca enge ɲghe .*
mwtá tsá á ɲgē nyē
car TOP PREP1 over.there DEM.PROX
 ‘The car is **right over there**.’ (LL6-SE:30)

- d. *Enge* *ŋgha* *wese* , *hejəye* əy
 á *ŋgē* *nyā* *wēsé* xèdzè -jé j-
 PREP1 **over.there** DEM.PROX DEM.DIST person -PL 3PL.SBJ-
kasan *ŋ* *ɓam* *ŋgəzlej* *kwaw* .
 k̄a- s̄an ɲ̄ ɓ̄am ɲ̄gɓ̄èɲ̄ k̄w̄aw
 IPFV- know INF crunch peanut NEG
 ‘**Over there in that place**, people don’t know how to munch peanuts.’
 (GE36-SE:10)
- e. *A* *təwse wese* , *uzəye* əy *kasan* *ŋ* *zam*
 á *twsé* *wēsé* wɓzjé j- k̄a- s̄an ɲ̄ z̄am
 PREP1 **there** DEM.DIST children -3PL.SBJ IPFV- know INF eat
ŋhwəye *kwaw* .
 nx̄w̄ā -jé k̄w̄aw
 goat -PL NEG
 ‘**There in that place**, children don’t know how to watch over goats.’
 (GE36-SE:11)

(iii) Pragmatic functions

The proximal locative demonstrative *tē* ‘here’ and *twsé* ‘there’ can have a discourse deictic function. The proximal refers to the current discourse as a whole (4.57a). The distal locative demonstrative *twsé* ‘there’ is also often used with a temporal meaning of ‘at that time’ (4.57b) referring back to the events reported earlier in the discourse.

- (4.57) a. *Labara anta ete* *ŋghe* *ca* , *a* *ŋgaya*
 làbārā āntā á *tē* nyē tsá ā- ɲ̄gājā
 story DEF.DET **PROX** **here** DEM.PROX TOP 3SG.SBJ- saying
 ‘**This** story (lit. the story **here**) is saying...’ (HT4-SN:10.2)
- b. *A* *təwse a* *walha* *beŋ* .
 á *twsé* ā- w̄al -x̄ā b̄eŋ
 PREP1 **there** 3SG.SBJ- leave.early -VNT.DIST early.morning
 ‘**At that time** (lit. **there**), he left early in the morning.’ (NH8-SN:8.6)

4.3.3 Demonstrative identifiers

Diessel (1999: 79) defines DEMONSTRATIVE IDENTIFIERS as those demonstratives which occur in copular or non-verbal clauses. Buwal has distinct forms which occur in these contexts as shown in Table 4.5. This section describes the (i) meaning, (ii) distribution and (iii) pragmatic functions of demonstrative identifiers.

(i) Meaning

Unlike nominal and locative demonstratives, there are only two demonstrative identifiers expressing different gradations of distance, the proximal *tsák^{wá}* ‘here’ meaning close to the speaker (4.58a), and the medial *tsáw* ‘there’ meaning further from the speaker (4.58b), either close to the addressee or not. There is no distal demonstrative identifier as the referent must be visible.

- (4.58) a. *ŋgezle mbəy cakwa* .
 ɲgɛ́ʒɛ mbɿ tsák^{wá}
 knife 3SG.STAT **here**
 ‘The knife is **here**.’ (LL6-SE:15)
- b. *Ujek caw* .
 wjɛk tsáw
 hut **there**
 ‘The hut is **there**.’ (GE13-SE:20.1)

Buwal also has two directional demonstrative identifiers *ɲmgbà* ‘up there’ (4.59a) and *wzà* ‘down there’ (4.59b). The direction ‘up’ is upstream, whilst ‘down’ is downstream.

- (4.59) a. *Ujek naka mgbà ata ha mala anta* .
 wjɛk nākā ɲmgbà á tā xā mālā āntā
 hut 1SG.POSS **up.there** PREP1 on head GEN 3SG.POSS
 ‘My house is **up there**, above his.’ (GE39-SE:33.1)
- b. *Ujek ɲkwa uza a manjəraf mala naka* .
 wjɛk nk^{wā} wzà á mándzrəf mālā nākā
 hut 2SG.POSS **down.there** PREP1 backside GEN 1SG.POSS
 ‘Your house is **down there**, below mine.’ (GE39-SE:33.2)

(ii) Distribution

Buwal demonstrative identifiers have the same syntactic properties as prototypical adjectives (see Section 3.3.3.1). They can function as predicate of a verbless clause (4.58 & 4.59), as predicate of a relative clause (4.60) as a noun modifier (4.61) and the directional demonstrative identifiers can also function as adverbs (4.62).

(4.60) a. *Barla ma cakwa ngha ca , ara barla Mse .*
bārlā má= tsák^wá nyā tsá ārā bārlā msé
mountain REL= here DEM.PROX TOP COP mountain Mshe
'The mountain **which is here** is the mountain of Mshe.' (GE36-SE:2)

b. *Barla ma caw ngha ca , barla Dəmew .*
bārlā má= tsáw nyā tsá bārlā dmew
mountain REL= there DEM.PROX TOP mountain Dimeo
'The mountain **which is there** is the mountain Dimeo.' (GE36-SE:3)

c. *Ujek ma mgba , mala mana .*
wǰĕk má= ŋmgbà mālā mānā
hut REL= up.there GEN mother.1POSS
'The house **which is up there**, is my mother's.' (GE39-SE:63.2)

d. *Yaŋ ma uza wese ga ŋ sa .*
jāŋ má= wzà wēsé gá ŋ sā
only REL= down.there DEM.DIST sufficient PREP2 1SG
'Only that **which is down there** is sufficient for me.' (GE39-SE:44)

(4.61) a. *Bay , hejəye əy kala ma cakwa ende*
bāy xèdzè -jé j- kà- lā mā tsák^wá éndē
chief person -PL 3PL.SBJ- IPFV- do **problem here** like.this.PROX
nghe .
nyē
DEM.PROX
'Chief, people are making the **problems here** like this.' (DE8-SN:3.11)

b. *Mgba a wata ηcene mgbà asa*
 ηmgbà á wātā ntsènè ηmgbà á sã
 up.there PREP1 **compound** 1EXCL.POSS **up.there** PREP1 under
barla ca ,
 bārġã tsá
 mountain TOP
 ‘Up there, at **our compound up there** below the mountain...’ (C16-SN:3)

c. *njew əy njew a wata bay uza ca* ,
 ndzèw j- ndzèw á wātā bāy wza tsá
 drag 3PL.SBJ- drag PREP1 **compound chief down.there** TOP
 ‘...they dragged him to the chief’s compound down there...’ (C8-SE:48.1)

(4.62) a. *Əy nda mgbà ata Mse η ja kusam*
 j- ndā ηmgbà á tā msé η dzā k^wsàm
 3PL.SBJ- go **up.there** PREP1 on Mshe INF hit body
 ‘They went up there onto Mshe to fight...’ (DE5-SN:1.3)

b. *hayak a nemenha uza asa*
 xājāk ā- ná- mèn -xā wza á sã
 dirt 3SG.SBJ- FUT- be.left -VNT **down.there** PREP1 under
ndaŋw .
 ndàŋ^w
 bottom
 ‘...dirt will be left **down there** on the bottom.’ (PP4-SN:1.7)

Demonstrative identifiers are frequently followed by the proximal nominal demonstrative *nyā* (4.60 a & b; 4.63).

(4.63) a. *Mpe ca mgbà ŋgha* .
 mpè tsá ηmgbà nyā
 tree TOP **up.there** DEM.PROX
 ‘The tree is **up there**.’ (LL6-SE:32)

- b. *Lekwal ca uza ngaha* .
 lèk^wál tsá wza nyā
 school TOP **down.there** DEM.PROX
 ‘The school is **down there**.’ (LL6-SE:33)

(iii) Pragmatic functions

The proximal demonstrative identifier *tsák^wá* ‘here’ can have a cataphoric discourse deictic function either pointing to the discourse to come or replacing it within a direct speech frame if for example the speaker doesn’t want to specify what was said (4.64).

- (4.64) A *ngaya* : « *Cakwa , cakwa ende* », *əy*
 ā- ngājā tsák^wá tsák^wá éndē j-
 3SG.SBJ- saying here here like.this.PROX 3PL.SBJ-
ghwelzene a bay .
 y^wāl –zā –ēnē á bāy
 explain TRANS -3SG.IOBJ PREP1 chief
 ‘He said, “It’s like this”, they explained it to the chief.’ (NH8-SN:7.4)

4.3.4 Similative demonstratives

SIMILATIVE DEMONSTRATIVES indicate the location of a referent to which another is similar. They could be translated as ‘like this’ or ‘like that’. In Buwal similative demonstratives function like proto-typical adjectives (see Section 3.3.3.1). Like other adjectives, similative demonstratives can also function adverbially. When functioning in this way they are similar to what Diessel (1999: 74) calls ‘manner demonstratives’. The forms of Buwal similative demonstratives can be found in Table 4.5. This section covers their (i) meaning, (ii) distribution and (ii) pragmatic functions.

(i) Meaning

Like nominal and locative demonstratives, similative demonstratives can be found with three gradations of distance: proximal *éndē* ‘like this’ (4.65a), medial *ándālà* ‘like this’ (4.65b) and distal *ándwsé* ‘like that’ (4.65c). The medial similative demonstrative is more precise than the other two and is used for quantity or size. In their situational use they point to something in the environment which is like the referent or the action in question.

- (4.65) a. *Hwa la ende* .
 x^{wā}- lā éndē
 2SG.SBJ- do **like.this.PROX**
 You do it **like this.** (DE18-SN:8.12)
 (Someone demonstrating how to do something.)
- b. *Ujek naka a nja andala ngha* .
 wjĕk nākā ā- ndzā ándālā nyā
 hut 1SG.POSS 3SG.SBJ- be **like.this.MED** DEM.PROX
 ‘My hut is **like this.**’ (GE36-SE:44)
- c. *Əy andəwse* .
 j ándwsé
 3PL.STAT **like.that**
 ‘They are **like that.**’ (GE36-SE:45.2)

(ii) Distribution

Buwal similative demonstratives function like other adjectives as predicates of verbless clauses (4.66), of relative clauses (4.67), as noun modifiers (4.68a) and as adverbs (4.69).

- (4.66) a. *Ca labara anta ca ende* ,
 tsá lābārā āntā tsá éndē
 TOP story DEF.DET TOP **like.this.PROX**
 ‘So the story is **like this...**’ (C8-SN:89)
- b. *Ndərey naka mbəy andala* .
 ndrĕj nākā mbj ándālā
 sorghum 1SG.POSS 3SG.STAT **like.this.MED**
 ‘My sorghum is **like this.**’ (GE36-SE:42)
- c. *heje andəwse*
 xèdzè ándwsé
 1INCL.STAT **like.that**
 ‘...we are **like that...**’ (HT8-SN:5.1)

- (4.67) a. *Hejəye ma ende ege .*
 xèdzè -jé má= éndē =égē
 person -PL REL= like.this.PROX =PL
 ‘People **who are like this.**’ (GE36-SE:47)
- b. *Hejəye ma andala ege .*
 xèdzè -jé má= ándālā =égē
 person -PL REL= like.this.MED =PL
 ‘People who are like this.’ (GE36-SE:43)
- c. *Hejəye ma andəwse ege .*
 xèdzè -jé má= ándwsé =égē
 person -PL REL= like.that =PL
 ‘People **who are like that.**’ (GE36-SE:46)
- (4.68) a. *Mawal naka kan ende ca , sa la vanɣay ?*
 māwəl nākā kàn éndē tsá sã- lā vánɣáj
 husband 1SG.POSS thing like.this.PROX TOP 1SG.SBJ- do how
 ‘My husband, a thing **like this**, how do I do it?’ (HT1-SN:5.1)
- b. *Səkan andala , sa kadaw kwaw .*
 skàn ándālā sá- kã- d̄aw kʷāw
 thing like.this.MED 1SG.SBJ- IPFV- want NEG
 ‘A thing **like this**, I don’t want.’ (GE36-SE:61.1)
- c. *Ujek andəwse , sa kadaw yam .*
 wjək ándwsé sá- kã- d̄aw jám
 hut like.that 1SG.SBJ- IPFV- want also
 ‘A house **like that**, I also want.’ (GE36-SE:63.2)
- (4.69) a. *Hwa zla ende ende ende ende*
 xʷã- ɣã éndē éndē éndē éndē
 2SG.SBJ- cut like.this.PROX like.this.PROX like.this.PROX like.this.PROX
kalkal .
 kálkál
equal
 ‘You cut (it) **like this, like this, like this, like this**, equally.’(PP5-SN:1.11)

- b. *Əy kala andala ŋgha* .
 j- k̄a- l̄a ándāl̄a nyā
 3PL.SBJ- IPFV- do **like.this.MED** DEM.PROX
 ‘They act like this.’ (DE14-SN:4.4)
- c. *Hwa sa yam anta andwse , hwa medew* .
 x^wā- s̄a j̄am āntā ándwsé x^wā- m̄ed -āw
 2SG.SBJ- drink water 3SG.POSS **like.that** 2SG.SBJ- swallow -3SG.DOBJ
 ‘You drink its liquid **like that**, you swallow it.’ (DE9-SN:2.7)

The proximal and medial simulative demonstratives may be followed by the proximal nominal demonstrative *nyē/nyā* ‘this’ (4.69b; 4.70).

- (4.70) *Sa nezenene zlap ende ŋghe* .
 s̄a- ná- z̄en -ēnè ʎ̄āp éndē nyē
 1SG.SBJ- FUT- return -3SG.IOBJ speech **like.this.PROX** DEM.PROX
 ‘I will respond to him **like this**.’ (DE12-SN:7.14)

(iii) Pragmatic functions

Comparative demonstratives frequently have a discourse deictic use. The proximal comparative demonstrative can have both cataphoric (4.71a) and anaphoric (4.71b) reference. The medial and distal comparative demonstratives are only used for anaphoric reference (4.71 c & d).

- (4.71) a. *Aya tew ende , a ŋgaya : « Hwa daw*
 āj̄ā téw éndē ā- ŋgāj̄ā x^wā- d̄aw
 then finally **like.this.PROX** 3SG.SBJ- saying 2SG.SBJ- want
sa cafahwaw aka vaw ?
 s̄a- ts̄āf -āx^wāw āká v̄aw
 1SG.SBJ- decorate -2SG.DOBJ ACC Q
 ‘Then finally **like this**, he said, "Do you want me to decorate you?"’
 (NF2-SN:4.1)

- b. *Əy ɲtakwza kwakwas anta ende* .
 j- ntāk^w -zā k^wák^wàs āntā éndē
 3PL.SBJ- finish TRANS ceremony DEF.DET **like.this.PROX**
 ‘They finish the ceremony **like this.**’ (DP1-SN:7.2)
 (How the ceremony is finished has just been described.)
- c. *Tew , andala ɲgha* .
 téw ándālā nyā
 finally **like.this.MED** DEM.PROX
 ‘Finally, it’s **like this.**’ (TN1-SN:7.7)
 (At the end of a story.)
- d. *Andəwse , andəwse , səkan ma ata zam a wata anta*
 ándwsé ándwsé skàn má= á tā zàm á wātā āntā
like.that like.that thing REL= at on eat at home 3SG.POSS
askwaw .
 ásk^wāw
 NEG.EXIST
 ‘**Like that, like that,** there was nothing to eat at his house.’ (TN3-SN:1.5)
 (Previous discourse describes how the lazy man did no work.)

The distal similitive demonstrative is frequently used in conversation to express agreement with what the other person has just said (4.72).

- (4.72) N. *Na , həman ca ma dakal dakal ca , həman ca na*
 nà xmàn tsá má= dākāl dākāl tsá xmàn tsá nà
 now praise.name TOP REL= big big TOP praise.name TOP now
vəram .
 vrām
 many
 ‘Now as for big praise names, now there are many praise names.’

P. *Andəwse* .

ándwsé

like.that

‘(It’s) **like that.**’

(C9-SN:88.1-2)

4.4 Quantifiers

According to Schachter and Shopen (2007: 37) QUANTIFIERS are noun modifiers that indicate quantity or scope. Buwal quantifiers include cardinal numerals, which will be described in Section 4.4.1, and other quantifiers such as ‘many’, ‘few’, ‘sufficient’ etc. which are discussed in Section 4.4.2. Ordinal numbers were covered in Section 3.1.3.1. The formal properties which unite cardinal numerals and other quantifiers into a single category ‘quantifiers’ are outlined in Section 4.4.3.

4.4.1 Cardinal numerals

The basic numerals from one to ten are given in Table 4.6 below. It seems that the forms *dzámāxkád* ‘eight’ and *dzáfád* ‘nine’ have been previously derived from *dzābán* ‘five’ and *māxkád* ‘three’, and *dzābán* ‘five’ and *nfád* ‘four’ respectively.

Table 4.6: Buwal basic cardinal numerals

Cardinal numeral	Gloss
<i>bsé</i>	‘zero, nothing’
<i>téŋ^wlèŋ</i>	‘one’
<i>gbák</i>	‘two’
<i>māxkád</i>	‘three’
<i>nfád</i>	‘four’
<i>dzābán</i>	‘five’
<i>nk^wáx</i>	‘six’
<i>nsléd</i>	‘seven’
<i>dzámāxkád</i>	‘eight’
<i>dzáfád</i>	‘nine’
<i>wám</i>	‘ten’

The numerals from eleven to nineteen are formed by the numeral ‘ten’, followed by the complex preposition *á xā* meaning ‘over’, then a basic numeral (4.73).

- (4.73) *wám á xā gbák* ‘twelve’
 ten over two
wám á xā dzābán ‘fifteen’
 ten over five
wám á xā dzáfád ‘nineteen’
 ten over nine

The numerals for ‘twenty’, ‘thirty’ etc are formed by attaching a prefix *rā* to a basic numeral. It is possible that this prefix comes from the word *rā* meaning ‘hand’ as two hands together have ten fingers. ‘Twenty-one’, ‘thirty-five’ etc are formed in a similar way to the teens (4.74).

(4.74) <i>rāgbák</i>	‘twenty’
hand-two	
<i>rāgbák á xā téng^wlèŋ</i>	‘twenty-one’
hand-two over one	
<i>rāgbák á xā gbák</i>	‘twenty-two’
hand-two over two	
<i>rādzābán</i>	‘fifty’
hand-five	
<i>rādzámāxkád</i>	‘eighty’
hand-eight	

The word for one hundred *téméré* is borrowed from Fulfulde *temerre* ‘one hundred’ (Noye 1974: 342). Multiples of one hundred are formed by the word for hundred followed by a basic numeral. Hundreds are followed by tens and ones introduced by the preposition *á*, which in this case could mean something like ‘with’ (4.75).

(4.75) <i>téméré nsléd</i>	‘seven hundred’
hundred seven	
<i>téméré gbák á rāgbák á xā téng^wlèŋ</i>	‘two hundred and twenty-one’
hundred two PREP1 hand-two over one	

For a thousand the word *blàk^w* is used. It may originally have meant ‘any very large number’ but now it is used to count years (4.76).

(4.76) *Daka a mar aka ata va bəlakw a temere ɲfad*
 dākà ā- mār āká á tā vā blàk^w á téméré ñfád
 since 3SG.SBJ- begin ACC PREP1 on year **thousand** PREP1 **hundred four**
aha .
 á xā
 PREP1 over
 ‘It began from after the year **fourteen hundred.**’ (NH13-SN:15.3)

When counting money (francs), the borrowed word *bàràw* is used for a thousand (4.77a). This comes from the Fulfulde *booro* ‘thousand francs’ which literally means ‘bag’ (Noye 1974: 317). In fact, at times the Buwal calque this concept and use the Buwal word for ‘bag’ *bākātār* for one thousand francs (4.77b).

(4.77) a. *hwa ɲterene ca baraw ragbak* .
 x^wā- ntār –ēnē tsá bàràw rāgbák
 2SG.SBJ- pay -3SG.IOBJ TOP **thousand.francs** **twenty**
 ‘You pay him, **twenty thousand francs.**’ (PP3-SN:1.6)

b. *Dala anta ca , hwa da , hwa da*
 dālā āntā tsá x^wā- dā x^wā- dā
 money 3SG.POSS TOP 2SG.SBJ- bring 2SG.SBJ- bring
bakatar .
bākātār
thousand.francs
 ‘Its cost, you bring, you bring **a thousand francs.**’ (C6-SN:163)

For ‘one hundred francs’ another borrowed word, *kábāl*, may be used instead of *téméré* (4.79a). This comes from the Fulfulde word *kaɓɓol* ‘one hundred francs’ (Zoubko 1996: 251). For amounts of money in smaller units a different system is used in which coins are counted. The smallest coin, called *dālā* from the Fulfulde *dala* (Noye 1974: 320) is five francs, so ten francs is two *dālā*, fifty francs is ten *dālā* and so forth (4.78a & b). Other words used to refer to coins which are at times borrowed from Fulfulde are *slāj* from

suley ‘ten franc coin’ (Zoubko 1996: 448) and *sáŋk^wáw* from *suŋku* ‘five francs’ (Noye 1974: 342). The word *dālā* is also used in Buwal to refer to money in general.

- (4.78) a. *Akwaw ca , kabal gbak a dala wam ngha*
 ák^wāw tsá kabal gbák á dālā wám nyā
 NEG.EXIST TOP **hundred.francs two** PREP1 **money ten** DEM.PROX
ca , parham .
 tsá párxám
 TOP lacking
 ‘Otherwise this **two hundred and fifty francs** is not enough.’ (C11-SN:29)
- b. *Sa valahwaw temere gbak a dala wam*
 s̄a- vāl -āx^wāw témère gbák á dālā wám
 1SG.SBJ- give -2SG.IOBJ **hundred two** PREP1 **money ten**
aha jaban .
 á xā dzábán
 PREP1 **over five**
 ‘I (will) give you **two hundred and seventy-five francs.**’ (LL13-SE:33)

Buwal cardinal numerals can also be used for counting. Their other functions are described in more detail in Section 4.4.3.

4.4.2 Other quantifiers

Other Buwal quantifiers are listed in Table 4.7 below. The quantifier *vrām* ‘many’ can only be used with count nouns, whereas the others can be used with both count and non-count nouns. The quantifier *dējdēj* ‘too much’ is borrowed from the Fulfulde word *dey-dey* ‘exact, as it should be’ (Noye 1974: 321)

Table 4.7: Buwal quantifiers

Quantifer	Gloss
<i>děj-děj</i>	‘too much’
<i>dàkālá</i>	‘a lot’
<i>gá</i>	‘sufficient’
<i>ndál</i>	‘same/equal’
<i>párxám</i>	‘insufficient’
<i>rák-rák</i>	‘equal’
<i>tété</i>	‘enough/average’
<i>téw-téw</i>	‘all’
<i>tsék^wdē</i>	‘a little/few’
<i>vrām</i>	‘many’

4.4.3 Functions of quantifiers

Buwal quantifiers function in many ways like prototypical adjectives (see Section 3.3.3.1): as the head of a noun phrase (indicating the number itself in this case of cardinal numerals) (4.79 a & b), as a noun modifier (4.80 a & b), as predicate of a verbless clause (4.81 a & b), as predicate of a relative clause (4.82 a & b) and as secondary predicate (depictive) (4.83 a & b).

- (4.79) a. *Tənguleŋ day aha bəse .*
təŋg^wlən dəj á xā bsé
one more PREP1 over nothing
 ‘**One** is more than nothing.’ (LL48-SE:3)

- b. *tete a menha*
tété ā- mèn -xā
average 3SG.SBJ- be.left -VNT.DIST
 ‘**An average amount** is left.’ (DP9-SN:4.9)

- (4.80) a. *Kélem derewel jamahkad .*
ká- ləm dērewəl dzámāxkád
 PFV- get **paper** **eight**
 ‘He got **eight** votes.’ (NH7-SN:5.7)

- b. *Yaw , hwa ndaw ujek gemtəye cekude aka yam .*
 jàw x^{wā}- ndāw wdzək gāmtāk -jé tsék^wdē ákā jám
 so 2SG.SBJ- find hut chicken -PL a.few EXIST also
 ‘So, you find there are a few chicken houses also.’ (DE4-SN:9.3)

- (4.81) a. *weləye anta ege gbak .*
 wālā -jé ānta =ege gbak
 wife -PL 3SG.POSS =PL two
 ‘...he had two wives.’ (lit. ‘his wives were two’) (TN4-WN:1.1)

- b. *Gwaygwaya tata ca varam*
 g^wājg^wājā tātá tsa vram
 festival 3PL.POSS TOP many
 ‘They had many festivals.’ (lit. ‘their festivals, were many’)(DE15-WN:3)

- (4.82) a. *Akwaw ca , ma jamahkad ege ca , ara zlam wala ,*
 ák^wāw tsá má= jámāxkád =égē tsá ārā ʒàm wālā
 NEG.EXIST TOP REL= eight =PL TOP COP name woman
ma tɛŋguleŋ mawal ege .
 má= tɛŋg^wlèŋ mawəl =égē
 REL= one man =PL
 ‘Otherwise, the eight ones are women's names, the one is for men.’
 (C9-SN:20)

- b. *heje dakənak ma tewtew , a negəre .*
 xèdzè dākṇàk má= téw-téw ā- ná- grē
 person black REL= all 3SG.SBJ- FUT- see
 ‘...all humanity (lit. black person(s)) will see.’ (HT8-SN:12.22)

- (4.83) a. *A təwse əy nda gbak a mzla .*
 á twsé j- ndā gbák á mʒā
 PREP1 there 3PL.SBJ- go two PREP1 blacksmith
 ‘Then she goes, the two of them with the blacksmith.’ (DE11-SN:1.12)

- b. *Hejəye baw əy kébecha varam*
 xèdzè -jé bāw j- ká- bēts -xā vrām
 person -PL TOP.ADD 3PL.SBJ- PFV- assemble -VNT.DIST many
 ‘The people also, many of them assembled...’ (NH3-SN:1.7)

Buwal quantifiers can also function as anaphors. In example (4.84a), the numerals *rāgbák* ‘twenty’ and *rāmāxkád* ‘thirty’ refer to the people. The quantifier *tsék^wdē* ‘a little’ in example (4.84b) is functioning as a textual anaphor referring to the description of a festival that has just been given.

- (4.84) a. *Hejəye* *baw* *əy* *kébecha* *vəram* , *kaw*
xèdzè *-jé* *bāw* *ǰ-* *ká-* *ḃèts* *-xā* *vram* *kaw*
person **-PL** **TOP.ADD** **3PL.SBJ-** **PRF-** **assemble** **-VNT** **many** **even**
day *aha* *ragbak* *ege* , *kaw* *a* *laza* *ramahkad*
dāj *á* *xā* *rāgbák* =égē *kaw* *ā-* *lā* *-zā* *rāmāxkád*
more **PREP1** **over** **twenty** =PL **even** **3SG.SBJ-** **do** **TRANS** **thirty**
aha *ege* .
á *xā* =égē

PREP1 over =PL

‘Many **people** had also gathered together, even more than **twenty**, it could have been around more than **thirty**.’ (NH3-SN:1.7)

- b. *cekude* *ma* *hejəye* *əy* *kala* *a* *gwaygwaya* *ca*
tsék^wdē *má=* *xèdzè* *-jé* *ǰ-* *kā-* *lā* *á* *g^wājg^wājā* *tsá*
a.little **REL=** **person** **-PL** **3PL.SBJ-** **IPFV-** **do** **PREP1** **festival** **TOP**
ana *ebe* .
ánā *èbè*

like DEM.MED

‘A **little bit** that people do at the festival, is like this.’ (DP8-SN:8)

Quantifiers can be modified by possessive pronouns to mean ‘two of them’ (4.85a), ‘all of you’ (4.85b) etc.

- (4.85) a. *Weləye* *anta* *ege* *gbak tata* , *əy* *kambaw*
wālā *-jé* *āntā* =égē *gbák tātá* *ǰ-* *kā-* *mbàw*
wife **-PL** **3SG.POSS** =PL **two** **3PL.POSS** **3PL.SBJ-** **IPFV-** **give.birth**
‘His wives, **the two of them**, they gave birth...’ (TN4-WN:1.2)

- b. *hune nemed* , *hune tewtew nkune* .
 x^wné ná- mēđ x^wnè téw-téw nk^wnè
 2PL.SBJ FUT- swear 2PL **all** 2PL.POSS
 ‘...you will swear, **all of you.**’ (NH8-SN:7.10)

Buwal quantifiers, apart from numerals, can also function adverbially (4.86).

- (4.86) A *kezlome zlome parham*
 á- kǎ- ǰmē ǰmē párxám
 3SG.SBJ- IPFV- hear hear **insufficient**
 ‘She doesn’t obey enough...’ (lit. ‘She obeys **insufficiently.**’) (C1-SN:21.2)

When the quantifier is repeated, the meaning is distributive (4.87 a & b). Note that the unit of measure term *káǰāl* ‘hundred francs’ is not repeated in example (4.87a).

- (4.87) a. *kwadakwa anta ca kǰal gbak gbak* .
 k^wádák^wá āntā tsá kǰāl gbák gbák
 sweet.potato DEF.DET TOP **hundred.francs(ful.) two two**
 ‘The sweet potato, is **two hundred francs each.**’ (C6-SN:175)
- b. *Hune ɲterekey cekude cekude*
 x^wné- ntàr -ēkēj tsék^wđē tsék^wđē
 2PL.SBJ- pay -1SG.IOBJ **a.little a.little**
 ‘You pay me **little by little...**’ (C5-SN:65)

Although quantifiers function in many ways like adjectives, they can be distinguished from them since within the noun phrase they always follow another adjective (4.88 a & b). Furthermore, some quantifiers can modify adjectives (4.89).

- (4.88) a. *Səkan ege parpar mahkad* , əy
 skàn =égē párpār mākád j-
 thing =PL **different three** 3PL.SBJ-
kendəremzekey .
 kā- ndràm -zā -ēkēj
 IPFV- please -TRANS -1SG.IOBJ
 ‘**Three different** things, they please me.’ (GE65-SE:27.1)
- b. *Rəgwac ege vedəye mewe varam* , əy
 rg^wàts =égē vēdjé mēwè vrām j-
 clothes =PL IND.DET.PL **new many** 3PL.SBJ-
kendəremzekey .
 kā- ndràm -zā -ēkēj
 IPFV- please -TRANS -1SG.IOBJ
 ‘**Many new** clothes, they please me.’ (GE65-SE:19.1)
- (4.89) *Dala jem cekude* , kula ŋ hey .
 dālā dzèm tsék^wdē k^wlá ŋ xēj
 someone **tall a.little** able INF run
 ‘Someone a **little bit tall**, (he) is able to run.’ (GE65-SE:20.1)

4.5 Plural markers

As well as the plural suffix *-jé*, which attaches to a small set of animate nouns (see Section 3.1.1.5), Buwal has a more general plural marker, the clitic *égē* which pluralises all types of nouns and follows the noun it is modifying (4.90). It is possible that this clitic comes from the Proto-Chadic **-aki* which Newman (1990: 16) states is the most widespread, best attested Chadic plural suffix.

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

The plural marker *égē* must be considered a clitic rather than a suffix as other noun phrase constituents such as possessive pronouns (4.91a) and relative clauses (4.91b) may interpose between it and the head noun (see Table 5.1, Section 5.1.).

- (4.91) a. *Aya mel tata ege wese əy kákalza*
 ājā mēl tātá =égē wēsé j- ká- kāl -zā
 SO oil 3PL.POSS =PL DEM.DIST 3PL.SBJ- PFV- smear TRANS
ata kusam .
 á tā k^wsàm
 PREP1 on body
 ‘And so those **oils of theirs**, they smeared them on their bodies.’
 (C18-SN:11.2)
- b. *Wende , ara kan ma kadavha ege ana ma*
 wéndé ārā kàn má= ká- dāv -xā =égē ánā má=
 IND.DET.SG COP thing REL= IPFV- sprout -VNT =PL like REL=
ŋ hayak .
 ŋ xājāk
 PREP2 ground
 ‘Another one (remedy), it’s **things which sprout** from the ground.’
 (DE9-SN:2.2)

When occurring alone, nouns marked with the plural suffix *-jé* are usually not marked with the plural enclitic as well (4.92a). However, if there are other modifying elements present in the noun phrase, then the plural enclitic may also be present (4.92b).

- (4.92) a. *Hejəye əy kadəmas .*
 xèdzè -jé j- ká- dmàs
 person -PL 3PL.SBJ- IPFV- dance
 ‘People were dancing.’
 (NH7-SN: 2.7)
- b. *hejəye ma ata hayak ege əy lamza*
 xèdzè -jé má= á tā xājāk =égē j- lām -zā
 person -PL REL= PREP1 on ground =PL 3PL.SBJ- accept TRANS
 ‘The people on the ground accept it.’
 (DP2-SN:3.3)

The general plural marker can be used with numerals to give an approximate meaning (4.84 & 4.93).

- (4.93) *hwa gəre ca , kaw ata wam aha ŋsələd ,*
x^wā- grē tsá káw á tā wám á xā nsléd
 2SG.SBJ- see TOP even(ful.) PREP1 on ten PREP1 over seven
wam aha jamahkad , ha a nda ata
wám á xā jámāxkád xá ā- ndā á tā
 ten PREP1 over eight until 3SG.SBJ- go PREP1 on
ragbak aha gbak ege , mahkad ca , mawal ege
rāgbák á xā gbák =égē máxkád tsá māwəl =égē
twenty PREP1 **over two** =PL three TOP man =PL
əy kaca wala .
ǰ- kā- tsā wālā
 3PL.SBJ- IPFV- put wife
 ‘...you see even at seventeen, eighteen up to **around twenty-two** or three,
 men get married (lit. put a wife)’ (DE19-SN:12.13)

The plural clitic can also be used on its own when the noun it is pluralising has been replaced by an interrogative pronoun (4.94) (see Section 4.1.4).

- (4.94) *Ara ege vayay ?*
ārā =égē vājáj
 COP =PL who
 ‘Who are they?’ (LL7-SN:6)

The functions of the plural in Buwal are discussed further in Section 5.1.6.

According to Corbett (2000: 101) the ASSOCIATIVE PLURAL ‘denotes a set comprised of the referent of the nominal plus one or more associated members.’ Moravcsik (2003: 472-473) states that the associative falls somewhere between ordinary plurals and coordinated nominals. The associative plural in Buwal is marked with the particle *ātā* which precedes the noun. A possible source of this marker is the 3rd person plural pronoun *tātā*. Also note

that the 3rd person plural direct object marker is *-ātā*. Newman (2000: 460) found that in Hausa the third person plural pronoun could also be used as an associative plural marker.

In Buwal the associative plural marker plus nominal can function as the head of a noun phrase in its own right. The use of the plural subject agreement marker on the verb shows that the noun phrase is considered to be plural. In example (4.95) below each person went with their own entourage. This is consistent with Moravcsik's observation that associates are commonly family, friends or associates in an activity (2003: 473).

- (4.95) *Aya a mpat ca ata juraw wese , nda ey*
ājā á mpát tsá ātā dzwrāw wēsé ndā j-
 then PREP1 tomorrow TOP ASS.PL **sub-chief** DEM.DIS go 3PL.SBJ-
nda zlaḃa ata Martan ey ata baba naka , ey
ndā ʒàḃá ātā martan éj ātā baba nākā éj
 go with ASS.PL **Martin** and ASS.PL **father** 1SG.POSS and
ata Tebe .
ātā tebe
 ASS.PL **Tebe**
 'The next day, that **sub-chief and his associates**, went along with **Martin and his associates** and **my father and his associates** and **Tebe and his associates.**' (NH8-SN: 11.1)

In Buwal it is also possible for all members of the set to be listed, as in (4.96 a & b). This is not consistent with Moravcsik's semantic typology of associative plurals which states that there is only partial enumeration (2003: 488). However, Frajzyngier found similar structures in both Gidar (2008: 109-110) and Hdi (2002: 48-49), where the associative plural marker can occur before a coordinate noun phrase.

- (4.96) a. *hwa ghwelzene ata macahw ey baba*
 x^{wā}- ɣ^{wəl} – zā –ēnē ātā māt̥sāx^w éj baba
 2SG.SBJ- show TRANS -3SG.IOBJ ASS.PL mother.2POSS and father
ŋkwa .
nk^{wā}
 2SG.POSS
 ‘...you should go and show him to your **mother and father**.’
 (HT1-SN:9.1)
- b. *ma kajavata ata kule ey gazlavay*
 má = k̄- dzàv –ātā ātā k^wlè éj gāḷāvāj
 REL= IPFV- assemble -3PL.DOBJ ASS.PL idol and God
 ‘...that which brings **idols and God** together...’
 (DE2-SN:18.1)

Moravcisk (2003: 472-473) also observes that the focal referent of the group referred to by the associative plural must be a definite human individual. Whilst this is often the case in Buwal, non-human nouns (4.97a) and even adjectives (4.97b) can also be associated when they belong to the same set. This also appears to be the case for Gidar (Frajzyngier 2008: 110).

- (4.97) a. *Sa nda a luma ŋ səkamha ata ŋte ey*
 s̄- ndā á l̄wmà ɲ skām -xā ātā nté éj
 1SG.SBJ- go PREP1 market INF buy -VNT.DIST ASS.PL shoe and
rəgwac .
rg^wàts
 clothes
 ‘I go to the market to buy **shoes and clothes**.’
 (GE25-SE:5)
- b. *Ata mbermber ey gəɖak , əy kéŋtezeze* .
 ātā mbér-mbér éj gɖàk j- ká- ntèz –ējē
 ASS.PL near and far 3PL.SBJ- PFV- divide PART
 ‘**Near and far**, they are divided.’
 (GE39-SE:49)

4.6 Genitive marker

Buwal has a genitive marker *mālā* which may be used to link two nouns in a genitive construction (4.98) (see Section 5.2.2).

- (4.98) *Ana kule mala musa* .
 ánā k^wlè **mālā** mwsá
 like idol GEN twin
 ‘Like the idol **of** twins’. (DE2-SN:6.1)

The genitive marker may also precede a noun alone when the referent it is associated with is already known from the context. For example in (4.99a) the speaker has been discussing different types of traditional remedies. The genitive marker is also frequently used with temporal nouns (see Section 3.1.2.4) which indicate a particular part of the day (4.99b). As was shown in Section 4.1.3, when the genitive marker precedes a possessive pronoun it forms an independent possessive (4.99c).

- (4.99) a. *Mala masbahw aka* .
mālā māsáx^w ákā
 GEN **bone.ache** EXIST
 ‘There is one **for aching bones**.’ (DE9-SN:1.7)
- b. *Sa fədáhha mala mapat beŋ ɲ nda ɲ*
 sã- fdãx -xã **mālā mápát** bēŋ ɲ ndā ɲ
 1SG.SBJ- wake -VNT.DIST GEN **morning** early INF go PREP2
lekwal .
 lèk^wál
 school(fr.)
 ‘I wake up early **in the morning** to go to school.’ (GE61-SE:9.7)
- c. *Ha anta ca , mala naka* .
 xā āntā tsá **mālā nākā**
 head 3SG.POSS TOP GEN 1SG.POSS
 ‘Its head, (it’s) **mine**.’ (NF3-SN:2.12)

A noun preceded by the genitive marker may directly follow the copula *ārā* (4.100) (see Section 4.9). This is evidence that the genitive marker is distinct from prepositions (see Section 4.8) as the copula can only precede predicate nominals and not prepositional phrases (see Section 8.2.1).

(4.100) *Dəvar* , *ara mala mana* .
 dvàr *ārā mālā mānā*
 hoe COP GEN mother.IPOSS
 ‘The hoe, it’s **my mother’s**.’ (GE15-SE:31)

4.7 Verbal particles

Buwal has five particles which are found within the verb phrase and code various spatial and aspectual distinctions. These are the itive marker *āzà*, the marker of accomplishment *āká* ‘ACC’, the completive marker *āzá* ‘COMPL’, the marker of simultaneity *ārā* ‘SIM’ and the marker of anticipation *ká* ‘ANT’.

The ITIVE marker *āzà* codes movement away from a deictic centre. Its function will be described further in Section 6.2.2. It is very similar in form to the completive marker *āzá*, however they can be distinguished in that they have a different tone melody as well as a different distribution. The source marker precedes a direct object while the completive marker follows it, so in fact both can occur in the one clause (4.101).

(4.101) *Hwa cawal aza varezl aza* .
 ^xwā- tsāwāl *āzà* vrèʒ *āzá*
 2SG.SBJ- scoop IT sorghum.husk COMPL
 ‘You scoop **out** the sorghum husks **first**.’ (PP4-SN:1.4)

The source marker may follow the possessive subject pronoun (see Section 6.4) which indicates that it is not attached to the verb (4.102).

- (4.102) *a* *hey anta* *aza səkwa* .
 ā- *xēj āntā* *āzà sk^wá*
 3SG.SBJ- ran 3SG.POSS **IT** Q.FAM
 ‘...did he run **away**?’ (NF2-SN:5.1)

Mina has an interesting construction which may give some insight into how the Buwalitive marker developed. Frajzyngier and Johnston (2005: 145-146) state that the direction ‘from’ is coded by verbs of movement and a locative complement followed by the marker *za*. The Buwalitive marker is not restricted to verbs of movement. Additionally, it differs in its distribution since it does not follow a locative complement but precedes a direct object. Two of the Mina examples given by Frajzyngier and Johnston involve a locative demonstrative, either *kà* ‘here’ or *mà* ‘there’ followed by *za*. It is possible that the Buwalitive marker developed from a fusion of these two elements.

The function of the remaining markers will be described in detail in Section 6.3. These four verb phrase particles are in a paradigmatic relationship and cannot co-occur. They most frequently follow the direct object within a clause (4.103a) but at times may follow an indirect object (4.103b).

- (4.103)a. *Sa* *mpekene* *ma* *ujek* *aza* *a* *mana* .
 sā- *mpāk* *-ēnē* *mā* *wjēk* *āzà* *á* *mānā*
 1SG.SBJ- shut -3SG.IOBJ mouth hut **COMPL** PREP1 mother.1POSS
 ‘I shut the door (lit. mouth of hut) **first** for my mother.’ (GE52-SE:1.11)
- b. *Sa* *mpekene* *ma* *ujek* *a* *mana* *aza* .
 sā- *mpāk* *-ēnē* *mā* *wjēk* *á* *mānā* *āzà*
 1SG.SBJ- shut -3SG.IOBJ mouth hut PREP1 mother.1POSS **COMPL**
 ‘I shut the door (lit. mouth of hut) for my mother **first**.’ (GE52-SE:1.11)

Mina has a number of forms which may be related to Buwal verb phrase particles. For example the locative adverb *kà* ‘here’ and the spatial specifier *ká* which codes ‘location or movement within a contained space’ (Frajzyngier and Johnston 2005: 138, 142) are similar in form to the markers of accomplishment *āká* and anticipation *ká* in Buwal. Both of these have a temporal meaning (see Sections 6.3.3 & 6.3.4), although the meaning of

the marker of accomplishment may at times have a spatial component. Cross-linguistically forms frequently carry both temporal and spatial meanings. Therefore it is plausible that the verb phrase particles *āká* and *ká* were derived historically from locatives of some kind and later developed temporal meanings.

The Buwal completive marker *āzā* is very similar in form and function to the ‘end-of-event’ marker in Mina (Frajzyngier and Johnston 2005: 249-260). This has the form *za* in phrase final position. In fact, in Buwal when there is no overt direct object expressed in the clause the completive marker loses the initial *ā* and cliticises to the verb root (4.104b), making it identical to the Mina form.

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

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

The Buwal marker of simultaneity *ārā* 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).

4.8 Prepositions

Prepositions (or adpositions) have been defined in different ways. Payne (1997:86) defines ADPOSITIONS as ‘particles...that say something about the semantic role of an adjacent noun phrase in the clause.’ Matthews (1997: 292) gives the following definition for PREPOSITIONS: ‘A word or other syntactic element of a class whose members typically come before a noun phrase and which is characterised by ones which basically indicate spatial relations.’ Huddleston and Pullum (2005: 127-128) in their discussion of prepositions in English point out that traditionally words are only analysed as prepositions

if they have noun phrase (NP) complements. They argue, however, for an extension to the membership of this class because these forms may potentially take other types of complements, including clauses, prepositional phrases, or even no complement at all (Huddleston and Pullum 2005: 140).

Applying this broader characterisation to prepositions in Buwal, four sub-groups can be distinguished. Basic prepositions take NP complements and are described in Section 4.8.1. The second group are complex prepositions which mostly begin with the basic preposition *á* (Section 4.8.2). These also take NP complements. One basic and one complex preposition may also take a verbal complement. The third group discussed in Section 4.8.3 take prepositional phrase complements (in some cases these are optional). Finally there is a small group of words which function in a similar way to prepositions but never take a complement (Section 4.8.4). Certain prepositions belonging to these different groups can also take clausal complements. These will be identified below. Prepositional phrases and their syntactic and semantic functions will be dealt with in more detail in Chapter 7.

4.8.1 Basic prepositions

Basic prepositions are generally morphologically simple and, according to Payne (1997:87), cross-linguistically the number in this set is usually rather small. Lehman (1985: 304) refers to these as ‘primary adpositions’ and states that these are more likely to express both grammatical and spatial meanings. In Buwal the basic prepositions are *á* ‘at, to’, *íj* ‘in’, and *ḵàbá* ‘with’. All of these prepositions take NP complements (4.105 a to c).

The prepositions *á* and *íj* are glossed as PREP1 and PREP2 because they take NP complements with a variety of different (mainly spatial) semantic roles. These are summarised in Sections 7.2.1.1 and 7.2.1.2. Both these prepositions can introduce indirect objects (see Section 8.1.1.3) and the preposition *íj* can additionally take a verbal complement to form the infinitive construction (see Section 10.1.1.4).

(4.105)a. *A* *nda a wata mzla*
 ā- *ndā á wātā mḵā*
 3SG.SBJ- go PREP1 home blacksmith
 ‘He goes **to** the blacksmith’s home...’

(DE11-SN:1.7)

- b. *ḡah sa ḡah aka ŋ ben mejəve* .
 ḡáh sā- ḡáh āká ŋ bèn médzvè
 hide 1SG.SBJ- hide ACC **PREP2** man's.hut ancestor.idol
 ‘...I hid **in** the ancestor idol hut.’ (C16-SN:17)
- c. *Əy kahan zlabə maman tata* .
 j- kā- xān ḡàḡá māmán tātá
 3PL.SBJ- IPFV- cry **with** mother.3POSS 3PL.POSS
 ‘They were crying **with** their mother.’ (TN3-WN:2.5)

4.8.2 Complex prepositions

Cross-linguistically morphologically complex prepositions are often built up out of combinations of prepositions and nouns (Payne 1997: 87). Table 4.8 lists the complex prepositions found in Buwal.

Table 4.8: Buwal complex prepositions

Preposition	Gloss	Derived from
<i>á tā</i>	‘on/about’	
<i>á sā</i>	‘under’	
<i>á rā</i>	‘at the side of’	<i>rā</i> ‘hand/arm’
<i>á mā</i>	‘at the edge of’	<i>mā</i> ‘mouth’
<i>á xā</i>	‘over, above’	<i>xā</i> ‘head’
<i>á dāw</i>	‘behind’	<i>dāwān</i> ‘back’
<i>ánā</i>	‘like, as’	
<i>màvdāj/màvāj²</i>	‘because’	<i>ma-</i> NOM + <i>vāj</i> ‘where’?

The majority of complex prepositions begin with the basic preposition *á* and encode spatial semantics. These prepositions are usually followed by an NP complement but *á tā* ‘on’ can also take a verbal complement (see Section 10.1.1.4). The preposition *ánā* ‘like’ has been grouped with the other prepositions beginning with *á* as it has a similar form.

² Note that the form *màvāj* is found most frequently in the corpus as much of this language data was obtained from speakers living in the area of Gadala Centre where this variant is commonly used. I am told that on the other side of the mountain (e.g. in Magaway) people are not familiar with this form and use *màvdāj* instead.

However, it has no spatial semantics and it is difficult to determine where it may have been derived from. As a result, the morpheme boundary is not clear and it is written as one morpheme. The prepositions *á t̄ā* ‘on’ and *ánā* ‘like’ can be followed by a relative clause complement to form cause (see Section 10.1.5.5) and manner (see Section 10.1.5.3) adverbial clauses respectively.

Payne (1997: 88) states that in certain languages it may be difficult to distinguish adpositional phrases from possessed noun phrases. Heine (1989: 78-80) describes confusion over the difference between relational nouns and adpositions in African linguistics. This is equally an issue for Buwal. However complex prepositions can be distinguished from relational nouns in Buwal (described in Section 3.1.2.5) using two major criteria (i) they are always followed by an NP complement (4.106a) and (ii) they are followed by the independent pronoun not the possessive pronoun (4.106b).

(4.106)a. *Sa d̄aw ŋ nda a d̄aw ujek .*
sā- d̄aw íj ndā á d̄aw wjēk
 1SG.SBJ- want INF go PREP1 **behind** house
 ‘I want to go **behind the house.**’ (LL6-SE:10)

b. *Sa nanda ara mbe*
sā- ná- ndā á rā mbē
 1SG.SBJ- FUT- go PREP1 **side** 3SG
 ‘I will go **to him** (lit. the side of him)...’ (HT3-SN:2.1)

Some of these prepositions are clearly derived historically from body parts (see Table 4.8), a very common source of spatial expressions in African languages (Heine 1989: 93). When they are being used with the body part semantics, complex prepositions will be followed by the possessive pronoun rather than the independent pronoun (4.107).

(4.107) *Mbaŋ , a razl aza ra anta .*
mbánj ā- ràɟ āzà rā āntā
 cut.suddenly 3SG.SBJ- cut IT **hand** 3SG.POSS
 ‘Wop! He cut off **his hand.**’ (TN1-SN:3.3)

The complex preposition *màvdāj/màvāj* ‘because’ may possibly be derived from the nominalising prefix *ma-* plus the interrogative pro-form *vāj* ‘where’. This form has some unusual characteristics compared with the other complex prepositions. Firstly, it shows noun-like properties since it can be followed a possessive pronoun (4.108a). However it may also be followed by an independent pronoun (4.108b) and in this way functions more like a preposition. It can also take a clausal complement marking reason adverbial clauses (see Section 10.1.5.4).

- (4.108)a. *Hwa kévelekey kan ma taŋtaŋ . Mavay*
x^wā- ká- vəl -ēkēj kàn má = tāŋ-tāŋ māvāj
 2SG.SBJ- PFV- give -1SG.IOBJ thing REL= good **because**
anta sa kadawahwaw dakala .
āntā sā- kā- dāw -āx^wāw dākālā
 3SG.POSS 1SG.SBJ- IPFV- love -2SG.DOBJ a.lot
 ‘You have given me a thing which is good. **Because of it** I love you a lot.’
 (GE45-SE:11.1-2)

- b. *Sa kasasam mavay hwa .*
sá- kā- sàsām māvāj x^wā
 1SG.SBJ- IPFV- rejoice **because** 2SG
 ‘I am rejoicing **because of you.**’
 (GE40-SE:23.2)

4.8.3 Prepositions taking prepositional phrase (PP) complements

The third group of prepositions in Buwal take prepositional phrase complements. These are listed in Table 4.9 below. They generally encode spatial semantics although the last two can also have a temporal meaning. They can be distinguished from adjectives by their lack of ‘noun-like’ properties. They do not function as arguments of verbal clauses or as the heads of noun phrases, in contrast with prototypical adjectives (see Section 3.3.3.1).

Table 4.9: Buwal prepositions taking PP complements

Preposition	Gloss
<i>kdā</i>	‘towards (straight)’
<i>kdē</i>	‘towards (general direction)’
<i>gbáj</i>	‘just’
<i>tsáláx</i>	‘beyond’
<i>sát</i>	‘up to’
<i>pá</i>	‘at a level’
<i>tá</i>	‘by, through’
<i>xá</i>	‘up to/until’
<i>dàkà</i>	‘from/since’

These prepositions may be followed by any preposition with spatial semantics either basic (4.109a) or complex (4.109b). It is also possible for more than one of these prepositions to co-occur (4.109c).

- (4.109)a. *hejəye əy kanda kəda a luma* .
xèdzè -jé j- kā- ndā kdā á lwmà
 person -PL 3PL.SBJ- IPFV- go **towards** PREP1 **market(ful.)**
 ‘...people were going **towards (lit. to) the market.**’ (C16-SN:19)
- b. *hejəye əy ketev ta ata delek wese*
xèdzè -jé j- kā- tèv tá á tā dēlēk wēsé
 person -PL -3PL.SBJ IPFV- climb **by** PREP1 **on** **vine.sp.** DEM.DIST
 ‘...people were climbing up **(lit. by on) that vine...**’ (TN2-WN:1.2)
- c. *Njefza ta kəda ete ŋghe ma*
ndzèf -zā tá kdā á tē nyē má
 smell -TRANS **by** **towards** PREP1 **here** DEM.PROX TAG.IMP.POL
 ‘Smell over **(lit. by towards) right here** won’t you please?’ (NF3-SN:1.13)

These prepositions can also take the demonstrative identifiers *ŋmgbà* ‘up there’ and *wzà* ‘down there’ as complements (see Section 4.3.3).

- (4.110)a. *Sa nda calah mgba ŋgha* .
sā- ndā tsáláx ŋmgbà nyā
 1SG.SBJ- go **beyond** **up.there** DEM.PROX

‘I went further (**lit. beyond**), **up there**.’ (GE40-SE:27.3)

- b. *hwa nda kəɖa uza* .
 x^{wā}- ndā **kɖā** **wzà**
 2SG.SBJ- go **towards down.there**
 ‘...you go **towards down there**.’ (PP2-SN:3.8)

For the majority of these prepositions, a complement is obligatory. However for two of them, *tsáláx* ‘beyond’ and *sát* ‘up to’, the complement can be omitted if the location is known from the context.

The last two prepositions in Table 4.10 *xá* ‘until’ and *dàkà* ‘since’ are borrowed from the Fulfulde prepositions *haa* and *diga/daga* respectively (see Noye 1974: 232). Like the other prepositions in this set, they take PP complements (4.11 a & b). However, they can also take an NP complement in the case of certain temporal nouns (4.12 a & b), and they can also mark temporal adverbial clauses (see Section 10.1.5.1).

- (4.111)a. *Sa ɲɔwɛrha ha a Magaway* .
 sā- ntswèr -xā **xá** **á** **màgāwáj**
 1SG.SBJ- travel -VNT.DIST **until(ful.)** **PREP1** **Magaway**
 ‘I travel **up to (lit. until to) Magaway**.’ (GE40-SE:32.3)

- b. *Əy zlap əy la menjevek aka daka a Zlence* .
 j- ʒāp j- lā mēndzēvək ákā **dàkà** **á** **ʒēntsé**
 3PL.SBJ- say 3PL.SBJ- do remedy EXIST **since(ful.)** **PREP1** **Ldenche**
 ‘They say there is a remedy that they applied (to the Buwal mountains)
from (lit. since at) Ldenche (to here).’ (C18-SN:93.1)

- (4.112)a. *Sa zazakaha a wata ŋkwa ha*
 s̄a- zàzàk -ā -xā á wātā nk^wā xá
 1SG.SBJ- rest -VNT.PROX -VNT.DIST PREP1 home 2SG.POSS **until(ful.)**
zadaw .
zàdāw
night
 ‘I rest at your home **until night** (then return).’ (GE40-SE:32.2)
- b. *Na sla ka ata lanja ŋcene*
 ná- lā ká á tā lā- ndzá ntsènè
 1EXCL.SBJ- prepare ANT PREP1 on NOM.ACT- be 1EXCL.POSS
daka na ŋgha
dàkà nà nyā
since(ful.) now DEM.PROX
 ‘We prepare our lives in advance **from** (lit. **since**) **now...**’ (BH1-SN:5.3)

4.8.4 Prepositions taking no complement

There are a number prepositions in Buwal which never take a complement. These are complex units that always begin with the preposition *á* (see Table 4.10). Note that ‘inside’ has a number of variants depending on the speaker. Locative demonstratives (see Section 4.3.2) arguably also belong to this category since they are always preceded by the preposition *á*.

Table 4.10: Buwal prepositions with no complement

Preposition	Gloss
<i>á bzā</i>	‘outside’
<i>á m̄ān/mn̄ā/m̄ā</i>	‘inside’
<i>á skā</i>	‘underneath’
<i>á xēdē</i>	‘on top’

While these expressions can function adverbially (4.113a), they can also function as noun modifiers (4.113b) and as predicates of a verbless clauses (4.113c). These are not prototypical adverb properties (see Table 3.1). These expressions do not involve relational nouns (see Section 3.1.2.5) as they can never be followed by a noun or a possessive

pronoun. On the basis of these properties, it seems best to place these forms within the class of prepositions.

- (4.113)a. *Hejəye əy kadəmas ara a səka .*
xèdzè -jé j- kâ- dmàs ārá á skā
 person -PL 3PL.SBJ- IPFV- dance SIM PREP1 **underneath**
 ‘People were dancing along the way **underneath** (the chief mounted on a horse).’ (NH7-SN:7.2)
- b. *əy tawar a kusam a bəza .*
j- tāwār á k^wsàm á bzā
 3PL.SBJ- walk.around PREP1 **body** PREP1 **outside**
 ‘...they would walk around naked (lit. with the **body on the outside**).’ (C18-SN:1)
- c. *vəya ca heje a mna .*
vjā tsá xèdzè á mnā
 wet.season TOP 1INCL.STAT PREP1 **inside**
 ‘Ah, the wet season, **we are in it**.’ (C5-SN:4)

4.9 Copula

Buwal has a copula *ārā* which is optionally used with nominal predicates (4.114 a & b) (see Section 8.2.1). It is also used in cleft constructions (4.114c) (see Section 11.3.1).

- (4.114)a. *Ara mba zlaŋgan baba anta .*
ārā mbà ʒāŋgān bābā āntā
 COP child sibling father 3SG.POSS
 ‘It was his cousin.’ (NH3-SN:7.3)
- b. *Zlana ara menter .*
ʒānā ārā méntèr
 sibling.1POSS COP teacher(fr.)
 ‘My brother **is** a teacher.’ (GE15-SE:3)
- c. *Ara tata ma kasəkam ndərey .*
ārā tātā má= kâ- skām ndrèj
 COP 3PL REL= IPFV- buy sorghum
 ‘It’s them who is buying sorghum.’ (LL21-SE:7)

Certain nearby languages have cognate markers. For example Lienhard (1978: 6) mentions an optional copula *adā* in Daba, while Hollingsworth (2004: 18) reports the existence of a marker *ara* (Gudur dialect) or *ala* (Mokong dialect) in Mofu Gudur which he states marks cleft clauses. It is likely that the diachronic source of the copula was verbal. Gavar has a verb *dā* ‘be’ which takes verbal morphology and the third person singular verbal agreement marker like Buwal is *a-* (author’s fieldnotes). The agreement marker and the verb may have fused to form the invariant particle *adā* as in Daba whilst a rhoticisation of the consonant led to the form *ara* in Buwal.

4.10 Existential marker

Buwal has an invariant existential marker *ákā* ‘it exists’ which functions as the predicate of an existential verbless clause (4.15 a & b) (see Section 8.2.2).

- (4.115)a. *Sərah aka* .
 srāx ákā
 jealousy EXIST
 ‘There is jealousy.’ (lit. ‘Jealousy **exists**.’) (HT3-SN :3.7)
- b. *Menjevek mala fagwalakw aka* .
 mēndzēvēk mālā fāg^wālāk^w ákā
 medicine GEN leprosy EXIST
 ‘There is medicine for leprosy.’ (DE9-SN:1.10)
 (lit. ‘Medicine for leprosy **exists**.’)

The existential marker is often used to introduce new participants into a discourse (4.116) (see Section 11.2.3).

- (4.116) *Heje wende aka* , əy *kanja a ŋgama*
 xèdzè wéndé ákā j- kã- ndzā á ŋgámà
 person IND.DET.SG EXIST 3PL.SBJ- IPFV- stay PREP1 friend
 ‘There was a certain person, he was staying with a friend...’(NH9-SN :2.1)
 (lit. ‘A certain person **existed**,...’)

The neighbouring languages of Gavar (author’s fieldnotes) and Mbudum (Burgess: personal communication) both have the existential marker *aka*. It is possible that this marker was derived from the preposition *á* plus a locative. In Mina, the locational adverb ‘here’ is *kà* (Frajzyngier and Johnston 2005: 145). In this case the existential construction, as in many languages, could be said to be a locative construction in which the location is left unspecified (Hengeveld 1992: 96). Another possibility is that this marker comes from a fusion of the third person singular subject agreement prefix *á-* plus the imperfective aspect prefix *kā-*. Since the imperfective prefix marks events which are ongoing and continuous, its meaning corresponds well with the stative semantics of the existential marker.

4.11 Negation markers

Buwal has two main negation markers, the plain negative *k^{wāw}/sk^{wāw}* (Section 4.11.1) and the existential negative *ák^{wāw}/ásk^{wāw}* (Section 4.11.2). These two forms are used to negate verbal declarative clauses (Section 9.2.1), imperative clauses (Section 9.2.2) and verbless clauses (Section 9.2.3). Table 4.11 below gives the frequency of different forms of negative particles found in the corpus in both verbal and verbless clauses. A third negation marker, *tàk^{wām}* ‘impossible’, only occurs with verbs (Section 4.11.3 & Section 9.2.6). The order in which the negative particle occurs within the clause will be discussed in Section 4.11.4. Their different functions will be described in Section 9.2.

Table 4.11: Frequency of negative particles in verbal and verbless clauses

Negation type	Form	Verbal*	Existential	Other verbless
Plain	<i>sk^{wāw}</i>	88	-	27
	<i>k^{wāw}</i>	335	-	56
Existential	<i>ákā sk^{wāw}</i>	22	18	-
	<i>ásk^{wāw}</i>	10	6	1
	<i>ák^{wāw}</i>	310	86	45
‘Impossible’	<i>tàk^{wām}</i>	14	-	-
Total		765	110	129

*Including imperative clauses

4.11.1 Plain negative

The form of the plain negative marker in Buwal is *k^{wāw}/sk^{wāw}*. The plain negative marker is cognate with negative particles found in other languages of the Daba sub-group such as *sku* in Gavar (author’s fieldnotes), *Mina* (Frajzyngier and Johnston 2005: 261) and *Mbudum* (Burgess: personal communication) and *kun* in Daba (Lienhard 1978: 23). It is likely that the form with the initial /s/ is the older form and that the negative marker is in the process of being phonologically reduced in Buwal. Either form can be used without a change in meaning, however in the corpus *k^{wāw}* occurs more frequently than *sk^{wāw}*.

For example, out of 423 verbal clauses negated with the plain negative, *sk^{wāw}* was found in only 88 with *k^{wāw}* in 335 (see Table 4.11).

4.11.2 Existential negative

The existential negative marker in Buwal has the form *ák^{wāw}/ásk^{wāw}*. This is a result of fusion and contraction of the existential marker *ákā* and the plain negative marker. In fact, the combination *ákā sk^{wāw}* can also still be found with the same meaning as *ák^{wāw}/ásk^{wāw}* (4.117), although it occurs far less frequently than the fused version (see Table 4.11). Further evidence that *sk^{wāw}* is the older form is that the combination *ákā k^{wāw}* is never found.

- (4.117) *Na ndaha , uda aka səkwaw . Uda akwaw .*
 nā- ndā -xā wdā ákā sk^{wāw} wdā ák^{wāw}
 1EXCL.SBJ- come -VNT food EXIST NEG food NEG.EXIST
 ‘We came, there was **no** food. There was **no** food.’ (NH11-SN:1.7-8)

Some insight into the development of the existential negative marker in Buwal can be gained by referring to Croft’s work on the evolution of negation. He states that there are three types of languages A, B and C, which form a diachronic cycle, direction of change being A>B, B>C and C>A (see Figure 4.2).

- **Type A:** The negation of the existential predicate is performed by a positive existential predicate plus an ordinary verbal negator.
- **Type B:** There is a special negative existential predicate which is distinct from the verbal negator.
- **Type C:** There is a special negative existential predicate which is identical to the verbal negator. (Croft 1991: 6)

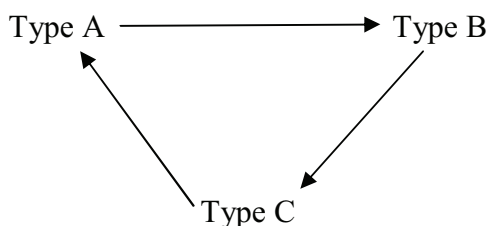


Figure 4.2: Croft's (1991:6) Negative-existential diachronic cycle

At present, Buwal cannot be categorised neatly as any one of these three types. It is somewhere in the process of development from Type A to Type C. We see the Type A situation with the existential marker followed by the plain negative *ákā sk^{wāw}*. Then these two markers fuse and contract to form *ák^{wāw}/ásk^{wāw}* which gives a Type B situation. Finally the existential negative marker extends its use to verbal negation as in Type C as in (4.118a). However, in Buwal the existential negative is only used in **part** of the verbal grammatical system, a situation which is also referred to by Croft as a possibility (Croft 1991: 10). This will be discussed further in the Section 9.2.1. It is clear that Buwal has not completely become a Type C language however, since the combination *ákā sk^{wāw}* can also be used for verbal negation (4.118b). Twenty-two examples of this pattern were found in the corpus of 765 verbal clauses (see Table 4.9). This is unexpected as, according to Croft's diachronic cycle, the process of the formation of a special negative existential predicate would be completed before being extended to the use of verbal negation. However, Croft (1991: 22) does note that the sequencing of these stages is not absolute.

(4.118)a. A *kanda* *a damaw akwaw*.
 á- kā- ndā á dāmāw ák^{wāw}
 3SG.SBJ- IPFV- go to bush NEG.EX
 ‘She is **not** going to the bush.’

(C2-SN:12.2)

- b. *Ma a hey ca , hejəye əy kasəbar ara*
má = ā- xěj tsá xèdzè -jé j- k̄ā- sbār ārá
 REL= 3SG.SBJ- flee TOP person -PL 3PL.SBJ- IPFV- follow SIM
aka səkwaw vaw ?
ákā sk^wāw vāw
 EXIST NEG Q
 ‘When he fled, weren’t people following him along the way?’
 (C10-SN:11.1)

It is likely that the development of the existential negative marker and its use in verbal clauses in Buwal is a relatively recent process as certain nearby languages including Daba (Lienhard 1978: 24) and Mofu-Gudur (Hollingsworth 2004: 16) are clearly Type A. However, in other languages of the subgroup such as Mina (Frajzyngier and Johnston 2005: 264), Gavar (author’s fieldnotes) and Mbudum (Burgess: personal communication), existential negation can also be used for verbal clauses. No contraction of the existential and negative marker has taken place in Mina. Mbudum has a special existential negative marker *haala* which appears to have no relationship to the existential *aka*. The closely related language Gavar, on the other hand, has the plain negative maker *sku* and the existential negative marker *akas*. It is interesting that the fusion and contraction of the existential marker *aka* and the plain negative in Gavar has resulted in a different form of the existential negative marker from that found in Buwal.

4.11.3 ‘Impossible’ negative

The form of the ‘impossible’ negative marker *tàk^wàm* has some similarity in form to the plain and existential negative markers. Gavar has a similar marker *takum* (author’s fieldnotes). There may also be a relationship with the simple negative marker in Daba, which has the form *dákun* following a vowel, and *kun* following a consonant (Lienhard 1978:23-24). It is likely that this marker was originally formed from the fusion of some kind of stative verb followed by simple negative marker. Gavar has the verb *dâ* ‘to be’ (author’s fieldnotes) and in Mina the existential verb has the form *dâ* in a non-pausal

context (Frajzyngier and Johnston 2005: 263). A cognate form of one of these, if present in Buwal historically, would be a likely candidate.

4.11.4 Distribution of negative particles

All three types of negative particles occur clause finally after any objects and adjuncts (4.119 a & b). This order is typologically unusual. Both Dahl (1979: 91) and Dryer (1988: 112) found that cross-linguistically negative morphemes show a strong tendency to **precede** the verb. Dryer (1988: 102) attributes this to the high communicative load carried by negatives and their need to be heard early in order to avoid misunderstanding. It has also been found that negative particles are normally associated with the verb or verb phrase (Dahl 1979: 92; Payne, J 1985: 224; Dryer 1988: 112; Payne, T 1997: 284). However, Dryer (2009: 307) found that Verb-Object-Negative order is very common in central Africa. He proposes that this is an areal phenomenon as it occurs in three different language families: Niger-Congo, Nilo-Saharan and Afro-asiatic. In fact, this order is particularly pervasive throughout Chadic languages being found in all three branches (Dryer 2009: 311 & 346).

- (4.119)a. *Ana ebe ca , hwa kélem sasam a manhayak*
ánā èbè tsá x^{wā}- ká- lèm sàsàm á mán xājāk
 like DEM.MED TOP 2SG.SBJ- PFV- get joy PREP1 mother land
- kwaw.*
k^{wā}w
 NEG
 ‘In this way, you did **not** have joy on the earth.’ (HT3-SN:5.1)

- b. *Wende ma , haldəma a keghwelene*
wéndé má xáldmā á- kǎ- ɣʷǎl -ēnē
IND.DET.SG TOP.EMPH girl 3SG.SBJ- IPFV- show -3SG.IOBJ
a cen akwaw , haldəma a keghwelene
á tsèn ákʷǎw xáldmā á- kǎ- ɣʷǎl -ēnē
PREP1 father NEG.EXIST girl 3SG.SBJ- IPFV- show -3SG.IOBJ
a maman akwaw
á mámán ákʷǎw
PREP1 mother.3POSS NEG.EXIST
‘Another one, the girl doesn’t show it to her father, the girl doesn’t show it to her mother...’ (DE19-SN:4.12)
- c. *Ca əy la ma anta a təwse takwam*
tsá j- lā mā āntā á twsé tàkʷǎm
TOP 3PL.SBJ- do problem DEF.DET PREP1 there impossible
‘So it was impossible for them to deal with the problem there...’ (NH15-SN:1.9)

In the Central Chadic language Ngizim certain sentence adverbs are able to follow the negative marker (Dryer 2009: 319). Similarly in Buwal, clausal adverbs can occur following the negative marker (see Section 3.4.3).

Dryer (2009: 340) mentions a possible correlation between clause final negation and clause final question particles. Both of these could be viewed as having the pragmatic function of coding a particular type of speech act; of denying in the case of negation. He notes that VO languages with final question particles are common in Africa and that VONeg languages tend to be VOQ (Dryer 2009: 340 & 343). This is also the case for Buwal, which has final question particles (see Section 4.11 & Section 9.3). When a negative marker is present it precedes the question particle (4.120).

- (4.120) *Hwa kezləme njef səkwaw vaw ?*
xʷá- kǎ- ɣmē ndzèf skʷǎw vāw
2SG.SBJ- IPFV- detect odour NEG Q
‘Don’t you smell something?’ (NF3-SN:2.6)

Both the existential negative marker *ák^{wāw}/ásk^{wāw}* (4.121b) and *tàk^{wàm}* ‘impossible’ (4.22b) can occur alone as a complete utterance. This is not the case for the plain negative *k^{wāw}/sk^{wāw}*.

(4.121)a. *A kawan aha nesle vaw ?*
 á- k̄- wān á xā nēfē vāw
 3SG.SBJ- IPFV- lie PREP1 over egg Q
 ‘Was she (the hen) sitting (lit. lying) on eggs?’

b. **Akwaw** .
ák^{wāw}
 NEG.EXIST
 ‘No.’ (C4-SN:8-9.1)

(4.122)a. *wala na ma kaw a kanda η lem̄ba*
 wālā nā má káw á- k̄- ndā íj lēm -bā
 wife 1SG.POSS TOP.EMPH even(ful.) 3SG.SBJ- IPFV- go INF get -BEN
η nda η lāba zlan a damaw akwaw . Mbəy
 íj ndā íj lā -bā ʒàn á dāmāw ák^{wāw} mbj
 INF go INF do -BEN work PREP1 bush NEG.EXIST 3SG.STAT
a wata .
 á wātā
 PREP1 home
 ‘...my wife is not even going to be able to go do work in the bush. She is at home.’

b. **Takwam** .
tàk^{wàm}
 impossible
 ‘(It’s) impossible.’ (C12-SN:23.1-24)

4.12 Question markers

Polar questions in Buwal are usually marked with a clause final particle *vāw* (4.123 a & b) (see Section 9.3.1). A cognate question particle *vu* is found in other languages of the

subgroup such as Mina (Frajzyngier and Johnston 2005: 285), Daba (Lienhard 1978: 17) and Gavar (author's fieldnotes).

(4.123)a. *Hwa kánda a damaw akwaw vaw ?*
 x^wā- ká- ndā á dāmāw ák^wāw vāw
 2SG.SBJ- PFV- go PREP1 bush NEG.EXIST Q
 'Haven't you gone to the bush?' (C3-SN:3.3)

b. *əy la kan ma taŋtaŋ vaw ?*
 j- lā kàn má = tāŋ-tāŋ vāw
 3PL.SBJ- do thing REL= good Q
 '...do they do a good thing?' (HT8-SN:7.8)

Buwal also has the familiar question marker *k^wá/sk^wá* which is used between friends

(4.124). This may have been derived from the plain negative marker *k^wāw/sk^wāw* (see Section 4.11.1).

(4.124) *Hwa nda aka a damaw yam səkwa ?*
 x^wā- ndā āká á dāmāw jám sk^wá
 2SG.SBJ- go ACC PREP1 bush also Q.FAM
 'You came back from the bush, **didn't you?**' (GE7-SE:4)

Clause final question particles are common in Chadic languages and indeed more generally in languages of the central part of Africa (Dryer 2009: 34).

4.13 Modal particles

Buwal has two modal particles which express epistemic modality. These are the speculative marker *ká* and the dubitative marker *āzà*. This section describes their function and distribution.

SPECULATIVE modality expresses uncertainty about the truth of a proposition (Palmer 2001: 24). The speculative marker *ká* can only occur preceding the polar question marker

vāw (see Section 4.12) to form speculative polar interrogatives (4.125) (see Section 9.3.1.3).

- (4.125) *Kata hwa nanda a mapat ka vaw ?*
kātà x^{wā}- ná- ndā á māpát ká vāw
 perhaps 2SG.SBJ- FUT- go PREP1 morning SPEC Q
 ‘Perhaps you will go in the morning **maybe?**’ (GE48-SE:1.1)

It is possible that this marker is historically related to the Hausa conjunction *kō* ‘or’ which may be used as an interrogative tag (Newman 2000: 499).

DUBITATIVE modality expresses doubt about the truth of a proposition (Palmer 2001: 25). It is possible that the dubitative marker *āzà* has been derived from the itive marker (see Section 4.7) as it has the same form, although its distribution is different. The dubitative marker may precede question markers *vāw* (4.126a) and *k^{wá}/sk^{wá}* (4.125b) (see Section 4.12) and the adverb *jám* ‘also’ (4.126c) (see Section 3.4.3). It can also precede a plain negation marker *k^{wāw}* (see Section 4.11.1) that is functioning as a rejection disjunctive coordinator (4.126d) (see Section 5.4.3).

- (4.126)a. *Ma anta ca , kadak aza vaw ?*
mā āntā tsá kádàk āzà vāw
 situation DEF.DET TOP good DUB Q
 ‘The situation, is it **really** good?’ (GE52-SE:31.2)

- b. *a dāwba tete a barbar anta aza kwa ?*
ā- dāw -bā tété á bār-bār āntā āzà k^{wá}
 3SG.SBJ- want -BEN enough PREP1 strength 3SG.POSS DUB Q.FAM
 ‘...does he **really** want the amount appropriate to his strength?’ (C11-SN:87)

- c. *Hune darlaŋw ege aza yam , hune ŋta zlan a tama*
x^wnè dàrlāŋ^w =égē āzà jám x^wnè- ntā ʒàn á tāmā
 2PL youth =PL DUB also 2PL.SBJ- take work PREP1 front
msəra ege .
msrā =égē
 elder =PL
 ‘Possibly, you, the youth also, you should take over the work from the
 elders.’ (C1-SN:39.3)
- d. *Əy nazam , aza kwaw ca , vaŋgay ?*
ǰ- ná- zàm āzà k^wāw tsá váŋgáj
 3PL.SBJ- FUT- eat DUB NEG TOP how
 ‘They will eat, if not, what will they do (lit. how)?’ (GE52-SE:39)

4.14 Conjunctions

Matthews (1997: 68) defines a CONJUNCTION as ‘a word which joins two syntactic units’. There are three types of conjunction in Buwal: subordinators (4.14.1), sequential markers (4.14.2) and coordinators (4.14.2).

4.14.1 Subordinators

SUBORDINATORS (or subordinating conjunctions) are morphemes which mark subordinate clauses (Matthews 1997: 360). It is also possible for certain subordinate clauses to be marked with prepositions (Section 4.8) or adverbs (Section 3.4.3). Included in this section are those morphemes which only have a subordinating function. There are three main types of subordinators: (i) quotatives (Section 4.14.1.1), (ii) the relative marker (Section 4.14.1.2) and (iii) adverbialisers (Section 4.14.1.3). These forms are discussed in more detail in relation to speech reports (Section 10.1.3), relative clauses (Section 10.1.4) and adverbial clauses (Section 10.1.5) respectively.

4.14.1.1 Quotatives

Buwal has the quotative marker *ŋgājā*, which marks speech reports, both direct and indirect (4.127) (see Section 10.1.3). The quotative marker has some verbal properties. It takes person/number subject agreement marking. However it cannot take any other verbal

affixes. This marker is probably related to the verb *jā* ‘say’. Frajzyngier (1996: 104) notes that in Chadic, as in many other languages quotatives often derive from verbs of ‘saying’. He also observes that there is a wide variation in the forms of verbs of ‘saying’ in Chadic (Frajzyngier 1996: 111). Therefore it is difficult to say where the form of the Buwal quotative marker comes from. Its properties are described further in Section 10.1.3.

- (4.127) *A* *zlepene* *a* *ɲgaya* : « *Kay ! Ha anta*
 ā- *ʒāp* *-ēnē* *ā-* *ɲgājā* *káj* *xā* *āntā*
 3SG.SBJ- speak -3SG.IOBJ 3SG.SBJ- QUOT Oh! head 3SG.POSS
 ca , *mala naka* . *Ha anta ca* , *mala naka !* »
 tsá *mālā nākā* *xā* *āntā* *tsá* *mālā nākā*
 TOP GEN 1SG.POSS head 3SG.POSS TOP GEN 1SG.POSS
 ‘He spoke to him saying, "Oh! Its head is mine! Its head is mine !"’
 (NF3-SN:1.16-18)

Another subordinating morpheme used with speech reports in Buwal is the resumptive quotative marker *màtáŋgár* which can be translated as ‘according to what was said by’. Speech reports of this type will be described further in Section 10.1.3. Diachronically this morpheme may have been derived from the nominaliser *ma-* (see Section 3.1.3.1) plus a verb of speech, perhaps sharing the verb *jā* ‘say’ with the quotative marker *ɲgājā* given there is some similarity in form. However in this case the morpheme boundaries are no longer clearly distinguishable. The resumptive quotative marker is followed directly by either a noun phrase (4.128a) or an independent pronoun (4.128b) which identifies the original speaker.

- (4.128)a. *Matangar hejeye* *ma zlezle ege* : « *Wala dɔlak*
 màtáŋgár xèdzè *-jé má= ʒēʒē* *=égē* *wālā dlàk*
 QUOT.RES person -PL REL= long.ago =PL woman mess
 ma kangaz *wala dɔlak* » *a* *ya* .
 má= kā- *ɲgàz* *wālā dlàk* *ā-* *jā*
 REL= IPFV- advise woman mess 3SG.SBJ- say
 ‘According what the people of long ago said, "A messy woman is the
 one who advises a messy woman" they said.’ (GE39-SE:10.1)

- b. *Matangar sa* , a *nuna sa ya* : « *Gazlavay*
màtángár sã á nwná sã- já gāḷāvāj
 QUOT.RES 1SG PREP1 last.year 1SG.SBJ- say God
menjenjekey *mba yam may* . »
 mā- ndzàndzà -ēkēj mbà jám máj
 JUS- give -1SG.IOBJ child also TAG.IMP.POL
 ‘According to what I said, last year I said, “May God give me a child also
 please.”’ (GE39-SE:10.2)

4.14.1.2 Relative marker

Payne (1997: 325) defines a RELATIVE marker (or relativiser) as a ‘particle that sets off a relative clause’. Buwal has the relative marker *má* which occurs at the beginning of a relative clause (4.129a). This is not a relative pronoun as it makes no reference to the relativised noun phrase (Payne 1997: 332). Frajzyngier (1996: 418) found this to be a common arrangement in Chadic languages. He states that Chadic languages display considerable variation in the form of relative markers and lists a number of possible sources for such markers including demonstratives and definite markers, indefinite pronouns, associative markers and complementisers (p 446). None of these seem to explain the form of the Buwal relative marker. The most likely source appears to be the *ma-* nominalising prefix discussed in Section 3.1.3.1. Headless relatives, which are marked with the relative marker (4.129b), function like nouns in many ways (see Section 5.1.1). This association lends support to the idea that the nominalising prefix is the source for the relative marker. Similarly for Mina (Frajzyngier and Johnston 2005: 429), Mofu-Gudur (Barreteau 1977: 106), Gavar (Tchikoua 2006: 28) and for the Central Chadic language Masa (Nguendjio 2005: 23), the relative marker has the same form as the nominalising prefix.

- (4.129)a. A *deŋ maman* [*ma kánda kwaw*] .
 ā- dèŋ māmán **má**= ká- ndā k^wāw
 3SG.SBJ- think mother.3POSS REL= PFV- come NEG
 ‘He thinks about his mother **who** hasn’t come (yet).’ (LL33-SE:18)

- b. [*Ma ketehzetene zlam akwaw*] *cemey* ,
má= k̄- tēh -zā -ētēnē ʒàm ák^wāw tséméj
REL= IPFV- listen -TRANS -3PL.IOBJ ear NEG.EXIST TOP.CON
bay a mbalata .
bāy ā- mbāl -ātā
chief 3SG.SBJ- arrest -3PL.DOBJ
‘**Those who** don’t listen to them, the chief arrests.’ (DE8-SN:5.3)

The relative marker is also used to mark various types of adverbial clauses (see Section 10.1.5). On its own it can mark temporal adverbial clauses expressing general time reference (4.130) (see Section 10.1.5.1). The relative marker is also used in conjunction with other morphemes such as nouns, prepositions and adverbs to mark other types of adverbial clauses. These are listed in Table 4.12 below. The relative marker is obligatory in some of these cases, in other cases it is optional. See the relevant sections for examples.

- (4.130) [*Ma sa vaŋ a wata*] , *əy kazam uda* .
má= s̄- vāŋ á wātā j- k̄- zàm wdā
REL= 1SG.SBJ- arrive PREP1 home 3PL.SBJ- IPFV- eat food
‘**When** I arrived home, they were eating food.’ (GE61-SE:1.1)

Table 4.12 below summarises the different functions of *ma* in Buwal and gives the sections in which they are discussed.

Table 4.12: Functions of *ma* in Buwal

Bound/Free	Function	Sub-types	Section Found
Bound	Nominaliser	Agent Patient Ordinal numbers Lexicalised	3.1.3.1
Free	Relative marker		4.14.1.2
	Adverbialiser	Temporal	10.1.5.1
		Locative	10.1.5.2
Manner		10.1.5.3	
Reason		10.1.5.4	
Cause		10.1.5.5	
Concessive	10.1.5.7		
Topic marker	Emphatic	4.15 & 11.2.2.3	

4.14.1.3 Adverbialisers

Adverbial clauses may be marked with a variety of morphemes including prepositions and adverbs (see Section 10.1.5). This sections deals with the small group of subordinating conjunctions or ADVERBIALISERS whose only function is to mark adverbial clauses.

The first of these, *már* ‘before’, precedes temporal adverbial clauses with specific time reference (see Section 10.1.5.1). This morpheme is probably derived from the verb *mār* meaning ‘begin’. Just like the verb *mār* ‘begin’ (4.131a), the adverbialiser *már* ‘before’ can be followed by an infinitive complement (4.131b).

- (4.131)a. *Sa mar ŋ da uda* .
 sā- mār ń dà wdā
 1SG.SBJ- begin INF prepare food
 ‘I begin to prepare food.’ (GE61-SE:3.9)
- Mar ŋ wan , sa zam uda aza* .
 már ń wān sā- zàm wdā āzá
 before INF sleep 1SG.SBJ- eat food COMPL
 ‘Before sleeping, I eat food first.’ (GE61-SE:3.3)

Secondly, there is the adverbialiser *màdā* ‘if’, which introduces possible conditional clauses (4.132) (see Section 10.1.5.6). Frajzyngier (1996: 375-376) found that the form *ma* is a common conditional marker in two out of the four branches of Chadic languages. He also mentions that *dV* is used as a conditional marker in a number of Chadic languages. It is possible that the Buwal *màdā* developed from a combination of these two morphemes.

- (4.132) *Mada hwa kázam uda aza deydey , hwa kula*
màdā x^wā- ká- zàm wdā āzá dējdej x^wā k^wlá
 if 2SG.SBJ- PFV- eat food COMPL too.much(ful.) 2SG.STAT able

ŋ wan kadak kadak kwaw .

ŋj wān kádàk kádàk k^wāw

INF sleep good good NEG

‘If you have eaten too much, you are not able to sleep very well.’

(GE61-SE:22.1)

Another morpheme used to introduce conditional clauses, although less commonly than *màdā*, is *āndzā* ‘if’ (4.133). This is perhaps related to the conditional particle *āngə̀* in Mina (Frajzyngier and Johnston 2005: 412).

(4.133) *Anja a kandaha , sa həbaraw .*

āndzā á- ká- ndā -xā sá- xbār -āw

if 3SG.SBJ- IPFV- go -VNT.DIST 1SG.SBJ- wait -3SG.DOBJ

‘If he is coming, I (will) wait for him.’

(GE57-SE:3)

Finally the adverbialisers *ndár* (4.134a) or less commonly *táp* (variant: *tpá*) (4.134b) are used to mark purpose clauses (see Section 10.1.5.10). Schmidtke-Bode (2009: 187) states that cross-linguistically purpose markers are most commonly drawn from the domain of directed motion or benefaction. It is possible that the Buwal adverbialiser *ndár* developed diachronically from the verb *ndā* ‘go’.

(4.134)a. *Nda ŋ badába wala ca , [ndar a*

ndā ŋj bād -ā -bā wālā tsá ndár ā-

go INF flatter -VNT.PROX -BEN woman TOP **so.that** 3SG.SBJ-

ndaha ŋ dahwaw uda yam] .

ndā -xā ŋj dà -āx^wāw wdā jám

go -VNT.DIST INF prepare -2SG.IOBJ food also

‘Go to flatter a woman, **so that** she comes to prepare you food also.’

(GE61-SE:10.5)

b. *Tal ŋ la zlan ca , [tap hwa zamba səkan] .*

tàl ŋj lā ɬàn tsá táp x^wā- zàm -bā skàn

make.effort INF do work TOP **so.that** 2SG.SBJ- eat -BEN thing

‘Make an effort to do work, **so that** you eat something.’ (GE61-SE:10.14)

4.14.2 Sequential markers

SEQUENTIAL MARKERS are morphemes which mark clauses referring to an event which occurs after and is somehow a consequence of the event in the previous clause (see Section 10.2). According to Frajzyngier (1996: 40) sequential markers are common in Chadic languages. Buwal has two sequential markers, *āmbá* ‘then’ and *ājā* ‘then/so’. As Frajzyngier predicts they do not precede negative clauses (4.135 a & b) (p 41). He also predicts that sequential markers may follow a fronted adverb of time. An example of this was found in the Buwal corpus (4.135c).

(4.135)a. *a* *kaḏāw* *ŋ* *ŋtewekey* *amba* *sa* *hey aza*
 á- kā- ḏāw íj ntàw -ēkēj **āmbá** *sā-* *xēj āzà*
 3SG.SBJ- IPFV- want INF whip -1SG.DOBJ **then** 1SG.SBJ- run IT
a *ujek*
 á *wjēk*
 PREP1 house
 ‘...he wanted to whip me, **then** I ran away into the house.’ (C16-SN:21.5)

b. *a* *mbal aza ca* *aya* *ḃah a* *ḃahza* *ka*
 ā- mbāl āzà tsá **ājā** ḃāh ā- ḃāh -zā ká
 3SG.SBJ- catch IT TOP **then** hide 3SG.SBJ- hide -TRANS ANT
asa *rəgwac ende*
 á *sā* *rg^wàts éndē*
 PREP1 under clothes like.this.PROX
 ‘...he caught it, **then** he hid it for the time being under his clothes like this.’ (C4-SN:9.2)

c. *A* *dəwze anta* *ca* , *amba* *ma* *anta* *a* *la*
 á dwzé āntā tsá **āmbá** mā āntā ā- lā
 PREP1 after DEF.DET TOP **then** situation DEF.DET 3SG.SBJ- do
zebzeb *ana ebe* *ŋghe*
zēḃ-zēḃ *ánā èbè* *nḃē*
 secretive like DEM.MED DEM.PROX
 ‘Afterwards, **then** the situation was done secretly like this...’ (NH8-SE:6.1)

Frajzyngier (1996: 66) found that in many Chadic languages the sequential marker functions at a discourse level, occurring at the beginning of a sentence. This is also the case in Buwal for both markers (4.136 a & b). In fact marker *ājā* ‘then/so’ most frequently functions in this way.

- (4.136)a. *Hwa ulakza , hwa ulakza kadak kadak .*
 x^{wā}- wlàk -zā x^{wā}- wlàk -zā kádàk kádàk
 2SG.SBJ- think -TRANS 2SG.SBJ- think -TRANS good good
Amba hwa nezenzene zlap ege .
āmbá x^{wā}- ná- zèn -zā -ēnē ʒāp =égē
then 2SG.SBJ- FUT- return -TRANS -3SG.IOBJ speech =PL
 ‘You think about it, you think about it very well. **Then** you will give him a response.’ (HT1-SN:6.4-6.5)

- b. *a dādā ra fagwalakw wese . Aya*
 ā- dād -ā rā fāg^{wā}lāk^w wēsé ājā
 3SG.SBJ- take.out -VNT.PROX hand leper DEM.DIST **then**
dād a dādā zley
 dād ā- dād -ā ʒèj
 take.out 3SG.SBJ- take.out -VNT.PROX meat
 ‘...he took out the hand of that leper. **Then** he took out the meat...’ (TN1-SN:5.3-4)

4.14.3 Coordinators

COORDINATORS are words which link units that are syntactically equivalent (Matthews 1997: 76-77). Conjunctive ‘and’ type coordination can be expressed in Buwal with one of two conjunctions *éj* ‘and’ and *léŋ* ‘plus’. It is likely that *éj* ‘and’ is a borrowing from Fulfulde *e* which Noye (1974: 323) defines as ‘with, and, from, where’ and Stennes (1961: 48) reports may connect nominals. Frajzyngier (1996: 26) states that most Chadic languages do not have a sentential coordinating conjunction. For those that do, two of the possible sources he suggests are nominal conjunctions and borrowings.

In Buwal, both *éj* ‘and’ and *léŋ* ‘plus’ can be used to coordinate noun phrases (4.137 a & b) (see Section 5.4.1), prepositional phrases (4.138 a & b) (see Section 7.3), adjectives (4.139 a & b) (see Section 5.1.8) and clauses (4.140 a & b) (see Section 10.4.1).

(4.137)a. *gazlavay tata [wélbe ey kule]*.
gāḷāvāj tātá wēlbē éj k^wlè
 god 3PL.POSS nature.spirit **and(ful.)** idol
 ‘...their gods were nature spirits **and** idols.’ (DE15-WN:2)

b. *A dəwze anta sa zehzene [m̄ba*
á dwzé āntā sā- zāx -zā -ēnē m̄bā
 PREP1 after DEF.DET 1SG.SBJ- pour -TRANS -3SG.IOBJ tamarind
leŋ sukar].
léŋ s̄wkār
plus sugar(fr.)
 ‘Afterwards, I pour in tamarind **plus** sugar.’ (DP5-SN:6)

(4.138)a. *Hwa kula ŋ cekzetene aza ana gef*
x^wā k^wlá ŋ tsàk -zā -ētēnē āzá ánā gèf
 2SG.STAT able INF help -TRANS -3PL.IOBJ COMPL like difficulty
vedəye ey ana ŋtəbəl ma mbalata yam
vēdjé éj ánā nt̄bəl má= mbāl -ātā jám
 IND.DET.PL **and(ful.)** like tiredness REL= hold -3PL.DOBJ also
 ‘You are able to help them, like certain difficulties **and** like tiredness
 which takes hold of them also...’ (BH1-SN:4.3)

b. *Vana a bəremetene serek ŋ ŋhwəye leŋ*
vāná ā- brām -ētēnē sérēk ŋ nx^wā -jé léŋ
 father.1POSS 3SG.SBJ- braid -3PL.IOBJ rope PREP2 goat -PL **plus**
ŋ ŋtəməye .
ŋ ntmēk -jé
 PREP2 sheep -PL
 ‘My father braids a rope for the goats and (lit. **plus**) for the sheep.’
 (GE18-SE:9)

- (4.139)a. *Ata mbermber ey gədak , əy kéŋtezeze* .
 ātā mbér-mbér éj gɔ̀dàk j- ká- ntèz -ējē
 ASS.PL near **and(ful.)** far 3PL.SBJ- PFV- separate -PART
 ‘Near **and** far, they are separated.’ (GE66-SE:49)
- b. *Ŋkəɗāŋ ŋgha mbəy [bɑ̃bɑ̃r lɛŋ dakala]* .
 nkɗāŋ nyā mbj bār-bār léŋ dākālā
 stone DEM.PROX 3SG.STAT hard **plus** big
 ‘This stone is hard and (lit. **plus**) big.’ (GE18-SE:31.1)
- (4.140)a. *Mawal ege , əy kabal mpe ŋ la ujek ,*
 māwəl =égē j- kā- bəl mpè ŋ lā wjək
 man =PL 3PL.SBJ- IPFV- chop wood INF make hut
ey əy kazla həmas .
 éj j- kā- ɣā xmās
and(ful.) 3PL.SBJ- IPFV- cut thatch
 ‘Men chop wood to make a hut **and** they cut thatch.’ (DE18-SN:2.9)
- b. *Əy kababaɗ lɛŋ əy zlak ara* .
 j- kā- bābàɗ léŋ j- ɣàk ārá
 3PL.SBJ- IPFV- plough **plus** 3PL.SBJ- sow SIM
 ‘They are ploughing **plus** they sow at the same time.’ (GE18-SE:32.1)

The conjunction *éj* ‘and’ can also be used at discourse level, beginning a sentence (4.141).

- (4.141) *Ama hune kátalaw , hune kálalak*
 àmá x^wnè- ká- təl -āw x^wnè- ká- ləlàk
 but(ful.) 2PL.SBJ- PFV- manage -3SG.DOBJ 2PL.SBJ- PFV- be.afraid
deydey mambaza akwaw . Ey Aba kála zlan
 dəjdéj mām̄bāzá ák^wāw éj aba ká- lā ɣàn
 too.much(ful.) so.much NEG.EXIST **and(ful.)** Aba PFV- do work
tete mala anta yam .
 tété mālā āntā jām
 average GEN 3SG.POSS also
 ‘But you managed it, you were not too afraid. **And** Aba did average work for him also.’ (C1-SN:4.7-8)

There is no disjunctive coordinating conjunction ‘or’ in Buwal. Disjunction is expressed using negation markers (see Section 10.4.2) or juxtaposition in the case of interrogative disjunction (see Section 9.3.1.2).

In terms of adversative ‘but’ coordination Buwal makes use of the borrowed conjunction *àmá* ‘but’ which Frajzyngier (1996: 24) points out has come into a number of Chadic languages from Arabic through Hausa and Fulfulde. This conjunction is used to coordinate clauses (4.142a) (see Section 10.4.3) and also often functions at a discourse level, beginning a sentence (4.142b).

- (4.142) a. *Kája zley damaw ene , ama ngamngam*
 ká- dzā ʒèj dāmāw éné àmá ngām-ngām
 PFV- kill meat bush like.that **but(ful.)** trap(ful.)
kájaza
 ká- dzā -zā
 PFV- kill -TRANS
 ‘He had killed some game (lit. meat of the bush) like that, but a trap killed him.’ (NF5-SN:1.5)
- b. *Ama zlan ca kánda tuwah .*
 àmá ʒàn tsá ká- ndā twáx
but(ful.) work TOP PFV- go good
 ‘**But** the work, it went well.’ (C1-SN:37.1)

4.15 Topic markers

Buwal topic markers follow the topicalised element which occurs in sentence initial position (see Section 11.2.1) and are followed by a pause (4.143 a to d). There are four topic markers; the general topic marker *tsá*, the contrastive topic marker *tséméj*, the emphatic topic marker *má*, and the additive topic marker *bāw*. This last marker is borrowed from the Fulfulde word *boo* ‘to the side of, also’ (Noye 1974: 317). The function of the different topics markers is described in more detail in Section 11.2.

- (4.143)a. *Ha anta ca , mala naka .*
 xā āntā tsá mālā nākā
 head 3SG.POSS TOP GEN 1SG.POSS
 ‘As for its head, it’s mine.’ (NF3-SN:2.11)
- b. *Kadak cemey , a deŋza ata taf anta*
 kádàk tséméj ā- dèŋ -zā á tā tàf āntā
 good TOP.CON 3SG.SBJ- think -TRANS PREP1 on path 3SG.POSS
 ‘But it is good, he thinks about his path...’ (DE13-SN:12.1)
- c. *Kaw metes ma , hune sew kwagwa .*
 káw mētēs má x^wné- sèw k^wág^wá
 even(ful.) hunger TOP.EMPH 2PL.SBJ- bear.with for.the.moment
 ‘Even hunger, you bear with (it) for the moment.’ (C4-SN:32.4)
- d. *Hune kénjeye a ŋgama yam baw , hune*
 x^wnè- ká- ndzā -ējē á ŋgámà jám bāw x^wné-
 2PL.SBJ- PFV- sit -PART PREP1 friend also TOP.ADD 2PL.SBJ-
dāw ŋ la metəwle səkwaw .
 dāw ń lā mētwlē sk^wāw
 want INF do lie NEG
 ‘(When) you are sitting with your friend **also**, you shouldn't lie.’
 (DE17-SN:4.2)

The general and contrastive topic markers can also occur at the beginning of an utterance (4.144 a & b).

- (4.144)a. *Ca, ara səkan ma taŋtaŋ kwaw .*
 tsá ārā skàn má = tāŋ-tāŋ k^wāw
 TOP COP thing REL= good NEG
 ‘So, it is not a good thing.’ (HT2-SN:3.8)
- b. *Cemey , ara ŋgərəŋ ege*
 tséméj ārā ŋgrēŋ =égē
 TOP.CON PRED greed =PL
 ‘But, they were greedy people...’ (NF4-SN:1.3)

It is not obvious how the Buwal topic markers developed. In certain Chadic languages there may be a link with a demonstrative as in Hdi (Frajzyngier 2002: 389), an associative marker as in Lele (Frajzyngier 2001: 333) or modal particles as in Hausa (Newman 2000: 616). None of these is the case for Buwal. It is possible that the contrastive topic marker *tséméj* is formed from a fusion of the general topic marker *tsá* and the interrogative pronoun *véméj* ‘what’ (see Section 4.1.4). In fact, from time to time speakers use *tséméj* in the place of *véméj* in questions (4.145). It is also possible that the emphatic topic marker *má* is related to the relative pronoun which has the same form (see Section 4.14.1.2).

- (4.145) əy *cene* *zlam dawar* *ca , mala ma* ***cemey*** ?
 j- tsā -ēnē ɣàm dāwār tsá mālā mā **tséméj**
 3PL.SBJ- put -3SG.IOBJ name misfortune TOP GEN situation TOP.CON
 ‘...they give (lit. put) names of misfortune, in what situation?’ (C9-SN:27.2)

4.16 Emphatic marker

Buwal has the emphatic marker *tsáj* which occurs sentence finally (4.146 a & b). Its function is to emphasise the truth of the statement.

- (4.146)a. *Ha* *kálakw* *anta* *aza* ***cay*** !
 xá ká- làk^w āntā āzá **tsáj**
 until(ful.) PFV- lose.weight 3SG.POSS COMPL **EMPH**
 ‘(He worked so hard) until he lost weight **didn’t he!**’ (C12-SN:85)
- b. *Sa* *mar* *ɲ* *ndaba* , *sa* *mbəlakw* ***cay*** !
 sā- mār ɲ ndā -bā sā mblāk^w **tsáj**
 1SG.SBJ- begin INF come -BEN 1SG.STAT stranger **EMPH**
 ‘I just came (lit. begin to come), I am a stranger **aren’t I!**’ C11-SN:47.2)

4.17 Interjections

Schachter and Shopen (2007: 57) define INTERJECTIONS as ‘words that can constitute utterances in themselves, and that usually have no syntactic connection to any other

words that may occur with them.’ Interjections may be phonologically distinctive. The phonology of Buwal interjections was discussed in Section 2.5. Some other examples of Buwal interjections are given in (4.147) below.

(4.147)		
	<i>á</i>	‘ah’
	<i>ásádāj</i>	‘I don’t know/care.’
	<i>ājá</i>	‘oh yes?’
	<i>kéléléw</i>	cry to chase away
	<i>mànà</i>	hesitation
	<i>wábáw</i>	cry of grief
	<i>wáj</i>	response when called

Of particular interest is *mànà* which is used as a fill-in word when the speaker is still considering what he should say (4.148).

(4.148)	<i>Kay</i>	,	<i>mana</i>		<i>mana</i>		,	<i>deŋgez</i>	<i>kája</i>		<i>mawal</i>	
	<i>káj</i>		mànà		mànà			<i>dēŋgēz</i>	<i>ká-</i>		<i>dzā māvāl</i>	
	Oh!		(hesitation)		(hesitation)			trap	PFV-		kill husband	
	<i>na</i>		<i>aza</i>		<i>a</i>			<i>damaw</i>			!	
	<i>nā</i>		<i>āzā</i>		<i>á</i>			<i>dámāw</i>				
			1SG.POSS		COMPL			PREP1			bush	
			‘Oh! um... A trap killed my husband in the bush!’									(NF5-SN:2.7)

Chapter 5 Noun phrases

A NOUN PHRASE consists of a head noun plus various modifying constituents. Buwal has four different types of noun phrases. The structure and constituents of the basic noun phrase is described in Section 5.1. Section 5.2 deals with genitive constructions, in which one or more nouns modify the head noun. Appositional noun phrases are discussed in Section 5.3. Finally coordinate noun phrases are covered in Section 5.4.

5.1 Basic noun phrase

The basic noun phrase in Buwal has the structure shown in Table 5.1. The head is the only obligatory element within the noun phrase and as such will be discussed first in Section 5.1.1. The following sections describe each slot within the noun phrase structure in order from left to right. The structure in Table 5.1 below represents the most frequent position that each of the constituents is found in within a noun phrase. A number of constituents including; the definite determiner (Section 5.1.4), the plural marker (Section 5.1.6), the indefinite determiner (Section 5.1.7), prepositional phrases (Section 5.1.10) and demonstratives (Section 5.1.11), may vary in their position with no resulting change in meaning. Others, particularly adjectives (Section 5.1.8), quantifiers (Section 5.1.9) and prepositional phrases (Section 5.1.10) may modify the head noun directly or as the predicate of a relative clause. These variations will be discussed further in the relevant sections.

Table 5.1: Structure of basic noun phrase

(FOC)	(ASS.PL)	HEAD	(POSS)	(DEF.DET)	(REL)	(PL)	(IND.DET)	(ADJ)	(QUANT)	(PP)	(DEM)	(FOC)
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5.1.1 Head

There are a number of different word classes and constructions which may function as the head of a noun phrase. These include: (i) nouns, (ii) independent personal pronouns, (iii) indefinite pronouns, (iv) independent possessive pronouns, (v) interrogative pronouns, (vi) universal quantifiers, (vii) indefinite determiners, (viii) nominal demonstratives, (ix) adjectives, (x) cardinal numerals, (xi) quantifiers, (xii) headless relative clauses and (xiii) genitive constructions. Examples of noun phrases with each type of head plus cross-

referencing to the sections in this grammar where more details can be found concerning them are given below.

(i) Nouns (Section 3.1)

- (5.1) *Gwambakw ege əy fəɗáhha tewtew ɲ msaw*
g^wāmbāk^w =égē j- fɗāx -xā téw-téw ɲ msàw
toad =PL 3PL.SBJ- wake.up -VNT.DIST all INF roast
zley tata
ɓèj tātá
meat 3PL.POSS
 ‘The toads all woke up to roast **their meat...**’ (NF6-WN:4.8)

(ii) Independent personal pronouns (Section 4.1.1.1)

- (5.2) *Ara mbe ma kasəkam ndərey .*
ārā mbē má= ká- skām ndrèj
COP 3SG REL= IPFV- buy sorghum
 ‘It’s him who is **buying the sorghum.**’ (GE15-SE:86)

(iii) Indefinite pronouns (Section 4.1.2)

- (5.3) *Hune namay ca dala ma tãntãñ .*
x^wné ná- māj tsá dālā má= tãntãñ
2PL.SBJ- FUT- choose TOP someone REL= good
 ‘You will choose **someone who is good.**’ (NH7-SN:4.4)

(iv) Independent possessive pronouns (Section 4.1.3)

- (5.4) *Sa naɲtar mala ɲcene tewtew*
sā- ná- ntàr mālā ntsènè téw-téw
1SG.SBJ- FUT- pay for 1EXCL.POSS all
 ‘I will pay **all of ours...**’ (NH9-SN:6.13)

(v) Interrogative pronouns (Section 4.1.4)

- (5.5) *Ma ŋta ha gamzakw vayay ca , əy nda*
má= ntā xā gāmzák^w **vájáj** tsá j- ndā
REL= take head rooster **who** TOP 3PL.SBJ- go
'**Whoever** won (lit. took the head of the rooster), they go...' (DP6-SN:3.6)

(vi) Universal quantifiers (Section 4.1.4)

- (5.6) *Dekey kaw vekey ege .*
dā -ēkēj **káw vékéj** =égē
bring -1SG.IOBJ **even which** =PL
'Bring me **every type.**' (GE37-WE:25)

(vii) Indefinite determiners (Section 4.2.1)

- (5.7) *Wende ma sa gare a njuna ca , ebe*
wéndé má= sã- grē á ndzwná tsá èbè
IND.DET.SG REL= 1SG.SBJ- see PREP1 yesterday TOP DEM.MED
kwaw .
k^wāw
NEG
'**Another (that) I saw yesterday, (it's) not this one.**' (GE35-SE:22)

(viii) Nominal demonstratives (Section 4.3.1)

- (5.8) *Ebe ege ca , əy kedede mavaw a mna .*
èbè =égē tsá j- kã- dēdē mávāw á mnā
DEM.MED =PL TOP 3PL.SBJ- IPFV- pour.into beer PREP1 inside
'**These ones, they pour beer into.**' (DE2-SN:13.2)

(ix) Adjectives (Section 3.3)

- (5.9) *Jem wese ca , sa dāw kwaw .*
dzèm wēsé tsá sā- dāw k^wāw
tall DEM.DIST TOP 1SG.SBJ- want NEG
‘I don’t want to be that tall (lit. **That height**, I don’t want it.)’
(GE39-SE:53)

(x) Cardinal numerals (Section 4.4.1)

- (5.10) *Tenguleŋ day aha bəse .*
téŋg^wlèŋ dāj á xā bsé
one more PREP1 over nothing
‘**One** is more than nothing.’
(LL48-SE:3)

(xi) Quantifiers (Section 4.4.2)

- (5.11) *cekude ma hejəye əy kala a gwaygwaya*
tsék^wdē má= xèdzè -jé j- kǎ- lā á g^wājg^wājā
a.little REL= person -PL 3PL.SBJ- IPFV- do PREP1 festival
ca ana ebe .
tsá ánā èbè
TOP like DEM.MED
‘**A little of what (lit. that which) people do at the festival**, is like this.’
(DP8-SN:8)

(xii) Headless relative clauses (Section 10.1.4)

- (5.12) *kédeŋza dakala ata ma əy*
ká- dèŋ -zā dākālá á tā má= j-
PFV- reflect TRANS a.lot PREP1 on REL= 3PL.SBJ-
temzene dengez mavaw ŋ ha .
tàm -zā -ēnē dèŋgèz māvāw í xā
pour TRANS -3SG.IOBJ dregs beer PREP2 head
‘...he thought a lot about **how they poured the beer dregs onto his head.**’
(TN3-WN:5.1)

(xiii) Genitive constructions (Section 5.2)

- (5.13) *a* *dāda* *ra* *fāgwalakw wese* .
 ā- dād -ā rā fāg^wālāk^w wēsé
 3SG.SBJ- take.out -VNT **hand leper** DEM.DIS
 ‘...he pulled out **that hand of the leper.**’ (TN1-SN:5.3)

Each type of noun phrase head has different restrictions regarding which noun phrase constituents may occur with them. These restrictions are summarised in Table 5.2 below. Note too that, the category ‘noun’ itself has been expanded to provide details about different noun sub-classes because they vary as to which noun phrase constituents they can take as dependents. Focus particles (see Section 5.1.2) have been excluded as they may occur with any head noun. Note that an X in brackets indicates that only some of the words in that particular class can take this constituent, depending on its semantics. For example certain group 1 temporal nouns such as *vjā* ‘wet season’ and *nkràm* ‘dry season’ cannot be possessed whereas others such as *vā* ‘year’ and *ntrā* ‘month’ can be.

Table 5.2: Restrictions on the co-occurrence of various noun phrase constituents

Head	ASS.PL	POSS	DEF.DET	REL	PL	DET	ADJ	QUANT	PP	DEM
common nouns	X	X	X	X	X	X	X	X	X	X
mass nouns	X	X	X	X	X	X	X	not NUM	X	X
abstract nouns	X	X	X	X	X	X	X	not NUM	X	X
locative nouns	X	(X)	X	X	X	X	X	(X)	X	X
temporal nouns (group 1)	X	(X)	X	X	X	X	-	X	X	X
temporal nouns (group 2)	-	-	X	X	(X)	X	-	-	X	X
relational nouns	X	X	X	X	-	X	X	X	X	X
independent personal pronouns	-	-	X	X	-	X	X	X	-	X
indefinite pronoun	-	X	X	X	-	X	X	-	X	X
independent possessives	X	X	X	X	X	X	X	X	-	X
interrogative pronouns	X	-	-	-	-	-	-	-	-	-
universal quantifiers	X	X	X	X	X	X	X	-	X	X
indefinite determiners	-	-	X	X	X	X	X	X	X	X
nominal demonstratives	X	-	X	X	X	-	X	X	X	X
adjectives	X	X	X	X	(X)	X	X	X	X	X
cardinal numerals	X	X	X	X	X	X	X	-	X	X
quantifiers	X	X	X	X	X	X	X	X	X	X
headless relative clauses	X	X	X	X	X	X	X	X	X	X
genitive constructions	X	X	X	X	X	X	X	X	X	X

5.1.2 Focus particles (FOC)

Focus particles, which could be considered a sub-class of adverbs, were discussed in detail in Section 3.4.4, where a full list was given. Focus particles can modify all types of noun phrase heads. A number of focus particles precede the head noun (5.14a), whereas most noun modifiers in Buwal follow. Two of these, *káw* ‘even’ and *jāŋ* ‘only’ are listed by Dryer (2007b: 177) as being among noun modifiers that tend to have idiosyncratic grammatical properties in the world’s languages. The focus particles *jám* ‘also’ and *zēnéj* ‘again’, occur at the end of a noun phrase (5.14b). This accords König’s (1991: 20)

observation that ‘additive’ particles like ‘also’ and ‘too’ often following their scope.

Words that mean ‘maybe/perhaps’ such as *gré*, *kātà*, and the compound of these *kētègré*, when modifying a noun, frequently occur at the start of a noun phrase (5.14c) but may also occur at the end (5.14d).

- (5.14) a. *Kaw msəra ege ma ndaha ege*
káw msrā =égē má= ndā -xā =égē
even old.person =PL REL= go -VNT.DIST =PL
 ‘Even the old people who came...’ (DP8-SN:7.3)
- b. *Yaw , vedəye ege yam cemey , hwa*
jàw vèdjé =égē jám tséméj x^{wā}-
so IND.DET.PL =PL also TOP.CON 2SG.SBJ-
debetene unaf aka .
dèb -ètēnē wnáf āká
calm -3PL.IOBJ heart ACC
 ‘So, the others also, you calm them down (lit. you calm down the heart for them).’ (HT1-SN:8.1)
- c. *ara gəre baba ŋkwa gəre kamac anta .*
ārā gré bābā nk^{wā} gré ká- mātš āntā
COP maybe father 2SG.POSS maybe PFV- die 3SG.POSS
 ‘...it’s maybe your father, maybe he has died.’ (DE2-SN:10.1)
- d. *Bay Jemere wese gəre .*
bāy dzemere wēsé gré
chief Jemere DEM.DIST maybe
 ‘That chief Jemere maybe.’ (NH6-SN:1.11)

5.1.3 Associative plural (ASS.PL)

The associative plural marker *ātā* was previously described in Section 4.5.2. It directly precedes the noun and can co-occur with various noun phrase constituents such as a general plural marker (5.15a), a demonstrative and a possessive pronoun (5.15b).

(5.15) a. *A dōwze anta eze , ata Mazkad ege , əy*
 á dwzé āntā ézē ātā mazkad =égē j-
 PREP1 after DEF.DET therefore ASS.PL **Mazkad** =PL 3PL.SBJ-
kadāw ŋ pərasl bay aza ,
 kā- dāw ŋ pràł bāy āzá
 IPFV- want INF seize chieftdom COMPL
 ‘Afterwards therefore, **the Mazkad people and their associates**, they
 wanted to seize the chieftdom...’ (NH13-SN:2.6)

b. *Aya a mpat ca ata juraw wese , nda əy*
 ājā á mpát tsá ātā dzwrāw wésé ndā j-
 then PREP1 tomorrow TOP ASS.PL **sub-chief** DEM.DIS go 3PL.SBJ-
nda zlaḅa ata Martan ey ata baba naka , ey ata
 ndā ḷàḅá ātā martan éj ātā baba nākā éj ātā
 go with ASS.PL **Martin** and ASS.PL **father** 1SG.POSS and ASS.PL
Tebe .
tebe
Tebe
 ‘Then the next day, **that sub-chief and his associates** went along with
Martin and his associates, my father and his associates and Tebe and
his associates.’ (NH8-SN: 11.1)

5.1.4 Possessive pronouns (POSS)

Buwal possessive pronouns were listed in Section 4.1.3 and their functions were also described there. When modifying a noun they directly follow the head (5.16 a & b).

(5.16) a. *Sa napad' ujek naka .*
 sā- ná- pād' wjĕk nākā
 1SG.SBJ- FUT- wrap **hut** 1SG.POSS
 ‘I will thatch (lit. wrap¹) **my hut.**’ (DP7-SN:2.2)

¹ The verb *pād* ‘wrap’ can be used to refer to the rooving of a hut when the roof is made of thatch. In this case the straw is made into layers which are then wrapped around a frame.

- b. *Uzəye ηcene ege ma na*
wzjé ntsènè = égē má = ná-
children 1EXCL.POSS =PL REL= 1EXCL.SBJ-
kambawata ca , sey nene
kā- mbàw -ātā tsá séj nènè-
 IPFV- give.birth -3PL.DOBJ TOP except 1EXCL.SBJ-
ηgazata .
ηgàz -ātā
 discipline -3PL.DOBJ
 ‘**Our children** to whom we are giving birth, we must discipline them.’
 (DE20-SN:3.2)

Buwal possessive pronouns may modify both what would be considered alienable and inalienably possessed nouns in other languages. This is evidence that these categories are not relevant for Buwal (see Section 5.2 for further discussion). However, for body parts the possessive pronoun is often omitted when it is clear who the possessor is. Compare examples (5.17a) and (5.17b) below.

- (5.17) a. *sa dam naka a dēmas ηkwa*
sā- dām nākā á dmās nk^wā
 1SG.SBJ- enter 1SG.POSS PREP1 **belly** 2SG.POSS
 ‘...I (will) enter **your belly**...’ (NF2-SN:4.7)
- b. *a dam anta a dēmas eze*
ā- dām āntā á dmās ézē
 3SG.SBJ- enter 3SG.POSS PREP1 **abdomen** therefore
 ‘...therefore he entered (his) belly...’ (NF2-SN:4.10)

5.1.4 Definite determiner (DEF.DET)

The definite determiner *āntā* was described in detail in Section 4.2.2. Within the noun phrase it follows the possessive pronoun (5.18a) and most frequently precedes a modifying relative clause (5.18b) and the plural marker (5.18c).

- (5.18) a. *Ma kavalahune uḁa ŋkune anta vayay ?*
 má= kā- vāl -āx^wnè wḁā nk^wnè āntā vājáj
 REL= IPFV- give -2PL.IOBJ **food** 2PL.POSS DEF.DET who
 ‘Who give you your food (lit. **the food of yours**)?’ (TN4-WN:3.3)
- b. *Ana van anta ma kada wese ca ,*
 ánā vān āntā má= kā- ḁā wēsé tsá
 like **rain** DEF.DET REL= IPFV- **draw** DEM.DIST TOP
 ‘Like **that rain which is falling** (lit. **drawing**)...’ (C7-SN:45.3)
- c. *Hejəye ma kasan menjevek ca hejəye*
 xèdzè -jé má= kā- sàñ mēndzēvēk tsá xèdzè -jé
 person -PL REL= IPFV- know remedy TOP **person** -PL
anta ege vedəye vedəye aka .
 āntā =égē vēdjé vēdjé ákā
 DEF.DET =PL IND.DET.PL IND.DET.PL EXIST
 ‘People who know remedies, **some of these people** exist.’ (DE9-SN:3.2)

As well as following the possessive pronouns, the definite determiner may also occur in the demonstrative slot (5.19a). There is no change in meaning associated with this position (5.19 b & c).

- (5.19) a. *sey ara bəyɹlaf ma mɹba anta*
 séj á rā bāy wɹɹáf má= ŋmɹbà āntā
 except PREP1 side **chief** **up.high** REL= **up.there** DEF.DET
ende taŋ .
 éndē táŋ
 like.this.PROX only(ful.)
 ‘...(it’s) only with **the chief on high who is up there** like this.’
 (C12-S N:143.1)
- b. *ŋhwəye ŋkwa anta ege , əy kanda ŋ la .*
 nx^wā -jé nk^wā āntā =égē j- kā- ndā ŋ lā
goat -PL 2SG.POSS DEF.DET =PL 3PL.SBJ- IPFV- go PREP2 field
 ‘Your goats (lit. **The goats of yours**), they are going to the field.’
 (GE67-SE: 3.1)

- c. *Ŋhwəye ŋkwa ege anta* , əy *kanda ŋ la* .
 nx^{wā} -jé nk^{wā} =égē āntā j- kā- ndā ŋ lā
 goat -PL 2SG.POSS =PL DEF.DET 3PL.SBJ- IPFV- go PREP2 field
 ‘Your goats (lit. **The goats of yours**), they are going to the field.’
 (GE67-SE: 3.2)

In the corpus, one example was found of the definite determiner following the distal demonstrative (5.20a) (see Section 5.1.11). However in the majority of cases the reverse order is found (5.20b).

- (5.20) a. *a pes wese* , *a pes wese anta* əy
 á pès wēsé á pès wēsé āntā j-
 PREP1 day DEM.DIST PREP1 **day** DEM.DIST DEF.DET 3PL.SBJ-
kádaza ara .
 ká- dā -zā ārá
 PFV- bring TRANS SIM
 ‘...on that day, on **that day**, they brought him along.’ (C10-SN:22)
- b. *a zaman anta wese ca* əy *kadaw ŋ*
 á zāmān āntā wēsé tsá j- kā- dāw ŋ
 PREP1 **time(ful.)** DEF.DET DEM.DIST TOP 3PL.SBJ- IPFV- want INF
ḅam tata
 ḅām tātā
 munch 3PL
 ‘...at **that time**, they wanted to deceive (lit. munch) themselves...’
 (C18-SN:73)

5.1.5 Relative clause (REL)

Nouns may be modified by relative clauses. For further information on different types of relative clauses see Section 10.1.4. Relative clauses follow the head noun and are preceded by the relative marker *má* (5.21a) (see Section 4.14.1.2). Possessive pronouns and the definite determiner (if present) will interpose between the head and the relative clause (5.21 b & c).

- (5.21) a. *Kan ma hwa la cemey , kan ma tantan kwaw .*
 kàn má= x^wá- lā tséméj kàn má= tāntān k^wáw
 thing REL= 2SG.SBJ- do TOP.CON thing REL= good NEG
 ‘The thing that you are doing is not a good thing (lit. a thing which is good).’ (NH3-SN:4.5)
- b. *Mawal naka ma sa may ca ebe nghe .*
 māwàl nākā má= sā- māj tsá èbè nyē
 husband 1SG.POSS REL= 1SG.SBJ- choose TOP DEM.MED DEM.PROX
 ‘My husband that I choose, is this one.’ (HT1-SN:9.2)
- c. *Ujek anta ma əy kalam tewtew ca ana ebe*
 wjēk āntā má= j- kā- lām téw-téw tsá ánā èbè
 hut DEF.DET REL= 3PL.SBJ- IPFV- build all TOP like DEM.MED
 ‘All the huts that they build, is like this.’ (DP7-SN:3.2)

Nouns may be modified by more than one relative clause (5.22).

- (5.22) *Hayak ma a nuna anta ma əy sler heje*
 xājāk má= á nwná āntā má= j- lēr xèdzè
 land REL= PREP1 times.past DEF.DET REL= 3SG.SBJ- exterminate person
dakənak.
 dākənək
 black
 ‘(In) the land of the old days when they exterminated humanity.’ (NH4-SN:2.19)
 (lit. The land which is of olden times when they exterminated black person(s)).’

When one of the relative clauses contains an adjective, it precedes the second relative clause (5.23).

- (5.23) *uzəye ma vəzek vəzek ma ata hayak ege .*
 wzjé má= vžék vžék má= á tā xājāk =égē
 children REL= small small REL= PREP1 on ground =PL
 ‘...the children who are very small who are on the ground.’ (BH4-SN:2.2)

5.1.6 General plural marking (PL)

The general plural enclitic *égē* was discussed in some detail in Section 4.5.1. In the noun phrase, it is preceded by possessive pronouns (5.24a) and possibly the definite determiner (5.24b).

- (5.24) a. *Yata hejeye ŋkwa ege* .
 jā -ātā xèdzè -jé nk^wā =égē
 call -3PL.DOBJ person -PL 2SG.POSS =PL
 ‘Call **your people.**’ (NH8-SN:7.3)

- b. *Ma a wata Dele anta ege*
 má= á wātā délé āntā =égē
 REL= PREP1 compound Deli DEF.DET =PL
 ‘**Those who are at Deli’s compound...**’ (C5-SN:24)

In combination with a relative clause, the plural marker most frequently occurs in the second position (5.25a). However it may also occur before (5.25b) or in both positions (5.25c). Language informants assert that there is no difference in meaning if one plural marker occurs before or after a relative clause. However if the plural marker appears in both positions as in (5.25c) there would be a pause between the two relative clauses which would indicate that there are two noun phrases in apposition (see Section 5.3). Therefore example (5.25c) should be translated ‘the old people, the ones who come...’.

- (5.25) a. *kan ma kadavha ege*
 kàn má= kā dāv -xā =égē
 thing REL= IPFV- sprout -VNT.DIST =PL
 ‘...things **which sprout...**’ (DE9-SN:2.2)

- b. *Ana menjevek ege ma əy kakadata*
 ánā mēndzēvēk =égē má= j- kàkàd -ātā
 like remedy =PL REL= 3PL.SBJ- squeeze -3PL.DOBJ
 ‘Like remedies **that they squeeze...**’ (DE9-SN:2.14)

- c. *msəra ege ma ndaha ege*
 msrā =égē mā= ndā -xā =égē
 old.person =PL REL= go -VNT.DIST =PL
 ‘...the old **people, the ones who come...**’ (DP8-SN:7.3)

Buwal has a general/singular vs plural number system as described by Corbett (2000: 14). The unmarked form is used to express reference to the noun without reference to number. This applies to both animate (5.22 & 5.26a) and inanimate nouns (5.26b).

- (5.26) a. *Kaw zezekw a dāw ŋ nda a dunəya kwaw .*
 káw zézēk^w á- dāw ŋ ndā á dwnjā k^wáw
 even **snake** 3SG.SBJ- want INF come PREP1 world(ful.) NEG
 ‘Even **snake(s)** shouldn’t (lit. don’t want to) come into the world.’
 (BH3-SN:2.4)
- b. *A kasar kan ma a ujek anta .*
 á- kā- sār kàn mā= á wdzēk āntā
 3SG.SBJ- IPFV- look.at **thing** REL= PREP1 hut 3SG.POSS
 ‘He was looking at **thing(s)** which were in his house.’ (NH9-SN:2.3)

In the same way, body parts which come in pairs may not be marked for plural (5.27a) unless this fact is being emphasised (5.29b).

- (5.27) a. *Dama ata ra ŋkwa deydey .*
 dāmā á tā rá nk^wā dejdej
 dirt(ful.) PREP1 on **hand** 2SG.POSS too.much(ful.)
 ‘There is too much dirt on **your hand(s)**.’ (NF4-SN:3.6)
- b. *Sa ghwalzahwaw nje naka ege .*
 sā- ɣ^wál -zā -āx^wāw ndzé nākā =égē
 1SG.SBJ- show TRANS -2SG.IOBJ eye 1SG.POSS =PL
 ‘I show you **my eyes**.’ (LL20-SE:17)

The general plural marker can be used with both referential (5.28a) and generic nouns (5.28b).

- (5.28) a. *A kazlad' kan ege kəda a wata*
 á- kǎ- ʒǎd' kǎn =égē kdē á wātá
 3SG.SBJ- IMPV- take.away **thing** =PL towards PREP1 home
maman eze .
 mǎmán ézē
 mother.3POSS therefore
 ‘Therefore she was taking **things** away to (lit. towards) her mother’s
 house.’ (NF5-SN:2.14)
- b. *a mpat anta a pes luma mala Gavar əy*
 á mpát āntā á pès lwmà mālā gāvār j-
 PREP1 tomorrow DEF.DET PREP1 day market(ful.) GEN Gavar 3PL.SBJ-
nda , əy mbal dɛma ege .
 ndā j- mbāl dmā =égē
 go 3PL.SBJ- catch **bride** =PL
 ‘...the next day on Thursday they go, they catch **brides**.’ (DP2-SN:5.1)

When a noun is modified by a quantifier, the general plural marker is not normally present (5.28 a to c).

- (5.29) a. *Hwa káca wala gbak* .
 x^wǎ- kǎ- tsā wālā gbák
 2SG.SBJ- PFV- put **wife two**
 ‘You married (lit. put) **two wife(s)**.’ (HT3-SN:3.4)
- b. *Kélem derewel jamahkad* .
 kǎ- lèm dērēwēl jámāxkád
 PFV- get **paper(ful.) eight**
 ‘He got **eight vote(s)**.’ (NH7-SN:5.7)
- c. *Cen a da mavaw ka daba varam* .
 tsèn ā- dà māvāw kǎ dābá vrām
 father 3SG.SBJ- prepare beer ANT **women's.hut many**
 ‘The father prepares **many hut(s)** of beer in advance.’ (DP3-SN:1.2)

However, the general plural marker will be used when the sense is distributive, meaning that the items in the group should be considered separately (5.30) (Corbett 2000: 118).

- (5.30) a. *Əy lam ka ŋgas ege bəjar bəjar gbak gbak .*
 j- lām ká ŋgās =égē bdzàr bdzàr gbák gbák
 3PL.SBJ- make ANT foot =PL branching branching two two
 ‘They make (them) with **two branching feet each.**’ (DE2-SN:6.7)
- b. *Madakal ege əy la zlan ege vedəye vəram*
 mà- dākāl =égē j- lā ʒàn =égē vədjé vrām
 NOM- big =PL 3PL.SBJ- do work =PL IND.DET.PL many
tewtew ana uzəye .
téw-téw ánā wzjé
all like children
 ‘Adults do **all types of work** like children.’ (DE18-SN:16.1)

For nouns belonging to the small set of animate nouns which take a plural suffix (see Section 3.1.1.5), this suffix is consistently attached to a plural noun even when modified by a quantifier (5.31 a & b).

- (5.31) a. *Sa kásəkama zləye wam .*
 sā- ká- skām -ā ʒā -jé wám
 1SG.SBJ- PFV- buy -VNT ox -PL ten
 ‘I bought **ten cows.**’ (LL44-SE:7.1)
- b. *Hejəye vəram əy kándaha .*
 xèdzè -jé vrām j- ká- ndā -xā
person -PL **many** 3PL.SBJ- PFV- go -VNT.DIST
 ‘**Many people** came.’ (LL27-SE:4)

The occurrence of the general plural marker with mass nouns and places names was covered in Sections 3.1.2.2 and 3.1.2.3 respectively.

5.1.7 Indefinite determiner (IND.DET)

Indefinite determiners were discussed in Section 4.2.1. In the noun phrase they most frequently occur following the plural marker (5.32a) if one is present. It is also possible for them to precede the plural marker (5.32b). According to language informants there is no change of meaning.

- (5.32) a. *Kule ege vedəye* , əy *dədə mavaw a mna*
k^wlè =égē vēdjé j- *dēdē māvāw á mnā*
idol =PL IND.DET.PL 3PL.SBJ- pour.into beer PREP inside
 ‘Other idols, they pour beer inside (them).’ (DE2-SN:13.1)
- b. *a dedər ata la vedəye ege*
ā- dēdər á tā lā vēdjé =égē
 3SG.SBJ- wander PREP1 on place IND.DET.PL =PL
 ‘He wanders around to other places.’ (DE17-SN:3.1)

Indefinite determiners precede adjectives (5.33a), quantifiers (5.33b) and demonstratives (5.33c).

- (5.33) a. əy *kəvadata ndaw mpe ege vedəye parpar*
 j- *kvād -ātā ndaw mpè =égē vēdjé párpār*
 3PL.SBJ- mix -3pDO **base tree =PL IND.DET.PL different**
parpar
párpār
different
 ‘...they mix some different types of trees...’ (DE9-SN:2.5)
- b. *Hejəye vedəye cekudə ende* əy *dās*
xèdzè -jé vēdjé tsék^wdē éndē j- *dās*
person -PL IND.DET.PL a.few like.this.PROX 3PL.SBJ- cultivate
ghwarnakw .
ɣ^wàrnàk^w
 onion
 ‘A (lit. certain) few people like this grow onions.’ (LL17-SN:23)

- c. *Benjer a dāwza gwambakw wende wese ma*
 béndzēr ā- dāw -zā g^wāmbāk^w wéndé wēsé ma=
 squirrel 3SG.SBJ- ask -TRANS **toad** IND.DET.SG DEM.DIST REL=
letene vemey ?
 lā -ētēnē véméj
 do -3PL.IOBJ what
 ‘The squirrel asked **that certain toad**, what happend to them?’
 (NF6-WN:4.4)

5.1.8 Adjectives (ADJ)

Adjectives were described in Section 3.3. They can either modify a noun directly (5.34 a & b) or function as the predicate of a relative clause (5.35 a & b). In direct modification, the noun is interpreted as non-referential or generic. When the adjective is preceded by the relative marker *má*, the noun is understood to be referential. Compare the meaning of examples (5.34a) and (5.35b). Frajzyngier (2001: 89-90) found a similar pattern in Lele where forms with the relativiser refer to specific objects or events whilst those without refer to any potential noun with such attributes.

- (5.34) a. *Dala jem ca , tuwah .*
 dālā dzèm tsá twáx
 someone tall TOP great
 ‘Anyone tall, is great.’ (GE39-SE:58)
- b. *Zlan ca , tuwah , ara kan tantan .*
 ʒàn tsá twáx ārā kàn tāŋ-tāŋ
 work TOP great COP thing good
 ‘Work, is great, it’s a good thing.’ (DE12-SN:7.5)
- (5.35) a. *Dala ma jem ca , tuwah .*
 dālā má= dzèm tsá twáx
 someone REL= tall TOP good
 ‘The tall person, is good.’ (GE39-SE:58.2)
 (Talking about a person you can see.)

- b. *Hune namay ca d'ala ma taŋtaŋ .*
 x^wné- ná- māj tsá dālā má= tǎŋ-tǎŋ
 2PL.SBJ- FUT- choose TOP **someone** REL= **good**
 ‘You will choose **someone who is good.**’ (NH7-SN:4.4)

When modifying a noun directly, the adjective follows a plural marker (5.30a) and precedes a quantifier (5.30a & 5.36).

- (5.36) *heje dakənak tewtew megəre zlan ŋtakwaw .*
 xèdzè dākṅàk téw-téw mā- grē ʒàn ntàk^waw
person black all JUS- see work 1INCL.POSS
 ‘...let **all humanity** (lit. **black person (s)**) see our work.’ (HT8-SN:8.5)

Two adjectives can be used to modify a noun. There are two ways of doing this. The two adjectives may be coordinated with a coordinating conjunction (5.37a) (see Section 4.14.3) or the two adjectives may be simply juxtaposed (5.37b). In both cases, the relative marker (if present) is only attached to the first adjective. The order in which the adjectives appear is not important (5.37 c & d).

- (5.37) a. *kwap ma dendeleŋ ey ghazbaŋ*
 k^wáp má= dēndēlēŋ éj yàzbaŋ
 cup REL= **circular and yellow**
 ‘a cup which is **circular and yellow**’ (LL28-SE:46)
- b. *Ara hejəye ma jem vərə ege .*
 ārā xèdzè -jé má= dzèm vrè =égē
 COP person -PL REL= **tall red** =PL
 ‘They are people who are **tall (and) red.**’ (GE39-SE:70.1)
- c. *Sa gərə d'ala cercer dakənak .*
 sā- grē dālā tsér-tsér dākṅàk
 1SG.SBJ- see someone **thin black**
 ‘I see someone **thin (and) black.**’ (GE65-SN: 31.1)

- d. *Sa gəre dala dakənak cercer* .
 sā- grē dālā dək̀nək tsér-tsér
 1SG.SBJ- see someone black thin
 ‘I see someone **black (and) thin.**’ (GE65-SN: 31.3)

5.1.9 Quantifiers (QUANT)

Quantifiers, including cardinal numerals and other quantifiers such as *vrām* ‘many’ and *tsék^wdē* ‘a few’, were described in Section 4.4. Like adjectives (see Section 5.1.8), they can modify nouns directly (5.38 a & b) or as the predicate of a relative clause (5.39 a & b). Once again, direct modification indicates that the noun is non-referential, and modification as predicate of a relative clause results in a reading of the noun as referential.

- (5.38) a. *Dala tenguleŋ a kefətek akwaw* .
 dālā téŋ^wlèŋ á- kā- ftək ák^wāw
 someone one 3SG.SBJ- IPFV- lose NEG.EXIST
 ‘Not **one person** is lost.’ (NH11-SN:2.12)

- b. *Hejeye tewtew ca əy kasan menjevek səkwaw* .
 xèdzè -jé téw-téw tsá j- kā- sən mēndzēvək sk^wāw
 person -PL all TOP 3PL.SBJ- IPFV- know remedy NEG
 ‘Not **all people** know remedies.’ (DE9-SN:3.1)

- (5.39) a. *a ndewzene a gwambakw ma tenguleŋ*
 a- ndāw -zā -ēnē á g^wāmbāk^w má= téŋ^wlèŋ
 3SG.SBJ- find -TRANS -3SG.IOBJ PREP1 toad REL= one
zlaḃa zley ŋ ra .
 ʒàḃá ʒèj ŋ rā
 with meat PREP2 hand
 ‘...he found the **one** toad with meat in (his) hand.’ (NF6-WN:4.3)

- b. *Kan ma tewtew ŋgha* , *a veletene ŋ*
kàn má= téw-téw nyā ā- vâl -ētēnē ŋ
thing REL= all DEM.PROX 3SG.SBJ- give -3PL.IOBJ INF
hejəye ma dā gham ege .
xèdzè -jé má= dā yàm =égē
 person -PL REL= draw war =PL
 ‘**All these things**, he gives to the soldiers (lit. people who draw war).’
 (NH11-SN:3.4)

When directly modifying a noun, quantifiers follow adjectives (5.40a) and precede demonstratives (5.40b).

- (5.40) a. *heje dakənak tewtew a nasan ka* , *ebe tuwah* .
xèdzè dākṇàk téw-téw ā- ná- sàṇ ká èbè twáx
 person **black all** 3SG.SBJ- FUT- know ANT DEM.MED great
 ‘**All humanity** (lit. **black person (s)**) will know in advance, this is great.’
 (HT6-SN:8.7)
- b. *kan ma hwa kelekey tewtew ŋgha ca*
kàn má= x^wā- kā- lā -ēkēj téw-téw nyā tsá
 thing REL= 2SG.SBJ- IPFV- do -1SG.IOBJ **all DEM.PROX TOP**
 ‘...**all these thing(s)** which you are doing to me...’ (C13-SN:13)

5.1.10 Prepositional phrases (PP)

Nouns can be modified by all types of prepositional phrases; those which have nominal complements (5.41 a & b) (see Chapter 7) and those which have verbal complements (5.42 a & b) (see Section 10.1.1.4).

- (5.41) a. *ŋkəɗəŋ ŋ la* , *tuwah ŋ dar mejere* .
nkdāŋ ŋ lā twáx ŋ dār mèdzērē
 rock PREP2 field good INF align terrace.wall
 ‘**Rocks in a field**, (they) are good to build (lit. align) a terrace wall (with).’
 (GE40-SE:3.1)

b. *Hwa kélem səkan asa ra* .
 x^wā ká- lèm skàn á sā rā
 2SG.SBJ- PFV- get **thing** PREP1 **under hand**
 ‘You have gotten riches (lit. **thing(s) under the hand**).’ (HT2-SN:2.2)

(5.42) a. *Səkan ata da uda akwaw* .
 skàn á tā dà wdā ák^wāw
thing PREP1 **on prepare food** NEG.EXIST
 ‘There is **nothing for preparing food**.’ (GE40-SE:38.2)
 (lit. ‘**a thing for preparing food** does not exist’)

b. *a rakha ndərey mavəday səkan ŋ zam askwaw* .
 ā- rək -xā ndrèj màvdāj skàn ŋ zàm ásk^wāw
 3SG.SBJ- ask -VNT.DIST sorghum because **thing** INF **eat** NEG.EXIST
 ‘...she begged for sorghum because there was **nothing to eat** (lit. **a thing to eat** did not exist).’ (TN3-WN:1.6)

It is possible for a noun to be modified by more than one prepositional phrase (5.43).

(5.43) *Ladās a dəvar ŋ la naka , a*
 lá- dās á dvàr ŋ lā nākā á-
 NOM.ACT **cultivate** PREP1 **hoe** PREP2 **field** 1SG.POSS 3SG.SUBJ-
kelekey .
 kā- lā -ēkēj
 IPFV- do -1SG.IOBJ
 ‘**Farming with a hoe in my field**, (it) is bothering me (lit. is doing for me).’
 (GE40-SE:16)

Like adjectives and quantifiers, prepositional phrases modify non-referential nouns directly (5.44 a & b) and referential nouns as the predicate of a relative clause (5.45 a & b).

- (5.44) a. *Labara ata benjer* , *a*
 làbārā á tā béndzēr á-
 story PREP1 on squirrel 3SG.SBJ-
kabasaheje .
 kā- bās -zā -āxèdzè
 IPFV- laugh -TRANS -1INCL.DOBJ
 ‘**Stories about the squirrel**, they (lit. it) makes us laugh.’ (GE40-SE:15.1)
 (Any squirrel story.)
- b. *a ndewzene a gwambakw ma tenguleŋ*
 ā- ndāw -zā -ēnē á g^wāmbāk^w ma = téng^wlèŋ
 3SG.SBJ- find TRANS -3SG.IOBJ PREP1 toad REL= one
zlaḅa zley ŋ ra .
 ʒàḅá ʒèj ŋ rā
 with **meat in hand**
 ‘...he found the one toad with **meat in (his) hand**.’ (NF6-WN:4.3)
- (5.45) a. *Labara ma ata benjer* , *a*
 làbārā má= á tā béndzēr á-
 story REL= PREP1 on squirrel 3SG.SBJ-
kabasaheje .
 kā- bās -zā -ā xèdzè
 IPFV- laugh TRANS -1INCL.DOBJ
 ‘**The story about the squirrel**, it is making us laugh.’ (GE40-SE:15.2)
 (The squirrel story that is being told right now.)
- b. *əy gam dawar ma ŋ hayak mala buwal* .
 j- gām dāwār má= ŋ xājāk mālā bwāl
 3PL.SBJ- drive.away illness REL= PREP2 land GEN Buwal
 ‘...they drive away **the illness which is in the land of Buwal**.’
 (DP2-SN:3.6)

While prepositional phrases frequently follow quantifiers within the noun phrase (5.46a) they may precede them with no change in meaning (5.46 b & c). Prepositional phrases precede a demonstrative (5.46d).

- (5.46) a. *Ladāw cekuḍe ara dāla aka vaw ?*
 lá- dāw tsék^wdē á rā dālā ákā vāw
 NOM.ACT ask a.little PREP1 side someone EXIST Q
 ‘Does someone have a small question?’ (HT4-SN:37.2)
 (lit. ‘Does a small question at someone’s side exist?’)
- b. *Zlɔye tewtew a damaw , əy kabam ndərey*
 ʒā -jé téw-téw á dāmāw j- kā- bām ndrèj
 ox -PL all PREP1 bush 3PL.SBJ- IPFV- munch sorghum
hejəye .
 xèdzè -jé
 person -PL
 ‘All the oxen in the bush, they munch people’s sorghum.’ (GE40-SE:35.1)
- c. *Zlɔye a damaw tewtew , əy kabam ndərey*
 ʒā -jé á dāmāw téw-téw j- kā- bām ndrèj
 ox -PL PREP1 bush all 3PL.SBJ- IPFV- munch sorghum
hejəye .
 xèdzè -jé
 person -PL
 ‘All the oxen in the bush, they munch people’s sorghum.’
 (GE40-SE: 35.2)
- d. *Akwaw ca , kabal gbak a dala wam*
 ák^wāw tsá kábāl gbák á dālā wám
 NEG.EXIST TOP hundred.francs(ful.) two PREP1 money(ful.) ten
ŋgha ca , parham .
 nyā tsá párxám
 DEM.PROX TOP insufficient
 ‘Otherwise, this two hundred and fifty francs is not enough (lit. insufficient).’ (C11-SN:29)

5.1.11 Demonstratives (DEM)

Nominal demonstratives were described in Section 4.3.1. When modifying a noun, they most frequently occur at the end of noun phrase (5.47a), before a focus particle (5.47b).

(5.47) a. *ɲhwəye anta ege tewtew ŋha ca*
 nx^{wā} -jé āntā =égē téw-téw nyā tsá
 goat -PL DEF.DET =PL all DEM.PROX TOP
 ‘...all these goats...’ (C13-SN:24.2)

b. *Ma a wata Mbevecey Bece ege wese yam vanḡay?*
 má= á wātā mbèvétséj bècé =égē wésé jám vāḡgáj
 REL= PREP1 home Mbevechey Beche =PL DEM.DIST also how
 ‘Also how are those at Mbevechey Bece’s home?’ (C5-SN:34)
 (lit. ‘Those at Mbevechey Bece’s home also are how?’)

However, demonstratives can also occur before the plural marker (5.48). According to language informants there is no change in meaning in this case.

(5.48) a. *Ndɔrey naka ŋha ege ŋhe , əy*
 ndrèj nākā nyā =égē nyē j-
 sorghum 1SG.POSS DEM.PROX =PL DEM.PROX 3PL.SBJ-
kébemekey aza
 ká- bām -ēkēj āzá
 PFV- munch -1SG.IOBJ COMPL
 ‘This sorghum of mine, they have munched it all (lit. on me)...’
 (C13-SN:7)

b. *a ɲkədawata hejəye wese ege .*
 ā- nkďaw -ātā xèdzè -jé wésé =égē
 3SG.SBJ- burn -3PL.DO person -PL DEM.DIST =PL
 ‘...it burnt those people.’ (C18-SN:84.2)

It is possible for the proximal and distal nominal demonstratives to co-occur (5.49). In this case the distal demonstrative always follows the proximal and functions as a previous reference marker rather than a spatial deictic.

(5.49) a. *Kan ma wam ŋha ege wese .*
 kàn má= wám nyā =égē wésé
 thing REL= ten DEM.PROX =PL DEM.DIST
 ‘These ten things (previously mentionned).’ (HT8-SN:12.20)

- b. *Ujek ngha wese , sa kája a mbe yam ,*
wjĕk nyā wēsé sā- ká- dzā á mbē jám
hut DEM.PROX DEM.DIST 1SG.SBJ- PFV- hit PREP1 3SG also
‘This (previously mentioned) hut, I covered (it with iron) with it (the money) also...’ (C3-SN:13)

5.2 Genitive constructions

According to Dryer (2007b: 177), GENITIVE CONSTRUCTIONS involve a noun occurring with another noun phrase denoting a possessor. He also states that the range of meanings may be broader than possession (p178). Genitive constructions can express a variety of different semantic relationships between two or more nouns. In various Chadic languages different structures may be used to code these relationships. For example Pero (Frajzyngier 1989: 149) makes a distinction between human and non-human possessors. There may be a special genitive marker, as in Mina (Frajzyngier and Johnston 2005: 45-47) and Hdi (Frajzyngier 2002: 53). Alienable and inalienable possession may use different structures, as in Miya (Schuh 1998: 245-255) and Gidar (Frajzyngier 2008: 94 &100).

In Buwal, a wide variety of semantic relationships can be expressed using simple juxtaposition of the nouns (see Section 5.2.1). This structure commonly involves a head-modifier order (Section 5.2.1.1). However, there are a number of examples which appear to exhibit modifier-head order. These will be discussed in Section 5.2.1.2. Section 5.2.2 deals with another construction in which a genitive marker is inserted between the two nouns. This structure is used for many of the same semantic relationships which are expressed by simple juxtaposition, including both alienable and inalienable possession.

5.2.1 Genitive constructions formed by juxtaposition

Genitive constructions formed through juxtaposition of nouns in are very common in Buwal and can express a large range of semantic relationships. They often lead to the formation of ‘semantic’ compounds where the meaning of the complex is not easily predictable from the meaning of the individual nouns. The vast majority of these exhibit head-modifier order. Examples of these are given in Section 5.2.1.1. There are a number of examples that possibly have modifier-head order (see Section 5.2.1.2). Although

variable head/modifier ordering is not common, it has been attested elsewhere. For example Pepper (2010: 53) found that Nizaa, a Niger-Congo language spoken in Cameroon, showed no clear preference for left-headed or right-headed compounds. He found that the difference is determined by the types of semantic relations they express. He argues that in the case of Nizaa, left-headed compounds tend to be associated with attributive relations, whereas for right-headed compounds possessive-like relations are more typical. In Buwal there is a clear preference for head-modifier order. Furthermore, as there are no formal differences between the two structures, the head can only be determined upon semantic grounds. Whilst possible modifier-head examples exhibit attributive type relations, head-modifier constructions can also have this type of meaning. In other words, the type of semantic relation does not predict the order of the elements concerned.

5.2.1.1 Head-modifier order

The structure of genitive constructions with head-modifier order formed by simple juxtaposition is given in Table 5.3 below.

Table 5.3: Structure of genitive construction formed by juxtaposition: head-modifier

Head Noun	Modifying Noun/ Genitive NP	Other Modifiers
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From the structure above it can be seen than the head noun comes first and the modifying noun comes second. Other noun modifiers then follow, whether they are modifying the head noun or the modifying noun. Unless the context is known, it may be ambiguous which of the nouns the modifiers are dependent on. For example, the noun phrase below could mean either ‘the hand of that leper’ or ‘that hand of the leper’ (5.50).

- (5. 50) *a* *dāda* *ra* *fagwalakw wese* .
 ā- *dād* *-ā* *rā* *fāg^wālāk^w* *wēsé*
 3SG.SBJ- take.out -VNT.PROX **hand leper** DEM.DIST
 ‘He pulled out **the hand of that leper.**’ (TN1-SN:5.3)
 OR ‘He pulled out **that hand of the leper.**’

It is possible for the head noun to be modified by an genitive construction as in (5.51) below and so have three nouns juxtaposed.

- (5.51) *rā* [*xèdzè fāg^wālāk^w*] ‘hand of the leper person’ (TN1-SN:5.8)
 hand person leper
- xājāk* [*bārlā zāblā*] ‘land of the mountain of miracles’ (NH13-SN:7.8)
 land mountain miracle
- ŋgḥèŋ* [*wēljé mājāj égē*] ‘peanuts of the Mazay women’ (NF1-SN:2)
 peanuts woman-PL Mazay =PL

The semantic relationships expressed by the structure in Table 5.3 include: (i) inalienable possession, (ii) alienable possession, (iii) part-whole, (iv) location of head noun, (v) attribute, (vi) purpose, (vii) name, (viii) ethnicity, (ix) spatial relationship, (x) temporal relationship and (xii) nominalisation plus object.

(i) Inalienable possession

- (5.52) *tsèn xáldmā* ‘girl’s father’ (DP3-SN:1.5)
 father girl
- wātā g^wāmbāk^w* ‘toad’s home’ (NF4-SN:4.3)
 home toad
- mtsè mēŋ* ‘antelope’s corpse’ (NF6-SN:2.11)
 corpse antelope
- ŋgās gāḥāvāj* ‘God’s feet’ (HT6-SN:8.1)
 foot God

(ii) Alienable possession

- (5.53) *mávāw mānā* ‘my mother’s beer’ (GE43-SE:25)
 beer mother.1POSS
- skàn dzèdzē* ‘grandparent’s thing’ (BH2-SN:1.1)
 thing grandparent
- jàm wālā nk^{wā}* ‘your wife’s water’ (GE16-SE:36)
 water wife 2SG.POSS

- (iii) Part-whole
- (5. 54) *xā gāmzák^w* ‘head of rooster’ (DE9-SN:4.5)
 head rooster
- lālālāj γ^wāḥγ^wāḥā* ‘roots of a plant species’ (NH6-SN:2.5)
 root plant sp.
- vārvārā dābá* ‘floor of hut’ (TN4-WN:4.2)
 floor hut
- (iv) Location of head noun
- (5.55) *bāj māk^wālāw* ‘chief of Mokolo’ (NH6-SN:1.9)
 chief Mokolo
- mpè bārlā* ‘tree of the mountain’ (DE11-SN:2.1)
 tree mountain
- ḥèj dāmāw* ‘meat of the bush’ (NF5-SN:1.5)
 meat bush
- (v) Attribute
- (5.56) *dālā nxēl* ‘someone of theft’ (NH7-SN:4.9)
 someone theft
- wdzēk mēndzēvēk* ‘house of medicine (clinic)’ (BH5-SN:2.2)
 house medicine
- mbà k^wétsér* ‘child of intelligence’ (DE19-SN:6.1)
 child intelligence
- (vi) Purpose
- (5.57) *dg^wàḥ māvāw* ‘beer pot’ (NH3-SN:6.5)
 pot beer
- wlèj mpè gālāb* ‘hole for the wood of the hangar’ (LL41-SE:11)
 hole wood hangar
- bāj k^wák^wās* ‘chief of ceremonies’ (NH11-SN:3.2)
 chief ceremony

(vii) Name

- (5.58) *bārlā msé* ‘mountain of Mshe’ (DP2-SN:3.1)
mountain Mshe
g^wājg^wājā yènè ‘the festival of Ghene’ (DE10-SN:1.1)
festival Ghene

(viii) Ethnicity

- (5.59) *mbà bwāl* ‘child of Buwal’ (ie. a Buwal person) (BH4-SN:2.3)
child Buwal
màdākāl mādāgāmzām ‘leader of Madagamzam clan’ (NH11-SN:2.7)
NOM-big Madagamzam
wēljé mājāj égē ‘Mazay women’ (NF2-SN:1.1)
woman-PL Mazay =PL

(ix) Spatial relationship

- (5.60) *tābā ŋgēj* ‘middle of porridge’ (DE9-SN:2.8)
middle porridge
tāmā mānā ‘front of my mother’ (NH3-SN:1.11)
front mother.1POSS
dwzé gē ‘behind the home’ (NH8-SN:6.3)
behind home

(x) Temporal relationship

- (5.61) *pès g^wājg^wājā* ‘day of the festival’ (DP3-SN:1.3)
day festival
mpát mātšk^wāx^w ‘tomorrow evening’ (LL18-SE:3.1)
tomorrow evening

(xi) Nominalisation + object

(5.62) *lāmár ɓà̀n* ‘beginning of work’ (BH1-SN:3.2)
NOM.ACT-begin work

lā́lá drès ‘making of building clay’ (NH6-SN:2.1)
NOM.ACT-make clay

lélèm wālā ‘getting of a wife’ (DE19-SN:2.1)
NOM.ACT-get wife

Many semantic compounds where the meaning is not easily predictable have been formed using the head-modifier structure. Some examples can be found in (5.63).

(5.63) *dā́fád gāmtāk* ‘firefly’
sorcerer chicken

bèrdzḗj dāmāw ‘zebra’
donkey bush

nfá nḗtē ‘egg yolk’
flour egg

dzèdzē k^wā́fāk^wār ‘great-grandparent’
grandparent worn.out.thing

gānānā gāmtāk ‘grass sp.’
tongue chicken

Many compounds of this sort are formed using the words *wjēk* ‘house’ (5.64), *mbàw* ‘child’ (5.65) (note *mbà* is the non-pausal form of this word) and *mán* ‘mother’ (5.66).

(5.64) *wdzēk g^wā́ŋk^wád* ‘cocoon’
house caterpillar

wdzēk mālám ‘potter’s kiln’
house NOM-build

wdzēk mbàw ‘womb’
house child

wdzēk ŋgès ‘bladder’
house urine

- (5.65) *mbà m̄nā* ‘cousin’
 child mother.1POSS
- mbà dāk^w* ‘colt’
 child horse
- mbà gādād* ‘arrow head’
 child arrow
- mbà mpè* ‘fruit’
 child tree
- mbà ndzé* ‘pupil (of eye)’
 child eye
- mbà nvàn* ‘upper grinding stone’
 child grinding stone
- (5.66) *mán gāmtāk* ‘hen’
 mother chicken
- mán ḥā* ‘cow’
 mother ox
- mán xājāk* ‘world, the earth’
 mother land
- mán nvàn* ‘lower grinding stone’
 mother grinding stone

The noun *mā* ‘mouth’ followed by the name of a place designates the language spoken there (5.67).

- (5.67) *Əy zlap ca mā buwal tenguleŋ anta* .
 j- zlap tsá mā bwāl téŋg^wlèn āntā
 3SG.SBJ- speak TOP language Buwal one 3SG.POSS
 ‘They spoke only the Buwal language.’ (DE15-WN:5.1)

5.2.1.2 Modifier-head order

Whilst the majority of genitive constructions exhibit head-modifier order, there are a number of examples which potentially have modifier-head order. The structure of such phrases is given in Table 5.4 below.

Table 5.4: Structure of genitive construction formed by juxtaposition: modifier-head

Modifying Noun	Head Noun	Other Modifiers
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Possible modifier-head constructions involve words which refer to male and female large domestic animals (5.68). Note that *yàl* ‘female animal’ only refers to young females that have not yet given birth, otherwise *mán* ‘mother’ is used (see 5.66).

(5.68)	<i>mēré</i> ‘male animal’	<i>dāk^w</i> ‘horse’	<i>mēré dāk^w</i> ‘stallion’
	<i>yàl</i> ‘female animal’	<i>nx^{wā}</i> ‘goat’	<i>yàl nx^{wā}</i> ‘female goat’

Certain compounds containing *mbàw* ‘child’ (5.65) and *mán* ‘mother’ (5.66) could possibly also be interpreted as modifier-head order if ‘child’ has a diminutive meaning and ‘mother’ means a larger version of something. An example of this could be the pair *mbà nvàn* ‘upper grinding stone’ and *mán nvàn* ‘lower grinding stone’. However, since there is no formal difference between head-modifier and modifier-head structures it is difficult to say for certain which is the head noun. This also applies to the examples in (5.68) as ‘male’ and ‘female’ could be interpreted as the head noun so that *mēré dāk^w* for example could mean ‘a male animal of the type horse’ rather than a ‘male horse’.

An interesting compound which appears to exhibit modifier-head order is made up of the two words *mǵā* ‘blacksmith’ and *wālā* ‘woman/wife’. The first example in (5.69) below shows modifier-head order whilst the second has head-modifier word order. The order in which these two nouns are combined creates a very different meaning.

(5.69)	<i>mǵā</i>	<i>wālā</i>	‘non-favoured/’ugly’ wife’
	blacksmith	woman	
	<i>wālā</i>	<i>mǵā</i>	‘blacksmith woman’
	woman	blacksmith	

Another word which appears to be able to modify a noun in either position is *msrā* ‘old/old thing’ (5.70). However, in this case there is no apparent change in meaning. The

second example could be interpreted perhaps as meaning ‘an old thing of the type clothes’.

- (5.70) *rg^wàts msrā* ‘old clothes’
 clothes old
- msrā rg^wàts* ‘old clothes’
 old clothes

5.2.2 Genitive constructions formed using a genitive marker

Certain genitive constructions are formed using the genitive marker *mālā* (see Section 4.6) but also at times the basic preposition *á* (see Section 4.8.1). In natural data *mālā* is at times followed by *á* but this is not accepted by native speakers as correct in elicitation sessions. A noun phrase introduced by *mālā* is located in the same place as prepositional phrases within the basic noun phrase structure (see Table 5.1). This gives the structure found in Table 5.5 below which is illustrated by the examples in (5.71). In these examples the boundaries of the various noun phrases are marked with square brackets. The demonstrative modifying the main head noun *dālā* ‘money’ follows the modifying noun phrase *gágmāj égē* ‘cottons’ (5.71a).

Table 5.5: Structure of genitive constructions formed using a genitive marker

(Noun Phrase/ Genitive construction)	<i>mālā</i> or <i>á</i>	Modifying Noun Phrase	Demonstrative
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- (5.71) a. *Ata* [*dala mala [gagəmay ege] wese]* *war* .
á tā dālā mālā gágmāj =égē wēsé wár
 PREP1 on **money(ful.)** GEN **cotton** =PL DEM.DIST still
 ‘(Albert was put in prison) due to **that cotton money** still.’ (C5-SN:57)

- b. *Sa ja [gwaygwaya naka madakal mala [hayak*
sā- dzā g^wājg^wājā nākā má= dākāl mālā xājāk
 1SG.SBJ- hit festival 1SG.POSS REL= big GEN land
naka]] .
nākā
 1SG.POSS
 ‘I (will) celebrate (lit. hit) my land’s major festival.’ (DE7-SN:2.4)
- c. *əy kádada [[həmas ujek] mala*
ǰ- ká- dād -ā xmās wjēk mālā
 3PL.SBJ- PFV- take.out -VNT.PROX thatch hut GEN
[hejeye ma la kwakwas ege tewtew]] .
xèdzè -jé má= lā k^wák^wàs =égē téw-téw
 person -PL REL= do sacrifice =PL all
 ‘...they pulled out the thatch of the huts of all the people who make sacrifices.’ (LL56-SE:9)

This structure can also occur without a head noun as in examples (5.24 a & b).

- (5.72) a. [*Mala masəbahw*] *aka* .
mālā māsəbáx^w ákā
 GEN bone.ache EXIST
 ‘There is one for aching bones.’ (DE9-SN:1.7)
 (lit. ‘One for aching bones exists.’)
- b. [*Mala heje ŋghe*] .
mālā xèdzè nyē
 GEN person DEM.PROX
 ‘It’s this man’s.’ (LL19-SE:5)

Genitive constructions containing a genitive marker are used to express many of the semantic relationships which can also be expressed by simple juxtaposition (see Section 5.2.1.1), particularly those expressing possessive-like relations. However, they cannot be used for attributes or ethnicity. Those semantic relationships that can be expressed by this structure include: (i) inalienable possession, (ii) alienable possession, (iii) part-whole, (iv)

location of head noun, (v) purpose, (vi) name, (vii) spatial relationship, (viii) temporal relationship and (ix) nominalisation plus object.

(i) Inalienable possession

- (5.73) *xā mālā nx^{wā}* ‘the head of the goat’ (GE41-SE:1.2)
 head GEN goat
- wdzēk mālā ṅgámà nākā* ‘the house of my friend’ (GE41-SE:8.2)
 house GEN friend 3SG.POSS
- nx^{wjé} mālā ātā martan égē* ‘the goats of Martin and associates’ (NH8-SN:1.1)
 goat-PL GEN ASS.PL Martin =PL

(ii) Alienable possession

- (5.74) *dālā mālā dāla āntā* ‘the money of the person’ (C5-SN:59.3)
 money GEN someone DEF.DET
- bāsk^{wár} mālā albe:* ‘the bicycle of Albert’ (NH12-SN:3.2)
 bicycle GEN Albert
- rg^{wàts} mālā msrā* ‘the clothes of the old person’ (GE41-SE:16.3)
 clothes GEN old.person

(iii) Part-whole

- (5.75) *sásábāj mālā mpè égē* ‘the roots of trees’ (DE9-SN:2.3)
 root(s) GEN tree =PL
- zlèj mālā zlā* ‘the meat of ox’ (C11-SE:130.1)
 meat GEN OX
- ndāw mālā mpè* ‘the base of a tree’ (GE31-SE:13.2)
 base GEN tree

(iv) Location of head noun

- (5.76) *zlàn mālā dāmāw* ‘work of the bush’ (DP13-SN:6.2)
 work GEN bush
- lāndzá mālā hāyāk* ‘dwelling place of the land’ (NH13-SN:2.7)
 place-dwell GEN land
- mpè mālā bārlā* ‘tree of the mountain’ (GE41-SN:19.2)
 tree GEN mountain

(v) Purpose

- (5.77) *mēndzēvēk mālā fāg^wālāk^w* ‘remedy for leprosy’ (DE9-SN:1.10)
remedy GEN leprosy
- bārdāk^w mālā lērēx* ‘power for healing’ (HT4-SN:33.1)
power GEN NOM.ACT-heal
- dālā mālā gāgmāj* ‘money for cotton’ (C5-SN:57.1)
money GEN cotton

(vi) Name

- (5.78) *g^wājg^wājā mālā ghènè* ‘festival of Ghene’ (DE10-SN:1.1)
festival GEN Ghene
- ntrā mālā sár báwá* ‘month of Sarbawa’ (C7-SN:45.2)
month GEN Sarbawa
- hāl mālā dáwāj* ‘the girl of Dawai’ (C1-SN:21.1)
girl GEN Dawai

(vii) Spatial relationship

Two examples of genitive constructions linked by *mālā* and indicating a spatial relationship, were found in natural spoken data (5.79). Both of these involved *mālā* followed by *á*.

- (5.79) *á tāmā mālā á zānes* ‘in front of the youth’ (C1-SN:28.1)
PREP1 front GEN PREP1 youth(fr.)
- á bār mālā á hālwā* ‘at the surface of the wall’ (C4-SN:5.1)
PREP1 surface GEN PREP1 wall

(viii) Temporal relationship

In the majority of cases temporal relationship is expressed using a genitive marker rather than simple juxtaposition (see Section 5.2.1.1).

- (5.80) *vāx á lwmà nkèf* ‘day of Saturday’ (NH12-SN:1.1)
 day PREP1 market ruin
- bēŋ mālā mápát* ‘early in the morning’ (C12-SN:75.2)
 early GEN morning
- pès g^wājg^wājā mámpàr mālā zādāw* ‘the first day of the festival at night’
 day festival NOM-first GEN night (DP1-SN:1.3)

(ix) Nominalisation + object

Note that for this construction to be possible, the object nominal must be referential and not generic.

- (5.81) *lāmár mālā zlàn* ‘the beginning of the work’ (GE41-SE:29.2)
 NOM.ACT-begin GEN work
- lēbér mālā ŋgɛ̀ɛ̀* ‘the selling of the peanuts’ (GE41-SE:32.2)
 NOM.ACT-sell GEN peanut(s)
- lēbér mālā skàn nyā* ‘the selling of this thing’ (GE41-SE:31.2)
 NOM.ACT-sell GEN thing DEM.PROX
- * *lēbér mālā skàn* ‘selling of things’ (Fieldnotes)
 NOM.ACT-sell GEN thing

5.3 Appositional noun phrases

It is possible to have two noun phrases in apposition, the second giving further information about the first. There will usually be a pause between the two noun phrases. The second noun phrase is often a name or title as in (5.82 a & b).

- (5.82) a. *Ata va wende əy tarha [uzəye*
á tā vā wéndé j- tār -xā wzjé
 PREP1 on year IND.DET.SG 3PL.SBJ- invite -VNT.DIST **children**
- heldəməye tata], [Ndelem egé] ŋ cekzetene* .
xáldmā -jé tātá ndelem =égé ń tsàk -zā -ētēnē
daughter -PL 3PL.POSS **Ndelem** =PL INF help TRANS -3PL.IOBJ
 One year, they asked **the sons of their daughters, the Ndelem clan** to
 help them.’ (NH10-WN:5.1)

- b. *ara* [*bay kwakwas antā*], [*Mazay madaka*]
 ārā bāj k^wák^wàs āntā māsāj má= dākāl
 COP **chief ceremony** 3SG.POSS **Mazay** REL= **big**
 ‘...it’s **the chief of ceremonies, the leader of the Mazay.**’ (DE10-SN:6.1)

In these constructions, the first noun phrase is often a pronoun. In this case a pause is possible but not obligatory. When there is no pause it may be possible to analyse this construction as an genitive construction. For this reason example (5.83a) could be interpreted as ‘they of the chiefs’ rather than ‘they the chiefs’.

- (5.83) a. [*Tata*] [*bay ege*] , *bay ege* , əy *laza eze* .
 tātā bāj =égē bāj =égē j- lā -zā ézē
 3PL **chief =PL** chief =PL 3PL.SBJ- do -TRANS therefore
 ‘Therefore **they the chiefs** (OR **they of the chiefs**), the chiefs, they do it.’
 (DE7-SN:2.13)

- b. [*Nene*] [*Madagamzam ege*] , əy *gemeney*
 nènè mādágāmzām =égē j- gām -ènèj
 1EXCL **Madagamzam =PL** 3PL.SBJ- drive.away -1EXCL.DOBJ
 ŋ *Gambəla* .
 ŋ gambəla
 PREP2 Gambela
 ‘**We the Madagamzam**, they drove us away from Gambela.’
 (NH11-SN:1.1)

5.4 Coordinate noun phrases

COORDINATION is a process by which ‘two or more units of the same type are combined into a larger unit and still have the same semantic relations with other surrounding elements (Haspelmath 2007:1). Buwal has conjunctive (‘and’) coordination within noun phrases. This will be covered in Section 5.4.1. Asymmetric coordination, the inclusory construction, is described in Section 5.4.2. Section 5.4.2 deals with disjunctive (‘or’) coordination. Adversative (‘but’) coordination operates only at the clause level and will therefore be discussed in Section 10.4.3.

5.4.1 Conjunctive coordination

Conjunctive coordination in Buwal is achieved by inserting a coordinator (see Section 4.14.3) between the two noun phrases. There are two conjunctions which can coordinate noun phrases, *éj* ‘and’ *léŋ* ‘plus’.

5.4.1.1 Coordinate noun phrases with *éj*

This conjunction *éj* ‘and’ is used when the referents are considered to be part of the same group. The structure for coordinate noun phrases using the conjunction *éj* ‘and’ can be found in Table 5.6 below.

Table 5.6: Structure of coordinate noun phrases with the conjunction *éj*

(ASS.PL)	Noun Phrase	(Noun Phrase) ⁿ	<i>éj</i>	Noun Phrase
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Noun phrases coordinated with this conjunction can occur in any position in the clause: as subjects (5.84a), objects (5.84b) and obliques (5.84c). Note that when a coordinated noun phrase occurs in subject position, as in example (5.84a), the plural agreement marker is used on the verb, showing that the coordinated noun phrase is considered plural. Two nouns belonging to the same semantic set may be preceded by the associative plural marker as in example (5.84a) (also see Section 4.5.2).

- (5.84) a. *Ata gwambakw ey meŋ əy ŋgel ma a damaw .*
ātā g^wāmbāk^w éj mēŋ j- ŋgəl má á damaw
 ASS.PL toad and antelope 3PL.SBJ- meet PREP1 bush
 ‘The toad and the antelope met in the bush.’ (NF6-WN:1.1)

- b. *Sa zamha ŋhwəye ey ŋtəməye .*
sā- zàm -xā nx^wā -jé éj ntmēk -jé
 1SG.SBJ- eat -VNT.DIST goat -PL and sheep -PL
 ‘I shepherd (lit. eat) the goats and the sheep.’ (GE18-SE:4)

- c. *a zlap ata Yesu ey fagwalakw ege*
ā- zlap á tā jesu éj fāg^wālāk^w =égē
 3SG.SBJ- speak PREP1 on Jesus and leper =PL
 ‘...it talks about Jesus and the lepers.’ (HT4-SN:17.2)

When more than one noun phrase is coordinated the conjunction is inserted before the final noun phrase only (5.85).

- (5.85) *Mbenjəwen a zam ɲhwəye , ɲtəməye ey zɬəye .*
 mbèndzwēn ā- zàm nx^{wā} -jé ntmēk -jé éj ɬā -jé
 shepherd 3SG.SBJ- eat goat -PL sheep -PL and ox -PL
 ‘A shepherd shepherds (lit. eats) goats, sheep and cattle.’ (LL17-SE:66)

5.4.1.2 Coordinate noun phrases with *léŋ*

The structure for coordinate noun phrases using the conjunction *léŋ* ‘plus’ can be found in Table 5.7 below. This conjunction is used when the referents are considered to be part of separate groups. Consistent with this, the associative plural marker cannot be used with this construction.

Table 5.7: Structure of coordinate noun phrases with the conjunction *léŋ*

Noun Phrase	(Noun Phrase) ⁿ	<i>léŋ</i>	Noun Phrase
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Noun phrases coordinated with *léŋ* ‘plus’ can function as subjects (5.86a), objects (5.86b) and obliques (5.86c) of verbal clauses.

- (5.86) a. *ɲhwəye leŋ ɲtəməye əy kápəlah aza a*
 nx^{wā} -jé léŋ ntmēk -jé j- ká- plāx āzá á
 goat -PL plus sheep -PL 3PL.SBJ- PFV- detach COMPL PREP1
zadāw .
 zàdāw
 night
 ‘The goats and (lit. plus) the sheep have escaped at night.’ (GE18-SE:3)
- b. *Bay mbal a mbelene ɲhwa leŋ mandá*
 bāj mbāl ā- mbāl -ēnē nx^{wā} léŋ mándá
 chief catch 3SG.SBJ- grab -3SG.IOBJ goat plus salt(ful.)
 ‘The chief grabbed him a goat plus salt.’ (TN1-SN:2.12)

- c. *Sa nda a wata mana a mba a dawan léŋ*
 s̄a- ndā á wātā m̄anā á mbà á dāwān léŋ
 1SG.SBJ- go PREP1 home mother.1POSS PREP1 **child** PREP1 **back** **plus**
uda ata ha .
 wdā á tā xā
food PREP1 **on** **head**
 ‘I go to my mother's house with a **child on (my) back plus food on (my) head.**’
 (GE18-SE:26)

The conjunction *léŋ* can also be used in calculations (5.87).

- (5.87) *Tenguleŋ léŋ tenguleŋ a jav anta gbak* .
 téng^wlèn léŋ téng^wlèn ā- dzàv āntā gbák
one plus one 3SG.SBJ- assemble 3SG.POSS two
 ‘**One plus one** equals (lit. it assembles itself) two.’
 (LL52-SE:2)

As in the construction using the conjunction *éj*, when multiple noun phrases are coordinated, the conjunction *léŋ* only occurs before the final noun phrase (5.88).

- (5.88) *kule makəba , kule welbe , léŋ kule mala kwakwas*
 k^wlè mākḃá k^wlè wēlḃē léŋ k^wlè mālā k^wák^wàs
 idol Makba idol nature spirit **plus** idol GEN sacrifice
 ‘...the Makba idol, the nature spirit idol plus the idol for the sacrifice...’
 (DE2-SN:2.2)

5.4.2 Asymmetric coordination

Like other Chadic languages such as Miya (Schuh 1998: 277) and Hausa (Newman 2000: 136), Buwal has asymmetric or inclusory coordination. This involves the plural of the coordination being anticipated in a plural subject agreement prefix and a singular noun occurring in a comitative phrase. This can only occur with human referents.

- (5.89) a. *Əy nanda a mʒla* .
 j- ná- ndā á mʒā
 3PL.SBJ- FUT- go PREP1 blacksmith
 ‘She will go with the blacksmith.’ (DE11-SN:1.11)
 (lit. ‘They will go with the blacksmith.)
- b. *Nene ndaha a Marəy* .
 nènέ ndā -xā á mərəj
 1EXCL.SBJ go -VNT.DIST PREP1 Marie
 ‘I came with Marie.’ (LL5-SE:36)
 (lit. ‘We(excl.) came with Marie.’)

5.4.3 Disjunctive coordination

DISJUNCTIVE coordination distinguishes alternatives (Matthews 1997: 101).

Semantically, Buwal only has exclusive disjunction, meaning that only one of the alternatives, but not both, are true (Payne 1997:340). Syntactically, there are three types of disjunction (interrogative, symmetrical and rejection disjunction). Interrogative disjunction is discussed in Section 9.3.1.2. SYMMETRICAL disjunction means that either alternative may be true. Symmetrical disjunctive coordination has the structure shown in Table 5.8 below in which the alternative is introduced by the negative existential marker *ák^wāw* (see Section 4.11.2) followed by an optional topic marker (see Section 4.15). Examples are given in (5.90 a-c) below.

Table 5.8: Structure of symmetrical disjunctive coordination of noun phrases

Noun phrase,	<i>ák^wāw</i>	(TOP),	Noun phrase
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The topic marker may be either the general topic marker *tsá* or the emphatic topic marker *má*. If there is no topic marker or when the general topic marker is used, either alternative is acceptable (5.90 a & b). However when the emphatic topic marker is used, the first alternative is preferred. The second is accepted if the first one is not forthcoming (5.90b).

- (5.90) a. *Njenjekey dala , akwaw ndərey* .
 ndzàndzà -èkēj dālā ák^wāw ndrèj
 give -1SG.IOBJ money(ful.) NEG.EXIST sorghum
 ‘Give me money **or** sorghum.’ (GE19-SE:9)

- b. *Sa kadāw uda , akwaw ca , ŋgəyey .*
 sá- k̄ā- d̄āw wdā ák^wāw tsá ŋgjēj
 1SG.SBJ- IPFV- want fufu NEG.EXIST TOP porridge
 ‘I want food **or** pap. (GE19-SE:3)
- c. *Sa kadāw say , akwaw ma , yam .*
 sá- k̄ā- d̄āw sáj ák^wāw má jàm
 1SG.SBJ- IPFV- want coffee/tea(ful.) NEG.EXIST TOP.EMPH water
 ‘I want tea, **if not**, water.’

The second type of disjunctive coordination in Buwal is REJECTION, in which one alternative precludes the other. Rejection disjunctive coordination has the structure shown in Table 5.9 below, in which the rejected alternative introduced by the plain negative marker *k^wāw* (see Section 4.11.1) followed by a general (never the emphatic) topic marker. The rejected alternative is also negated using the plain negative. Examples given in (5.91) below.

Table 5.9: Structure of rejection disjunctive coordination of noun phrases

Noun phrase	<i>k^wāw</i>	TOP,	Noun phrase	<i>k^wāw</i>
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- (5.91) a. *Dekey yam kwaw ca , say kwaw .*
 dā -ēkēj jàm k^wāw tsá sáj k^wāw
 bring -1SG.DOBJ water NEG TOP coffee/tea(ful.) NEG
 ‘Bring me water **and not** tea.’ (GE19-SE:13.2)
- b. *Sa dāw tablə kwaw ca , lanja kwaw .*
 s̄ā- d̄āw tablə k^wāw tsá lā ndzá k^wāw
 1SG.SBJ- want table(fr.) NEG TOP place sit NEG
 ‘I want a table **and not** a chair.’ (GE19-SE:13.5)

Chapter 6 Tense, aspect, mode and spatial verbal marking

Buwal uses a number of different strategies for marking tense, aspect and mode (TAM). This chapter deals with how TAM is marked through verbal affixes and verbal particles. Spatial markers have been included here as their meanings have an aspectual element associated with them. Other aspect-like distinctions are coded using pragmatically marked structures which will be described in section 12.4. Modal distinctions in Buwal are largely expressed through the use of modal adverbs and are discussed in Section 3.4.3. However, mirativity is expressed by a possessive subject pronoun following the verb. This will be discussed in Section 6.4.

As in many Chadic languages, aspect plays a more dominant role in Buwal than tense. The major division is between the perfective and imperfective aspects. Future tense, however, is also coded. In Buwal these primary tense/aspect distinctions are all marked with prefixes on the verbs. These will be described in more detail in Section 6.1. Secondary aspects as well as spatial distinctions combine with the primary aspects and tense. These are coded using either verbal suffixes (Section 6.2.1) or various verbal particles (Section 6.3).

Certain Central Chadic languages have been said to have two tense/aspect systems which are used to code pragmatically dependent and independent clauses respectively. These languages include Hdi (Frajzyngier 2002: 295), Gidar (Frajzyngier 2008: 235) and Mina (Frajzyngier and Johnston 2005: 1999). Multiple tense/aspect systems have also been found in other Chadic languages such as Hausa (Newman 2000: 567-568). The contrast between dependent and independent clauses reflects the pragmatic functions of the clause. According to Frajzyngier (2004: 55), pragmatically dependent clauses ‘must be interpreted in connection with another proposition or event’. Such clauses may include specific interrogatives, sequential clauses, relative clauses, negative clauses and comments on focus. Pragmatically independent clauses on the other hand include comments on topic, declarative clauses and questions about the truth of the proposition. In Buwal, the same tense/aspect markers are used for both clause types. Therefore it seems that Buwal only has one tense/aspect system even though Mina, which is in the same subgroup, has two. Frajzyngier (2004: 65) notes that it is possible even in the same subgroup of Chadic for only some languages to have multiple aspectual systems.

6.1 Tense/aspect prefixes

The forms of the tense/aspect prefixes were discussed in Section 3.2.1.4. Different aspects also 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 (6.1).

(6.1)

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 ókégèl]	‘You are growing.’

For disyllabic subject agreement markers, it is the tone on the second syllable which varies. It is high for unspecified and imperfective aspects and low for perfective (6.2).

(6.2)

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

There are also different requirements for subject marking. The third person singular subject agreement marker is omitted in the perfective aspect (see Section 8.1.1.1).

Table 6.1 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 6.1: 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 3s	Mid	Low-Low
Future	<i>ná-/á-</i>	Yes	Mid	Low-High
Unspecified	unmarked	Yes	Mid	Low-High

The semantics of each of these aspectual categories will be described further with examples in the sections which follow. Firstly however, the concept of perfectivity and its use in the Buwal aspectual system requires clarification. One definition of IMPERFECTIVE aspect is that it constructs a situation from the inside, taking note of its internal structure whereas PERFECTIVE views a situation as a whole without taking note of its internal structure (Payne 1997: 259; Comrie 1976: 4). Dahl (1985: 74-75) on the other hand argues that the notion of BOUNDEDNESS may be more important for the conceptualisation of (im)perfective aspect in some languages. If an action is ongoing it is UNBOUNDED (ie. imperfective) and if finished it is BOUNDED (ie. perfective). This concept of perfectivity appears to apply well in the case of Buwal. The imperfective and perfective markers are in complementary distribution with the imperfective marking unbounded events and the perfective marking events which are bounded. This is illustrated by the example sentences in (6.3). In (6.3a) the verb is marked with the imperfective prefix and the action it describes is ongoing. The verb marked with the perfective aspect (6.3b) on the other hand indicates that the action is finished. For the unmarked verb (6.3c), no commitment is made as to whether the action will continue or not. In these examples, the translations provided are not idiomatic but repeat the aspect of the Buwal original.

(6. 3) a. *Daka a njuna yam a ketev cekudē.*
 dākà á ndzwná jàm á- k̄ā- t̄èv cékdē
 since(ful.) PREP1 yesterday water 3SG.SBJ- IPFV- climb a.little
 ‘Since yesterday the water **is climbing** a little.’ (It will keep climbing.)

b. *Daka a njuna yam k̄āev cekudē.*
 dākà á ndzwná jàm k̄ā- t̄èv cékdē
 since(ful.) PREP1 yesterday water PFV- climb a.little
 ‘Since yesterday the water **climbed** a little.’ (It will not keep climbing.)

c. *Daka a njuna yam a tev cekudē.*
 dākà á ndzwná jàm ā- t̄èv cékdē
 since(ful.) PREP1 yesterday water 3SG.SBJ- climb a.little
 ‘Since yesterday the water **climbs** a little.’ (It may or may not keep climbing.)

(PROGQ:53)

6.1.1 Imperfective

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 the examples below.

HABITUAL aspect expresses a situation which is characteristic of an extended period of time (Comrie 1976: 27-28). Example (6.4) expresses how every year in January the Buwal harvest cotton and dig up peanuts. This has been happening for a long time and presumably will continue to happen into the future.

- (6.4) *Ata ɲtəra Welmbegem heje **kazam** gagəmay*
 *á tā ntrā wélmbègém xèjé- **kā-** zàm gágməj*
 PREP1 on month Welmbegem 1INCL.SBJ- IPFV- **eat** cotton
 *ey heje **kara** ɲgəzleŋ .*
 *éj xèjé- **kā-** rà ɲgɔ̀zèŋ*
 and(ful.) 1INCL.SBJ- IPFV- **dig** peanut
 ‘In January (lit. the month of Welmbegem) **we harvest** (lit. eat) cotton and
 we dig up peanuts.’ (LL29-SE:2)

PROGRESSIVE aspect is used for on-going dynamic events that are happening at the reference time (Dahl 1985: 91-92), as in example (6.5). (Events are DYNAMIC when they demand a continual input of energy in order to continue (Comrie 1976: 13)).

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

CONTINUOUS NON-PROGRESSIVE aspect applies to those verbs which are traditionally thought of as stative such as ‘know’ or ‘want’. In contrast to dynamic events STATES continue as before unless changed (Comrie 1976: 13). Stative verbs can be marked with the imperfective in Buwal (6.6), indicating that the situation continues indefinitely.

- (6.6) *weləye ma a Metengurme ca , əy kasan*
wālā -jé má= á mètəŋg^wrmē tsá j- k̄a- s̄an
 woman -PL REL= PREP1 Metengurme TOP 3PL.SBJ- IPFV- **know**
ŋ ja gajak .
ŋ dzā ḡadzàk
 INF hit gourd
 ‘...the women of Metengurme, they **know** how to play (lit.) the gourd¹.’
 (HT8-SN:13.4)

The Buwal imperfective can be used with past (6.7a), present (6.7b) and future time reference (6.7c).

- (6.7) a. *Mana a kahan . A ketetengel*
mānā á- k̄a- xān á- k̄a- tètəŋgèl
 mother.1POSS 3SG.SBJ- IPFV- cry 3SG.SBJ- IPFV- roll
ata hayak .
á tā xājāk
 PREP1 on ground
 ‘My mother **was crying**. She **was rolling** on the ground.’
 (NH3-SN:3.7-8)
- b. *Hejəye na əy kačaw kan ege .*
xèdzè -jé nā j- k̄a- d̄aw k̄an =égē
 person -PL 1SG.POSS 3PL.SBJ- IPFV- need thing =PL
 My people **need** things. (DE8-SN:2.13)
- c. *Dele a kanah ma a mapat.*
délē á- k̄a- nāx má á m̄apát
 Deli 3SG.SBJ- IPFV- throw mouth PREP1 morning
 ‘Deli **is leaving** (lit. throw mouth) in the morning.’ (PROGQ:66)

6.1.2 Perfective

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

¹ A gourd covered with beads is used as a percussion instrument.

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 (6.8 a-c).

- (6.8) a. *a nuna anta wala wese ketegəre kándav*
 á nwná āntā wālā wēsé kètègré **ká-** **ndāv**
 PREP1 times.past DEF.DET woman DEM.DIST perhaps PFV- **fall**
a təwse , ketegəre 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
 PREP1 yesterday TOP.CON 1EXCL.SBJ- PFV- **do** concert(fr.) PREP1
Hwadangaw .
 x^wádangāw
 Hodango
 ‘..yesterday, we held (lit. **did**) a concert in Hodango.’ (NH2-SN:1.1)
- c. *Sa káwan kadak kadak .*
 sā- **ká-** **wān** kádàk kádàk
 1SG.SBJ- PFV- **sleep** good good
 ‘I **slept** very well.’ (the previous 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, which is the case in Buwal. The perfective prefix cannot co-occur with the imperfective. A past marker on the other hand may co-occur with an imperfective marker or occur on its own, marking both perfective and imperfective past. A second difference between perfective and past according to Bybee et al is that the perfective can be used for future events, while past is not. This is also the case in Buwal where the perfective can be used to refer to future events in certain subordinate clauses such as temporal sequence (6.9a) and conditional (6.9b), when one event precedes another.

- (6.9) a. *Mar sa zenha, hune*
 már sã- zèn -xã x^wnè-
 before 1SG.SBJ- return -VNT.DIST 2PL.SBJ-
káŋtakwza zlan ŋgha aza.
ká- **ntāk^w** **-zã** zlà̀n nyã ázá
 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*
 màdã mãwàl **ká-** **ndã** ázá nènè- ná- ndã á
 if husband PFV- **come** COMPL 1EXCL.SBJ- FUT- go PREP1
egələyz .
 egljz
 church(fr.)
 ‘If my husband **has come**, we will go to church.’ (LL36-SE:5)

The perfective may be used for background information describing events which have taken place previous to the main time line (6.10).

- (6.10) *Bay mbal a mbelene ŋhwa leŋ manda , a*
 bãy mbāl ā- mbāl -ēnē nx^wã léŋ mándá ā-
 chief grab 3SG.SBJ- grab -3SG.IOBJ goat plus salt(ful.) 3SG.SBJ-
nda . Fagwalakw wende kamac ara mbe aka
 ndã fãg^wãlãk^w wéndé **ká-** **màts** á rã mbē ákã
 go leper IND.DET.SG PFV- **die** PREP1 side 3SG EXIST
yam . A nda , fətar a fətar aza .
 jám ā- ndã ftà̀r ā- ftà̀r āzà
 also 3SG.SBJ- go dig.up 3SG.SBJ- dig.up IT
 ‘The chief grabbed a goat for him plus salt, he went. There was also another leper that **had died** in his neighbourhood. He went, he dug (the body) up.’ (TN1-SN:2.12-3.2)

6.1.3 Unmarked

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 (6.11a), present (6.11b) and even future time reference, for imminent events (6.11c).

- (6.11) a. əy **ca** bay mewè ata wan ɲsələd' ɲtəra Mahwaraw .
 j- **tsā** bāy méwè á tā wān ɲsléd' ntrā mǎx^wàràw
 3PL.SBJ- **put** chief new PREP1 on day seven month Mohoro
 ‘They **put** a new chief (in place) on the seventh of September (lit. day
 seven of the month of Mohoro).’ (NH7-SN:1.1)
- b. Na **han** benjer kéreheny aza a
 ná- **xān** béndzēr ká- rēh -ēnèj āzá á
 1EXCL.SBJ- **cry** squirrel PFV- save -1EXCL.IOBJ COMPL PREP1
 dəbe .
 dbé
 termite.mound
 ‘We **cry** (that) the squirrel has saved himself (lit. on us) in the termite
 mound.’ (NF2-SN:2.5)
- c. Sa **ghwalzahwaw** səkan ma əy kala
 sā- ɣ^wāl -zā -āx^wāw skàn má= j- kǎ- 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 the things that they do with idols.’ (DE2-SN:4)

The unmarked verb form can be used for both bounded (6.12a) and unbounded events (6.12b).

- (6.12) a. əy **nda** , əy **ɲja aka** ata papalam .
 j- **ndā** j- **ndzā āká** á tā pápálàm
 3PL.SBJ- **go** 3PL.SBJ- **sit** ACC PREP1 on plank
 ‘They **went**, they **sat down** on a bench (lit. plank).’ (NH7-SN:3.3)

- b. *Kaw vayay ca a kadəmas . Wala a dəmas .*
 káw vájáj tsá á- k̄- dmàs wālā ā- dmàs
 even(ful.) who TOP 3SG.SBJ- IPFV- **dance** woman 3SG.SBJ- **dance**
Mawal a dəmas . Darlaŋw ege əy dəmas .
 māwəl ā- dmàs dàrlāŋ^w =égē j- dmàs
 man 3SG.SBJ- **dance** young.man =PL 3PL.SBJ- **dance**
 ‘Everyone **was dancing**. The women **danced**. The men **danced**. The youth **danced**.’
 (NH7-SN:7.11-14)

The unmarked form of the verb is used for sequential events in narratives (6.13). This contrasts with what Dahl (1985: 139) says about the perfective typically belonging to these contexts cross-linguistically.

- (6.13) *Aya ŋhel wese , a ndaha , a dam a ujek*
 ājā nxèl wēsé ā- ndā -xā ā- dām á wjĕk
 then thief DEM.DIST 3SG.SBJ- **go** -VNT.DIST 3SG.SBJ- **enter** PREP1 hut
ŋgama anta wese , a ŋgwaf ma ujek .
 ŋgámà āntā wēsé ā- ŋg^wáf mā wjĕk
 friend 3SG.POSS DEM.DIST 3SG.SBJ- **break.down** mouth hut
 ‘Then that thief, he **came**, he **entered** the hut of that friend of his, he **broke down** the door (lit. mouth of hut).’
 (NH9-SN:3.4)

The unmarked verb form also has a generic use (6.14a.). According to Dahl (1985: 99) GENERIC sentences ‘describe the typical or characteristic properties of a species, a kind or individual.’ In Buwal the generic can also have a habitual meaning expressing what commonly happens (6.14b).

- (6.14) 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*
xèdzè -jé má= á nwná āntā =égē tsá j-
 person -PL REL= PREP1 times.past DEF.DET =PL TOP 3PL.SBJ-
tawar ca a berjeŋ .
tāwār tsá á bèrdzēŋ
 travel TOP PREP1 donkey
 ‘...people of the old days, they **would travel** by donkey.’ (HT6-SN:5.13)

There does not appear to be any difference in meaning between the use of unmarked verbs (6.15a) and verbs marked with the imperfective prefix (6.15b) in expressing habitual aspect.

- (6.15) a. *Ata pes ata pes , weləye əy da*
á tā pès á tā pès wālā -jé j- dà
 PREP1 on day PREP1 on day woman -PL 3PL.SBJ- **prepare**
uda .
wdā
 food
 ‘Every day women **prepare** food.’ (GE1-SE:27.1)
- b. *Ata pes ata pes , weləye əy*
á tā pès á tā pès wālā -jé j-
 PREP1 on day PREP1 on day woman -PL 3PL.SBJ-
kada uda .
kā- dà wdā
 IPFV- **prepare** food
 ‘Every day women **prepare** food.’ (GE1-SE:27.2)

6.1.4 Future

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 since it marks events with future reference involving both intention (6.16 a & b) and prediction (6.17 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.

- (6.16) a. *Sa nanda a Maruwa ata wan mahkad' .*
 s̄a- 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 domas aza .*
 s̄a- á- bān -āx^wāw lā má = á dmàs āzá
 1SG.SBJ- FUT- wash -2SG.IOBJ place REL= PREP1 abdomen COMPL
 ‘...I **will wash** for you the place in the abdomen first.’ (NF3-SN:4.10)
- (6.17) a. *A dōwze anta , v̄rezl a netev aza*
 á dwzé āntā vrèḹ ā- ná- t̄ev āzà
 PREP1 after DEF.DET sorghum.husk 3SG.SBJ- FUT- ascend IT
m̄gba ata ha .
 ŋmgbà á tā xā
 up.there PREP1 on head
 ‘Afterwards, the sorghum husks **will go up** to the top.’ (PP4-SN:1.3)
- b. *hal tata cemey , a ala ŋkwaḅ ŋ ha zeney .*
 xāl tātá tséméj ā- á- lā nk^wāḅ ŋ xā zēnéj
 girl 3PL.POSS TOP.CON 3SG.SBJ- FUT- do brain PREP2 head again
 ‘...as for their daughter, she **will become** nice (lit. brain in head) 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 (6.18 a & b).

- (6.18) a. *Kaw vayay maghwalza mada kánja η*
 káw vájáj mā- y^wāl -zā **màdā** ká- ndzā íj
 even(ful.) who JUS- explain -TRANS **if** PFV- be PREP2
bay ca, a neletene a hejəye ca
 bāy tsá ā- **ná-** **lā** -**ētēnē** á xèdzè -jé tsá
 chief TOP 3SG.SBJ- FUT- **do** -3PL.IOBJ PREP1 person -PL TOP
vemey ?
 véméj
 what
 ‘Let each one explain, if he became chief, what he **will do** for people.’
 (NH7-SN:3.6)
- b. *Mada dala kázlapa ma anta tew*
màdā dālā ká- ɬāp -ā mā āntā téw
if someone PFV- say -VNT.PROX problem 3SG.POSS finally
cemey, heje narak gazlavay a hedé .
 tséméj xèjé- **ná-** **ràk** gāɬāvāj á xēdé
 TOP.CON 1INCL.SBJ- FUT- **pray** God PREP1 on.it
 ‘If someone has finished recounting his problem, we **will pray** to God
 about it.’
 (NH1-SN:4.5)

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 (6.19a) Galdok did eventually become chief. However in (6.19b) they did not swear (take an oath) on Tuesday because something happened before hand which made it unnecessary.

- (6.19) a. *Ma Gazlakw a nanja η bay wese ca Gala*
 má = gáɬàk^w á- **ná-** **ndzā** íj bāy wēsé tsá gálā
 REL= Galdok 3SG.SBJ- FUT- **be** PREP2 chief DEM.DIST TOP Gala
Mazay ca kamac akwaw , mbəy a nje .
 mǎzāj tsá ká- mǎts ák^wāw mbj á ndzé
 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 (lit. he was with an eye).’
 (NH13-SN:5.1)

- b. *A təwse ca kedé əy nemedza a pes*
 á twsé tsá kēdé j- ná- mēd -zā á pès
 PREP1 there TOP perhaps 3PL.SBJ- FUT- swear -TRANS PREP1 day
luma Mafaw .
 lwmà màfaw
 market(ful.) Mofu
 ‘At that time perhaps they **were 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 (6.20 a & b). The future and perfective markers cannot co-occur.

- (6.20) a. *mama kanajav akwaw*
 màmá- kā- ná- dzàv ák^wāw
 1DUAL.SBJ- IPFV- FUT- **come.together** 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
 ‘Since they **would be imprisoning** him, he pleaded for mercy...’
 (NH8-SN:12.3)

6.2 Directional marking

Buwal has two main categories of directional marking associated with verbs. The first is VENTIVE, or movement towards a deictic reference point. There are two ventive suffixes in Buwal, whose functions will be described in more detail in Section 6.2.1 below. The second direction is movement away from a deictic reference point which is coded in Buwal by an ITIVE marker (Section 6.2.2). This marker is not a suffix but rather an independent particle. A number of Central Chadic languages, such as Daba (Lienhard and Wiesemann 1986: 46), Mbuko (Gravina 2001: 7), Muyang (Smith 2002: 17), Cuvok

(2006: 82) and Moloko (Friesen and Mamalis 2004: 36), have an itive marker coding the opposite direction to ventive. Contrary to expectation, itive and ventive markers can in fact co-occur in Buwal. This indicates that the meaning of the itive marker is not the ‘opposite’ of ventive in this case. The meaning of the itive marker will be discussed further in Section 6.2.2. Several Central Chadic languages such as Merye (Gravina 2007: 14), Gidar (Frajzyngier 2008: 196) and Mofu-Gudur (Barreteau 1988: 382) have only ventive markers. It is possible that Buwal also began this way with the itive marker being a later development (see Section 4.7.1 for a discussion of possible sources of this marker).

6.2.1 Ventive suffixes

Buwal has two VENTIVE suffixes, the proximal $-\bar{a}$ and the distal $-h\bar{a}$ (see (6.23) for examples which illustrate the difference in their meaning). Their distribution and form were discussed in Section 3.2.1.4. They each code movement towards a deictic reference point. This is unlike the ‘goal orientation marker’ in Mina. Although the marker in Mina has a similar form to the Buwal ventive markers, it can indicate movement towards or away from a reference point or simply that the event happened in a specific place elsewhere (Frajzyngier and Johnston 2005: 171). In Buwal, for verbs of movement, the movement is assumed to be away from or neutral with respect to the deictic reference point (6.21a) unless the verb is marked with a ventive suffix (6.21b).

- (6.21) 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 (6.22a), the subject (6.22b) or some other salient location within a discourse (6.22c).

- (6.22) a. *na nda^{ha} , na nja a Buwal .*
 ná- ndā -xā ná- ndzā á bwāl
 1EXCL.SBJ- go -VNT.DIST 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.DIST hand person leper
 ‘...he pulled out (towards him) the hand of the leper person.’ (TN1-SN:5.8)
- c. *Mana a ja ula . A zen^{ha} , 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 (lit. hit voice). He came back, he 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 (6.23a) the verb does not carry ventive marking. This indicates that the subject is still at the location ‘the market’ and has not yet returned. Examples (6.23 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. In (6.23b) the market is nearby in the Buwal village whereas in (6.23c) the market is 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.

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

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

It is not clear exactly how the distinction between proximal and distal is determined. In some cases visibility may be a factor. For example, one language informant gave the examples in (6.24) below. When the proximal marker is used, the field is visible (6.24a). When the distal is used, the field is in the bush and not visible (6.24b). However, another informant said that it is possible to use the proximal ventive marker with ‘bush’ (6.25a) and in the natural spoken corpus there are examples of the proximal being used with other locations that are somewhat far away and not visible (6.25b). It seems the concept of ‘near’ and ‘far’ are relative and open to the interpretation of the speaker.

- (6.24) a. *Sa zlakala naka ŋgha* .
 sā- ʒàk -ā lā nākā nyā
 1SG.SBJ- sow -VNT.PROX field 1SG.POSS DEM.PROX
 ‘I sowed this field of mine (and returned).’ (GE51-SE:5.9)
 (The field is visible.)
- b. *Sa zlakha la naka a damaw* .
 sā- ʒàk -xā lā nākā á dāmāw
 1SG.SBJ- sow -VNT.DIST field 1SG.POSS PREP1 bush
 ‘I sowed my field in the bush (and returned).’ (GE51-SE:5.10)
 (The field is not visible.)

- (6.25) a. *A bala mpe ŋ la a damaw .*
 ā- bāl -ā mpè ń lā á dāmāw
 3SG.SBJ- chop -VNT.PROX wood PREP2 field PREP1 bush
 ‘He chopped wood in a field in the bush (and returned).’ (GE51-SE:2.5)
- b. *Hune hey ŋ barla ŋ bahaba*
 x^wné- xěj ń bārlā ń bāh -ā -bā
 2PL.SBJ- flee PREP2 mountain INF hide -VNT.PROX -BEN
 ‘You flee into the mountains to hide (before coming back...)’
 (DE5-SN:1.15)

The concept of distance can be temporal as well as spatial (6.26).

- (6.26) a. *A nagwarzama a tambaca a Yawundey .*
 ā- ná- g^wàrzàm -ā á tāmācá á jawndej
 3SG.SBJ- FUT- get.up -VNT.PROX PREP1 today PREP1 Yaounde
 ‘He will leave today from Yaounde.’ (GE51-SE:14.2)
- b. *A nagwarzamha vagumtaf .*
 ā- ná- g^wàrzàm -xā vāg^wmtáf
 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. Payne (1997: 244) states that there is often a connection between aspect and location/direction marking. The idea of ‘come’ is then likely to be associated with inceptive aspect (6.27 a & b).

- (6.27) a. *A nuna anta ma Mazkad ege əy*
 á nwná āntā má = māzkáf = égē j-
 PREP1 times.past DEF.DET REL= Mazkad =PL 3PL.SBJ-
njaha ŋ bay a Buwal .
 ndzā -xā ń bāy á bwāl
 be -VNT.DIST PREP2 chief PREP1 Buwal
 ‘In olden times, when the Mazkad clan came to be chiefs in Buwal.’
 (NH10-WN:1.1)

- b. *Mesfè a laha* , *heje ja Welmbegem* .
 mésfè 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 the context of past time reference, the distal suffix indicates the situation is now finished (6.28a) whereas the proximal indicates that it may be still ongoing (6.28b).

- (6.28) a. *Hayak Buwal a marha* a *pes wese* .
 xājāk bwāl ā- mār -xā á pès wésé
 country Buwal 3SG.SBJ- begin -VNT.DIST PREP1 day DEM.DIST
 ‘The Buwal country began on that day.’ (GE51-SE:13.2)
 (That day is over.)

- b. *Hayak Buwal a mara* *ata bəlakw*
 xājāk bwāl ā- mār -ā á tā blàk^w
 country Buwal 3SG.SBJ- begin -VNT.PROX PREP1 on thousand
tənguleŋ a temere ŋfád .
 tɛŋg^wlèn á témérè nfád
 one PREP1 hundred four
 ‘The Buwal country began in 1400.’ (GE51-SE:13.4)
 (The Buwal country still continues to this day.)

With reference to future time, the ventive suffixes can be used to identify prospective events (6.29). Time is seen as moving towards the present (Comrie 1976: 106).

- (6.29) *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 (lit. the market which is coming).’ (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 (6.30).

- (6.30) a. *A* *kasəkamaha* *ηkələf a*
 á- k̄ā- skām -ā -xā nklèf á
 3SG.SBJ- IPFV- buy -VNT.PROX -VNT.DIST fish PREP1
luma .
lwmà
 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 η*
 j- ndā á ηgē tsá j- ndā η
 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 a while (before returning)...’
 (HT8-SN:7.8)

6.2.2 Itive marker

Buwal has an ITIVE marker *āzà* which codes movement away from a deictic reference point (6.31 a & b). Its form and distribution were described in Section 4.7.1.

- (6.31) a. *Vakutaŋ , a* *zəmbar* *aza ra* *marazlarazl*
 vək^wtāŋ ā- zmbàr āzà rā má- ràḷ -ā- ràḷ
 throw.far 3SG.SBJ- throw.far IT hand NOM- cut -NOM.PAT- cut
wese .
wēsé
 DEM.DIST
 ‘He threw **away** that cut off hand.’ (TN1-SN:5.16)

- b. *Sa dam aza a bəza .*
 sā- dàm āzà á bzā
 1SG.SBJ- exit IT PREP1 outside
 ‘I come (lit. **out**) outside.’ (NF2-SN:4.16)

In contrast to ventive suffixes (see Section 6.2.1), the deictic reference point of *āzà* is always some place other than the speaker of the location. As a result, it is possible for ventive and itive marking to co-occur (6.32 a & b). This involves 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.

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

- b. *a zena aza ŋ ŋəzle ŋ nda ŋ basl dəvar*
 ā- zèn -ā āzà ń ŋgɛ̄ ń ndā ń bāt dvār
 3SG.SBJ- return -VNT.PROX IT PREP2 forge INF go INF forge hoe
 ‘...he comes back **from there** into the forge (lit. to go) to forge a hoe.’
 (DP9-SN:4.6)

Like the ventive markers, the itive marker can occur with non-movement verbs. These constructions imply that there is movement away from the place where the activity has been conducted (compare 6.33 a & b). Examples (6.30 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 (6.33b).

- (6.33) a. *Mbal aza gamtak .*
 mbāl āzà gāmtāk
 catch IT chicken
 ‘Catch the chicken **from there!**’ (GE52-SE:18.1)
 (The addressee is near the chicken. He catches it and brings it away with him.)

- b. *Sa sàken aza ndərey mavaw a masen .*
 sà- skèn āzà ndrèj mávāw á māsèn
 1SG.SBJ- grind IT sorghum beer PREP1 mill(fr.)
 ‘I grind beer sorghum **from there** at the mill.’ (GE52-SE:20.1)
 (The sorghum is brought away from there. Said in some other place.)
- c. *Sa sàken ndərey mavaw a masen .*
 sà- skèn ndrèj mávāw á māsèn
 1SG.SBJ- grind sorghum beer PREP2 mill(fr.)
 ‘I grind beer sorghum 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 temporal meaning.

6.3 Verbal particles

Buwal has four verbal particles which are in a paradigmatic relationship and code various aspectual and spatial distinctions. These can be found in Table 6.2 below. Their forms and distribution were described in Section 4.7.2.

Table 6.2: Buwal verbal particles

Marker	Form
Completive	<i>āzà</i>
Simultaneity	<i>ārà</i>
Accomplishment	<i>ākà</i>
Anticipation	<i>kà</i>

The examples in (6.34) illustrate the difference in aspectual meaning of the four particles when used with the verb *skām* ‘buy/sell’. The completive marker *āzà* in example (6.34a) 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 (6.34b) the marker of simultaneity *ārà* indicates that the fish will be bought at the same time as doing something else, in this case travelling home. The marker of accomplishment *ākà* in example (6.34c) indicates that the subject has just come from buying fish at the market. Finally the marker of anticipation *kà*

in example (6.34d) expresses the idea that the fish is bought ahead of time in case it may run out.

- (6.34) a. *Sa səkam ŋkələf **aza** a luma .*
 s̄a- skām nklèf **āzā** á lwmà
 1SG.SBJ- sell fish **COMPL** PREP1 market(ful.)
 ‘I sell fish at the market **first**.’ (GE52-SE:2.3)
- b. *Sa səkam ŋkələf **ara** a wata .*
 s̄a- skām nklèf **ārā** 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 .*
 s̄a- skām nklèf **ākā** á lwmà
 1SG.SBJ- buy fish **ACC** PREP1 market(ful.)
 ‘I **come back from** buying fish at the market.’ (GE52-SE:2.2)
- d. *Sa səkam ŋkələf **ka** a luma .*
 s̄a- skām nklèf **kā** á lwmà
 1SG.SBJ- buy fish **ANT** PREP1 market(ful.)
 ‘I buy fish at the market **in advance**.’ (GE52-SE:2.4)

The functions of each of these verbal particles will be described in more detail in the sections which follow.

6.3.1 Completive marker *āzā*

The Buwal completive marker could be said to code TERMINATIVE aspect or the endpoint of an event (Frawley 1992: 321). It implies that one event must end before another can begin and could loosely be translated as ‘already’ for past events and ‘first’ for present and future events. It corresponds closely in form and function to what Frajzyngier and Johnston (2005: 249-259) call the ‘end-of-event’ marker in Mina. Completive markers have also been found in other Central Chadic languages such as Mbuko (Gravina 2001: 17-18), Cuvok (Ndokobai 2006: 58) and Mofu-Gudur (Hollingsworth 1991: 245-246).

The completive marker can co-occur with all primary tenses and aspects such as imperfective (6.35a), perfective (6.35b) and future (6.35c). It can also occur with the unmarked form of the verb (6.35d).

- (6.35) a. *əy kəmpam menjevek aza mar a nda a*
 j- k̄- mpàm mēndzēvēk āzā mār 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 they go (lit. he goes) to the hospitals.’ (DE9-SN:4.4)

- b. *Əy kəbecata aza , əy*
 j- k̄- b̄èts -ātā āzā j-
 3PL.SBJ- PFV- assemble -3PL.DOBJ COMPL 3PL.SBJ-
ngad̄ata eze .
ngād -ātā ézē
 count -3PL.DOBJ therefore
 ‘They have **already assembled** them (i.e. votes), therefore they count them.’ (DP6-SN:3.5)

- c. *sa nenjeŋza ma anta aza kadak kadak .*
 s̄- ná- ndzèf -zā mā āntā āzā kádàk kádàk
 1SG.SBJ- FUT- smell -TRANS issue DEF.DET COMPL good good
 ‘...I **will smell out** the issue very well **first**.’ (HT3-SN:2.1)

- d. *mawal ca a ŋtar duwa ma ata ha anta*
 māwəl tsá ā- ntàr dwā má= á tā xā āntā
 husband TOP 3SG.SBJ- pay debt REL= PREP1 on head 3SG.POSS
aza , wala a kaba akwaw .
āzā wālā ā- k̄- bā ák^wāw
 COMPL wife 3SG.SBJ- IPFV- taste NEG.EXIST
 ‘..the husband, he **pays** the debt which is on his head **first**, the wife doesn't taste anything.’ (C4-SN:23.5)

The completive aspectual marker can also be used in imperative clauses (6.36) (see Section 9.1).

- (6.36) *əy mambal aza ŋhel aza amba əy nala guma*
ǰ- mā- mbāl āzà nxèl āzá āmbá ǰ- ná- lā g^wmā
 3PL.SBJ- JUS- arrest IT thief COMPL then 3PL.SBJ- FUT- do judgement
anta .
āntā
 DEF.DET
 ‘...let them arrest the thief from there **first**, then they will do the judgement.’
 (NH8-SN:14.1)

The completive marker can mark the final event in narratives (6.37).

- (6.37) *Das a dās la anta aza , sler a*
dās ā- dās lā āntā āzá ɬēr ā-
 cultivate 3SG.SBJ- cultivate field 3SG.POSS COMPL exterminate 3SG.SBJ-
slerata aza tewtew , zam a zamata
ɬēr -ātā āzá téw-téw zàm ā- zàm -ātā
 exterminate -3PL.DOBJ COMPL all eat 3SG.SBJ- eat -3PL.DOBJ
aza .
āzá
 COMPL
 ‘He cultivated his field, he exterminated everyone, he ate them up.’ (NF3-SN:5.2)

As mentioned in Section 4.7.2, the completive marker may occur before (6.38a) or after the indirect object (6.38b). This leads to a change in scope with a resulting change in meaning. Example (6.38a) could be said if the subject is buying fish for his wife before leaving the market, whereas example (6.38b) can only be used if the subject is **selling** fish.

- (6.38) a. *Sa səkemene ŋkələf aza a wala naka* .
sā- skām -ēnē nklèf āzá á wālā nākā
 1SG.SBJ- buy -3SG.IOBJ fish COMPL PREP1 wife 1SG.POSS
 ‘I buy fish **first** for my wife.’ (GE52-SE:2.7)

- b. *Sa səkemene ŋkələf a wala naka aza* .
 sā- skām -ēnē nklèf á wālā nākā āzá
 1SG.SBJ- sell -3SG.IOBJ fish PREP1 wife 1SG.POSS **COMPL**
 ‘I sell fish for my wife **first.**’ (GE52-SE:2.8)

6.3.2 Marker of simultaneity *ārá*

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 (6.39 b & c) but can be used for all simultaneous actions (6.39 a & d). Like the completive marker, the marker of simultaneity can occur with all primary tenses and aspects such as imperfective (6.39a), perfective (6.39b) and future (6.39c) as well as with unmarked verbs (6.39d).

- (6.39) a. *Kaw əy kada kule wese ca , əy*
 káw j- kā- dā k^wlè wēsé tsá j-
 even 3PL.SBJ- IPFV- make.sacrifice idol DEM.DIST TOP 3PL.SBJ-
kayaza gazlavay ara a mna .
 kā- 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)
- b. *əy kádaza ara a wata bay ,*
 j- ká- dā -zā ārá á wātā bāy
 3PL.SBJ- PFV- **bring** -TRANS SIM to compound chief
 ‘..they **brought** him **along the way** to the chief’s compound.’ (C10-SN:20)
- c. *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)

- d. $\varnothing y$ *la d̄raf baray* *ara a damaw ŋ la*
 j- *lā dr̄af bārāj* *ārā á dāmāw íj lā*
 3PL.SBJ- **do** song second.weeding **SIM** PREP1 bush PREP2 field
anta .
āntā
 3SG.POSS
 ‘They **sing** the song of the second weeding **at the same** time in the bush in
 his field.’ (DE10-SN:2.7)

The marker of simultaneity can also occur in imperative clauses (6.40).

- (6.40) *Slak̄ba* *ara ŋ zlam*
ɬak -bā ārā íj ɬàm
tuck -BEN **SIM** PREP2 ear
 ‘Tuck it in (your) ear **on the way**.’ (NF2-SN:2.18)

As for the completive marker, the marker of simultaneity can occur before or after an indirect object with a resulting change in meaning. Example (6.41a) would be said in a situation where the mother has previously opened the door to go out and instructs the speaker to close it once she is gone. In example (6.41b) however, both the speaker and his mother are on their way out and the speaker closes the door on the way.

- (6.41) a. *Sa mpekene ma ujek ara a mana* .
sā- mpāk -ēnē mā wjēk ārā á mānā
 1SG.SBJ- close -3SG.IOBJ mouth hut **SIM** PREP1 mother.1POSS
 ‘I close the door (lit. mouth of hut) at the same time for my mother.’
 (GE52-SE:1.7)
- b. *Sa mpekene ma ujek a mana ara* .
sā- mpāk -ēnē mā wjēk á mānā ārā
 1SG.SBJ- close -3SG.IOBJ mouth hut PREP1 mother.1POSS **SIM**
 ‘I close the door (lit. mouth of hut) for my mother on the way out.’
 (GE52-SE:1.6)

6.3.3 Marker of accomplishment *āká*

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.

Examples (6.39 a & b) illustrate the meaning of the verb *dēŋ* ‘stand’ without and with the path marker. In example (6.42a) there is no movement, while in example (6.42b) the child moves from, for example, a sitting to the standing position.

- (6.42) a. *A təwse , kaw vayay ca a dēŋ ama ujek*
 á twsé káw vájáj tsá ā- **dēŋ** á mā wjék
 PREP1 there even who TOP 3SG.SBJ- **stand** PREP1 edge hut
tata ,
 tātá
 3PL.POSS
 ‘Then each one, he **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)

The marker of accomplishment can co-occur with any of the primary tenses and aspects such as imperfective (6.43a), perfective (6.43b), future (6.43c) and the unmarked form of the verb (6.43d). It can also occur in imperative clauses (6.43e). Examples (6.43 a, b & e) illustrate that physical movement is not always involved in the event. The terminus of the activity in example (6.43a) is the finished decoration. For example (6.43b), it is the abandonment of school and in example (6.43e) it is the state of being calm.

- (6.43) a. *Wala mzla a kacaf gaduda aka .*
 wālā mǰā 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)

- b. *Uzəye lekwal ege vedəye kájakza*
 wʒjé lèk^wál égē vēdjé **ká-** **yàk** **-zā**
 children school =PL IND.DET.PL **PFV-** **abandon** **-TRANS**
lekwal aka.
 lèk^wál **āká**
 school ACC
 ‘Certain school children **have abandoned** school.’ (1470)
- c. *a nawan aka ana gamtak ma aha nesle*
 ā- **ná-** **wān āká** ánā gámtāk mā = á xā nēṭē
 3SG.SBJ- FUT- **lie** ACC like chicken REL= PREP1 over egg
 ‘...he **will lie down** like a chicken which is on (lit. over) eggs...’
 (HT5-SN:2.6)
- d. *Sa nda aka a ηcəne a wata ηkune.*
 sā **ndā** **āká** á ntsné á wātā nk^wnè
 1SG.SBJ- **come** ACC PREP1 earlier PREP1 compound 2PL.POSS
 ‘I **came** from your compound earlier.’ (2422)
- e. *Deḅ unaf aka a dāw η ghwadāhwaw*
dèḅ wnāf **āká** ā- dāw í y^wād^f -āx^wāw
calm heart PTH 3SG.SBJ- want INF anger -2SG.DOBJ
kwaw.
 k^wáw
 NEG
 ‘**Calm** your heart **down**, it shouldn’t (lit. doesn’t want to) anger you.’
 (280)

The marker of accomplishment can also be used to code RETROSPECTIVE aspect, ‘a point immediately subsequent to the endpoint of an event’ (Frawley 1992: 321). In other words, something which has ‘just’ happened (6.44 a & b).

- (6.44) 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 home
 ‘I **just** came from eating at home.’ (GE52-SE:3.1)
- b. *Sa zam uda aka təlam , amba sa zləme lahan .*
 sā- zàm wdā **āká** tlám āmbá sā- ḷmē lā- xán
 1SG.SBJ- eat food ACC recent then 1SG.SBJ- hear NOM.ACT- cry
 ‘I **just** finished eating food recently, then I heard crying.’ (GE52-SE:3.2)

Retrospective events are necessarily complete and in this sense the function of the marker of accomplishment overlaps somewhat with the completive marker *āzā* (see Section 6.3.1) in coding events which occur before other events (6.44 a & b).

(6.45) a. *Sa nazam uda aka ha sa hōrad* .
 sā- ná- zàm wdā **āká** xá sā xrād
 1SG.SBJ- FUT- eat food ACC until(ful.) 1SG.STAT satisfied
 ‘I will eat until I am satisfied.’ (GE52-SE:3.4)

b. *Sa zamaha ḡhwəye aka , amba sa*
 sā- zàm -ā -xā nx^{wā} -jé **āká** āmbá sā-
 1SG.SBJ- eat -VNT.PROX -VNT.DIST goat -PL ACC then 1SG.SBJ-
banaba ara .
 bān -ā -bā ārá
 wash -VNT.PROX -BEN SIM
 ‘I shepherd the goats, then I wash at the same time (before returning).’
 (GE52-SE:3.6)

The completive marker is distinct because implies that the first event must be completed before the second event can take place. Examples (6.46 a & b) contrast the meanings of the same temporal sequence using either the marker of accomplishment or the completive marker.

(6.46) a. *Sa zam uda aka , amba sa nda a damaw* .
 sā- zàm wdā **āká** āmbá sā- ndā á dāmāw
 1SG.SBJ- eat food ACC then 1SG.SBJ- go PREP1 bush
 ‘I ate food **just before**, then I went to the bush.’ (GE52-SE:3.8)

b. *Sa zam uda aza , amba sa nda a damaw* .
 sā- zàm wdā **āzā** āmbá sā- ndā á dāmāw
 1SG.SBJ- eat food COMPL then 1SG.SBJ- go PREP1 bush
 ‘I (must) eat food **first**, then I (will) go to the bush.’ (GE52-SE:3.7)

As for the other verbal particles, the marker of accomplishment can occur before or after an indirect object with a resulting change in meaning. Example (6.47a) could be said when the mother and the speaker have been together in the house and the mother asks the speaker to close the door on the way out. Example (6.47b) could be said when the mother has left and forgotten to close the door.

- (6.47) a. *Sa mpekene ma ujek aka a mana .*
 s̄a- mpāk -ēnē mā wjēk āká á m̄nā
 1SG.SBJ- close -3SG.IOBJ mouth hut ACC PREP1 mother.3POSS
 ‘I close the door (lit. mouth of hut) **there** for my mother.’ (GE52-SE:1.13)
- b. *Sa mpekene ma ujek a mana aka .*
 s̄a- mpāk -ēnē mā wjēk á m̄nā āká
 1SG.SBJ- close -3SG.IOBJ mouth hut PREP1 mother.3POSS ACC
 ‘I close the door (lit. mouth of hut) for my mother **there**.’ (GE52-SE:1.12)

6.3.4 Marker of anticipation *ká*

The marker of ANTICIPATION *ká* marks an action which is done ahead of time with a possible future situation in view (6.48 a-c). It is often used for actions which are as preparation for a future activity. For example in (6.48a) below a woman puts food on the shelf ahead of time for her children to eat.

- (6.48) a. *Sa s̄okam ŋkələf ka a luma .*
 s̄a- skām nklèf ká á l̄wmà
 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 kádap̄ba ka a ŋkusaf .*
 s̄a- ká- d̄ap̄ -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 wzejé 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 on the shelf **ahead of time.**’
 (TN4-SN:3.2)

Like the other verbal particles, the marker of anticipation can co-occur with all primary tenses and aspects, such as imperfective (6.49a), perfective (6.48b), future (6.49b) as well as the unmarked verb (6.48a).

- (6.49) a. *egələyz yam baw a kasəkamha*
 egljz jám bāw á- **kā-** **skām** **-xā**
 church(fr.) also TOP.ADD 3SG.SBJ- IPFV- **buy** -VNT.DIST
asana ege ka , ana kan ege vedəye ka .
 asana =égē **ká** ánā kàn =égē vēdjé **ká**
 matches(ful.) =PL ANT like thing =PL IND.DET.PL ANT
 ‘...the church also, it **is buying** matches **in advance**, like other things **in advance.**’ (to give away at the Christmas celebrations) (DP8-SN:7.1)
- b. *əy nampak ka pes gbak , mahkad*
 j- **ná-** **mpāk ká** pès gbák mākád
 3PL.SBJ- FUT- **shut** ANT day two three
 ‘...they **will imprison** him **in advance** two or three days...’
 (before his trial) (DE16-WN:3.2)

The marker of anticipation can also occur in imperative clauses (6.50).

- (6.50) *Mbahw , mtahw wese kaw kágay ma cemey , de6 ka .*
 mbáx^w mtàx^w wēsé káw ká- gāj mā tséméj **dè6 ká**
 pardon orphan DEM.DIST even PFV- spoil situation TOP.CON **calm** ANT
 ‘Please, that orphan, even if he has made a mistake, **calm down ahead of time.**’
 (in anticipation of the coming festival so that it can be celebrated well)
 (BH4-SN:2.4)

At times a clause may have a similar meaning with either the marker of accomplishment *āká* or the anticipation marker *ká*, probably because both may carry the implication that the event expressed by the verb occurs before some other event. For example certain language informants felt that both examples (6.51 a & b) implied that the man bought fish in advance for his wife because he was going on a journey.

- (6.51) a. *Sa səkemene ŋkələf aka a wala naka .*
 s̄a- skām -ēnē nklèf **āká** á wālā nākā
 1SG.SBJ- buy -3SG.IOBJ fish ACC PREP1 wife 1SG.POSS
 ‘I buy fish in advance for my wife.’ (GE52-SE:2.5)
- b. *Sa səkemene ŋkələf ka a wala naka .*
 s̄a- skām -ēnē nklèf **ká** á wālā nākā
 1SG.SBJ- buy -3SG.IOBJ fish ANT PREP1 wife 1SG.POSS
 ‘I buy fish in advance for my wife.’ (GE52-SE:2.11)

Whilst it is possible that one of these markers has developed from the other diachronically, they do now have different meanings as is illustrated by examples (6.52 a & b). The event in (6.52b) occurred longer ago than the event in (6.52a).

- (6.52) a. *Sa zam uda aka a wata .*
 s̄a- zàm wdā **āká** á wātā
 1SG.SBJ- eat food ACC PREP1 home
 ‘I **just** ate food at home.’ (GE53-SE:12.1)
- b. *Sa zam uda ka a wata .*
 s̄a- zàm wdā **ká** á wātā
 1SG.SBJ- eat food ANT PREP1 home
 ‘I ate food at home **previously**.’ (GE53-SE:12.2)

The marker of anticipation can occur both before (6.53a) and after the indirect object (6.53b) with a change in meaning. Example (6.53a) could be said if, for example, the mother is sick and so the speaker closes the door to keep out the wind. Example (6.53b) could be said if the mother has forgotten to close the door.

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

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

6.4 Possessive subject pronoun

In Buwal a verb occurring in an intransitive clause (see Section 8.1.2.1), which is normally marked for the subject may also be followed by a possessive pronoun which agrees in person and number with that subject (6.54a). Many Chadic languages have a similar construction. These pronouns are commonly known by Chadicists as INTRANSITIVE COPY PRONOUNS (ICPs) (Storch et al 2011: 5). ICPs resemble object pronouns in some languages, and possessive pronouns in others. I am following Frajzyngier here, in using the term POSSESSIVE SUBJECT PRONOUNS. He has used this term in relation to Mina (Frajzyngier and Johnston 2005: 86-91) and Wandala (Frajzyngier 2011: 47-64). This choice reflects the fact that ICPs in Buwal have exactly the same form as possessive pronouns (see Section 4.1.3 for a list) and can occur in imperative clauses with no subject marking (6.54b) and hence cannot really be said to be copying anything.

(6.54) a. *Benjer a ŋgaya : « Hune ma kasanaw ,*
 béndzēr ā- ŋgājā x^wnè ma = k̄a- s̄an -āw
 squirrel 3SG.SBJ- saying 2PL.STAT REL= IPFV- know -3SG.DOBJ
sa nda naka .
 s̄a- ndā nākā
 1SG.SBJ- go 1SG.POSS
 ‘Squirrel said, “You are the ones who know about it, I’m leaving.”’
 (NF6-SN:4.7)

- b. *Fətek ŋkune* .
 ftək nk^wnè
 lose 2PL.POSS
 ‘Lose yourselves.’ (GE15-SE:61)

The function of ICPs appears to vary depending on the language. It has often been observed that ICPs occur with verbs which have ‘middle’ semantics, in which the subject is highly affected by the action. This has led Leger and Zoch to postulate that middle markers have spread diachronically into different non-middle domains, becoming intransitive markers in some languages and totality/auxiliary focus markers in others (Leger & Zoch 2011: 39 & 42). There is often some relationship between ICPs and inchoative verbal semantics (i.e. entering into a new state) (Frajzyngier 1977: 75). For Mina, Frajzyngier and Johnston (2005: 88) state that the function of possessive subject pronouns is ‘to code a change in the event’.

In Buwal, possessive subject pronouns occur only with intransitive verbs (including ambitransitive verbs used intransitively). They are not obligatory, and 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’, *dām* ‘enter/exit’, *dèdèr* ‘wander’, *zèn* ‘return and *ndāv* ‘fall’ (6.55a), or change of state like *bāw* ‘change’, *màts* ‘die’, *gāj* ‘spoil’ and *gāl* ‘grow’ (6.55b).

- (6.55) a. *heje kededer ŋtakwaw* .
 xèjé- kǎ- dèdèr ntàk^wàw
 1INCL.SBJ- IPFV- wander 1INCL.POSS
 ‘...we are wandering.’ (HT4-SN:30.13)

- b. *Kágal anta tew cemey , əy dene*
 kǎ- gāl āntā téw tséméj j- dā -ēnē
 PFV- grow 3SG.POSS finally TOP.CON 3PL.SBJ- bring -3SG.IOBJ
a mba tata eze .
 á mbà tātá ézē
 PREP1 child 3PL.POSS therefore
 ‘She has finally grown up, therefore they bring her to their son.’
 (DE19-SN:3.5)

In Buwal, possessive subject pronouns can occur with any patientive (S=O) intransitive verb. As Section 3.2.2.2 showed, many verbs that would generally be treated as strictly transitive in many other languages can function as patientive ambitransitives in Buwal. As a result, the number of verbs in Buwal that can occur with possessive subject pronouns is very large. Furthermore, the subject need **not** be significantly affected by the action (6.56 a & b). This is an indication that possessive subject pronouns are not coding a specifically inchoative meaning in Buwal.

- (6.56) a. *Dala kácak anta* .
 dālā ká- tsāk āntā
 money(ful.) PFV- contribute 3SG.POSS
 ‘Money was contributed.’ (GE21-SE:25.10)
- b. *Mce ŋgha a han anta* .
 mtsè nyā ā- xān āntā
 corpse DEM.PROX 3SG.SBJ- mourn 3SG.POSS
 ‘This deceased can be mourned.’ (GE21-SE:17.6)

The use of the possessive subject pronoun in intransitive clauses codes the modality of MIRATIVITY. Aikhenvald (2004: 20) defines mirativity as ‘a category manifesting ‘unexpected information’ with overtones of surprise and admiration’. In Buwal this surprise is not always positive as the construction can refer to something occurring in spite of wishes to the contrary (6.57b & 6.58b).

- (6.57) a. *Uda a kada* .
 wdā á- kā- 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- kā- 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.)

- (6.58) a. *Sa kándav* .
 s̄a- ká- ndàv
 1SG.SBJ- PFV- fall
 ‘I have fallen.’ (GE47-SE:9.1)
 (I wanted to fall.)
- b. *Sa kándav naka* .
 s̄a- 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 at an unexpected event. In many cases, particularly when the subject is not ‘agent-like’ as in (6.59) the construction with the possessive subject pronoun means that it is possible for the action to be done if some force is used. The sense of surprise may relate to accomplishing difficult activities that take an increase in agency. Example (6.60b) shows an increase in agency as the people planned to assemble, it did not happen randomly.

- (6.59) a. *M̄ba a kabac* .
 m̄bā á- k̄a- bāts
 tamarind 3SG.SBJ- IPFV- crush
 ‘The tamarind is being crushed.’ (GE47-SE:13.1)
- b. *M̄ba a bac anta* .
 m̄bā ā- bāts **āntā**
 tamarind 3SG.SBJ- crush 3SG.POSS
 ‘The tamarind **can** be crushed.’ (GE47-SE:13.2)
- (6.60) a. *Hejəye əy kébec* .
 xèdzè -jé j- ká- b̄èts
 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- b̄èts **tātá**
 person -PL 3PL.SBJ- PFV- assemble 3PL.POSS
 ‘The people have assembled **themselves**.’ (GE47-SE:4.3)
 (Planned ahead of time.)

This mirative function of possessive pronouns was 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. In Goemai however, Hellwig (2011: 76) states that the possessive forms occur in an adverbial function and can even follow the object of a transitive clause. This is not the case in Buwal, where the syntactic properties of possessive subject pronouns more closely resemble typical ICPs in Chadic languages (Storch et al 2011: 6-7) as they must follow the verb and can only occur in intransitive clauses. Therefore it may be, as Leger and Zoch (2011: 42) suggest, that possessive subject pronouns in Buwal began as middle markers but over time took on the mirative function common to the southern part of what is known as the Nigerian ‘sprachbund’ (Hellwig 2011:77).

Chapter 7 Prepositional phrases

Trask (1993: 215) gives the traditional definition of a PREPOSITIONAL PHRASE as ‘a phrase consisting of a preposition and a noun phrase serving as its object.’ However, as Huddleston and Pullman (2005: 139) point out for English, prepositions may take a range of complements. This is also the case for Buwal. The different sub-classes of prepositions and the types of complements they take were outlined in Section 4.8. The structure of the prepositional phrase in Buwal is given in Table 7.1. Depending on the preposition, the complement may be (i) a noun phrase (NP), (ii) a prepositional phrase (PP), (iii) no complement or (iv) a subordinate clause. This chapter will focus on the semantic functions of the first three types of prepositional phrases. Subordinate clauses which are introduced by prepositions will be dealt with in further detail in Chapter 10 on clause combining. These subordinate clauses are often adverbial clauses, some of which involve deranked verb forms introduced by a preposition (see Sections 10.1.1.4 & 10.1.5.10). In other cases the complement of the preposition is a relative clause (see Sections 10.1.5.1, 10.1.5.3, 10.1.5.4 & 10.1.5.5). Reason adverbial clauses may be introduced by a preposition directly (see Section 10.1.5.4).

Table 7.1: Structure of Buwal prepositional phrase

Preposition	(Complement)
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Section 7.1 briefly summarises the syntactic functions of prepositional phrases all of which are discussed in further detail elsewhere. The semantic functions of various types of prepositional phrases are covered in Section 7.2. Finally, Section 7.3 describes coordinate prepositional phrases.

7.1 Syntactic functions of prepositional phrases

This section describes the syntactic functions of prepositional phrases. Several of these functions are discussed in more detail in other sections of the grammar. Prepositional phrases may function as (i) noun modifiers (7.1a) (Section 5.1.10), (ii) predicates of verbless clause (7.1b) (Section 8.2.1), (iii) predicates of relative clauses (7.1c) (Section 10.1.4.1), (iv) complements of copula verbs (7.1d) (Section 8.3), (v) indirect objects (7.1e) (Section 8.1.1.3) and (vi) obliques (7.1f). Trask (1993: 194) defines an OBLIQUE as ‘denoting an argument NP which is neither subject nor a direct object’ and goes on to say

that oblique NPs in English are realised as objects of prepositions. This is also the case in Buwal. Although the indirect object in Buwal is introduced with a preposition, it is analysed as a core argument rather than an oblique because the indirect object is usually cross-referenced on the verb (see Section 8.1.1.3).

- (7.1) a. *Gāmesl ŋ barla* , əy *hey ata heje kwaw* .
 gmèł́ ń̄ b̄arlā́ j- xēj́ á tā xèdzè k^wāw
 monkey PREP2 **mountain** 3PL.SBJ- flee PREP1 on person NEG
 ‘Monkeys **in the mountains**, they don’t flee from a person.’
 (GE40-SE:2.2)
- b. *La naka calah ama zlazlar* .
 lā nākā tsáláx á mā ɣàɣàr
 field 1SG.POSS **beyond** PREP1 **edge** river
 ‘My field is **beyond (at) the edge of the river**.’
 (GE40-SE:27.7)
- c. *kélemaheje mba ma a hede*
 ká- lèm -āxèdzè mbà má = á xēdé
 PFV- get -1INCL.IOBJ child REL= PREP1 **on.it**
 ‘...it has got fruit (lit. child fruit) which is **on it** for us...’
 (C7-SN:24)
- d. *Hwa nja ana tɔ̀bɛkw , ketegəre* .
 x^wā- ndzā ánā t̀bèk^w kètègré
 2SG.SBJ- be **like chaff** perhaps
 ‘You are **like chaff**, perhaps.’
 (DE14-SN:12.3)
- e. *A, zlam dawar ege ca , əy kecetene*
 á ɣàm dāwār =égē tsá j- kā- tsā -ētēnē
 ah! name misfortune =PL TOP 3PL.SBJ- IPFV- put -3PL.IOBJ
a hejəye vɔ̀ram ana ebe ŋghe .
 á xèdzè -jé vrām ánā èbè nyē
 PREP1 **person** -PL many like DEM.MED DEM.PROX
 ‘Ah, names of misfortune, they give many of them **to people** like this.’
 (C9-SN:44)
- f. *Əy nabas ata hune* .
 j- ná- bās á tā x^wnè
 3PL.SBJ- FUT- laugh PREP1 **on** 2PL
 ‘They will laugh **at you**.’
 (HT8-SN:10.17)

7.2 Semantic functions of prepositional phrases

In Buwal the same preposition may introduce prepositional phrases functioning in a number of different semantic and grammatical roles. This section discusses the semantic roles expressed by prepositional phrases with NP complements (Section 7.2.1), no complement (Section 7.2.2) and prepositional phrase complements (Section 7.2.3).

7.2.1 Prepositional phrases with NP complements

Table 7.2 summarises the types of roles which are marked with each preposition that takes an NP complement, both basic (see Section 4.8.1) and complex (see Section 4.8.2). Examples are given below.

Table 7.2: Semantic roles of Buwal prepositional phrases with NP complements

Preposition Type	Preposition	Semantic/Grammatical Role	Gloss
Basic	<i>á</i>	Spatial (Loc/All/Abl) Temporal Comitative Instrument Manner Material Indirect object	‘at/to/from’ ‘at’ ‘with’ ‘with’ ‘with’ ‘out of’
	<i>ǰ</i>	Spatial Indirect object	‘in/into/from in’
	<i>ǰàbá</i>	Comitative	‘with/along with’
Complex	<i>á tã</i>	Spatial Temporal Cause Content	‘on’ ‘on’ ‘due to’ ‘about’
	<i>á sã</i>	Spatial	‘under’
	<i>á rã</i>	Spatial	‘at the side of’
	<i>á mã</i>	Spatial	‘at the edge of’
	<i>á xã</i>	Spatial	‘over/above’
	<i>á dãw</i>	Spatial	‘behind’
	<i>ãnã</i>	Similative Manner Example Asserter	‘like’ ‘like’ ‘like’ ‘according to’
	<i>màvdãj/màvãj</i>	Reason	‘because’

7.2.1.1 Preposition *á*

The preposition *á* is the most frequent in Buwal and covers a wide range of meanings. For this reason it is glossed as PREP1 in the examples. One of its main functions is as a general spatial preposition. It functions both as a locative ‘at’ (7.2a) as well as both an allative ‘to/into’ (7.2b) and an ablative ‘from’ (7.2c). The precise direction must be determined from the context. At times directional marking on the verb may give an indication (7.2c).

- (7.2) a. *A ba ujek a damaw*
 ā- bā wdzēk á dāmáw
 3SG.SBJ- create hut PREP1 bush
 ‘He built a house **at the bush...**’ (TN1-SN:1.2)
- b. *A nda a wata mzla .*
 ā- ndā á wātá mǵā
 3SG.SBJ- go PREP1 home blacksmith
 ‘He goes **to the blacksmith's home.**’ (DE2-SN:8.4)
- c. *Mesleje anta a ndaha a damaw .*
 mēlédzē āntā á- ndā -xā á dāmáw
 neighbour 3SG.POSS 3SG.SBJ- go -VNT.DIST PREP1 bush
 ‘His neighbour came **from the bush.**’ (NF5-SN:1.1)

The preposition *á* also occurs with temporal adjuncts preceding temporal nouns (7.3) (see Section 3.1.2.4).

- (7.3) *Sa kégərehwaw a njuna ata taf .*
 sā- ká- grē -x^wāw á ndzwná á tā tàf
 1SG.SBJ- PFV- see -2SG.DOBJ PREP1 yesterday PREP1 on road
 ‘I saw you **yesterday** on the road.’ (LL17-SE:28)

The preposition *á* can introduce noun phrases which have comitative (7.4a), instrumental (7.4b), material (7.4c) and manner (7.4d) meanings.

- (7.4) a. *Bay a ndaha a madarlaŋw anta*
 bāj ā- ndā -xā á mā- dárŋá^w āntā
 chief 3SG.SBJ- go -VNT.DIST PREP1 NOM- young.man 3SG.POSS
ege.
 =égē
 =PL
 ‘The chief came **with his assistants.**’ (NH7-SN:2.1)
- b. *Hejəye əy bal ndərey a wambat .*
 xèjè -jé j- bàl ndrèj á wāmbāt
 person -PL 3PL.SBJ- chop millet PREP1 sickle
 ‘People cut millet **with a sickle.**’ (LL41-SE:1)
- c. *Uzəye əy kala muta a ɓarɓlam .*
 wzjé j- kā- lā mwtá á ɓàrɓām
 children 3PL.SBJ- IPFV- make car(ful.) PREP1 iron
 ‘Children make cars **out of iron.**’ (DE1-SN:1.6)
- d. *Sa la zlan a gef .*
 sā- lā ɓàn á géf
 1SG.SBJ- do work PREP1 difficulty
 ‘I do work **with difficulty.**’ (LL35-SE:8)

The preposition *á* can also introduce an indirect object (7.5).

- (7.5) *na kánda ŋ jene mbahw a mawal Kwada*
 nā- ká- ndā ŋ dzā -ēnē mbáx^w á māvāl k^wádā
 1EXCL.SBJ- PFV- go INF hit -3SG.IOBJ pardon PREP1 husband Koda
mana
mānā
mother.1POSS
 ‘...we went to plead with (lit. hit pardon to) **the husband of my mother’s Koda**¹.
 (C14-SN:39)

¹ Koda is the name of the eighth-born child. Here the speaker is referring to his sister.

7.2.1.2 Preposition *ɲ*

After *á*, the preposition *ɲ* is the most frequent in Buwal. Its basic meaning is the locative ‘in’ (7.6a) but, like *á*, it can be used with allative ‘into’ (7.6b) and ablative ‘from in’ (7.6c) meanings depending on the context. This preposition also has some grammatical functions. Given the range of meanings involved, it is glossed PREP2 in the examples.

- (7.6) a. *Uzəye , pes pes əy kavah ɲ bədam a təwse .*
 wzjé pès pès j- kǎ- vāx ɲ bdām á twsé
 children day day 3PL.SBJ- IPFV- pass.time PREP2 cave PREP1 there
 ‘The children, they would pass all day **in the cave** there.’ (C18-SN:133.4)
- b. *a daf ra delele ɲ gaduda*
 ā- dāf rā délélé ɲ gǎdwdā
 3SG.SBJ- reach hand directly PREP2 cooking.pot
 ‘He reached directly **into the pot.**’ (NH3-SN:1.8)
- c. *Sa da tasaw ɲ dabaskayam .*
 sǎ- dā tāsāw ɲ dābá-ská-jām
 1SG.SBJ- bring dish(ful.) PREP2 kitchen
 ‘I get a dish **from in the kitchen.**’ (GE40-SE:20.2)

The preposition *ɲ* can also be used to mark the indirect object (7.7).

- (7.7) *əy lene wasay ɲ gazlavay .*
 j- lā -ēnē wásāj ɲ gǎǰāvāj
 3PL.SBJ- do -3SG.IOBJ thankyou PREP2 God
 ‘...they give thanks **to God.**’ (DP2-SN:4.1)

7.2.1.3 Preposition *ɣàbá*

The preposition *ɣàbá* ‘with’ is used to head prepositional phrases with a comitative meaning.

- (7.8) a. *Əy kahan zlaʔa maman tata .*
 j- k̄- x̄n ʔàʔá m̄mán t̄tá
 3PL.SBJ- IPFV- cry **with mother**.3POSS 3PL.POSS
 ‘They were crying **along with their mother.**’ (TN3-WN:2.5)
- b. *əy yak talgway aka zlaʔa ŋenge*
 j- j̄àk t̄alg^wāj āká ʔàʔá ŋéŋgē
 3PL.SBJ- leave flute ACC **with pan.pipes**
 ‘They leave the flutes **along with the pan pipes.**’ (DE7-SN:3.5)

The difference in meaning between comitative prepositional phrases marked with the preposition *á* and the preposition *ʔàʔá* is that the second type emphasises the accompanying entity more and so could be better translated as ‘along with’. For example, according to language informants (7.9a) could be said in response to the question ‘Who did you go to the market with?’. Example (7.9b) on the other hand implies a context involving you needing your friend at the market so you ask him to come and help you. There is an intentionality involved in the bringing of the item or person.

- (7.9) a. *Nene nda a luma a ŋgama naka .*
 n̄éné- ndā á l̄wm̄à á ŋgámà n̄ākā
 1EXCL.SBJ- go PREP1 market(ful.) PREP1 **friend** 1SG.POSS
 ‘I (lit. we (excl)) went to the market **with my friend.**’ (GE40-SE:21.5)
- b. *Nene nda a luma zlaʔa ŋgama naka .*
 n̄éné- ndā á l̄wm̄à ʔàʔá ŋgámà n̄ākā
 1EXCL.SBJ- go PREP1 market(ful.) **with friend** 1SG.POSS
 ‘I (lit. we (excl)) went to the market **along with my friend.**’
 (GE40-SE:21.6)

7.2.1.4 Spatial prepositions beginning with *á*

Complex prepositions beginning with *á* that have spatial semantics include: *á t̄ā* ‘on’, *á s̄ā* ‘under’, *á r̄ā* ‘at the side of’, *á m̄ā* ‘at the side of’, *á x̄ā* ‘over’ and *á d̄āw* ‘behind’. These forms were described in Section 4.8.2. They are grouped together here as they all behave in a similar way. They all begin with the preposition *á* and so can all have locative,

allative and ablative meanings. This is illustrated with the preposition *á dāw* ‘behind’ in examples (7.10 a to c) below.

- (7.10) a. *əy pal ŋhwəye a daw ujek anta*
 ǰ- pàl nx^wā -jé á dāw wdzēk āntā
 3PL.SBJ- untie goat -PL PREP1 **behind house** 3SG.POSS
 ‘They untied the goats **behind his house.**’ (NH8-SN:8.1)
- b. *Sa dāw ŋ nda a daw ujek .*
 sā- dāw ǰ ndā á dāw wdzēk
 1SG.SBJ- want INF go PREP1 **behind hut**
 ‘I want to go **behind the house.**’ (LL6-SE:10)
- c. *Sa ŋta ŋkəďāŋ a daw muta .*
 sā- ntā nkďāŋ á dāw mwtá
 1SG.SBJ- take stone PREP1 **behind car(ful.)**
 ‘I take a stone **from behind the car.**’ (GE40-SE:22.5)

The preposition *á tā* ‘on’ has extended its meaning and can express temporal relations (7.11 a & b), particularly when specifying a particular day, month or year. Note that when a temporal expression is repeated, the resulting meaning is distributive.

- (7.11) a. *Əy ca bay mewe ata wan ŋsələď ŋtəra Mahwaraw .*
 ǰ- tsā bāy méwè á tā wān nsléd ntrā mǎx^wàràw
 3PL.SBJ- put chief new PREP1 **on day seven month Mohoro**
 ‘They put a new chief (in place) **on the seventh of September (lit. on day seven of the month of Mohoro).**’ (NH7-SN:1.1)
- b. *Əy kaďa gham ata va ata va*
 ǰ- kā- dā yàm á tā vā á tā vā
 3PL.SBJ- IPFV- draw war PREP1 **on year** PREP1 **on year**
 ‘They were making (lit. drawing) war **every year (lit. on year on year)...**’ (NH10-WN:4.2)

Prepositional phrases introduced by *á tā* ‘on’ can also express meanings such as cause (7.12a) or content (7.12b).

- (7.12) a. *mawal ηkwa a nasasam ata hwa .*
 māwàl nk^wā ā- ná- sàsàm á tã x^wā
 husband 2SG.POSS 3SG.SBJ- FUT- rejoice PREP1 on 2SG
 ‘...your husband will rejoice **over you.**’ (HT1-SN:5.3)
- b. *Hune zen zlap ata ma anta .*
 x^wné- zèn ʒāp á tã mā āntā
 2PL.SBJ- return speech PREP1 on problem 3SG.POSS
 ‘You discuss (lit. return speech **about**) **the problem.**’ (DE12-SN:14.1)

7.2.1.5 Preposition *ánā*

The preposition *ánā* ‘like’ introduces prepositional phrases which can have semantic roles such as similitive (7.13a) and manner (7.13b).

- (7.13) a. *hejəye əy cakza kule ca a nja ana*
 xèdzè -jé j- tsāk -zā k^wlè tsá ā- ndzā **ánā**
 person -PL 3SG.SBJ- believe -TRANS idol TOP 3SG.SBJ- is **like**
gazlavay .
gāʒāvāj
God
 ‘...people believe an idol, it is **like God.**’ (DE2-SN:18.1)
- b. *əy kala ana Buwal ege yam .*
 j- kā- lā **ánā bwāl =égē** jám
 3PL.SBJ- IPFV- do **like Buwal =PL** also
 ‘They do (it) **like the Buwal people** also.’ (DE1-SN:4.2)

This preposition is frequently used to introduce noun phrases which are given as examples (7.14).

- (7.14) *Kule ege vedəye , əy dēdē mavaw a mna , ana*
k^wlè =égē vēdjé j- dēdē mávāw á mnā ánā
 idol =PL IND.DET.PL 3PL.SBJ- pour.in beer PREP1 inside **like**
kule mejəve , ana uzlaf tərgwa , ana uzlaf daba ,
k^wlè médzvè ánā wǝǝf trǝ^wā ánā wǝǝf dābá
 idol ancestor.idol **like** idol granary **like** idol women's.hut
ana uzlaf ben , ana seŋge .
ánā wǝǝf bèn ánā séŋgè
like idol man's.hut **like** funeral.pot
 ‘Certain idols, they pour beer into them, **like** the ancestor pot idol, **like** the granary idol, **like** the woman's hut idol, **like** the man's hut idol, **like** the funeral pot.’ (DE2-SN:13.1)

The preposition *ánā* can mean ‘according to’ the speech of someone (7.15 a & b).

- (7.15) a. «*Sa , sa maja gwazla* » *ana benjer*
sā sā mā- dzá ǝ^wǝǝā ánā béndzēr
 1SG 1SG.STAT NOM- kill elephant **according.to** squirrel
əy .
ā jā
 3SG.SBJ- say
 ‘Me, I am the killer of the elephant.’ **according Squirrel**, he (Squirrel) said.’ (NF2-SN:5.3)
- b. *Əy nda , əy səkamata ana ma a*
j- ndā j- skām -ātā ánā má= á
 3PL.SBJ- go 3PL.SBJ- sell -3PL.DOBJ **according.to** REL= at
nuna anta ege
nwná āntā =égē
times.past DEF.DET =PL
 ‘They went, they sold them, **according to those of the old days...**’ (NH4-SN:1.4)

Finally, this preposition can be found in the expression *ánā ǰāp* (TOP), which might be translated as ‘that is to say’, introducing a further explanation of what was just said (7.16).

- (7.16) *Kaw ana uzəye ma , hwa gəre ca əy hey tata .*
káw ánā wzjé má x^wā- grē tsá j- xěj tātá
 even(ful) like children TOP.EMPH 2SG.SBJ- see TOP 3PL.SBJ- flee 3PL.POSS
Ana zlap ca , ge a wed' anta .
ánā ǰāp tsá gē ā- wēd' āntā
 like speech TOP house 3SG.SBJ- disperse 3SG.POSS
 ‘Even like the children, you see that they flee. **That is to say**, the household disperses.’ (DE12-SN:10.5-6)

7.2.1.6 Preposition *màvdāj/màvāj*

The preposition *màvdāj* or its variant *màvāj* ‘because’ is used to introduce a prepositional phrase which has the semantic role of reason (7.17 a & b).

- (7.17) a. *Na ca hejəye ma a Buwal ege əy*
nà tsá xèdzè -jé má= á bwāl =égē j-
 now TOP person -PL REL= PREP1 Buwal =PL 3PL.SBJ-
kázlara nje aza cekudè , mavəday
ká- ǰàr -ā ndzé āzá tsék^wdē màvdāj
 PFV- open -VNT.PROX eye COMPL a.little **because**
nasara ege
nāsārā =égē
white.man(ful.) =PL
 ‘Now people who are in Buwal have opened their eyes a little, **because of white men...**’ (DE15-SN:7)
- b. *mac a mac anta mavay lehey*
màts ā- màts āntā màvāj lā- xěj
 die 3SG.SBJ- die 3SG.POSS **because** NOM.ACT **run**
 ‘...he died **because of running...**’ (NF6-WN:2.11)

Prepositional phrases introduced with *màvdāj/màvāj* give reasons that could have happened at any time in any place, whereas cause prepositional phrases introduced with *á* *tā* ‘on’ (see Section 7.2.1.4) refer to a cause in the immediate vicinity. For example, in (7.18a) the subject referents are laughing about something the child did earlier. In (7.18b) however, they are laughing at something the child did at the time.

- (7.18) a. *Əy kaβas mavay mbaw .*
ǰ- k̄a- βās màvāj mbàw
 3PL.SBJ- IPFV- laugh **because child**
 ‘They are laughing **because of the child.**’ (GE40-SE:23.4)
- b. *Əy kaβas ata mbaw .*
ǰ- k̄a- βās á tā mbàw
 3PL.SBJ- IPFV- laugh **PREP1 on child**
 ‘They laugh **at the child.**’ (GE40-SE:23.3)

7.2.2 Prepositional phrases with PP complements

The semantic roles of prepositional phrases with PP complements is summarised in Table 7.3 below.

Table 7.3: Semantic roles of prepositions with PP complements

Preposition	Semantic role	Gloss
<i>kdā</i>	Allative	‘towards (straight)’
<i>kdē</i>	Allative	‘towards (general direction)’
<i>gbáj</i>	Locative	‘just’
<i>tsáláx</i>	Locative	‘beyond’
<i>sát</i>	Allative	‘up to’
<i>pá</i>	Locative	‘at a level’
<i>tá</i>	Path	‘by, through’
<i>xá</i>	Allative Temporal	‘up to’ ‘until’
<i>dàkà</i>	Ablative Temporal	‘from’ ‘since’

The majority of these carry spatial semantics and give some kind of precision about the direction (7.19a), path (7.19b) or exact location (7.19c).

- (7.19) a. *a kanda kəda a Zamay*
 á- k̄ā- ndā k̄dā á zāmāj
 3SG.SBJ- IPFV- go towards PREP1 Zamay
 ‘...he was going **towards (to) Zamay...**’ (C12-SN:64)
- b. *Taf ma ta ŋ barla gədak .*
 tàf má= tá ŋ b̄arlā gdāk
 path REL= through PREP2 mountain far
 ‘The path which is **through (in) the mountains** is far.’ (GE40-SE:26.10)
- c. *A nda pa ama ŋgəzle*
 ā- ndā pá á mā ŋḡzē
 3SG.SBJ- go level PREP1 edge forge
 ‘He goes to the level at the edge of the forge...’ (DP9-SN:4.7)

The prepositions *tá* ‘by, through’ (7.20a) and *pá* ‘at a level’ (7.20b) can also be used with a figurative as well as a purely physical sense.

- (7.20) a. *gazlavay a nasar la ca ta ŋ kule .*
 ḡāḷāvāj ā- ná- sār lā tsá tá ŋ k̄lè
 God 3SG.SBJ- FUT- watch place TOP through PREP2 idol
 ‘...God will watch the place, **through idols.**’ (DE2-SN:18.6)
- b. *Mbəy pa ŋ cercer aha sa .*
 mb̄j pá ŋ tsér-tsér á xā s̄ā
 3SG.STAT at.a.level PREP2 thin PREP1 over 1SG
 ‘He is thinner than me.’ (GE16-SE:12)
 (lit. He is **at a level in thinness** over me.)

The prepositions *xá* ‘until’ and *dākà* ‘since’, both borrowed from Fulfulde, can carry both temporal (7.21a & 7.22a) and spatial (7.21b & 7.22b) meanings.

- (7.21) a. *Sa nja a Buwal ha a makuda* .
 sã- ndzã á bwāl xá á māk^wđá
 1SG.SBJ- live PREP1 Buwal **until(ful.)** PREP1 next.year
 ‘I (will) live at Buwal **until next year.**’ (GE40-SE:32.4)
- b. *Sa tev ha η kelkel* .
 sã- tèv xá ŋ kēl-kēl
 1SG.SBJ- climb **until(ful.)** PREP2 summit
 ‘I climb **up to the summit.**’ (GE40-SE:32.6)
- (7.22) a. *Hejeye əy jamha daka mala mapat* .
 xèdzè -jé j- dzām -xā dākà mālā mápát
 person -PL 3PL.SBJ- gather -VNT.DIST **since(ful.)** GEN morning
 ‘The people (have) gathered **since the morning.**’ (NH7-SN:1.2)
- b. *Mar aka daka ete , calah mgba , ara la*
 mār āká dākà á tē tsáláx ŋmgbà ārā lā
 begin ACC **since(ful.)** PREP1 here beyond up.there COP field
naka .
 nākā
 1SG.POSS
 ‘Beginning **from here** (to) further than up there is my field.’
 (GE40-SE:33.1)

7.2.3 Prepositional phrases with no complement

Prepositions which take no complement were described in Section 4.8.4. Reasons why these should be considered prepositions and not adverbs or temporal nouns were given there. Table 7.4 summarises the semantic roles for each preposition which takes no complement.

Table 7.4: Semantic roles of Buwal prepositions with no complement

Preposition	Semantic role	Gloss	Replaces
<i>á bzā</i>	Spatial	‘outside’	
<i>á mǎn/mnā/mā</i>	Spatial Temporal	‘inside’ ‘during’	<i>ŋ</i> ‘in’ + NP
<i>á skā</i>	Spatial	‘underneath’	<i>á sã</i> ‘under’ + NP
<i>á xēdē</i>	Spatial	‘on top’	<i>á tã</i> ‘on’ + NP

	Cause Content	‘due to it’ ‘about it’	
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Note that all of these prepositions except *á bzā* ‘outside’ directly replace a prepositional phrase consisting of a preposition plus a NP complement and therefore fulfil equivalent semantic roles. In terms of spatial roles, these prepositions can have locative (7.23a), allative (7.23b) and ablative (7.23c) interpretations depending on the context.

- (7.23) a. *Hune kegəre heje anta kénjeye a*
x^wné- k̄ā- grē xèdzè āntā ká- ndzā -ējē á
2PL.SBJ- IPFV- see person DEF.DET PFV- sit -PART PREP1
səka
skā
underneath
‘You see the person seated **underneath**...’ (HT6-SN:8.11)
- b. *əy kelene wa a man zeney kwa ?*
j- k̄ā- lā -ēnē wá á m̄ān zēnej k^wá
3SG.SBJ- IPFV- do -3SG.IOBJ milk PREP1 **inside** again Q.FAM
‘...do they add (lit. do) milk to it (lit. **inside**) as well?’ (C11-SN:73)
- c. *əy daza a bəza*
j- dā -zā á bzā
3SG.SBJ- bring -TRANS PREP1 **outside**
‘...they bring it **outside**...’ (DP1-SN:3.6)

The preposition *á m̄ān/mnā/mā* can also be used to refer to something occurring during a particular period of time or activity (7.24).

- (7.24) *weləye əy kaja mekwedkwede ata ŋgas ,*
wālā -jé j- k̄ā- dzā m̄èk^wēdk^wēdē á tā ŋgās
woman -PL 3PL.SBJ- IPFV- hit rattle PREP1 on foot
əy kesleŋ a mna .
j- k̄ā- fēŋ á mnā
3PL.SBJ- IPFV- jump.dance PREP1 **inside**

‘...women would shake (lit. hit) rattles on (their) feet, they would do a jumping dance at the same time (lit. **inside**).’ (DE10-SN:3.4)

In addition to spatial meaning, the preposition *á xēdě* ‘on it’ is equivalent to *á tā* ‘on’ + NP and may also carry other meanings. For example, in (7.25a) it expresses cause while in (7.25b) it expresses content.

(7.25) a. *A , mada dala kulaskwaw a wata aka . Hejəye*
á mādā dālā k^wlask^wāw á wātā ákā xēdzè -jé
 ah! if someone sick PREP1 home EXIST person -PL
yam baw , əy kededer a hede .
jám bāw j- kā- dèdèr á xēdě
 also TOP.ADD 3PL.SBJ- IPFV- wander PREP1 **on.it**
 ‘Ah, if there is someone sick at home. People also wander around (looking for a cure) because of him (lit. **on it**).’ (DE12-SN:16.1-2)

b. *Əy rak gazlavay a hede .*
j- ràk gāḷāvāj á xēdě
 3PL.SBJ- pray God PREP1 **on.it**
 ‘They pray to God **about it**.’ (DE12-SN:17.3)

7.3 Coordinate prepositional phrases

Prepositional phrases can be coordinated in a similar manner to noun phrases (see Section 5.4). The same two conjunctions, *éj* ‘and’ *léj* ‘plus’, which can be used to coordinate noun phrases (see Section 5.4.1), can also be used for the conjunctive coordination of prepositional phrases (7.26 a & b).

(7.26) a. *Hwa kula ŋ cekzetene aza ana gef*
x^wā k^wlā ŋ tsàk -zā -ētēnē āzā ánā gèf
 2SG.STAT able INF help -TRANS -3PL.IOBJ COMPL like difficulty
vedəye ey ana ŋtəbal ma mbalata yam
vēdjé éj ánā ntɓàl má= mbāl -ātā jám
 IND.DET.PL **and(ful.) like tiredness REL= hold -3PL.DOBJ also**
 ‘You are able to help them, **for example (with) certain difficulties and also for example (with) the tiredness which grips them...**’ (BH1-SN:4.3)

- b. *Nene kala labara ata ḡhwəye leŋ ata*
 nènè- kà- lā làbārā á tā nx^wā -jé léŋ á tā
 1EXCL.SBJ- IPFV- do chatter PREP1 on goat -PL plus PREP1 on
ḡtəməye .
 ntmēk -jé
 sheep -PL
 ‘We are chatting **about goats and (lit.) plus about sheep.**’ (GE18-SE:14)

Chapter 8 Declarative clauses

This chapter describes main declarative clauses. Key distinctions between main and subordinate clauses will be discussed in Section 10.1. Non-declarative clauses will be dealt with in Chapter 9. This chapter is divided into four main sections. Verbal clauses are described in Section 8.1, whilst Section 8.2 deals with verbless clauses. Section 8.3 discusses verbal clauses in which the verbs have copula-type functions. Finally, comparative clauses are covered in Section 8.4.

8.1 Verbal clauses

In this section the structure of the basic verbal clause is given (Section 8.1.1) and various clause types relating to this structure are described (Section 8.1.2). Section 8.1.3 explores different ways the transitivity of a clause may be adjusted.

8.1.1 Structure of the basic verbal clause

The structure of the basic verbal clause is given in Table 8.1 below. Those elements which are shaded can vary in their order. This applies to adverbs (Adv), including ideophones (Ideo) which may appear before the verb but at times can also occur in other adverb slots (see Section 3.4). As described in Section 4.7.2, certain verbal particles (Vpt) can occur either before or after the indirect object.

Table 8.1: Structure of the Buwal basic verbal clause

(S)	(Ideo)	V	(PSP)	(SRC)	(DO)	(Vpt)	(Adv)	(prep IO)	(VPt)	(Adv)	(OBL) ⁿ	(Adv)
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As Table 8.1 shows, the basic word order in Buwal is SVO/SV. This order is relatively fixed, although different arguments can be left or right dislocated for pragmatic purposes. The dislocated element will be followed or preceded by a topic marker or a pause and is therefore no longer considered to belong to the main clause. These constructions will be discussed with other pragmatically marked structures in Chapter 11. Full noun phrases can occur in the subject (Section 8.1.1.1), direct object (Section 8.1.1.2), indirect object (Section 8.1.1.3) and oblique (Section 8.1.1.3) positions. Each type of argument will be discussed in more detail in the sections which follow and bolded in the examples provided.

8.1.1.1 Subject

The subject noun phrase is located directly before the verb (8.1 a & b), although it is possible for an ideophone to interpose (8.1 c).

- (8.1) a. *Wala mɪla a kacaf gaduda aka .*
wālā mɪlā á- k̄a- tsāf gādwdā āk̄á
woman blacksmith 3SG.SBJ- IPFV- decorate cooking.pot ACC
 ‘The blacksmith woman is decorating the clay pot.’ (LL17-SE:90)
- b. *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)
- c. *Baba na cafcav a ndav anta*
bābā nā tsàftsàlāv ā- ndāv āntā
father(ful.) 1SG.POSS falling.suddenly 3SG.SBJ- fall 3SG.POSS
ata hayak .
á tā xājāk
 PREP1 on ground
 ‘My father suddenly fell to the ground.’ (NH3-SN:2.8)

Buwal, as is generally the case for Central Chadic languages, has subject agreement prefixes on the verb which precede the verb stem. These were listed in Table 3.16 in Section 3.2.1.4. These are agreement markers rather than pronouns because they are present even when the subject is overtly expressed (8.1 a to c). These types of markers are ANAPHORIC as they may constitute the only reference to the particular argument in the clause when the subject is recoverable from the context (Payne 1997: 250). See example (8.2a) below. Subject agreement is always marked on the verb except for third person singular when the verb is in the perfective (8.2b) or the jussive (8.2c) form (see also Section 3.2.1.4). In Mina, Frajzyngier and Johnston (2005: 83) also found that the third person singular pronoun is only used in some aspects and moods.

- (8.2) a. *A nda a wata mɪzla* .
 ā- ndā á wātā mɪɟā
 3SG.SBJ- go PREP1 compound blacksmith
 ‘He goes to the blacksmith's house.’ (DE2-SN:8.4)
 (Nominal subject mentioned three sentences earlier.)
- b. *Káya mesleje anta ege* .
 ká- jā mēlédzè āntā =égē
 PFV- invite neighbour 3SG.POSS =PL
 ‘He invited his neighbours.’ (TN3-WN:6.3)
- c. *Mabamba yam* .
 mā- bām -bā jām
 JUS- munch -BEN also
 ‘Let **him** munch some also.’ (DE5-SN:5.2)

Independent pronouns never occur in the subject position but may occur in the left-dislocated position if the speaker wishes to emphasise the subject (8.3) (see also Section 11.2.1).

- (8.3) *Tata , əy kasan ŋ bal zley* .
 tātā j- kā- sàŋ ŋ bāl ɟèj
 3PL 3PL.SBJ- IPFV- know INF shoot meat
 ‘**Them**, they know how to shoot game (lit. meat).’ (GE29-SE:4)

8.1.1.2 Direct object

A direct object noun phrase normally immediately follows the verb (8.4a), although it is possible for the itive directional marker (see Section 6.2.2) to interpose between them (8.4b).

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

- b. *A wata əy tew aza bay* .
 á wātā j- tèw āzà bāy
 PREP1 compound 3PL.SBJ- carry IT **chief**
 ‘At the compound they lifted (lit. carried) down **the chief** (from his horse).’ (NH7-SN:7.5)

Buwal has a series of direct object suffixes which code a pronominal direct object (8.5a). These were listed in Table 3.16. It is also possible, for an independent pronoun to occur as a direct object for the purpose of emphasis (8.5b) (see also Section 4.1.1.1).

- (8.5) 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)

All of the direct object suffixes apart from third person plural are simply pronominal. They are not agreement markers as they do not co-occur with an overt direct object (8.4 a & b; 8.5b). Whilst first and second person direct object suffixes can never be omitted, the third person singular object suffix *-āw* typically only occurs before a pause. In example (8.6a) the verb occurs at the end of the sentence and so the object suffix is included. When the verb is followed by a locative adjunct as in (8.6b), the object suffix is omitted. However when a pause is inserted after the verb (8.6c), the object suffix is reintroduced.

- (8.6) a. *A varḥa ma sa kazamaw* .
 ā- vāḡ -xā má= sá- kā- zàm -āw
 3SG.SBJ- arrive -VNT.DIST REL= 1SG.SBJ- IPFV- eat -3SG.DOBJ
 ‘He arrived when I was eating **it**.’ (GE45-SE:18.1)

- b. *A vaṅha ma sa kazam a wata .*
 ā- vāṅ -xā má = sá- k̄ā- zàm á wātā
 3SG.SBJ- arrive -VNT.DIST REL= 1SG.SBJ- IPFV- eat PREP1 home
 ‘He arrived when I was eating (it) at home.’ (GE45-SE:18.2)
- c. *A vaṅha ma sa kazamaw ,*
 ā- vāṅ -xā má = sá- k̄ā- zàm -āw
 3SG.SBJ- arrive -VNT.DIST REL= 1SG.SBJ- IPFV- eat -3SG.DOBJ
a wata .
 á wātā
 PREP1 home
 ‘He arrived when I was eating **it**, at home.’ (GE45-SE:18.3)

The third person singular direct object suffix is also deleted when other suffixes are attached to the verb (8.7) (see also Section 3.2.1.4).

- (8.7) *sa kélemba dala , sa nda , sa*
 s̄ā- k̄á- lèm -b̄ā dālā s̄ā- ndā s̄ā-
 1SG.SBJ- PFV- get -BEN money(ful.) 1SG.SBJ- go 1SG.SBJ-
səkambā .
 skām -b̄ā
 buy -BEN
 ‘...when I get money, I will go and buy it for myself.’
 (lit. ‘...(when) I have got money, I (will) go and buy myself (it).’) (C6-SN:282)

Third person singular direct object noun phrases are frequently omitted in natural speech when they are understood from the context (8.8a). Considering Since the third person singular direct object suffix is also omitted in a non-pausal situation, it can be difficult to determine if a particular verb is functioning as an agentive ambitransitive or simply as a transitive verb with the object omitted (see Section 3.2.2.2). One test that overcomes this ambiguity is the obligatory presence of the third person singular direct object suffix before a pause, if the verb is functioning transitively (8.8b). Example (8.8c) shows that omitting the object suffix under these conditions is not possible.

- (8.8) a. *A da teked sefe a tɔrgwa wese , ca a*
 ā- dā tēkēd séfē á trg^wā wēsé tsā ā-
 3SG.SBJ- bring calabash unused PREP1 granary DEM.DIST put 3SG.SBJ-
ca ata ha .
 tsā á tā xā
 put PREP1 on head
 ‘She took that unused calabash from the granary, she put (it) on her head.’
 (NF5-SN:2.2)
- b. *Sa nasəkamahwaw səkan ma hwa*
 s̄ā- ná- skām -āx^wāw skàn má= x^wā-
 1SG.SBJ- FUT- buy -2SG.IOBJ thing REL= 2SG.SBJ-
kadāwaw .
 k̄ā- d̄āw -āw
 IPFV- want -3SG.DOBJ
 ‘I will buy for you the thing that you want (lit want it).’ (GE45-SE:15.1)
- c. **Sa nasəkamahwaw səkan ma hwa*
 s̄ā- ná- skām -āx^wāw skàn má= x^wā-
 1SG.SBJ- FUT- buy -2SG.IOBJ thing REL= 2SG.SBJ-
kadāw .
 k̄ā- d̄āw
 IPFV- want
 ‘I will buy for you the thing that you want.’ (Fieldnotes)

The distribution of the 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 (8.9a), it can also co-occur with an overt direct object (8.9b). 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 (8.9c).

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

Some direct objects are obligatory as they form lexicalised expressions with the verb. See examples (8.10 a & b). This is not a case of noun incorporation as obligatory direct objects occupy the normal direct object position (see Table 8.1) and various suffixes may still be attached to the verb (8.10b). These lexicalised expressions were discussed in Section 3.2.2.4 where it was explained how obligatory direct objects are not ‘true’ objects. They cannot be replaced by a direct object suffix, nor can they be modified by noun modifiers

- (8.10) a. *Sa keteh zlam .*
 sā- kā- tēh ʒàm
 1SG.SBJ- IPFV- listen **ear**
 ‘I am listening.’ (GE50-SE:1.1)
 (lit. ‘I am listening the ear.’)

- b. *Mada a tama cemey , gazlavay*
 màdā á tāmā tséméj gāḷāvāj
 if PREP1 front TOP.CON God
képelzekey taf ca , sa nanda .
 ká- pàl -zā -ēkēj tàf tsá sā- ná- ndā
 PFV- release -TRANS -1SG.IOBJ path TOP 1SG.SBJ- FUT- go
 ‘If in the future, God has allowed me (lit. released **the path for me**), I will go.’
 (NH1-SN:6.3)

8.1.1.3 Indirect object

An indirect object noun phrase follows the direct object, if there is one (8.12 a & b), and is preceded by either the preposition *á* or *ḡ*. It is difficult to determine exactly when either preposition should be used. At times it appears to depend on speaker preference. Examples can be found in which the same verbs in similar contexts have an indirect object being preceded by either preposition (8.11 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 (8.12a) and *ḡ* when it has a recipient role (8.12b). Others felt that *á* is used when the action is either finished or currently being done and *ḡ* for future actions which are being contemplated. Thus in (8.12a) the speaker is currently ploughing the field and in (8.12b) he has not yet started. More work needs to be done in examining the use of each preposition in natural data from a larger number of speakers in order to arrive at a clearer answer to this question.

- (8.11) a. *sa zlepenē a heje anta* .
 sā- ḷāp -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 zlepenē ḡ meḡ*
 ḡ^wāmbāk^w ā- ḷāp -ēnē ḡ mēḡ
 toad 3SG.SBJ- say -3SG.IOBJ PREP1 antelope
 ‘...the toad spoke to the antelope...’ (NF6-WN:1.1)

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

Although the indirect object is always preceded by a preposition, I am treating it as a core argument because Buwal has indirect object agreement suffixes which attach to the verb. These were listed in Table 3.16. They may constitute the only reference to the indirect object in the clause (8.13a) or they can also co-occur with an overt indirect object (8.13b).

- (8.13) a. *Əy fetetene ŋhwəye ege* .
 j̄- fāt -ētēnē nx^{wā} -jé =égē
 3PL.SBJ- slaughter -3PL.IOBJ goat -PL =PL
 ‘They slaughter goats for **them**.’ (DE2-SN:6.5)
- b. *Ca a cetene uda a uzəye anta ege ka*
 tsā ā- tsā -ētēnē wdā á wzejé āntā =égē ká
 put 3SG.SBJ- put -3PL.IOBJ food PREP1 **children** 3SG.POSS =PL ANT
ata zləmbal .
 á tā ʎmbàl
 PREP1 on shelf
 ‘She put the food for **her children** in advance on the shelf.’ (TN4-WN:3.2)

In the vast majority of cases in the corpus the indirect object is marked on the verb even if it is also made explicit within the clause (8.14a). Lienhard and Wiesemann (1986: 43) also found for Daba that indirect object pronouns were always used in this situation. In Buwal, although it is preferred that the verb carries indirect object marking, it is possible for this marking to be absent (8.14b). However 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 (8.14 c & d). It is not clear at this point when indirect object marking may be

omitted. For example indirect object marking 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 (8.14a) and (8.14b) have the same meaning.

- (8.14) a. *Sa mbelene urey η zlaŋgan mana* .
 s̄a- 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* .
 s̄a- 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* .
 s̄a- 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 I] zlaŋgan mana.*
 s̄a- mbāl I] ʒāŋgān mānā
 1SG.SBJ- pluck PREP2 sibling mother.1POSS
 ‘I pluck (it) for **my aunt**.’ (Fieldnotes)

An overt indirect object may be an independent pronoun (8.15b). An independent pronoun is used when the indirect object cannot be seen and so needs to be specified. In example (8.15a) however, the indirect object is visible.

- (8.15) a. *Sa velene gamtak* .
 s̄a- vāl -ēnē gāmtāk
 1SG.SBJ- give -3SG.IOBJ chicken
 ‘I give **him** a chicken.’ (GE29-SE:23.1)
- d. *Sa velene gamtak η mbe* .
 s̄a- vāl -ēnē gāmtāk íj mbē
 1SG.SBJ- give -3SG.IOBJ chicken PREP2 3SG
 ‘I give a chicken to **him**.’ (GE29-SE:23.2)

8.1.1.4 Oblique

Noun phrases can also occur as oblique arguments functioning as complements of a preposition (8.16a). Different prepositional phrases were described in Chapter 7. Oblique arguments follow the indirect object (8.16c). It is possible for there to be more than one in the clause (8.16b). These noun phrases may be replaced by independent pronouns (8.16b)

- (8.16) a. *Əy nanda a mʒla .*
 ǰ- ná- ndā á mǰā
 3PL.SBJ- FUT- go PREP1 **blacksmith**
 ‘She will go with **the blacksmith.**’ (DE11-SN:1.11)
 (lit. ‘They will go with the blacksmith.’)
- b. *sa kabəzla ata mpe ana mbe .*
 sá- k̄ā- bǰā á tā mpè ánā mbē
 1SG.SBJ- IPFV- bless PREP1 on **tree** like 3SG
 ‘I am blessing (lit. on) **the tree** like this (lit. **it.**)’ (BH3-SN:3.5)
- c. *na ndewzetene a ɲhwəye a*
 ná- ndāw -zā -ētēnē á nx^wā -jé á
 1EXCL.SBJ- find -TRANS -3PL.IOBJ PREP1 goat -PL PREP1
 wata juraw gbak .
 wātā dzwrāw gbák
 compound sub-chief(ful) two
 ‘...we found two goats at **the subchief’s house.**’ (NH8-SN:4.1)

8.1.2 Verbal clause types

In this section verbal clauses are divided into different types based on their VALENCE, or the number of core arguments present within the clause (Payne 1997: 170). Clauses having one nominal argument include intransitive (Section 8.1.2.1) and zero-transitive (Section 8.1.2.5) clauses. Both transitive (Section 8.1.2.2) and extended intransitive (Section 8.1.2.3) clauses have two nominal arguments. Finally ditransitive (Section 8.1.2.4) clauses are those with three nominal arguments. Each clause type will be described in more detail in the sections which follow.

8.1.2.1 Intransitive

According to Dryer (2007a: 250), INTRANSITIVE clauses take a single core argument represented by the subject. Examples of intransitive clauses in Buwal are given in (8.17 a & b).

- (8.17) a. *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)
- b. *dakw a kandaha , akw ,*
dāk^w ā- kā- ndā -xā āk^w
horse 3SG.SBJ- IPFV- come -VNT.DIST horse.arriving
akw
āk^w
 horse.arriving
 ‘The horses were arriving, clip clop...’ (NH5-SN:2.4)

Some intransitive clauses contain a possessive subject pronoun which follows the verb and agrees in person and number with the subject (8.18 a & b). As discussed in Section 6.4, this construction is used to code the modality of mirativity.

- (8.18) a. *benjer a hey anta kwawah a dəbe .*
béndzēr ā- xēj āntā k^wáwáx á dbé
squirrel 3SG.SBJ- flee 3SG.POSS enter.to.hide PREP1 termite.hill
 ‘The squirrel fled into the termite mound.’ (NF2-SN:1.6)
- b. *sa nda naka .*
sā- ndā nākā
1SG.SBJ- go 1SG.POSS
 ‘...I’m leaving.’ (NF6-WN:4.7)

8.1.2.2 Transitive

TRANSITIVE clauses contain two core arguments represented by the subject and the direct object (Dryer 2007: 250). Examples of transitive clauses in Buwal are given in (8.19 a &

b). As mentioned in Section 8.1.1.2, in natural speech the direct object is frequently omitted if understood from the context.

- (8.19) a. *Kuvahw* *a* *kwakwaba* *ma*
k^wvāx^w *ā-* *k^wāk^wāb* *-ā* *mā*
monitor.lizard 3SG.SBJ- rinse.quickly -VNT.PROX **mouth**
 ‘The monitor lizard rinsed out (his) mouth.’ (NF2-SN:1.11)
- b. *Mana* *kála* *mavaw a* *pes luma* *Gavar .*
mānā *ká-* *lā* *māvāw á* *pès lwmà* *gávár*
mother.1POSS PFV- make **beer** PREP1 day market(ful.) Gavar
 ‘My mother made beer on Thursday (lit. Gavar market day).’ (NH3-SN:1.4)

8.1.2.3 Extended Intransitive

The indirect object in Buwal can function in a number of different semantic roles such as recipient, benefactive, malefactive and patient. Consequently any verb, including an ambitransitive verb functioning intransitively, can take an indirect object. This gives rise to what Dixon and Aikhenvald (2000:3) call an EXTENDED INTRANSITIVE clause which is an intransitive clause to which a further core argument has been added. Examples of extended intransitive clauses in Buwal are shown in (8.20 a-c). Although Dixon and Aikhenvald observe that extended intransitive clauses are typically greatly outnumbered within a particular language by intransitive and transitive clauses, in Buwal such clauses are relatively common. This reflects the wide range of semantic roles which the indirect object can fill.

- (8.20) a. *uzaye wese ege əy zlepeɲ ɲ cen*
wzjé wēsé =égē j- ʒāp -ēnē ɲ tsèn
children DEM.DIST =PL 3PL.SBJ- speak -3SG.IOBJ PREP2 **father**
tata
tātá
 3PL.POSS
 ‘Those children spoke to their father.’ (TN4-WN:4.1)

- b. *na ndewzetene a ḡhwəye a*
ná- ndāw -zā -ētēnē á nx^wā -jé á
 1EXCL.SBJ- find -TRANS -3PL.IOBJ PREP1 **goat** -PL PREP1
wata juraw ḡbak .
wātá dzwrāw ḡbák
 compound sub-chief(ful.) **two**
 ‘We found **two goats** at the sub-chief’s compound.’ (NH8-SN:4.1)
- c. *kéndene aza a unaf anta .*
ká- ndā -ēnē āzá á wnáf āntā
 PFV- go -3SG.IOBJ COMPL PREP1 heart 3SG.POSS
 ‘...it went **for him** into his heart.’ (HT4-SN:27.21)

8.1.2.4 Ditransitive

DITRANSITIVE clauses contain a subject and two non-subject core arguments that are often called direct and indirect object respectively (Dryer 2007:253). Examples of ditransitive clauses in Buwal are given in (8.21 a & b). Dixon and Aikhenvald (2000:3) would call these clauses ‘extended transitive’ as a core argument has been added to a transitive clause. Like the extended intransitive clauses described in the previous section, ditransitive clauses are common in Buwal due to the wide semantic range of functions filled by the indirect object. The clauses are not just restricted to verbs such as ‘give’, ‘show’ or ‘tell’.

- (8.21) a. *Madakal ege əy ḡhwelene menjevek a*
mà- dākāl =égē j- ḡ^wàl -ēnē mēndzēvēk á
 NOM- **big** =PL 3PL.SBJ- show -3SG.IOBJ **remedy** PREP1
dāla ma ḡkwəb ḡ ha .
dālā má= nk^wāb ḡ xā
 someone REL= **brain** PREP2 **head**
 ‘The leaders show **remedies** to someone sensible.’ (DE9-SN:3.4)
- b. *əy keghwedetene unaf a musa ege .*
j- kā- ḡ^wàd -ētēnē wnáf á mwsá =égē
 3PL.SBJ- IPFV- anger -3PL.IOBJ **heart** PREP1 **twin** =PL
 ‘...they anger **the heart** of the twins.’ (DE2-SN:6.10)

8.2.1.5 Zero-transitive

Some clauses have no semantic subject and correspondingly no nominal subject. In this case Buwal uses a semantically non-referential third person singular subject prefix (8.22 a & b).

- (8.22) a. *A* *mena* *wende* *zeney* .
 ā- *mèn* *–ā* *wéndé* *zēnéj*
 3SG.SBJ- be.left –VNT.PROX IND.DET.SG again
 ‘There is another part left as well.’ (DP9-SN:4.10)
 (lit. ‘**It** is left another again.’)
- b. *A* *mbelekey* *ma* *ŋ* *ha* .
 ā- *mbāl* *–ēkēj* *mā* *íj* *xā*
 3SG.SBJ- hold -1SG.IOBJ mouth PREP2 head
 ‘My head hurts.’ (LL15-SE:16)
 (lit. ‘**It** hurts me in the head’).

8.1.3 Adjusting transitivity

This section deals with various grammatical processes which lead to a change in transitivity of a clause. However, before discussing each of these processes in more detail it is necessary to define transitivity and relate this to the structures found in the Buwal language. Transitivity has been defined in different ways by various linguists over the years. 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 was the view which was used in the division of Buwal verbal clauses into various clause types in Section 8.1.2.

However LaPolla et al (2011: 472) assert that ‘...the straightforward syntactic approach cannot explain the diversity of patterns related to transitivity in different languages...’ Dixon and Aikhenvald (2000: 6) also point out that some verbal derivations ‘may reduce or increase the number of core arguments’ but also be used in circumstances where ‘the number of core arguments may be retained but their semantic roles altered.’ Consequently they advocate an integrated approach where both semantic and syntactic distinctions are taken into account (Dixon and Aikhenvald 2000: 19).

Various semantic approaches to transitivity have been developed. According to Payne (1997: 169), SEMANTIC valence is the ‘number of participants that must be ‘on-stage’ in the scene expressed by the verb.’ The semantic valence may not correspond with the syntactic valence as not all of these participants may be overtly expressed. Hopper and Thomson (1980: 251) 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. According to LaPolla et al (2011: 474), what Hopper and Thomson are really talking about is the **effectiveness** of the event which is different to **transitivity** which relates the number of participants in a clause. LaPolla et al argue that these two terms should be kept distinct.

For the purposes of the discussion of transitivity adjusting in Buwal below I will follow Hopper and Thomson (1980) in using the term ‘semantic transitivity’ to refer to semantic effectiveness of an event. The term ‘syntactic valence’ will be used to refer to the number of core grammatical arguments within a clause, whilst the number of semantic participants ‘on stage’ will be referred to as ‘semantic valence’.

In order to explain transitivity adjusting processes in Buwal, both syntactic and semantic views of transitivity are required. The only processes that lead to a change in the syntactic valence of a clause are the direct causative use of the transitivity suffix (see Section 8.1.3.1a) and indirect causation (described in Section 8.1.3.2). The transitivity suffix has a number of other functions which change the semantic transitivity of a clause. These are detailed in Sections 8.1.3.1b to 8.1.3.1d. Constructions which involve a reduction in semantic valence rather than syntactic valence are the impersonal (Section 8.1.3.3), reflexive (Section 8.1.3.4) and the reciprocal (Section 8.1.3.5).

8.1.3.1 Transitivity suffix

The Buwal transitivity suffix $-z\bar{a}$ has number of functions which result in a change in the transitivity of a clause: (a) causative, (b) agentivisation, (c) transitivisation and (d)

attenuative. After describing the suffix in general terms here, specific examples will be provided for each function below.

As this list shows, the transitivity suffix functions as a causative, which allows an intransitive verb to take a second core argument. This leads to an increase in the **syntactic** valency of the clause. However, I have chosen not to label this morpheme as ‘causative’ but rather the more neutral ‘transitivity suffix’ because 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. The Buwal transitivity suffix can have a number of different semantic effects when attached to transitive verbs and it is not always completely predictable what these will be.

Causative morphemes which have non-valency-increasing functions are not uncommon cross-linguistically (Kittilä 2009: 68; Aikhenvald 2011: 86). 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 that it is related to the Buwal form *-zā*.

(a) Causative

Dixon (2000: 30) defines a CAUSATIVE construction as involving the ‘specification of an additional argument, a causer, onto the basic clause’. The Buwal transitivity suffix functions as a causative when it attaches to an intransitive verb (8.23b & 8.24b). The verb takes an object, the former S becoming O. The resulting construction expresses direct causation where the agent is himself involved in the action.

- (8.23) a. *Sa njā ata papalam .*
 sā- **ndzā** á tā pápálàm
 1SG.SBJ- **sit** PREP1 on plank
 ‘I **sit** on a plank.’ (LL57-SE:35)
- b. *Bay a nda , a njaza ŋ karawal*
 bāy ā- ndā ā- **ndzā** -**zā** ń kārāwāl
 chief 3SG.SBJ- go 3SG.SBJ- **sit** -TRANS PREP2 chair(ful.)

ata lanja .

á tā lā ndzá

PREP1 on place sit

‘The chief went and **seated** him in a chair on the sitting place.’

(NH7-SN:6.5)

(8.24) a. *Həza a babahw ata ηhwa* .

xzā ā- **bàbàx^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 η vay ?*

x^wā- **bàbàx^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 (see Section 3.2.2.2) when used intransitively can also take the transitive suffix with a causative meaning (8.25c). These include *bàbàr* ‘roar/make roar’, *bāx* ‘cry out/make cry out’, *dmàs* ‘dance/make dance’, *ḥāp* ‘speak/make speak (e.g. a radio)’ and *sàsràk* ‘learn/teach’.

(8.25) a. *Mba a kahan* .

mbà á- **kā-** **xān**

child 3SG.SBJ- IPFV- **cry**

‘The child is **crying**.’

(GE21-SE:17.1)

b. *Hejəye əy kahan mce* .

xèdzè -jé j- **kā-** **xān** mtsè

person -PL 3PL.SBJ- IPFV- **cry** corpse

‘People are **mourning the deceased**.’

(GE21-SE:17.2)

c. *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)

(b) Agentivisation

According to Kittilä (2009: 79), AGENTIVISATION involves a change in agency which involves volitionality, control, willingness and purposefulness of the action. One of non-valency-increasing functions of the 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 increase in agency appears to be largely in the areas volitionality, purposefulness and control. The interpretation depends on the semantics of the situation. This can lead to contextually determined changes in meaning when the transitivity suffix is added to certain verbs (8.26 a & b; 8.27 a & b).

- (8.26) 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)
- (8.27) a. *Sa jeḃ mba naka η lupital .*
 sā- **dzèḃ** 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 jeḃza mba naka η lupital .*
 sā- **dzèḃ** **-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 (8.28) below.

- (8.28) *dèŋ* ‘think/worry’ *dèŋzā* ‘reflect/decide’

<i>bād</i>	‘flatter’	<i>bādzā</i>	‘deceive’
<i>dāw</i>	‘want’	<i>dāwzā</i>	‘ask’
<i>sār</i>	‘look at’	<i>sārzā</i>	‘visit/examine’
<i>ḥāp</i>	‘speak’	<i>ḥāpzā</i>	‘greet’
<i>ndāw</i>	‘come upon’	<i>ndāwzā</i>	‘find (while looking)’
<i>ḥāx</i>	‘hide’	<i>ḥāxzā</i>	‘store/put aside’
<i>dā</i>	‘bring/get’	<i>dāzā</i>	‘bring somewhere’
(8.28) cont...			
<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>ḥān</i>	‘imitate/try’	<i>ḥānzā</i>	‘try on/make an effort’
<i>tsā mā</i>	‘accompany’	<i>tsāzā mā</i>	‘guide’

(c) Transitivity

Interacting with the function of agentivisation is the notion of TRANSITIVISATION. According to Kittilä (2009: 83), transitivity relates to any increase in transitivity which does not relate to the agent and includes directness of causation, intensification of events (high degree of patient affectedness), punctuality, expression of definiteness, and dynamicity.

For Buwal, it is the INDIVIDUATION and AFFECTEDNESS of the object which are related to 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 nouns which are proper, human/animate, concrete, singular, count or referential/definite are more highly individuated than those having the correspondingly opposite semantic and pragmatic properties. In the case of Buwal, referentiality appears to be the key property in this respect, triggering the use of the transitivity suffix (8.29b & 8.30b).

- (8.29) a. *Sa tam yam* .
sā- tām jām
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)

(8.30) a. *Sa dam serek η gejere naka .*
 sā- **dàm** **sérèk** 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 **sérèk** 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.)

Another factor relevant here is the affectedness of the object. This idea 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 (8.31b & 8.32b), whereas without the transitivity suffix the action is not yet complete (8.31a & 8.32a).

(8.31) a. *Sa ɓar ujek naka aka .*
 sā- **ɓàr** wjèk 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 .*
 sā- **ɓàr** -zā wjèk nākā āká
 1SG.SBJ- **crack** -TRANS hut 1SG.POSS ACC
 ‘I **cracked** my hut.’ (GE21-SE:4.4)
 (Already finished.)

- (8.32) a. *Sa kecem zlbay .*
 sá- kǎ- tsēm ʒāmbáj
 1SG.SBJ- IPFV- defend staff
 ‘I **am defending** with a stick.’ (GE50-SE:11.7)
 (Doing it now.)
- b. *Sa kecemza zlbay .*
 sá- kǎ- tsēm -zā ʒāmbáj
 1SG.SBJ- IPFV- defend -TRANS staff
 ‘I **was defending** with a stick.’ (GE50-SE:11.6)
 (In the past)

(d) Attenuative

Whilst in many cases the use of the transitivity suffix increases the semantic transitivity of the clause, it may also be used to **decrease** semantic transitivity, being used with a **ATTENUATIVE** sense for many verbs in transitive clauses. This use indicates that an action is only partially done or 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 & Le Bleis 1990: 46). The type of polysemy found in Buwal is unusual although Wolff (1983a: 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 (8.33b & 8.34b). Such verbs include *tsāp* ‘render’, *dās* ‘cultivate’, *rāk* ‘ask for’, *zām* ‘eat’, *bān* ‘wash’, *ʒàn* ‘taste’, *mpāk* ‘close’, *dād* ‘pull out’ and *skèn* ‘grind’.

- (8.33) a. *Sa babad la .*
 sǎ- bǎbǎd lǎ
 1SG.SBJ- plow field
 ‘I **plow** the field.’ (GE21-SE:14.1)
- b. *Sa babadza la .*
 sǎ- bǎbǎd -zǎ lǎ
 1SG.SBJ- plow -TRANS field

- (GE21-SE:14.5)
- (8.34) a. *hwa lam ujek a mbe .*
 x^{wā}- **lām** wdzēk á mbē
 2SG.SBJ- **build** hut PREP1 3SG
 ‘...you **build** a house with it.’ (PP1-SN:7)
- b. *sa lamzaba ujek*
 sā- lām -zā -bā wdzēk
 1SG.SBJ- **build** -TRANS -BEN hut
 ‘...I **fix up** (lit. **build a bit**) a hut for myself...’ (EP1-SN:2.1)

However, the attenuative use is also found with verbs which have objects with non-patient-like semantic roles (8.35b), for example *tēh* ‘listen’, *dzèjèk^w* ‘regret’ and *nkàp* ‘wait for’.

- (8.35) a. *Sa kefefekw dəraf .*
 sá- **kā-** **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- **kā-** **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 (8.36 a & b).

- (8.36) a. *Sa kehenzene banay a*
 sá- **kā-** **xān** -zā -ēnē banaj á
 1SG.SBJ- IPFV- **mourn** -TRANS -3SG.IOBJ suffering(ful.) PREP1

mesleje naka .

mēlédzè nākā

neighbour 1SG.POSS

‘I am **mourning the sufferings** of my neighbour (as part of a group).’

(GE21-SE:17.5)

b. *Sa cekzene a mana ŋ tew kan* .

sā- tsàk -zā -ēnē á mánā íj tètù 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.)

The above discussion has shown that the meaning of the transitivity suffix, while interacting with verbal semantics, also appears to contain an element of unpredictability. A profitable area for further study would be to investigate all the verbs in the corpus and see whether there is a strong correlation between semantic type and the interpretation of the transitivity suffix. It would also be interesting to investigate further whether the transitivity suffix can have more than one interpretation when attached to a particular verb. No clear examples of this have been found so far.

8.1.3.2 Indirect causation

A restricted group of transitive verbs can be causativised by a process in which an extra participant, a causer, is added to the clause in the subject position, whilst the original subject becomes an indirect object of the verb. This process increases the syntactic valency of the clause. The process is possible with verbs of consumption such as *zàm* ‘eat’, *sā* ‘drink’, *ɕàn* ‘taste’ and *bā* ‘taste’ and verbs of perception like *sār* ‘look at’, *grē* ‘see’, *ndzèf* ‘smell’ and *ɕmē* ‘hear/feel’. The resulting meaning is a type of INDIRECT CAUSATION in which the indirect object is given something to eat and drink (8.37 a & b) or made to experience something (8.38 a & b).

- (8.37) a. *əy kanda , əy kedetene yam , əy*
 j- k̄- ndā j- k̄- dā -ētēnē jām j-
 3PL.SBJ- IPFV- go 3PL.SBJ- IPFV- draw -3PL.IOBJ water 3PL.SBJ-
kesetene
 k̄- s̄ -ētēnē
 IPFV- drink -3PL.IOBJ
 ‘...they go, they draw water for them, they **have them drink.**’
 (DE18-SE:2.8)
- b. *hwa kézlenzekey sasam aza .*
 x^wā- k̄- ɣàn -zā -ēkēj sàsàm āzá
 2SG.SBJ- PFV- taste -TRANS -1SG.IOBJ joy COMPL
 ‘...you **had me taste** joy a little.’
 (BH4-SN:2.3)
- (8.38) a. *Əy kenjefzene mehesfɛŋ ŋ mbaw.*
 j- k̄- ndzɛf -zā -ēnē mēxésfɛŋ ɲ mbàw
 3PL.SBJ- IPFV- smell -TRANS -3SG.IOBJ plant.sp. PREP2 child
 ‘They **have the child smell** a ‘meheshfeng’ plant a bit.’
 (2122)
- b. *Sa garezene dala a mba naka .*
 s̄- grē -zā -ēnē dālā á mbà nākā
 1SG.SBJ- see -TRANS -3SG.IOBJ someone PREP1 child 1SG.POSS
 ‘I **have my child see** someone.’
 (GE46-SE:23)

8.1.3.3 Impersonal

Where other languages may use a passive construction, Buwal uses the third person plural subject to express an IMPERSONAL meaning. This construction is used when the person who did the action is unknown or when it is not important to make their identity 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), Muyang (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 (8.39 a & b) or in combination with the noun *xèdzjé* ‘people’ (8.40 a & b). While there is no change in syntactic valence of the clause, the semantic valence is affected as the agent is de-focused.

- (8.39) a. *Əy la menjevek ege ca parpar parpar parpar .*
ǰ- 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. *Əy kágazl zлана .*
ǰ- ká- gàḷ ḥānā
 3PL.SBJ- PFV- beat sibling.1POSS
 ‘They have beaten my brother.’ (GE30-SE:46.1)
- (8.40) a. *Hejəye əy kərhelene ḡhwa mesleje*
xèdzè -ǰé ǰ- ká- nxèl -ēnē nx^wā mēṭédzè
 person -PL 3PL.SBJ- PFV- steal -3SG.IOBJ goat neighbour
naka aza .
nākā āzá
 1SG.POSS COMPL
 ‘People have stolen my neighbour's goat.’ (GE46-SE:4.11)
- b. *Hejəye əy kágazl zлана .*
xèdzè -ǰé ǰ- ká- gàḷ ḥānā
 person -PL 3PL.SBJ- PFV- beat sibling.1POSS
 ‘People have beaten my brother.’ (GE30-SE:46.2)

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 (8.41).

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

8.1.3.4 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 & 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. In fact, this type of polysemy is common in African languages (Heine 2000: 18). However in Buwal whilst ‘body’ is indeed used for reciprocal (see Section 8.1.3.5), the typical reflexive construction involves the noun *hā* ‘head’ followed by a possessive pronoun which matches the subject in person/number (8.42 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). This construction does not involve a decrease in syntactic valency but rather in semantic valency since the number of semantic participants in the event has been reduced.

- (8.42) a. *Hejəye ma mpam bay ege wese , əɣ*
 xèdzè -jé má = mpàm bāy = égē wēsé j-
 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 (lit. showed) **themselves.**’
 (NH7-SN:3.10)
- b. *Kábawza ha anta aza η gadāŋ .*
 ká- bāw -zā xā āntā āzá ŋ gádāŋ
 PFV- change -TRANS head 3SG.POSS COMPL PREP2 idiot
 ‘**He** changed **himself** into an idiot.’
 (HT6-SN:9.6)

Reflexives, which involve coreferentiality of the subject and the indirect object are coded by the auto-benefactive suffix *-bā* (see Section 3.2.1.4) plus an independent pronoun occurring in the indirect object position (8.43 a & b). A similar construction was found in Hdi by Frajzyngier (2002: 196).

- (8.43) a. *A kavalba gamtak a mbe .*
 ā- kā- vāl -bā gāmtāk á mbē
 3SG.SBJ- IPFV- give -BEN chicken PREP1 3SG

‘He is giving a chicken to himself.’ (LL23-SE:3)

- b. *Sa dāw ŋ səkambā ŋhwa ŋ sa .*
sā- dāw ŋ skām -bā nx^{wā} ŋ sā
 1SG.SBJ- want INF buy -BEN goat PREP2 1SG
 ‘I want to buy a goat for myself.’ (GE46-SE:11.2)

EMPHATIC REFLEXIVES emphasise ‘that a reference is to a particular participant alone’ (Payne 1997: 203). In Buwal they are expressed using the noun *hā* ‘head’ followed by a possessive pronoun and preceded by the preposition *á* (8.44 a & b). Heine (2000: 3) states that this is a frequent construction in African languages.

- (8.44) a. *a dekaba a ha anta a*
ā- dèk -ā -bā á xā āntā á
 3SG.SBJ- hobble -VENT(PROX) -BEN PREP1 head 3SG.POSS PREP1
zlambay yam .
ɕāmbáj jám
 staff also
 ‘...he hobbles out himself (lit. with his head) with a staff also.’
 (C5-SN:37.2)

- b. *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)

8.1.3.5 Reciprocal

Payne (1997: 200-201) defines a prototypical RECIPROCAL clause as one ‘in which two participants equally act upon each other.’ Evans (2008: 40) points out that ‘reciprocal constructions in fact extend to a broader range of situations than this.’ The type of situation described by Payne can be called a STRONG RECIPROCAL where ‘mutual relations hold between all members of a set’ (Evans 2008: 40). In Buwal strong reciprocals are expressed by simply using the noun *k^wsām* ‘body’ in the direct object position (8.45 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). As for reflexives, the reciprocal construction leads to a reduction in the semantic rather than the syntactic valence of the clause.

(8.45) a. *əy kaŋcakw kusam .*
 ǰ- k̄a- 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- k̄a- 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* (8.46).

(8.46) *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 ASSYMETRICAL reciprocity in which mutual relations do not hold (Evans 2008: 40) as in examples (8.47 a & b) where only one person is chasing or following.

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

b. *Əy kasəbar kusam .*
 ǰ- k̄a- sbār k^wsàm
 3PL.SBJ- IPFV- follow **body**
 ‘They are following **each other**.’ (GE49-SE:17)

Reciprocals in which the subject and the indirect object are coreferential, are expressed by the prepositional phrase *ɲ tàbā tātá* ‘amongst them’ (8.48 a & b).

(8.48) a. *Əy kaval gemtəye ɲ taba tata .*
ǰ- k̄a- v̄al gāmtāk -jé ɲ tàbā tātá
 3PL.SBJ- IPFV- give chicken -PL PREP2 middle 3PL.POSS
 ‘They give chickens **to each other.**’ (GE49-SE:18)

b. *Əy kada uda ɲ taba tata .*
ǰ- k̄a- dà wdā ɲ tàbā tātá
 3PL.SBJ- IPFV- prepare food PREP2 middle 3PL.POSS
 ‘They are preparing food **for each other.**’ (GE49-SE:20)

8.2 Verbless clauses

There are two main syntactic types of verbless clauses in Buwal. The first of these, the stative clause, will be described in Section 8.3.1. This clause type can be divided into various sub-types depending on the predicate type. The second type of verbless clause, the existential clause, will be dealt with in Section 8.3.2.

Table 8.2 below gives a summary of the semantic types of verbless clauses and their structures. Also included in the table are those clauses with copula-like verbs (see Section 8.3) since their semantic function overlaps with verbless clauses. The sources and meanings of the terms used in Table 8.2 will be given in the following sections, along with examples of each semantic type of verbless clause.

Table 8.2: Summary of semantic types of Buwal verbless clauses and their structures

Meaning	Subject	Copula	Predicate type	Predicate
Equational	NP or Stative pronoun	Optional <i>ārā</i>	Nominal	NP (referential) or independent pronoun
Proper inclusion	NP or Stative pronoun	Optional <i>ārā</i>		NP (non-referential)
Characterisation	NP or Stative pronoun	Optional <i>ārā</i>		NP
Specification	NP	Optional <i>ārā</i>		NP (non-referential)
Genitive	NP	Optional <i>ārā</i>		genitive marker plus NP or possessive pronoun
Naming	NP	Optional <i>ārā</i>		Proper noun
Attribution	NP or Stative pronoun	None, <i>ndzā</i> ‘be’ or <i>lā</i> ‘become’	Adjective	Adjective, numeral or quantifier
Locative I	NP or Stative pronoun	None		Demonstrative identifier
Locative II (incl. possession)	NP or Stative pronoun	None or <i>ndzā</i> ‘be’	Prepositional phrase	Prepositional phrase
Temporal	NP or Stative pronoun	None		Prepositional phrase
Similative	NP or Stative pronoun	None or <i>ndzā</i> ‘be’		Prepositional phrase
Comitative (incl. possession)	NP or Stative pronoun	None or <i>ndzā</i> ‘be’		Prepositional phrase
Existential (incl. possession)	NP or independent pronoun	No	Existential marker	

8.2.1 Stative clauses

The structure of the stative clause is given in Table 8.3 below. It consists of an optional subject NP followed by either an optional stative pronoun or copula and then the predicate. Stative pronouns function as the subject of verbless clauses. A full list was given in Table 4.1 and their properties described in Section 4.1.1.2. Tense and aspect marking does not occur in stative verbless clauses. Time reference must be determined from the context. The same structure may be used in the past (8.49a), present (8.49b) or future (8.49c).

Table 8.3: The Buwal stative verbless clause

(Subject NP)	(Stative pn)/(Copula)	Predicate
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- (8.49) a. *A nuna* [*ɲhwa naka*]NP [*fɛtek*]Pred .
 á **nwná** nx^wā nākā fték
 PREP1 **last.year** goat 1SG.POSS lost¹
 ‘**Last year** my goat (was) lost.’ (GE15-SE:46.2)
- b. *A vawaca* [*ɲhwa naka*]NP [*fɛtek*]Pred .
 á **vávātsà** nx^wā nākā fték
 PREP1 **this.year** goat 1SG.POSS lost
 ‘**This year** my goat (is) lost.’ (GE15-SE:46.3)
- c. *A makudá* [*ɲhwa naka*]NP [*fɛtek*]Pred .
 á **māk^wďá** nx^wā nākā fték
 PREP1 **next.year** goat 1SG.POSS lost
 ‘**Next year** my goat (will be) lost.’ (GE15-SE:46.4)

The subject may be any noun or noun phrase (8.50 a & b).

- (8.50) a. [*gazlavay tata*]NP [*welbe ey kule*]Pred.
 gāǰāvāj tātá wēlbe éj k^wlè
 god 3PL.POSS nature.spirit and idol
 ‘...**their gods** (were) nature spirits and idols.’ (DE15-WN:2)
- b. [*Ata gwambakw ey meŋ*]NP [*səkan damaw ege*]Pred .
 ātā g^wāmbāk^w éj mēŋ skàn dāmāw =égē
 ASS.PL toad and antelope thing bush =PL
 ‘**The toad and the antelope** (are) wild animals (lit. things of the bush).’
 (GE15-SE:79.1)

Note that the subject may be topicalised, as indicated either by a topic marker (8.51a) or simply a pause (8.51b) (see Section 11.2.1).

¹ Here *fték* ‘lost’ is functioning as an adjective rather than a verb (see Section 3.2.1.3).

- (8.51) a. [Ma kaja ula ca ,]NP [tata]Pred.
 má = kā- dzā wlā tsá tātā
 REL = IPFV- hit neck TOP 3PL
 ‘The ones who call out, (are) them.’ (DE7-SN:1.6)
- b. [Dəvar ŋgha]NP , [mala mana]Pred .
 dvàr nyā mālā mānā
 hoe DEM.PROX GEN mother.1POSS
 ‘This hoe, (it’s) my mother’s.’ (GE15-SE:30)

Dixon (2010: 180) notes that most languages with a copula construction allow the copula verb to be omitted at times due to its lack of referential meaning. In Buwal, where there is no overt subject noun phrase the subject may be expressed by either a stative pronoun (8.52a) (see Section 4.1.1.2) or the copula *ārā* (8.52b) (see Section 4.9). Note that the copula can only occur with predicate nominals. This is not unusual cross-linguistically according to Dryer (2007: 236-238).

- (8.52) a. [Mbəy]pn [tənguleŋ anta]Pred .
 mbj téng^wlèŋ āntā
 3SG.STAT one 3SG.POSS
 ‘He was by himself (lit. one of him).’ (TN5-SN:4.6)
- b. [Arā]Cop [ŋgama ege]Pred .
 ārā ŋgámà = égē
 COP friend =PL
 ‘They are (it’s) friends.’ (NF4-SN:1.2)

In Buwal an overt noun phrase and a stative pronoun or copula can optionally co-occur (8.53 a & b). Lienhard (1978: 6) also found that the copula *adā* in Daba is optional. Note however that a stative pronoun and a copula cannot co-occur. This indicates that they occupy the same slot in the structure in Table 8.3 above.

- (8.53) a. [Mesleje naka]NP [mbəy]pn [meber kan]Pred .
 mēlédzè nākā mbj mā- bér kàn
 neighbour 1SG.POSS 3SG.STAT NOM- sell thing
 ‘My neighbour is a seller.’ (GE15-SE:75.2)

- b. [mba]NP [ara]Cop [dadawar]Pred
 mbàw ārā dādāwār
 child COP evil.person
 ‘The child is an evil person.’ (HT1-SN:2.3)

The stative pronoun is used when the subject is definite/identifiable. For example in (8.54a) the speaker could be talking about any peanuts, whereas in (8.54b) the speaker assumes that the hearer knows which peanuts he is talking about. The use of the copula, apart from its restriction to nominal predicates, does not appear to be grammatically conditioned.

- (8.54) a. [ŋgəzleŋ]NP [a wata naka]Pred .
 ŋgɛ̀zèŋ á wātā nākā
 peanuts PREP1 compound 1SG.POSS
 ‘(Some) peanuts are at my home.’ (GE15-SE:17)
- b. [ŋgəzleŋ]NP [mbəy]pn [a wata naka]Pred .
 ŋgɛ̀zèŋ mbj á wātā nākā
 peanut 3SG.STAT PREP1 compound 1SG.POSS
 ‘The peanuts are at my home.’ (GE15-SE:19)

In natural discourse the subject may be omitted altogether when known from the context. For example the question in (8.55a) could be answered with either (8.55b) or (8.55c).

- (8.55) a. [Ara]Cop [vemey]Pred ?
 ārā véméj
 COP what
 ‘What is it?’ (GE15-SE:81.1)
- b. [Ara]Cop [həza]Pred .
 ārā xzā
 COP dog
 ‘It's a dog.’ (GE15-SE:81.2)

- c. [Həza]Pred .
 xzā
 dog
 ‘Dog’ (GE15-SE:81.3)

The predicate in a stative verbless clause can be one of a number of types: (i) predicate nominal, (ii) predicate adjective (including quantifiers and numerals) and (iii) predicate prepositional phrase. Each will be discussed in more detail and examples given below.

(i) Predicate nominal

Firstly, the predicate may be a noun or a pronoun as in examples (8.50 a & b), (8.51 a & b), (8.52b), (8.53 a & b) and (8.55 b & c) above. There are two main semantic types of predicate nominals, both of which have the same structure in Buwal. The first is EQUATIONAL which indicates that an entity is identical to the entity expressed by the predicate nominal (8.56 a & b) (Payne 1997: 114). These constructions have referential predicates (Dryer 2007: 233).

- (8.56) a. [hwa]NP [wala naka]Pred
 x^{wā} wālā nākā
 2SG.STAT wife 1SG.POSS
 ‘...you (are) my wife...’ (DE7-SN:1.4)
- b. [Nəyzerəya ege]NP [əy]pn [ma ndaha ŋ
 nizerja = éǵē j má = ndā -xā ń
 Nigeria =PL 3PL.STAT REL= come -VNT.DIST INF
 gayzaheje ka]Pred
 gāj -zā -āxèdzè ká
 spoil -TRANS -1INCL.DOBJ ANT
 ‘The Nigerians are the ones who came to spoil us in advance...’ (GE6-SE:4)

The second type, which Payne (1997: 114) calls PROPER INCLUSION and Dryer (2007: 233) calls TRUE NOMINAL, indicates that an entity belongs to the class of items specified in the nominal predicate. In this case the predicate is non-referential (8.57 a & b).

- (8.57) a. [mbəy]NP [haldəma]Pred
 mb̄j xáldmá
 3SG.STAT girl
 ‘...she (was) a girl...’ (DE11-SE:1.3)
- b. [Ara]Cop [ɲseɲ hejəye ma def def ege]NP .
 ārā nsēɲ xèdzè -jé má= déf déf =égē
 COP clan person -PL REL= short short =PL
 ‘They are (lit. it’s) a clan of very short people.’ (NH16-SN:2.4)

Hengeveld (1992: 82-88) also divides predicate nominals into those which express characterisation versus specification. CHARACTERISATION gives only one characteristic of the referent which may also have other characteristics. Examples (8.56 a & b) and (8.57 a & b) illustrate this type. In SPECIFICATION, the predicate nominal gives a definition of the item being referred to (8.58 a & b). Stative pronouns usually cannot be used in this type of clause in Buwal as the subject can not be definite.

- (8.58) a. [Mende]NP [ma ata rehha metene]Pred.
 méndé má= á tā rēx -xā mètēné
 IND.DET.SG REL= PREP1 on cure -VNT.DIST malnutrition
 ‘A certain one (is) one for curing malnutrition.’ (DE9-SN:1.2)
- b. [Mslad’]NP [ara]Cop [səkan ma ata zlad’ la]Pred .
 m̄lād’ ārā skàn má= á tā ɣād’ lā
 broom COP thing REL= PREP1 on sweep place
 ‘A broom is a thing for sweeping the place.’ (LL53-SE:8)

Another type of predicate nominal is the GENITIVE clause in which a noun (8.59 a & b) or a possessive pronoun (8.59c) (see Section 4.1.3) occurs in the predicate position preceded by the genitive marker *mālā* (see Section 4.6). There is the same range of relationships between the two referents as for genitive constructions (see Section 5.2.2). The fact that the copula can be used in this type of clause (8.59d) is evidence that this construction is nominal rather than involving a prepositional phrase. Stative pronouns cannot occur in this type of clause.

- (8.59) a. [Dəvar]NP [mala mana]Pred .
 dvàr mālā mānā
 hoe GEN mother.1POSS
 ‘The hoe (is) my mother’s.’ (GE15-SE:29)
- b. [Wende]NP [mala mbəlah ege]Pred .
 wéndé mālā mblàx =égē
 IND.DET.SG GEN wound =PL
 ‘Another (is) for wounds.’ (DE9-SN:1.5)
- c. [I]hwa]NP [mala naka]Pred .
 nx^{wā} mālā nākā
 goat GEN 1SG.POSS
 ‘The goat (is) mine.’ (GE15-SE:27)
- d. [I]hwa ŋgha ca]TOP , [ara]Cop [mala naka]Pred .
 nx^{wā} nyā tsá ārā mālā nākā
 goat DEM.PROX TOP COP GEN 1SG.POSS
 ‘As for this goat, it's mine.’ (GE15-SE:26)

Naming clauses may be formed either by simple juxtaposition of the two nominals (8.60a), or else a copula may be used to link them (8.60b).

- (8.60) a. [zlam anta]NP [Haman Makwal]Pred.
 ʒàm āntā xámān māk^{wál}
 name 3SG.POSS Haman Mokol
 ‘His name (was) Haman Mokol.’ (NH7-SN:5.6)
- b. Zlana ara Dele .
 ʒānā ārā délē
 sibling.1POSS COP Deli
 ‘My brother is Deli.’ (GE15-SE:93.3)

(ii) Predicate adjective

The predicate of a stative verbless clause may also be an adjective (8.61 a & b), quantifier (8.62a) or a numeral (8.52a & 8.62b). This type of clause expresses ATTRIBUTION. The copula *ārā* cannot occur in predicate adjective clauses. However like other verbless

clauses, the stative pronoun may be optionally included even when the subject is overtly expressed by a noun phrase (8.61b)

(8.61) a. [Wala anta]NP [tuwah deydey]Pred.
 wālā āntā twáx dējdej
 wife 3SG.POSS beautiful too.much(ful.)
 ‘His wife (was) too beautiful.’ (TN1-SN:1.4)

b. [Heje dawar]NP mbəy [zukwana]Pred.
 xèdzè dāwār mbj zk^wāná
 person sickness 3sSTAT better
 ‘The sick person is better.’ (1811)

(8.62) a. [zləye na ege]NP [cekudé]Pred
 ʒā -jé nā =égē tsék^wdē
 ox -PL 1SG.POSS =PL few
 ‘...my cows (are) few...’ (DE4-SN:9.2)

b. [nene]NP [gbak a wala naka]Pred
 nènè gbák á wālā nākā
 1EXCL.STAT two PREP1 wife 1SG.POSS
 ‘...we (are) two with my wife...’ (DE12-SN:8.1)

There is also a type of predicate adjective clause which expresses location (named ‘Locative I’ in Table 8.2). In this case demonstrative identifiers (see Section 4.3.3) are used as the predicate (8.63 a & b).

(8.63) a. [Ujek menjevek]NP [cakwa]Pred .
 wjēk mēndzēvēk tsák^wá
 house medicine here
 ‘The clinic (lit. house of medicine) is here.’ (GE15-SE:77.1)

b. [I]hwa ma haŋga mala naka wese]NP [caw]Pred .
 nx^wā má= xāŋgá mālā nākā wēsé tsáw
 goat REL= as.if GEN 1SG.POSS DEM.DIST there
 ‘That goat which is like mine is there.’ (GE48-SE:7.12)

(iii) Predicate prepositional phrase

The predicate of a stative verbless clause may also be a prepositional phrase. This type of predicate may express a number of meanings: locative (8.54 a & b, 8.64a), temporal (8.64b), similitive (8.64c) and comitative (8.64d). The copula cannot be used with this type of clause.

- (8.64) a. [əy]pn [ata mpe]Pred .
j á tā mpè
3PL.STAT PREP1 on tree
'They (are) in a tree.' (BH4-SN:2.9)
- b. [Heje]pn [a vəya]Pred .
xèdzè á vjā
1INCL.STAT PREP1 wet.season
'We (are) in the wet season.' (LL24-SE:2)
- c. [mbəy]pn [ana mpe ŋghe]Pred
mbj ánā mpè nyē
3SG.STAT like tree DEM.PROX
'...he (is) like this tree...'. (BH3-SN:3.1)
- d. [hune]pn [a gef]Pred
x^wnè á gèf
2PL.STAT PREP1 difficulty
'...you are having (lit. with) difficulties...'. (HT3-SN:4.3)

Note that locative (8.65a) and comitative (8.65b) clauses can be used to express possession.

- (8.65) a. [car deydey]NP [ara mbe]Pred.
tsàr dējdej á rā mbē
stubbornness too.much(ful.) PREP1 side 3SG
'...she has too much stubbornness.'
(lit. '...too much stubbornness is at her side.')

- b. [mbəy]pn [a metes]Pred
 mb̄j á mētēs
 3SG.STAT PREP1 hunger
 ‘...he has hunger...’ (DE17-SN:2.1)
 (lit. ‘...he (is) with hunger...’)

8.2.2 Existential clauses

Buwal existential clauses have the structure found in Table 8.4. It consists of the subject followed by the invariable existential marker *ákā* which could be translated ‘it exists’ (see Section 4.10). This marker can also be used to mark existential relative clauses. These will be discussed in Section 10.1.4.2.

Table 8.4: Structure of Buwal existential clause

(Subject)	<i>ákā</i>
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The subject may be an independent pronoun (8.66a), or any noun phrase (8.66 b-e).

- (8.66) a. [Tata]pn *aka* .
 tātā ákā
 3PL EXIST
 ‘They exist.’ (GE29-SE:15)
- b. [dala ma ata ŋter zlam ege wese]NP *aka*
 dālā má= á tā ntèr ʒàm =égē wēsé ákā
 money REL= PREP1 on write name =PL DEM.DIST EXIST
 ‘...there is that money which is for writing names...’ (C1-SN:29.4)
 (lit. ‘...that money which is for writing names exists.’)
- c. [bezle ŋhwəye]NP *aka* .
 béʒē nx^{wā} -jé ákā
 enclosure goat -PL EXIST
 ‘...there is a goat enclosure.’ (DE4-SN:6.1)
 (lit. ‘...a goat enclosure exists.’)

- d. [Mala masəbahw]NP aka .
 mālā mäsáx^w ákā
 GEN bone.ache EXIST
 ‘There is one for aching bones.’ (DE9-SN:1.7)
 (lit. ‘One for aching bones exists.’)
- e. [ŋhwəye vedəye a wata juraw ete
 nx^{wā} -jé vēdjé á wātā dzwrāw á tē
 goat -PL IND.DET.PL PREP1 home sub-chief(ful) PREP1 here
 a Zukwadfāŋw]NP aka .
 á zk^{wā}dfāŋ^w ákā
 PREP1 Zukodfong EXIST
 ‘There are some goats at the sub-chief’s home here in Zukodfong.’
 (lit. ‘Some goats at the sub-chief’s home here in Zukodfong exist.’)
 (NH8-SN:3.5)

Here the prepositional phrases in example (8.66e) are analysed as noun modifiers (see Section 5.1.10) and therefore as constituents of the noun phrase functioning as the subject. They could equally be analysed as adjuncts with the subject being the noun modified by the indefinite determiner (8.67). As will be shown in Section 10.1.4.2, the existential marker does not need to be directly adjacent to the noun phrase which is in its scope.

- (8.67) [ŋhwəye vedəye]NP a wata juraw ete a
 nx^{wā} -jé vēdjé á wātā dzwrāw á tē á
 goat -PL IND.DET.PL PREP1 compound sub-chief(ful) PREP1 here PREP1
 Zukwadfāŋw aka .
 zk^{wā}dfāŋ^w ákā
 Zukodfong EXIST
 ‘There are some goats at the sub-chief’s home here in Zukodfong.’
 (lit. ‘Some goats exist at the sub-chief’s home here in Zukodfong.’) (NH8-SN:3.5)

Like other verbless clauses, the subject may be topicalised in existential clauses (8.68) (see Section 11.2.1).

- (8.68) [*Dadawar ma a wata ege ca*]NP, *aka* .
 dādāwār má= á wātā =égē tsá ákā
 badness REL= PREP1 home =PL TOP EXIST
 ‘Problems which are at home, (they) exist.’ (DE12-SN:2.1)

In natural discourse, if the subject is already known from the context for example as established in (8.69a), it may be omitted altogether (8.69b).

- (8.69) a. *Akwaw ma* , *zley zla* .
 ák^wāw má ɓèj ɓā
 NEG.EXIST TOP.EMPH meat ox
 ‘Otherwise, beef (lit. ox meet).’
 (Speaker A)
- b. *Aka* .
 ákā
 EXIST
 ‘There is some.’ (lit. ‘(It) exists.’) (C11-SN:13-14)
 (Speaker B)

Existential clauses are frequently used to introduce a new participant into discourse (8.70) (see also Section 11.2.3). This presentation function is typical of existentials cross-linguistically (Payne 1997: 123).

- (8.70) *A* , *wala mende aka* , *əy gbak a mzla* , *əy*
 á wālā méndé ákā j gbák á mɓā j-
 ah! woman IND.DET.SG EXIST 3PL.STAT two PREP1 blacksmith 3PL.SBJ-
kanda ŋ da la .
 kā- ndā ŋ dā lā
 IPFV- go INF make.sacrifice.to place
 ‘Ah, there is a certain woman, she is with a blacksmith (lit. they are two with a blacksmith), they are going to make a sacrifice to a place.’ (DE11-SN:1.1)

Existential clauses are also used to express possession (8.71 a & b), again a common strategy cross-linguistically (Dryer 2007: 244).

- (8.71) a. [*Dəvar naka*]NP *aka* .
 dvàr nākā ákā
 hoe 1SG.POSS EXIST
 ‘I have a hoe.’ (LL19-SE:9)
 (lit. ‘My hoe exists.’)
- b. [*Zabəla mala Madagamzam*]NP *aka* .
 zāblā mālā mādágámzām ákā
 supernatural.power GEN Madagamzam EXIST
 ‘The Madagamzam clan had supernatural power.’ (NH11-SN:2.3)
 (lit. ‘The supernatural power of the Madagamzam existed.’)

8.3 Clauses with ‘copula’ verbs

This section describes Buwal verbal clauses with similar meanings to verbless clauses or copula clauses in other languages. In structure these verbal clauses conform to the structure found in Table 8.1. However, due to the semantic overlap with verbless clauses they are presented here.

It is common in the world’s languages for verbs of stance such as ‘sit’, ‘stand’ or ‘lie’ to have their use extended to a copula function (Dixon 2010:182; Newman 2002: 10). Hellwig (2003: 363) found this to be the case in the West Chadic language Goemai. In Buwal there is an overlap between the use of the intransitive verb *ndzā* ‘sit, dwell, stay’ and stative verbless clauses (see Section 8.2.1). For example, both can be used to express an attribute with an adjective (8.72 a & b) and with a prepositional phrase; location (8.73 a & b), comitative (8.74 a & b), and similitive (8.75 a & b) meanings (see Table 8.2). The type of clause to be preferred depends on the meaning being expressed. For example, verbless clauses are more common for attributive and locative type meanings. However, for the similitive meaning the verbal construction is preferred. The difference between the two comitative clauses in (8.74 a & b) is that the verbless clause implies that the situation may only last for a short time whereas the clause with *ndzā* indicates that it may last forever. This aligns well with Newman’s (2002: 12) comment that the extension of the use of verbs of stance to more stative-like meanings is commonly based on this idea of continuation through time.

- (8.72) a. *Mbəy ɓarɓar* .
 mbj̄ ɓár-ɓár
 3SG.STAT hard
 ‘It is hard.’ (GE15-SE:35)
- b. *A nja ɓarɓar* .
 ā- ndzā ɓár-ɓár
 3SG.SBJ- **sit** hard
 ‘It is (lit. sits) hard.’ (GE15-SE:34)
- (8.73) a. *Wata naka , mbəy a Kuvahwam* .
 wātā nākā mbj̄ á k^wvàx^wám
 compound 1SG.POSS 3SG.STAT PREP1 Kuvohom
 ‘My home, it is in Kuvohom.’ (GE15-SE:33)
- b. *Wata na cemey , a nja ŋ Kuvahwam*
 wātā nā tséméj̄ ā- ndzā ɲ k^wvàx^wám
 home 1SG.POSS TOP.CON 3SG.SBJ- **sit** PREP2 Kuvohom
 ‘My home, it is (lit. sits) in Kuvohom...’ (DE4-SN:1.2)
- (8.74) a. *Hwa ara nene* .
 x^wā á rā nènè
 2SG.STAT PREP1 side 1EXCL
 ‘You are with (lit. at the side of) us.’ (GE15-SE:91.2)
- b. *hwa nanja a nene*
 x^wā- ná- ndzā á nènè
 2SG.SBJ- FUT- **sit** PREP1 1EXCL
 ‘You will be (lit. sit) with us.’ (BH1-SN:2)
- (8.75) a. *Hwa ana tebekw* .
 x^wā ánā tēbèk^w
 2SG.STAT like bat
 ‘You are like a bat.’ (GE15-SE:39)
- b. *Hwa nja ana tebekw* .
 x^wā- ndzā ánā tēbèk^w
 2SG.SBJ- **sit** like bat
 ‘You are (lit. sit) like a bat’ (GE15-SE:38)

Although the verb *ndzā* can express copula-like meanings there are no language internal reasons to indicate that it is any different from a typical Buwal verb. Hellwig (2003: 364) also found this to be the case for locative verbs in Goemai. In Buwal, the verb *ndzā* occurs in clauses which do not differ in structure from the basic verbal clause. Prototypical adjectives can function as secondary predicates in verbal clauses, occurring in the adverb position (see Table 8.1) (see Section 3.3.3.1). Therefore in example (8.72b), the adjective could be said to be functioning as a ‘depictive’ which, according to Schultze-Berndt and Himmelmann (2004: 65-66), designates a state of affairs which holds at the same time as the event coded by the verb. In this case example (8.72b) would be interpreted as meaning that the subject is in a hard state at the same time that it is ‘sitting’. Furthermore, the prepositional phrases in examples (8.73b, 8.74b & 8.75b) could be said to be functioning as oblique arguments within a verbal clause (see Table 8.1).

Since the verb *ndzā* is intransitive, it cannot take a nominal complement. If *ndzā* is being used with a copula-like meaning then the complement noun must occur in a prepositional phrase as in example (8.76a). Other evidence that *ndzā* is a normal verb relates to the way it behaves like other verbs. It occurs with the verbal subject agreement markers (8.72-8.75b), can be nominalised (8.76b) and takes all tense/aspect prefixes (8.74b & 8.76 a & c).

- (8.76) a. *Kaw vayay maghwalza mada kánja ŋ bay*
káw vájáj mā- y^wāl -zā màdā ká- ndzā ń bāy
 even who JUS- explain -TRANS if PFV- **sit** PREP2 chief
ca, a neletene a hejəye ca vemey ?
tsá ā- ná- lā -ētēnē á xèdzè -jé tsá vé méj
 TOP 3SG.SBJ- FUT- do -3PL.IOBJ PREP1 person -PL TOP what
 ‘Let each one explain, if they **were** chief (lit. **sat in** chief), what would they do for the people?’ (NH7-SN:3.6)

- b. *Hwa deŋza ata lanja ŋkwa yam*
 x^wā- dèn -zā á tā **lā-** **ndzá** nk^wā jám
 2SG.SBJ- reflect -TRANS PREP1 on NOM.ACT **sit** 2SG.POSS also
ca vaŋgay ?
tsá váŋgáj
 TOP how
 ‘What (lit. how) do you think about your **life** (lit. **sitting**)?’ (HT4-SN:32.9)
- c. *heldəməye cemey , əy dāw mawal ma kanja*
 xáldmā -jé tséméj j- dāw māwəl má= **kā-** **ndzā**
 girl -PL TOP.CON 3PL.SBJ- want husband REL= **IPFV-** **sit**
parpar parpar .
párpār párpār
 different different
 ‘...girls, they want husbands who **are** (lit. **are sitting**) different.’
 (DE19-SN:10.1)

The inchoative meaning ‘become’ in Buwal is expressed using the ambitransitive verb *lā* ‘do/make’. Again, an adjective may function as a secondary predicate, this time as a ‘resultative’ designating the result of the event of ‘becoming’ expressed by the verb (8.77 a & b) (Schultze-Berndt and Himmelmann 2004: 65-66).

- (8.77) a. *Sa ndaba ama kwahwaw ŋ la*
 sā- ndā -bā Á mā k^wáh^wáw ŋ **lā**
 1SG.SBJ- go -BEN PREP1 edge fire INF **do**
bahw̄bahw̄.
 bāx^w-bāx^w
 warm
 ‘I go next to the fire to **become** (lit. **do**) warm.’ (2092)
- b. *mbəlah anta a la zukwana .*
 mblāx āntā ā- **lā** zk^wāná
 wound 3SG.POSS 3SG.SBJ- **do** better
 ‘...his wound **becomes** (lit. **does**) better.’ (HT6-SN:8.10)

If the result of the process is expressed by a noun it must be introduced by the preposition *ŋ* (8.78).

(8.78) A *makudá sa nala ŋ wala* .
 á māk^wđá sā- ná- lā ŋ wālā
 PREP1 next.year 1SG.SBJ- FUT- do PREP2 woman
 ‘Next year I **will become** (lit. **will do into**) a woman.’ (GE15-SE:41.5)

8.4 Comparative clauses

According to Payne (1997: 88), a COMPARATIVE construction is one ‘in which two items are compared according to some quality.’ In Buwal there are two types of comparative construction; comparatives of equality (Section 8.4.1) and comparatives of inequality (Section 8.4.2). Constituents present in both types include; a STANDARD (S) against which the COMPAREE (C) is compared, a MARKER OF STANDARD (MS) and the predicate (Pred) which contains the quality which is being compared.

8.4.1 Comparatives of equality

Comparatives of EQUALITY express the meaning that quality in question is present to an equal degree in both items which are being compared. The structure of Buwal comparatives of equality is given in Table 8.5 below. The subject functions as the comparee, the predicate is the quality which is being compared and the oblique argument is the standard which is marked by the preposition *ánā* ‘like’.

Table 8.5: Structure of Buwal comparatives of inequality

Subject	Predicate	<i>ánā</i> ‘like’	Oblique
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When the predicate of the clause consists of an adjective, the structure in Table 8.5 is based on the stative verbless clause expressing a similitive meaning (see Section 8.2.1). The subject may be either a stative pronoun (8.79a) or a noun (8.79b). The oblique may be an independent pronoun (8.79a) or a noun (8.79b).

- (8.79) a. [Hwa]C [jem]Pred [ana]MS [sa]S .
 x^wā dzèm ánā sā
 2SG.STAT tall like 1SG
 ‘You are as tall as me.’ (GE16-SE:1)
 (lit. ‘You are tall like me.)
- b. [Rəgwac anta]C [pepedék]Pred [ana]MS [gagəmay]S.
 rg^wàts āntā pépédék ánā gágmāj
 clothes 3SG.POSS white like cotton
 ‘His clothes are as white as cotton.’ (GE16-SE:3)
 (lit. ‘His clothes are white like cotton.’)

When the predicate is a verb or a resultative participle (see Section 3.3.3.3), the comparative clause is verbal with the subject being coded by a noun phrase in conjunction with a subject agreement prefix (8.80a), or a subject prefix alone (8.80b).

- (8.80) a. [Mba a]C [la zlan]Pred [ana]MS [cen]S .
 mbà ā- lā ɣàn ánā tsèn
 child 3SG.SBJ- do work like father
 ‘The child does work the same (lit. like) the father.’ (GE16-SE:41.5)
- b. [Hwa]C [kénjeye]Pred [ana]MS [sa]S .
 x^wā- ká- ndzā -ējē ánā sā
 2SG.SBJ- PFV- sit -PART like 1SG
 ‘You are seated the same as (lit. like) me.’ (GE16-SE:42.1)

8.4.2 Comparatives of inequality

Comparatives of INEQUALITY express the meaning that the quality in question is not present to an equal degree in both the comparee and the standard. The marker of standard in such constructions is the complex preposition *á xā* ‘over’. This is derived from the preposition *á* plus the word *xā* ‘head’ (see Section 4.8.2). In both Gidar and Hdi, Frajzyngier (2008: 452; 2002: 501) notes that the word for ‘head’ has been grammaticalised as a marker of comparison. This construction conforms to what Leyew and Heine (2003: 50) refer to as the ‘location schema’, in which the standard of comparison is coded as a static locative participant.

There are two structural types of comparatives of inequality in Buwal. The first expresses the concept ‘bigger, greater’ or ‘more than’ and uses the adjective *dāj* ‘more’ as the predicate. This structure is given in Table 8.6 and is based on the stative verbless clause (see Section 8.2.1). Examples are shown (8.81 a & b).

Table 8.6: Structure of comparative of inequality with *dāj* ‘more’

Subject	<i>dāj</i> ‘more’	<i>á xā</i> ‘over’	Oblique
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- (8.81) a. [*Tɛŋguleŋ*]C [*dāj*]Pred [*aha*]MS [*bəse*]S .
 tɛŋg^wlɛŋ **dāj** á xā bsé
 one **more** PREP1 over nothing
 ‘One is **more** than zero.’ (LL48-SE:3)
- b. [*əy*]C [*dāj*]Pred [*aha*]MS [*ŋseŋ vedəye ege tewtew*]S .
 j **dāj** á xā nsɛŋ vɛdʒé =égɛ tɛw-tɛw
 3PL.STAT **more** PREP1 over clan IND.DET.PL =PL all
 ‘...they are **more** (numerous) than all other clans.’ (NH10-WN:7.2)

The structure of the second type of comparative of inequality is shown in Table 8.7 and is also based on the stative verbless clause (see Section 8.2.1). The predicate in this case consists of the preposition *pá* ‘at a level’ (see Section 4.8.3) followed by either the preposition *ŋ*, or the relative marker *má* (see Section 4.14.1.2), followed by the standard of comparison introduced by the complex preposition *á xā* meaning ‘over’. The use of either the preposition or the relative marker does not appear to lead to any variation in meaning. This type of construction can be interpreted as meaning ‘C is at a level in _____ness over S’.

Table 8.7: Structure of comparative of inequality with *pá* ‘at a level’

Subject	Predicate			<i>á xā</i> ‘over’	Oblique
	<i>pá</i> ‘at a level’	<i>ŋ</i> or <i>má</i>	Standard		

A number of different word classes can function as the standard of comparison: (i) an adjective (8.82 a & b; 8.83 a & b), (ii) a verb (8.84 a & b), (iii) a patient nominalisation (8.85) (see Section 3.1.3.1), (iv) a resultative participle (8.86 a & b) (see Section 3.3.3.3) or (v) a noun designating a quality (8.87) (see Section 3.1.2.2).

(i) Adjective

(8.82) a. [Sa]C [pa η pəzək]Pred [aha]MS [hwa]S .
 sā pá ħ́ pzék^w á xā x^wā
 1SG.STAT **at.a.level** PREP2 **small** PREP1 over 2SG
 ‘I am **smaller** than you.’ (LL51-SE:2)
 (lit. ‘I am **at a level in smallness** over you.’)

b. [Hwa]C [pa ma def]Pred [aha]MS [sa]S .
 x^wā pá má= déf á xā sā
 2SG.STAT **at.a.level** REL= **short** PREP1 over 1SG
 ‘You are **shorter** than me.’ (GE16-SE:10.2)
 (lit. ‘You are at a level in shortness over me.’)

Note that the adjective *dāj* ‘more’, as well as functioning alone as the predicate as shown in Table 8.6 and examples (8.81 a & b), can also function as the standard of comparison in the structure shown in Table 8.7 (8.83 a & b).

(8.83) a. [Mbəy]C [pa η dāy]Pred [aha]MS [sa]S .
 mbj pá ħ́ dāj á xā sā
 3SG.STAT **at.a.level** PREP2 **more** PREP2 over 1SG
 ‘He is **greater** than me.’ (GE16-SE:21.2)
 (lit. ‘He is **at a level in ‘moreness’** over me.’)

b. [I]sələd]C [pa ma dāy]Pred [aha]MS [jaβan]S .
 nsléd pá má= dāj á xā dzābān
 seven **at.a.level** REL= **more** PREP1 over five
 ‘Seven (is) **bigger** than five.’ (LL51-SE:5)
 (lit. ‘Seven (is) **at a level in ‘moreness’** over me.’)

(ii) Verb

Note that the verb in comparative constructions can take tense/aspect prefixes (8.84a).

- (8.84) a. [Mbəy]C [*pa* *ŋ* *kéhey*]Pred [*aha*]MS [*sa*]S .
mbj pá ŋ ká- xěj á xā sā
3SG.STAT **at.a.level** PREP2 PFV- **run** PREP1 over 1SG
'He **ran faster** than me.' (GE16-SE:13.4)
(lit. 'He is **at a level in having run** over me.')

- b. [Mbəy]C [*pa* *ma* *san*]Pred [*aha*]MS [*sa*]S .
mbj pá má= sàñ á xā sā
3SG.STAT **at.a.level** REL= **know** PREP1 over 1SG
'He **knows more** than me.' (GE16-SE:14.2)
(lit. 'He is **at a level in knowing** over me.')

(iii) Patient nominalisation

Note that if the standard of comparison is a patient nominalisation it is not possible for it to be preceded by the relative marker *má*.

- (8.85) [*Uda* *ŋgha*]C [*pa* *ŋ* *madada*]Pred
wdā nyā pá ŋ má- dà -á- dà
food DEM.PROX **at.a.level** PREP2 NOM- **cook** NOM.PAT **cook**
[*aha*]MS [*ma* a *njuna*]S .
á xā má= á ndzwná
PREP1 over REL= PREP1 yesterday
'This food (is) **more cooked** than yesterday's.' (GE16-SE:33)
(lit. 'This food (is) **at a level in 'cookedness'** over that of yesterday.')

(iv) Resultative participle

- (8.86) a. [Haldōma]C [*pa* *ŋ* *kéŋgezeye*]Pred
 xáldmā pá ń ká- ńgàz -ējē
 girl at.a.level PREP2 PFV- discipline -PART
 [aha]MS [hal heje ńghe]S.
 á xā xāl xèdzè nyē
 PREP1 over girl person DEM.PROX
 ‘That girl **has been disciplined** more than this man's girl.’ (GE16-SE:20.1)
 (lit. ‘The girl (is) **at a level in having been disciplined** more than the girl
 of this person.’)

- b. [Səkan ńgha mbəy]C [*pa* *ma* *kékefeye*]Pred
 skàn nyā mbj pá má= ká- kāf -ējē
 thing DEM.PROX 3SG.STAT at.a.level REL= PFV- lift -PART
 [aha]MS [ma caw ńgha]S .
 á xā má= tsáw nyā
 PREP1 over REL= there DEM.PROX
 ‘This thing **has been lifted up** more than that one over there.’
 (lit. ‘This thing is **at a level in having been lifted up** over this one there.’
 (GE16-SE:18.2))

(v) Noun designating a quality

Note that when a noun is used as the standard of comparison, it may only be preceded by the preposition *ń*. If the relative marker *má* is used, the noun must be part of a larger verbal clause.

- (8.87) a. [Wala ńkwa]C [*pa* *ŋ* *dedehw*]Pred [aha]MS [mala
 wālā nk^wā pá ń dédèx^w á xā mālā
 wife 2SG.POSS at.a.level PREP2 tardiness PREP1 over GEN
naka]S .
 nākā
 1SG.POSS
 ‘Your wife (is) more tardy than mine.’ (GE16-SE:45.1)
 (lit. ‘Your wife (is) **at a level in tardiness** over mine.’)

- b. [Wala ŋkwa]C [pa ma la dedehw]Pred [aha]MS
wālā nk^wā pá má= lā dédèx^w á xā
wife 2SG.POSS at.a.level REL= do tardiness PREP1 over
[mala naka]S .
mālā nākā
GEN 1SG.POSS
‘Your wife **is tardy more** than mine.’ (GE16-SE:45.2)
‘Your wife (is) **at a level which does tardiness** over mine.’

Chapter 9 Non-declarative clauses

The subject of this chapter is non-declarative clauses in Buwal. Section 9.1 will deal with imperative clauses. Negation of both verbal and verbless clauses as well as imperatives will be discussed in Section 9.2. Finally interrogative clauses, including polar interrogatives, content interrogatives and tag questions will be described in Section 9.3.

9.1 Imperative clauses

In Buwal, imperative mood is marked on the verb. How this mood is marked is summarised in Table 9.1 below. I am using ‘mood’ to refer to the speech act value of an utterance such as declarative (indicative), interrogative and imperative. Imperative mood marking is used to express various kinds of deontic (obligation) modality.

As Table 9.1 shows, 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 (for example the jussive marker cannot be found with second person), therefore they could be regarded as comprising a single paradigm. However, since the marking strategies and semantics are different for each type, the three types will be treated separately. Second person imperatives will be referred to as IMPERATIVE (see Section 9.1.1) and first person imperatives as HORTATIVE (see Section 9.1.2) following Timberlake (2007: 318). Whilst JUSSIVE is often used for both first and third person imperatives (Palmer 2001: 81), here it will only be used for third person (see Section 9.1.3). There are no first person singular imperative clauses in Buwal.

Table 9.1: Buwal imperative mood marking

Mood	Person/Number	Subject Agreement Marking	Verbal Affixes
Imperative	2SG	Optional	∅-
	2PL	Yes	
Hortative	1INCL	Infinitive marker <i>ɨ</i>	- <i>āk^wā</i>
	1DUAL	No	- <i>w</i> *
Jussive	3SG	No	<i>mā-</i>
	3PL	Yes	

*The dual hortative suffix only applies to the verb ‘go’.

9.1.1 Imperative

According to Payne (1997: 303), IMPERATIVES are used to directly command the addressee to perform some action. The addressee is usually the second person, either singular or plural. In Buwal, the form of the verb stem used in imperative constructions is the unmarked form (see Section 6.1.3). The tone on both the verb stem and the subject agreement markers does not vary in imperative clauses. For second person singular, the subject agreement marker is optional (9.1a). When it is included, the sense is of a mitigated order or the giving of advice (9.1b).

- (9.1) a. *Gway* , *ndaha* *a* *wata* *naka* *!*
 g^wāj ndā -xā á wātā nākā
 pal go -VNT.DIST PREP1 compound 1SG.POSS
 ‘Pal, come to my compound!’ (NF4-SN:3.2)
- b. *Hwa* *ɲterekey* *ende* .
 x^wā- ntàr -ēkēj éndē
 2SG.SBJ- pay -1SG.IOBJ like.this.PROX
 ‘You (should) pay me like this.’ (DE18-SE:18.5)

The second person singular subject agreement marker is obligatory in negative imperative clauses (9.2).

- (9.2) *Hwa* *hey səkɰaw* !
 x^wā- xēj sk^wāw
 2SG.SBJ- run NEG
 ‘Don’t run away.’ (NH13-SN:2.10)

For the second person plural, the subject agreement marker is obligatory in both affirmative (9.3a) and negative (9.3b) imperative clauses.

- (9.3) a. *hune* *kwakwab* *ma* *a* *yam* *a* *yam* *!*
 x^wné- k^wāk^wāḃ 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- gàɓ k^wāw
 2PL.SBJ- beat NEG
 ‘Don’t beat (him)!’ (C1-SN:46.3)

9.1.2 Hortative

In Buwal the hortative involves the first person dual and the first person plural inclusive. First person plural inclusive hortative clauses will be described in Section 9.1.2.1. The dual form is quite restricted and only applies to the verb ‘go’. For other verbs indicating first person dual hortative, a complex structure of the dual form of ‘go’ plus the infinitive form of the main verb must be used. This will be discussed further in Section 9.1.2.2.

9.1.2.1 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 *ɲ*, which is used to form the infinitive (see Section 10.1.1.4), before the verb stem. The first person inclusive collective suffix *-ak^wā* (see Section 3.2.1.4) is also attached to the verb stem (9.4 a & b).

- (9.4) a. *ɲ tewakwa* *ujek na eze* .
 ɲ tɛw -āk^wā wjɛk nà ézɛ
 INF carry -1INCL.COL hut now therefore
 ‘Let’s carry the root (lit. hut) now therefore.’ (DP7-SN:2.6)
- b. *ɲ lamakwa* *ujek tewtew* !
 ɲ lām -āk^wā wjɛk tɛw-tɛw
 INF build -1INCL.COL hut all
 ‘Let’s all build a house.’ (LL10-SE:64)

In Buwal the special hortative form of the verb ‘go’ is *āzā*. The first person inclusive collective marker is attached to the stem as for other verbs but there is no infinitive marker (9.5 a & b). The non-hortative form of ‘go’ is *ndā*. Other Central Chadic languages

such as Mina (Frajzyngier and Johnston 2005: 242) and Kapsiki (Smith 1969: 129) also have irregular stems for hortative ‘go’.

- (9.5) 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-* (9.6b) and the third person jussive marker *mā-* (9.6c) with resulting variations in meaning.

- (9.6) 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 get 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 (9.5a & 9.7). This does not appear to affect the meaning of the clause.

- (9.7) *Aza* *ŋ* *sasərakakwa* *dəraf* *ara* *tata* .
āzā *ŋ* *sàsɾàk* *-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)

9.1.2.2 First person inclusive dual

Only the special hortative stem *āzā* ‘go’ can take the first person dual hortative suffix.

The stem can either occur alone (9.8a) or preceded by the imperfective (9.8b) or the jussive prefixes (9.8c) with similar changes in meaning to those for the first person plural inclusive illustrated in (9.6 a-c) .

- (9.8) 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 (9.9 a & b).

(9.9) a. *Maza* *a wata* .
mā- āzā -w á wātā
 JUS- go.HORT 1DUAL.HORT PREP1 compound
 ‘Let the two of us go home!’ (NF3-SN:4.3)

b. *Kaza* *ama gezleŋ may*
kā- āzā -w á mā gēḷéŋ máj
 IPFV- go.HORT -1DUAL.HORT PREP1 edge summit TAG.IMP.POL
cemey?
tséméj
 TOP.CON
 ‘Let the two of us 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 (9.10 a & b). An infinitive following the declarative form of the verb ‘go’ *ndā* would normally be interpreted as expressing the purpose of the movement (see Section 10.1.5.10). However for the hortative, there may be no movement involved as in example (9.10b). This is evidence that this structure has become grammaticalised.

(9.10) 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* .
kā- āzā -w íj wlàk -zā
 IPFV- go.HORT -DUAL.HORT INF think -TRANS
 ‘Let the two of us be thinking about it.’ (GE22-SE:5.10)

9.1.3 Jussive

The jussive in this description of Buwal refers to an imperative involving a third person, either singular or plural. This is marked with the jussive prefix *mā-* (see Section 3.2.1.4).

For third person singular the subject agreement marker is omitted (9.11a), but for third person plural is it included (9.11b).

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

b. *Əy megəre zlan ɲtakwaw .*
 j- mā- grē ḷàn ntāk^wàw
 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 (9.12a) and wishes (9.12b).

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

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

9.2 Negation

There are two main negative markers in Buwal; the plain negative *k^wāw/sk^wāw* (see Section 4.11.1) and the existential negative *ák^wāw/ásk^wāw* (see Section 4.11.2). These two markers are used to negate various types of clauses as described in the sections which follow. Section 9.2.1 deals with negative declarative verbal clauses. Negative imperative

clauses are described in Section 9.2.2. The negation of verbless clauses, including both stative and existential clauses, is the subject of Section 9.2.3. Section 9.2.4 discusses issues relating to the negation of subordinate clauses. Emphatic negation is described in Section 9.2.5. A third negative marker *tàk^wàm* ‘impossible’ (see Section 4.11.3) only occurs in verbal clauses and is covered in Section 9.2.6. Finally, constituent negation is dealt with in Section 9.2.7.

9.2.1 Negative declarative verbal clauses

Declarative verbal clauses are negated with a negative particle which occurs clause finally after any objects or adjuncts and which may be followed by certain sentence adverbs or a question marker (see Section 4.11.4). One of three negative markers may be used; the plain negative *k^wāw/sk^wāw*, the existential negative *ák^wāw/ásk^wāw* or the ‘impossible’ negative *tàk^wàm*. This last negative marker will be described in more detail in Section 9.2.6. This section will deal with the differences in use between the plain and the existential negative markers in declarative verbal clauses.

Having more than one way of marking negation in verbal clauses is not unusual cross-linguistically. There may be variation according to tense and aspect, mood, verbal vs. existential clauses, verbal vs. non-verbal clauses or speech act type (Payne, J. 1985: 222-223; Payne, T. 1997: 282; Miestamo 2005: 15; Ziegelmeyer 2009: 19). Negation in Buwal verbal clauses does not vary in relation to tense/aspect marking as clauses in all tenses and aspects can take either marker. Furthermore, each negative particle can occur with verbs which are either semantically active or stative.

Negation in Buwal is what Miestamo (2005: 7) would call SYMMETRIC in that apart from the negative marker, there are no formal structural differences from the corresponding affirmative clause. For example, Buwal does not use different tense/aspect marking in negative clauses, as had been found in certain other languages (Miestamo 2005: 10).

The difference in use between the two negative markers appears to be pragmatically governed. The examples in (9.13 b & c) and (9.14 b & c) contrast the meaning of the answers given using each type of negative marker to the questions in (9.13a) and (9.14a)

respectively. In (9.13b) the expectation is that the speaker would have eaten food as it was known that he was hungry and planning to eat. His answer counters that. In example (9.14b) the speaker is seen on the road and so it assumed he is going to the market. Once again his answer counters that expectation. From these examples it therefore seems that the plain negative *k^{wāw}/sk^{wāw}* is used for **denial** of a corresponding positive assertion. This is what Frajzyngier (2004: 54) would categorise as a ‘pragmatically dependent clause’ in that it must be interpreted in connection with another proposition.

The Buwal existential negative *ák^{wāw}/ásk^{wāw}* on the other hand, codes a **simple negative assertion** that does not need to be interpreted with reference to a corresponding affirmative clause and is thus ‘pragmatically independent’ (Frajzyngier 2004: 54). For example in (9.13c) there is no expectation that the speaker will have eaten as he is not hungry. Example (9.14c) is said while the speaker is still at home so there is no expectation that he is going anywhere. This marker could be interpreted as meaning ‘it is not the case that...’ or ‘the situation does not exist such that...’.

- (9.13) a. *Hwa kázam uda vaw ?*
 x^{wā}- ká- zàm wdā vāw
 2SG.SBJ- PFV- eat food Q
 ‘Have you eaten food?’ (GE11-SE:11.1)
- b. *Sa kázam uda kwaw .*
 sā- ká- zàm wdā k^{wāw}
 1SG.SBJ- PFV- eat food NEG
 ‘I haven’t eaten food (yet).’ (GE11-SE:11.2)
 (The speaker wants food and is planning to eat.)
- c. *Sa kázam uda akwaw .*
 sā- ká- zàm wdā ák^{wāw}
 1SG.SBJ- PFV- eat food NEG.EXIST
 ‘I haven’t eaten food.’ (GE11-SE:13)
 (The person doesn’t want food.)
- (9.14) a. *Hwa nda a luma vaw ?*
 x^{wā}- ndā á lwmà vāw
 2SG.SBJ- go PREP1 market(ful.) Q
 ‘Are you going to the market?’ (GE11-SE:3.1)

- b. *Sa nda a luma kwaw . Sa nda a wata*
 sã- ndã á lwmà k^wãw sã- ndã á wātã
 1SG.SBJ- go PREP1 market(ful.) NEG 1SG.SBJ- go PREP1 compound
mana .
 mãnã
 mother.3POSS
 ‘I am not going to the market. I am going to my mother's house.’
 (Said on the road while going.) (GE11-SE:3.3-4)
- c. *Sa nda a luma akwaw .*
 sã- ndã á lwmà ák^wãw
 1SG.SBJ- go PREP1 market(ful.) NEG.EXIST
 ‘I don't go to the market.’ (GE11-SE:3.2)
 (Said while the speaker is still at home.)

When the plain negative marker is used, there is usually an implied or explicitly stated alternative state of affairs. For example in (9.14b) the speaker is not going to the market since he is going elsewhere. Example (9.15b) below implies that the speaker is not cultivating, either because he does not know how or because he is doing something else such as pulling up grass.

- (9.15) a. *Hwa kadãs vaw ?*
 x^wã- kã- dãs vãw
 2SG.SBJ- IPFV- cultivate Q
 ‘Are you cultivating?’ (GE11-SE:42.1)
- b. *Sa kadãs kwaw .*
 sã- kã- dãs k^wãw
 1SG.SBJ- IPFV- cultivate NEG
 ‘I don't cultivate.’ (GE11-SE:43.2)
 (Either the speaker does not know how to cultivate or he is doing something else.)
- c. *Sa kadãs akwaw .*
 sã- kã- dãs ák^wãw
 1SG.SBJ- IPFV- cultivate NEG.EXIST
 ‘I am not cultivating.’ (GE11-SE:42.2)

Contini-Morava (1989: 126-127) in her discussion of negation in Swahili invokes the concept of ‘temporal boundedness’ to help explain the difference in meaning of the three negation strategies found there: the suffix *-i* and the particles *ja* and *ku*. She states that *ja* and *ku* describe the negated occurrence as limited in time whereas *-i* is neutral with respect to time limitations. She goes on to say that there are two ways a negative event can be temporally bounded. The first is that the **opportunity** for the positive event to occur is limited in time, meaning that it is not expected to occur at other times (expressed by *ku*). Secondly the **negation** of the event is restricted in time, so that at other times the event would be expected to occur (expressed by *ja*).

The concept of ‘temporal boundedness’ can also be applied to the use of the plain and existential negative markers in Buwal. The use of the existential negative in Buwal appears to be similar to the use of *-i* in Swahili since the negated event is unspecified for time limitation and is likely to persist unchanged (cf Contini-Morava 1989: 126 & 130). For example, in (9.13c) above, the speaker is unlikely to eat any time soon as he is not hungry. In (9.16b), the house still exists and so still has the opportunity to be beautiful. In example (9.17b) the speaker will never know because he refuses to find out. This lack of temporal boundedness reflects the stative-like origin of the existential negative marker. It is used for situations that either never will exist, or will not exist over an extended period of time. This conforms to what Miestamo (2005: 196) notes about negative statements being stative since they refer to a universe in which no change occurs.

The plain negative is used to refer to negated events which are temporally bounded. Unlike Swahili, Buwal does not make a distinction within this category. In example (9.16a) below, the opportunity for the house to be beautiful is over as it has now been destroyed. In (9.13b) it is the negation which is restricted in time, as it is expected that the speaker will eat soon. In (9.17a) the negation is also bounded temporally as once the obstacle to the speaker’s knowledge is removed, he will know.

- (9.16) a. *Ujek anta kádadaɓ kwaw .*
 wjĕk āntā ká- dàdàɓ k^wāw
 house DEF.DET PFV- be.beautiful NEG
 ‘The house was not beautiful.’ (GE11-SE:55.1)
 (The house no longer exists.)
- b. *Ujek anta kádadaɓ akwaw .*
 wjĕk āntā ká- dàdàɓ ák^wāw
 house DEF.DET PFV- be.beautiful NEG.EXIST
 ‘The house was not beautiful.’ (GE11-SE:55.2)
 (The house is still there.)
- (9.17) a. *Sa kanasan kwaw .*
 sá- kǎ- ná- sàɓ k^wāw
 1SG.SBJ- IPFV- FUT- know NEG
 ‘I will not be knowing.’ (GE11-SE:81.1)
 (I want to know but something prevents me.)
- b. *Sa kanasan akwaw .*
 sá- kǎ- ná- sàɓ ák^wāw
 1SG.SBJ- IPFV- FUT- know NEG.EXIST
 ‘I will not be knowing.’ (GE11-SE:81.2)
 (I refuse to know.)

Examples (9.18) and (9.19) illustrate the use of each negation marker in natural spoken data. In (9.18) the speaker is describing the various huts in his compound. He states that his daughter’s hut is not arranged properly. The use of the plain negative marker here implies that this situation will not last forever. Patching it with straw is only a temporary measure.

- (9.18) *Yaw , ujek vedəye aka zeney . Kaw mala*
jàw wjèk vèdjé ákà zēnéj káw mālā
 so(ful.) hut IND.DET.PL EXIST again even(ful.) GEN
heləye na ege , kélemeje kwaw .
xāl -jé nā =égē ká- lām -ējē k^wāw
 daughter -PL 1SG.POSS =PL PFV- arrange -PART NEG
Dap sa dāp ka a ŋkusaf .
dāp sā- dāp ká á nksāf
 patch.up 1SG.SBJ- patch.up ANT PREP1 grass
 ‘Then there are other huts as well. Even for my daughters, it’s **not** arranged (yet). I patch it up with straw for the moment.’ (DE4-SN:7.1-7.3)

In example (9.19) the speaker is recounting the history of a particular clan. Here he is describing their success in war. Wherever they went they did not lose one person. The use of existential negation here emphasizes the fact that nobody **ever** died. The negation is temporally unbounded.

- (9.19) *Kaw a katay , əy kandaha ,*
káw á kátáj j- ká- ndā -xā
 even(ful.) PREP1 where 3PL.SBJ- IPFV- go -VNT.DIST
əy nda , əy dā gham , əy nda aza a wata
j- ndā j- dā yàm j- ndā āzà á wātā
 3PL.SBJ- go 3PL.SBJ- draw war 3PL.SBJ- go IT PREP1 home
celele . Dala tɛŋguleŋ a kefətek akwaw .
tsélélé dālā tɛŋ^wlèŋ á- ká- fték ák^wāw
 not.one.missing someone one 3SG.SBJ- IPFV- lose NEG.EXIST
Dala a kamac akwaw , a taba tata
dālā á- ká- mātš ák^wāw á tábā tātá
 someone 3SG.SBJ- IPFV- die NEG.EXIST PREP1 middle 3PL.POSS
akwaw .
ák^wāw
 NEG.EXIST
 ‘Wherever, they came, they went, they made (lit.drew) war, they came home without one missing. **Not** one person was lost. **No**one died amongst them.’ (NH11-SN:2.11-13)

9.2.2 Negative imperative clauses

This section describes the negation of imperative clauses. Both the plain and existential negative markers can be used to negate imperative clauses in Buwal. As the use of each of these markers can lead to different nuances in meaning according to the type of imperative clause (see Section 9.1), each type will be described separately. Second person imperative clauses will be discussed in Section 9.2.2.1, hortative clauses in Section 9.3.2.2, jussive clauses in Section 9.2.2.3 and finally other clauses that express obligation in Section 9.2.2.4.

9.2.2.1 Second-person imperative

Second person imperative clauses are most frequently negated using the plain negative marker *k^wāw/sk^wāw* (9.20 a & b). Note that for second person singular imperatives the subject agreement marker is obligatory in negative clauses (see Section 9.1.1).

- (9.20) a. *Hwa ja kaŋgaŋ ara kwaw !*
x^wā- dzā kāŋgāŋ ārá k^wāw
2SG.SBJ- hit drum SIM NEG
'Don't hit the drum along the way!' (NF4-SN:3.2)
- b. *Hune gazl kwaw !*
x^wné- gàlɔ́ k^wāw
2PL.SBJ- beat NEG
'Don't beat (him)!' (C10-SN:46.3)

The use of the existential negative *ák^wāw/ásk^wāw* in imperative clauses makes the imperative a strong prohibition whereas with the plain negative it is more like giving advice. The exchange in (9.21) illustrates the difference in use of the two negative markers in second person imperatives. This use reflects the difference in temporal boundedness of both negative markers as discussed in Section 9.2.1 above. In (9.21b) the plain negative marker is used. The person is told not to take the item at that particular time. This situation may possibly change. In (9.21d) on the other hand the person is forbidden to ever take the item and therefore no change is expected.

- (9.21) a. *Sa ηtaba vaw ?*
 sā- ntā -bā vāw
 1SG.SBJ- take -BEN Q
 ‘Should I take it?’ (GE12-SE:2.1)
- b. *Hwa ηta kwaw !*
 x^{wā}- ntā k^{wā}w
 2SG.SBJ- take NEG
 ‘Don’t take it (for now)!’ (GE12-SE:2.2)
- c. *Sa ηtaw !*
 sā- ntā -āw
 1SG.SBJ- take -3SG.DOBJ
 ‘I (will) take it!’ (GE12-SE:3.1)
- d. *Hwa ηta akwaw !*
 x^{wā}- ntā ák^{wā}w
 2SG.SBJ- take NEG.EXIST
 ‘You are **not** to take it (ever)!’ (GE12-SE:3.2)

9.2.2.2 Hortative

Hortative clauses can also be negated using either the plain negative (9.22a & 9.23a) or the existential negative marker (9.22b & 9.23b). The difference in meaning follows the pattern established for declarative verbal clauses (see Section 9.2.1). For the examples in (9.22a) and (9.23b) there is an explicit or implied reason why the positive situation cannot hold. However if the obstacle is removed the situation may change. In examples (9.22b) and (9.23b) the situation is not likely to change for an extended period of time.

- (9.22) a. *Ij lamakwa ujek kwaw .*
 ij lām -āk^{wā} wjēk k^{wā}w
 INF build -1INCL.COL hut NEG
 ‘Let’s **not** build the hut.’ (GE10-SE:5.2)
 (Something is preventing it.)

- b. *ŋ lamakwa ujek akwaw* .
 ŋ lām -āk^{wā} wjēk ák^{wāw}
 INF build -1INCL.COL hut NEG.EXIST
 ‘Let's **not** build a hut.’ (GE10-SE:5.3)
 (The people are moving so it is not needed.)

- (9.23) a. *Azakwa a damaw kwaw* . *Azakwa*
 āzā -āk^{wā} á dāmāw k^{wāw} āzā -āk^{wā}
 go.HORT -1INCL.COL PREP1 bush NEG go.HORT -1INCL.COL
ŋ barla .
 ŋ bārlā
 PREP2 mountain
 ‘Let's **not** go to the bush. Let's go into the mountain.’ (GE12-SE:7.3-7.3)

- b. *Azakwa a damaw akwaw* .
 āzā -āk^{wā} á dāmāw ák^{wāw}
 go.HORT -1INCL.COL PREP1 bush NEG.EXIST
 ‘Let's **not** go to the bush (all day).’ (GE12-SE:7.2)

9.2.2.3 Jussive

Jussive imperative clauses can also be negated using either the plain or the existential negative marker. Like second person imperatives, the use of the existential negative with jussives expresses a strong prohibition (9.24b & 9.25b) whereas with the plain negative conveys advice (9.24a & 9.25a).

- (9.24) a. *Manja kwaw* !
 mā- ndzā k^{wāw}
 JUS- stay NEG
 ‘Let it **not** stay!’ (GE10-SE:8.2)

- b. *Manja akwaw* !
 mā- ndzā ák^{wāw}
 JUS- stay NEG.EXIST
 ‘It is **never** to stay!’ (GE10-SE:8.3)

(9.25) a. *Manda a wata ŋkwa kwaw !*
 mā- ndā á wātā nk^{wā} k^{wāw}
 JUS- go PREP1 compound 2SG.POSS NEG
 ‘Let him **not** go to your compound!’ (GE10-SE:9.2)

b. *Manda a wata ŋkwa akwaw !*
 mā- ndā á wātā nk^{wā} ák^{wāw}
 JUS- go PREP1 compound 2SG.POSS NEG.EXIST
 ‘Let him **never** go to your compound!’ (GE10-SE:9.3)

9.2.2.4 Obligation

There are other types of clauses which can express obligation in Buwal. The first of these involves the verb *dāw* ‘want’ followed by an infinitive complement (see Section 10.1.2.2). This is always negated with the plain negative marker (9.26 a & b).

(9.26) a. *Hwa dāw ŋ rata uzəye mawal ege kwaw .*
 x^{wā}- dāw ŋ rā -ātā wzejé māwəl =égē k^{wāw}
 2SG.SBJ- want INF insult -3PL.DOBJ children man =PL NEG
 ‘You should **not** insult the young men.’ (HT1-SN:1.4)
 (lit. ‘You don’t want to insult the male children.’)

b. *heje dāw ŋ bah səkwaw .*
 xèjé- dāw ŋ bāh sk^{wāw}
 1INCL.SBJ- want INF hide NEG
 ‘...we shouldn’t hide.’ (HT8-SN:7.11)
 (lit. ‘...we don’t want to hide.’)

Another type of clause expressing negation involves the use of the focus particle *séj* ‘except’ occurring at the beginning of a clause (see Section 3.4.4). These clauses can be negated by either the plain (9.27a) or existential negative marker (9.27b) depending on the meaning.

- (9.27) a. *Sey* *hwa* *la* *zlan* *kwaw* .
 séj *x^{wā}-* *lā* *ɣàn* *k^{wā}w*
 except(ful.) 2SG.SBJ- do work NEG
 ‘You must **not** do work.’ (GE10-SE:13.2)
 (lit. ‘Except you do **not** do work.’)
- b. *Sey* *sa* *sa* *akwaw* .
 séj *sā-* *sā* *ák^{wā}w*
 except(ful.) 1SG.SBJ- drink NEG.EXIST
 ‘I must **not** drink (it).’ (GE12-SE:13.2)
 (lit. ‘Except I do **not** drink (it).’)

9.2.3 Negative verbless clauses

As described in Section 8.2 there are two main types of verbless clauses in Buwal, stative and existential. This section describes how each of these types of verbless clauses is negated. Negative stative verbless clauses are dealt with in Section 9.2.3.1, while negative existential clauses are described in Section 9.2.3.2.

9.2.3.1 Stative verbless clauses

Stative verbless clauses can be divided into three types according to the predicate: (i) predicate nominal, (ii) predicate adjective and (iii) predicate prepositional phrase (see Section 8.2.1).

- (i) Predicate nominals are always negated with the plain negative marker *k^{wā}w/sk^{wā}w* (9.28 a & b). This is because such clauses constitute a denial of the corresponding positive assertion. For example (9.28a) counters the expectation that it is that woman and example (9.29) that the donkey is ours.

- (9.28) a. *ara* *wala* *wese* *kwaw* .
 ārā *wālā* *wēsé* *k^{wā}w*
 COP woman DEM.DIST NEG
 ‘...it’s **not** that woman.’ (DP9-SN:2.1)

- b. *sa mba buwal kwaw*
sā mbàw bwāl k^wāw
 1SG.STAT child Buwal NEG
 ‘...I (am) **not** a child of Buwal...’ (BH4-SN:2.23)

Predicate nominals include nouns preceded by the genitive marker *mālā* (9.29).

- (9.29) *berjeŋ ma , mala ŋcene səkwaw .*
bèrdzēŋ má mālā ntsènè sk^wāw
 donkey TOP.EMPH GEN 1EXCL.POSS NEG
 ‘...even the donkey, it is **not** ours.’ (NH12-SN:3.1)

- (ii) Predicate adjectives (including quantifiers and numerals) are generally negated with the existential negative marker *ák^wāw/ásk^wāw* (9.30 a & b). This is because there is no time limit on the situation expressed by the clause.

- (9.30) a. *Kay , mbəy zukwana akwaw .*
káj mbj zk^wāná ák^wāw
 no! 3SG.STAT better NEG.EXIST
 ‘No, he (is) **not** better.’ (LL15-SE:9)
- b. *Dala dakala akwaw .*
dālā dākālá ák^wāw
 money(ful.) a.lot NEG.EXIST
 ‘The money (is) **not** a lot.’ (C6-SN:207)

It is occasionally possible however, for predicate adjectives to be negated with the plain negative if the negated event is to be specified as time limited. For example, in (9.31a), since the sauce is still being eaten, it is still possible that it may yet be pleasing. In (9.31b) however, the negated event is not temporally bounded as there is no chance that the sauce will ever be pleasing since it is gone.

- (9.31) a. *Urey anta ndəram kwaw .*
 wrèj āntā ndràm k^wāw
 sauce DEF.DET pleasing NEG
 ‘The sauce (is) **not** pleasing.’ (GE13-SE:9.2)
 (You see it and are still eating it.)
- b. *Urey anta ndəram akwaw .*
 wrèj āntā ndràm ák^wāw
 sauce DEF.DET pleasing NEG.EXIST
 ‘The sauce (was) **not** pleasing.’ (GE13-SE:9.3)
 (It has already been eaten.)

The adjective *k^wlā* ‘able’ is frequently negated with the plain negative marker (9.32a).

This is because it usually refers to the person’s ability at a particular point in time. If a lack of ability applies over an extended period of time then the existential negative may be used as in example (9.32b). This example refers to the fact that nobody was ever able to kill someone from the speaker’s clan.

- (9.32) a. *Sa kula ŋ hey səkwaw .*
 sā k^wlā ŋ xēj sk^wāw
 1SG.STAT able INF run NEG
 ‘I am **not** able to run.’ (LL11-SE:5)
- b. *Dala kula ŋ jeney akwaw .*
 dālā k^wlā ŋ dzā -ēnèj ák^wāw
 someone able INF kill -1EXCL.DOBJ NEG.EXIST
 ‘**Nobody** (was) able to kill us.’ (NH11-SN:2.2)
 (lit. ‘Someone was **never** able to kill us.’)

(iii) Predicate prepositional phrases can be negated using either the plain (9.33a) or the existential negative marker (9.33b).

- (9.33) a. *kusam na mbəy a man səkwaw .*
 k^wsàm nā mbj á mǎn sk^wāw
 body 1SG.POSS 3SG.STAT PREP1 inside NEG
 ‘...my body was **not** inside.’ (NH14-SN:2.6)

- b. *Əy a wata akwaw* .
 ǰ á wātā ák^wāw
 3PL.STAT PREP1 home NEG.EXIST
 ‘They are **not** at home.’ (LL16-SE:6)

The differences in meaning are consistent with the uses of the negative markers elsewhere. Example (9.34a) counters the expectation that the donkey is in the marsh. Furthermore, there is an implication that it is known to be in another location. Example (9.34b) simply states that the donkey is not in marsh. Example (9.35a) also expresses counter expectation because the person is planning on putting the pot on the fire. The negated event in this case is time limited as it is expected the situation will change. On the other hand (9.35a) simply states that the pot is not on the fire. There is no expectation that it will be put there.

- (9.34) a. *Berjeŋ mbəy ŋ jajaḅ kwaw* .
 bèrdzēŋ mbǰ ǰ dzàdzāḅ k^wāw
 donkey 3SG.STAT PREP2 marsh NEG
 ‘The donkey is **not** in the marsh.’ (GE13-SE:22.3)
 (It’s somewhere else. You know where it is.)

- b. *Berjeŋ mbəy ŋ jajaḅ akwaw* .
 bèrdzēŋ mbǰ ǰ dzàdzāḅ ák^wāw
 donkey 3SG.STAT PREP2 marsh NEG.EXIST
 ‘The donkey is **not** in the marsh.’ (GE13-SE:22.2)
 (You don’t know where it is.)

- (9.35) a. *Gaduda mbəy ata kwahwaw kwaw* .
 gàdwdā mbǰ á tā k^wāh^wāw k^wāw
 pot 3SG.STAT PREP1 on fire NEG
 ‘The pot is **not** on the fire.’ (GE13-SE:23.2)
 (You haven’t put it on yet.)

- b. *Gaduda mbəy ata kwahwaw akwaw* .
 gàdwdā mbǰ á tā k^wāh^wāw ák^wāw
 pot 3SG.STAT PREP1 on fire NEG.EXIST
 ‘The pot is **not** on the fire.’ (GE13-SE:23.3)
 (It is in some undefined place.)

9.2.3.2 Existential clauses

Existential clauses are always negated with the existential negative marker *ák^wāw/ásk^wāw* (9.36 a & b) or the non-contracted version *ákā sk^wāw* (9.36c) (see Section 4.11.2).

- (9.36) a. *Fagwalakw zoney akwaw* .
 fāg^wālāk^w zēnéj ák^wāw
 leprosy again NEG.EXIST
 ‘There was **no** more leprosy.’ (HT4-SN:24.3)
 (lit. ‘Leprosy again **didn’t exist.**’)
- b. *səkan ŋ zam askwaw* .
 skàn íj zàm ásk^wāw
 thing INF eat NEG.EXIST
 ‘...there was **nothing** to eat.’ (TN3-WN:1.6)
 (lit. ‘A thing to eat **didn’t exist.**’)
- c. *Na ndaha , uda aka səkwaw* .
 nā- ndā -xā wdā ákā sk^wāw
 1EXCL.SBJ- go -VNT.DIST food EXIST NEG
 ‘We came, there was **no** food.’ (NH11-SN:1.7)
 (lit. ‘We came, food **did not exist.**’)

This also applies to existential clauses expressing possession (9.37).

- (9.37) *Berjeŋ naka akwaw* .
 bèrdzēŋ nākā ák^wāw
 donkey 1SG.POSS NEG.EXIST
 ‘I don’t have a donkey.’ (LL19-SE:15)
 (lit. ‘My donkey **does not exist.**’)

Note that verbless clauses such as (9.38), which have both an indefinite subject and a prepositional phrase and which are negated with the existential negative, can be analysed in one of two ways. Firstly, these types of verbless clauses can be analysed as containing a negated predicate prepositional phrase clause (9.38a) (see Section 9.2.3.1). Secondly,

they can equally well be analysed as containing a negative existential clause, with the subject being a noun modified by a prepositional phrase (9.36b).

(9.38) a. [Dala]NP [ara sa]Pred *akwaw* .
 dālā á rā sā ák^wāw
 money(ful.) PREP1 side 1SG NEG.EXIST
 ‘I do **not** have money.’ (GE13-SE:25.2)
 (lit. ‘Money (is) **not** with me.’)

b. [Dala ara sa]NP [*akwaw*]Pred .
 dālā á rā sā ák^wāw
 money(ful.) PREP1 side 1SG NEG.EXIST
 ‘I do not have money.’ (GE13-SE:25.2)
 (lit. ‘Money with me **does not exist.**’)

9.2.4 Negation of subordinate clauses

This section discusses the negation of subordinate clauses in Buwal. Different types of subordinate clauses will be described in Chapter 10.

It is possible to negate both a matrix clause and a subordinate clause. In the case of speech reports (9.39 a & b) or relative clauses (9.40 a & b) a negative marker will occur at the end of the subordinate clause as well as on the matrix clause in which it is embedded. This results in the two negative markers following each other; the first negating the subordinate clause, and the second negating matrix clause.

(9.39) a. [Hwa dāw ŋ zlap ca : « [Hwa mbamawal ma
 x^wā- dāw ŋ ʒāp tsá x^wā mbà māwəl má =
 2SG.SBJ- want INF speak TOP 2SG.STAT child man REL=
taŋtaŋ səkwaw]SR » *kwaw*]MC.
 tāŋ-tāŋ sk^wāw k^wāw
 good NEG NEG
 ‘You shouldn’t (lit. don’t want to) say, “You are **not** a good young man.”’
 (HT1-SN:1.8)

- b. [Hwa dāw ŋ deŋza hwa ya : « [Ebe
x^wā- dāw ŋ dèn -zā x^wā- jā èbè
2SG.SBJ- want INF reflect -TRANS 2SG.SBJ- say DEM.MED
ŋghe mawal naka **kwaw**]SR » **kwaw**]MC .
nyē māvāl nākā **k^wāw** **k^wāw**
DEM.PROX husband 1SG.POSS NEG NEG
‘You shouldn’t (lit. don’t want to) think, saying “This one is **not** my
husband.”’ (HT7-SN:1.10)

- (9.40) a. [Heje kasan səkan ma [əy nevelene
xèjé- kā- sà̀n skàn má = jí- ná- vāl -ēnē
1INCL.SBJ- IPFV- know thing REL= 3PL.SBJ- FUT give -3SG.IOBJ
akwaw]RC **səkwaw**]MC .
ák^wāw **sk^wāw**
NEG.EXIST NEG
‘We **don’t** know the thing that they will **not** give him.’ (GE31-SE:7)

- b. [Jeje ege əy kazlap ata dāla ma
dzèdzē = égē jí- kā- ɣāp á tā dālā má =
grandparent =PL 3PL.SBJ- IPFV- speak at on someone REL=
[kadāw ŋ dās **kwaw**]RC **akwaw**]MC .
kā- dāw ŋ dās **k^wāw** **ák^wāw**
IPFV- need INF cultivate NEG NEG.EXIST
‘The grandparents **didn’t** talk about someone who **didn’t** want to
cultivate.’ (GE31-SE:2)

As a result of this distribution, ambiguity may arise (9.41 a & b). Similar ambiguities have been found in other Chadic languages including Tera (Payne 1985: 226) and Goemai (Hellwig 2011: 306). Context can help to determine the meaning. In Buwal, the different use of the two negation markers can be helpful in resolving the ambiguity. For example, the verb *dāw* ‘want’ is most frequently negated with the plain negative marker. This verb appears in the main clause in (9.41a) and the relative clause in (9.41b). Furthermore the speech report in (9.41a) is a predicate adjective clause which would normally be negated with the existential negative (see Section 9.2.3.1). Therefore it is likely that the scope of the negation in (9.41a) is the main clause. For example (9.41b) however, the main clause

would normally be negated using the existential negative (cf 9.40b) and therefore it is likely that the scope of the negative marker in this case is the relative clause. The correct free translation is underlined in each of the examples below.

- (9.41) a. *Hwa dāw ŋ ulakza hwa ya : « Ebe ca ,*
x^{wā}- dāw ŋ wlāk -zā x^{wā}- jā èbè tsá
 2SG.SBJ- want INF think -TRANS 2SG.SBJ- say DEM.MED TOP
pəzek » kwaw .
pzék k^{wāw}
 small NEG
‘You shouldn’t (lit. don’t want to) think saying, “This one is small.”
 OR
 ‘You should (lit. want to) think saying, “This one is not small.”’
 (HT7-SN:1.13)

- b. *A nuna anta jeje ege əy kazlap*
á nwná āntā dzèdzē =égē j- kā- ɓāp
 PREP1 times.past DEF.DET grandparent =PL 3PL.SBJ- IPFV- speak
ata dāla ma kadāw ŋ dās kwaw .
á tā dālā má= kā- dāw ŋ dās k^{wāw}
 PREP1 on someone REL= IPFV- want INF cultivate NEG
‘In olden times, the grandparents talked about someone who **didn’t** want to cultivate.’
 OR
 ‘In olden times, the grandparents **didn’t** talk about someone who wanted to cultivate.’
 (TN3-WN:1.1)

For complement and adverbial clauses no ambiguity arises. Example (9.42a) shows that it is possible to negate the proposition expressed by a complement clause. However, two independent negative clauses separated by a pause are employed to express a double negative meaning (9.42b).

- (9.42) a. *Sa kadāw hwa deŋza ma kwaw .*
sá- kā- dāw x^{wā}- dèŋ -zā mā k^{wāw}
 1SG.SBJ- IPFV- want 2SG.SBJ- reflect -TRANS problem NEG
 ‘I **don’t** want (that) you think about the problem.’ (GE31-SE:9)

- b. *Sa kadāw kwaw , hwa deŋza ma kwaw .*
 sá- kǎ- dāw k^wāw x^wā- dèŋ -zā mā k^wāw
 1SG.SBJ- IPFV- want NEG 2SG.SBJ- reflect -TRANS problem NEG
 ‘I **don’t** want that you **not** think about the problem.’ (GE31-SE:11)
 (lit. ‘I **don’t** want it, you **don’t** think about the problem.’)

For adverbial clauses also, two independent clauses separated by a pause must be used if both propositions are negated (9.43a). The same strategy is used when the main proposition is negative and the adverbial proposition is positive (9.43b).

- (9.43) a. *A sasam akwaw , mavay kélem səkan ma tan̄tan̄*
 ā- sàsām ák^wāw màvāj ká- lè̄m skàn má = tǎŋ-tǎŋ
 3SG.SBJ- rejoice NEG.EXIST because PFV- get thing REL= good
akwaw .

ák^wāw

NEG.EXIST

‘He doesn’t rejoice, because he did **not** get something good.’

(GE31-SE:32)

- b. *Dala a bal mpe kwaw , ndar a gal dakala .*
 dālā ā- bāl mpè k^wāw ndár ā- gāl dākālā
 someone 3SG.SBJ- chop tree NEG so.that 3SG.SBJ- grow a.lot
 ‘Someone doesn’t chop the tree, so that it (wil) grow a lot.’ (GE31-SE:27)

9.2.5 Emphatic negation

The focus particle *káw* ‘even’ (see Section 3.4.4) may precede the existential negative marker to emphasis negation (9.44 a & b). This cannot occur with the plain negative marker.

- (9.44) a. *Sa dāwba kan zeney kaw akwaw .*
 sǎ- dāw -bā kàn zēnéj káw ák^wāw
 1SG.SBJ- want -BEN thing again even(ful.) NEG.EXIST
 ‘I **don’t** want anything more **even a little bit**.’ (LL13-SE:36)

- b. *Baba naka kála lekwal kaw akwaw* .
 bābā nākā ká- lā lèk^wál káw ák^wāw
 father(ful.) 1SG.POSS PFV- do school(fr.) **even(ful.)** NEG.EXIST
 ‘My father has **not** done any school **not even a little.**’ (GE32-SE:3)

9.2.6 ‘Impossible’ negation

The negative word *tàk^wàm* ‘impossible’ can be used to negate verbal clauses expressing the impossibility of an event taking place (9.45 a & b).

- (9.45) a. [*Hal na a lem landa a pes*
 xāl nā ā- lèm lā- ndá á pès
 daughter 3SG.POSS 3SG.SBJ- get NOM.ACT- go PREP1 day
mbaca a lekwal takwam mavay mbəy kulaskwaw.
 mbācá á lekwal **tàk^wàm** māváj mbj k^wlāsk^wāw
 today PREP1 school **impossible** because 3SG.STAT sick

‘It was **impossible** for my daughter to get to go to school today because she is sick.’ (1921)

(lit. ‘My daughter got the going to school today **impossible**, because...’)

- b. [*əy la ma anta a təwse takwam*
 j- lā mā āntā á twsé **tàk^wàm**
 3PL.SBJ- do problem DEF.DET PREP1 there **impossible**
 ‘...it was **impossible** for them to deal with the problem there.’ (NH15-SN:1.9)
 (lit. ‘They did the problem there **impossible**...’)

This word can also negate bare verb roots.

- (9.46) a. *dā van ca [dā] takwam* .
 dā vān tsá dā **tàk^wàm**
 draw rain TOP draw **impossible**
 ‘Rain, it was **impossible** for it to rain.’ (NH4-SN:2.16)
 (lit. ‘Draw rain, draw **impossible**.’)

- b. *Sa kédene ma ŋ mbaw ende*
 sā- ká- dā -ēnē mā íj mbàw éndē
 1SG.SBJ- PFV- bring -3SG.IOBJ problem INF give.birth like.this.PROX

ca , [mbaw] *takwam*
 tsá mbàw **tàk^wàm**
 TOP give.birth **impossible**
 ‘I caused her problems to give birth like this, it was **impossible** to give
 birth (lit. give birth **impossible**.)’ (C17-SN:5.1)

While the verb in this construction is normally unmarked, it may also be marked with either the future prefix on its own or in combination with the imperfective prefix (9.47 a & b). The perfective prefix or the imperfective prefix alone do not occur with *tàk^wàm*. This is because these aspects imply that the event is either taking place or has already taken place. This interpretation is obviously not semantically compatible with the idea of the proposition being impossible.

(9.47) a. A *nazlar takwam* .
 ā- ná- ǰàr **tàk^wàm**
 3SG.SBJ- FUT- open **impossible**
 ‘It is **impossible** that it will open.’ (GE33-SE:8.1)
 (lit. ‘It will open **impossible**.’)

b. A *kanazlar takwam* .
 ā- kā- ná- ǰàr **tàk^wàm**
 3SG.SBJ- IPFV- FUT- open **impossible**
 ‘It is **impossible** that it will be opening.’ (GE33-SE:8.2)

9.2.7 Constituent negation

Constituent negation is not generally possible in Buwal. The one exception is that adjectives (9.48a) and resultative participles (9.49a) can be negated with the plain negative marker *k^wāw/sk^wāw*. Compare (9.48a) and (9.49b) with (9.48b) and (9.49b) where the existential negative negates the verb and not the adjective.

(9.48) a. Sa ca rəgwac ma pepedék *kwaw* , ma vərə .
 sā- tsā rg^wàts má= pépēdék **k^wāw** má= vrè
 1SG.SBJ- put clothes REL= white NEG REL= red
 ‘I put on clothes which are **not** white, which are red.’ (GE65-SE:28.1)

- b. *Sa ca rəgwac ma pepedək akwaw* .
 s̄a- ts̄a rg^wàts má= pépēdék ák^wāw
 1SG.SBJ- put clothes REL= white NEG.EXIST
 ‘I do **not** put on clothes which are white.’ (GE65-SE:28.2)
- (9.49) a. *Sa kegəre la kébebedeye kwaw* .
 s̄a- k̄a- grē lā ká- bàbàd̄ -ējē k^wāw
 1SG.SBJ- IPFV- see field PFV- plough -PART NEG
 ‘I see a field (that is) **not** ploughed.’ (GE14-SE:11.1)
- b. *Sa kegəre la kébebedeye akwaw* .
 s̄a- k̄a- grē lā ká- bàbàd̄ -ējē ák^wāw
 1SG.SBJ- IPFV- see field PFV- plough -PART NEG.EXIST
 ‘I do **not** see a field (that is) ploughed.’ (GE14-SE:11.2)

When an adjective is being negated, the negative marker immediately follows the adjective as in example (9.50) where the indirect object follows. This distribution helps distinguish constituent negation from clausal negation where the negative marker occurs at the end of the clause (see Section 9.2.1).

- (9.50) *A velene kan kadak kwaw a mba anta* .
 ā- v̄al -ēnē k̄an kádàk k^wāw á mbà āntā
 3SG.SBJ- give -3SG.IOBJ thing good NEG PREP1 child 3SG.POSS
 ‘He gives something (that is) **not** good to his child.’ (GE32-SE:9)

9.3 Interrogative clauses

This section describes interrogative clauses in Buwal. Section 9.3.1 discusses different types of polar interrogatives, which in general anticipate a ‘yes’ or ‘no’ answer. Content interrogatives, which are sometimes called ‘information questions’, are dealt with in Section 9.3.2. Finally, tag questions are described in Section 9.3.3.

9.3.1 Polar interrogatives

POLAR INTERROGATIVES, sometimes called ‘yes/no questions’ are used to question the truth value of a proposition, with the expected answer being ‘yes’ or ‘no’ (König &

Siemund 2007: 291; Payne 1997: 295). In Buwal there are four types of polar interrogatives; plain (Section 9.3.1.1), alternative (Section 9.3.1.2), speculative (Section 9.3.1.3) and disconfirmation (Section 9.2.1.3). Answers to polar interrogatives will be discussed in Section 9.3.1.5.

9.3.1.1 Plain polar interrogatives

Polar interrogatives in Buwal are marked with the general question marker *vāw* or the familiar question marker *k^{wá}/sk^{wá}*, both of which occur at the end of the clause (9.51 a & b) (see Section 4.12). Although the majority of the world’s languages show a rising intonation for interrogatives (König & Siemund 2007: 292), in Buwal polar questions do not differ in their intonation from declarative clauses, having a right edge low boundary tone which combines with the mid tone on the marker to produce a mid-falling tone (see Section 2.7.2.1).

- (9.51) a. *A kawan aha nesle vaw ?*
á- k̄ā- wān á xā nēlē vāw
3SG.SBJ- IPFV- lie PREP1 over egg Q
‘Was she sitting (lit. lying) on eggs? (C4-SN:8)
- b. *əy kelene wa a man zeney kwa ?*
j- k̄ā- lā -ēnē wá á m̄ān zēnéj k^{wá}
3PL.SBJ- IPFV- add -3SG.IOBJ milk PREP1 inside again Q.FAM
‘...do they add milk to it as well?’ (C11-SN:73)

The general question marker *vāw* can be used with verbal clauses with any type of tense and aspect (9.52 a-c).

- (9.52) a. *Hejəye ŋghe ege ca , hune kasanata*
xèdzè -jé nyē =égē tsá x^wné- k̄ā- sàñ -āṭā
person -PL DEM.PROX =PL TOP 2PL.SBJ- IPFV- know -3PL.DOBJ

vaw ?

vāw

Q

‘These people, do you know them?’ (NH7-SN:4.1)

b. *hune kájaba zley aza vaw*

x^wnè- ká- jā -bā ɬèj āzá **vaw**

2PL.SBJ- PFV- kill -BEN meat COMPL Q

‘...did you kill yourselves some meat?’ (NF6-SN:3.1)

c. *Əy nezenha na na ŋgha vaw* ?

ǰ- ná- zèn -xā nà nà nyā **vāw**

3PL.SBJ- FUT- return -VNT.DIST now now DEM.MED Q

‘Will they come back right now?’ (LL16-SE:9)

The general question marker can also be used with different types of verbless clauses (9.53 a-d).

(9.53) a. *Ara səkan patakwar vaw* ?

ārā skàn páták^wār **vāw**

COP thing hoof Q

‘Is it an animal (lit. thing of hoov(es))?’ (LL3-SE:30)

b. *Hwa werwer vaw* ?

x^wā wér-wér **vāw**

2SG.STAT healthy Q

‘Are you healthy?’ (LL1-SE:7)

c. *Əy a wata vaw* ?

ǰ á wátá **vāw**

3PL.STAT PREP1 compound Q

‘Are they at home?’ (LL16-SE:4)

d. *Zley kan ŋgha aka vaw*

ɬèj kàn nyā ákā **vāw**

meat thing DEM.PROX EXIST Q

‘Is there this type meat (at this restaurant)?’ (C11-SN:124.1)

(lit. ‘Does the meat of this thing exist?’)

Constituents which are not whole clauses may also be questioned (9.54 a & b).

(9.54) a. *Ata hayak ŋgha vaw ?*
 á tā xājāk nyā vāw
 PREP1 on land DEM.PROX Q
 ‘In this land?’ (NH6-SN:1.1)

b. *Tete vaw ?*
 tété vāw
 enough Q
 ‘Enough?’ (DE7-SN:5.11)

9.3.1.2 Alternative interrogatives

ALTERNATIVE interrogatives, which are a type of interrogative disjunction, usually take the question marker *vāw* on each alternative. The intonation on the first alternative is level high, which is the normal continuation intonation (see Section 2.7.2.1), and on the second alternative mid-falling, the normal right boundary prosody for clauses containing the question marker. It is possible for the second question marker to be omitted (9.55e). The alternatives may be whole clauses (9.55a) or clause constituents such as core arguments of verbal clauses (9.55b), predicates of verbless clauses (9.55c), modifiers (9.55d), obliques (9.55e) or simply a negative marker (9.55f). Verbs cannot constitute the alternatives.

(9.55) a. *Ara dāla vaw , ara səkan bəse vaw ?*
 ārā dālā vāw ārā skàn bsé vāw
 COP someone Q COP thing zero Q
 ‘Is it someone or is it a simple (lit. zero) thing?’ (LL3-SE:24)

b. *Hwa dāwba ŋ saba say vaw , yam vaw ?*
 x^{wā}- dāw -bā íj sà -bā sáj vāw jàm vāv
 2SG.SBJ- want -BEN INF drink -BEN tea(ful.) Q water Q
 ‘Do you want to drink tea or water?’ (LL34-SE:5)

- c. *Ma zam zley ŋgha ca , pataw vaw , həza vaw ?*
 má = zàm ʒèj nyā tsá pátáw vāw xzā vāw
 REL= eat meat DEM.PROX TOP cat(ful.) Q dog Q
 ‘The one which ate this meat, is it a cat or a dog?’ (GE15-SE:82.1)
- d. *ŋkwaḅ tata anta ca , a nda kalkal a*
 nk^wāḅ tātá āntā tsá ā- ndā kalkāl á
 mind 3SG.POSS DEF.DET TOP 3SG.SBJ- go equal(ful.) PREP1
medédé vaw , parpar parpar vaw .
 mēdēdē vāw párpār párpār vāw
 successive.ones Q different different Q
 ‘...their state of mind, does it goes equally for each successive one or differently?’ (HT4-SN:14.1)
- e. *Hwa nda a ŋgas vaw , a muta ?*
 x^wā- ndā á ŋgās vāw á mwta
 2SG.SBJ- go PREP1 foot Q PREP1 car(fr.)
 ‘Are you going by foot or by car?’ (LL34-SE:4)
- f. *Əy kávalzaba aza cekudé ca aka vaw ,*
 j- ká- vəl -zā -ḅā āzá tsék^wdē tsá ákā vāw
 3PL.SBJ- PFV- give -TRANS -BEN COMPL a.little.bit TOP EXIST Q
akwaw vaw ?
 ák^wāw vāw
 NEG.EXIST Q
 ‘Did they give a litte bit, or not?’ (C10-SN:37)
 (lit. ‘Does a little bit (that) they gave exist, does it not exist?’)

9.3.1.3 Speculative interrogatives

SPECULATIVE polar interrogatives express doubt or question the truth of the proposition expressed by the clause but do not necessarily demand an answer (9.56 a & b). They are formed using the question marker *vāw* preceded by a speculative modal marker *ká* (see Sektion 4.13.1). There is frequently also a modal adverb expressing speculative epistemic modality (see Section 3.4.3) present in the clause (9.56a and 9.57 a & b).

- (9.56) a. *Gəre sa navalahwaw dala ŋkwa a*
gré sã- ná- vâl -ãx^wãw dālã nk^wã á
maybe 1SG.SBJ- FUT- give -2SG.IOBJ money(ful.) 2SG.POSS PREP1
mapat ka vaw ?
mãpát ká vãw
 morning SPEC Q
 ‘**Maybe** I will give you your money tomorrow?’ (GE48-SE:3.4)
- b. *Gəre hwa nda a Makwalaw ca , ŋtekey ara*
gré x^wã- ndã á māk^wãlãw tsá ntã -ëkēj ārá
 maybe 2SG.SBJ- go PREP1 Mokolo TOP take -1SG.DOBJ SIM
ka vaw ?
ká vãw
 SPEC Q
 ‘**Maybe** you (will) go to Mokolo, take me along **maybe**?’ (C12-SN:67.2)

It is also possible that the clause may contain an interrogative pro-form (9.57 a & b) (see Section 4.1.4).

- (9.57) a. *gəre heje laba vanḡay ka vaw ?*
gré xèjé- lã -bã vãḡgáj ká vãw
maybe 1INCL.SBJ- do -BEN **how** SPEC Q
 ‘...what (lit. **how**) do we do **maybe**?’ (C12-SN:28.1)
- b. *Ca gəre ma anta a nagwar pa a*
tsá gré mã āntã ā- ná- g^wār pá á
 TOP **maybe** problem DEF.DET 3SG.SBJ- FUT- arrive at.a.level PREP1
katay ka vaw ?
kátáj ká vãw
 where SPEC Q
 ‘So **maybe** how far will this problem go?’ (NH3-SN:8.2)
 (lit. ‘So **maybe** this problem will arrive at at a level **where maybe**?’)

9.3.1.4 Disconfirmation interrogatives

DISCONFIRMATION polar interrogatives are questions that expect a negative answer. In Buwal these are marked with the dubitative epistemic modal particle *āzà* (see Section 4.13.2) preceding the question marker *vāw* (9.58 a & b).

- (9.58) a. *Hwa zam uda a wata naka ca aka aza vaw ?*
x^wā- zàm wdā á wātā nākā tsá ákā āzà vāw
 2SG.SBJ- eat food PREP1 compound 1SG.POSS TOP EXIST **DUB Q**
 ‘You eat food at my house, is there **really** any?’ (C13-SN:8.1)
- b. *vedəye əy kahan ca hwa dāw ca sa , sa*
vēdjé j- kā- xān tsá x^wā- dāw tsá sā sā-
 other 3PL.SBJ- IPFV- cry TOP 2SG.SBJ- want TOP 1SG 1SG.SBJ-
sasam aza vaw
sàsàm āzà vāw
 rejoice **DUB Q**
 ‘...others are crying, do you **really** want that me, I rejoice?’ (C3-SN:53.4)

This construction is often used for polite requests (9.59).

- (9.59) A *kausta akwaw aza vaw ?*
á- kā- wsta ák^wāw āzà vāw
 3SG.SBJ- IPFV- reduce(ful.) NEG.EXIST **DUB Q**
 ‘Can't it (the price) be reduced?’ (C6-SN:48)

9.3.1.5 Answering polar interrogatives

Polar interrogatives can be answered either positively or negatively. When giving a positive answer the pro-sentence *ājāw* ‘yes’(see Section 4.1.6) may be used either on its own (9.60b) or preceding a clause repeating the proposition in the original question (9.61b).

(9.60) a. « *Kay gwambakw ege hune kájaba zley aza*
káj g^wambāk^w =égē x^wnè ká- jā -bā ʒej āzá
 Oh! toad =PL 2PL.SBJ- PFV- kill -BEN meat COMPL
vaw ? »

vaw

Q

‘Hey toads, did you kill yourselves some meat?’

b. *Gwambakw ege əy ŋgaya : « Ayaw . »*
g^wambāk^w =égē j- ŋgājā ājāw
 toad =PL 3PL.SBJ- QUOT **yes**

The toads said “Yes”.

(NF6-WN:3.1-2)

(9.61) a. *Hwa kulaskwaw vaw ?*
x^wā k^wlāsk^wāw vāw

2SG.STAT sick Q

‘Are you sick?’

b. *Ayaw , sa kulaskwaw .*
ājāw sā k^wlāsk^wāw
yes 1SG.STAT sick

‘Yes, I am sick.’

(LL15-SE:11-12)

The pro-sentence *ājāw* ‘yes’ can also be used to answer negative questions (9.62 a & b) confirming the truth of the negative proposition.

(9.62) a. *Hwa kánda a luma akwaw vaw ?*
x^wā- ká- ndā á lwmà ák^wāw vāw
 2SG.SBJ- PFV- go PREP1 market(ful.) NEG.EXIST Q
 ‘Didn’t you go to the market?’

b. *Ayaw , sa kánda a luma akwaw .*
ājāw sā- ká- ndā á lwmà ák^wāw
yes 1SG.SBJ- PFV- go PREP1 market(ful.) NEG.EXIST

‘Yes, I didn’t go to the market.’

(LL5-SE:17-18)

There is more than one way to give a negative answer to a question. These correspond with the two main types of negation discussed in Section 9.2.1. The pro-sentence *ɲyè* ‘no’, like the plain negative marker *k^{wā}* is used for denial of a corresponding positive assertion (9.63b). It cannot be used to answer negative questions.

(9.63) a. *Hwa nda aka a damaw vaw ?*

x^{wā}- ndā āká á dāmāw vāw

2SG.SBJ- go ACC PREP1 bush Q

‘Did you come back from the bush?’

b. *ɲghe , sa nda aka a damaw kwaw . Sa nda aka*

ɲyè sā- ndā āká á dāmāw k^{wā} sā- ndā āká

no 1SG.SBJ- go ACC PREP1 bush NEG 1SG.SBJ- go ACC

a luma .

á lwmà

PREP1 market(ful.)

‘No, I didn't come back from the bush. I came back from the market.’

(GE11-SE:45.1-3)

This is also illustrated by the following example from a conversation where the first speaker makes a statement that he assumes to be true (9.64a) and the second speaker denies it (9.64b).

(9.64) a. *Hwa kánda ɲ sarata ma a wata*

x^{wā}- ká- ndā ɲ sār -ātā má = á wātā

2SG.SBJ- PFV- go INF visit -3PL.DOBJ REL= PREP1 compound

baba ɲkwa ege yam .

bābā nk^{wā} =égē jám

father(ful.) 2SG.POSS =PL also

‘You have also gone to visit those at your father’s compound.’

b. *ɲghe .*

ɲyè

no

‘No.’

(C4-SN:13-14.1)

The existential negative marker *ák^{wāw}* (see Section 4.11.2) can also be used on its own as a pro-sentence meaning ‘no’, used in contexts of simple negative assertion (9.65b & 9.66b). Note that *ák^{wāw}* can be used to answer both positive (9.65a) and negative questions, confirming the truth of the negative proposition (9.66a).

(9.65) a. *Hwa kánda a ujek gazlavay ata mbaca vaw ?*
x^{wā}- ká- ndā á wjēk gāḷāvāj á tā tāmbācá vāw
 2SG.SBJ- PFV- go PREP1 house God PREP1 on today Q
 ‘Did you go to church (lit. God’s house) today?’

b. *Akwaw , sa kánda akwaw .*
ák^{wāw} sā- ká- ndā ák^{wāw}
 NEG.EXIST 1SG.SBJ- PFV- go NEG.EXIST
 ‘No, I didn’t go.’ (GE11-SE:46.1-2)

(9.66) a. *Macahw a da unaf akwaw vaw , zlanahw*
mātsāx^w á- dā wnáf ák^{wāw} vāw ḷānāx^w
 mother.2POSS 3SG.SBJ- bring heart NEG.EXIST Q sibling.2POSS
ḡkwa ege əy nada unaf akwaw vaw ?
nk^{wā} =égē j- ná- dā wnáf ák^{wāw} vāw
 2SG.POSS =PL 3PL.SBJ- FUT- bring heart NEG.EXIST Q
 ‘Isn’t your mother annoyed, won’t your brothers get annoyed?’
 (lit. ‘Doesn’t your mother bring the heart, won’t your siblings bring the heart?’)

b. *Akwaw .*
ák^{wāw}
 NEG.EXIST
 ‘No (they aren’t annoyed).’ (C5-SN:39-40)

The interjection *káj*, which is borrowed from Fulfulde, can also be used to mean ‘no’. It can be used for both types of negation (9.67b & 9.68b).

- (9.67) a. *Hwa kadāw uda vaw ?*
 x^{wā}- k̄- d̄aw wdā vāw
 2SG.SBJ- IPFV- want food Q
 ‘Are you wanting food?’
- b. ***Kay** sa kadāw uda **kwaw** .*
káj sá- k̄- d̄aw wdā k^{wāw}
no! 1SG.SBJ- IPFV- want food NEG
 ‘No, I am **not** wanting food.’ (GE8-SE:7.1&3)
- (9.68) a. *Hwa kazam uda a urey zley gamtak vaw ?*
 x^{wá}- k̄- zàm wdā á wrèj ʒèj gámṭāk vāw
 2SG.SBJ- IPFV- eat food PREP1 sauce meat chicken Q
 ‘Are you eating fufu with chicken meat sauce?’
- b. ***Kay** , sa kazam uda a urey zley gamtak **akwaw** .*
káj sá- k̄- zàm wdā á wrèj ʒèj gámṭāk ák^{wāw}
no! 1SG.SBJ- IPFV- eat food PREP1 sauce meat chicken NEG.EXIST
 ‘No, I am not eating fufu with chicken meat sauce.’ (LL12-SE:26-27)

The interjection *káj* can be used to answer negative questions (9.69 a & b). Unlike the existential negative (see above), *káj* in this case is used to deny the truth of the negative presupposition.

- (9.69) a. *Zla ŋkwa akwaw vaw ?*
 ʒā nk^{wā} ák^{wāw} vāw
 ox 2SG.POSS NEG.EXIST Q
 ‘Don’t you have a ox?’
- b. ***Kay** , zla naka aka .*
káj ʒā nākā ákā
no! ox 1SG.POSS EXIST
 ‘No, I (do) have an ox.’ (LL19-SE:19 & 21)

9.3.2 Content Interrogatives

CONTENT INTERROGATIVES, which are also called ‘content questions’, ‘constituent questions’, ‘question-word questions, or ‘information questions’, are questions which must be answered by the kind of information specified by the interrogative word (König & Siemund 2007: 291; Payne 1997: 298). In Buwal content interrogatives are formed using interrogative pro-forms which, like the polar question marker (see Section 9.3.1.1), always occur at the end of a clause. This may mean, at times, that a gap is left within the clause in the normal position of the element which the interrogative replaces. A full list of interrogative pro-forms was given in Table 4.4 in Section 4.1.4. These pro-forms replace words of different classes; nouns (Section 9.3.2.1), numerals (Section 9.3.2.2), adjectives (Section 9.3.2.3) and adverbs (Section 9.3.2.4). Each of these types will be described in more detail below.

9.3.2.1 Interrogative pronouns

The major interrogative pronouns are *véméj* ‘what’, *vájáj* ‘who’ and *vékéj* ‘which’.

Questions formed with *véméj* ‘what’ and *vékéj* ‘which’ may be answered with the name of an item (9.70b) or the description of an activity and the name of a category respectively (9.71b).

(9.70) a. *Ara vémey ?*
 ārā véméj
 COP **what**
 ‘**What** is it?’

 b. *Ara həza .*
 ārā xzā
 COP **dog**
 ‘It’s a **dog**.’

(GE15-SE:81.1-2)

(9.71) a *Heje a ɲtara vékey ?*
 xèdzè á ntrā vékéj
 1INCL.STAT PREP1 month **which**
 ‘**Which** month are we in?’

- b. *Heje a ɲtəra pes .*
xèdzè á ntrā pès
 1INCL.STAT PREP1 month **sun**
 ‘We are in the hot time (lit. month of **sun**).’ (LL24-SE:4-5)

The interrogative pronouns listed above replace nouns whatever their function in a clause may be. For example, an interrogative pronoun shown here can function as predicate in a verbless clauses (9.70a) and as a noun modifier (9.71a). In verbal clauses interrogative pronouns can function as core arguments, with examples for subject (9.72a), direct object (9.72b) and indirect object (9.72c). Note that when the subject of a verbal clause is being questioned, this clause becomes a relative clause which then functions as the subject of a predicate nominal clause in which the question word is the predicate (9.72a). When the direct object is questioned, as shown in (9.72b), the question word is simply placed at the end of the clause and a gap left after the verb where the direct object would normally occur.

- (9.72) a. [*Ma dekey wala fagwalakw ɲgha*] *vayay ?*
má= dā -ēkēj wālā fāg^wālāk^w nyā vájáj
 REL= bring -1SG.DOBJ wife leper DEM.PROX **who**
 ‘**Who** (will) bring me the wife of that leper?’ (TN1-SN:2.2)
 (lit. ‘The one who brings me that leper’s wife is who?’)

- b. *Hwa lene a mawal ɲkwa vemey ?*
x^wā- lā -ēnē á māwàl nk^wā véméj
 2SG.SBJ- do -3SG.IOBJ PREP1 husband 2SG.POSS **what**
 ‘**What** are you doing for your husband?’ (DE12-SN:14.5)

- c. *Hwa mbelene urey a vayay ?*
x^wā- mbāl -ēnē wrèj á vájáj
 2SG.SBJ- trim -3SG.IOBJ vegetables PREP1 **who**
 ‘For **whom** are you trimming vegetables?’ (LL17-SE:51)

These interrogative pronouns can also replace obliques, in which case they are preceded by a preposition (9.73).

- (9.73) *Hwa caf a vemey , benjer ?*
 x^wā- tsāf á **véméj** béndzēr
 2SG.SBJ- decorate PREP1 **what** squirrel
 ‘**What** did you decorate with, squirrel?’ (NF2-SN:3.5)

The interrogative pronoun *vétséj* ‘whose’ replaces a noun functioning as a possessor or a possessive pronoun. It may occur alone (9.74a) or be preceded by the genitive marker *mālā* (9.74b) or the preposition *á* (9.74c).

- (9.74) a. *Hwa mbal urey vecey ?*
 x^wā- mbāl wrèj **vétséj**
 2SG.SBJ- pluck vegetables **whose**
 ‘**Whose** vegetables are you trimming?’ (LL17-SE:50)
- b. *Ujek ma tuwah ŋgha mala vecey ?*
 wjèk má= twáx nyā **mālā vétséj**
 hut REL= great DEM.PROX GEN **whose**
 ‘**Whose** is this great hut?’ (GE3-SE:34)
- c. *Əy káŋkəɗaw wende zeney a vecey ?*
 j- ká- nkɗaw wéndé zēnéj **á vétséj**
 3PL.SBJ- PFV- burn IND.DET.SG again PREP1 **whose**
 ‘**Whose** other ones did they burn as well?’ (LL56-SE:8)

There are two interrogative pronouns which question a location, *váj* and *kátáj*. Each of these is always preceded by a preposition, most frequently *á* (9.75a), but *ŋj* is also possible (9.75b).

- (9.75) a. *Əy dāk a vay ?*
 j dāk **á váj**
 3PL.STAT gone PREP1 **where**
 ‘**Where** did they go?’ (LL6-SE:7)

- b. *a nda aka ta ŋ katay ?*
 ā- ndā āká tá ŋ kátáj
 3SG.SBJ- come ACC by PREP1 where
 ‘...what direction (lit. by **where**) did he come from?’ (C10-SN:3.2)

The interrogative pronoun *váj* is used for destinations in a different location from the questioner (9.76a). On the other hand, *kátáj* is used for a source location (9.76b) or the location of an object (9.76a). It can also be used for a destination if it is identical with the location of the questioner. For example to the question in (9.76b) the addressee could reply ‘I am coming here to your place.’

- (9.76) a. *Ujek ŋkwa a katay ?*
 wjĕk nk^{wā} á kátáj
 house 2SG.POSS PREP1 where
 ‘**Where** is your house?’ (LL6-SE:1)

- b. *Hwa nda a katay ?*
 x^{wā}- ndā á kátáj
 2SG.SBJ- go PREP1 where
 ‘**Where** are you going?’ (GE3-SE:10)

9.3.2.2 Interrogative pro-numeral

The interrogative pro-numeral *vánáj* ‘how many’ replaces a number and can occur in any function that a numeral can such as a noun modifier (9.77a), the predicate of a verbless clause (9.77b) and a secondary predicate (9.77c).

- (9.77) a. *Gwaygwaya a la wan vanay ?*
 g^{wāj}g^{wāj}ā ā- lā wān vánáj
 festival 3SG.SBJ- do day how.many
 ‘**How many** days does the festival last?’ (LL46-SE:15)

- b. *Weləye anta ege vanay ?*
 wālā -jé āntā =égē **vánáj**
 wife -PL 3SG.POSS =PL **how.many**
 ‘**How many** wives does he have?’ (GE3-SE:52)
 (lit. ‘His wives are **how many**?’)

- c. *Ŋgəzleŋ ŋkwa kézeŋeye vanay ?*
 ŋgɛzɛŋ nk^wā ká- zēŋ -ējē **vánáj**
 peanut 2SG.POSS PFV- weigh -PART **how.many**
 ‘**How much** did your peanuts weigh?’ (GE3-SE:53)

The answer to a question with *vánáj* ‘how many’ (9.78a) must be a numeral (9.78b) and therefore the pro-form can only be used to refer to count nouns. The amount of mass nouns is questioned using *vánǵáj* ‘how’ (see Section 9.3.2.3 below).

- (9.78) a. *Hejəye vanay ?*
 xèdzè -jé **vánáj**
 person -PL **how.many**
 ‘**How many** people (are there)?’ (GE3-SE:54.1)
 (lit. ‘The people are **how many**?’)

- b. *Hejəye mahkad .*
 xèdzè -jé **māxkád**
 person -PL **three**
 ‘There are **three** people.’ (GE3-SE:54.2)
 (lit. ‘The people are **three**.’)

9.3.2.3 Interrogative pro-adjective

The interrogative pro-adjective *vánǵáj* ‘how’ can replace an adjective functioning as the predicate of a verbless clause (9.79a) or as a secondary predicate (9.79b).

- (9.79) a. *Ma a wata nkune ege yam vɔŋgay ?*
 má= á wātā nk^wnè =égē jám vɔŋgáj
 REL= PREP1 home 2PL.POSS =PL also **how**
 ‘**How** is your family as well?’
 (lit. ‘The ones at your home also are **how**?’) (C5-SN:5)
- b. *Jem anta a nja vɔŋgay ?*
 dzèm āntā ā- ndzā vɔŋgáj
 length 3SG.POSS 3SG.SBJ- sit **how**
 ‘**How** long is it?’ (LL28-SE:28)
 (lit. ‘Its length sits **how**?’)

When enquiring about the amount of a mass nouns (9.80a) or the size of something (9.81a) the word *xámá* ‘amount/size’ may precede *vɔŋgáj* ‘how’. In this case the answer will either be a quantifier (9.80b) or an adjective expressing dimension (9.81b).

- (9.80) a. *Vakw anta hama vɔŋgay ?*
 vāk^w āntā xámá vɔŋgáj
 sand DEF.DET **amount how**
 ‘How much sand is there?’ (GE3-SE:55.1)
 (lit. ‘**How** is the **amount** of sand?’)
- b. *Dakala .*
 dākālá
 a.lot
 ‘A lot.’ (GE3-SE:55.2)
- (9.81) a. *Jem wala nkwa , mbəy hama vɔŋgay ?*
 dzèm wālā nk^wā mbj xámá vɔŋgáj
 height wife 2SG.POSS 3SG.STAT **size how**
 ‘How tall is your wife?’ (GE3-SE:55.8)
 (lit. ‘Your wife’s height, **how** is its **size**?’)
- b. *Mbəy def .*
 mbj déf
 3SG.STAT short
 ‘She is short.’ (GE3-SE:55.9)

When enquiring about the state of a referent apart from size or amount, the word *gàr* ‘state’ may precede *váŋgáj* ‘how’ (9.82 a & b).

- (9.82) a. *Yam anta gar vaŋgay ?*
jàm āntā gār váŋgáj
 water DEF.DET **state** **how**
 ‘**How** is the **state** of the water?’ (GE3-SE:56.10)
- b. *Dedəwek .*
dédwēk
 bitter
 ‘Bitter.’ (GE3-SE:56.11)

9.3.2.4 Interrogative pro-adverb

The interrogative pro-form *váŋgáj* ‘how’, as well as functioning as a pro-adjective can also function as a pro-adverb specifying manner (9.83 a & b). It is not surprising that there is this overlap of functions since adjectives in Buwal can also function adverbially (see Section 3.3.3.1).

- (9.83) a. *Hwa káwan vaŋgay ?*
x^wā- ká- wān váŋgáj
 2SG.SBJ- PFV- sleep **how**
 ‘**How** did you sleep?’ (GE3-SE:30)
- b. *ŋgama ege əy zlapza kusam ca vaŋgay ?*
ŋgámà =égē j- ʒāp -zā k^wsàm tsá váŋgáj
 friend =PL 3PL.SBJ- speak -TRANS body TOP **how**
 ‘**How** do friends greet each other?’ (LL47-SE:11)

The interrogative pro-adverb *vépéj* ‘when’ replaces adverbs or prepositional phrases with a temporal meaning (9.84 a & b).

- (9.84) a. *Hwa nayaḅ rəgwac ege vepɛy ?*
 x^wā- ná- jāḅ rg^wats =égē **vépéj**
 2SG.SBJ- FUT- wash clothes =PL **when**
 ‘**When** will you wash the clothes?’ (GE3-SE:29)
- b. *Əy cahwaw zlam anta vepɛy ?*
 j- tsā -āx^wāw ɬàm āntā **vépéj**
 3PL.SBJ- put -2SG.IOBJ name DEF.DET **when**
 ‘**When** did they give you the name?’ (LL50-SE:8)

There is more than one way of expressing ‘why’ in Buwal. Firstly, the interrogative pronoun *véméj* ‘what’ can be used as a pro-adverb with this kind of meaning. It can either occur on its own (9.85 a & b) or be preceded by either the preposition *màvāj* (or *ɲgam* borrowed from Fulfulde) ‘because’ (9.85a) or *á tã* ‘on’ (9.86b). In this case it is the reason for or the cause of something that is being questioned.

- (9.85) a. *Hwa ja ula vemey ?*
 x^wā- dzā wlā **véméj**
 2SG.SBJ- hit neck **what**
 ‘**Why** are you crying out (lit. hit neck)?’ (NF5-SN:2.6)
- b. *Hwa la səkan ma da ebe vemey ?*
 x^wā- lā skàn má dā èbè **véméj**
 2SG.SBJ- do thing REL= resemble DEM.MED **what**
 ‘**Why** do you do things like (lit. which resemble) this?’ (NH3-SN:2.5)
- (9.86) a. *Hwa pəreslene la anta aza mavay vemey ?*
 x^wā- pràɬ -ēnē lā āntā āzá **màvāj véméj**
 2SG.SBJ- seize -3SG.IOBJ field 3SG.POSS COMPL **because what**
 ‘**Why** (lit. **because of what**) did you seize his field?’ (GE3-SE:42)
- b. *Hwa gazl mba anta ata vemey ?*
 x^wā- gəlɟ mbà āntā á tã **véméj**
 2SG.SBJ- beat child 3SG.POSS **PREP1 on what**
 ‘**Why** (lit. **on what**) do you beat his child?’ (GE3-SE:6)

Another complex form involving the preposition *ŋ* followed by the destination interrogative pronoun *váj* is used to question the purpose of an action and could be translated in English as ‘for what purpose?’ (9.87 a & b). There is usually a negative connotation associated with the action.

- (9.87) a. *Gway , hwa bedžekey ka ŋ vay !*
g^wāj x^wā- bàď -zā -ēkēj ká ŋ váj
 pal 2SG.SBJ- deceive -TRANS -1SG.DOBJ ANT **PREP2 where**
 ‘Pal, **for what purpose** did you deceived me?’ (NF2-SN:3.3)
- b. *Hwa zam uda aza tewtew ŋ vay ?*
x^wā- zàm wdā āzá téw-téw ŋ váj
 2SG.SBJ- eat food COMPL all **PREP2 where**
 ‘**For what purpose** did you eat up all the food?’ (GE3-SE:46)

9.3.3 Tag Questions

In Buwal there are two major types of tag questions. Both of these are marked with a variety of clause final markers (see Section 4.1.5). The first type, confirmation questions, are discussed in Section 9.3.3.1. Imperative tag questions are then dealt with in Section 9.3.3.2.

9.3.3.1 Confirmation tag questions

A CONFIRMATION TAG QUESTION seeks confirmation of the truth of the information contained within the clause. There are two ways of forming confirmation tag questions in Buwal. The first uses the confirmation tag particle *néjé* in clause final position (see Section 4.1.5). The speaker expects an affirmative response as illustrated by the following exchanges (9.88 & 9.89).

- (9.88) a. *a kandəram neye gway ?*
á- kā- ndràm néjé g^wāj
 3SG.SBJ- IPFV- please TAG.CONF pal
 ‘...it was pleasing, **wasn’t it**, pal?’ (C15-SN:29)

b. *A , a ndəram .*
 á a- ndràm
 ah! 3SG.SBJ- please
 ‘Ah, it was pleasing.’ (C15-SN:29-30)

(9.89) a. *Ca a lahwaw hahar a zeney neye ?*
 tsá ā- lā -āx^wāw xáxār á zēnéj **néjé**
 TOP 3SG.SBJ- do -2SG.IOBJ pity PREP1 again TAG.CONF
 ‘So it made you have pity once again, didn’t it?’

b. *A lekey hahar .*
 ā- lā -ēkēj xáxār
 3SG.SBJ- do -1SG.IOBJ pity
 ‘It made me have pity.’ (C8-SN:49-50.1)

Another type of confirmation tag question is formed using the plain negative maker *k^wāw/sk^wāw* followed by the polar question marker *vāw* (9.90a). This construction also affirms the truth of the proposition but in this case there has been doubt earlier so it is more emphatic.

(9.90) a. *a pes ma hwa , a kada ca sa ka ,*
 á pès má= x^wā á- kā- dà tsá sá- kā-
 PREP1 day REL= 2SG.SBJ- 3SG.SBJ- IPFV- cook TOP 1SG.SBJ- IPFV-
sa kayahwaw , kwaw vaw ?
 sá- kā- jā -āx^wāw **k^wāw vāw**
 1SG.SBJ- IPFV- call -2SG.DOBJ NEG Q
 ‘...on the day that you..., she is cooking, I am, I am calling you, **aren’t I?**’

b. *Andəwse , andəwse , sa naghwalzahune .*
 ándwsé ándwsé sā- ná- y^wāl -zā -āx^wnè
 like.that like.that 1SG.SBJ- FUT- show -TRANS -2PL.IOBJ
 ‘(It’s) like that, (it’s) like that, I will show you.’ (C6-SN:72-73)

9.3.3.2 Imperative tag questions

IMPERATIVE TAG QUESTIONS do not solicit a verbal response, but rather a physical one. There are two imperative tag markers in Buwal which are generally used with imperative clauses (see Section 4.1.5). Like other tag markers, imperative tag markers occur clause finally. The first of these markers is *ménéǵē*. This marker is used for very strong commands or orders and it is used when talking to inferiors (9.91 a & b).

- (9.91) a. *Nda η ban aza menege ?*
 ndā ǰ bān āzà ménégē
 go INF wash IT TAG.IMP
 ‘Go and wash there, **won't you?**’ (NF4-SN:3.13)
- b. *Ma yahwaw ca vayay ? Kes aza ete menege?*
 má= jā -āx^wāw tsá vājáj kēs āzà á tē ménégē
 REL= call -2SG.DOBJ TOP who leave IT PREP1 here TAG.IMP
 ‘Who called you? Move away from here, **won't you?**’ (GE6-SE:11.1-2)

The marker *ménéǵē* is derived from *mānā* ‘my/our mother’ plus the plural marker *ǵē* (see Section 4.5.1) and therefore literally means ‘my/our mothers’. It is as though the speaker is calling on the mothers for permission or to make something happen. This idea may be rooted in the ancestor worship which takes place in the Buwal traditional religion (see Section 1.2.4.1). The sense of seeking permission is reflected in the use of this marker with a first person singular subject (9.92).

- (9.92) *Hejəye əy kada ndərey kəda η damaw ,*
 xèdzè -jé ǰ- kā- dā ndrèj kdā ǰ dāmāw
 person -PL 3PL.SBJ- IPFV- bring sorghum towards PREP2 bush
sa nda η zlakaba yam menege ?
 sā- ndā ǰ ǵàk -ā -bā jám ménégē
 1SG.SBJ- go INF sow -VNT.PROX -BEN also TAG.IMP
 ‘People are taking sorghum to (lit. towards) the bush, I will also go and
 sow there, **shall I?**’ (GE6-SE:10)

The second imperative tag marker *máj* or *má* is more polite than *ménégē*. It can be used with superiors and has more of a sense of pleading than of a command (9.93 a & b).

- (9.93) a. *Manda* *ŋ* serzekey *yam máy* ?
 mā- ndā ŋ sār -zā -ēkēj jám **máj**
 JUS- go INF visit -TRANS -1SG.DOBJ also TAG.IMP.POL
 ‘Let him also come and visit me **please?**’ (C12-SN:128.1)
- b. *mpam serek ma taŋtaŋ má* ?
 mpàm sérēk má = tāŋ-tāŋ **má**
 look.for rope REL = good TAG.IMP.POL
 ‘...look for a rope which is good **please?**’ (C13-SN:15.1)

Like *ménégē*, the tag marker *máj* can also be used with clauses with a first person singular subject with a sense of asking permission (9.94).

- (9.94) *Sa* *ba* *yam máy* ?
 sā- bā jám **máj**
 1SG.SBJ- taste also TAG.IMP.POL
 ‘(May) I taste also **please?**’ (GE20-SE:11.1)

Chapter 10 Clause combinations

This chapter describes all the different ways in which clauses may be combined in Buwal, covering both SUBORDINATION and COORDINATION. The forms themselves were introduced in Section 4.14. The chapter begins with a description of subordinate clauses in Buwal (Section 10.1). Sequential clauses, which fall somewhere on the continuum between subordinate and coordinate clauses, are described in Section 10.2. Clause juxtaposition is very common in Buwal and may express a variety of semantic relationships. This is dealt with in Section 10.3. Finally, clause coordination will be covered in Section 10.4.

10.1 Subordination

Subordination can be defined from both structural and semantic perspectives. From the structural perspective, Matthews (1997: 360) defines a SUBORDINATE clause as ‘a clause which is a syntactic element within or of a larger clause.’ This highlights the notion of embedding. Subordinate clauses may also be identified using the notion of dependency, or the impossibility of a clause occurring in isolation (Christofaro 2003: 15). Dependent clauses often differ in their morphosyntactic properties from declarative clauses spoken in isolation. Christofaro (2003: 2), however, defines subordination in purely functional terms as ‘a particular way to construe the cognitive relation between two events, such that one of them...lacks an autonomous profile, and is construed in the perspective of the main event.’ The semantic or pragmatic relationships involved may be coded with a variety of construction types both cross-linguistically and even within the same language. These formal expressions of semantic/pragmatic relationships form a type of syntactic continuum (Christofaro 2003: 20).

10.1.1 Subordinating structures

This section outlines the various structures which are used in Buwal to express different subordinating functions identified with reference to Christofaro’s (2003:2) definition above. According to Thompson et al (2007: 237), there are three devices used for marking subordinate clauses cross-linguistically: (i) subordinating morphemes, (ii) special verb forms and/or (ii) special word order. Christofaro (2003: 53-55) refers to ‘deranked’ verb

forms which may only occur in dependent clauses. She states that a verb form is deranked if TAM or person agreement is either not expressed or expressed differently from independent clauses, or if there is nominal/adjectival marking on the dependent verb (Christofaro 2003: 74).

In Buwal a variety of strategies are available to mark subordinate clauses. They may be used alone or in combination. These strategies include syntactic embedding (Section 10.1.1.1), subordinating morphemes (Section 10.1.1.2), variation in participant coding (Section 10.1.1.3) and special verb forms (Section 10.1.1.4). Examples in the following sections illustrate each of the strategies. Subordinate clauses are marked with square brackets.

10.1.1.1 Syntactic embedding

All subordinate clauses are syntactically embedded by definition. For certain Buwal subordinate clauses, such as the object complement clause below (10.1a), this is the only strategy used. Note that in (10.1b) the direct object marker on the verb replaces the whole proposition found in the complement clause in (10.1a). In this case the subordinate clause uses what Christofaro (2003: 54) calls a ‘balanced’ verb form, reflecting the fact that it does not differ from the form of the verb used in independent clauses.

- (10.1) a. *Sa* *cak* [*vəya* *kála* *anta* *ete*
 sā- *tsāk* *vjā* *ká-* *lā* *āntā* *á* *tē*
 1SG.SBJ- believe *rainy.season* PFV- *do* 3SG.POSS PREP1 *here*
 tew] .
 téw
 finally
 ‘I believe **the rainy season has finally happened here.**’ (GE39-SE:8.3)
- b. *Sa* *cakaw* .
 sā- *tsāk* -*āw*
 1SG.SBJ- believe -3SG.DOBJ
 ‘I believe **it.**’ (GE39-SE:8.4)

10.1.1.2 Subordinating morphemes

Certain subordinating morphemes such as the relative marker (10.2a) function only as subordinators. A full list of subordinators can be found in Section 4.14.1. However certain prepositions (10.2b) (see Section 4.8) or adverbs (10.2c) (see Section 3.4.3) can also be used to mark subordinate clauses. These are described in greater detail in Sections 10.1.4 and 10.1.5.

- (10.2) a. *Hwa san dala [ma mbawha]* .
 x^wā- sà̀n dālā́ **má**= mbà̀w -xā́
 2SG.SBJ- know someone REL= be.born -VNT.DIST
 ‘You know someone **who** was born.’ (HT6-SN:9.9)
- b. *A da unaf [mavay baba anta]*
 ā- dā́ wnáf **mà̀vāj** bā́bā́ ā́ntā́
 3SG.SBJ- bring heart **because** father(ful.) 3SG.POSS
kévelene dala akwaw .]
 ká- vāl -ḗnḗ dālā́ ák^wā́w
 PFV- give -3SG.IOBJ money(ful.) NEG.EXIST
 ‘He is unhappy (lit. brings heart) **because** his father didn’t give him any money.’ (LL33-SE:16)
- c. *[Karba əy nelem dala] , əy kadāw*
kárbā j- ná- lè̀m dālā́ j- kā- dā̀w
even.though 3PL.SBJ- FUT- get money(ful.) 3PL.SBJ- IPFV- want
ŋ la zlan kwaw .
 ŋ́ lā́ ɣ̀àn k^wā́w
 INF do work NEG
 ‘**Even though** they will get money, they don’t want to do work.’ (GE24-SE:5)

10.1.1.3 Variation in participant coding.

In Buwal, participants may be coded differently within a subordinate clause compared with a clause spoken in isolation. For example in a subject relative clause the subject,

whether expressed as a noun phrase or as subject agreement on the verb, is simply omitted (10.3a). In other cases participants may be indexed by a pronoun (10.3b).

(10.3) a. *Ya əy ya hejəye [ma kampam bay] ege.*
jā j- jā xèdzè -jé má= k̄- mpàm bāy =égē
 call 3PL.SBJ- call **person** -PL REL= IPFV- look.for chiefdom =PL
 ‘They called the **people** who were looking for the chiefdom.’
 (NH7-SN:3.1)

b. *Əy la maslaga anta [ma ata təkadʹ*
j- lā málàgá āntā má= á tā tkàdʹ
 3PL.SBJ- make **piece.of.cloth** DEF.DET REL= PREP1 on wrap.around
a mbe .]
á mbē
 PREP1 3SG
 ‘They make **the cloth** which is for wrapping around (the body) (lit. **with**
 it.)’
 (DP1-SN:3.4)

10.1.1.4 Special verb forms

A number of different deranked verb forms (see Christofaro 2003: 53-55) may be used in Buwal subordinate clauses. Firstly, the tense/aspect marking options on the verb may be limited due to the semantics of the situation. For example the subordinator *ndár* ‘so that’, which marks purpose clauses, can only be followed by an unmarked verb (10.4a) or a verb marked with the future prefix (10.4b). The verb cannot be marked with perfective or imperfective aspect because the event which the subordinate clause describes has not yet happened.

(10.4) a. *mala mackwahw əy dèdew [ndar a*
mālā mátsk^wāx^w j- dèdē -āw ndar ā-
 GEN evening 3PL.SBJ- pour.into -3SG.DOBJ **so.that** 3SG.SBJ-
na zadāw zadāw .]
nā zādāw zādāw
ferment night night
 ‘...in the evening they pour it into (pots) **so that it ferments** all night.’
 (DP2-SN:2.4)

- b. [*Ndar hwa nazlar a taba heje tewtew .*]
ndár x^wā- ná- ɣàr á tàbā xèdzè téw-téw
so.that 2SG.SBJ- FUT- **open** PREP1 middle person all
 ‘So that you will be popular (lit. open) amongst all people.’
 (DE12-SN:7.13)

Secondly, there are verb forms used in subordinate clauses which are not marked for tense/aspect or person agreement. The first of these, the INFINITIVE construction, is introduced by the preposition *ɲ*. The verb can take any verbal suffix including: direct or indirect object, transitivity, ventive, auto-benefactive and collective suffixes. The infinitive can be used as a noun modifier expressing purpose (10.5a), as a complement clause (10.5b) or as a purpose adverbial clause (10.5c). Haspelmath (1989: 288) observes that the grammaticalisation of a purposive form to an infinitive is widespread cross-linguistically. He states that purposive meaning often arises from a locative allative meaning or possibly from a benefactive or causal meaning (Haspelmath 1989: 291). Later this purposive form extends its use to different types of complement clauses. This is the diachronic process which appears to have occurred in Buwal, where the infinitive is marked with the locative preposition *ɲ*, which also marks indirect objects with a benefactive role (see Section 8.1.1.3).

- (10.5) a. *a rakha ndarey mavəday sakan [ɲ zam]askwaw .*
ā- rāk -xā ndrèj màvdāj skàn ɲ zàm ásk^wāw
 3SG.SBJ- ask -VNT.DIST sorghum because thing INF eat NEG.EXIST
 ‘...she asked for sorghum because there was nothing to eat.’
 (TN3-WN:1.6)

- b. *Sa kasan [ɲ das ghwarnakw] .*
sá- kā- sànd ɲ dās y^wàrnàk^w
 1SG.SBJ- IPFV- know INF cultivate onion
 ‘I know (how) to cultivate onions.’
 (GE28-SE:50)

- c. *hejəye əy kánda aza [ɲ njen ɲgas]*
xèdzè -jé j- ká- ndā āzá ɲ ndzèn ɲgās
 person -PL 3PL.SBJ- PFV- come COMPL INF follow foot
 ‘...people had already come to follow foot(prints)...’
 (NH9-SN:4.3)

The second non-finite verb form is introduced by the preposition *á tã* ‘on’. This construction most frequently occurs as the predicate of a relative clause and specifies the purpose for which an object is used (10.6a). It can also function as the predicate of a verbless clause (10.6b), or as an adverbial clause (10.6c). Unlike the infinitive introduced by *íj*, a verb introduced by *á tã* cannot be used in complement clauses and so has not grammaticalised to the same extent. It is possible that this type of purposive meaning has arisen from the causal function of this preposition (see Section 7.2.1.4).

- (10.6) a. *Ara mel [ma ata da urey] .*
 ārā mēl má = á tã dà wrèj
 COP oil REL= PREP1 on prepare sauce
 ‘It’s oil **for preparing** sauce.’ (C6-SN:15)
- b. *Ŋgəzleŋ ŋgwayaŋ naka [ata ra] .*
 ŋgɛ̀ɛ̀ŋ ŋg^wájāŋ nākā á tã rà
 ground.peas 1SG.POSS PREP1 on dig
 ‘My ground peas are **for digging**.’ (DP13-SN:4.2)
- c. *Sa dərəzlza la naka aza [ata*
 sā- drèɟ -zā lā nākā āzá á tã
 1SG.SBJ- surround -TRANS field 1SG.POSS COMPL PREP1 on
cap] .
 tsāp
 fence.in
 ‘I surround my field **for fencing (it) in**.’ (GE40-SE:28.12)

A verb unmarked for tense/aspect or person agreement, which is not introduced by a preposition, may be used in absolutive adverbial clauses (10.7) (see Section 10.1.5.11).

- (10.7) [*Slak aka ŋ zlam eze*] , a *kanda eze səkwa .*
 ɬàk āká íj ɬàm ézē á- kã- ndā ézē sk^wá
 tuck ACC PREP2 ear therefore 3SG.SBJ- IPFV- go therefore Q.FAM
 ‘Therefore **tucking** it into his ear, therefore he was going wasn’t he?’
 (NF2-SN:2.19)

Note, finally, that various types of nominalisation were outlined in Section 3.1.3. They will not be discussed further here. Since nominalised constituents can function like other nouns as arguments of a verbal clause, they could be regarded as types of complement clauses.

Table 10.1 below summarises the types of subordinate clauses found in Buwal along with their semantic and formal properties.

Table 10.1: Formal and semantic properties of Buwal subordinate clauses

Subordinate clause category	Formal type	Subordination strategy	Semantic types
Complement	Sentence-like	-Embedding only	-Propositional attitude -Comentative -Knowledge -Immediate perception
		-Jussive	-Obligation -Manipulative
	Reduced sentence-like	-Limited tense/aspect marking	-Desiderative -Obligation
	Infinitive	-Infinitive verb form -Complement subject omitted	-Desiderative -Obligation -Ability -Permission -Achievement -Phasal
-Infinitive verb form -Complement subject expressed		-Manipulative -Ability (teach)	
Speech reports	Direct	-Quotative marker <i>ngājā</i> (opt.) -Utterance verb before comp. (opt.) -Utterance verb after comp (opt.) -No marking (opt.)	

Subordinate clause category	Formal type	Subordination strategy	Semantic types
Speech reports (cont...)	Indirect	-Quotative marker <i>ṅgājā</i> (opt.) -Utterance verb before comp. (opt.) -Utterance verb after comp (opt.) -Variation in pronouns	
	Resumptive	-Quotative marker <i>màtāṅgār</i> + NP -Utterance verb before comp. (opt.)	
Relative	Marked with relative marker	-Relative marker <i>má</i>	
	Sentence-like	-NP omission -Agreement marking -Pronouns	-Subject, Direct Object (3SG non-pausal), Oblique -Direct Object, Indirect Object -Oblique, Possessor
	Deranked	-Participle <i>-á tā</i> + verb	-Attributive -Purpose
	Verbless	-NP omission	-Attributive, Location etc
	Existential	-Existential marker <i>ákā</i> at end of clause - Existential marker <i>ákā</i> following relativised NP	-Subject -Direct object, Indirect object, Oblique, Possessor
Adverbial	Sentence-like	-‘place’ + REL	Locative
		- <i>ánā</i> + REL	Manner – real & hypothetical Example According to
		- <i>xāṅgá</i> ‘as if’ alone - <i>xāṅgá</i> ‘as if’ + REL	Manner-hypothetical Manner-real
		- <i>māvāj/màvdāj</i> ‘because’ + (REL)	Reason
		- <i>á tā</i> + REL	Cause
		- <i>kárbā</i> ‘although’ + (REL) OR <i>évèlè</i> ‘although’	Concessive

Subordinate clause category	Formal type	Subordination strategy	Semantic types
Adverbial (cont...)	Reduced sentence-like	-limited T/A marking	
		-‘time’ + REL OR REL alone	General time reference – simultaneous & sequence
		- <i>á dwzé</i> ‘after’ + (REL)	Specific time reference ‘after’
		- <i>már</i> ‘before’	Specific time reference ‘before’
		- <i>dàkà</i> ‘since’ + REL OR <i>mār āká</i> ‘beginning from’ + REL	Specific time reference ‘since’
		- <i>xá</i> ‘until’ + REL	Specific time reference ‘until’
		- <i>màdā</i> ‘if’ OR <i>āndzā</i>	Possible conditional – predictive & hypothetical
		- <i>kēdě</i> ‘perhaps’	Counterfactual conditional
		- <i>káw</i> ‘even’ + (<i>màdā</i> ‘if’)	Concessive conditional
		- <i>káw</i> ‘even’ + INT	Identifinite concessive
		- <i>kēdě</i> ‘perhaps’ + <i>dāw</i> ‘want’ + INF	Substitutive
		- <i>ndár</i> or <i>táp</i>	Purpose
	Deranked	- <i>már</i> ‘before’ + INF	Specific time reference ‘before’
		- <i>māvāj/māvāj</i> + (REL) + INF	Reason (purpose)
		-(<i>ndár</i>) + INF	Purpose (sequence)
		- <i>á tā</i> + non-finite verb	Purpose (simultaneous)
		-verb root + verbal particle	Absolutive - general

Then the major functional types of subordinate clauses and the structures used to express them are now examined in turn, beginning with complement clauses in Section 10.1.2, moving on to speech reports in Section 10.1.3, relative clauses in Section 10.1.4 and finally adverbial clauses in Section 10.1.5.

10.1.2 Complement clauses

A COMPLEMENT clause is a clause that functions as an argument (subject or object) of some other clause (Payne 1997: 313). The structure of Buwal complement clauses in general is discussed in Section 10.1.2.1. The different semantic types of complement clauses and the structures that are used to express them are outlined in Section 10.1.2.2.

10.1.2.1 Structure of complement clauses

Buwal complement clauses have the basic structure given in Table 10.2 below.

Table 10.2: Structure of Buwal complement clauses

Matrix Clause	Complement Clause
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Only object complement clauses are possible in Buwal. The semantic equivalent of a subject complement clause is expressed using either nominalisation (see Section 3.1.3) or the topic-comment structure (see Section 11.2.1) in which the two clauses are juxtaposed. For object complements, the so-called ‘matrix’ clause is often topicalised. As a result, the matrix clause could be thought of as being in juxtaposition with the ‘complement’ clause. However, it is also possible for object complements to occur directly following the matrix verb, with no intervening pause or topic marker (10.8). Evidence for the syntactic embedding of such clauses was given in Section 10.1.1.1.

- (10.8) *Sa kegəre [a katawar a mbe njəwen] .*
sá- kǎ- grē á- kǎ- tāwār á mbē ndzwèn
1SG.SBJ- IPFV- see 3SG.SBJ- IPFV- travel PREP1 3SG true
‘I see that it’s true that he is travelling with him.’ (C12-SN:111.2)
(lit. ‘I am seeing he is travelling with him truly.’)

It is possible for more than one complement clause to be nested (10.9a). However when complement clauses are conjoined they are simply placed in juxtaposition, separated by a pause (10.9b).

- (10.9) a. *Sa dāw [hwa san [mba ŋkwa a gəre [muta*
sā- dāw x^wā- sà̀n mbà nk^wā ā- grē mwtá
 1SG.SBJ- want 2SG.SBJ- know child 2SG.POSS 3SG.SBJ- see car(ful.)
a kehey ata taf]]] .
á- kā- xēj á tā tàf
 3SG.SBJ- IPFV- run PREP1 on road
 ‘I want you to know that your child saw a car running on the road.’
 (lit. ‘I want (that) you know (that) your child saw a car (that) was running
 on the road.’) (GE39-SE:30)
- b. *Hwa gəre [a nda], [a ghwalza a tama*
x^wā- grē ā- ndā ā- y^wāl -zā á tāmā
 2SG.SBJ- see 3SG.SBJ- go 3SG.SBJ- explain -TRANS PREP1 front
hejəye ma ber zlap gazlavay ege]
xèdzè -jé má= bēr ɓāp gāɓāvāj =égē
 person -PL REL= announce speech God =PL
 ‘You see he goes, he explains it in front of people who preach God’s
 word...’ (DE12-SN:17.2)

In contrast to many Chadic languages, Buwal has no overt marker of complementation. Frajzyngier (1996: 88-89) proposes that in Chadic languages complementisers have the function of modality marking as well as marking a syntactic boundary. In Buwal modality is generally expressed either with the use of imperative verb forms (see Section 9.1) or modal adverbs (see Section 3.4.3). Concerning their separating function, Frajzyngier argues that complementisers enable the assignment of arguments to the proper verbs (Frajzyngier 1996: 94). In a language such as Buwal where arguments are relatively fixed in their position in the clause, this function is not as important since there is less ambiguity regarding how arguments map onto verbs.

Buwal complement clauses can be divided into three main types according to the verb forms found: (i) sentence-like, (ii) reduced sentence-like and (iii) infinitival. Examples of the different semantic relationships they may express are given in Section 10.1.2.2.

- (i) Sentence-like complements are those which could stand alone and in which verbs are fully inflected. These are what Christofaro (2003: 54) would call ‘balanced’

complement clauses. In Buwal, verbless clauses may also occur as sentence-like complement clauses. Jussive (see Section 9.1.3) complements also belong to this category.

- (ii) Reduced sentence-like complements contain verbs which are restricted in their tense/aspect marking.
- (iii) Infinitival complements contain verbs in their infinitive form as described in Section 10.1.1.4 above.

10.1.2.2 Semantic types of complement clauses

This section lists the different semantic relationships that exist in Buwal between a predicate, its clausal complement, and the types of complements in terms of the structures that can be used to express them.

(i) Propositional attitude

According to Noonan (2007: 124), PROPOSITIONAL ATTITUDE predicates ‘express an attitude regarding the truth of the proposition expressed as their complement.’ In Buwal, verbs used with this meaning are: *tsāk* ‘believe’, *dèŋ* ‘think/reflect’, *wlāk* ‘think’ and *lāŋgāl* ‘measure/reckon’. These take sentence-like complements (10.10).

(10.10) *Sa cak [hwa kadās ghwarnakw .]*
 sā- tsāk x^wā- kā- dās y^wàrnàk^w
 1SG.SBJ- believe 2SG.SBJ- IPFV- cultivate onion
 ‘I believe you cultivate onions.’ (GE39-SE:10.2)

(ii) Commentative

COMMENTATIVE predicates ‘provide a comment on the complement proposition which takes the form of an emotional reaction or evaluation’ (Noonan 2007: 127). The two verbs in Buwal that can be used in this way are: *xān* ‘cry, mourn’ (10.11) and *dzèjèk^w* ‘regret’.

They take sentence-like complements. The verb *sàsàm* ‘rejoice’ is intransitive and so cannot be used in this way.

(10.11) *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.hill
 ‘We mourn (that) the squirrel has saved (himself) into the termite hill.’
 (NH2-SN:2.5)

(iii) Knowledge and acquisition of knowledge

KNOWLEDGE AND ACQUISITION OF KNOWLEDGE predicates ‘describe the state, or the manner of acquisition of knowledge’ (Noonan 2007: 129). The primary Buwal verb used in this way is *sàn* ‘know’. This verb can express both the ability to perform an action ‘know how’ as well as knowledge of an event or thing. However when *sàn* is used with an ability meaning it always takes an infinitive complement (see point (viii) below). When used with the ‘knowledge’ meaning it takes a sentence-like complement (10.12 a & b). Like most Chadic languages (Frajzyngier 1996: 299), Buwal does not distinguish among various modalities of knowing, such as knowledge acquired through direct experience (10.12a) or through hearsay (10.12b). Perception predicates such as *ɣmē* ‘hear’ and *grē* ‘see’ can also be used with a knowledge sense in addition to their immediate or direct perception meanings (10.13 a & b).

(10.12)a. *Heje wese kásanza [ara ndərey ma nda*
xèdzè wēsé ká- sà̀n -zā ārā ndrèj má = ndā
 person DEM.DIST PFV- know -TRANS COP sorghum REL= come
a wata anta] .
á wātā āntā
 PREP1 house 3SG.POSS
 ‘That person knew it was the sorghum which came from his house.’
 (NH9-SN:5.4)

b. *Sa san [a nanda a Maruwa a mpat]* .
 sā- sà̀n ā- ná- ndā́ á marwa á mpát
 1SG.SBJ- know 3SG.SBJ- FUT- go PREP1 Maroua PREP1 tomorrow
 ‘I know he will go to Maroua tomorrow.’ (GE39-SE:13.7)

(10.13)a. *Kézləme [mavaw a wata dāla]* .
 ká- ɣ̣mē mávāw á wātā́ dālā́
 PFV- hear beer PREP1 house someone
 ‘He heard beer was at someone's house.’ (TN3-WN:1.3)

b. *hwa gəre [a dāw ɲ lem̩ba kan ta zam]* .
 x^wā- grē ā- dāw ɲ lēm̩ -6ā kàn tá zàm
 2SG.SBJ- see 3SG.SBJ- want INF get -BEN thing for eat
 ‘...you see he wanted to get something to eat.’ (C16-SN:26)

(iv) Immediate perception

IMMEDIATE PERCEPTION predicates ‘name the sensory mode by which the subject directly perceives the event coded in the complement’ (Noonan 2007: 142). In Buwal these are: *grē* ‘see’, *sār* ‘look at’, *tsàtsàn* ‘notice’, *ndāw* ‘find/come upon’, *ndzèf* ‘smell’, *ɣ̣mē* ‘hear, feel, understand’ and *ɣ̣àn* ‘taste’. These verbs take sentence-like complements (10.14 a & b). Buwal does not code a distinction between direct and indirect perception, in contrast to many Chadic languages (Frajzyngier 1996: 275-276).

(10.14)a. *heje kegəre [vejəd aka]*
 xèjé- k̄ā- grē védzēd ák̄ā
 1INCL.SBJ- IPFV- see leaf EXIST
 ‘...we see there are leaves...’ (C7-SN:11.1)

b. *Sa njef [zley a kada ata kwahwaw]* .
 sā- ndzèf ɣ̣èj á- k̄ā- dà́ á tā́ k^wāh^wāw
 1SG.SBJ- smell meat 3SG.SBJ- IPFV- cook PREP1 on fire
 ‘I smell meat cooking on the fire.’ (GE39-SE:16.1)

(v) Desiderative

DESIDERATIVE predicates express ‘a desire that the complement proposition be realised’ (Noonan 2007: 132). The main verb in Buwal used to express the desiderative is *dāw*, which can express both ‘like’ and ‘want’. A reduced sentence-like complement is used when the subject of the matrix and subordinate clauses are different (10.15a). The tense/aspect marking is restricted as the situation is presented as not yet realised and so the verb cannot be marked with either the perfective or the imperfective makers. When the subject of the matrix and the subordinate clauses are the same the complement is usually an infinitive (10.15b). The subject of the complement clause cannot be overtly marked in this construction. Frajzyngier (1996: 233) observes that when the subjects are the same, the most economical way of coding them is by not coding overtly. Nevertheless, in Buwal a reduced sentence-like complement is possible with the same subject as the elicited example in (10.15c) shows.

- (10.15) a. *Na kadāw [hune ŋter a ma buwal .]*
ná- kǎ- dāw x^wné- ntèr á mā bwāl
1EXCL.SBJ- IPFV- want 2PL.SBJ- write PREP1 language Buwal
‘We want you to write in the Buwal language.’ (LL3-SE:19)
- b. *A dāw [ŋ ŋtawahwaw]* .
ā- dāw ŋ ntàw -āx^wāw
3SG.SBJ- want INF whip -2SG.DOBJ
‘He wanted to whip you.’ (C16-SN:16)
- c. *Sa dāw [sa nda yam]* .
sā- dāw sā- ndā jám
1SG.SBJ- want 1SG.SBJ- go also
‘I also want to go.’ (GE39-SE:33.3)
(lit. ‘I want (that) I go also.’)

The verbs *dèŋ* and *wlāk* ‘think’ have a desiderative meaning when followed by an infinitive complement (10.16).

- (10.16) əy kedeŋ [ŋ la wasay a gazlavay]
 j- k̄a- d̄eŋ ŋ l̄a w̄as̄aj á ḡaŋz̄āv̄aj
 3PL.SBJ- IPFV- think INF do thanks PREP1 God
 ‘...they are thinking of giving (lit. to give) thanks to God...’
 (HT4-SN:35.1)

(vi) Obligation

OBLIGATION predicates express a type of deontic modality. They can take either reduced sentence-like or infinitive complements. Those taking reduced sentence-like complements involve the use of the verbs *d̄aw* ‘want’ (10.17a) or *l̄em* ‘get’ with a dummy subject. Note that if the subject of the complement clause is third person, the jussive form of the verb is used (10.17b).

- (10.17)a. A d̄aw [hune mbaw day aha jere]
 ā- d̄aw x^wn̄é- mb̄aw d̄aj á x̄a dz̄ēr̄ē
 3SG.SBJ- want 2PL.SBJ- give.birth more PREP1 over locust
 ‘You must reproduce more than the locusts...’ (BH4-SN:1.5)
 (lit. ‘It wants (that) you give birth more than locusts...’)
- b. a kelem [kaw vayay mala zlan ma tuwah].
 ā- k̄a- l̄em k̄aw v̄ájaj m̄a- l̄a ɣ̄àn má = tw̄ax
 3SG.SBJ- IPFV- get even(ful.) who JUS- do work REL= good
 ‘...everyone should do good work.’ (HT6-SN:10.4)
 (lit. ‘...it is getting (that) let each one do good work.’)

When taking an infinitive complement, the verb *d̄aw* ‘want’ can also be used to express obligation or the giving of advice (10.18). The verb *l̄em* ‘get’ when taking an infinitive complement does not express obligation but achievement (see point (x)).

- (10.18) Hwa d̄aw [ŋ rata uzəye mawal ege] kwaw .
 x^wā- d̄aw ŋ r̄ā -ā-t̄ā wzjé m̄aw̄al =égē k^wāw
 2SG.SBJ- want INF insult -3PL.DOBJ children man =PL NEG
 ‘You should not insult the young men.’ (HT1-SN:1.4)

(vii) Manipulative

MANIPULATIVES involve an element of causation between the agent, which is the subject of the matrix clause, and the affected argument, which is the subject of the complement clause (Noonan 2007: 136). The verb *ḥāp* ‘speak/tell’ can be used with the sense of giving an order. The addressee is coded as the indirect object and may be overtly expressed (10.19a). The complement clause, encoding the order, may either be an infinitive (10.19a) or a jussive (10.19b).

- (10.19) a. *Sa zlepenē a [mawal naka ŋ*
sā- ḥāp -ēnē á māwāl nākā ŋ
1SG.SBJ- tell -3SG.IOBJ PREP1 husband 1SG.POSS INF
ndaha] .
ndā -xā
come -VNT.DIST
‘I tell to my husband to come.’ (GE39-SE:35.6)
- b. *Zlepetene [əy mayakza aka]* .
ḥāp -ētēnē j- mā- jāk -zā āká
tell -3PL.IOBJ 3PL.SBJ- JUS- leave -TRANS ACC
‘Tell them that they should leave it there.’ (GE1-SE:21)
(lit. ‘Tell them let them leave it.’)

The other type of manipulative predicate takes an infinitive complement. As above, the subject of the complement clause may be overtly expressed (10.22). Verbs which behave in this way include: *rāk* ‘ask’, *bād* ‘trick’ and *tāk* ‘oblige’. In this case, however, the person being manipulated is coded as the direct object.

- (10.20) *sa karak [hejəye ŋ paɸ ujek naka]* .
sā- kā- rāk xèdzè -jé ŋ paɸ wjēk nākā
1SG.SBJ- IPFV- ask person -PL INF wrap hut 1SG.POSS
‘...I am asking people to thatch (lit. wrap) my hut.’ (DP7-SN:2.3)

(viii) Ability

ABILITY can be expressed through predicates containing the adjective *k^wlá* ‘able’ and the verbs *sàn* ‘know’ and *sàsràk* ‘learn’. Each of these takes an infinitive complement. When the subject of the matrix and the complement clauses are the same, the subject is not coded in the complement clause (10.21 a & b). However, the verb *sàsràk* can also mean ‘teach’ and in this case it is possible to include an overt complement clause subject (10.21c).

(10.21)a. *Mbəy kula [ŋ heḅ baskwar]* .
mbj k^wlá ŋ hēḅ bāsk^wár
3SG.STAT able INF steer bicycle
‘He is able to ride a bicycle.’ (GE1-SE:4)

b. *Sa san [ŋ dās ndərey]* .
sā- sàñ ŋ dās ndrèj
1SG.SBJ- know INF cultivate sorghum
‘I know how to cultivate sorghum.’ (GE39-SE:34.1)

c. *Sa kásasərakzata [uzəye ŋ ja balaŋw]* .
sā- ká- sàsràk -zā -ātā wzjé ŋ dzā bālāŋ^w
1SG.SBJ- PFV- teach -TRANS -3PL.DOBJ children INF hit ball(fr.)
‘I taught the children how to play ball.’ (LL17-SE:16)

(ix) Permission

PERMISSION can be expressed using the adjective *k^wlá* ‘able’ as a predicate with an infinitive complement (10.22).

(10.22) *Hwa kula [ŋ nja aka ete ŋghe]* .
x^wā k^wlá ŋ ndzā āká á tē nyē
2SG.STAT able INF sit ACC PREP1 here DEM.PROX
‘You can (lit. are able to) sit down right here.’ (LL9-SE:9)

(x) Achievement

According to Noonan (2007: 139) ACHIEVEMENT predicates can be either positive, expressing the manner or realisation of achievement, or negative, refer to a lack of achievement. In Buwal these meanings are expressed with the verbs *lèm* ‘get’, *tàl* ‘make an effort’, *ɬàn* ‘try’ and *xēsēŋ* ‘forget’. Each of these takes an infinitive complement (10.23 a & b).

- (10.23)a. *hwa kélem [ŋ mbalaha varvara ŋ*
x^wā- ká- lèm ɲ mbāl -ā -xā vārvārā ɲ
2SG.SBJ- PFV- get INF hold -VNT.PROX -VNT.DIST land INF
hayak ŋkwa a wata] səkɰaw
xājāk nk^wā á wātā sk^wāw
country 2SG.POSS PREP1 home NEG
‘...you didn’t get to take hold of land in your country at home...’
(HT2-SN:4.1)

- b. *Sa dāw [ŋ slanza [ŋ lam ujek]]* .
sā- dāw ɲ ɬàn -zā ɲ lām wjək
1SG.SBJ- want INF try -TRANS INF build hut
‘I want to try to build a house.’
(LL17-SE:70)

The concept ‘remember’ is expressed in a rather unusual way in Buwal, by using the verb *sàn* ‘know’ with the transitivity marker attached. The thing being remembered is coded as an indirect object. This form of the verb can also take an infinitive complement (10.24).

- (10.24) *heje senzene [ŋ lene wasay]*
xèjé- sàñ -zā -ēnē ɲ lā -ēnē wásāj
1INCL.SBJ- know -TRANS -3SG.IOBJ INF do -3SG.IOBJ thanks
‘...we remember to give him thanks...’
(HT4-SN:36.3)

(xi) Phasal

PHASAL predicates are closely associated with aspect and ‘refer to the phase of an act or state: its inception, continuation, or termination’ (Noonan 2007: 139). All such predicates are followed by infinitive complements in Buwal. Inception is expressed using the verbs *mār* ‘begin’ or *dèw* ‘start’ (10.25). Termination is expressed using adjectives (see Section 3.2.1.2).

- (10.25) *Na mar [ŋ mpam ujek ta a uraw*
ná- mār ŋ mpàm wjĕk tá á wŕāw
1EXCL.SBJ- begin INF search hut by PREP1 neighbourhood(ful.)
ŋtakwaw ata la ŋgha .]
ntàk^wàw á tā lā nyā
1INCL.POSS PREP1 on place DEM.PROX
‘We began to search houses through our neighbourhood in this place.’
(NH8-SN:3.3)

The verb *vās* ‘hurry’ falls into the phasal category as it has the meaning ‘to hurry’ or ‘to do something with greater intensity’ (10.26).

- (10.26) *Meŋ a vas [ŋ hey a mazlazlay]*
mēŋ ā- vās ŋ xĕj á màḷāḷáj
antelope 3SG.SBJ- hurry INF run PREP1 intensity
‘The antelope ran even faster...’ (NF6-WN:2.8)
(lit. ‘The antelope hurried to run with intensity...’)

Imminent events can be expressed with either the adjective *láb* ‘almost/ready’ (10.27a) or with the verb *dāw* ‘want’ (10.27b).

- (10.27)a. *Sa slaḅ [ŋ nda a luma] .*
sā láb ŋ ndā á lwmà
1SG.STAT ready INF go PREP1 market(ful.)
‘I am about (lit. ready) to go to the market.’ (GE13-SE:15.1)

- b. *Nene dāw [ŋ la ma]* .
 nèn- dāw ŋ lā mā
 1EXCL.SBJ- want INF do problem
 ‘We were about (lit. wanted) to have problems.’ (NH3-SN:4.11)

The range of meanings associated with complement taking predicates is summarised in Table 10.3 below. Only those predicates with more than one semantic type have been included.

Table 10.3: Summary of variety of meanings associated with different matrix predicates

Predicate	Semantic type	Complement type
<i>dèŋ</i> ‘think/reflect’ <i>wlāk</i> ‘think’	Propositional attitude (i)	Sentence-like
	Desiderative (v)	Infinitive
<i>sàn</i> ‘know’	Knowledge (iii)	Sentence-like
	Ability (viii)	Infinitive
	Achievement (x)	Infinitive
<i>grē</i> ‘see’ <i>ǰmē</i> ‘hear’	Immediate perception (iv)	Sentence-like
	Acquisition of knowledge (iii)	Sentence-like
<i>dāw</i> ‘like, want’	Desiderative (v)	Sentence-like (different subject) Infinitive (same subject)
	Obligation (vi)	Sentence-like (impersonal subject) Infinitive (2 nd person subject)
	Phasal (xi)	Infinitive
<i>lèm</i> ‘get’	Obligation (vi)	Sentence-like (impersonal subject)
	Achievement (x)	Infinitive
<i>k^wlā</i> ‘able’	Ability (viii)	Infinitive
	Permission (ix)	Infinitive

10.1.3 Speech reports

Speech reports may be either DIRECT, in which the actual words of the original speaker are quoted, or INDIRECT, in which the quotation is adapted in various ways to the viewpoint of the speaker giving the report (Noonan 2007: 121). Both types of speech reports are found in Buwal but direct reports are far more frequent in the data. For example out of 241 speech reports marked with a complementiser in natural data in the corpus, only 16 are clearly indirect. At times the distinction is difficult to make because the same methods of marking speech reports are used for both direct and indirect speech as is generally the case in Chadic languages (Frajzyngier 1996: 174). The only way to distinguish between the two types is by considering how deixis is portrayed, especially with reference to the pronominal system. In Buwal there are three types of speech reports: (a) direct, (b) indirect and (c) resumptive, which makes reference to something which has been previously said but does not necessarily claim to use the exact form of the words uttered at the time. Each of these are described in more detail below.

(a) Direct speech reports

According to Frajzyngier (1996: 113), in Chadic languages, the structure of sentences with verbs of saying consist of the following components: (i) a matrix clause containing a verb of saying, (ii) an embedded complement clause and (iii) an optional complementiser. He states that most Chadic languages have the order matrix clause-embedded clause with the complementiser coming between the two clauses (Frajzyngier 1996: 114). This generalisation applies to many speech reports in Buwal. However, there is more than one way of marking speech reports in this language and sometimes a combination methods is used. The structure of the Buwal speech report is given in Table 10.4 below.

Table 10.4: Structure of Buwal speech reports

(Matrix clause containing utterance predicate)	(Quotative marker <i>ŋgājā</i>)	Speech Complement	(Utterance verb)
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Table 10.5 summarises the different methods used to mark speech reports, giving the frequency of their occurrence and co-occurrence in a corpus of 459 direct speech reports found in natural data. A cross represents that a particular method is used. Each method is described in more detail below.

Table 10.5: Frequency of methods of marking direct speech reports

Quotative marker	Utterance verb preceding	Utterance verb following	<i>kàn vāw</i> 'thing Q' + utterance verb	Frequency
-	-	-	-	98
X	-	-	-	107
-	X	-	-	79
-	-	X	-	44
X	-	X	-	42
-	X	-	-	15
X	X	-	-	45
X	X	X	-	13
-	-	X	X	3
X	-	X	X	7
-	X	X	X	3
X	X	X	X	3
217	158	99	16	459

Table 10.5 shows that the most frequent method of marking a speech report is the use of a quotative marker *ngājā* (see Section 4.14.1.1). The quotative marker precedes the speech report. This construction may be used in conjunction with utterance verbs (10.28a) or on its own (10.28b). Frajzyngier (1996: 125) observes that many Chadic languages may omit a verb of saying if a complementiser is present.

- (10.28) a. *Əy zlepetene əy ngaya* : « Hune *nja aka*
ǰ- ɣāp -ētēnē ǰ- ngājā x^wné- ndzā āká
 3PL.SBJ- speak -3PL.IOBJ 3PL.SBJ- QUOT 2PL.SBJ- sit ACC
kwagwa .»
k^wág^wá
 firstly
 ‘They spoke to them **saying**, "Firstly, you sit down."’ (NH7-SN:2.9)
- b. *Meŋ a ngaya* : « *Gwambakw , hwa ɓas ata*
mēŋ ā- ngājā g^wāmbāk^w x^wā- ɓās á tā
 antelope 3SG.SBJ- QUOT toad 2SG.SBJ- laugh PREP1 on
sa vaw ? »
sā vāw
 1SG Q
 ‘The antelope **said**, "Toad, are you laughing at me?"’ (NF6-WN:1.2)

The distribution of the quotative marker is somewhat unusual as it can occur with all person/ number combinations (10.28 a & b and 10.29a), except for first and second person singular. In this case only an utterance predicate is used (10.29b).

- (10.29)a. *Hune ŋgaya* : « *Nene navalahwaw uda*
x^wné- ŋgājā nènè- ná- vāl -āx^wāw wdā
 2PL.SBJ- saying 1EXCL.SBJ- FUT- give -2SG.IOBJ food
akwaw . »
ák^wāw
 NEG.EXIST
 ‘You said, "We will not give you food."’ (GE59-SE:13.10)
- b. *Sa ya* : « *Gəmesl mbəy asa la* ».
sā- jā gmèl mbj á sā lā
 1SG.SBJ- say monkey 3SG.STAT PREP1 under field
 ‘I said, "The monkey is in (lit. under)¹ the field."’ (C16-SN:29.3)

The quotative marker appears to be grammaticalising further. Often in natural speech the third person singular agreement marker *a-* will be used rather than the third person plural, even with a plural subject (10.30).

- (10.30) *əy dāwzata a ŋgaya* : « *Kan aka*
ǰ- dāw -zā -ātā ā- ŋgājā kàn ákā
 3PL.SBJ- ask -TRANS -3PL.DOBJ 3SG.SBJ- saying thing EXIST
vaw ? Kan aka vaw ? »
vāw kàn ákā vāw
 Q thing EXIST Q
 ‘...they ask them saying, "Is there something? Is there something?"’
 (C11-SN:158.1-2)

Many Buwal speech reports are introduced by a matrix clause containing utterance verbs such as *zlāp* ‘speak’, *jā* ‘say’, *ghwāl* ‘show/explain’, *dāwzā* ‘ask’, *zèn* ‘return/reply’, *ŋgāf*

¹ The preposition ‘under’ here is used when the crops are grown. If a person or animal is in the field they are literally ‘under’ the crops.

‘recount’, *ɬàp* ‘tell story’ etc. The verb *zèn* ‘return’ is frequently followed by the noun *zlāp* ‘speech’ to give the meaning ‘return speech’ or ‘respond’. The addressee is generally coded as the indirect object. However, for the verb *dāwzā* ‘ask’ (which is the verb *dāw* ‘want, love’ with the transitivity suffix attached (see Section 8.1.3.1)), the addressee is coded as the direct object. While utterance verbs may co-occur with the quotative marker as was shown in example (10.28a), it is also possible for the quotation to simply follow the utterance predicate with no intervening complementiser (10.31 a & b). Frajzyngier (1996: 163) reports that this often occurs in Chadic languages.

- (10.31)a. *Bamam a zlepe* : « *Gwambakw , kay , nda η*
bāmām ā- ɬāp -ēnē *g^wāmbāk^w káj ndā ɲ*
 bee 3SG.SBJ- speak -3SG.IOBJ toad no! go INF
ban aza ra aza . Dama ata ra ηkwa
bān āzà rā āzá dāmā á tā rā nk^wā
 wash IT hand COMPL dirt PREP1 on hand 2SG.POSS
deydey . »
dējdēj
 too.much(ful.)
 ‘The bee **said to him**, "Toad! No! Go and wash you hands first. There is too much dirt on your hands." (NF4-SN:3.5-6)
- b. *hwa dāwza mawal ηkwa aza* : « *Mawal naka*
x^wā- dāw -zā māwəl nk^wā āzá māwəl nākā
 2SG.SBJ- ask -TRANS husband 2SG.POSS COMPL husband 1SG.POSS
kan ende ca , sa la vanḡay ? »
kàn éndē tsá sā- lā vāḡgáj
 thing like.this TOP 1SG.SBJ- do how
 ‘...you **ask** your husband first, “My husband, this thing, how do I do (it)?” (HT1-SN:5.1)

Speech reports are also frequently marked by the utterance verb *jā* ‘say’, following the speech complement. The verb is preceded by a subject agreement prefix but does not take tense/aspect marking. This method of marking speech reports can occur alone (10.32a) or

in conjunction with the quotative marker (10.32b), an utterance verb preceding the speech complement (10.32c) or all three methods may be used (10.32d).

(10.32)a. « *Kámac anta* » *a ya* .
 ká- m̀àts āntā ā- jā
 PFV- die 3SG.POSS 3SG.SBJ- say
 ‘‘He has died.’’ he said.’ (NF5-SN:1.6)

b. *a ngaya* : « *Hwa d̀aw sa cafahwaw aka*
 ā- ngājā x^wā- d̀aw s̄ā- tsāf -āx^wāw āká
 3SG.SBJ- QUOT 2SG.SBJ- want 1SG.SBJ- decorate -2SG.DOBJ ACC
 vaw ? » *a ya* .
 vāw ā- jā
 Q 3SG.SBJ- say
 ‘He said, ‘‘Do you want me to decorate you?’’ he said.’ (NF2-SN:4.1)

c. *sa kázlaphwaw* : « *Caza kanḡaṅ aka a*
 s̄ā- ká- ḡāp -āx^wāw tsā -zā k̄āṅḡāṅ āká á
 1SG.SBJ- PFV- speak -2SG.IOBJ put -TRANS drum ACC PREP1
 wata akwaw ca uzəye naka ege əy
 wātā ák^wāw tsá w̄zjé nākā =égē j-
 home NEG.EXIST TOP children 1SG.POSS =PL 3PL.SBJ-
 nafəḋáhha aza » *sa ya* .
 ná- fd̄ax -xā āzá s̄ā- jā
 FUT- wake -VNT.DIST COMPL 1SG.SBJ- say
 ‘...I said to you, ‘‘Put the drum down at home otherwise my children will
 wake up’’ I said.’ (NF4-SN:2.9)

- d. *a dawzata hejəye buwal ege a*
ā- dāw -zā -ātā xèdzè -jé bwāl =égē ā-
 3SG.SBJ- ask -TRANS -3PL.DOBJ person -PL Buwal =PL 3SG.SBJ-
ŋgaya : « *Hejəye ege ca hune kasanata*
ŋgājā xèdzè -jé =égē tsá x^wné- kā- sàñ -ātā
 QUOT person -PL =PL TOP 2PL.SBJ- IPFV- know -3PL.DOBJ
vaw ? » a ya .
vāw ā- jā
 Q 3SG.SBJ- say
 ‘...he asked the Buwal people saying, “These people, do you know
 them?” he said.’ (NH7-SN:4.1-4.2)

The combination *ā jā* appears to be in the process of being grammaticalised. In the third person plural, the singular subject agreement marker is frequently used in natural speech rather than the plural (10.33a). Also in fast speech it may be contracted to *j̄* (10.33b).

- (10.33)a. *A dəwze anta əy ghwalza eze* : « *Bay ca*
á dwzé āntā j- ɣ^wāl -zā ézē bāy tsá
 PREP1 after DEF.DET 3PL.SBJ- show -TRANS therefore chief TOP
heje ŋgha » a ya .
xèdzè nyā ā- jā
 person DEM.PROX 3SG.SBJ- say
 ‘Afterwards they announced (lit. showed) therefore, “The chief is this
 person.” he said.’ (NH7-SN:6.1)
- b. *Mawal anta wese a ŋgaya* : « *Ndaha wala*
māwəl āntā wēsé ā- ŋgājā ndā -xā wālā
 husband 3SG.POSS DEM.DIST 3SG.SBJ- QUOT come -VNT.DIST wife
naka . » əy .
nākā ā- jā
 1SG.POSS 3SG.SBJ- say
 ‘That husband of hers said, “Come here, my wife” he said.’ (NH5-SN:3.9)

- T. « *A , sa a ujek ete ca .* »
 á s̄a á wjĕk á tē tsá
 ah! 1SG.STAT PREP1 hut PREP1 here TOP
 "Ah, I am in the hut here."
- C. « *Hwa a ujek ete ca , hwa la a ujek*
 x^wā á wjĕk á tē tsá x^wā- lā á wjĕk
 2SG.STAT PREP1 hut PREP1 here TOP 2SG.SBJ- do PREP1 hut
vemey ? »
 véméj
 what
 "You are in the hut here, what are you doing in the hut?"
- T. « *A , sa nja ende .* »
 á s̄a- ndzā éndē
 ah! 1SG.SBJ- sit like.this
 "Ah, I am sitting like this." (C10-SN:8.3-6)

(b) Indirect speech reports

Indirect speech reports are marked in the same way as direct speech reports in Buwal (10.36 a & b) (see Table 10.4).

- (10. 36) a. *Kézlepekey a ngaya hal anta kamac*
 ká- ǰāp -ĕkĕj ā- ngājā xāl āntā ká- m̀ats
 PFV- speak -1SG.IOBJ 3SG.SBJ- QUOT daughter 3SG.POSS PFV- die
anta .
 āntā
 3SG.POSS
 'He spoke to me **saying** (that) his daughter had died.' (LL42-SE:3)

- b. *Nda η zlepepe a mba ma caw ngha ca ,*
 ndā ń **ʒāp** -ēnē á mbà má= tsáw nyā tsá
 go INF **speak** -3SG.IOBJ PREP1 boy REL= there DEM.PROX TOP
sa kadāw ca , a nedewekey yam vaw ,
 sā- kā- dāw tsá ā- ná- dāw -ēkēj jám vāw
 1SG.SBJ- IPFV- love TOP 3SG.SBJ- FUT- love -1SG.DOBJ also Q
hwa ya
 x^wā- jā
 2SG.SBJ- say
 ‘Go **speak** to that boy there, I love him, will he also love me, **you** (will)
say.’ (DE19-SN:5.2)

The only way of distinguishing between direct and indirect speech reports is with reference to the person values of any pronouns. Tense/aspect marking, deictics and the use of ideophones and interjections does not vary. In the direct quote in (10.37a) the complement verb carries first person singular subject agreement marking, while in (10.37b) the indirect quote involves third person singular agreement marking.

- (10.37)a. *A ngaya : « Sa navalahwaw uda akwaw . »*
 ā- ngājā **sā-** ná- vāl -āx^wāw wdā ák^wāw
 3SG.SBJ- QUOT **1SG.SBJ-** FUT- give -2SG.IOBJ food NEG.EXIST
 ‘He said, “**I** will not give you food.”’ (GE59-SE:13.4)
- b. *A ngaya : a navalahwaw uda akwaw .*
 ā- ngājā **ā-** ná- vāl -āx^wāw wdā ák^wāw
 3SG.SBJ- QUOT **3SG.SBJ-** FUT- give -2SG.IOBJ food NEG.EXIST
 ‘He said (that) **he** will not give you food.’ (GE59-SE:13.5)

It is sometimes difficult to ascertain whether a speech report is direct or indirect. For instance when the subject of the matrix clause and the speech complements are first person and co-referential (10.38a), or when the speaker is referring to a third person (10.38b), no variation in pronouns occurs.

(10.38) a. *Nene* *ngaya* : « *Nene* *navalahwaw* *uda*
nèné- *ngājā* *nèné-* *ná-* *vàl* *-āx^wāw* *wdā*
 1EXCL.SBJ- QUOT 1EXCL.SBJ- FUT- give -2SG.IOBJ food
akwaw . »
ák^wāw
 NEG.EXIST
 ‘We said “We will not give you food.”’
 OR ‘We said (that) we will not give you food.’ (GE59-SE:13.6)

b. *Ana ma sa zlame ca a ngaya hejeye ey*
ánā má= sā- *ļmē tsá ā-* *ngājā xēdzè -jé j-*
 like REL= 1SG.SBJ- hear TOP 3SG.SBJ- QUOT **person** -PL -3PL.SBJ
naca mavaw ata kwahwaw a pes luma
ná- *tsā mávāw á* *tā k^wāh^wāw á* *pès lwmà*
 FUT- put beer PREP1 on fire PREP1 day market(ful.)
Zamay .
zāmāj
Zamay
 ‘According to what I heard, it said **people** will put beer on the fire on
 Monday (lit. Zamay market day).’
 OR
 ‘According to what I heard, it said, “**People** will put beer on the fire on
 Monday.”’ (DP2 –SN:2.1)

Quotative markers are occasionally used to indicate that the speaker does not have direct knowledge of the events heard about them from others. Frajzyngier (1996: 180) calls this type of epistemic modality ‘doubt-in-truth’. He gives a number of examples in Chadic languages of ‘doubt-in-truth’ markers having their origin in verbs of saying (Frajzyngier 1996: 181-186).

(10.39)a. *A ba ujek a damaw a ya* .
ā- *bā wjēk á* *dámāw ā-* *jā*
 3SG.SBJ- create hut PREP1 bush 3SG.SBJ- say
 ‘He built a house in the bush, **they** say.’ (TN1-SN:1.2)

- b. *Aya mzla wala wese a ɲgaya , da a da*
ājā mɓā wālā wēsé ā- ɲgājā dā ā- dā
 so blacksmith wife DEM.DIST 3SG.SBJ- QUOT bring 3SG.SBJ- bring
teked' sefe a tɔrgwa .
tēkēd' séfē á trɔᵂā
 calabash unused PREP1 granary
 ‘So **they say** that unfavoured (lit. blacksmith) wife got an unused calabash
 from the granary.’ (NF5-SN:2.1)

(c) Resumptive speech reports

RESUMPTIVE speech reports make reference to something which has been previously said by someone. Their structure is given in Table 10.6 below.

Table 10.6: Structure of Buwal resumptive speech reports

<i>màtàngár</i>	NP or pronoun	(Utterance predicate)	Speech complement
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Resumptive speech reports are marked using the morpheme *màtàngár* ‘according to what was said’ followed by a noun or independent pronoun which codes the original speaker (see Section 4.14.1.1). Another utterance verb may also be present (10.40 a & c), but is not obligatory (10.40b). The speech report itself may either direct (10.40a) or more frequently a reiteration or summary of something previously referred to without citing the original words exactly (10.40 b & c).

- (10.40)a. *Matàngar sa , a nuna sa ya : « Gazlavay*
màtàngár sā á nwná sā- jā gāḷāvāj
 QUOT.RET 1SG PREP1 last.year 1SG.SBJ- say God
menjenjekey mba yam may . »
mā- ndzàndzà -ēkēj mbà jám máj
 JUS- give -1SG.IOBJ child also TAG.IMP.POL
 ‘**According to what I said**, last year **I said**, “May God also give me a
 child please.”’ (GE39-SE:10.2)

- b. *matangar hwa van ege ca voram aza kwaw cay* .
màtángár x^wā v àn =égē tsá vrām āzà k^wāw tsáj
 QUOT.RET 2SG family =PL TOP many DUB NEG TAG.EMPH
 ‘...according to what you said, there are many families, aren’t there!’
 (C9-SN:176)
- c. *Matangar hwa ana ma a ηcəne hwa ya dala*
màtángár x^wā ánā má= á ntsné x^wā- jā dālā
 QUOT.RET 2SG like REL= PREP1 earlier 2SG.SBJ- say someone
kélem menjevek ,
ká- lèm mēndzēvĕk
 PFV- get remedy
 ‘According to what you said, like earlier you said, someone got
 remedie(s)...’
 (C3-SN:67)

10.1.4 Relative Clauses

A RELATIVE CLAUSE is a clause that functions as a nominal modifier (Payne 1997: 325). Andrews (2007b: 206) gives the following more detailed definition of a relative clause: ‘a subordinate clause which delimits the reference of an NP by specifying the role of the referent of that NP in the situation described by the relative clause.’ Structurally, Buwal has two major types of relative clauses. The first is marked with the relative marker *má* and will be discussed in Section 10.1.3.1. For the second type, which is used only to assert the existence of a particular referent (Section 10.1.3.2), the relative marker is omitted.

10.1.4.1 Relative clauses marked with *má*

The basic structure of the Buwal relative clause marked with the relative marker *má* is given in Table 10.7 below. The relative clause in Buwal occurs after the head noun, as reported for Chadic languages generally (Frajzyngier 1996: 416). The relative marker occurs between the head noun and the relative clause (10.41a). As was noted previously (see Sections 4.14.1.2 and 5.1.1), it is possible to have headless relative clauses (10.41b).

Table 10.7: Structure of the Buwal relative clause marker with *má*

(Head NP)	<i>má</i>	Relative clause
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- (10.41)a. *ara nderey ma nda a wata anta* .
 ārā ndrèj má= ndā á wātā āntā
 COP sorghum REL= come PREP1 home 3SG.POSS
 ‘...it was the sorghum which came from his home.’ (NH9-SN:5.4)
- b. *Ma dew η nda η la cemey , ara gamtak* .
 má= dèw í ndā í lā tséméj ārā gāmtāk
 REL= start INF go PREP2 field TOP.CON COP chicken
 ‘The one to start to go into the field, it was the chicken.’ (NF3-SN:1.2)

It is possible for a noun to be modified by more than one relative clause, but in this case there is a pause between them (10.42a). Relative clauses may also be nested (10.42b).

- (10.42)a. *Heje [ma jem], [ma sa gəre a njuna] , [ma*
xèdzè má= dzèm má= sã- grē á ndzwná má=
 person REL= tall REL= 1SG.SBJ- see PREP1 yesterday REL=
lam ujek ŋgha] , kándaha .
 lām wjèk nyā ká- ndā -xā
 build hut DEM.PROX PFV- go -VNT.DIST
 ‘The person who is tall, that I saw yesterday, who built this hut, came.’
 (GE60-SE:1.2)
- b. *Hejəye [ma gəre ŋhel [ma keŋhel ŋhwa [ma*
xèdzè -jé má= grē nxèl má= kã- nxèl nx^wā má=
 person -PL REL= see thief REL= IPFV- steal goat REL=
η bezle tata]]] , əy kenjen ŋgas .
 í béłžē tātá j- kã- ndzèn ŋgās
 PREP2 animal.enclosure 3PL.POSS 3PL.SBJ- IPFV- follow foot
 ‘The people who saw the thief who was stealing the goat which was in
 their animal enclosure, they are following footprints.’ (GE60-SE:1.4)

Relative clauses marked with the relative marker can be divided into three types according to the nature of the predicate involved; (a) sentence-like (b) deranked and (c) verbless. These three types will be discussed in more detail below.

(a) Sentence-like relative clauses

Sentence-like relative clauses involve no restrictions on the tense/aspect marking that the verbs within them may contain, although certain arguments may be omitted. Buwal does not have ‘relative tenses’. These are different tense markers found in relative clauses that are frequently found in Chadic languages (Frajzyngier 1996: 454).

Different types of sentence-like relative clauses can be distinguished in Buwal based on the role of the relativised noun phrase. Payne (1997: 335) gives the following typological hierarchy of roles which may be relativised cross-linguistically (Figure 10.1).

Figure 10.1: Typological hierarchy of relativised elements

Subject > Direct Object > Indirect Object > Oblique > Possessor

All the elements listed above may be relativised in Buwal. Examples of each type are given below.

(i) Subject

For subject relative clauses, the relativised NP is simply omitted. There is no subject agreement marking on the relativised verb (10.43).

- (10.43) *Hejəye* [*ma mpam bay*] *ege wese* , əy
 xèdzè -jé má = mpàm bāy = égē wēsé j-
 person -PL REL= look.for chiefdom =PL DEM.DIST 3PL.SBJ-
ghwalza ha tata .
 y^wāl -zā xā tātá
 show -TRANS head 3PL.POSS
 ‘Those people **who looked for the chiefdom**, they introduced (lit. showed) themselves.’ (NH7-SN:3.10)

(ii) Direct Object

If the relativised noun phrase is singular in a direct object relative clause, it is either completely omitted from the relative clause (10.44a) or coded by the third person singular object suffix attached to the verb before a pause (10.44b) (see Section 8.1.1.2). If the relativised noun phrase is plural, then it is coded within the relative clause by the third person plural object suffix (10.44c) (also see Section 8.1.1.2)

(10.44)a. *Sa ghwalzahwaw səkan [ma əy kala*
sā- y^wāl -zā -āx^wāw skàn má= j- k̄a- 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 the things **that they do with idols.**’ (DE2-SE:4)

b. *Əy nasəbar kan [ma darlaŋw ege əy*
j- ná- sbār kàn má= d̄arlāŋ^w =égē j-
3PL.SBJ- FUT- follow thing REL= youth =PL 3PL.SBJ-
kalaw] ,
k̄a- lā -āw
IPFV- do -3SG.DOBJ
‘They will follow the thing(s) **that the youth are doing (lit. it)...**’
(C1-SN:13.4)

c. *Əy ŋgad̄ata , d̄erewel [ma əy*
j- ŋgād̄ -ātā d̄erewēl má= j-
3PL.SBJ- count -3PL.DOBJ paper(ful.) REL= 3PL.SBJ-
nahzata] ege wese .
nāx -zā -ātā =égē wēsé
drop -TRANS -3PL.DOBJ =PL DEM.DIST
‘They count them, those papers **that they dropped (lit. them).**’
(DP6-SN:3.2)

(iii) Indirect Object

For indirect object relative clauses, the relativised noun phrase is obligatorily coded by indirect object agreement marking on the verb in the relative clause (10.45).

- (10.45) *Mba* [*ma sa velene uda*], *a ndaha*
 mbà má= sã- vâl -ēnē wdā ā- ndā -xā
 child REL= 1SG.SBJ- give -3SG.IOBJ food 3SG.SBJ- go -VNT.DIST
ŋ rakba zeney .
 ŋ rāk -bā zēnéj
 INF ask -BEN again
 ‘The child **to whom I gave food (lit. to him)**, he came to ask again.’
 (GE60-SE:2.2)

(iv) Oblique

For oblique relative clauses, the relativised NP may be omitted (10.46 a & b) or it may be represented by a preposition taking no complement (see Section 4.8.4) (10.47a) or an independent pronoun preceded by a preposition (10.47b). This occurs, for example, when clarification, such as precise location as in (10.47a), is necessary.

- (10.46)a. *weləye əy nda ama zlazlar* [*ma yam a*
 wālā -jé j- ndā á mā ʒàʒàr má= jàm ā-
 woman -PL 3PL.SBJ- go PREP1 edge river REL= water 3SG.SBJ-
kehey] .
 kā- xēj
 IPFV- flow
 ‘...women went to the edge of the river **where water was flowing.**’
 (DP9-SN:1.2)
- b. *Vah* [*ma hejəye əy tawar kusam a bəza*] ,
 vāx má= xèdzè -jé j- tāwār k^wsàm á bzā
 day REL= person -PL 3PL.SBJ- walk.around body PREP1 outside
kánda anta zlezle .
 ká- ndā āntā ʒēʒē
 PFV- go 3SG.POSS long.ago
 ‘The day **that people walked around naked**, has gone long ago.’
 (GE60-SE:4.5)

- (10.47)a. *ujek naka tenguleŋ [ma sa kawan a mna] ,*
wjĕk nākā téŋg^wlèŋ má= sá- kâ- wān á mnā
hut 1SG.POSS one REL= 1SG.SBJ- IPFV- sleep PREP1 inside
ara tal
ārā tál
COP corrigated.iron(fr.)
‘...my one hut **where I sleep inside**, it’s corrigated iron.’ (DE4-SN:2.1)
- b. *kaw ana səkan ma sa kehey a mbe , muta*
káw ánā skàn má= sá- kâ- xĕj á mbē mwtá
even(ful.) like thing REL= 1SG.SBJ- IPFV- run PREP1 3SG car(ful.)
ege , wese ca sa kadāw zeney .
=égē wēsé tsá sá- kâ- dāw zēnéj
=PL DEM.DIST TOP 1SG.SBJ- IPFV- want again
‘For example (lit. even like) a thing **that I run with (lit. it)**, cars, that one,
I want (it) as well.’ (EP1-SN:5)

(v) Possessor

For possessor relative clauses, the possessor is coded by a possessive pronoun within a relative clause (10.48).

- (10.48) *Wala [ma dāwar anta a ŋga anta] wese ,*
wālā má= dāwār āntā ā- ŋgā āntā wēsé
woman REL= water.pot 3SG.POSS 3SG.SBJ- break 3SG.POSS DEM.DIST

a kanda a wata mzla .
ā- kâ- ndā á wātā mġā
3SG.SBJ- IPFV- go PREP1 compound blacksmith
‘That woman **whose (lit. her) water pot broke**, she is going to the
blacksmith's compound.’ (GE60-SE:5.3)

(b) Deranked relative clauses

Deranked verbal relative clauses make use of special verb forms that have limited tense/aspect marking. There are two main types. The first involves the resultative (Section 3.3.5) functioning as predicate of the relative clause (10.50 a & b). Note that this is a type

of subject relative clause and therefore the relativised NP is omitted within the relative clause (see point (i) above).

(10.49)a. *Gam aza ŋhwa [ma képeleye] wese .*
 gām āzà nx^wā má = ká- pàl -ējē wēsé
 drive.away IT goat REL= PFV- untie -PART DEM.DIST
 ‘Drive away that goat **which has been untied.**’ (GE14-SE:5)

b. *Əy ca ka [ma kékeceye] , [ma*
 j- tsā ká má = ká- kàts -ējē má =
 3PL.SBJ- put ANT REL= PFV- take.part -PART REL=
kéḅekweye] .
 ká- ḅàk^w -ējē
 PFV- make.lump -PART
 ‘For the time being, they put **that which was taken, that which had formed into lumps.**’ (DP9-SN:2.5)

The second type of deranked relative clause involves the use of the verb introduced by the preposition *á tã* ‘on’, mentioned in Section 10.1.1.4, which express the purpose or use of the noun being modified. This is a type of oblique relative clause (see point (iv) above). It is possible for the relativised noun to be expressed by a pronoun preceded by a preposition within the relative clause (10.50a) but in the majority of cases this is omitted (10.50b).

(10.50)a. *Əy la maslaga anta [ma ata*
 j- lā máłàgá āntā má = á tã
 3PL.SBJ- make piece.of.cloth DEF.DET REL= PREP1 on
təkàf a mbe .]
 tkàf á mbē
 wrap.around PREP1 3SG
 ‘They make the cloth **which is for wrapping around (the body) (lit. with it.)**’ (DP1-SN:3.4)

- b. *a kampam taf [ma ata nda a wata] .*
 á- k̄ā- mpàm tàf má= á tā ndā á wātā
 3SG.SBJ- IPFV- look.for path REL= PREP1 on go PREP1 home
 ‘...he was looking for the path **which is for going home.**’ (NH2-SN:8.1)

Note that the infinitive form of the verb (see Section 10.1.1.4) cannot function as the predicate of a relative clause.

(c) Verbless relative clauses

Different types of stative verbless clauses were presented in Section 8.2.1, organised according to the predicate type. Verbless predicates may be nouns, adjectives or prepositional phrases. Only the last two predicate types are possible in verbless relative clauses. Nouns cannot function as predicates of a verbless relative clause. Predicate adjective verbless relative clauses are shown in (10.51 a & b) and predicate prepositional phrase verbless clauses are shown in (10.52 a & b).

- (10.51)a. *Hune namay ca d̄ala [ma taŋtaŋ] .*
 x^wné- ná- māj tsá d̄ālā má= tāŋ-tāŋ
 2PL.SBJ- FUT- choose TOP someone REL= good
 ‘You will choose someone **who is good.**’ (NH7-SN:4.4)

- b. *[ma kadak kwaw]ca mbəy ata ha*
 má= kádàk k^wāw tsá mbj á tā xā
 REL= good NEG TOP 3SG.STAT PREP1 on top
 ‘...**that which is not good**, it is on top...’ (DP9-SN:3.7)

- (10.52)a. *Ana gəmesl [ma ŋ barla] ege .*
 ánā gmèl má= ŋ bārā =égē
 like monkey REL= PREP1 mountain =PL
 ‘Like the monkeys **which are in the mountain(s).**’ (DE21-SE:1.6)

- b. *Kaw vayay a ndaha a dērewel anta*
káw vājáj ā- ndā -xā á dērēwēl āntā
 even(ful.) who 3SG.SBJ- go -VNT.DIST PREP1 paper(ful.) 3SG.POSS
 [*ma asa ra*]
má= á sā rā
 REL= PREP1 under hand
 ‘Each one comes with his paper **which is in (lit. under) (his) hand...**’
 (DP6-SN:2.3)

10.1.4.2 Existential relative clauses

An EXISTENTIAL relative clause asserts the existence of a particular referent within the clause. This type of relative clause makes use of the existential marker *ákā* (see Section 4.10) rather than the relative marker *má*. Verbless existential clauses were presented in Section 8.2.2. Existential relative clauses are sentence-like (see Section 10.1.3.1(a)). The following roles may be relativised with existential relative clauses: (i) subject, (ii) direct object, (iii) indirect object, (iv) oblique and (v) possessor. The structure of the existential relative clause generally follows the structure of the basic verbal independent clause (see Table 8.1, Section 8.1.1). In addition, the existential marker follows the relativised noun phrase. Only relativised subjects vary from this arrangement as described below.

(i) Subject

When the subject is relativised, the existential marker occurs at the **end** of the main clause (10.53 a & b), although it is possible for certain clausal adverbs to follow it (10.53c).

- (10.53)a. *dāla [a kaṛhwaz] aka .*
dālā á- kā- nh^wàz ákā
 someone 3SG.SBJ- IPFV- get.drunk EXIST
 ‘...there is someone (who) gets drunk.’ (DE12-SN:2.7)
- b. *Əy [kanda a ŋgas vaŋ a Garuwa ege] aka .*
j- kā- ndā á ŋgās vāŋ á garwa =égē ákā
 3PL.SBJ- IPFV- go PREP1 foot arrive PREP1 Garoua =PL EXIST
 ‘There are those (who) go by foot, arriving at Garoua.’ (HT6-SN:4.6)

- c. *Fagwalakw wende [kámac ara mbe] aka yam .*
 fāg^wālāk^w wéndé ká- m̀àts á rā mbē ákā jám
 leper IND.DET.SG PFV- die PREP1 side 3SG EXIST also
 ‘There was another leper (who) had died in his neighbourhood also.’

(ii) Direct object

When the direct object is relativised, the existential marker follows it and may itself be followed by the indirect object (10.54a) and obliques (10.54b).

- (10.54)a. [*kébetene*] *jeḃ aka* [*a uzəye anta ege*].
 ká- bā -ētēnē dzèḃ ákā á wzjé āntā =égē
 PFV- make -3PL.IOBJ grave EXIST PREP1 children 3SG.POSS =PL
 ‘...there is a grave (that) she made a grave for her children.’ (C9-SN:34.1)
- b. [*əy la*] *maslālaw aka* [*ata jekejew*] .
 j- lā m̀àlālāw ákā á tā dzèkédzèw
 3PL.SBJ- do poison EXIST PREP1 on thorny.plant
 ‘There was a poison (that) they put on a long thorn.’ (TN5-SN:3.13)

If the existential marker is not followed by anything (apart from a clausal adverb), it may be difficult to ascertain whether it is the subject or the direct object which is being relativised. For example, (10.55a) has two possible interpretations. The intended meaning can be identified with reference to the context. This sentence was given in answer to the question ‘What types of work do children do?’. As such, the first interpretation is the most likely. In example (10.55b), knowing that the speaker is talking about his wife, we can infer that the object is being relativised.

- (10.55)a. [*Uzəye əy kala*] *zlan ege aka yam* .
 wzjé j- ká- lā ḥ̀àn =égē ákā jám
 children 3PL.SBJ- IPFV- do work =PL EXIST also
 ‘There are different types of work (that) children do also.’
 NOT ‘There are children (who) do different types of work.’ (DE18-SN:6.1)

- b. *Evele [kélem] menjevek cekudè aka*
 évèlè ká- lèm mēndzēvēk tsék^wdē ákā
 although PFV- get medicine a.little EXIST
 ‘Although there was a little medicine (that) she got...’
 NOT ‘Although there is one who got a little medicine...’ (C2-SN:16.1)

(iii) Indirect object

There is only one example in the corpus of an indirect object being relativised with an existential relative clause (10.56). Since the indirect object is topicalised in this example, it is difficult to say anything definite about the position of the existential marker.

- (10.56) *ana wende kwaw ca , [a netehzene*
 ánā wéndé k^wāw tsá ā- ná- tēh -zā -ēnē
 like IND.DET.SG NEG TOP 3SG.SBJ- FUT- listen -TRANS -3SG.IOBJ
zlam aza] aka
 ʒàm āzá ákā
 ear COMPL EXIST
 ‘..like a certain one, there is one he will listen to...’ (DE12-SN:8.2)

(iv) Oblique

When an oblique noun phrase is relativised, the existential marker follows (10.59 a & b).

- (10.57)a. *[késleŋgelene ata] heje mende aka*
 ká- ʎāŋgāl -ēnē á tā xèdzè méndé ákā
 PFV- measure -3SG.IOBJ PREP1 on person IND.DET.SG EXIST
 ‘...there was a certain person about (whom) he gave an analogy (lit. measured) for him...’ (HT6-SN:4.2)
- b. *[a kandaḅa ata] la aka vaw ?*
 ā- kā- ndā -ḅā á tā lā ákā vāw
 3SG.SBJ- IPFV- go -BEN PREP1 on place EXIST Q
 ‘...are there places (that) he is going to?’ (C5-SN:35.3)

(v) Possessor

Again, for a possessor existential relative clause the existential marker follows the relativised noun phrase.

- (10.58) [əy ndewzene a wata] heje mende
j- ndàw -zā -ēnē á wātā xèdzè méndé
3PL.SBJ- find -TRANS -3SG.IOBJ PREP1 home person IND.DET.SG
aka .
ákā
EXIST
'...there was a certain person at (whose) home they found it.'
(NH8-SN:8.3)

10.1.5 Adverbial Clauses

ADVERBIAL CLAUSES function as modifiers of verb phrases or entire clauses (Thompson et al 2007: 237). In Buwal, some adverbial type relations may be expressed by simple juxtaposition of clauses (see Section 10.3). This section describes adverbial clauses which exhibit some kind of structural marking for subordination. In the sub-sections which follow, adverbial clauses are categorised according to their semantic type, and the structures used to express each type are described. Firstly, however, a few remarks concerning the general structure of adverbial clauses will be made.

Adverbial clauses may be marked with a subordinating morpheme such as the relative marker *má*, a preposition, an adverb or a special subordinating conjunction (see Section 4.14.1.3). The majority of adverbial clauses are sentence-like since they contain finite verb forms. However, the tense/aspect marking they carry may be restricted as a result of constraints on temporal sequencing. This applies to temporal clauses (Section 10.1.5.1), conditional clauses (Section 10.1.5.6) and purpose clauses (Section 10.1.5.10). Certain purpose clauses (Section 10.1.5.10) and absolutive adverbial clauses (Section 10.1.5.11) contain non-finite verb forms. Adverbial clauses may follow the matrix clause. However, as they frequently have the pragmatic function of giving background information they often precede the matrix clause being followed by either a topic marker or an intonational break, reflecting the typical topic-comment structure (see Section 11.2.1). This pattern

was also observed by Frajzyngier (1996: 305-309), who found that in Chadic languages temporal adverbial clauses often occur before the matrix clause and considers that pragmatic factors may influence the order.

10.1.5.1 Temporal clauses

According to Frajzyngier (1996: 303), the TEMPORAL adverbial clause ‘provides temporal reference for the apodosis (i.e. the matrix clause) in a similar way to the adverb of time.’ In Buwal, the temporal reference may either be (a) GENERAL, expressing a ‘when’ type meaning, or (b) SPECIFIC, expressing relative temporal meanings such as ‘after’, ‘before’, ‘until’ and ‘since’. Sometimes the matrix clause may be marked with an adverb meaning ‘then’ which narrows the nature of the temporal relationship (see Section 10.2).

(a) General time reference

In Buwal, temporal adverbial clauses expressing general time reference can be marked with the relative marker. This strategy is common cross-linguistically (Thompson et al 2007: 246-247) and also reported for the West Chadic language Pero (Frajzyngier 1996: 337). Adverbial clauses introduced by the relative marker can introduce events that occur simultaneously, or in sequence (before or after) the event expressed in the matrix clause. The interpretation depends on the tense/aspect marking on the respective verbs. For simultaneous events, one or both of the verbs will be marked with the imperfective marker (10.59a). For temporal sequences, the perfective marker is used to indicate that one event occurs before another. The initial event may be expressed in either adverbial clause (10.59b) or the matrix clause (10.59c).

- (10.59)a. [*Ma bamam a kavanha*] *cemey* ,
má= bāmām ā- **kā-** vāŋ -xā tséméj
 REL= bee 3SG.SBJ- IPFV- arrive -VNT.DIST TOP.CON
gwambakw a zlepené a ŋgaya : « Hwa ja
 g^wāmbāk^w ā- ʒāp -ēnē ā- ŋgājā x^wā- dzā
 toad 3SG.SBJ- speak -3SG.IOBJ 3SG.SBJ- QUOT 2SG.SBJ- hit
kaŋgaŋ ara kwaw ! »
 kāŋgāŋ ārá k^wāw
 drum SIM NEG
 ‘While the bee was arriving, the toad said to him, “You shouldn’t hit a drum on the way!”’ (NF4-SN:2.3)

- b. *a zam bay a ule anta [ma kámac*
 ā- zàm bāy á wlè āntā **má= ká-** màts
 3SG.SBJ- eat chief PREP1 place 3SG.POSS REL= PFV- die
anta .]
 āntā
 3SG.POSS
 ‘...he became (lit. ate) chief in his place **when** he had died.’
 (NH13-SN:3.1)
- c. [*Ma hwa lem zlam anta] ca hwa kála ca*
má= x^{wā}- lèm ɣàm āntā tsá x^{wā}- **ká-** lā tsá
 REL= 2SG.SBJ- get name DEF.DET TOP 2SG.SBJ- PFV- do TOP
vemey ?
 véméj
 what
 ‘**When** you got the name, what had you done?’
 (LL50-SE:13)

It is likely that this construction has developed diachronically from a temporal noun modified by a relative clause. This is still possible in Buwal (10.60 a & b).

- (10.60)a. [*Vah ma dōma a wata naka aka] , sa da*
vāx má= dmā á wātā nākā ákā sā- dà
time REL= bride PREP1 home 1SG.POSS EXIST 1SG.SBJ- prepare
uda ca besl .
 wdā tsá bét
 food TOP once
 ‘(At) **the time when** there was a bride at my home, I prepared food once.’
 (GE54-SE:20.1)

- b. [*Pes ma heje kanda η ban η yam wese*]
pès má= xèjé- kã- ndā ŋ bãn ŋ jàm wēsé
day REL= 1INCL.SBJ- IPFV- go INF wash PREP2 water DEM.DIST
cemey, heje dakənak tewtew megəre zlan ŋtakwaw .
tséméj xèdzè dàknàk téw-téw mā- grē ʒàn ntàk^wàw
 TOP.CON person black all JUS- see work 1INCL.POSS
 ‘That **day when** we go to wash in water, let all humanity (lit. black
 person(s)) see our work.’ (HT8-SN:8.5)

(b) Specific time reference

According to Frajzyngier (1996: 352), in Chadic languages specific temporal markers may derive from adverbs or prepositions. This is also the case for certain specific temporal adverbial clauses in Buwal. There are four types, expressing: (i) ‘after’, (ii) ‘before’, (iii) ‘since’ and (iv) ‘until’.

(i) ‘After’

Clauses which express the meaning ‘after’ are preceded by the adverbialiser *á dwzé* which consists of the preposition *á* followed by relational/temporal noun *dwzé* ‘behind/after’(see Sections 3.1.2.4 and 3.1.2.5). This is frequently followed by the relative marker *má* (10.61a), although the relative marker is not obligatory (10.61b). This type of construction is also found in other Chadic languages (Frajzyngier 1996: 351). The presence of the relative marker does not appear to significantly change the meaning, except to give emphasis. The adverbialiser *á dwzé* may also be followed by nominalised verb form (10.61c).

- (10.61)a. [*A dɔwze ma sa kánda na a egləyz*]
á dwzé má= sã- ká- ndā nã á egljz
PREP1 after REL= 1SG.SBJ- PFV- go 1SG.POSS PREP1 church(fr.)
ca , a la zeney .
tsá ā- lã zēnéj
 TOP 3SG.SBJ- do again
 ‘**After** (lit. **after when**) I had gone to church, he did (it) again.’
 (NH3-SN:6.3)

- b. [*A dɔwze* sa kában aza], sa nanda
 á dwzé sã- ká- bãn āzá sã- ná- ndã
 PREP1 after 1SG.SBJ- PFV- wash COMPL 1SG.SBJ- FUT- go
 a luma .
 á lwãmà
 PREP1 market(ful.)
 ‘After I have washed, I will go to the market.’ (GE61-SE:2.5)
- c. [*A dɔwze* laban], sa kánda a
 á dwzé lã- bãn sã- ká- ndã á
 PREP1 after NOM.ACT wash 1SG.SBJ- PFV- go PREP1
 luma .
 lwãmà
 market(ful.)
 ‘After washing, I went to the market.’ (GE61-SE:2.3)

(ii) ‘Before’

Adverbial clauses which express the meaning ‘before’ are preceded by the adverbialiser *már* ‘before’ (see Section 4.14.1.3). Unlike ‘after’ clauses, *már* is never followed by the relative marker (10.62a). However, it may be followed by the infinitive form of the verb (10.62b).

- (10.62)a. *hwa sarza* *ɲkwaɓ anta aza* [*mar* *hwa nda*
 x^wã- sãr -zã nk^wãb āntã āzá **már** x^wã- ndã
 2SG.SBJ- look.at -TRANS mind 3SG.POSS COMPL **before** 2SG.SBJ- go
 a sɔka]
 á skã
 PREP1 underneath
 ‘...you (should) look at his mind first **before** you marry him (lit. go underneath)...’ (HT1-SN:2.1)
- b. [*Mar* *ɲ wan*], sa *zam uda aza* .
már ɲ wãn sã- zãm wdã āzá
before INF sleep 1SG.SBJ- eat food COMPL
 ‘Before sleeping, I eat food first.’ (GE61-SE:3.3)

(iii) ‘Since’

There are two strategies for introducing ‘since’ clauses in Buwal. The first uses the preposition *dàkà* ‘since’ (borrowed from Fulfulde) followed by the relative maker (10.63 a & b).

- (10.63)a. [*Daka ma ruraḅ a ndaha*] , *sa*
dàkà má= rwràḅ ā- ndā -xā sā-
since(ful.) REL= heat 3SG.SBJ- go -VNT.DIST 1SG.SBJ-
kawan a ujek akwaw .
kā- wān á wjēk ák^wāw
 IPFV- sleep PREP1 hut NEG.EXIST
 ‘**Since** (lit. **since when**) the heat came, I have not been sleeping in the hut.’
 (GE61-SE:4.5)

- b. [*Daka ma zlap gazlavay a ndaha*] *ŋ*
dàkà má= ʒāp gāʒāvāj ā- ndā -xā ɲ
since(ful.) REL= speech God 3SG.SBJ- go -VNT.DIST PREP2
hayak ɲtakwaw] , hejəye əy kala zlan a
xājāk ntàk^wàw xèdzè -jé j- kā- lā ʒàn á
 country 1INCL.POSS person -PL 3PL.SBJ- IPFV- do work PREP1
luma buwal kwaw .
lwmà bwāl k^wāw
 market(ful.) Buwal NEG
 ‘**Since** (lit. **since when**) the word of God came into our land, people do not do work on a Sunday (lit. Buwal market day).’
 (GE61-SE:4.3)

The second uses the verb *mār* ‘begin’ followed by the marker of accomplishment *āká* (see Section 6.3.3). This could be interpreted as meaning ‘beginning from’. This expression must be followed by the relative marker (10.64a) if a full clause is used. If the temporal expression consists of a nominalisation, the preposition *á tā* ‘on’ follows the adverbialiser (10.64b).

(10.64)a. [*Mar aka ma sa vaŋha*], *sa kasasərak*
mār āká má = sā- vāŋ -xā sā- kā- sàsɾàk
begin ACC REL= 1SG.SBJ- arrive -VNT.DIST 1SG.SBJ- IPFV- learn
ma buwal .

mā bwāl

language Buwal

‘**Beginning from** when I arrived, I have been learning the Buwal language.’ (GE61-SE:4.11)

b. *Mar aka ata lavaŋ naka ete*
mār āká á tā lā- vāŋ nākā á tē
begin ACC PREP1 on NOM.ACT arrive 1SG.POSS PREP1 here
ŋghe , *sa kasasərak ma buwal* .

nyē sá- kā- sàsɾàk *mā bwāl*

DEM.PROX 1SG.SBJ- IPFV- learn language Buwal

‘**Beginning from** my arrival here, I have been learning the Buwal language.’ (GE61-SE:4.9)

(iv) ‘Until’

Clauses which express the meaning ‘until’ are preceded by the preposition *xá* , another borrowing from Fulfulde. The relative marker can optionally co-occur (10.65 a & b).

(10.65)a. *əy lam kule anta ka [ha ma Gamata*
ǰ- lām k^wlè āntā ká *xá* *má=* gāmātā
 3PL.SBJ- build idol 3SG.POSS ANT **until(ful.)** REL= Gamata
mana a kada *ŋgha*] .

mānā á- kā- dā *nyā*

mother.1POSS 3SG.SBJ- IPFV- make.sacrifice DEM.PROX

‘...they made his idol in advance **until** (lit **until when**) my mother’s (son) Gamata is (now) making sacrifices to this one.’ (NH4-SN:2.18)

- b. *Meŋ a vas ŋ hey a mazlazlay [ħa mbəy*
mēŋ ā- vās ǰ xēj á màǰǎǰáj xá mbj
 antelope 3SG.SBJ- hurry INF run PREP1 intensity **until(ful.)** 3SG.STAT
ŋtəbal .]
 ntɓàl
 tired
 ‘The antelope ran even faster (lit. with intensity) **until** he was tired.’
 (NF6-WN:2.10)

10.1.5.2 Locative clauses

Locative clauses are formed by a locative noun such as *lā* ‘place’ or *kvā* ‘side’ followed by a relative clause (10.66 a & b). Headless relative clauses are not used for this function.

- (10.66)a. *a cetene ma ata [la ma əy*
ā- tsā -ētēnē mā á tā lā má= j-
 3SG.SBJ- put -3PL.IOBJ mouth PREP1 on **place** REL= 3PL.SBJ-
ŋkan ŋhwəye] .
 nkàn nx^wā -jé
 tie.up goat -PL
 ‘...he accompanied them to the **place where** they tied up the goats.’
 (NH8-SN: 6.2)
- b. *A kadāw ŋ nda kəda ŋ [kəva ma ŋhel*
á- kā- dāw ǰ ndā kdā ǰ kvā má= nxèl
 3SG.SBJ- IPFV- want INF go towards PREP2 **side** REL= thief
a jebza , a səkama ndərey]
ā- dzèb -zā ā- skām -ā ndrèj
 3SG.SBJ- transport -TRANS 3SG.SBJ- sell -VNT.PROX sorghum
kwaw .
 k^wāw
 NEG
 ‘He didn’t want to go towards the location (lit. **side**) **where** the thief took
 and sold the sorghum.’
 (NH9-SN:4.5)

10.1.5.3 Manner clauses

There are two ways of introducing manner clauses in Buwal. The first involves the preposition *ánā* ‘like/as’ followed by a relative clause. This construction can express both real (10.67a) and hypothetical (10.67b) meanings, which are distinguished with reference to the context. In addition, the hypothetical adverb *māṅgālṅgāl* ‘pretending’ (following the verb (10.67c)) may be used to disambiguate the meaning. The verb in the subordinate clause may be an infinitive (10.67d).

- (10.67)a. *Sa mbaz talgway [ana ma vana a*
sā- mbàz tálg^wāj ánā má= vāná ā-
 1SG.SBJ- blow flute **like** REL= father.1POSS 3SG.SBJ-
ghwelzekey].
γ^wāl -zā -ēkēj
 show -TRANS -1SG.IOBJ
 ‘I play the flute **like** my father showed me.’ (GE61-SE:6.2)
- b. *A kazam uda [ana ma a kadāw kwaw]*.
á- kā- zàm wdā ánā má= á- kā- dāw k^wāw
 3SG.SBJ- IPFV- eat food **like** REL= 3SG.SBJ- IPFV- want NEG
 ‘He is eating food **as if** (lit. **like**) he doesn't want it.’ (GE610-SE:6.5)
- c. *Sa la māṅgalṅgal [ana ma sa nda a wata]*.
sā- lā māṅgālṅgāl ánā má= sā- ndā á wātā
 1SG.SBJ- do pretending **like** REL= 1SG.SBJ- go PREP1 home
 ‘I pretend **that** (lit. **like**) I am going home.’ (GE61-SE:6.7)
- d. *Sa nda māṅgalṅgal [ana ma ḡ badā*
sā- ndā māṅgālṅgāl ānā mā ḡ bād' -ā
 1SG.SBJ- go pretending **like** REL= INF flatter -VNT.PROX
wala].
wālā
 woman
 ‘I go pretending (lit. **like**) to flatter women.’ (3051)

The preposition *ánā* ‘like/as’ can also be used to introduce specific examples of the topic being discussed. These specific examples can be clauses (10.68 a & b).

- (10.68)a. *hwa dāw ŋ labza mba ŋkwa [ana ma ŋ*
x^{wā}- dāw íj làb -zā mbà nk^{wā} ánā má= íj
 2SG.SBJ- want INF send -TRANS child 2SG.POSS **like** REL= INF
jəŋge a lekwal]
dzŋgè á lèk^{wál}
 study(ful.) PREP1 school(fr.)
 ‘...you want to send your child **for example** (lit. **like**) to study at school...’ (C6-SN:81)
- b. [*Ana ma əy kada kule*].
ánā má= j- ká- dā k^wlè
like REL= 3PL.SBJ- IPFV- make.sacrifice idol
 ‘**For example** (lit. **like**) they make sacrifices to idols.’ (DE13-SN:4.3)

Finally, the preposition *ánā* can refer to someone’s previous speech or their opinion (10.69).

- (10.69) [*Ana ma sa deŋza*] *cemey* , [*ma sa gəre*
ánā má= sá- dèŋ -zā tséméj má= sá- grē
like REL= 1SG.SBJ- think -TRANS TOP.CON REL= 1SG.SBJ- see
yam] cemey , *gwaygwaya kánda ndəram* .
jám tséméj g^wájg^wájā ká- ndā ndràm
 also TOP.CON celebration PFV- go pleasing
 ‘**According to what** I think, **what** I see also, the celebration went well.’ (C1-SN:2 &4)

The second way of marking manner clauses is with the clausal adverb *xāŋgá* ‘as if’ (see Section 3.4.3) at the beginning of the subordinate clause. When this adverb is used alone, it expresses a hypothetical meaning (10.71a). To refer to an actual state of affairs the adverb must be followed by the relative marker (10.71b).

(10.70)a. A *kazam uda [hanga a kadaw kwaw]* .
 á- k̄- zàm wdā xāṅgá ā- k̄- d̄aw k^wāw
 3SG.SBJ- IPFV- eat food **as.if** 3SG.SBJ- IPFV- want NEG
 ‘He is eating food **as if** he doesn't want it.’ (GE61-SE:7.1)

b. A *ṅhel [hanga ma cen a keṅhel a*
 ā- nxèl xāṅgá má= tsèn á- k̄- nxèl á
 3SG.SBJ- steal **as.if** REL= father 3SG.SBJ- IPFV- steal PREP1
nuna anta] .
 nwná āntā
 times.past DEF.DET
 ‘He steals **like** his father was stealing in times past.’ (GE61-SE:7.8)

10.1.5.4 Reason clauses

The preposition *màvdāj* or its variant *màvāj* ‘because’ can be used to introduce reason clauses (10.71 a & b) in addition to noun phrases expressing reasons (see Section 7.2.1.6). The preposition may optionally be followed by the relative marker *má* without changing the meaning.

(10.71)a. *uzəye əy kahan [mavəday yam a*
 wzjé j- k̄- xān **màvdāj** jàm á-
 children 3PL.SBJ- IPFV- cry **because** water 3SG.SBJ-
kazahha ata tata] .
 k̄- zāx -xā á tā tātā
 IPFV- pour -VNT.DIST PREP1 on 3PL
 ‘...the children were crying **because** water was pouring onto them’
 (TN3-WN:2.3)

b. A *sasam [mavay kélem səkan ma taṅtaṅ]* .
 ā- sàsàm **màvāj** ká- lèm skàn má= t̄aṅ-t̄aṅ
 3SG.SBJ- be.happy **because** PFV- get thing REL= good
 ‘He is happy **because** he got something good.’ (LL33-SE:13)

- c. *A ɲtɔ́bəl [mavay ma kála zlan dakala]*.
 ā- ntɔ́bəl māvāj má= ká- lā ɣàn dākálá
 3SG.SBJ- tire **because** REL= PFV- do work a.lot
 ‘He is tired **because** (lit. **that**) he did a lot of work.’ (LL33-SE:20)

Reason clauses may contain an infinitive form of the verb (10.72). This expresses a purpose meaning (see Section 10.1.5.10). As Schmidtke-Bode (2009: 154) observes, cross-linguistically there is often an overlap in structure between purpose and reason clauses. Both provide an explanation for the matrix clause action.

- (10.72) *Van a dá [mavəday ɲ gal səkan ege] .*
 vān ā- dā māvďāj ɲ gəl skàn =égē
 rain 3SG.SBJ- rain **because** INF grow thing =PL
 ‘It rains in order to (lit. **because to**) grow things.’ (GE61-SE:11.4)

10.1.5.5 Cause clauses

Cause clauses are formed by a relative clause preceded by the preposition *á tã* ‘on’ which could be translated as meaning ‘due to the fact that’ (10.73 a & b). This use parallels certain prepositional phrases introduced by *á tã* (see Section 7.2.1.4).

- (10.73)a. [*Ata ma əy kaampak*] *ca , ja a*
 á tã má= j- ká- á- mpāk tsá dzā ā-
 PREP1 on REL= 3PL.SBJ- IPFV- FUT- shut TOP hit 3SG.SBJ-
ja mbahw
 dzā mbáx^w
 hit pardon
 ‘**Due to the fact that** they were going to imprison (lit. shut) (him), he pleaded for mercy (lit. hit pardon)...’ (NH8-SN:12.3)

- b. *Mbəy kulaskwaw [ata ma kázama səkan*
mbj k^wlask^wāw á tā má= ká- zàm -ā skàn
 3SG.STAT sick PREP1 on REL= PFV- eat -VNT.PROX thing
deydey] .
dējdej
 too.much(ful.)
 ‘He is sick **due to the fact that** he ate too much.’ (LL37-SE:3)

Semantically, cause and reason clauses overlap considerably. For example (10.74a) and (10.74b) below have the same meaning. However, the cause expressed following *á tā má* must be real and not hypothetical.

- (10.74)a. *ŋtəmek kámac anta [ata ma a sa*
ntmēk ká- mātš āntā á tā má= ā- sā
 sheep PFV- die 3SG.POSS PREP1 on REL= 3SG.SBJ- drink
menjevek].
mēndzēvək
 remedy
 ‘The sheep died **due to the fact that** it drank a remedy.’ (GE61-SE:12.1)
- b. *ŋtəmek kámac anta [mavay a sa menjevek]* .
ntmēk ká- mātš āntā māvāj ā- sā mēndzēvək
 sheep PFV- die 3SG.POSS **because** 3SG.SBJ- drink remedy
 ‘The sheep died **because** it drank a remedy.’ (GE61-SE:12.2)

10.1.5.6 Conditional clauses

Buwal has three types of conditional clauses: (a) possible, (b) counterfactual and (c) concessive. These are described in more detail in the subsections below.

(a) Possible conditional clauses

POSSIBLE CONDITIONAL clauses are those for which it is possible for the condition to be fulfilled (Dixon 2009: 15). These include both real (present, habitual or past situations) (10.75a & c) and unreal (imaginative or predictive) (10.75b) conditional clauses

(Thompson et al 2007, 258). These two types are not distinguished formally in Buwal. Possible conditional clauses are preceded by either *màdā* (10.75 a & b) or *āndzā* (10.75c) ‘if’. The first of these subordinating conjunctions *màdā* is the most common in the corpus. Conditional clauses may either precede (10.75 b & c) or follow the matrix clause (10.75a).

- (10.75)a. *əy jetene mbahw* [*mada əy keghwedetene*
 ǰ- dzā -ētēnē mbáx^w màdā ǰ- kā- y^wàf -ētēnē
 3PL.SBJ- hit -3PL.IOBJ pardon **if** 3PL.SBJ- IPFV- anger -3PL.IOBJ
 unaf a musa ege] .
 wnáf á mwsá =égē
 heart PREP1 twin =PL
 ‘They ask them forgiveness **if** they anger the heart of twins.’
(DE2-SN:6.10)
- b. [*Mada kásəkam ɲhwa*] *ca* , *na nazam zley* .
 màdā *ká-* *skām* *nx^wā* *tsá* *nā-* *ná-* *zàm* *ɟèj*
 if PFV- buy goat TOP 1EXCL.SBJ- FUT- eat meat
 ‘**If** he has bought a goat, we will eat meat.’
(LL36-SE:6)
- c. [*Anja a kandaha*] , *sa həbaraw* .
 āndzā *ā-* *kā-* *ndā* *-xā* *sā-* *xbār* *-āw*
 if 3SG.SBJ- IPFV- go -VNT.DIST 1SG.SBJ- wait -3SG.DOBJ
 ‘If he is coming, I (will) wait for him.’
(GE57-SE:3)

(b) Counterfactual conditional clauses

COUNTERFACTUAL CONDITIONAL clauses are those for which it is no longer possible for the condition to be met (Dixon 2009: 15). In Buwal, these are marked with the modal adverb *kēdē* ‘perhaps’ (10.76 a & b) (see Table 3.21, Section 3.4.3). The tense/aspect marking on both clauses is restricted as the hypothetical event in the adverbial clause must precede the event in the matrix clause.

(10.76)a. [*Kedé* a njuna heje kájav] ca , heje
 kēdé á ndzwná xèjé- ká- dzàv tsá xèjé-
perhaps PREP1 yesterday 1INCL.SBJ- PFV- assemble TOP 1INCL.SBJ-
nacacalakwa ma ntakwaw aza .
 ná- tsàtsàl -āk^wā mā ntàk^wàw āzá
 FUT- resolve -1INCL.COL problem 1INCL.POSS COMPL
 ‘**Perhaps if** yesterday we had assembled, we would have resolved our
 problem together already.’ (GE61-SE:13.2)

b. [*Kedé* hejaye əy kájam ma dakal dakal
 kēdé xèdzè -jé j- ká- dzām má= dākāl dākāl
perhaps person -PL 3PL.SBJ- PFV- gather REL= big big
ege] , [əy kájamha a egəlayz] ca ,
 =égē j- ká- dzām -xā á egljz tsá
 =PL 3PL.SBJ- PFV- gather -VNT.DIST PREP1 church(fr.) TOP
a nanda ndəram kedé zeney eze
 ā- ná- ndā ndràm kēdé zēnéj ézē
 3SG.SBJ- FUT go pleasing perhaps again therefore
 ‘**Perhaps if** people had gathered the leaders, (if) they had gathered at
 church, it would have therefore gone even better...’ (C1-SN:35.1)

(c) Concessive conditional clauses

CONCESSIVE CONDITIONAL clauses imply that the situation in the main clause holds true whether or not the condition in the concessive conditional clause is met. In Buwal, such clauses are preceded by the focus particle *káw* ‘even’ (10.77 a & b) (see Section 3.4.4).

(10.77)a. [*Kaw* a rahwaw], [*kaw* a
 káw ā- rā -āx^wāw káw ā-
even(ful.) 3SG.SBJ- insult -2SG.DOBJ **even(ful.)** 3SG.SBJ-
gazlahwaw], sey hwa sewew .
 gəɫɟ -āx^wāw séj x^wā- sèw -āw
 beat -2SG.DOBJ except(ful.) 2SG.SBJ- bear -3SG.DOBJ
 ‘**Even if** he insults you, **even if** he beats you, you must bear it.’
 (HT1-SN:3.4)

- b. [*Kaw* əy *kada* *kule wese*] *ca* ,
káw j- *kā-* *dā* *k^wlè wēsé* *tsá*
even(ful.) 3PL.SBJ- IPFV- make.sacrifice idol DEM.DIST TOP
əy *kayaza* *gazlavay ara a mna* .
j- *kā-* *jā* -*zā* *gāḷāvāj* *ārá á mnā*
3PL.SBJ- 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-SN:18.5)

The concessive conditional marker *káw* ‘even’ can also co-occur with the possible conditional marker *màdā* ‘if’ (10.78).

- (10.78) [*Mada kaw* *hwa kámay mawal aza*] *cemey* ,
màdā káw x^wā- *ká-* *māj* *māwàl āzá tséméj*
if even(ful.) 2SG.SBJ- PFV- choose husband COMPL TOP.CON
a dāw ca hwa nda , *hwa ghwelzene*
ā- *dāw tsá* x^wā- *ndā* x^wā- *y^wāl -zā -ēnē*
3SG.SBJ- want TOP 2SG.SBJ- go 2SG.SBJ- show -TRANS -3SG.IOBJ
ata macahw ey baba ŋkwa .
ātā mātsāx^w éj bābā nk^wā
ASS.PL mother.2POSS and(ful.) father(ful.) 2SG.POSS
‘**Even if** you have already chosen a husband, it should be (lit. wants) that
you go, you show (him) to your mother and father.’ (HT1-SN:9.1)

10.1.5.7 Concessive clauses

A CONCESSIVE CLAUSE makes a concession which contrasts with the proposition in the main clause (Thompson et al 2007: 262). Buwal concessive clauses are marked using one of two linking adverbs (see Table 3.22, Section 3.4.3): *kárḃā* or *évēlè* ‘although, even’. These adverbs can either precede the adverbial clause (10.79 a & c) or come at the end of the matrix clause (10.79b). The adverb *kárḃā* may be optionally followed by the relative marker *má* (10.79c).

- (10.79)a. [*Karba* əy nelem dala] , əy kadaw ŋ la
kárbā j- ná- lèm dālā j- kā- dāw ɨ lā
although 3PL.SBJ- FUT- get money 3PL.SBJ- IPFV- want INF do
zlan kwaw .
 ʒàn k^wāw
 work NEG
 ‘**Although** they will get money, they don’t want to do work.’ (GE24-SE:5)
- b. [*Kándaha*], nene kála zlan *evele* .
 ká- ndā -xā nènè- ká- lā ʒàn évèlè
 PFV- go -VNT.DIST 1EXCL.SBJ- PFV- do work **even so**
 ‘He had come, we worked **even so**.’ (LL55-SE:1)
- c. *Ndorey kágal anta dakala* , [*karba* ma van
 ndrèj ká- gəl āntā dākālā **kárbā** má = vān
 sorghum PFV- grow 3SG.POSS a.lot **although** REL= rain
káda parham].
 ká- dā párxám
 PFV- rain insufficient
 ‘The sorghum has grown a lot, **although** it has not rained enough (lit. rain
 has rained insufficiently).’ (GE24-SE:2)

10.1.5.8 Indefinite concessive clauses

According to Thompson et al (2007: 263), INDEFINITE CONCESSIVE CLAUSES are ‘those which signal a meaning like ‘no matter what’ or ‘whatever.’ They state that a universal quantifier may be used for an element in the concession. Indefinite concessive adverbial clauses in Buwal are preceded by the focus particle *káw* ‘even’ and end with an interrogative pro-form (10.80 a & b). These constructions function like universal quantifiers (see Section 4.1.4).

- (10.80)a. [*Kaw* hwa laba *vangay*] , sa nala war .
káw x^wā- lā -bā **vángáj** sā- ná- lā wár
even(ful.) 2SG.SBJ- do -BEN **how** 1SG.SBJ- FUT- do still
 ‘**Whatever** (lit. **however**) you do, I will do still do it.’ (GE61-SE:14.2)

- b. [*Kaw* a *zlapahwaw* ma *vekey*], *hwa*
káw ā- *ɣ̣āp* -āx^wāw mā *vékéj* x^wā-
even(ful.) 3SG.SBJ- speak -2SG.IOBJ word **which** 2SG.SBJ-
lamza .
lám -zā
 accept -TRANS
 ‘**Whatever** (lit. **whichever** word) he says to you, you accept it.’
 (HT7-SN:1.7)

10.1.5.9 Substitutive clauses

SUBSTITUTIVE CLAUSES replace an expected event with an unexpected one (Thompson et al 2007: 263). In Buwal, substitutive adverbial clauses contain the verb *dāw* ‘want’ followed by an infinitive complement. They are preceded by the modal adverb *kēdě* ‘perhaps’ (10.81 a & b).

- (10.81)a. [*Kede* a *dāw* *ŋ* *nda* a *luma*], *mbəy* *dák*
kēdé ā- *dāw* *ŋ* *ndā* á *lwmà* *mbj* *dák*
perhaps 3SG.SBJ- **want** INF **go** PREP1 market(ful.) 3SG.STAT gone
a *damaw* .
á *dámāw*
 PREP1 bush
 ‘**Perhaps** he **wanted to go** to the market, (but) he went to the bush (instead).’
 (GE61-SE: 15.1)
- b. [*Kede* a *dāw* *ŋ* *nhel*], *əy* *kégəreza* .
kēdé ā- *dāw* *ŋ* *nxèl* *j*- *ká*- *grē* -zā
perhaps 3SG.SBJ- **want** INF **steal** 3PL.SBJ- PFV- see -TRANS
 ‘**Perhaps** he **wanted to steal**, (but) they saw him (instead).’
 (GE61-SE:15.4)

10.1.5.10 Purpose clauses

PURPOSE CLAUSES express a motivating event for the event in the matrix clause (Thompson et al 2007: 250). Schmidke-Bode (2009: 199) states that cross-linguistically

languages typically develop more than one purposive construction. The two most common purpose constructions are ‘finite’ (sentence-like) which are typically marked by an overt conjunction, adposition or affix, and ‘non-finite’, which make use of deranked verb forms. Buwal has both types of constructions: (a) reduced sentence-like and (b) deranked. Their meanings do not differ substantially. Both express the motivation for the event expressed in the matrix clause. Reduced sentence-like purpose clauses are used when the participants need to be overtly expressed. Deranked purpose clauses are used when certain participants may be omitted such as when the subject of the matrix and the adverbial clause are the same. The sequential marker *āmbá* ‘then’ may occur at the beginning of a purpose clause as the event it describes always occurs after the event in the matrix clause (see Section 10.2).

(a) Reduced sentence-like purpose clauses

Reduced sentence-like purpose clauses are marked with one of two subordinating conjunctions: *ndár* or *táp* (variant: *tpá*) ‘so that’, the first appearing far more frequently in the corpus (10.82 a to c). The tense/aspect marking on the verb of the subordinate clause is restricted by constraints on the order of the events. The subordinate verb cannot take perfective marking as this event necessarily follows that of the matrix clause. It is possible for the subordinate clause to precede the matrix clause (10.82c).

- (10.82)a. *mala mackwahw əy dēdēw [ndar a*
 mālā mátsk^wāx^w j- dēdē -āw ndár ā-
 GEN evening 3PL.SBJ- pour.into -3SG.DOBJ **so.that** 3SG.SBJ-
 na zadāw zadāw].
 nā zādāw zādāw
 ferment night night
 ‘...in the evening they pour it into (pots) **so that** it ferments all night.’
 (DP2-SN:2.4)

- b. *Heje kala ata zley [tap zley a rɔdɑ*
xɛ̀jɛ- kɑ- lɑ́ á tɑ́ ɬɛ̀j tɑ́p ɬɛ̀j ā- rɔ́ɑ
 1INCL.SBJ- IPFV- add PREP1 on meat **so.that** meat 3SG.SBJ- rot
səkwaw] .
sk^wāw
 NEG
 ‘We add (salt) to meat **so that** the meat doesn't rot.’ (HT8-SN:2.5)
- c. [*Ndar hwa zambɑ uda kadak kadak*] *ca , tal*
ndár x^wā- zàm -bɑ́ wdɑ́ kádàk kádàk tsá təl
so.that 2SG.SBJ- eat -BEN food good good TOP make.effort
ŋ la zlan .
ŋ́ lɑ́ ɬàn
 INF do work
 ‘**So that** you (will be able to) eat very well, make an effort to do work.’
 (GE61-SE:10.2)

The subject of the matrix clause and the purpose clause may be the same (10.83).

- (10.83) *mzla wala wese a nda ɲ*
mʒā wālā wēsé ā- ndā ɲ
 blacksmith wife DEM.DIST 3SG.SBJ- go INF
zladāba [ndar a detene uda
ʒād -ā -bā ndár ā- dà -ētēnē wdā
 pick.up -VNT.PROX -BEN so.that 3SG.SBJ- prepare -3PL.IOBJ food
a uzəye anta ege] .
á wzjé āntā =égē
 PREP1 children 3SG.POSS =PL
 ‘...that non-favoured wife went to pick (it) up so that she prepared food
 for her children.’ (TN4-WN:2.3)

(b) Deranked purpose clauses

The most common type of deranked purpose clause involves the use of the infinitive form of the verb (see Section 10.1.1.4). This construction can be used when the subject of the matrix clause and the subordinate clause is the same. Any verb whether intransitive (10.84a) or transitive (10.84b) can be used in the matrix clause. This is significant because if the verb is intransitive, the infinitive cannot function as a complement clause (see Section 10.1.2.1).

- (10.84)a. *A nda a wata mzla [ɲ səkamha jene] .*
ā- ndā á wātā mʒā ɲ skām -xā dzēnē
 3SG.SBJ- go PREP1 home blacksmith INF buy -VNT.DIST axe
 ‘He went to the blacksmith's house to buy an axe.’ (TN3-WN:5.3)

- b. *kaw vayay a da baraw gbak gbak [ɲ nda*
káw vājáj ā- dā bāràw gbák gbák ɲ ndā
 even(ful.) who 3SG.SBJ- bring thousand(ful.) two two INF go
[ɲ səkam mēd]] .
ɲ skām mēd
 INF buy oath
 ‘...everyone brought two thousand (francs) to go to buy the oath.’
 (NH8-SN:7.13)

It is possible for the infinitive to be preceded by the subordinating conjunction *ndár* ‘so that’ (10.85).

- (10.85) *Na sla ka ata lanja ηcene ...*
 ná- ɫā ká á tā lā- ndzā ntsènè
 1EXCL.SBJ- prepare ANT PREP1 on NOM.ACT be 1EXCL.POSS
 [*ndár η lem lanja ma tantan ara hwa*].
ndár ɲ lèm lā- ndzā má= tãŋ-tãŋ á rā x^wā
so.that INF get NOM.ACT be REL= good PREP1 side 2SG
 ‘We prepare our lives in advance...**in order to** have a good life with you.’
 (BH1-SN:5.3)

Infinitive purpose clauses are often reanalysed cross-linguistically as complement clauses (Schmidtke-Bode 2009: 200). A number of different types of complement clauses, including desiderative, manipulative, obligation, ability, permission, achievement and phasal, make use of the infinitive form of the verb in Buwal (see Section 10.1.2.2). Complement clauses and purpose clauses differ syntactically, however, in that complement clauses take the place of the direct object of the verb and purpose clauses are adjuncts. The distinction can be established by checking whether another direct object (which is not the subject of the subordinate clause) is present as in example (10.84b) above. Another test is to see if an adjunct can be inserted between the verb and the infinitive. It is not possible for an adjunct to occur between a verb and the direct object (see Section 8.1.1). Therefore if the infinitive is functioning as a complement clause an adjunct may not precede it. In the case of the complement clause in (10.86a) below, *mālā mápát* ‘for the morning’ cannot occur between the verb *dāw* ‘want’ and the infinitive. However, if an adjunct can precede the infinitive, as in example (10.86b), this indicates that the infinitive is also an adjunct and functioning as a purpose clause.

- (10.86)a. *Sa dāw [η da uda mala mapat] .*
 sā- dāw ɲ dà wdā **mālā mápát**
 1SG.SBJ- want INF prepare food GEN **morning**
 ‘I want to prepare food **in the morning**.’ (GE61-SE:9.11)

- b. *Sa fəɖáhha mala mapat beŋ* [ɲ nda ɲ
 s̄a- fɖāx -xā mālā m̄apát bēŋ ɲ ndā ɲ
 1SG.SBJ- wake -VNT.DIST GEN morning early INF go PREP2
lekwal] .
 lèk^wál
 school(fr.)
 ‘I wake up **early in the morning** to go to school.’ (GE61-SE:9.7)

A second, less common type of deranked purpose clause involves a non-finite verb preceded by the preposition *á t̄ā* ‘on’ (10.87 a & b). This construction is used where the event within the purpose clause is simultaneous with the event in the matrix clause.

- (10.87)a. *Sa d̄erezlza la naka aza* [*ata cap .*]
 s̄a- dr̄èɟ -zā lā nākā āzá á t̄ā tsāp
 1SG.SBJ- surround -TRANS field 1SG.POSS COMPL PREP1 on fence.in
 ‘I surround my field while fencing (it) in.’ (GE40-SE:28.12)
- b. *Sa kákəɖaŋza la* [*ata zlaka*]
 s̄a- ká- kɖáŋ -zā lā á t̄ā ɟàk -ā
 1SG.SBJ- PFV- finish -TRANS field PREP1 on sow -VNT.PROX
 ‘I finished sowing the field...’ (GE61-SE:19.3)
 (lit. ‘I finished the field for sowing...’)

10.1.5.11 Absolutive clauses

ABSOLUTIVE clauses do not explicitly express the relationship with the main clause. It must be inferred from the context (Thompson et al 2007, 264). In Buwal, absolutive clauses contain deranked verb forms, generally the verb root, usually followed by a verbal particle (10.88 a & b) (see Section 6.3).

- (10.88)a. [*Slak aka ɲ zlam eze*] , *a kanda eze səkwa .*
 ɬàk āká ɲ ɟàm ézē á- k̄a- ndā ézē sk^wá
 tuck ACC in ear therefore 3SG.SBJ- IPFV- go therefore Q.FAM
 ‘Therefore tucking it into his ear, he was going wasn’t he?’ (NF2-SN:2.19)

- b. [Ban aza] , a tetengel ata hayak war .
 bān āzá ā- tètèngèl á tā xājāk wár
 bathe COMPL 3SG.SBJ- roll PREP1 on ground still
 ‘Having bathed, he still rolled around on the ground.’ (GE61-SE:16.4)

The infinitive form of the verb may also be used in absolutive clauses (10.89).

- (10.89) [I] nda ama je6] , əy tadakw aza ka ata
 í ndā á mā dzè6 j- tàdàk^w āzà ká á tā
 INF go PREP1 edge grave 3PL.SBJ- descend IT ANT PREP1 on
 hayak .
 xājāk
 ground
 ‘Going to the place in front of the grave, they lower (the body) for the time
 being onto the ground.’ (DP1-SN:6.1)

10.2 Sequential clauses

Frajzyngier (1996: 40) describes SEQUENTIAL CLAUSES as commonly found in Chadic languages. He states that in sequential clauses, the second clause describes an event which occurs after, and which is a result of, the event in the first clause. Sequential clauses in Buwal are marked with either the sequential marker *āmbá* ‘then’ or *ājā* ‘then/so’ (10.90 a & b) (see Section 4.14.2).

- (10.90)a. Əy zlanza zley **amba** əy mac .
 j- ʒàn -zā ʒèj **āmbá** j- màts
 3PL.SBJ- taste -TRANS meat **then** 3PL.SBJ- die
 ‘They tasted the meat **then** they died.’ (NF6-WN:4.5)

- b. *a kavas ŋ nda aza ca , aya hal wese*
 á- kǎ- vās ǰ ndā āzà tsá **ājā** xāl wēsé
 3SG.SBJ- IPFV- hurry INF go IT TOP **so** girl DEM.DIST
wer a hey aza kǎdē a luma .
 wér á- xēj āzà kdē á lwmà
 manner.of.fleeing 3SG.SBJ- run IT towards PREP1 market(ful.)
 ‘...he was hurrying to go away, **so** that girl, fleeing, ran towards the
 market.’ (C4-SN:11.5)

These markers can also occur at the beginning of the matrix clause modified by a temporal adverbial clause (see Section 10.1.4.1) when the relationship is one of temporal sequence (10.91 a & b). The function of these markers is to narrow the temporal relationship between the two events. The adverbial clause must then occur before the event in the matrix clause. When the sequential marker is present, the adverbial clause must occur before the matrix clause.

- (10.91)a. [***Ma** sa kanavaŋ a wata*] , *amba əy*
má= sǎ- kǎ- ná- vāŋ á wātā **āmbá** j-
REL= 1SG.SBJ- IPFV- FUT- arrive PREP1 home **then** 3PL.SBJ-
nazam uda .
 ná- zàm wdā
 FUT- eat food
 ‘**When** I arrive (lit. will be arriving) at home, **then** they will eat food.’
 (GE61-SE:1.14)
- b. [***ma** hejəye əy zlap tewtew*] *ca , aya nda əy*
má= xèdzè -jé j- ǰāp téw-téw tsá **ājā** ndā j-
REL= person -PL 3PL.SBJ- speak all TOP **then** go 3PL.SBJ-
nda tata eze .
 ndā tātá ézē
 go 3PL.POSS therefore
 ‘...**when** all the people spoke, **then** they left.’ (NH3-SN:7.5)

The sequential marker *āmbá* ‘then’ can also occur in purpose adverbial clauses (see Section 10.1.4.10) as the event in the purpose clause occurs after the event in the matrix clause (10.92 a & b).

- (10.92)a. *Sa banba aza* , [*ndar amba sa nda η*
sā- bān -bā āzá ndár āmbá sā- ndā ř
 1SG.SBJ- wash -BEN COMPL **so.that then** 1SG.SBJ- go INF
tawarha].
tāwār -xā
 walk.around -VNT.DIST
 ‘I wash first, **so that then** I go for a walk.’ (GE61-SE:8.9)
- b. *əy manda η sarzata kwagwa*
ǰ- mā- ndā ř sār -zā -ātā k^wág^wá
 3PL.SBJ- JUS- go INF look.at -TRANS -3PL.DOBJ for.the.moment
 [*amba η teh ma anta*]
āmbá ř tēh mā āntā
then INF wait problem DEF.DET
 ‘...let them go and examine them (those claiming to be injured) for the time being, while waiting for the problem (to be solved)...’
 (lit. ‘... let them go to look at them for the moment, **then** to wait for the problem...’) (NH14-SN:3.9)

10.3 Clause juxtaposition

Simple juxtaposition of two or more clauses with no marker in between is very common in Chadic languages. Frajzyngier (1996: 40) suggests that the role of such a structure is to establish a connection between two events and invite the hearer to provide a semantic interpretation of this connection. Buwal makes frequent use of clause juxtaposition. In these constructions there is an intonational break between each clause. Non utterance final clauses show an continuation intonation pattern of a high level tone on the final syllable before the pause, while the final clause ends with an utterance final boundary low tone (see Section 2.7.2.1). Clause juxtaposition in Buwal can result in two broad categories of semantic interpretation: (a) addition and (b) sequence.

(a) Addition

Rather than using a coordinate structure (see Section 10.4.1), Buwal typically expresses addition semantics using juxtaposition. This strategy is common in Chadic languages as most do not have a sentential coordinating conjunction (Frajzyngier 1996: 26). Addition in Buwal can be divided into three semantic types: (i) unordered addition, (ii) same-event addition and (iii) elaboration.

(i) Unordered addition

In UNORDERED ADDITION, two semantically related events are combined with no temporal sequence assumed (10.93 a & b) (Dixon 2009: 26).

- (10.93) a. *Na bam teked' , na bam mba dambazl a*
ná- bām tēkēd' ná- bām mbà dāmbàz̩ á
1EXCL.SBJ- munch calabash 1EXCL.SBJ- munch child pumpkin PREP1
nje .
ndzé
rawness
'We munched calabash, we munched raw pumpkin seeds.'
(NH11-SN:1.11)

- b. *A pes wende , káda mavaw ,*
á pès wéndé ká- dà mávāw
PREP1 day IND.DET.SG PFV- prepare beer
káɲtawa ɲkələf ɲ zlazlar .
ká- ntāw -ā nklèf ɲ ʒàʒàr
PFV- catch -VNT.PROX fish PREP2 river
'One day, she prepared wine, she caught fish in the river.' (TN4-WN:3.1)

(ii) Same-event addition

In SAME-EVENT ADDITION, the two clauses describe different aspects of the same event (10.94 a & b) (Dixon 2009: 27).

(10.94) a. *Əy mar ŋ ŋhel aza , əy gam ŋhwəye mala*
ǰ- mār ǰ nxèl āzá ǰ- gām nx^wā -jé mālā
 3PL.SBJ- begin INF steal COMPL 3PL.SBJ- drive.away goat -PL GEN
ata Martan , mala a Nəykawla .
ātā martan mālā á njkawla
 ASS.PL Martin GEN PREP1 Nicholas
 ‘They began to steal (them) first, they drove away the goats of Martin and
 others and of Nicholas.’ (NH8-SN:2.3)

b. *a dam a ujek ŋgama anta wese , a*
ā- dām á wjēk ŋgámà āntā wēsé ā-
 3SG.SBJ- enter PREP1 hut friend 3SG.POSS DEM.DIST 3SG.SBJ-
ŋgwaf ma ujek .
ŋg^wāf mā wjēk
 break.down mouth hut
 ‘...he entered the hut of that friend of his, he broke down the door.’
 (NH9-SN:3.4)

(iii) Elaboration

ELABORATION is where the second clause echoes the first, adding additional information (10.95 a & b) (Dixon 2009: 27).

(10.95) a. *Gulam kwekwet , gadaɸ kwekwet .*
g^wlām k^wēk^wét gàdàɸ k^wēk^wét
 quiver used.up arrow used.up
 ‘The quiver was used up, the arrows were used up.’ (NH4-SN:2.15)

b. *Əy nda , əy kanda kəda a wata .*
ǰ- ndā ǰ- kā- ndā kɸā á wātā
 3PL.SBJ- go 3PL.SBJ- IPFV- go towards PREP1 home
 ‘They went, they were going towards home.’ (NF3-SN:4.3)

(b) Sequence

Events in simple temporal succession are frequently expressed by a number of juxtaposed clauses following each other (10.96 a & b). The meaning is similar to the sequential

clauses described in Section 10.2, however each event is not necessarily the result of a previous one. These differ from temporal sequence adverbial clauses as each event is independent.

- (10.96)a. *Əy fataw , əy daw , əy*
 ǰ- fāt -āw ǰ- dà -āw ǰ-
 3PL.SBJ- slaughter -3SG.DOBJ 3PL.SBJ- prepare -3SG.DOBJ 3PL.SBJ-
 zamaw , əy sasam .
 zàm -āw ǰ- sàsàm
 eat -3SG.DOBJ 3PL.SBJ- rejoice
 ‘They slaughter it, they prepare it, they eat it, they rejoice.’ (NH11-SN:3.5)
- b. *A dā yam , a da uda , mbəy ɲtəbal .*
 ā- dā jàm ā- dà wdā mbj ntɓàl
 3SG.SBJ- draw water 3SG.SBJ- prepare food 3SG.STAT tired
 ‘She draws water, she prepares food, she is tired.’ (GE61-SE:17.3)

10.4 Clause Coordination

Payne (1997: 336-337) defines coordination of clauses as ‘the linking of two clauses of equal grammatical status’, elaborating that the two clauses ‘have more or less the same function in terms of the event structure of the text’. Haspelmath (2007: 1) also emphasises the semantic perspective when he defines coordination as being when ‘two or more units of the same type are combined into a larger unit and still have the same semantic relations with other surrounding elements.’ Buwal has constructions which express conjunctive coordination (Section 10.4.1), disjunctive coordination (Section 10.4.2) and adversative coordination (Section 10.4.3).

10.4.1 Conjunctive coordination

Conjunctive coordination asserts that each of the propositions are true (Payne 1997: 338). While conjunctive coordination is most commonly expressed in Buwal using simple juxtaposition (see Section 10.3), clauses may also be combined using a coordinating conjunction, either *éj* ‘and’ (borrowed from Fulfulde) or *léj* ‘plus’ (see Section 4.14.3).

Noun phrases and prepositional phrases are coordinated in the same way (see Sections 5.4.1 and 7.3).

The coordinating conjunction *léŋ* ‘plus’ is used for simultaneous actions (10.97).

- (10.97) [əy dák ŋ banha] *leŋ* [əy nada
 j dák ŋ bān -xā léŋ j- ná- dā
 3PL.STAT gone INF wash -VNT.DIST **plus** 3PL.SBJ- FUT- draw
yam ara].
 jàm ārá
 water SIM
 ‘They are gone to wash **plus** they will draw water at the same time.’
 (GE18-SE:32.2)

The coordinating conjunction *éj* ‘and’ can be used to express a number of different types of semantic relationships including temporal succession (10.98a), unordered addition (10.98b) and elaboration (10.98c).

- (10.98) a. [Atul , a dɔbas] *ey* [kawkaw əy
 àt̄w̄l ā- dɔàs éj kākāw j-
 smoke.rising 3SG.SBJ- billow **and(ful.)** suddenly 3PL.SBJ-
ŋtahwaw uzəye aza] .
 ntā -āx^wāw wzjé āzá
 take -2SG.IOBJ children COMPL
 ‘The smoke billows **and** suddenly they take your children.’ (NH4-SN:1.2)
- b. *Ata ŋtəra Welmbegem [heje kazam gagəmay]*
 á tā ntrā wélmbègém xèjé- kākā- zàm gágmāj
 PREP1 on month Welmbegem 1INCL.SBJ- IPFV- eat cotton
ey [heje kara ŋgəzleŋ] .
 éj xèjé- kākā- rà ŋgɔ̀ɛ̀ŋ
and(ful.) 1INCL.SBJ- IPFV- dig peanut
 ‘In January (lit. the month of Welmbegem) we harvest cotton **and** we dig
 up peanuts.’ (LL29-SE:2)

- c. [Na nda ŋ rakahwaw , bay ma zetelveŋ ma
ná- ndā ŋ rāk -āx^wāw bāy má= zētélvēŋ má=
1EXCL.SBJ- come INF pray -2SG.DOBJ chief REL= up.high REL=
mgbà] *ey* [na narakahwaw ata
ŋmgbà éj ná- ná- rāk -āx^wāw á tā
up.there **and(ful.)** 1EXCL.SBJ- FUT- pray -2SG.DOBJ PREP1 on
ma ege vedəye parpar parpar] .
mā =égē vēdjé párpār párpār
problem =PL IND.DET.PL different different
‘We come to pray to you, chief on high, **and** we will pray to you about
some different problems.’ (BH1-SN:1.5)

10.4.2 Disjunctive coordination

Disjunctive coordination of noun phrases was covered in Section 5.4.3. Buwal makes use of the same structures for the disjunctive coordination of clauses. This also applies to interrogative disjunction which was discussed in Section 9.3.1.2. Two other types of disjunctive coordination were described for noun phrases: (a) symmetrical and (b) rejection. Examples of these types of coordination involving clauses are given below. See Section 5.4.3 for further detail on the meaning of each type.

(a) Symmetrical

For symmetrical disjunction either alternative may be true. The second alternative is introduced by the negative existential marker *ák^wāw* (see Section 4.11.2) followed by an optional topic marker (see Section 4.15) (10.99 a & b).

- (10.99) a. *Hwa velekey dala , akwaw ca , hwa*
x^wā- vāl -ēkēj dālā ák^wāw tsá x^wā-
2SG.SBJ- give -1SG.IOBJ money(ful.) NEG.EXIST TOP 2SG.SBJ-
dekey ndərey .
dā -ēkēj ndrèj
bring -1SG.IOBJ sorghum
‘Give me money, **or** bring me sorghum.’ (GE19-SE:5)

- b. *Sa lam ujek , akwaw ma , sa ca wala .*
 s̄a- lām wjĕk ák^wāw má s̄a- tsā wālā
 1SG.SBJ- build hut NEG.EXIST TOP.EMPH 1SG.SBJ- put wife
 ‘I (will) build a house, **if not**, I (will) take a wife.’ (GE19-SE:11.2)

This construction is also used to express the adverbial meaning of possible consequence (10.100). In fact this is probably the primary meaning with the disjunctive meaning having developed from it.

- (10.100) *Caza kaᅇgaᅇ aka a wata , akwaw ca , uzəye*
 tsā -zā kāᅇgāᅇ āká á wātā ák^wāw tsá wzjé
 put -TRANS drum ACC PREP1 home NEG.EXIST TOP children
naka ege əy nafəᅇdāhha aza
 nākā =égē j- ná- fdāx -xā āzá
 1SG.POSS =PL 3PL.SBJ- FUT- wake -VNT.DIST COMPL
 ‘Put the drum down at home, **otherwise** my children will wake up.’
 (NF4-SN:2.9)

(b) Rejection

Rejection disjunction occurs in Buwal when one alternative precludes the other. The rejected alternative is introduced by the plain negative marker *k^wāw* (see Section 4.11.1) followed by a general topic marker. The second clause is usually negated (10.101a) or finishes with an interrogative marker since it expresses the alternative which is being rejected (10.101b).

- (10.101) a. *Sa nda a luma kwaw ca , sa nda a*
 s̄a- ndā á lwmà k^wāw tsá s̄a- ndā á
 1SG.SBJ- go PREP1 market(ful.) NEG TOP 1SG.SBJ- go PREP1
damaw kwaw .
 dāmāw k^wāw
 bush NEG
 ‘I go to the market **and not** to the bush.’ (GE19-SE:13.7)

- b. *a talba ende , kwaw ca , a ndaba*
 ā- tàl -bā éndē k^wāw tsá ā- ndā -bā
 3SG.SBJ- manage -BEN like.this NEG TOP 3SG.SBJ- go -BEN
ata la wende ca aka vaw ?
 á tā lā wéndé tsá ákā vāw
 PREP1 on place IND.DET.SG TOP EXIST Q
 ‘...he manages like this, **otherwise** is there another place where he goes?’
 (C5-SN:41)

10.4.3 Adversative coordination

ADVERSATIVE coordination expresses contrast between the propositions of the two clauses. In Buwal there is more than one way of expressing contrast, including the use of adverbs (see Section 3.4.3) or the contrastive topic marker (see Section 11.2.2.2). One common way is to use the contrastive conjunction *àmá* ‘but’ borrowed from Fulfulde (10.102 a & b) (see Section 4.14.3).

- (10.102) a. *Sa kazam kan akwaw ama sa kayayaŋ ,*
 sā- kā- zàm kàn ák^wāw àmá sá- kā- jàjàŋ
 1SG.SBJ- IPFV- eat thing NEG.EXIST **but(ful.)** 1SG.SBJ- IPFV- shine
kusam naka parpar .
 k^wsàm nākā párpār
 body 1SG.POSS different
 ‘I am not eating anything **but** I shine, my body is different.’ (C11-SN:182)

- b. *hwa ndewzene a egəloyz*
 x^wā- ndàw -zā -ēnē á egljz
 2SG.SBJ- find -TRANS -3SG.IOBJ PREP1 church(fr.)
kélemeye ama əy kája ujek anta
 ká- lām -ējē àmá j- ká- dzā wjək āntā
 PFV- build -PART **but(ful.)** 3PL.SBJ- PFV- hit house DEF.DET
kwagwa kwaw .
 k^wág^wá k^wāw
 for.the.moment NEG
 ‘...you (will) find a church built **but** they haven’t covered (with iron) (lit. hit) the building yet.’
 (PP2-SN:4.2)

Chapter 11 Pragmatically marked structures

PRAGMATICS is concerned with how utterances are interpreted in real contexts (Payne 1997: 261). This chapter, while not an exhaustive description of Buwal pragmatics, discusses a number of pragmatically marked constructions in Buwal. Section 11.1 deals with those elements that can occur as DETACHED PHRASES, which according to Van Valin and LaPolla (1997: 36) are outside the clause but within the sentence. Section 11.2 describes topicalisation in Buwal, a significant feature of Chadic languages. Cleft constructions are discussed in Section 11.3. Finally the various functions of verb repetition are dealt with in Section 11.4.

11.1 Detached phrases

Certain elements may occur as detached phrases. They may either occur in initial or left-detached position or in final or right-detached position (Van Valin & LaPolla 1997: 36-37). Left-detached phrases are described in Section 11.1.1 and right-detached phrases in Section 11.1.2. Detached phrases in Buwal are distinguished from topicalisation (see Section 11.2) as these phrases are never marked by topic markers, nor do they have a grammatical role in the adjoining clause.

11.1.1 Left-detached phrases

Left-detached phrases are followed by a pause and have utterance final intonation (see Section 2.7.2.1) indicating that they are somehow separate from the following clause. The words typically found in this position are: terms of address (11.1a), interjections (11.1b) (see Section 4.17), ideophones (11.1c) (see Section 3.4.1), pro-sentences such as ‘yes’ or ‘no’ (11.1d) (see Section 4.1.6) and certain discourse level connectives (11.1e).

- (11.1) a. *Gwambakw* , *hwa* *bas* *ata* *sa* *vaw* ?
g^wāmbāk^w x^wā- bās á tā sā vāw
toad 2SG.SBJ- laugh PREP1 on 1SG Q
‘Toad, are you laughing at me?’ (NF6-WN:1.2)

- b. *Kay* , *hune jeβzata* *war* !
 káj x^wné- dzèb -zā -ātā wár
 Oh! 2PL.SBJ- take -TRANS -3PL.DOBJ still
 ‘Oh, take them (away) still!’ (NH9-SN:6.9)
- c. *kpaŋ* , *a daba jene anta* .
 kpāŋ á- dā -bā dzēnē āntā
 getting.something 3SG.SBJ- bring -BEN axe 3SG.POSS
 ‘...getting something, she brought her axe.’ (TN2-SN:4.3)
- d. *Ayaw* , *sa káwan kadak kadak* .
 ājāw sā- ká- wān kádàk kádàk
 yes 1SG.SBJ- PFV- sleep good good
 ‘Yes, I slept well.’ (LL1-SE10)
- e. *Yaw* , *a təwse a nda , kánda ma mbəy*
 jàw á twsé ā- ndā ká- ndā má = mbj
 well(ful.) PREP1 there 3SG.SBJ- go PFV- go REL= 3SG.STAT
haldəma .
 xáldmā
 girl
 ‘Well, then she went, she had gone when she was a girl.’ (DE11-SN:1.3)

11.1.2 Right-detached phrases

Right-detached phrases in Buwal directly follow the clause. A term of address may be postposed to a clause with no pause preceding it (11.2 a & b).

- (11.2) a. *Hune han vemey wəlye Mazay ege?*
 x^wné- xān véméj wālā -jé mǎzāj =égē
 2PL.SBJ- mourn what woman -PL Mazay =PL
 ‘What are you mourning Mazay women?’ (NF2-SN:2.3)
- b. *Nda kəcaŋ berjeŋ* .
 ndā ktsáŋ bərdzēŋ
 go fast donkey
 ‘Go fast, donkey!’ (GE62-SE:6.2)

This position is also used for elaborations. In this case there is a pause before the right-detached phrase (11.3 a to c).

(11.3) a. *hune nemed , hune tewtew nkune .*
 x^wnè- ná- mēd^f x^wnè téw-téw nk^wnè
 2PL.SBJ- FUT- swear 2PL all 2.PL.POSS
 ‘...you will swear, **all of you.**’ (NH8-SN:7.10)

b. *Kádam , kézledene kan ege aza ,*
 ká- dàm ká- ǰā^f -ēnē kàn =égē āzá
 PFV- enter PFV- pick.up -3SG.IOBJ thing =PL COMPL
nderey .
ndrèj
sorghum
 ‘He entered, he picked up things (to his friend’s detriment), (such as) **sorghum.**’ (NH9-SN:3.5)

c. *Kéjhel sakan ege vedaye , nderey , ngəzlej , kwalangway*
 ká- nxèl skàn =égē vēdjé ndrèj ngǰèn k^wálāng^wáj
 PFV- steal thing =PL certain sorghum peanut baggage
ege lej rəgwac ege .
 =égē léj rg^wàts =égē
 =PL plus clothes =PL
 ‘He stole certain things, **sorghum, peanuts, baggage plus clothes.**’ (GE62-SE:7.2)

11.2 Topicalisation

The notion of TOPIC has been defined in different ways by linguists in general (Payne 1997: 270) as well as by Chadicists. For example Andrews (2007a: 149) states that topics ‘are generally thought of as entities previously known to the hearer, which it is the function of the sentence to provide further information about.’ However for Chadic languages, Buwal included, the most useful idea of topic is that it provides a frame, setting or a background for the comment which is the main point of the communication. Chafe (1976: 50) describes this notion of topic as follows: ‘...the topic sets a spatial, temporal or individual framework within which the main predication holds.’ This concept

of topic has been applied to such Chadic languages as Muya (Smith 2003: 1), Ouldeme (Kinnaird 1999: 9), Zulgo (Haller and Watters 1984: 29) and Miya (Schuh 1998: 345). Gravina (2003: 2) on the other hand prefers to refer to this function as POINT OF DEPARTURE, while Frajzyngier, in his descriptions of Lele (2001: 333) and Gidar (2008: 386) distinguishes between BACKGROUNDING and topicalisation which he restricts to the fronting of various clausal constituents. This narrower idea of topicalisation has also been applied to such Chadic languages as Hausa (Newman 2000: 615; Jagger 1978: 70) and Hdi (Frajzyngier 2002: 389). However, in their description of Mina, Frajzyngier and Johnston (2005: 363) state that the topic does not have to be an argument or an adjunct of the comment clause. Furthermore, in Gidar, topics, in the sense of fronted clausal constituents, and background information are marked in the same way (Frajzyngier 2008: 379 & 386), indicating that these functions have a common structure. This is also the case for Buwal and therefore, for the purposes of this description, both of these types of phrases will be referred to as 'topics'. The construction used for these functions is described in Section 11.2.1 below. The topic may be marked with a number of different topic markers which express different constraints on the relevance of the information found in the comment. These will be discussed in Section 11.2.2.

Foley (2007: 209 & 412) states that cross-linguistically topics are closely correlated with given or old information and are therefore usually definite. This has been confirmed by various researchers in Chadic languages. It is usually said that the topic is definite (Smith 2003: 1; Kinnaird 1999: 8) or consists of old or given information (Jagger 1978: 70; Newman 2000: 615; Frajzyngier 2008: 386) with the comment giving new information. As such the comment could be said to be the FOCUS, which Foley (2007: 403) defines as 'the new information the clause is expected to provide'. A more general definition of focus is that it 'refers to that part of the clause that provides the most relevant or most salient information' (Aboh et al 2007: 1). This is generally the case in Buwal for the topic-comment structure, as example (11.4) illustrates. This example is an extract from a story about a legendary giant of a man called Vezpembem. The first few sentences of this story are given in (11.4 a-c). Firstly, the speaker gives the title of the story mentioning the name of Vezpembem (11.4a). In the second sentence he again mentions this name but this time it is topicalised (11.4b). The third sentence also has a topicalised element which sets the time frame for the story (11.4c). Although this has not been mentioned previously, the use of the definite determiner indicates that the speaker treats it as identifiable. Sentence (11.4c) goes on to describe how Vezpembem used to plunder the Gavar people. Later in

the story, the speaker refers back to this plundering in (11.4d). This is topicalised, reflecting the fact that it has been previously mentioned.

- (11.4) a. Yawa , labara **Vezipembem** .
 jàwà l àbàrà v èz p èm b èm
 good(ful.) story **Vezipembem**
 ‘Good, the story of **Vezipembem**.’ (TN5-SN:1)
- b. **Vezipembem ca** , ara ηseη Madagamzam .
 v èz p èm b èm tsá ārà nsēη mādágāmzām
Vezipembem TOP COP clan Madagamzam
 ‘**Vezipembem** was of the clan of Madagamzam.’ (TN5-SN:2.1)
- c. *A nuna anta ca əy kayaba*
 á nwná āntā tsá j- k ā- jā -bā
 PREP1 times.past DEF.DET TOP 3PL.SBJ- IPFV- call -BEN
madam Gavar , ata ma a kanda η
 má- dām gāvār á tā má= á- k ā- ndā íj
 NOM- plunder Gavar PREP1 on REL= 3SG.SBJ- IPFV- go INF
damata Gavar ege .
 dām -ātā gāvār =égē
 plunder -3PL.DOBJ Gavar =PL
 ‘In times past, they called (him) the one who plunders Gavar, because he used to go to plunder the Gavar people.’ (TN5-SN:2.2)
- d. *A nda a Gavar ca , a nda ca , a*
 ā- ndā á gāvār tsá ā- ndā tsá ā-
 3SG.SBJ- go PREP1 Gavar TOP 3SG.SBJ- go TOP 3SG.SBJ-
zledetene kan ege aza tewtew .
 ʒāɗ -ētēnē kàn =égē āzā téw-téw
 pick.up -3PL.IOBJ thing =PL COMPL all
 ‘He would go to Gavar, he would go, he would take away all their things.’ (TN5-SN:3.1)

Foley (2007: 410) points out that a mismatch may arise between topic and given information and focus and new information. For example, topics may contain new information if they relate to newly introduced participants. In Buwal, the topic-comment

construction (described in Section 11.2.1) is not used for this purpose. The presentation structure is used (see Section 11.2.3).

11.2.1 Topic-comment construction

The Buwal topic-comment construction has the structure given in Table 11.1. The topic occurs utterance initially and is followed by a pause, with the comment following (11.5a). The topic carries continuation intonation as described in Section 2.7.2.1. One of four topic markers (see Section 11.2.2) may be optionally inserted preceding the pause (11.5b).

Table 11.1: Structure of topic-comment construction

Topic	(TOP),	Comment
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- (11.5) a. [Dala ηhel]TOP , hune kámayaw , a
 dālā nxèl x^wnè- ká- māj -āw ā-
 someone thief 2PL.SBJ- PFV- choose -3SG.DOBJ 3SG.SBJ-
nagayzahune .
 ná- gāj -zā -āx^wnè
 FUT- spoil -TRANS -2PL.IOBJ
 ‘As for a thieving person, (if) you have chosen him, he will spoil (it) for you.’ (NH7-SN:4.9)
- b. [Ebe ca]TOP , ara bay ηtakwaw .
 èbè tsá ārā bāy ntàk^wàw
 DEM.MED TOP COP chief INCL.POSS
 ‘As for this one, he is our chief.’ (DE8-SN:1.4)

A wide variety of elements may occur in the topic position. Firstly, the topic may consist of an argument of the following verbal comment clause, such as (i) subject, (ii) direct object, (iii) indirect object or (iv) oblique. In addition, the topic may be: (v) a clausal adverb, (vi) a nominalised verb, (vii) a partial predication, (viii) subject of a verbless clause, (ix) a full clause or (x) a noun with no syntactic relationship with the clause expressing the comment.

(i) Subject

The subject, which may either be a noun (11.6a) or an independent pronoun (11.6b), is followed by an optional topic marker and a pause. The subject is coded within the comment clause by person number agreement marking on the verb (11.5a) except for third person singular with the perfective aspect where it is normally omitted (11.5b) (see Section 8.1.1.1).

- (11.6) a. [gwambakw ca,]TOP *a* kazam uda .
g^wāmbāk^w tsá á- ká- zàm wdā
toad TOP 3SG.SBJ- IPFV- eat food
'...as for the toad, **he** was eating the food.' (NF4-SN:2.13)
- b. [mbe ca]TOP , kála zlan dakala tew .
mbē tsá ká- lā ɣàn dākālá téw
3SG TOP PFV- do work a.lot finally
'...as for him, he finally did a lot of work.' (HT6-SN:9.8)

(ii) Direct Object

When the direct object is topicalised, it is moved to the front of the clause and followed by an optional topic marker plus a pause. The direct object is coded within the comment clause by object marking on the verb (11.7 b & c). For a third person singular direct object, the object marking is omitted in a non-pausal situation (11.7a). This follows the normal pattern of object marking found in basic verbal clauses (see Section 8.1.1.2).

- (11.7) a. [Kaw metes ma]TOP , hune sew kwagwa .
káw mētēs má x^wne- sèw k^wág^wá
even(ful.) hunger TOP.EMPH 2PL.SBJ- bear.with for.the.moment
'Even hunger, you bear with for the moment.' (C4-SN:32.4)
- b. [Zəwet ca]TOP , hwa lemew .
zwèt tsá x^wā- lèm -āw
eternal.life TOP 2SG.SBJ- get -3SG.DOBJ
'As for eternal life, you (will) get **it**.' (HT6-SN:3.17)
- c. [Hejəye ɲghe ege ca]TOP , hune
xèdzè -jé nyē =égē tsá x^wné-
person -PL DEM.PROX =PL TOP 2PL.SBJ-

- (11.9) a. [I] *laja guma mewewe ca*]TOP, *səkan*
 í lā- dzá g^wmā méwè wēsé tsá skàn
 PREP2 NOM.ACT hit judgement new DEM.DIST TOP thing
ege vedəye , *vedəye vəram ŋ man*
 =égē vēdjé vēdjé vrām í mǎn
 =PL IND.DET.PL IND.DET.PL many PREP2 **inside**
 ‘In that new way of making judgments, there are many other things **in**
it...’ (DE16-WN:5.1)
- b. [*Kefē ca*]TOP, *sa urađ ndərey a həfē* .
 kēfē tsá sā- wrāđ ndrèj á xēđé
 large.rock TOP 1SG.SBJ- spread.out sorghum PREP1 **on.it**
 ‘As for the rock, I spread sorghum out **on it.**’ (GE62-SE:12.1)

Typically, the whole prepositional phrase coding the oblique is topicalised and then completely omitted from the comment clause. It is very common to find temporal expressions in this position (11.10 a & b).

- (11.10)a. [*a dəwze anta ca*]TOP, *Kwayaŋ nda a nda aza a*
 á dwzé āntā tsá k^wájáŋ ndā ā- ndā āzà á
 PREP1 after DEF.DET TOP Koyang go 3SG.SBJ- go IT PREP1
wata .
 wātā
 home
 ‘...afterwards, Koyang went away home.’ (NH14-SN:2.16)
- b. [*ata vah vekey ca*]TOP1, [*weləye ca*]TOP2, *əy*
 á tā vāx vékéj tsá wālā -jé tsá j-
 PREP1 on day which TOP woman -PL TOP 3PL.SBJ-
kadā yam , *əy kada uda* ,
 kā- đā jām j- kā- dà wdā
 IPFV- draw water 3PL.SBJ- IPFV- prepare food
 ‘...on whichever day, as for women, they draw water, they prepare
 food...’ (DE18-SN:12.1)

(v) Clausal adverb

Certain clausal adverbs (see Section 3.4.3) may also be topicalised (11.11 a & b).

- (11.11)a. [njəwen ca]TOP , hwa kádāw η deŋza ηkwaβ
ndzwèn tsá x^wā- ká- dāw íj dèŋ -zā nk^wāβ
true TOP 2SG.SBJ- PFV- want INF reflect -TRANS brain
cekudé .
tsék^wdē
a.little
‘...truly, you should have (lit. wanted to) reflected a little.’ (C8-SN:35)
- b. [Kədə ca]TOP , pakam a kala .
kdē tsá pákàm á- kā- lā
however TOP noise 3SG.SBJ- IPFV- do
‘However, noise was happening.’ (NH3-SN:3.3)

(vi) Nominalised verb

It is possible for a verb to be topicalised, although examples are infrequent. The topicalised verb is nominalised and then repeated as a verb in the comment (11.2). This was also found to be the case by Kinnaïrd (1999: 16) for Ouldeme and by Haller and Watters (1984: 37) for Zulgo.

- (11.12) *evele* [*landa* *naka*]TOP1 , [*gwarzam a naka*
évèlè **lā-** **ndā** nākā g^wàrzàm á nākā
although NOM.ACT **go** 1SG.POSS get.up PREP1 1SG.POSS
a wata]TOP2 , *sa dāw η nda ata la naka*
á wātā sā- dāw íj **ndā** á tā lā nākā
PREP1 home 1SG.SBJ- want INF **go** PREP1 on place 1SG.POSS
aka
ákā
EXIST
‘...although as for my **going**, my leaving (lit. getting up) from home, there was a place of mine I wanted to **go** (to)...’ (HT6-SN:6.6)

(vii) Partial predication

As Haller and Watters (1984, 31) found for Zulgo, the topic may be a partial predication with the comment consisting only of a single clausal constituent such as a direct object (11.13a), indirect object (11.13b), oblique argument (11.13c) or an adverb (11.13d).

- (11.13)a. [Əy dāw ŋ ca ca]TOP, *kede uzəye anta ege* .
 ǰ- dāw ŋ tsā tsá **kēdě wzjé āntā =égē**
 3PL.SBJ- want INF put TOP **perhaps children 3SG.POSS =PL**
 ‘They wanted to put in place, **perhaps his children.**’ (NH13-SN:3.9)
- b. [Sa velene uda ca]TOP, *ŋ mba naka* .
 sā- vāl -ēnē wdā tsá **ǰ mbà nākā**
 1SG.SBJ- give -3SG.IOBJ food TOP **PREP2 child 1SG.POSS**
 ‘I give the food, **to my child.**’ (GE62-SE:14.1)
- c. [Dam hwa nadamha a mapat ca ,]TOP *a*
 dām x^wā- ná- dām -xā á māpát tsá **á**
 enter 2SG.SBJ- FUT- enter -VNT.PROX PREP1 morning TOP **PREP1**
bay .
bāy
chief
 ‘You will enter in the morning, **into the chief’s (house).**’ (TN1-SN:6.4)
- d. [A dava ca]TOP, *mgbam*
 ā- dāv -ā tsá **ŋmgbàm**
 3SG.SBJ- sprout -VNT.PROX TOP **bunches.spread.out**
mgbam ende
ŋmgbàm éndē
bunches.spread.out like.this.PROX
 ‘It sprouts, **in spread out bunches like this.**’ (C8-SN:85)

At times the comment may be a complete clause and in this way this structure can be used to express object complement type relations (11.14 a & b). Kinnaird (1999: 16) and Smith (2003: 33) also found that this was possible for Ouldeme and Muyang respectively.

- (11.14)a. [sa gəre ca]TOP, a kendezekey
 sā- grē tsá á- kā- ndā -zā -ēkēj
 1SG.SBJ- see TOP 3SG.SBJ- IPFV- come -TRANS -1SG.IOBJ
 ende zlaḅa lakwatay
 éndē ʒàḅá lák^wátāj
 like.this.PROX with whip
 ‘...I saw, it was coming on me like this with a whip...’ (C16-SN:15.3)
- b. [Sa zləme]TOP, əy kala labara .
 sā- ʒmē j- kā- lā ləbārā
 1SG.SBJ- hear 3PL.SBJ- IPFV- do chatter
 ‘I hear, they are chatting.’ (GE39-SE:14.3)

(viii) Subject of verbless clause

Topicalisation can occur in verbless clauses in Buwal. The subject, but not the predicate, of a verbless clause may be topicalised. This is true of both stative clauses (11.15 a-c) (see Section 8.2.1) and existential clauses (11.16 a & b) (see Section 8.2.2).

- (11.15)a. [ɲhel ca]TOP, ara kan ma taŋtaŋ kwaw
 nxəl tsá ārā kàn má= tāŋ-tāŋ k^wāw
 theft TOP COP thing REL= good NEG
 ‘...as for theft, it’s not a good thing...’ (C4-SN:32.6)
- b. [Bay ca]TOP, heje ŋgha
 bāy tsá xèdzè nyā
 chief TOP person DEM.PROX
 ‘As for the chief, (he’s) this person.’ (NH7-SN:6.1)
- c. [Zlan mala mesəfe ca]TOP, dakala .
 ʒàn mālā mészé tsá dākālā
 work GEN harvest TOP a.lot
 ‘As for the work of the harvest, (there’s) a lot (of it).’ (DP13-SN:2.5)
- (11.16)a. [leḅez ca]TOP, aka .
 lá- ḅèz tsá ákā
 NOM.ACT divide TOP EXIST
 ‘...as for division, it exists.’ (C9-SN:126)

- b. [*lazazak tata ca*]TOP, *akwaw* .
 lá- zàzàk tātá tsá ák^wāw
 NOM.ACT rest 3PL.POSS TOP NEG.EXIST
 ‘...as for their rest, it doesn’t exist.’ (DE18-SN:12.1)

(ix) Full clauses

Topics may be full clauses. This includes complements of verbless clauses consisting of a predicate adjective (11.17a) or a verbal clause (11.17b).

- (11.17)a. [*Kémed ndorey ŋgha ca*]TOP, *kadək* .
 ká- mēd ndrèj nyā tsá kádàk
 PFV- swallow sorghum DEM.PROX TOP good
 ‘He has swallowed this sorghum, (it’s) good.’ (GE39-SE:1.17)

- b. [*I dās a damaw*]TOP, *a*
 í dās á dāmāw ā-
 INF cultivate PREP1 bush.country 3SG.SBJ-
kaṅtəbalzaheje .
 kā- ntɓàl -zā -āxèdzè
 IPFV- tire -TRANS -1INCL.DOBJ
 ‘To cultivate in the bush, it tires us.’ (GE39-SE:32.5)

When both the topic and the comment are clauses, adverbial relations often result. In Buwal this is the most frequent type of structure used to express a variety of relationships between two clauses such as simultaneous events (11.18a), temporal sequence (11.18b), purpose (11.18c) and condition (11.18d). Smith (2003: 28) and Haller and Watters (1984: 45) also found frequent use of topicalisation for these functions in Muyang and Zulgo respectively. In Buwal, overt markers are used for emphasis or clarification of the semantic relationship between the two clauses (see Section 10.1.5).

- (11.18) a. [*Sa kasa yam*]TOP, *əy kanda tata* .
 sā- kā- sā jàm j- kā- ndā tātá
 1SG.SBJ- IPFV- drink water 3PL.SBJ- IPFV- go 3PL.POSS
 ‘(While) I am drinking water, they are leaving.’ (GE61-SE:18.2)

- b. [Sa kázam uda aza]TOP , mana a
 s̄a- ká- zàm wdā āzá m̄anā ā-
 1SG.SBJ- PFV- eat food COMPL mother.1POSS 3SG.SBJ-
kedefekey ma .
 k̄a- d̄af -ēkēj m̄a
 IPFV- reach.out -1SG.IOBJ word
 ‘(After) I had eaten food, my mother was calling to me (lit. reaching out a
 word to me).’ (GE61-SE:19.1)
- c. [Sa kala d̄eres]TOP , sa nalam ujek .
 s̄a- k̄a- lā drès s̄a- ná- lām wjēk
 1SG.SBJ- IPFV- do clay 1SG.SBJ- FUT- build hut
 ‘I am making clay, (so that) I will build a hut.’ (GE61-SE:20.1)
- d. [Hwa kádās la dakala ca]TOP , hwa nelem
 x^wā- ká- d̄ās lā d̄ākālá tsá x^wā- ná- lèm
 2SG.SBJ- PFV- cultivate field a.lot TOP 2SG.SBJ- FUT- get
kan dakala yam .
 k̄àn d̄ākālá jám
 thing a.lot also
 ‘(If) you have cultivated a lot of fields, you will also get many crops (lit.
 thing(s)).’ (GE61-SE:22.4)

(x) Noun with no syntactic relationship with the comment

It is possible for a topic to have no syntactic relationship with the following comment

(11.19).

- (11.19) [kwadakwa ca]TOP, da kaḅal gbak
 k^wádāk^wá tsá dā kábāl gbák
 sweet.potato TOP bring hundred.francs(ful.) two
 ‘...as for the sweet potato, bring two hundred francs...’ (C6-SN:175.1)

In natural discourse multiple topics within the one utterance frequently occur (11.20 a & b). Each topic contributes to the framework for the following comment. Newman (2000: 617) also found that Hausa may have more than one topic, although he states that out of context they seem clumsy. Perhaps reflecting this aesthetic evaluation, during an

elicitation session one Buwal informant considered that more than one topic was not possible.

- (11.20)a. [A *dəwze anta yam baw*]TOP1 , [kaw *vayay ca*]TOP2,
 á *dwzé āntā jám bāw káw vājáj tsá*
 PREP1 after DEF.DET also TOP.ADD even(ful.) who TOP
a kampam taf ma ata nda a wata .
 á- *kā- mpàm tàf má = á tā ndā á wātā*
 3SG.SBJ- IPFV- look.for path REL= PREP1 on go PREP1 compound
 ‘Afterwards also, everyone was looking to go home.’ (NH2-SN:8.1)
 ‘Afterwards also, each person, he was looking for the path to go home.’
- b. [A *naka na ca*]TOP1 , [kémenekey *ca*]TOP2 ,
 á *nākā nà tsá ká- mèn -ēkēj tsá*
 PREP1 1SG.POSS now TOP PFV- be.left -1SG.IOBJ TOP
wan cekudē ende .
wān tsék^wdē éndē
 day few like.this.PROX
 ‘Now has for me, I have only a few days left.’ (C12-SN:102.2)
 (‘For me now, it is left to me, a few days like this.’)

In natural discourse, particularly in conversations, an utterance may begin with a topic marker. This indicates a relationship between what follows and the previous discourse. Previous to the utterance given in (11.21), the speaker has spoken about how he had put aside a sum of money but then his brother was fined by the chief for having stolen a bicycle. As his brother had no money they called on the speaker to help him and he felt pity for him. All of these circumstances led to him taking his savings and paying the fine.

- (11.21) [Ca]TOP1 [a təwse ca]TOP2 [aya kpaŋ sa
 tsá á twsé tsá ājā kpāŋ sā-
 TOP PREP1 there TOP then getting.something 1SG.SBJ-
 ŋta bakatar ranfád wese ca]TOP3 , aya ŋtar sa
 ntā bākātār rānfád wēsé tsá ājā ntār sā-
 take thousand forty DEM.DIST TOP then pay 1SG.SBJ-
 ŋtaraza ende tew
 ntār -ā -zā éndē téw
 pay -VNT.PROX -TRANS like.this.PROX finally
 ‘So, at that time, then I took that forty thousand francs, then finally I paid
 it like this...’ (C8-SN:50.2)

11.2.2 Function of topic markers

Buwal has four different topic markers, each of which express different relationships between the topic and the comment. All four of these markers share the function of marking the preceding information as background and the following information as highlighted. Multiple topic markers have also been reported in a number of Chadic languages such as Gidar (Frajzyngier 2008: 382 & 386), Miya (Schuh 1998: 347), Mbuko (Gravina 2003: 3) and Mandara (Pohlig & Pohlig 1994). Buwal topic markers are listed with their meanings in Table 11.2 and further examples of their use given in the sections which follow. Also included in the table is the number of occurrences of each marker in the corpus out of 3563 sentences with a topic marker.

Table 11.2: Buwal topic markers

Name	Marker	Meaning/Function	Occurrences
General	<i>tsá</i>	Highlights comment as important	2921
Contrastive	<i>tséméj</i>	Comment is contrary to expectation or only a possibility	314
Emphatic	<i>má</i>	Emphasises and adds topic topic, strengthening expectation of comment	181
Additive	<i>bāw</i>	Adds a similar topic or additional information to the same topic.	147

The examples below (11.22 a-d) illustrate the types of meaning which may be produced by the different markers, grouped together for comparison.

- (11.22)a. *A mapat ca , nene nanda a Maruwa .*
 á mǎpát tsá nèné- ná- ndā á marwa
 PREP1 morning TOP 1EXCL.SBJ- FUT- go PREP1 Maroua
 ‘As for in the morning, we will go to Maroua.’ (GE62-SE:8.1)
- b. *A mapat cemey , nene nanda a Maruwa .*
 á mǎpát tséméj nèné- ná- ndā á marwa
 PREP1 morning TOP.CON 1EXCL.SBJ- FUT- go PREP1 Maroua
 ‘But in the morning, we will go to Maroua.’ (GE62-SE:8.2)
 (In answer to someone saying they want to come and visit you that morning.)
- c. *A tambaca , sa a wata akwaw . A mpat*
 á tǎmbācá sǎ á wātā ák^wāw á mpát
 PREP1 today 1SG.STAT PREP1 home NEG.EXIST PREP1 tomorrow
baw , sa nda a Maruwa .
 bǎw sǎ- ndā á marwa
 TOP.ADD 1SG.SBJ- go PREP1 Maroua
 ‘Today, I am not at home. Tomorrow **also**, I go to Maroua.’
 (GE62-SE:8.3-4)
- d. *A mapat ma , nene nanda a Maruwa .*
 á mǎpát má nèné- ná- ndā á marwa
 PREP1 morning TOP.EMPH 1EXCL.SBJ- FUT- go PREP1 Maroua
 ‘Even in the morning, we are going to Maroua.’ (GE62-SE:8.5)

11.2.2.1 General topic marker

The general topic marker *tsá* is by far the most common in the corpus (see Table 11.2). It simply serves to highlight the information that follows it as important in its own right.

The example sentences under (11.23) are all taken from the same story. In the story the Mazay women wish to discover whether the monitor lizard or the squirrel had eaten their peanuts. In (11.23) they order them both to rinse out their mouths. In (11.23 a & c) the action of the monitor lizard and the squirrel rinsing out their mouths is marked as

background as it is already known that they would be doing this. The important information in this case is the result of the rinsing which follows the topic marker. In the case of the monitor lizard (11.23b) the result is blood. For the squirrel (11.23c) chewed up peanuts were found.

(11.23)a. *hune kwakwaḅ ma a yam*
 x^wné- k^wāk^wāḅ mā á jàm
 2PL.SBJ- rinse mouth PREP1 water
 ‘...you rinse out your mouth(s) with water...’ (NF2-SN:1.8)

b. *Kuvahw a kwakwaḅa ma ca , mbambaz .*
 k^wvāx^w ā- k^wāk^wāḅ -ā mā tsá mbámbàz
 monitor.lizard 3SG.SBJ- rinse -VNT.PROX mouth TOP blood
 ‘(When) the monitor lizard rinsed out his mouth, blood.’ (NF2-SN: 1.11)

c. *Benjer a kwakwaḅ ma ca , ηgəzleŋ paskakad*
 béndzēr ā- k^wāk^wāḅ mā tsá ηgḷèŋ pàskàkàd
 squirrel 3SG.SBJ- rinse mouth TOP peanut many.small.pieces
kəḍā a ma .
 kdā á mā
 towards PREP1 inside
 ‘(When) the squirrel rinsed out his mouth, many small pieces of peanut were (lit. towards) inside.’ (NF2-SN:11.12)

11.2.2.2 Contrastive topic maker

The function of the contrastive topic marker *tséméj* is to indicate that the highlighted information following the marker counters a previously held expectation. Its use is illustrated by the following example from a folk tale concerning a toad and a bee. In (11.24a) an expectation is set up by the statement that one day the toad invites the bee to come and eat a meal at his home. The bee comes (11.24b) but while he is coming the toad rebukes him for beating his drum (11.24c) and ends up sending him home. This counters the expectation that the bee is an invited and welcome guest at the toad’s home. The story goes on with the bee coming and being sent away a number of times. Meanwhile the toad is busily eating the food (11.25a). Finally, the bee comes back to find the food finished

(11.25b). The contrastive topic marker is used as the food being finished counters the expectation that the bee was going to get something to eat at the toad's home.

(11.24)a. *A pes wende aka , gwambakw a tar bamam η*
 á pès wéndé ákā g^wāmbāk^w ā- tār bāmām íj
 PREP1 day IND.DET.SG EXIST toad 3SG.SBJ- invite bee INF
nda η zama uda a wata anta .
 ndā íj zàm -ā wdā á wātā āntā
 come INF eat -VNT.PROX food PREP1 home 3SG.POSS
 ‘There was a certain day, the toad invited the bee to go and eat food at his home.’ (NF4-SN:2.1)

b. *Bamam a ndaha .*
 bāmām ā- ndā -xā
 bee 3SG.SBJ- come -VNT.DIST
 ‘The bee came.’ (NF4-SN:2.2)

c. *Ma bamam a kavaṅha cemey ,*
 má= bāmām á- kā- vāṅ -xā tséméj
 REL= bee 3SG.SBJ- IPFV- arrive -VNT.DIST TOP.CON
gwambakw a zlepené a ṅgaya : « Hwa ja
 g^wāmbāk^w ā- ḷāp -ēnē ā- ṅgājā x^wā- dzā
 toad 3SG.SBJ- say -3SG.IOBJ 3SG.SBJ- saying 2SG.SBJ- hit
kaṅgaṅ ara kwaw !
 kāṅgāṅ ārá k^wāw
 drum SIM NEG
 ‘**But** while the bee was arriving, the toad said to him, "Don't play the drum along the way!"’ (NF4-SN:2.3)

(11.25)a. *A kavas η zam uda anta war .*
 á- kā- vās íj zàm wdā āntā wár
 3SG.SBJ- IPFV- hurry INF eat food DEF.DET still
 ‘He was still hurrying to eat the food.’ (NF4-SN:2.15)

b. *Ha bamam a zenha cemey, uda ṅtakw .*
 xá bāmām ā- zèn -xā tséméj wdā nták^w
 until bee 3SG.SBJ- return -VNT.DIST TOP.CON food finished
 ‘Until the bee came back, **but** the food was finished.’ (NF4-SN:2.16)

The contrastive topic marker is also used to indicate that the information in the comment is only a possibility and not a fact. In (11.26), the comment following the general topic marker in (11.26a) states a simple fact, whereas in (11.26b), which uses the contrastive topic marker, the comment is a jussive and expresses a wish which may or may not be realised.

- (11.26)a. *Yam ca* , *sa kadawaw* .
 jàm tsá sá- kâ- dâw -āw
 water TOP 1SG.SBJ- IPFV- want -3SG.DOBJ
 ‘As for water, I want it.’ (GE62-SE:10.1)
- b. *Yam cemey* , *manja kwagwa* .
 jàm tséméj mā- ndzā k^wág^wá
 water TOP.CON JUS- stay for.the.moment
 ‘The water, let it stay for the moment.’ (GE62-SE:10.2)

Example (11.27) illustrates this type of use with an extract from a natural text. The context is that a particular sub-chief has been brought before a higher chief to answer for the theft of some goats. The matter could not be resolved on that day and, in the section below, the chief gives instructions regarding all the things that need to happen in order for the judgment to be made in the future. These things have not yet happened and so are only possible; for this reason the contrastive topic marker is used.

- (11.27) *ma anta a naŋtakw cemey , hune nda a*
mā āntā ā- ná- ntāk^w tséméj x^wné- ndā á
 problem DEF.DET 3SG.SBJ- FUT- finish TOP.CON 2PL.SBJ- go PREP1
juraw , heje nalakwa guma cemey,
dzwrāw xèjé- ná- lā -āk^wā g^wmā tséméj
 sub-chief(ful.) 1INCL.SBJ- FUT- do -1INCL.COL judgement TOP.CON
hune nda , hwa mbal aza ŋhel ma dahwaw
x^wné- ndā x^wā- mbāl āzà nxèl má= dā -āx^wāw
 2PL.SBJ- go 2SG.SBJ- arrest IT thief REL= bring -2SG.DOBJ
ŋhwəye wese ege , hune ndaha zlabā msəra
nx^wā -jé wēsé =égē x^wné- ndā -xā ʒàbá msrā
 goat -PL DEM.DIST =PL 2PL.SBJ- go -VNT.DIST with old.person
wese amba heje naŋgadākwa guma anta .
wēsé āmbá xèjé- ná- ŋgād -āk^wā g^wmā āntā
 DEM.DIST then 1INCL.SBJ- FUT- count -1INCL.COL judgement DEF.DET
 ‘...the problem will finish (TOP.CONT), you go with the subchief, we will
 do the judgment together (TOP.CONT), you go, you arrest the thief that
 brought you those goats, you come with that old person, then we will count
 out the judgement.’ (NH8-SN:13.1)

Pohlig and Pohlig (1994: 217-218) found for a similar counter-expectation marker in Mandara that it could be used with apprehensives. In this case they contend that the construction is underlyingly counter expectation as it is unlikely that the feared event would be realised. In the case of Buwal, the possible event is more neutral. It is possible that the primary function of this marker was counter expectation and subsequently extended to events that were possible and also contrary to expectation and then finally to events which were simply possible.

11.2.2.3 Emphatic topic marker

The emphatic topic marker *má* carries a meaning something like ‘even’. It emphasises the topic as well as carrying an additive meaning. For example in (11.28) below, when the general topic marker is used the implication is that ‘fufu is the only thing I eat’ (11.28a). The implication in (11.28b), when the emphatic topic marker is used, is that ‘I eat fufu among other things’. As Pohlig and Pohlig (1994: 214) found a similar emphatic particle

in Mandara, which has the same form. They report that the epistemic status of the following information is strengthened. It is understood to be more likely. For example (11.28b) implies that I certainly eat a number of things. Therefore it is likely that I eat fufu as well.

- (11.28)a. *Sa zam ca , uda .*
 s̄a- zàm tsá wdā
 1SG.SBJ- eat TOP fufu
 ‘I eat, fufu.’ (GE62-SE:13.1)
 (Implies that I only eat fufu.)
- b. *Sa zam ma , uda .*
 s̄a- zàm má wdā
 1SG.SBJ- eat TOP.EMPH fufu
 ‘I even eat, fufu.’ (GE62-SE:13.6)
 (I’m not fussy. I eat fufu plus other things.)

In example (11.29), from a natural text, the speaker is describing different types of natural remedies. In each of the sentences below, he adds a new type of remedy using the emphatic topic marker.

- (11.29)a. *Hwa gare wende ma , ana ma , əy*
 x^wā- grē wéndé má ánā má= j-
 2SG.SBJ- see IND.DET.SG TOP.EMPH like REL= 3PL.SBJ-
gazlahwaw , əy tayahwaw ata mbəlah aka .
 gəlɕ -āx^wāw j- tāj -āx^wāw á tā mblāx ákā
 beat -2SG.IOBJ 3PL.SBJ- patch -2SG.IOBJ PREP1 on wound EXIST
 ‘There is **even** another one you see, for example, they beat it for you, they put a patch (of it) on the sore for you.’ (DE9-SN:2.13)
- b. *Wende ma , əy slar maslaraslar*
 wéndé má j- ɬàr má= ɬàr -á- ɬàr
 IND.DET.SG TOP.NAR 3PL.SBJ smear NOM- smear -NOM.PAT- smear
ata la anta .
 á tā lā āntā
 PREP1 on place DEF.DET
 ‘**Even** another one, they smear the one you smear (lit. the smeared one) on the place.’ (DE9-SN:2.15)

- c. *Wende ma* , *hwa njefza*
wéndé **má** x^wā- ndzèf -zā
IND.DET.SG TOP.NAR 2SG.SBJ- smell -TRANS
menjefenjef .
má = ndzèf -á- ndzèf
NOM- smell -NOM.PAT- smell
‘**Even** another one, you smell the one you smell (lit. the smelled one).’
(DE9-SN:2.17)

11.2.2.4 Additive topic marker

The additive topic marker *bāw* is borrowed from the Fulfulde *boo* ‘to the side of, also’ (Noye 1974: 317) and frequently follows the Buwal word *jám* ‘also’. This Fulfulde marker has also been borrowed into other nearby Chadic languages such as Mina (Frajzyngier and Johnston 2005: 360) and Gidar (Frajzyngier 2008: 382). It has two functions in Buwal: (i) the addition of a similar topic and (ii) the addition of further information about the same topic.

(i) Addition of a similar topic

In (11.30b) below a similar topic ‘husband’ is added to ‘wife’, found in the preceding clause uttered (11.30a).

- (11.30)a. *Wala a kawan* .
wālā á- kā- wān
wife 3SG.SBJ- IPFV- sleep
‘The wife is sleeping.’ (GE62-SE:9.13)

- b. *Mawal baw* , *mbəy a wata akwaw* .
māwàl **bāw** mbj á wātā ák^wāw
husband TOP.ADD 3SG.STAT PREP1 home NEG.EXIST
‘The husband **also**, he is not at home.’ (GE62-SE:9.14)

This use is also illustrated by example (11.31) which is taken from a folk tale about a squirrel who invites a number of different animals to help him cultivate his field. The first one to arrive is the chicken and while they are cultivating together, the cat arrives

(11.31a). After various events occur which result in the chicken being killed, the squirrel then cultivates with the cat (11.31b) and here the additive topic marker is used.

(11.31)a. *Əy kadās a gamtak . A dəwze anta*
 j- k̄ā- d̄ās á gāmtāk á dwzé āntā
 3PL.SBJ- IPFV- cultivate PREP1 chicken PREP1 after DEF.DET
pataw , mbəy pay .
 pátáw mbj páj
 cat(ful.) 3SG.STAT arrived
 ‘He was farming with the chicken. Afterwards the cat, he arrived.’
 (NF3-SN:1.3-4)

b. *A dəwze anta əy kadās a pataw*
 á dwzé āntā j- k̄ā- d̄ās á pátáw
 PREP1 after DEF.DET 3PL.SBJ- IPFV- cultivate PREP1 cat(ful.)
wese yam baw , həza mbəy pay .
 wēsé jám bāw xzā mbj páj
 DEM.DIST also **TOP.ADD** dog 3SG.STAT arrived
 ‘Afterwards he was farming with that cat **also**, (when) the dog arrived.’
 (NF3-SN:2.1)

(ii) Addition of further information about the same topic

The additive topic marker is also used to identify a consistent topic across a series of sentences when additional information is being given. The following extract (11.32) is taken from a natural text where the speaker lists the different qualities of a good chief. Each sentence adds a different quality to the same topic, namely the chief.

(11.32) *Əy da bay yam baw , ara dala ma kala*
j- dā bāy jām bāw ārā dālā má= kā- lā
 3PL.SBJ- bring chief also TOP.ADD COP someone REL= IPFV- do
ŋwesem səkwaw . Bay yam baw , ara dala
ŋw^wésém sk^wāw bāy jām bāw ārā dālā
 violence NEG chief also TOP.ADD COP someone
ma kampam pakam a dala səkwaw . Bay yam
má= kā- mpàm pákàm á dālā sk^wāw bāy jām
 REL= IPFV- look.for noise PREP1 someone NEG chief also
baw , ara dala ma kaŋhwaz kwaw . Bay yam
bāw ārā dālā má= kā- nh^wàz k^wāw bāy jām
 TOP.ADD COP someone REL= IPFV- get.drunk NEG chief also
baw , ara dala ma ŋkwaɓ ŋ ha , a
bāw ārā dālā má= nk^wāɓ ɲ xā á-
 TOP.ADD COP someone REL= brain PREP2 head 3SG.SBJ-
kasan zlap yam .
kā- sàɴ ɟāp jām
 IPFV- know speech also

‘They bring a chief **also**, he is someone who is not violent. A chief **also**, he is someone who doesn’t look for quarrels (lit. noise) with people. A chief **also**, he is not someone who gets drunk. A chief **also**, he is someone sensible (lit. brain in head), he knows speaking also.’ (DE8-SN:2.16-19)

11.2.3 Presentation topic construction

When a new participant is introduced into a discourse, it is usually followed by an indefinite determiner plus the existential marker in Buwal. Gravina (2003: 2) found that a morpheme meaning ‘to exist’ was also used in the introduction of new participants in Mbuko discourse and in Muyang, Smith (2003:7) reports that such elements are marked with morpheme meaning ‘a certain’. For Buwal existential reference to clause level constituents was discussed in the section on existential relative clauses (Section 10.1.4.2). Whilst these expressions normally occur in their expected positions within the clause, they may also occur in the topic position and be followed by a pause yielding the structure given in Table 11.3 below.

Table 11.3: Buwal presentation construction

(Topic)	IND.DET	EXIST,	Comment
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This type of topic often corresponds to the subject of the comment clause (11.33 a & b).

- (11.33)a. *ɲhel wende aka* , *kadamaza*
nxèl wéndé ákā ká- dàm -ā -zā
thief IND.DET.SG EXIST PFV- plunder -VNT.PROX -TRANS
mesleje ɲkwa aza
mēlédzè nk^wā āzá
 neighbour 2SG.POSS COMPL
 ‘...**there was a certain thief**, he plundered your neighbour...’
 (C10-SN:3.1)
- b. *Hejəye vedəye aka* , *əy keveletene uda*
xèdzè -jé vèdjé ákā j- kā- vāl -ētēnē wdā
person -PL IND.DET.PL EXIST 3PL.SBJ- IPFV- give -3PL.IOBJ food
a uzəye tata ege .
á wzjé tātá =égē
 PREP1 children 3PL.POSS =PL
 ‘**There are certain people**, they give food to their children.’(GE38-SE:17)

It can, however, correspond to other roles. For example, in (11.34) the topicalised element is coded as a possessor in the comment clause.

- (11.34) *Heje wende aka* , *a nuna anta* , *weləye*
xèdzè wéndé ákā á nwná āntā wālā -jé
person IND.DET.SG EXIST PREP1 times.past DEF.DET wife -PL
anta ege gbak .
āntā =égē gbák
 3SG.POSS =PL two
 ‘**There was a certain man**, in olden times, he had two wives (lit. **his** wives were two)’.
 (TN4-SN:1.1)

This construction can also be used with nominal temporal expressions (11.35).

- (11.35) *A pes wende aka , gwambakw a tar bamam η*
á pès wéndé ákā g^wāmbāk^w ā- tār bāmām η
 PREP1 day IND.DET.SG EXIST toad 3SG.SBJ- invite bee INF
nda η zama uda a wata anta .
ndā η zàm -ā wdā á wātā āntā
 come INF eat -VNT.PROX food PREP1 home 3SG.POSS
 ‘**There was a certain day**, the toad invited the bee to go and eat a meal at his house.’ (NF4-SN:2.1)

11.3 Cleft constructions

The comment in the topic-comment structure can sometimes be thought of as the focus of the sentence i.e. the new information that the speaker wants the hearer to know (see Section 11.2). One type of focus where the speaker believes the hearer has no knowledge of the information, is sometimes referred to as ASSERTIVE FOCUS (Payne 1997: 269). Another type of focus often discussed in linguistic literature is CONTRASTIVE FOCUS, which corrects the expectation of the hearer (Zimmermann 2011: 1167). In Buwal, cleft constructions can be used to express both types of focus. These constructions are based on stative verbless clauses with a nominal predicate (see Section 8.2.1) and involve relative clauses which contain presupposed or given information. There are two types of cleft constructions, clefts and pseudo-clefts, which will be described in more detail and examples given in Sections 11.3.1 and 11.3.2 respectively. Zeller (2011: 12) states that clefting is the most common strategy in African languages for expressing focus. Clefting is also used in a number of other Chadic languages including Mina (Frajzyngier and Johnston 2005: 347), Hdi (Frajzyngier 2002: 401) and Miya (Schuh 1998: 343).

Zimmermann (2011: 1164), in her study of focus in four West Chadic languages, found that three of the four languages exhibit a subject/non-subject split in the formal expression of focus. This is also the case for Buwal. Cleft constructions are used to express subject focus, while non-subject focus is either not marked or may be overtly indicated by using the topic-comment structure. Frajzyngier and Johnston (2005: 347) found that only a focussed subject is followed by a relative clause in Mina.

11.3.1 Cleft

The structure of the Buwal cleft construction is given in Table 11.4 below. The predicate consists of a nominal modified by a relative clause giving the meaning ‘It’s NP who....’.

Table 11.4: Structure of the Buwal cleft construction

(COP)	Noun Phrase/ Independent pronoun	Relative Clause
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Note that the copula is optional and may be omitted without a change in meaning (11.36 a & b). In Section 8.2.1 on stative verbless clauses, the copula was shown to be generally optional. A cleft construction with no copula can still be identified by the use of independent pronouns (11.36b). However, this only applies for third person singular and plural where the independent pronouns are distinct from the stative pronouns found in the pseudo-cleft construction (see Section 11.3.2 below). For other person/number combinations it is not possible to identify which construction is being used if the copula is omitted.

- (11.36)a. *Ara mbe ma keɲhel ɲhwa naka* .
ārā **mb**ē má= k̄- nxèl nx^wā nākā
 COP 3SG REL= IPFV- steal goat 1SG.POSS
 ‘It’s **him** who is stealing my goat.’ (GE63-SE:7.1)

- b. *Mbe ma keɲhel ɲhwa naka* .
mbē má= k̄- nxèl nx^wā nākā
 3SG REL= IPFV- steal goat 1SG.POSS
 ‘(It’s) **him** who is stealing my goat.’ (GE63-SE:7.2)

It is possible for the relative clause of a cleft construction to be topicalised (11.37 a & b). This is not surprising since it contains given information.

- (11.37)a. *Ma mar ɲ bal hayak buwal ca , ara Ghəlay ege* .
má= **m**ār ɲ bāl xājāk bwāl tsá ārā ɣlāj =égē
 REL= begin INF clear country Buwal TOP COP Ghelay =PL
 ‘The ones who began to clear the Buwal country, it was the Ghelay clan.’ (NH13-SN:2.4)

- b. *Ma ηhel aza ηhwa ca* , *ara hwa* .
 má= nxèl āzà nx^wā tsá ārā x^wā
 REL= steal IT goat TOP COP 2SG
 ‘The one who stole away the goat, it’s you.’ (NH8-SN:8.4)

The cleft construction can be used to express contrastive focus as illustrated by example (11.38a) where the speaker denies the accusation given in (11.37b). In (11.38b) the speaker rejects the addressee’s denial that it was he who harmed him.

- (11.38)a *Ma ηhel ηhwa ma* , *ara manaj* .
 má= nxèl nx^wā má ārā mānāj
 REL= steal goat TOP.EMPH COP so.and.so
 ‘Even the one who stole the goat, it’s so and so.’ (NH8-SN:11.8)

- b. *Ara hwa ma lekey*
 ārā x^wā má= lā -ēkēj
 COP 2SG REL= do -1SG.IOBJ
 ‘It’s you who did (it) to me...’ (NH14-SN:3.5)

However, the cleft construction can also be used to express simple assertive focus which does not counter any previously held expectation. In example (11.39a) a blacksmith is searching for the cause of a client’s illness. He asserts that (the spirit of) a tree got hold of him. There is no previous expectation that it was anything else. Another example is (11.39c) which gives the answer to the question in (11.39b) about who broke the calabash. Once again there is no expectation about who is the guilty party.

- (11.39)a. *ara mpe ma mbalaw* .
 ārā mpè má= mbāl -āw
 COP tree REL= hold -3SG.DOBJ
 ‘...it’s a tree which got hold of him.’ (DE14-SN:7.1)

- b. *Ma ηga teked’ anta vayay ?*
 má= ηgā tēkēd’ āntā vājáj
 REL= break calabash DEF.DET who
 ‘Who broke the calabash ?’ (LL28-SE:2)

- c. *Ara mba ma nga ma a kalawad* .
āra mbà má= ngā má= á- ká- lāwād
 COP **child** REL= break REL= 3SG.SBJ- IPFV- play
 ‘It was the child who broke (it) when he was playing.’ (LL28-SE:3)

11.3.2 Pseudo-cleft

The structure of the Buwal pseudo-cleft construction is given in Table 11.5 below. In this case the predicate simply consists of a headless relative clause giving the meaning ‘NP is the one who...’. For this construction the relative clause cannot be topicalised as topicalisation is not possible for predicates of verbless clauses.

Table 11.5: Structure of the Buwal pseudo-cleft construction

(Noun phrase)	Stative pronoun	Relative Clause
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The pseudo-cleft construction can be used to express contrastive subject focus. Example (11.40) is taken from a conversation between a buyer and a seller in the market. They have been discussing the quality of the hoe the buyer is thinking of purchasing. In (11.40a) the buyer questions whether it has been made by white or black people. The fact that he expects that it is made by white people is indicated by the use of the dubitive marker with black people (see Section 4.13.2). In (11.40b) the seller, contrary to the expectation of the buyer, affirms that it is indeed made by black people.

- (11.40)a. *Hejəye ma pepedék ege əy ma laza*
xèdzè -jé má= pépēdék =égē j má= lā -zā
 person -PL REL= white =PL 3PL.STAT REL= make -TRANS
səkwa, hejəye ma dakənak ege aza vaw ?
sk^wá xèdzè -jé má= dākñàk =égē āzà vāw
 Q.FAM person -PL REL= black =PL DUB Q
 ‘Was it white people who made it, or **really** black people?’ (C6-SN:272)

- b. *Hejəye ma dakənak ege , hejəye ma dakənak*
 xèdzè -jé má= dàknàk =égē xèdzè -jé má= dàknàk
 person -PL REL= black =PL person -PL REL= black
ege , pat əy ma laza .
 =égē pát j má= lā -zā
 =PL all(ful.) 3PL.STAT REL= do -TRANS
 ‘Black people, black people, all, **they** are the ones who made it.’
 (C6-SN:273)

The pseudo-cleft construction can also be used for assertive subject focus. In example (11.41) an elderly lady is recounting an episode in the history of the Buwal people when the government forced them to come down from the mountain where they were living and live on the plain. The fact that the chief of the time resisted and was put in prison, although not mentioned in the previous discourse, is well-known in the community and so constitutes given information. In (11.41) the speaker identifies the representatives of the government as the ones who arrested the chief.

- (11.41) *əy ma ŋta Mazay aza a Mazagway ma*
 j má= ntā māzāj āzá á mazag^waj má=
 3PL.STAT REL= take Mazay COMPL PREP1 Mazagway REL=
ata nje naka yam .
 á tā ndzé nākā jám
 PREP1 on eye 1SG.POSS also
 ‘...also **they** were the ones I saw take the Mazay to Mazagway to Mazagway.’
 (lit. ‘...**they** were the ones who took the Mazay (i.e. the chief) to Mazagway which was on my eye(s) also.’)
 (NH6-SN:1.4)

The pseudo-cleft construction can also be used like other predicate nominals to express proper inclusion, as in (11.42), where the buying of sorghum is the person’s job. In this case the information within the relative clause is new rather than given.

- (11.42) *Mbəy ma kasəkam ndərey .*
 mbj má= kā- skām ndrèj
 3SG.STAT REL= IPFV- buy sorghum
 ‘**He** is one who buys sorghum.’
 (GE15-SE:87)

11.4 Verb repetition

This section describes the structure and function of various repeated verb constructions in Buwal. Section 11.4.1 describes a construction that involves one leftward repetition of the verb root to encode highlighted events. The pluractional in Section 11.4.2 is similar except that the verb root is repeated multiple times. Finally, the durative in Section 11.4.3 involves the repetition of the entire finite verb form.

11.4.1 Highlighted form

In Buwal there is a repetition pattern of the verb which involves leftward repetition 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 in Table 11.6 which are phonetic transcriptions of recordings made of the repeated form of selected Buwal verb roots. Note that in these examples the third person singular subject agreement prefix is attached to the second root.

Table 11.6: Reduplicated forms of Buwal verbs

Underlying Tone	Verb Root	Repeated form	Gloss
M	[bən]	[bén ɛbən]	‘he washes’
	[tsɛ̃tsɛ̃x]	[tsɛ̃tsɛ̃x ɛ̃tsɛ̃tsɛ̃x]	‘he cuts off pieces’
	[ʃɛ̃ʃɛ̃ dɛ̃m]	[ʃɛ̃ʃɛ̃ dɛ̃m ɛ̃ʃɛ̃ʃɛ̃ dɛ̃m]	‘he slips’
L	[gɛ̃ɛ̃]	[gɛ̃ɛ̃ ɛ̃gɛ̃ɛ̃]	‘he beats’
	[dɛ̃dɛ̃ɛ̃]	[dɛ̃dɛ̃ɛ̃ ɛ̃dɛ̃dɛ̃ɛ̃]	‘he heaps up’
	[tɛ̃tɛ̃ŋgɛ̃l]	[tɛ̃tɛ̃ŋgɛ̃l ɛ̃tɛ̃tɛ̃ŋgɛ̃l]	‘he rolls around’

The repeated verb root is restricted to a position immediately preceding the conjugated verb. This distribution distinguishes this construction from the set of ideophones which can occur in a number of different positions within the clause. Also there is no pause following the initial verb root as there would be for an ideophone (see Section 11.1.1).

Some African languages use verb copying in certain focus constructions (Zeller 2011: 12; Childs 2003: 135). However repeated verb constructions are not used for this purpose in Buwal. For example, (11.43b) below can be used to answer the question in (11.43a), whereas (11.43c) with the repeated verb construction cannot.

- (11.43)a. A *la vemey* ?
 ā- *lā véméj*
 3SG.SBJ- do what
 ‘What is he doing?’ (GE64-SE:1.1)
- b. A *gazi ndarey* .
 ā- *gàḷ ndrèj*
 3SG.SBJ- **beat** sorghum
 ‘He **beats** sorghum.’ (GE64-SE:1.2)
- c. **Gazi a gazi ndarey* .
gàḷ ā- gàḷ ndrèj
beat 3SG.SBJ- **beat** sorghum
 ‘He **beats** the sorghum.’ (GE64-SE:1.3)

In Buwal, the repeated verb form is used for highlighted events, which may be climactic or involve a certain degree of intentionality or refer to some kind of extended process. For example, (11.43c) above could be said if there was previously no sorghum and so the agent is beating it with purpose and forethought. In (11.43b) there is no such implication. Examples (11.44 a & b) are the first and last lines of a folk tale concerning a wily squirrel. In (11.44a) he invites a number of different animals to come and work in his field. However, he does so with the specific intention of tricking them into killing each other so that he can eat them. The intentional nature of his action is indicated by the use of the repeated verb form. At the end of the story the narrator sums up all that has happened (11.44b), again using the repeated verb construction.

(11.44)a. *Tar a tar gamtak , tar a*
tár ā- tār gāmtāk tár ā-
invite.to.help 3SG.SBJ- **invite.to.help** chicken **invite.to.help** 3SG.SBJ-
tar pataw , tar a tar həza ,
tār pátáw tár ā- tār xzā
invite.to.help cat(ful.) **invite.to.help** 3SG.SBJ- **invite.to.help** dog
tar a tar levere .
tár ā- tār lēvērē
invite.to.help 3SG.SBJ- **invite.to.help** lion
 ‘He **invited** the chicken to help, he **invited** the cat to help, he **invited** the dog to help, he **invited** the lion to help.’ (NF3-SN:1.1)

b. *Das a das la anta aza , sler*
dás ā- dās lā āntā āzá ɬér
cultivate 3SG.SBJ- **cultivate** field 3SG.POSS COMPL **exterminate**
a slerata aza tewtew , zam a
ā- ɬér -ātā āzá téw-téw zám ā-
3SG.SBJ- exterminate -3PL.DOBJ COMPL all **eat** 3SG.SBJ-
zamata aza .
zám -ātā āzá
eat -3PL.DOBJ COMPL
 ‘He **cultivated** his field, he **exterminated** everyone, he **ate** them up.’ (NF3-SN:5.2)

Frajzyngier and Johnston (2005: 188-191) found a similar repeated verb form in Mina, which they argue is a type of 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 (11.45).

(11.45) *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)

Also, unlike Mina, the Buwal form is not restricted to events in the past (11.46 a & c). Furthermore, although most frequently the verb is unmarked for tense and aspect (11.46a), examples have also been found with the imperfective (11.46b) and the future (11.46c) marking.

- (11.46)a. *Sa tal ca mana , dá sa dá*
 s̄a- tāl tsá m̄anā **dá** s̄a- **dā**
 1SG.SBJ- prepare.hot.drink TOP (hesitation) **draw** 1SG.SBJ- **draw**
yam aza mpar ŋ keserwal .
 j̄am āzá mp̄ar ŋ̄ kēs̄erwāl
 water COMPL first PREP2 saucepan(fr.)
 ‘I prepare (it like so), um, I first **put** (lit.**draw**) some water into a pot.’
 (DP5-SN:2)
- b. *demas əy kacemas ara taf taf taf vaŋ a wata .*
dmás j̄- **kā-** **dmàs** ārá t̄af t̄af t̄af v̄aŋ á wātā
 dance 3PL.SBJ- IPFV- dance SIM path path path arrive PREP1 home
 ‘...they were dancing all along the path arriving home.’ (NH7-SN:7.4)
- c. *Dam hwa nadamha a mapat ca a bay .*
dām x̄^{wā}- **ná-** **dām** -x̄ā á m̄apát tsá á b̄ay
 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 (11.47).

- (11.47) *Sa kasan ana ebe ca , nja a nja a*
 s̄a- k̄a- s̄an ánā èbè tsá **ndzā** ā- **ndzā** á
 1SG.SBJ- IPFV- know like DEM.MED TOP **dwel** 3SG.SBJ- **dwel** PREP1
wata naka kwaw .
 wātā nākā **k^{wā}w**
 home 1SG.POSS NEG
 ‘(If) I knew about this, she wouldn’t dwell at my home.’ (TN5-SN:5.7)

11.4.2 Pluractional

If an action is repeated a number of times, it can be coded in Buwal by two or more leftward repetitions of the verb root (11.48 a & b). There is no pause between the repetitions. The more repetitions, the greater number of occurrences of the action. As with the repeated form described in Section 11.4.1, any affixation occurs on the final verb root. Buwal is different in this regard from 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), which have special pluractional form of the verb often involving reduplication of only part of the verb root. Mina, however, has a similar structure to Buwal (Frajzyngier and Johnston 2005: 191).

- (11.48)a. *Gazl gazl a gazl, a ηgene ja a*
gàḷ gàḷ ā- gàḷ ā- ηgā -ēnē dzā á
beat beat 3SG.SBJ- beat 3SG.SBJ- apply -3SG.IOBJ hit PREP1
mana zeney .
mānā zēnéj
 mother.1POSS again
 ‘He beat (her) a number of times, he struck my mother as well.’
 (NH3-SN:2.13)
- b. *Kwec kwec kwec kwec kwec kwec kwec*
k^wèts k^wèts k^wèts k^wèts k^wèts k^wèts k^wèts
sprinkle sprinkle sprinkle sprinkle sprinkle sprinkle sprinkle
a kwec yam a hede .
ā- k^wèts jàm á xēdé
 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 (11.49).

- (11.49) *Uzəye wese ege ndaɗ ndaɗ əy ndaɗ ηkəɗaŋ wese aza .*
wzjé wēsé =égē ndàɗ ndàɗ j- ndàɗ nkɗaŋ wēsé āzá
children DEM.DIST =PL align align 3PL.SBJ- align stone DEM.DIST COMPL
 ‘Those children aligned those stones first.’
 (TN4-WN:4.3)

11.4.3 Durative

If an action is carried out over an extended period of time, it is expressed by one or more repetitions of the conjugated verb along with any verbal particles, with a pause between each repetition (11.50 a-c). A nominal subject or object is said only once; the subject occurring before the first verb (11.50 a & b) and the object after the last (11.50c). The subject is coded on each verb by subject agreement whereas object marking is omitted.

- (11.50)a. *Hejəye əy ketev , əy ketev ,*
xèdzè -jé j- kǎ- tèv j- kǎ- tèv
person -PL 3PL.SBJ- IPFV- climb 3PL.SBJ- IPFV- climb
əy ketev , əy dǎk , əy kánda tata
j- kǎ- tèv j dǎk j- ká- ndǎ tǎtá
3PL.SBJ- IPFV- climb 3PL.STAT gone 3PL.SBJ- PFV- go 3PL.POSS
gǎdak .
gdǎk
far
 ‘People kept on climbing, they were gone, they had gone far away.’
 (TN2-WN:3)
- b. *mzla wese ca , a jam ara , a*
mǒǎ wēsé tsá ā- dzām ārá ā-
blacksmith DEM.DIST TOP 3SG.SBJ- gather.together SIM 3SG.SBJ-
jam ara , a jam ara .
dzām ārá ā- dzām ārá
gather.together SIM 3SG.SBJ- gather.together SIM
 ‘...as for that blacksmith, he keeps on gathering it together at the same time.’
 (DP9-SN:4.5)

c. *Pa ama zlazlar ca , a nda ca , a*
 pá á mā ʒàʒàr tsá ā- ndā tsá ā-
 at.a.level PREP1 edge river TOP 3SG.SBJ- go TOP 3SG.SBJ-

kakac aza , a kakac aza , a
 kā- kàts āzà á- kā- kàts āzà á-
 IPFV- take.part IT 3SG.SBJ- IPFV- take.part IT 3SG.SBJ-

kakac aza vʒekw wese .
 kā- kàts āzà vʒék wēsé
 IPFV- take.part SRC slime DEM.DIST

‘At the level of the edge of the river, she goes, **she keeps on taking out some of that slime.**’
 (DP9-SN:1.4)

Appendices

Appendix A Buwal lexicon

This lexicon represents all the lexical items collected in the field and includes some idioms and commonly borrowed words. Words are transcribed semi-phonemically and listed in alphabetic order.

a		<i>ásádāj</i>	‘I don't know!’
<i>a-</i>	3SG.SBJ	<i>ātā</i>	3PL.DOBJ
< <i>a</i> >	NOM.PAT	<i>ātā</i>	ASS.PL
<i>á</i>	‘ah!’	<i>àtwl</i>	‘smoke rising’
<i>á-</i>	FUT	<i>āvá</i>	‘tentatively’
<i>á</i>	PREP1	<i>-āw</i>	3SG.DOBJ
<i>-ā</i>	VNT.PROX	<i>-āx^wāw</i>	2SG.DOBJ, 2SG.IOBJ
<i>-āxèdzè</i>	1INCL.DOBJ, 1INCL.IOBJ	<i>-āx^wnè</i>	2PL.DOBJ, 2PL.IOBJ
<i>ājá</i>	‘Oh yes?’	<i>āzá</i>	COMPL
<i>ājā</i>	‘then, so’	<i>āzà</i>	DUB
<i>ājāw</i>	‘yes’	<i>āzà</i>	IT
<i>ákā</i>	EXIST	<i>āzā</i>	‘go.HORT’
<i>āká</i>	ACC		
<i>āk^w</i>	‘horse arriving’	b	
<i>-āk^wā</i>	1INCL.COL	<i>bā</i>	‘taste(v)’
<i>ák^wāw/ ásk^wāw</i>	NEG.EXIST	<i>bā</i>	‘create, make, form’
<i>àmá</i>	‘but(ful.)’	<i>bābā</i>	‘father(ful.)’
<i>-āmāw</i>	1DUAL.DOBJ, 1DUAL.IOBJ	<i>bàbàbà</i>	‘fast growing’
<i>āmbá</i>	‘then’	<i>bàbàd’</i>	‘plough(v)’
<i>ánā</i>	‘like, according to’	<i>bàbàr</i>	‘roar, rustle (leaves)’
<i>ándālà</i>	‘like this.MED’	<i>bàbàr</i>	‘erode’
<i>ándwsé</i>	‘like that’	<i>bàbàx^w</i>	‘bark (as dog)’
<i>āndzā</i>	‘if’	<i>bàbàx^w</i>	‘smear a powder’
<i>āntā</i>	DEF.DET	<i>bādāg^wār</i>	‘batchelor’
<i>āntā</i>	3SG.POSS	<i>bād’</i>	‘deceive, flatter’
<i>àṅgé</i>	‘noise of flute’	<i>bākālāf</i>	‘buffalo’
<i>ārá</i>	SIM	<i>bākātār</i>	‘bag, pocket’
<i>ārā</i>	COP	<i>bāk^w</i>	‘empty out’

<i>bàk</i> ^w	‘itch(v)’	<i>bāw</i>	TOP.ADD
<i>bàl</i>	‘cut down (tree), chop’	<i>bàw-báw</i>	‘tree sp.’
<i>bāl</i>	‘funeral, have a funeral’	<i>bāx</i>	‘cry out’
<i>bālāk</i>	‘awning’	<i>bàx</i> ^w - <i>bàx</i> ^w	‘plant sp.’
<i>bāláj</i> ^w	‘ball(fr.)’	<i>bāy</i>	‘chief, chiefdom’
<i>bàlŋg</i> ^w <i>àd</i>	‘uproot’	<i>bdákāvàn</i>	‘name of a large rock’
<i>bālvār</i>	‘winnowing’	<i>bdàk</i> ^w	‘tear deeply’
<i>bāļ</i>	‘clear(v)’	<i>bdām</i>	‘cave, den, lair’
<i>bámbráx</i>	‘flat out’	<i>bdzàr</i>	‘branching’
<i>bān</i>	‘bathe, wash’	<i>bdāk</i> ^w - <i>bdāk</i> ^w	‘hornbill’
<i>bāŋg</i> ^w <i>ārāj</i> ^w	machete	<i>bèbèts</i>	‘roar’
<i>bār</i>	‘against, along’	<i>bēdbēdēŋ</i>	‘big(gest) drum’
<i>bārāf</i>	‘thing left behind’	<i>bēlēlēr</i>	‘stone for sealing tomb’
<i>bārāj</i>	‘second weeding’	<i>bēlméd</i>	‘natron’
<i>bàràw</i>	‘thousand (ful)’	<i>béļē</i>	‘animal enclosure’
<i>bárbár</i>	‘salty’	<i>bèn</i>	‘man’s sleeping hut’
<i>bárdzádzāx</i> ^w	‘slope’	<i>béndzēr</i>	‘squirrel’
<i>bárdādāk</i>	‘slightly sour’	<i>bēŋ</i>	‘early morning’
<i>bārgādāŋ</i>	‘storm, harmattan’	<i>bēŋkēts</i>	‘shake strongly’
<i>bàrkáļāf</i>	‘plant sp.’	<i>bēr</i>	‘hate, betray’
<i>bārlā</i>	‘mountain’	<i>bēr</i>	‘announce, sell’
<i>bàrļàļá</i>	‘patchy’	<i>bèrdè-bèrdé</i>	‘dust(n)’
<i>bās</i>	‘light (fire)’	<i>bèrdèk</i>	‘miss(v)’
<i>bās</i>	‘ignore’	<i>bèrdzēŋ</i>	‘donkey’
<i>bāsk</i> ^w <i>ár</i>	‘bicycle’	<i>bk</i> ^w <i>lā</i>	‘skin’
<i>bàt</i>	‘sink, pour’	<i>bk</i> ^w <i>lā ndzē</i>	‘eyelid’
<i>bàts</i>	‘operate bellows, inflate’	<i>blàk</i> ^w	‘thousand’
<i>bāts</i>	‘crush into pieces’	<i>bláx</i>	‘manner of leaving’
<i>bāv</i>	‘open, start (meeting)’	<i>blàx</i> ^w	‘solid’
<i>bāw</i>	‘change, turn’	<i>blèk</i>	‘spread over’

<i>blèr</i>	‘hippopotamus’	<i>bāh</i>	‘hide, store, shelter(v)’
<i>blèr</i>	‘volcano’	<i>ḡāk^w</i>	‘lump (clay, mud)’
<i>blmèd’</i>	‘flying termite’	<i>ḡāk^w</i>	‘make/form lumps’
<i>bḡā</i>	‘blessing’	<i>ḡāl-ḡāl</i>	‘rectum’
<i>bḡā</i>	‘bless, praise’	<i>ḡālgām</i>	‘small smelly animal’
<i>bḡāk</i>	‘slander(v)’	<i>ḡāḡ</i>	‘forge(v)’
<i>bḡāx</i>	‘break off’	<i>ḡāḡ</i>	‘destroy all together’
<i>bḡèw</i>	‘break out, break down’	<i>ḡām</i>	‘munch, crunch’
<i>bnāḡ</i>	‘gold’	<i>ḡām mā</i>	‘make noise’
<i>bnèk</i>	‘smell bad’	<i>ḡāmām</i>	‘bee’
<i>brā</i>	‘hip, waist’	<i>ḡāḡkāl</i>	‘large calabash’
<i>bràf</i>	‘boil over, ooze, leak’	<i>ḡār</i>	‘crack’
<i>brām</i>	‘braid’	<i>ḡār-ḡār</i>	‘hard, strong’
<i>brāx^w</i>	‘well up’	<i>ḡārām</i>	‘antenna’
<i>brāz</i>	‘injure’	<i>ḡārdāk^w</i>	‘power, strength’
<i>brdzālāx^w</i>	‘sloped’	<i>ḡārḡām</i>	‘iron(n)’
<i>bré</i>	‘herd(n)’	<i>ḡās</i>	‘laugh(v)’
<i>brfāk^w</i>	‘light gray’	<i>ḡāw</i>	‘stab, pierce’
<i>brwēḡ</i>	‘lance, spear’	<i>ḡāw</i>	‘peel away’
<i>bsé</i>	‘nothing, zero’	<i>ḡáx^w-ḡáx^w</i>	‘warm(adj)’
<i>bwāl</i>	‘Buwal’	<i>ḡé</i>	‘full’
<i>bx^wām</i>	‘salt’	<i>ḡē</i>	‘fill’
<i>bx^wām</i>	‘eat big mouthfuls’	<i>ḡēḡēḡ</i>	‘sprinkle’
<i>bzā</i>	‘outside’	<i>ḡèlvèn</i>	‘tree sp.’
<i>bzām</i>	‘chin’	<i>ḡéḡ</i>	‘once’
ḡ		<i>ḡèḡ</i>	‘fence, join together’
<i>ḡá</i>	‘bah!’	<i>ḡèḡ</i>	‘prune(v)’
<i>-ḡā</i>	BEN	<i>ḡép</i>	‘manner of throwing away’
<i>ḡáḡā</i>	‘deaf-mute’	<i>ḡēr</i>	‘stand strong’
<i>ḡàf</i>	‘heat, boil’	<i>ḡèrḡèḡé</i>	‘patterned’
		<i>ḡésē</i>	‘liquid filtered through ashes’

<i>bèts</i>	‘assemble’	<i>dādāk</i>	‘long’
<i>bèz</i>	‘divide, separate’	<i>dādḡ^wâts</i>	‘Pleiades’
<i>bɣ^wām</i>	‘cheek’	<i>dāfād</i>	‘sorcerer’
<i>bràḷ</i>	‘faint(v)’	<i>dāḡ^wāf</i>	‘impotent’
<i>brés-brés</i>	‘slow growing’	<i>dāj</i>	‘more’
<i>brésé</i>	‘slowly (physical growth)’	<i>dāk</i>	‘gobble’
<i>bzèm</i>	‘mouse sp.’	<i>dāk</i>	‘tread on, press down’
		<i>dākà</i>	‘since (ful.)’
d		<i>dākā</i>	‘dregs’
<i>dà</i>	‘prepare (food)’	<i>dākāl</i>	‘big’
<i>dā</i>	‘bring, make sacrifice to’	<i>dākālá</i>	‘a lot’
<i>dābá</i>	‘woman’s hut’	<i>dāklāj</i>	‘gossip(n)’
<i>dābá-ská-jām</i>	‘kitchen’	<i>dāknàk</i>	‘black’
<i>dábádàm</i>	‘clay chicken house’	<i>dāk^w</i>	‘dip(v)’
<i>dábdābà</i>	‘stopper, plug’	<i>dāk^w</i>	‘horse’
<i>dàblā</i>	‘child born after twins’	<i>dāk^wār</i>	‘shin’
<i>dàbàlāj</i>	‘ignorant person’	<i>dālā</i>	‘money (ful.)’
<i>dàdàb</i>	‘stuttering’	<i>dālād</i>	‘bachelor’
<i>dàdàb</i>	‘be beautiful’	<i>dālāj</i>	‘young girl’
<i>dàdàk</i>	‘manner of catching’	<i>dàḷ</i>	‘block(v)’
<i>dādāk</i>	‘dirty(v)’	<i>dàm</i>	‘enter, exit, plunder’
<i>dàdàk rā</i>	‘threaten’	<i>dámā</i>	‘glue (from a fruit)(n)’
<i>dàdàk^w</i>	‘difficulty’	<i>dāmā</i>	‘dirt’
<i>dàdàḷ</i>	‘heap up’	<i>dāmārā</i>	‘misfortune, cold(head)’
<i>dàdàn</i>	‘singe’	<i>dámāw</i>	‘bush country’
<i>dàdàp</i>	‘convince, cover up’	<i>dàmták^wād</i>	‘tree sp.’
<i>dàdàw</i>	‘small of back’	<i>dàmtk^wāl</i>	‘pestle, pounding stick’
<i>dādāwār</i>	‘evil, bad person’	<i>dàn mbàw</i>	‘miscarry’
<i>dàdàz</i>	‘redden’	<i>dàngàl</i>	‘sort, separate out’
<i>dādrās</i>	‘blunten’	<i>dāngāz</i>	‘ram(n)’
<i>dādrāḷ</i>	‘blunten’	<i>dáp</i>	‘big piece’
<i>dàd</i>	‘pull, stretch’	<i>dàp</i>	‘noise of hitting’

<i>dàp</i>	‘cover’	<i>dèf-dèf</i>	‘in big piles’
<i>dàr</i>	‘found, begin’	<i>dējédj</i>	‘too much (ful.)’
<i>dār</i>	‘shake by hitting on ground’	<i>dèk</i>	‘place with difficulty’
<i>dār</i>	‘plant in the ground’	<i>dékèn</i>	‘name of trad. festival’
<i>dáráf</i>	‘favourite’	<i>dēkēē</i>	‘sorghum dough with milk’
<i>dārjāk^w</i>	‘stubbornness’	<i>délélé</i>	‘direct’
<i>dàrlāj^w</i>	‘young man’	<i>dēlsēsén</i>	‘fruit fly’
<i>dàrlǎm</i>	‘desert(n)’	<i>déł</i>	‘short’
<i>dàts</i>	‘crowded’	<i>dèndèlèn</i>	‘circular’
<i>dāv</i>	‘grow, sprout’	<i>dèn</i>	‘think, reflect,
<i>dāvās</i>	‘knock down, knock over’	<i>dēŋ</i>	‘stand(v)’
<i>dāw</i>	‘behind’	<i>dēŋgēr</i>	‘let dirt settle in water’
<i>dāwān</i>	‘back(n)’	<i>dèŋgèz</i>	‘dregs’
<i>dāwār</i>	‘illness, misfortune’	<i>dēŋgēz</i>	‘trap(n)’
<i>dāx^{wám}</i>	‘hill’	<i>dèrlǎén</i>	‘eternity’
<i>dāx^{wzàk^w}</i>	‘bark for brides’	<i>dēs</i>	‘divination equipment’
<i>dázāk^w</i>	‘cricket’	<i>dēs</i>	‘piece of jewellery’
<i>dbé</i>	‘termite hill’	<i>dēs</i>	‘touch with the end of’
<i>dbár</i>	‘fixing something to’	<i>dèw</i>	‘start’
<i>dbár</i>	‘gold’	<i>dēx</i>	‘block(v)’
<i>ddrāk^w</i>	‘begin to learn something’	<i>déx^{wédē}</i>	‘type of stone’
<i>dāndrák^w</i>	‘centipede’	<i>dfnèk</i>	‘dark’
<i>dāntsá</i>	‘conjunctivitis’	<i>dgáv</i>	‘tree sp.’
<i>ddēm</i>	‘vine sp.’	<i>dg^{wàł}</i>	‘small clay pot’
<i>dèbèbēr</i>	‘clay bed’	<i>dīm</i>	‘noise of thunder’
<i>dèb</i>	‘calm, appease’	<i>dkàj</i>	‘wander around’
<i>dēb</i>	‘moisten’	<i>dkàm</i>	‘gather’
<i>dèdèr</i>	‘wander’	<i>dk^{wlám}</i>	‘round’
<i>dédèx^w</i>	‘tardiness’	<i>dlá</i>	‘way, manner’
<i>dēd</i>	‘encourage’	<i>dmā</i>	‘bride’
<i>dēd</i>	‘push while following’	<i>dmàs</i>	‘belly, pregnancy’
<i>déf</i>	‘low, short’	<i>dmàs</i>	‘dance(v & n)’
<i>dēf</i>	‘amass’	<i>dmbàł</i>	‘tendon’

<i>dnāz</i>	‘tree sp.’	<i>dzāŋk^wārāk^w</i>	‘peanut stick’
<i>dràd</i>	‘eat fufu with meat’	<i>dzāŋ^w-dzāŋ^w</i>	‘bottle’
<i>dràf</i>	‘song’	<i>dzàŋ^wx^wàr</i>	‘tall and thin’
<i>drèḷ</i>	‘surround’	<i>dzàv</i>	‘assemble’
<i>drèḷ</i>	‘around’	<i>dzāw</i>	‘fasten, attach’
<i>drès</i>	‘clay’	<i>dzáxàrḷàk</i>	‘grass sp.’
<i>drŋg^wáḷ</i>	‘tree stump’	<i>dzàx^w</i>	‘pound(v)’
<i>dvàr</i>	‘hoe’	<i>dzè</i>	‘elope’
<i>dvèz mā</i>	‘lip’	<i>dzē:dzē</i>	‘every type’
<i>dwā</i>	‘debt’	<i>dzèḅ</i>	‘transport, take’
<i>dwzé</i>	‘behind, after’	<i>dzèḅ</i>	‘grave(n)’
<i>dwḷá</i>	‘heifer’	<i>dzèdzē</i>	‘grandparent’
		<i>dzèdzwèd</i>	‘fly(n)’
dz		<i>dzèjèk^w</i>	‘regret(v)’
<i>dzā</i>	‘show itself’	<i>dzèk</i>	‘lean against’
<i>dzā</i>	‘hit(v)’	<i>dzèkédzèw</i>	‘plant sp.’
<i>dzàḅ</i>	‘turn over, spill’	<i>dzèm</i>	‘long, tall’
<i>dzāḅán</i>	‘five’	<i>dzēnē</i>	‘axe’
<i>dzàdzāḅ</i>	‘marsh’	<i>dzērē</i>	‘locust’
<i>dzéx</i>	‘whole’	<i>dāw</i>	‘patchy’
<i>dzàdzàk</i>	‘heap up soil’	<i>dzənàk</i>	‘knead, mix dough’
<i>dzàdzàr</i>	‘filter drop by drop’	<i>dzkāw</i>	‘latrine, toilet’
<i>dzàdzàr</i>	‘filtered liquid’	<i>dzkèd</i>	‘thorn, thorny plant’
<i>dzáfád</i>	‘nine’	<i>dzkèd ndrèj</i>	‘tree sp.’
<i>dzàjá</i>	‘light brown’	<i>dzk^wàd</i>	‘hair, fur’
<i>dzāk</i>	‘limp, lean’	<i>dznàk</i>	‘manner of falling’
<i>dzākār</i>	‘crest, partition’	<i>dzŋgè</i>	‘study, read(ful.)’
<i>dzāk^w</i>	‘stack, pile up’	<i>dzràd</i>	‘stir(v)’
<i>dzām</i>	‘assemble, gather’	<i>dzràv</i>	‘move up and down’
<i>dzāmāl</i>	‘accumulate’	<i>dzvā</i>	‘breastbone’
<i>dzámāxkád</i>	‘eight’	<i>dzvād</i>	‘tangle’
<i>dzāndzár</i>	‘mouse sp.’	<i>dzvák</i>	‘resow’

<i>dzwrāw</i>	‘sub-chief(ful.)’	<i>dēmbēz</i>	‘calabash for serving
<i>dz:é</i>	‘large (animal)’	<i>dēŋ</i>	‘bowl’
d		<i>dēŋgēr</i>	‘carry on head’
<i>dā</i>	‘draw water, rain’	<i>dērēwēl</i>	‘paper, book(ful.)’
<i>dâd</i>	‘pull out’	<i>dêts</i>	‘wring out, milk’
<i>dādāj</i>	‘prickly grass seeds’	<i>déz</i>	‘calabash (edible)’
<i>dādārāj</i>	‘phlegm’	<i>dǫ^wâr</i>	‘hump (of cow)’
<i>dâf</i>	‘stretch out’	<i>dlàk</i>	‘mess’
<i>dǎk</i>	‘gone’	<i>dłāŋ^w</i>	‘cat’
<i>dālā</i>	‘someone’	e	
<i>dálàz</i>	‘trap(n)’	<i>èbè</i>	DEM.MED
<i>dâłz</i>	‘form abcess’	<i>égē</i>	PL
<i>dāmbàłz</i>	‘pumpkin’	<i>éj</i>	‘and(ful.)’
<i>dāp</i>	‘patch up’	<i>-ējē</i>	PART
<i>dâr</i>	‘fresh grass’	<i>-ēkēj</i>	1SG.DOBJ, 1SG.IOBJ
<i>dâs</i>	‘cultivate, farm’	<i>éndē</i>	‘like this.PROX’
<i>dâw</i>	‘love, want, need, ask’	<i>éndzèkēdē</i>	‘however, so’
<i>dāwāp</i>	‘rag’	<i>énē</i>	‘like that’
<i>dāwār</i>	‘canari’	<i>-ēnē</i>	3SG.IOBJ
<i>dǎx-dǎx</i>	‘sour’	<i>-ēnēj</i>	1EXCL.DOBJ, 1EXCL.IOBJ
<i>dbàs</i>	‘flame(v)’	<i>-ētēnē</i>	3PL.IOBJ
<i>dbât</i>	‘relieve pain with heat’	<i>évèlè</i>	‘although’
<i>dédé</i>	‘appropriate’	<i>ézē</i>	‘therefore’
<i>dēdē</i>	‘pour into’		
<i>dédwēk</i>	‘bitter’	f	
<i>dēk-dēk</i>	‘still(adj)’	<i>fá:</i>	‘putting hand in a bag’
<i>dék^w-dék^w</i>	‘very black’	<i>fárá</i>	‘manner of running slowly’
<i>dēlēk</i>	‘vine sp.’	<i>fâd</i>	‘shave’
<i>dēlēk</i>	‘bile, gall, gall bladder’	<i>fâfân</i>	‘flower’
<i>dēm</i>	‘manner of fleeing as a group’	<i>fág^wáj</i>	‘stubbornness’
<i>dém-dém</i>	‘bland’	<i>fāg^wālāk^w</i>	‘leprosy, leper’
<i>dēmbēl</i>	‘pick(v)’	<i>fâl</i>	‘increase(v)’

<i>fáŋgáláw</i>	‘madness’	<i>frèw</i>	‘sniff, sip’
<i>fáŋg^wálár</i>	‘hollow(adj)’	<i>ftàk^w</i>	‘steal everything’
<i>fár</i>	‘manner of leaving’	<i>ftàn</i>	‘spark(n)’
<i>fārá</i>	‘pulling out quickly’	<i>ftàr</i>	‘dig up’
<i>fárám</i>	‘horn’	<i>fték</i>	‘lost’
<i>fāt</i>	‘slice, cut up, slaughter’	<i>ftēk</i>	‘lose’
<i>fāt</i>	‘for good’	<i>ftél</i>	‘manner of running’
<i>fātátá</i>	‘vast’		
<i>fāx:</i>	‘soaring’	g	
<i>fdāx</i>	‘wake up’	<i>gá</i>	‘sufficient’
<i>fēdfēdē</i>	‘roof matting’	<i>gā</i>	‘load(v)’
<i>fēfēd’</i>	‘diminish’	<i>gāb</i>	‘knead, paddle’
<i>fēfēk^w</i>	‘whistle(v)’	<i>gábár</i>	‘deer’
<i>fēfēk^w</i>	‘shrink’	<i>gàdàd’</i>	‘arrow’
<i>fēfēt</i>	‘thin’	<i>gàdàd’</i>	‘stinger’
<i>fēkēd’</i>	‘use up’	<i>gādbāŋ</i>	‘crawl’
<i>fēlēx</i>	‘do little by little’	<i>gàdwdā</i>	‘cooking pot’
<i>fēŋ</i>	‘blow nose’	<i>gádāŋ</i>	‘idiot’
<i>féŋ-féŋ</i>	‘scented’	<i>gàdzàk</i>	‘gourd, bottle’
<i>féséd’</i>	‘tiny’	<i>gàdzāmbāl</i>	‘harp’
<i>fèt</i>	‘blow, fan’	<i>gàgàt</i>	‘gulp down’
<i>fétē</i>	‘pepper(n)’	<i>gágmāj</i>	‘cotton’
<i>fják^w</i>	‘fine, thin’	<i>gágràŋ</i>	‘insufficient’
<i>fjām</i>	‘weevil’	<i>gāj</i>	‘spoil’
<i>fk^wám</i>	‘stuffing mouth’	<i>gāj</i>	‘badness, sin’
<i>flá</i>	‘tiredness from eating’	<i>gàl</i>	‘grow up, raise’
<i>flàk^w</i>	‘snatch woman’	<i>gālābā</i>	‘better’
<i>flàw</i>	‘manner of leaving’	<i>gālāb</i>	‘hangar, shelter’
<i>fléŋ-fléŋ</i>	‘sleeping better’	<i>gàlàgàlá</i>	‘exhausted’
<i>fràd’</i>	‘dislocate’	<i>gāláj</i>	‘enclosed area’
<i>frāw-frāw</i>	‘a bit strange’	<i>gàláj^w</i>	‘jerry-can(fr.)’

<i>gāldām</i>	‘pig’	<i>gdàŋ</i>	‘hard, difficult’
<i>gāfāŋ</i>	‘single’	<i>gdāŋ</i>	‘mold (pottery)’
<i>gàḷ</i>	‘beat, thresh’	<i>gdégdē</i>	‘mat (traditional)’
<i>gāḷāŋgār</i>	‘hat’	<i>gdémfé</i>	‘pot for flour’
<i>gāḷār vāj</i>	‘ligament’	<i>gdāk</i>	‘reduced’
<i>gāḷāvāj</i>	‘God, sky’	<i>gdām</i>	‘gather’
<i>gām</i>	‘drive away, herd’	<i>gē</i>	‘house’
<i>gāmbār bāmām</i>	‘beeswax’	<i>gēb</i>	‘abandon, leave’
<i>gāmḷā</i>	‘star’	<i>gèdwrej</i>	‘sauce pot’
<i>gāmtāk</i>	‘chicken’	<i>gèdzéré</i>	‘shorts, loincloth’
<i>gāmzák^w</i>	‘rooster (cock)’	<i>gèdzéréŋ</i>	‘tooth decay’
<i>gāmzák^w</i>	‘wisdom, wise’	<i>gèf</i>	‘physical difficulty’
<i>gānānā</i>	‘tongue’	<i>gēḷéŋ</i>	‘summit of hill’
<i>gānānā gāmtāk</i>	‘grass sp.’	<i>gēndēw</i>	‘palm branch, frond’
<i>gàŋglán</i>	‘praying mantis’	<i>gèŋgèr</i>	‘want more’
<i>gāp</i>	‘put on weight,’	<i>gèŋgèr</i>	‘rub(v)’
<i>gār</i>	‘state’	<i>gēŋgréŋ</i>	‘harp’
<i>gār</i>	‘stand, liven up’	<i>gér</i>	‘all dissappear’
<i>gārāk</i>	‘shield(n)’	<i>gèr</i>	‘look (for) intently’
<i>gārāwāl</i>	‘robe(ful.)’	<i>gēr</i>	‘scoop out sorghum’
<i>gárdádāŋ</i>	‘palate’	<i>gēs</i>	‘touch, feel’
<i>gārksāŋ</i>	‘tic’	<i>gèsgèl</i>	‘folere’
<i>gās</i>	‘time(s)’	<i>gèvdè</i>	‘tree sp.’
<i>gāsāŋ</i>	‘virgin’	<i>géz</i>	‘rust(n)’
<i>gāt</i>	‘eat with hands’	<i>glèb</i>	‘kneel’
<i>gāvār</i>	‘Gavar’	<i>gmāz</i>	‘bellows’
<i>gàvdā</i>	‘bracelet, bead’	<i>gmèf</i>	‘monkey, baboon’
<i>gāw</i>	‘hunter’	<i>gnēx</i>	‘apply lightly’
<i>gāwlā</i>	‘Gawla (ceremony)’	<i>gré</i>	‘maybe’
<i>gāzāwā</i>	‘Gazawa’	<i>grē</i>	‘see’
<i>gàzgàz</i>	‘mane’	<i>gzá</i>	‘section’
<i>gdāk</i>	‘far’		

gb		<i>g^wāŋg^wāx^w</i>	‘rub(v)’
<i>gbàf</i>	‘soak through’	<i>g^wāŋk^wájāx</i>	‘egg-plant’
<i>gbák</i>	‘manner of	<i>g^wār</i>	‘arrive’
<i>gbák</i>	‘two’	<i>g^wār</i>	‘arrived’
<i>gbāḷ</i>	‘body shining’	<i>g^wāráw</i>	‘cola nut(ful.)’
<i>gbáŋ</i>	‘just’	<i>g^wārg^wār</i>	‘large drops’
<i>gbāŋ^w</i>	‘knock(v)’	<i>g^wārkw^wāk^wāk^w</i>	‘large’
<i>gbár</i>	‘straight’	<i>g^wārzàm</i>	‘get up, raise up’
<i>gbāv</i>	‘make hole’	<i>g^wāvāŋ^w</i>	‘snake sp.’
<i>gbáw</i>	‘finish completely’	<i>g^wbàts</i>	‘cook while stirring’
		<i>g^wdāx</i>	‘dig up’
g^w		<i>g^wdāk^w</i>	‘entrance hut’
<i>g^wá:ḷām</i>	‘hole in tree trunk’	<i>g^wēbé</i>	‘middle-aged, fresh’
<i>g^wàḅ</i>	‘ruminate, chew cud’	<i>g^wēdzēŋg^wēr</i>	‘chicken cage’
<i>g^wàḅ</i>	‘loosen’	<i>g^wénēḅ-g^wénēḅ</i>	‘soft’
<i>g^wādārāk</i>	‘vulture’	<i>g^wèrlēŋ</i>	‘thing which eats wounds’
<i>g^wàfāt</i>	‘loosen’	<i>g^wlāk</i>	‘argue’
<i>g^wāflāŋ^w</i>	‘hollow(adj)’	<i>g^wlām</i>	‘quiver’
<i>g^wāj</i>	‘pal’	<i>g^wlēr</i>	‘mouse sp.’
<i>g^wājā</i>	‘aggression, force’	<i>g^wlèt</i>	‘hoe (very hard)(n)’
<i>g^wājáf</i>	‘guava(fr.)’	<i>g^wḷām</i>	‘animal shelter’
<i>g^wājg^wājā</i>	‘festival, party’	<i>g^wḷām</i>	‘canari’
<i>g^wālá</i>	‘term of address’	<i>g^wmā</i>	‘judgement’
<i>g^wālām</i>	‘tree sp.’	<i>g^wnàt</i>	‘scratch(v)’
<i>g^wāḷāk^w</i>	‘wide leaf’	<i>g^wràt</i>	‘wound (animal)(v)’
<i>g^wāḷā</i>	‘elephant’	<i>g^wvàd</i>	‘hoe(v)’
<i>g^wàm</i>	‘put off’	<i>g^wzēd</i>	‘mouse sp.’
<i>g^wām</i>	‘heap up’	<i>g^wzlèx</i>	‘striped’
<i>g^wāmbāk^w</i>	‘toad, frog’		
<i>g^wànák-bāj</i>	‘papaya’	Y	
<i>g^wànàk^w</i>	‘tree sp.’	<i>yàyàndàr</i>	‘snore(v)’
<i>g^wānk^wád</i>	‘caterpillar’	<i>yàl</i>	‘female animal’

<i>yālā</i>	‘boundary’	<i>yèv</i>	‘breaking clay objects’
<i>yàḷ</i>	‘eat raw’	<i>yēw</i>	‘catch in a trap’
<i>yàḷàlāw</i>	‘bad (to eat)’	<i>yjād</i>	‘throb of pain’
<i>yàm</i>	‘war’	<i>yjàm</i>	‘noise of pain’
<i>yāmbák</i>	‘manner of getting up’	<i>yāj</i>	‘Ghelay (clan name)’
<i>yāmpāf</i>	‘lung’	<i>yràd</i>	‘scrape(v)’
<i>yār</i>	‘stare(v)’	<i>yrek</i>	‘a bit large’
<i>yār</i>	‘be late’	<i>yrew</i>	‘lots(n)’
<i>yār</i>	‘undercook’	<i>yvéŋ</i>	‘never’
<i>yáràd</i>	‘tree sp.’		
<i>yārāmyārām</i>	‘unripe/tough’	y^w	
<i>yàḷàw</i>	‘short-sighted’	<i>y^wā:k</i>	‘noise of toad’
<i>yāv</i>	‘pride, admiration’	<i>y^wáb</i>	‘throwing down’
<i>yāv</i>	‘boast, admire’	<i>y^wād</i>	‘annoy, get angry’
<i>yàzbàŋ</i>	‘yellow’	<i>y^wáf</i>	‘killing sickness’
<i>yéḃ</i>	‘manner of abandoning’	<i>y^wājām</i>	‘noise of falling’
<i>yéḃé-yéḃé</i>	‘numerous’	<i>y^wāl</i>	‘show, explain’
<i>yèdè</i>	‘grass sp.’	<i>y^wālŋg^wād</i>	‘uproot’
<i>yéf</i>	‘full’	<i>y^wáf</i>	‘get fatter’
<i>yēf</i>	‘fill, pour into’	<i>y^wáfŋy^wáf</i>	‘fat, swollen’
<i>yéyēdèk</i>	‘throat irritation’	<i>y^wáfŋy^wáfā</i>	‘plant sp.’
<i>yēlé</i>	‘intestines’	<i>y^wāmtsāk^w</i>	‘grass sp.’
<i>yēḷéw</i>	‘underdeveloped’	<i>y^wāndād</i>	‘come out, dig out’
<i>yém</i>	‘doing all together’	<i>y^wārāk^w</i>	‘insert something into’
<i>yēm</i>	‘judgement, fault’	<i>y^wārāk^w</i>	‘make a hole’
<i>yēm</i>	‘judge(v)’	<i>y^wāràm</i>	‘collapse(v)’
<i>yèmbēv</i>	‘grass sp.’	<i>y^wārḷá-y^wārḷá</i>	‘snail’
<i>yén-yén</i>	‘sweet’	<i>y^wārḷāḷāj</i>	‘peanuts’
<i>yēndēw</i>	‘hook onto’	<i>y^wārḷāk^w</i>	‘onion, garlic’
<i>yèndzèk</i>	‘weak’	<i>y^wārḷndzàlàn^w</i>	‘crooked’
<i>yènè</i>	‘Ghene (trad. festival)’	<i>y^wārḷŋg^wām</i>	‘cactus’
<i>yénénéḃ</i>	‘wet, too much water’	<i>y^wátátá</i>	‘slightly acidic’

<i>ɣ^wâv</i>	‘rot slightly’	<i>jâx^w</i>	‘thread(v)’
<i>ɣ^wâz-ɣ^wâz</i>	‘silk, hair (of maize)’	<i>-jé</i>	PL
<i>ɣ^wéʒék-ɣ^wéʒék</i>	‘clean’		
<i>ɣ^wènè-ɣ^wènè</i>	‘tickle(n)’	k	
<i>ɣ^wèrdédé</i>	‘patterned’	<i>ká</i>	DUB
<i>ɣ^wèrgè</i>	‘mushroom’	<i>ká</i>	ANT
<i>ɣ^wétsétsé</i>	‘acidic’	<i>ká</i>	PFV
<i>ɣ^wrg^wm</i>	‘bird sp.’	<i>kā</i>	IPFV
		<i>kāb</i>	‘mix (solids)’
j		<i>kābāl</i>	‘hundred francs(ful.)’
<i>ǰ-</i>	3PL.SBJ	<i>kádàk</i>	‘good’
<i>ǰ</i>	3PL.STAT	<i>kād</i>	‘move(v)’
<i>jā</i>	‘say, invite, call’	<i>kāf</i>	‘raise, lift(v)’
<i>jâ:</i>	‘noise of rain’	<i>kāh</i>	‘dig’
<i>jāb</i>	‘wash’	<i>káj</i>	‘Oh!, No!(ful.)’
<i>jáf-jáf</i>	‘too delicious’	<i>kàkàd</i>	‘squeeze, massage’
<i>jājá</i>	‘invitation, call’	<i>kākār</i>	‘take into consideration’
<i>jàjàŋ</i>	‘shine brightly’	<i>kàkIák</i>	‘cackle (chicken)’
<i>jājāx</i>	‘melt’	<i>kāl</i>	‘smear(v)’
<i>jāk</i>	‘leave, abandon, stop’	<i>kāl-kāl</i>	‘confusion’
<i>jàk^w</i>	‘shorten’	<i>kál-kál</i>	‘equal (ful)’
<i>jāʔ</i>	‘hatch, produce’	<i>káláláw</i>	‘bouncing child on belly’
<i>jàʒàʒá</i>	‘heavily (rain)’	<i>kālkākāk</i>	‘jaw’
<i>jám</i>	‘also’	<i>kálsásāŋ</i>	‘underneath ear’
<i>jàm</i>	‘water, juice’	<i>káʔá</i>	‘maybe’
<i>jāŋ</i>	‘move away, migrate’	<i>káʔáfāj</i>	‘danger’
<i>jāŋ</i>	‘only’	<i>kàʔpàràx</i>	‘flat and oval’
<i>jáp</i>	‘deep’	<i>kámbáŋ</i>	‘tree sp.’
<i>jār</i>	‘flee’	<i>kāmpāx</i>	‘dove(n)’
<i>jàts</i>	‘flee in secret’	<i>kāŋgāŋ</i>	‘drum (medium sized)’
<i>jàw</i>	‘so(ful.)’	<i>káŋkās</i>	‘bean(s)’
<i>jáx-jáx</i>	‘sweet (average), diluted’	<i>káp</i>	‘manner of covering’

<i>káp</i>	‘manner of hitting with force’	<i>kēmtésē</i>	‘grass sp.’
<i>káp</i>	‘manner of sitting’	<i>kérkèm</i>	‘dried leftover fufu’
<i>kār</i>	‘fence in’	<i>kèrɲgèf</i>	‘bone’
<i>kārāwāl</i>	‘chair(ful.)’	<i>kēs</i>	‘leave, make leave’
<i>kárbā</i>	‘even though’	<i>kés-kés</i>	‘bird sp.’
<i>kàrkájāx</i>	‘shell(n)’	<i>kēt</i>	‘bring good’
<i>kātà</i>	‘perhaps’	<i>kètègré</i>	‘perhaps’
<i>kátádāj</i>	‘omnipresent one’	<i>kètèsè</i>	‘a bit later’
<i>kátáj</i>	‘where’	<i>kévējē</i>	‘ancient’
<i>kàts</i>	‘take a part’	<i>kláj</i>	‘complete(adj)’
<i>káw</i>	‘even(ful.)’	<i>klāj</i>	‘complete the number’
<i>kāw</i>	‘do once again’	<i>klāɲ</i>	‘threshing-floor’
<i>kāwkāw</i>	‘suddenly’	<i>klāw</i>	‘hook onto’
<i>káwláwláw</i>	(exclamation)	<i>klèɲ</i>	‘wisdom, wise person’
<i>kāzámzám</i>	‘cricket (fatty)’	<i>kràd’</i>	‘approach(v)’
<i>kďā</i>	‘towards’	<i>kràk</i>	‘tuck into’
<i>kďāɲ</i>	‘used up’	<i>krāp</i>	‘press down’
<i>kďāɲ</i>	‘finish’	<i>kráw-kráw</i>	‘large (seeds)’
<i>kďāp</i>	‘tip out’	<i>krēw</i>	‘difficult farming’
<i>kďē</i>	‘however, so’	<i>krēw</i>	‘farm with difficulty’
<i>kďē</i>	‘towards’	<i>ktād’</i>	‘manner of cutting’
<i>kē:vék</i>	‘bird sp’	<i>kték</i>	‘putting in a container’
<i>kēcéwē</i>	‘grass sp.’	<i>ktsáj</i>	‘fast’
<i>kēďé</i>	‘perhaps if’	<i>ktsāx</i>	‘cough(v)’
<i>kēďé-kēďé</i>	‘tickling’	<i>ktskèd’</i>	‘stumble(v)’
<i>kéf-kéf</i>	‘light (weight)’	<i>ktskèm</i>	‘start (jump)(v)’
<i>kéfē</i>	‘rock (large)’	<i>kvā</i>	‘side’
<i>kēl-kēl</i>	‘summit, top’	<i>kvād’</i>	‘mix(v)’
<i>kèlēk</i>	‘beforehand’		
<i>kéléléw</i>	‘cry to chase away’	kp	
<i>kēlɲgēď</i>	‘weak’	<i>kpāɲ</i>	‘manner of getting’
<i>kéǒvǒvǒ</i>	‘swimming’		

k^w		<i>k^wāsāxāl</i>	‘ugly, strange’
<i>k^wádāk^{wá}</i>	‘sweet potato’	<i>k^wàtsà-k^wàtsá</i>	‘here and there’
<i>k^wàftàlàx^w</i>	‘dusty colour’	<i>k^wāw</i>	NEG
<i>k^wág^{wá}</i>	‘for the moment’	<i>k^wáwáx</i>	‘entering to hide’
<i>k^wây</i>	‘have diarrhea’	<i>k^wdáp</i>	‘lost’
<i>k^wāh^{wāw}</i>	‘fire, heat’	<i>k^wdāp</i>	‘lose’
<i>k^wāj</i>	‘scatter’	<i>k^wdŷ^{wām}</i>	‘manner of swallowing’
<i>k^wájk^{wájā}</i>	‘hyena’	<i>k^wédk^{wéd}</i>	‘very fine’
<i>k^wájłālāŋ</i>	‘sour’	<i>k^wēdk^{wéděŋ}</i>	‘small (piece)’
<i>k^wájtsálāŋ</i>	‘sour’	<i>k^wēk^{wēd}</i>	‘scatter’
<i>k^wák</i>	‘heat(n)’	<i>k^wék^{wédě}</i>	‘mite’
<i>k^wāk^{wāb}</i>	‘rinse’	<i>k^wék^{wésé}</i>	‘kindling’
<i>k^wák^{wās}</i>	‘sacrifice(n)’	<i>k^wēk^{wét}</i>	‘used up’
<i>k^wāk^{wās}</i>	‘set aside chaff’	<i>k^wélélé</i>	‘fine’
<i>k^wák^{wjàŋ}</i>	‘mystery, enigma’	<i>k^wēlēŋ</i>	‘stop (rain)(v)’
<i>k^wālá</i>	‘tobacco pipe’	<i>k^wéléŋ-k^wéléŋ</i>	‘easily, quickly’
<i>k^wālāj</i>	‘drought, rainbow’	<i>k^wélféd-k^wélféd</i>	‘soft’
<i>k^wālálá</i>	‘scattered’	<i>k^wélyēd</i>	‘easy to swallow’
<i>k^wālāŋg^{wáj}</i>	‘burden, baggage’	<i>k^wéféx</i>	‘line scratched in skin’
<i>k^wālár</i>	‘egg (unfertilized)’	<i>k^wémpé</i>	‘underpants’
<i>k^wāłāk^{wār}</i>	‘worn out thing’	<i>k^wērłéj</i>	‘disorder’
<i>k^wām</i>	‘load(v)’	<i>k^wērłéj-k^wērłéj</i>	‘open, clear (not covered)’
<i>k^wāndād</i>	‘crop (of bird)’	<i>k^wésē</i>	‘doughnut(ful.)’
<i>k^wánzāj</i>	‘coil of iron’	<i>k^wēt</i>	‘sharpen’
<i>k^wāp</i>	‘throw at’	<i>k^wētēk</i>	‘indicate, point’
<i>k^wār</i>	‘pick up’	<i>k^wētél</i>	‘tail(n)’
<i>k^wárk^{wárdèdēm}</i>	‘cicada’	<i>k^wét-k^wét</i>	‘sharp’
<i>k^wàrlàlāj</i>	‘open landscape’	<i>k^wèts</i>	‘sprinkle’
<i>k^wárbàlá</i>	‘shea-butter tree’	<i>k^wètsēd</i>	‘spread out’
<i>k^wárndzàláx</i>	‘agama lizard’	<i>k^wétsér</i>	‘intelligence’
<i>k^wàrtsàf</i>	‘wrinkle(v)’	<i>k^wétséx</i>	‘dash(n)’
<i>k^wásásáb</i>	‘cane rat’	<i>k^wjèr</i>	‘moving back and forth’

<i>k^wlá</i>	‘able’	<i>lág^waw</i>	‘leather bow string’
<i>k^wláb</i>	‘paint, cover with leaves’	<i>lāk-lāk</i>	‘tree sp.’
<i>k^wlák^w</i>	‘obligatory’	<i>lāk^w</i>	‘lose weight’
<i>k^wlāp</i>	‘dent, wrinkle’	<i>lāk^wāt</i>	‘major river’
<i>k^wlāsk^wāw</i>	‘sick’	<i>lāk^wātāj</i>	‘whip(n)’
<i>k^wlè</i>	‘idol’	<i>lālāk</i>	‘be.afraid’
<i>k^wléd-k^wléd</i>	‘smooth’	<i>lālāx^w</i>	‘valley’
<i>k^wlāktádāk</i>	‘leech’	<i>lālāx^w</i>	‘hunting’
<i>k^wlè</i>	‘darkness’	<i>lām</i>	‘admit (a wrong)’
<i>k^wnāw</i>	‘sorghum drink’	<i>lām</i>	‘help(v)’
<i>k^wráb</i>	‘manner of kneeling’	<i>lām</i>	‘build, make’
<i>k^wrāt</i>	‘pick in quantity’	<i>lāmbāj</i>	‘litter(n)’
<i>k^wrēj-k^wrēj</i>	‘open landscape’	<i>lāp</i>	‘fold, hem(v)’
<i>k^wrndzàx</i>	‘rough’	<i>lāw</i>	‘cry of grief’
<i>k^wsām</i>	‘body’	<i>lāwād</i>	‘game’
<i>k^wsē</i>	‘fishing net’	<i>lāwād</i>	‘play’
<i>k^wstàlāx</i>	‘messy, rough’	<i>lāwán</i>	‘bed’
<i>k^wtsēk</i>	‘chicken basket’	<i>lāwár</i>	‘start of dry season’
<i>k^wvāx^w</i>	‘monitor lizard’	<i>lāx-lāx</i>	‘pleasant’
<i>k^wzāk^wāx^w</i>	‘maternal uncle.2POSS’	<i>lēēd</i>	‘plead with’
<i>k^wzāk^wnā</i>	‘maternal uncle.1POSS’	<i>lēbēr-lēbēr</i>	‘flexible’
<i>k^wzājg^wān</i>	‘maternal uncle.3POSS’	<i>lèk^wāl</i>	‘school(fr.)’
		<i>léléŋ</i>	‘humidity’
l		<i>lèm</i>	‘get, obtain’
<i>la</i>	NOM.ACT	<i>lèm mā</i>	‘meet’
<i>lā</i>	‘place, field,	<i>léŋ</i>	‘plus’
<i>lā</i>	‘do, add, make’	<i>lēŋgēd</i>	‘hockey-like game’
<i>lābārā</i>	‘story, chatter(n)’	<i>léts</i>	‘tight’
<i>lāb</i>	‘send (something)’	<i>lēvērē</i>	‘lion’
<i>lāb</i>	‘accept, agree to’	<i>léz</i>	‘narrow’
<i>lāb</i>	‘wet(v)’	<i>lîat</i>	‘make dirty’
<i>lāg^wādā</i>	‘dust’	<i>lgē</i>	‘pasture’

<i>Ipèt</i>	‘moisten’	<i>tēr</i>	‘exterminate’
<i>Ivà</i>	‘baby sling’	<i>tēr</i>	‘splinter, sliver’
<i>Ivāŋ-Ivāŋ</i>	‘dark’	<i>tēw</i>	‘catch (object in air)’
<i>Iwèts</i>	‘fireplace’	<i>tkàd</i>	‘change skin colour’
<i>Iw̄mà</i>	‘market(ful.)’	<i>tkār</i>	‘kick(v)’
		<i>tlāj</i>	‘place horizontally’
‡		<i>tpàts</i>	‘throw liquid’
<i>tā</i>	‘prepare, arrange’	<i>tràb</i>	‘cover, patch(v)’
<i>táb</i>	‘almost, ready’		
<i>tād</i>	‘ask repeatedly’	‡	
<i>tāgāf</i>	‘long broad leaf’	<i>tà</i>	‘do the Gawla’
<i>tāk</i>	‘tuck(v)’	<i>tā</i>	‘ox, bovine’
<i>tātalāj</i>	‘root’	<i>tā</i>	‘cut(v)’
<i>tātāp</i>	‘cover lightly’	<i>tā mā</i>	‘overtake (lit. cut mouth)’
<i>tātār</i>	‘pursue’	<i>tāb</i>	‘help each other’
<i>tātār</i>	‘paint(v)’	<i>tābá</i>	‘with’
<i>tātrāj</i>	‘crawl (lizard)(v)’	<i>tād</i>	‘pick up, take away’
<i>tāmāj-tāmāj</i>	‘wrong way around’	<i>tāk</i>	‘sow, plant’
<i>tàn</i>	‘try, imitate’	<i>tātāb</i>	‘washing place’
<i>tāŋgāl</i>	‘measure(v)’	<i>tātāj</i>	‘dominate’
<i>tāŋgāt</i>	‘time’	<i>tātār</i>	‘river, stream’
<i>tāp</i>	‘tell, recount’	<i>tātār</i>	‘join together’
<i>tār</i>	‘smear a little(v)’	<i>tām</i>	‘ear’
<i>tārāmā</i>	‘date palm’	<i>tām</i>	‘name’
<i>tāx</i>	‘tear(v)’	<i>tām g^wàtā</i>	‘cocoyam (lit. elephant’s ear)’
<i>téb-téb</i>	‘narrow’	<i>tām mātaxáj</i>	‘vine sp.’ (lit. ‘mouse ear’)
<i>tēdēk^w</i>	‘grass sp.’	<i>tāmbáj</i>	‘cane, staff’
<i>tēlēx</i>	‘needle (very long)’	<i>tāmbāx^w</i>	‘sorghum dust’
<i>tētēdék^w</i>	‘skin of stalk’	<i>tàn</i>	‘work(n)’
<i>tētēd</i>	‘remove skin’	<i>tàn</i>	‘taste(v)’
<i>tēŋ</i>	‘dance and jump(v)’	<i>tānā</i>	‘sibling.1POSS’
<i>tēŋ</i>	‘set (trap)’	<i>tānāx^w</i>	‘sibling.2POSS’

<i>ḥāŋ</i>	‘cross(v)’	<i>má</i> =	REL
<i>ḥāŋgāl</i>	‘edge(n)’	<i>mā</i>	‘mouth, language, problem’
<i>ḥāŋgān</i>	‘sibling.3POSS’	<i>mā</i>	‘front, edge’
<i>ḥàp</i>	‘swollen’	<i>mā-</i>	JUS
<i>ḥāp</i>	‘say, speak, greet’	<i>mābàk^w</i>	‘grass sp.’
<i>ḥāp</i>	‘speech, discourse’	<i>mābàlmád</i>	‘bald’
<i>ḥàr</i>	‘open, uncover’	<i>mābánbán</i>	‘salt’
<i>ḥār</i>	‘be popular’	<i>mābás</i>	‘shoulder’
<i>ḥārāwáj</i>	‘yellow sorghum’	<i>mābjḥáráw</i>	‘large cricket’
<i>ḥárdâj</i>	‘gap’	<i>màdā</i>	‘if’
<i>ḥàv</i>	‘strain, filter, trickle’	<i>mādábáj</i>	‘awkward (physically)’
<i>ḥàx^wdâj</i>	‘dark grey’	<i>mádàdàk^w</i>	‘base’
<i>ḥāz</i>	‘capsize, turn over’	<i>mádàdàk^w</i>	‘heel’
<i>ḥdēŋ</i>	‘tooth’	<i>mádàdàk^w</i>	‘elbow’
<i>ḥèḅ</i>	‘overlap(v)’	<i>mādádār</i>	‘blight(n)’
<i>ḥèj</i>	‘flesh, meat’	<i>mādánḡáḥà</i>	‘deaf person’
<i>ḥékēlév</i>	‘skin of stem’	<i>mādárg^wālā</i>	‘plant sp.’
<i>ḥēḥē</i>	‘long ago’	<i>mādárlāŋ^w</i>	‘soldier, assistant’
<i>ḥéḥēvèr</i>	‘forest’	<i>màdāwān</i>	‘hill’
<i>ḥérèk</i>	‘fingernail, claw’	<i>mādzá</i>	‘green mamba’ (lit. ‘buffalo
<i>ḥlāw</i>	‘okra’	<i>mādzádzráv</i>	‘waterfall’
<i>ḥlāw</i>	‘lay something down on’	<i>mād</i>	‘be.cold(v)’
<i>ḥmbàl</i>	‘shelf’	<i>mād</i>	‘finish(v)’
<i>ḥmē</i>	‘hear, understand, feel’	<i>mādádǎ</i>	‘chest’
<i>ḥràts</i>	‘pour grain into’	<i>mádâdâklá</i>	‘turkey’
<i>ḥráv</i>	‘grass sp.’	<i>mādân</i>	‘drizzle’
<i>ḥrmbàd</i>	‘sticky’	<i>màflāflā</i>	‘tarantula’
<i>ḥvèr</i>	‘open place, clearing’	<i>māglá</i>	‘man who has done Gaola’
m		<i>māḡ^wálvāŋ</i>	‘pap made with beans’
<i>ma-</i>	NOM	<i>māḡ^wârvá</i>	‘pap made only with flour’
<i>má</i>	TOP.EMPH	<i>māḡ^wdâ-</i>	‘bird sp.’
		<i>māyárḥàw</i>	‘shortsighted person’

<i>māyramyram</i>	‘cartilage’	<i>māmbáx</i> ^w <i>álām</i>	‘envy’
<i>máh</i> ^w <i>ábák</i> ^w	‘cloud’	<i>māmbāzá</i>	‘so much’
<i>màj</i>	TAG.IMP.POL	<i>mán</i>	‘mother’
<i>māj</i>	‘choose, pick’	<i>màn</i>	‘pay back’
<i>májá</i>	‘saliva’	<i>mān</i>	‘inside’
<i>mākááfàj</i>	‘misfortune’	<i>mán nvàn</i>	‘lower grinding stone’
<i>mākárnáná</i>	‘upside down’	<i>mán xājāk</i>	‘world’
<i>màkḅā</i>	‘name of sacrifice’	<i>mānānàk</i> ^w	‘forehead’
<i>māk</i> ^w <i>áh</i> ^w <i>āw</i>	‘log’	<i>mānānāx</i>	‘bitterness’
<i>māk</i> ^w <i>ámbāj</i>	‘ant (large)’	<i>mānāj</i>	‘so and so’
<i>māk</i> ^w <i>ándàrváj</i>	‘small circular root’	<i>mànāw</i>	‘pancreas’
<i>māk</i> ^w <i>ḁá</i>	‘next year’	<i>mándá</i>	‘salt(ful.)’
<i>mák</i> ^w <i>sàm</i>	‘semen’	<i>mándàḅ</i>	‘beer sorgum liquid’
<i>mālā</i>	GEN	<i>māndálá</i>	‘age mate’
<i>málàj</i>	‘only child’	<i>māndársāk</i>	‘mouse sp.’
<i>mālwlā</i>	‘demon, evil spirit’	<i>māndáxām</i>	‘pest’
<i>máḁàgá</i>	‘piece of cloth’	<i>māndván</i>	‘hare’
<i>màḁālāw</i>	‘venom, poison’	<i>māndwán</i>	‘rat’
<i>māḁáḁār</i>	‘tree sp.’	<i>māndzándzāx</i> ^w <i>jām</i>	‘spitting cobra’
<i>māḁáxáj</i>	‘mouse’	<i>mándzràf</i>	‘end, backside’
<i>màḁāxḁā</i>	‘arthritis’	<i>mánjàm</i>	‘grass sp.’
<i>màḁāḁáj</i>	‘intensity’	<i>māḁgālāj</i>	‘single seed’
<i>máḁàḁār</i>	‘river bank’	<i>māḁgālḁgāl</i>	‘pretending’
<i>máḁàm</i>	‘edge(n)’	<i>māḁgárāj</i>	‘butting heads’
<i>màḁārāw</i>	‘hawk’	<i>māḁgārzāj</i>	‘red teeth’
<i>māḁárbābāw</i>	‘spider’	<i>māḁgdáw</i>	‘bow-legged’
<i>màma-</i>	1DUAL.SBJ	<i>māḁgráw</i>	‘grass sp.’
<i>mámán</i>	‘mother.3POSS’	<i>máḁg</i> ^w <i>ará</i>	‘thumb’
<i>màmàw</i>	1DUAL	<i>máḁg</i> ^w <i>ārlàm</i>	‘throat’
<i>màmàw</i>	1DUAL.STAT	<i>māḁg</i> ^w <i>ávrāj</i> ^w	‘insect sp.’
<i>mámàrzáj</i>	‘ant (medium)’	<i>māpát</i>	‘morning’

<i>māpdǎkxā</i>	‘bush sweet potato’	<i>māvājvāj</i>	‘red squirrel’
<i>már</i>	‘before’	<i>mávàŋg^{wàn}</i>	‘selfish person’
<i>mār</i>	‘begin’	<i>māvává</i>	‘old (former)’
<i>márāđ</i>	‘plane(n)’	<i>māvāw</i>	‘beer (traditional)’
<i>máràvá</i>	‘regret’	<i>màvdāj</i>	‘because’
<i>màrǎŋgál</i>	‘Orion’	<i>māwá</i>	‘tree sp.’
<i>mārpā</i>	‘fiance’	<i>māwàl</i>	‘man, husband’
<i>mās</i>	‘type of weed’	<i>māwálāj</i>	‘youth meeting’
<i>māsáqāl</i>	‘laziness’	<i>māxájŋg^{wāw}</i>	‘grass sp.’
<i>māsālām</i>	‘sword’	<i>māxántávāj</i>	‘plant sp.’
<i>māsáwájám</i>	‘water beetle’	<i>māxkád</i>	‘three’
<i>māsáwlàx</i>	‘delinquant’	<i>máx^wábág^{wām}</i>	‘mumps’
<i>māsáx^w</i>	‘ache in the bones’	<i>màx^wājāx^wājā</i>	‘grass’
<i>màsēn</i>	‘mill(fr.)’	<i>máx^wèrsèk^w</i>	‘bud(n)’
<i>māsk^wālāj</i>	‘strong willed’	<i>màzālāk</i>	‘pile of sorghum’
<i>māsx^wvrzāj</i>	‘sore throat’	<i>māzāmbàk</i>	‘red sorghum’
<i>mātábwá</i>	‘last born’	<i>mázàx^w</i>	‘navel’
<i>mātāb</i>	‘baobab tree’	<i>mābā</i>	‘tamarind’
<i>mátákān</i>	IND.DET	<i>mēbēlmé</i>	‘inarticulate’
<i>māták^wád</i>	‘last one’	<i>médèfēsēj</i>	‘bedbug’
<i>mātāk^{wām}</i>	‘desire to see’	<i>mēdējnkēđék</i>	‘snake sp.’
<i>mātāk^wtāk^{wā}</i>	‘knee’	<i>mēdzélēj</i>	‘pit’
<i>mātámās</i>	‘guinea corn’	<i>mēdzémbédêw</i>	‘bump, knock’
<i>mátáŋgár</i>	QUOT.RES	<i>mèdzērē</i>	‘terrace wall’
<i>mātátəlg^{wā}</i>	‘gecko’	<i>médzkèđ</i>	‘front yard’
<i>màts</i>	‘die’	<i>médzkné</i>	‘spit’
<i>mātsáǎj</i>	‘head ornament’	<i>médzvè</i>	‘ancestor idol’
<i>mātsàrbáǎ</i>	‘adult tooth behind baby’	<i>mèđ</i>	‘swallow, peck’
<i>mātsāx^w</i>	‘mother.2POSS’	<i>mēđ</i>	‘oath’
<i>mátsk^wāx^w</i>	‘evening’	<i>mēđ</i>	‘swear an oath’
<i>mávā</i>	‘slave(n)’	<i>mèđē</i>	‘case’
<i>māvāj</i>	‘because’	<i>mēđēđē</i>	‘point, end’

<i>mēdēdē</i>	‘successive ones’	<i>mēré</i>	‘male animal’
<i>médéf</i>	‘mud wasp’	<i>mèrēwrēj</i>	‘rice’
<i>mēdélè</i>	‘someone resembling’	<i>mésék^w</i>	‘ant (tiny)’
<i>mèfēk^w</i>	‘peanut and fat’	<i>mēsélēbé</i>	‘headscarf’
<i>mēftéftē</i>	‘mouse sp.’	<i>mēsémélèvéŋ</i>	‘first-time mother’
<i>mēftēs</i>	‘muscle’	<i>mésésék^w</i>	‘charcoal’
<i>mēg^wdēŋ</i>	‘clitoris’	<i>mēséswèd’</i>	‘snake sp.’
<i>mèk^wēdk^wēdē</i>	‘rattle(n)’	<i>mésfé</i>	‘harvest season’
<i>mék^wzēŋ</i>	‘large lizard’	<i>mèsk^wèd’</i>	‘grind finely, soften’
<i>mèl</i>	‘oil’	<i>mètèlém</i>	‘fetish’
<i>mélè</i>	‘tree sp.’	<i>mètēné</i>	‘malnutrition’
<i>mélèk^wdé</i>	‘dung beetle’	<i>mētēŋ^w</i>	‘metal flint’
<i>mélxéd’</i>	‘fine and soft’	<i>mètērēf’</i>	‘infection’
<i>mēlédzè</i>	‘neighbour’	<i>mētēs</i>	‘famine, hunger’
<i>mēlémpéd’</i>	‘bush sweet potato’	<i>mètètèk^w</i>	‘poor man’
<i>mēlépēts</i>	‘foam on beer’	<i>méth^wé</i>	‘true’
<i>mémèrvétékēm</i>	‘dragonfly’	<i>métrésēŋ^w</i>	‘naked’
<i>mémèd’ zézèk^w</i>	‘heron’ (lit. ‘snake	<i>mētséd’</i>	‘spark(n)’
<i>mēmēŋ</i>	‘leopard, panther’	<i>mētséfék</i>	‘granary lid’
<i>mémtsèr-mtsèr</i>	‘mouse’	<i>mētséŋ</i>	‘chisel(n)’
<i>mèn</i>	‘left’	<i>mētwlē</i>	‘lie(n)’
<i>méndé</i>	IND.DET.SG	<i>mèvèdvèdēŋ</i>	‘turtle (water)’
<i>mēndé</i>	‘sword’	<i>méwè</i>	‘new’
<i>mēndzēvèk</i>	‘medicine’	<i>méwzēl</i>	‘removal of excess plants’
<i>méndzév</i>	‘mosquito’	<i>mēxélēz</i>	‘dried, slightly off fufu’
<i>ménégē</i>	TAG.IMP	<i>mēxésfēŋ</i>	‘grass sp.’
<i>mènēkēt</i>	‘insect sp.’	<i>mèx^wēsē-x^wēsē</i>	‘annoyance’
<i>mēnēkēt</i>	‘ringworm’	<i>mézèŋkéd’</i>	‘jigger, sand flea’
<i>mènēnēs</i>	‘fried bean leaves’	<i>mèzērēf’</i>	‘prostitution’
<i>méntèr</i>	‘teacher(fr.)’	<i>mjdānāk</i>	‘bird sp.’
<i>mépètsék</i>	‘bark for young girls’	<i>mŋād’</i>	‘broom’

<i>mḵā</i>	‘blacksmith’	<i>mbà xētsēkē</i>	‘kid(n)’
<i>mpād</i>	‘take little by little’	<i>mbádàb</i>	‘plant sp.’
<i>mpāk</i>	‘close, shut’	<i>mbād</i>	‘domesticate, tame’
<i>mpāf</i>	‘cut(v)’	<i>mbād</i>	‘exchange, change’
<i>mpàm</i>	‘look for’	<i>mbād</i>	‘rub(v)’
<i>mpàr</i>	‘first’	<i>mbād-mbād</i>	‘chaff’
<i>mpàs</i>	‘bury’	<i>mbádāk^w</i>	‘underneath chin’
<i>mpát</i>	‘tomorrow’	<i>mbāg^{wāf}</i>	‘mouse species’
<i>mpàt</i>	‘pull out’	<i>mbáj</i>	‘grabbing hold of’
<i>mpè</i>	‘wood, tree’	<i>mbāj</i>	‘cassava’
<i>mpsèl</i>	‘testicle’	<i>mbāk^w</i>	‘evaporate’
<i>mrēd</i>	‘stretch, grow a little’	<i>mbāl</i>	‘hold, grab, catch(v)’
<i>msàk</i>	‘red earth’	<i>mbāl mā</i>	‘give pain, hurt’
<i>msār</i>	‘fry’	<i>mbáḵá</i>	‘type of beer’
<i>msàw</i>	‘roast(v)’	<i>mbàmáwāl</i>	‘boy, son’
<i>msáxáj</i>	‘plant sp.’	<i>mbám̀b̀àz</i>	‘blood’
<i>mséd</i>	‘nastiness’	<i>mbáná</i>	‘water fight’
<i>mséd</i>	‘louse’	<i>mbáj</i>	‘cutting suddenly’
<i>msrā</i>	‘old, old person’	<i>mbàṅgás</i>	‘toe’
<i>mtàx^w</i>	‘orphan’	<i>mbàrá</i>	‘finger’
<i>mtsā</i>	‘vagina’	<i>mbàrlá</i>	‘rope’
<i>mtsád</i>	‘tweezers (small)’	<i>mbárná</i>	‘day before yesterday’
<i>mtsàr</i>	‘nose’	<i>mbàw</i>	‘child’
<i>mtsè</i>	‘corpse, deceased’	<i>mbàw</i>	‘give birth, be born’
<i>mwsá</i>	‘twin’	<i>mbàwák</i>	‘small flute’
<i>mzā</i>	‘fat’	<i>mbáx^w</i>	‘pardon, forgiveness’
<i>mzār</i>	‘small(est) drum’	<i>mbàx^w</i>	‘wrap up with cloth’
mb		<i>mbàz</i>	‘blow(v)’
<i>mbā</i>	‘unfinished’	<i>mbē</i>	3SG
<i>mbà gādàd</i>	‘arrow head’	<i>mbèdwén</i>	‘sibling after’
		<i>mbèdédék</i>	‘fish sp.’

<i>mbēléw</i>	‘alone’	<i>nāx</i>	‘drop, throw away’
<i>mbèlgém</i>	‘sling-shot’	<i>nāx mā</i>	‘leave’
<i>mbēf</i>	‘crouch against, wink’	<i>nḃāx^w</i>	‘pull apart’
<i>mbēfém</i>	‘one-eyed’	<i>nēf</i>	‘stick on the end of(v)’
<i>mbèḷ:é</i>	‘fixedly’	<i>néjé</i>	TAG.CONF
<i>mbēmbē</i>	‘same’	<i>nēfē</i>	‘egg’
<i>mbèndzwēn</i>	‘shepherd’	<i>nèm</i>	‘wrinkle (eyes)(v)’
<i>mbēḡ</i>	‘winnow’	<i>ném-ném</i>	‘dew’
<i>mbèḡtsērēw</i>	‘mudfish’	<i>néné-</i>	1EXCL.SBJ
<i>mbèr</i>	‘jump(v)’	<i>nènè</i>	1EXCL
<i>mbér-mbér</i>	‘near’	<i>nènè</i>	1EXCL.STAT
<i>mbéx</i>	‘very small’	<i>nēnēw</i>	‘throw from far away’
<i>mbèz-mbézē</i>	‘beetle’	<i>nēs</i>	‘fry leaves’
<i>mbj̄</i>	3SG.STAT	<i>nèts</i>	‘light(v)’
<i>mblàk^w</i>	‘guest, stranger’	<i>nfá</i>	‘flour’
<i>mblám</i>	‘tree sp.’	<i>nfá nēfè</i>	‘yolk (of egg)’
<i>mblàm</i>	‘foreigner, ethnic group’	<i>nfád</i>	‘four’
<i>mblāx</i>	‘wound, sore’	<i>nfārā</i>	‘forearm’
<i>mbrāf</i>	‘squash(v)’	<i>nḡā</i>	DEM.PROX
n		<i>nḡē</i>	DEM.PROX
<i>ná-</i>	FUT	<i>nḡyè</i>	‘no’
<i>nà</i>	‘now’	<i>nh^wàz</i>	‘get drunk’
<i>nā</i>	‘ripen, ferment’	<i>nkàn</i>	‘tie up, bind’ tether
<i>nāk</i>	‘stop up’	<i>nkàp</i>	‘wait’
<i>nākā</i>	1SG.POSS	<i>nkḃāḡ</i>	‘stone (small)(n)’
<i>nàm-nàm</i>	‘liver’	<i>nkḃāw</i>	‘burn, grumble’
<i>nānā</i>	‘shiver, tremble’	<i>nkḃēx</i>	‘crime’
<i>nāsārā</i>	‘white man(ful)’ foreigner	<i>nkèf</i>	‘abandoned compound’
<i>nāt</i>	‘lick(v)’	<i>nkēm</i>	‘stalk (maize, sorghum)’
<i>nāw</i>	‘dry in sun’	<i>nkìèf</i>	‘fish’
		<i>nkràf</i>	‘boil (water), bubble up’

<i>nkràm</i>	‘dry season’	<i>ntàw</i>	‘whip(v)’
<i>nkràṅ</i>	‘delay(v)’	<i>ntàw</i>	‘take out mystically’
<i>nkrāp</i>	‘hide (animal) for women’	<i>ntāw</i>	‘catch’
<i>nkràt</i>	‘simmer’	<i>ntāwāl</i>	‘thigh’
<i>nksāf</i>	‘grass’	<i>ntāwàn</i>	‘type of fruit’
<i>nk^{wā}</i>	2SG.POSS	<i>ntbàl</i>	‘tire’
<i>nk^{wāb}</i>	‘brain’	<i>ntbàl</i>	‘tired’
<i>nk^{wāk^w}</i>	‘hernia’	<i>nté</i>	‘shoe, sandal’
<i>nk^{wárłá}</i>	‘puff adder’	<i>ntēb</i>	‘bend down, stoop’
<i>nk^{wáx}</i>	‘six’	<i>ntèf</i>	‘spit(v)’
<i>nk^{wlāf}</i>	‘weakness’	<i>ntēlē</i>	‘pond, lake’
<i>nk^{wnè}</i>	2PL.POSS	<i>ntém</i>	‘mouse sp.’
<i>nsāl</i>	‘mate(v)’	<i>ntèṅ</i>	‘lower(v)’
<i>nsēṅ</i>	‘seed, clan, type’	<i>ntèr</i>	‘write, draw’
<i>nsléd</i>	‘seven’	<i>ntèz</i>	‘divide, separate’
<i>ntā</i>	‘take, subtract’	<i>ntk^{wāl}</i>	‘curl up’
<i>ntā</i>	‘burst’	<i>ntmàw</i>	1DUAL.POSS
<i>ntā nvá</i>	‘defecate’	<i>ntmēk</i>	‘sheep’
<i>ntāb</i>	‘twist’	<i>ntrā</i>	‘moon, month’
<i>ntàd</i>	‘dive, dip’	<i>ntràb</i>	‘grab, take’
<i>ntàd</i>	‘deafen’	<i>ntrák^w</i>	‘well (traditional)’
<i>ntād</i>	‘pull apart’	<i>ntràm</i>	‘ebony tree’
<i>ntāk</i>	‘crush’	<i>ntràm</i>	‘spur(n)’
<i>nták^w</i>	‘finished’	<i>ntsā</i>	‘bite, gnaw, sting’
<i>ntāk^w</i>	‘finish, complete’	<i>ntsā mā</i>	‘bite finger’
<i>ntāk^{wāl}</i>	‘tree sp.’	<i>ntsàd</i>	‘belongings’
<i>ntàk^{wàw}</i>	1INCL.POSS	<i>ntsàd</i>	‘enrich’
<i>ntàḷ</i>	‘choke’	<i>ntsàk^w</i>	‘push’
<i>ntàr</i>	‘pay’	<i>ntsālā</i>	‘gizzard’
<i>ntār</i>	‘separate combatants’	<i>ntsēb</i>	‘insert into wood’
<i>ntàr mā</i>	‘support’	<i>ntsèk^w</i>	‘tighten’
<i>ntàv</i>	‘sew’	<i>ntsènè</i>	1EXCL.POSS

<i>ntsèr</i>	‘scratch(v)’	<i>ndàv</i>	‘fall, fell’
<i>ntsèw</i>	‘eat pieces’	<i>ndàv/ndèw</i>	‘find’
<i>ntsēx</i>	‘groan(v)’	<i>ndàw</i>	‘base, foundation’
<i>ntsfēd’</i>	‘yam’	<i>ndéḃ-ndéḃ</i>	‘heavy’
<i>ntskàḃ</i>	‘chew’	<i>ndéděk^w</i>	‘good for the body’
<i>ntslèd’</i>	‘spit(v)’	<i>ndēděz</i>	‘baby, newborn’
<i>ntsmād’</i>	‘type of rock’	<i>ndék^w-ndék^w</i>	‘sweet’
<i>ntsné</i>	‘before, earlier’	<i>ndèl</i>	‘barrenness’
<i>ntswèr</i>	‘travel(v)’	<i>ndéléx-ndéléx</i>	‘heavy’
<i>ntsxèḥ</i>	‘ankle’	<i>ndélwēŋ</i>	‘peanut and beef bones’
<i>ntwès</i>	‘folere seeds’	<i>ndéndéḃēk</i>	‘fresh’
<i>nvá</i>	‘excrement, faeces’	<i>ndēndēd’</i>	‘squeeze(v)’
<i>nvàn</i>	‘grinding stone’	<i>ndèndèlèk^w</i>	‘short and circular section’
<i>nwná</i>	‘last year, times past’	<i>ndèr</i>	‘crush lightly’
<i>nxèl</i>	‘thief, theft’	<i>ndēw</i>	‘throw and catch’
<i>nxèl</i>	‘steal’	<i>ndèw-ndéw</i>	‘game played with stones’
<i>nx^{wā}</i>	‘goat’	<i>ndk^{wlém}</i>	‘silk-cotton tree’
<i>nx^{wāl}</i>	‘dry(v)’	<i>ndlàf’</i>	‘solid and stong’
nd		<i>ndlāj</i>	‘place horizontally’
<i>ndā</i>	‘go, walk’	<i>ndlám</i>	‘in pieces’
<i>ndàblām</i>	‘young female chicken’	<i>ndláj^w</i>	‘same, similar’
<i>ndàd’</i>	‘align’	<i>ndràḃ</i>	‘pleasing’
<i>ndākāḃāj</i>	‘mud’	<i>ndràḃ</i>	‘please, satisfy’
<i>ndákátsā</i>	‘ankle ring, bangle’	<i>ndrámdámḡàj</i>	‘ground pea’
<i>ndál</i>	‘equal’	<i>ndrāw</i>	‘crush(v)’
<i>ndālā</i>	‘pile of sorghum stalks’	<i>ndrèj</i>	‘sorghum’
<i>ndándàdáz</i>	‘tree sp.’	<i>ndrèj ŋg^{wájāj}</i>	‘maize, corn’
<i>ndàŋ^w</i>	‘coming aggressively’	<i>ndvāl</i>	‘hammer’
<i>ndàŋ^w</i>	‘bottom, relation’	ndz	
<i>ndár</i>	‘so that, in order to’	<i>ndzā</i>	‘sit, live, dwell,
<i>ndàry^{wàz}</i>	‘catfish’	<i>ndzàd’</i>	‘wrap around with cloth’

<i>ndzàk^w</i>	‘transport(v)’	<i>ngàd</i>	‘mix’
<i>ndzàndzà</i>	‘give’	<i>ngād</i>	‘count, tell, recount’
<i>ndzàndzàr</i>	‘clear thout’	<i>ngājā</i>	QUOT
<i>ndzāng^wālāj</i>	‘type of peanut’	<i>ngàl</i>	‘hit hard with a staff’
<i>ndzé</i>	‘raw’	<i>ngàl</i>	‘set apart’
<i>ndzé</i>	‘eye(n)’	<i>ngàl</i>	‘grow old’
<i>ndzè</i>	‘sown last year’	<i>ngálá</i>	‘side (of body)’
<i>ndzèf</i>	‘odour, smell’	<i>ngālād</i>	‘unripe fruit’
<i>ndzèf</i>	‘smell(v)’	<i>ngālāŋ</i>	‘strength, means’
<i>ndzèk</i>	‘do up, clip on’	<i>ngálngál</i>	‘spherical’
<i>ndzèl</i>	‘grass sp.’	<i>ngàlŋgàl</i>	‘beating with a stick’
<i>ndzèļ</i>	‘join two things’	<i>ngāļāđ</i>	‘grass sp.’
<i>ndzèn</i>	‘follow’	<i>ngàm</i>	‘crushing noise’
<i>ndzéndzèyéw</i>	‘fruit bat’	<i>ngām-ŋgām</i>	‘trap (iron)(ful.)’
<i>ndzèndzén</i>	‘debris’	<i>ngámà</i>	‘friend’
<i>ndzéréŋ</i>	‘string game’	<i>ngāŋgāl</i>	‘sway(v)’
<i>ndzèw</i>	‘drag, pull, drive’	<i>ngàŋgràļ</i>	‘crowd in’
<i>ndzēx</i>	‘rub, scrub’	<i>ngār</i>	‘gossip, slander(n)’
<i>ndzrám</i>	‘palm rat’	<i>ngārā</i>	‘true, worthy’
<i>ndzrēb</i>	‘sip(v)’	<i>ngàrwālā</i>	‘fellow-wife’
<i>ndzrēļ</i>	‘remove, pull out’	<i>ngās</i>	‘foot’
<i>ndzwèn</i>	‘true’	<i>ngāts</i>	‘tighten’
<i>ndzwná</i>	‘yesterday’	<i>ngàz</i>	‘advise, punish,
ŋ		<i>ngàb</i>	‘transplant, plant’
<i>ŋ</i>	PREP2	<i>ngē</i>	‘over there’
<i>ŋ</i>	INF	<i>ngēf</i>	‘feather’
		<i>ngèl mā</i>	‘meet, encounter’
ŋg		<i>ngélé</i>	‘fishhook’
<i>ngā</i>	‘break(v)’	<i>ngēlēlēm</i>	‘gravel’
<i>ngā</i>	‘apply’	<i>ngélŋgél</i>	‘spherical’
<i>ngá:łāw</i>	‘plant sp.’	<i>ngéļē</i>	‘knife’

<i>ngéngè</i>	‘reed’	<i>ng^wràf</i>	‘collapse’
<i>ngēr</i>	‘develop’	<i>ng^wrēx</i>	‘scratch(v)’
<i>ngès</i>	‘urinate’		
<i>ngès</i>	‘urine’	ngmb	
<i>ngjēj</i>	‘pap, porridge’	<i>nggàk^w</i>	‘bump, knot (in tree)’
<i>nglá</i>	‘joint’	<i>ngmbà</i>	‘up there’
<i>ngl̄ē</i>	‘forge(n)’	<i>ngmbāk</i>	‘stop short,
<i>ngl̄èṅ</i>	‘fear, reverence’	<i>ngmbàk^w</i>	‘hit with elbow(v)’
<i>ngl̄èṅ</i>	‘peanut(s)’	<i>ngmbám</i>	‘tipping out’
<i>ngl̄èṅ ng^wájāṅ</i>	‘Bambara pea(s)’	<i>ngmbàm</i>	‘growing in bunches’
<i>ngràd</i>	‘stretch, squeeze shut’	<i>ngmbáx^w</i>	‘noise of something
<i>ngráḷ</i>	‘weaver-bird’		
<i>ngrāḷ</i>	‘make noise’	p	
<i>ngrāw</i>	‘scratch(v)’	<i>pá</i>	‘put aside’
<i>ngreṅ</i>	‘greed’	<i>pá</i>	‘at a level’
<i>ngtāw</i>	‘rip(v)’	<i>pād</i>	‘wrap up’
		<i>pádāj-pádāj</i>	‘flat and oval’
ng^w		<i>páj</i>	‘arrived’
<i>ng^wād-ng^wād</i>	‘betrayal’	<i>páj</i>	‘lighting up’
<i>ng^wāf</i>	‘throw at’	<i>pákàm</i>	‘mouth (inside)’
<i>ng^wālālāṅ</i>	‘hip’	<i>pāk^w</i>	‘pulling up peanuts’
<i>ng^wāṅg^wāb</i>	‘develop (sore)’	<i>pál</i>	‘alone’
<i>ng^wájṅg^wálāj</i>	‘non-ground, raw’	<i>pàl</i>	‘untie, release’
<i>ng^wàṅg^wár</i>	‘hum, grumble’	<i>pàl tàf</i>	‘allow, permit’
<i>ng^wájṅg^wāv</i>	‘rubbish’	<i>pālām</i>	‘grass sp.’
<i>ng^wàrlàlá</i>	‘coarse’	<i>pāḷ</i>	‘pour libation’
<i>ng^wàrlàlá</i>	‘grain (unground)’	<i>pāḷāw</i>	‘splash(v)’
<i>ng^wàrtsàf</i>	‘get goosebumps, scrunch’	<i>pápá</i>	‘wing’
<i>ng^wāv</i>	‘suffer’	<i>pápá nklèf</i>	‘fin’
<i>ng^wāv</i>	‘suffering, sorrow’	<i>pápálàm</i>	‘plank, canoe’
<i>ng^wdā</i>	‘sorghum mixed with beans’	<i>pāpāḷ</i>	‘husk (corn), shell
<i>ng^wésém</i>	‘violence, aggression’	<i>pàpàs</i>	‘spread out bits of’

<i>pàr</i>	‘come apart, pull apart’	<i>péré-péré</i>	‘full to overflowing’
<i>párák-párák</i>	‘overflowing’	<i>pḕrèdzé</i>	‘door(ful.)’
<i>pàrdwm</i>	‘noise of dancing’	<i>pértsé</i>	‘manner of getting up’
<i>pàrḥàk^w</i>	‘escape, get away’	<i>pès</i>	‘sun, day’
<i>párpār</i>	‘different’	<i>pēt</i>	‘sharpen, shape, harvest’
<i>párxám</i>	‘insufficient’	<i>pèts</i>	‘gouge out’
<i>pàskàkàd’</i>	‘in small pieces’	<i>pèw</i>	‘be disobedient’
<i>pàsxàt</i>	‘come undone’	<i>péx^w</i>	‘noise of entering’
<i>páták^{wār}</i>	‘hoof’	<i>pjsār</i>	‘Fulbe’
<i>pátáw</i>	‘cat(ful.)’	<i>plàm</i>	‘pull out in large quantities’
<i>páx^w</i>	‘traced out’	<i>plār</i>	‘loosening with length’
<i>pāx^w</i>	‘cut in small pieces’	<i>plāv</i>	‘pierce’
<i>pāx^w-pāx^w</i>	‘threshing stick’	<i>plāx</i>	‘come apart’
<i>pāx^{wāk^w}</i>	‘pull away’	<i>plèm</i>	‘twist out’
<i>pdāk</i>	‘slice(v)’	<i>pṭēd’</i>	‘peel off layers’
<i>pdāktāwāj</i>	‘butterfly, moth’	<i>pràṭ</i>	‘snatch, seize’
<i>pdèk^w</i>	‘razor’	<i>pràḥ</i>	‘cut up’
<i>pdèm</i>	‘deep’	<i>pràt</i>	‘detach, divide’
<i>pdṅg^{wāj^w}</i>	‘manner of rolling’	<i>prēd’</i>	‘split, pick (corn)’
<i>pèdfēl</i>	‘movement of small animal’	<i>prèḥ</i>	‘cut into pieces’
<i>pēk</i>	‘shake to separate out skins’	<i>psār</i>	‘blow away’
<i>pélém</i>	‘vast’	<i>psāt</i>	‘break wind’
<i>pēlēṅ</i>	‘come apart’	<i>psèk</i>	‘spit out’
<i>péḥéṅ</i>	‘manner of shining in eye’	<i>ptāk^w</i>	‘tear in passing(v)’
<i>pēṅ</i>	‘cut at an angle(v)’	<i>ptēṭ</i>	‘nibble(v)’
<i>pēpdēl</i>	‘scamper’	<i>ptk^{wàs}</i>	‘gain weight rapidly’
<i>pépédéf</i>	‘manner of scampering’	<i>ptsàm</i>	‘blink’
<i>pépédék</i>	‘white’	<i>ptskèd’</i>	‘shake up and down’
<i>pépèḥéṅ</i>	‘fish-scale, eggshell’	<i>pzàk^w</i>	‘explode’
<i>pèprèk mā</i>	‘race, compete’	<i>pzék/pzék^w</i>	‘small’
<i>pēr</i>	‘prevent, shut in’		
<i>pēr</i>	‘sprinkle with the mouth’		

r		<i>sād</i>	‘apply (ointment), smear’
<i>rà</i>	‘dig’	<i>sāfāj</i>	‘erase, change the subject’
<i>rā</i>	‘side(n)’	<i>sáj</i>	‘coffee/tea(ful.)’
<i>rā</i>	‘insult(v)’	<i>sákátáj</i>	‘blowing everywhere’
<i>rā</i>	‘arm, hand’	<i>sālák-sālák</i>	‘crow(n)’
<i>rādākál</i>	‘majority’	<i>sāmbwá</i>	‘armpit’
<i>rād</i>	‘press down (flour)’	<i>sàn</i>	‘know, remember’
<i>ráf-ráf</i>	‘taste of butter or milk’	<i>sàŋg^wáf</i>	‘pouring out all together’
<i>ràk</i>	‘ask, request’	<i>sàŋg^wàjàŋ</i>	‘naked’
<i>rák-rák</i>	‘equal, half’	<i>sàŋkárá</i>	‘mastitis’
<i>ràł</i>	‘scratch lightly’	<i>sār</i>	‘weaken’
<i>ràļ</i>	‘cut(v)’	<i>sār</i>	‘undercook’
<i>ráp</i>	‘all together’	<i>sār</i>	‘look at, watch, visit’
<i>ráp</i>	‘manner of eating all’	<i>sār</i>	‘stiffen’
<i>ràràb</i>	‘growl loudly, shout at’	<i>sárbáwá</i>	‘August’
<i>ràràm</i>	‘growl(v)’	<i>sàrdǎ</i>	‘bone marrow’
<i>ràv</i>	‘resound’	<i>sárlá</i>	‘trousers’
<i>rdǎ</i>	‘rot(v)’	<i>sárláj</i>	‘rabies’
<i>rèdzè</i>	‘scorpion’	<i>sásábāj</i>	‘bark (of tree)’
<i>rēh</i>	‘heal, cure, save, escape’	<i>sāsád</i>	‘inside part of stalk’
<i>rép</i>	‘manner of sitting/resting’	<i>sàsàk</i>	‘sift’
<i>rg^wàts</i>	‘article of clothing’	<i>sàsàk^w</i>	‘shake to empty’
<i>rwràb</i>	‘heat(n)’	<i>sásálāj</i>	‘leg’
		<i>sàsàm</i>	‘rejoice’
s		<i>sàsàt</i>	‘change skin, hatch’
<i>sa-</i>	1SG.SBJ	<i>sàsràk</i>	‘learn, teach’
<i>sā</i>	1SG	<i>sát</i>	‘up to’
<i>sā</i>	‘drink(v)’	<i>sáx-sáx</i>	‘slightly sour’
<i>sā</i>	‘under’	<i>sāxá</i>	‘nape of neck’
<i>sā</i>	1SG.STAT	<i>sáxàl</i>	‘bamboo’
<i>sā mā</i>	‘click tongue’	<i>sáx^wàr</i>	‘plant. sp.’
<i>sàd</i>	‘shed skin, peel skin’	<i>sbāk^w</i>	‘discussion, denial’

<i>sbār</i>	‘follow’	<i>skām</i>	‘buy, sell’
<i>sbè</i>	‘pay bride-price’	<i>skàn</i>	‘thing, animal’
<i>sbè</i>	‘bride-price’	<i>skāw</i>	‘hug(v)’
<i>sbāŋ</i>	‘plant sp.’	<i>ské</i>	‘fig tree’
<i>sbèŋ</i>	‘nasal mucus, snot’	<i>skèn</i>	‘grind, crush’
<i>sēbēlēŋ</i>	‘middle-aged woman’	<i>sk^wá</i>	Q.FAM
<i>sèf</i>	‘cool down, dry lightly’	<i>sk^wāj</i>	‘inside part of a calabash’
<i>séfē</i>	‘unused calabash’	<i>sk^wlāx^w</i>	‘in-law’
<i>séj</i>	‘except(ful.)’	<i>slām</i>	‘caress(v)’
<i>sék</i>	‘pouring all at once’	<i>smbār</i>	‘comb, nail, needle’
<i>sèk^w</i>	‘become tense’	<i>snēx^w</i>	‘tree sp.’
<i>sémtēj</i>	‘taciturn’	<i>spék</i>	‘late’
<i>sèntèx^w</i>	‘dregs of beer’	<i>sràb</i>	‘pick in large quantity’
<i>séŋgè</i>	‘funeral pots’	<i>srāx</i>	‘jealousy’
<i>sèŋsèŋ</i>	‘dream(n)’	<i>srāx^w</i>	‘slide(v)’
<i>sēŋsēŋ</i>	‘shadow(n)’	<i>srk^wātāk^w</i>	‘letting drop more than one’
<i>sérēk</i>	‘string, rope’		
<i>sèrèm</i>	‘descend into a valley’	t	
<i>sēsé</i>	‘measles’	<i>tá</i>	‘by’
<i>sēsēb</i>	‘suck(v)’	<i>tā</i>	‘on, about’
<i>sēsēdēm</i>	‘slip(v)’	<i>tábā</i>	‘hunting net’
<i>sēsēf</i>	‘spit (rain)(v)’	<i>tàbā</i>	‘middle, between’
<i>sésēk-sésēk</i>	‘tree sp.’	<i>tábāx</i>	‘middle’
<i>sèsèk^w</i>	‘whisper(v)’	<i>tábāxá</i>	‘crown of head’
<i>sēsēr</i>	‘drip(v)’	<i>tàdāk^w</i>	‘descend, go down,’
<i>sèw</i>	‘bear (with)’	<i>tàf</i>	‘path, road’
<i>séwēt</i>	‘stick for stirring’	<i>tāfsālā</i>	‘ladder’
<i>sfàn</i>	‘breathe, pant’	<i>tāj</i>	‘patch(v)’
<i>sfàn</i>	‘breath’	<i>tāk</i>	‘oblige, forbid, obstruct’
<i>sfè</i>	‘mourning string’	<i>tākāf</i>	‘sharpen’
<i>sg^wāf</i>	‘remove skins by wetting’	<i>tākār</i>	‘tortoise, turtle’
<i>skā</i>	‘underneath’	<i>tàkázwdā</i>	‘calabash for fufu’

<i>tàksájám</i>	‘cup’	<i>tātá</i>	3PL.POSS
<i>tàktrg^{wā}</i>	‘granary calabash’	<i>tātā</i>	3PL
<i>tàk^{wām}</i>	‘impossible’	<i>tátàjá</i>	‘cucumber’
<i>tāk^{wār}</i>	‘roll up, curl up’	<i>tātāk</i>	‘chase’
<i>tāk^{wārā}</i>	‘namesake’	<i>táták^{wām}</i>	‘molar tooth’
<i>tàl</i>	‘manage, make an effort’	<i>táták^{wâf}</i>	‘thick (liquid)’
<i>tāl</i>	‘weed(v)’	<i>tàtàm</i>	‘mortar’
<i>tāl</i>	‘sharpen’	<i>tātāp</i>	‘cover with layers’
<i>tāl</i>	‘boil, prepare hot drink’	<i>tātār</i>	‘cackle(v)’
<i>tálg^{wāj}</i>	‘flute (for men)’	<i>tátâm</i>	‘wind, air’
<i>táŋ</i>	‘complete in number’	<i>tàtŋg^{wâl}</i>	‘roll(v)’
<i>tāŋ</i>	‘complete the number’	<i>tāwār</i>	‘walk (go for a), travel’
<i>tāŋ-tāŋ-tāŋ</i>	‘hard (skin)’	<i>tāxŋâdâj</i>	‘flat’
<i>tám</i>	‘daily(ful.)’	<i>tbèk^w</i>	‘chaff’
<i>tàm</i>	‘pour out’	<i>tdāw</i>	‘cut with something blunt’
<i>tām</i>	‘move up and down’	<i>tdāx^w</i>	‘beat well’
<i>tāmā</i>	‘front, before’	<i>tē</i>	‘here’
<i>tāmā</i>	‘face(n)’	<i>tēbèk^w</i>	‘bat’
<i>tāmbācá</i>	‘today’	<i>tēbēŋ</i>	‘miss(v)’
<i>tāmtāk^w</i>	‘club, cudgel’	<i>tēh</i>	‘listen, wait’
<i>tāmtār</i>	‘courtyard’	<i>tēk</i>	‘driving in deeply’
<i>táj</i>	‘only(ful.)’	<i>tēkēd</i>	‘calabash, plate’
<i>tāŋ-tāŋ</i>	‘good, honest’	<i>tēk^wtēŋ</i>	‘short’
<i>táp</i>	‘so that’	<i>tél</i>	‘manner of going’
<i>tāp</i>	‘running quickly’	<i>tèlxēj</i>	‘run a lot’
<i>tāpá</i>	‘tobacco’	<i>tēŋ</i>	‘snap’
<i>tāpsám</i>	‘movement of animal hide’	<i>téméré</i>	‘hundred(ful.)’
<i>tár</i>	‘for good’	<i>téndéŋ</i>	‘balafon, bell’
<i>tār</i>	‘invite to help’	<i>tēŋ</i>	‘set foot’
<i>tàrgàŋ</i>	‘polish(v)’	<i>téŋg^wlèŋ</i>	‘one’
<i>tāsāw</i>	‘dish(ful.)’	<i>tēŋ^w</i>	‘light fire with metal flint’

<i>tépē</i>	‘termite’	<i>twáɗ</i>	‘finished’
<i>tēptépē</i>	‘calabash’	<i>twāɗ</i>	‘finish’
<i>tēstēlém</i>	‘torch’	<i>twàl</i>	‘wrap around’
<i>tēstēsēs</i>	‘sprouting thickly’	<i>twàr</i>	‘be dizzy’
<i>tété</i>	‘enough, average’	<i>twáx</i>	‘beautiful, great’
<i>tètè</i>	‘silent’	<i>twlèk</i>	‘circle, turn(v)’
<i>tētēf</i>	‘drip (rain)’	<i>twsé</i>	‘there’
<i>tètèk^w</i>	‘poverty’		
<i>tētēk^wlēs</i>	‘partridge’	Ts	
<i>tētēné</i>	‘horn’	<i>tsá</i>	TOP
<i>tètèŋgèl</i>	‘roll (on the ground)’	<i>tsā</i>	‘put’
<i>tètewèɗ</i>	‘sling, fling’	<i>tsā mā</i>	‘lead, guide, accompany’
<i>tèv</i>	‘ascend, go up, climb’	<i>tsāb</i>	‘smear in large quantity’
<i>téw</i>	‘finally, completely’	<i>tsáb-tsáb</i>	‘a bit sour’
<i>tèw</i>	‘carry’	<i>tsábāk-tsábāk</i>	‘bland’
<i>téw-téw</i>	‘all’	<i>tsāf</i>	‘decorate’
<i>tèzē</i>	‘first-born’	<i>tsàftsàláv</i>	‘movement of falling’
<i>tkàɗ</i>	‘roll up’	<i>tsáj</i>	EMPH
<i>tkèr</i>	‘well (traditional)’	<i>tsàk</i>	‘help’
<i>tk^wàɗ</i>	‘wipe, rub(v)’	<i>tsāk</i>	‘contribute’
<i>tk^wám</i>	‘conical’	<i>tsāk</i>	‘hope’
<i>tk^wám</i>	‘manner of hitting once’	<i>tsāk^w</i>	‘take off’
<i>tk^wsásār</i>	‘dry, insufficient water’	<i>tsák^wá</i>	‘here is’
<i>tlàj</i>	‘after-birth pains’	<i>tsāk^wār</i>	‘fish trap’
<i>tlám</i>	‘recent’	<i>tsàk^wàràk^w</i>	‘dried out animal skin’
<i>tlām</i>	‘scoop out’	<i>tsāl</i>	‘take care of’
<i>tràk</i>	‘turn(v)’	<i>tsáláx</i>	‘beyond’
<i>tràs</i>	‘block throat’	<i>tsām</i>	‘pick up things spread out’
<i>tréj-tréj</i>	‘dried out’	<i>tsáŋtsāɗ</i>	‘flea’
<i>trg^wā</i>	‘granary’	<i>tsáŋtsāx</i>	‘smoke(n)’
<i>trvàɗ</i>	‘twist(v)’	<i>tsáp</i>	‘going a second time’
<i>ttŋg^wàl</i>	‘float’	<i>tsáp</i>	‘long and flowing’

<i>tsāp</i>	‘fence in’	<i>tsétsèŋg</i> ^{wéĵ}	‘stalk of sorghum head’
<i>tsāp</i>	‘drop small amounts’	<i>tsētstēr</i>	‘pour a little’
<i>tsáp-tsáp</i>	‘stalking’	<i>tsétswēr</i>	‘filter(n)’
<i>tsàr</i>	‘stubbornness’	<i>tsèv</i>	‘pierce (lightly)’
<i>tsārŋgāġ</i>	‘crab’	<i>tsēw</i>	‘prune(v)’
<i>tsātsāf</i>	‘plant sp.’	<i>tsèx</i> ^w	‘father.2POSS’
<i>tsàtsàl</i>	‘arrange, solve, resolve’	<i>tsfèk</i> ^w	‘squat’
<i>tsàtsàn</i>	‘notice’	<i>tsfèk</i> ^w - <i>tsfèk</i> ^w	‘weak’
<i>tsātsāx</i>	‘cut off pieces’	<i>tsy</i> ^{wāb}	‘soak’
<i>tsáw</i>	‘there is’	<i>tsk</i> ^{wđáf}	‘being blinded’
<i>tsāwāl</i>	‘scoop out from water’	<i>tsk</i> ^{wèf}	‘crouch’
<i>tsbák</i> ^w	‘in a pile’	<i>tslāb</i>	‘dip finger’
<i>tsdāv</i>	‘toad hopping’	<i>tslák</i>	‘failure’
<i>tséġ-tséġ</i>	‘sharp’	<i>tspē</i>	‘stealthy’
<i>tsēdēkw-tsēdēkw</i>	‘light’	<i>tsràġ</i>	‘twist off’
<i>tsēf</i>	‘beautify’	<i>tsràĵ</i>	‘pile(v)’
<i>tséktstégērék</i>	‘kingfisher’		
<i>tsék</i> ^{wđē}	‘a little, few’	v	
<i>tsēlēbē</i>	‘how much more’	<i>vā</i>	‘spend the year’
<i>tsélélé</i>	‘not one missing’	<i>vā</i>	‘year’
<i>tséléléw</i>	‘light, thin (liquid)’	<i>vāg</i> ^{wmtád}	‘day after tomorrow’
<i>tsēġ</i>	‘dribble(v)’	<i>váj</i>	‘where’
<i>tsēm</i>	‘defend’	<i>vájáj</i>	‘who’
<i>tséméĵ</i>	TOP.CON	<i>vāk</i> ^w	‘sand’
<i>tsémpéd</i>	‘monkey (small, red)’	<i>vàk</i> ^{wtāŋ}	‘throwing far’
<i>tsèn</i>	‘father’	<i>vàl</i>	‘give, offer’
<i>tsēntsēl</i>	‘summit, highest point’	<i>vàn</i>	‘family’
<i>tsēŋk</i> ^{wēġ}	‘long and thin’	<i>vān</i>	‘rain’
<i>tsēŋtsélēm</i>	‘firewood’	<i>vāná</i>	‘father.1POSS’
<i>tsér-tsér</i>	‘thin’	<i>vánáj</i>	‘how many’
<i>tsétsé</i>	‘today’	<i>vánván</i>	‘especially’
<i>tsētstēf</i>	‘consider’	<i>vāŋ</i>	‘arrived’

<i>vāŋ</i>	‘arrive’	<i>vlàŋ-vlàŋ</i>	‘walking quickly’
<i>váŋgáj</i>	‘how’	<i>vlēx</i>	‘bow (hunting)’
<i>vāŋg^wār</i>	‘spend a long time’	<i>vʒàk^w</i>	‘movement of catching’
<i>vār</i>	‘sesame seed’	<i>vʒèw</i>	‘take suddenly’
<i>vār</i>	‘burn a part lightly’	<i>vnā</i>	‘vomit(v)’
<i>vārvārā</i>	‘courtyard, plain’	<i>vnām</i>	‘needle’
<i>vās</i>	‘hurry, do quickly’	<i>vrām</i>	‘many’
<i>vāvār</i>	‘burn a little’	<i>vrè</i>	‘red’
<i>vāw</i>	Q	<i>vrèʒ</i>	‘separate out’
<i>vāvātsà</i>	‘this year’	<i>vrèʒ</i>	‘sorghum husk’
<i>vāx</i>	‘spend time, pass time’	<i>vrēŋ</i>	‘misbehaviour’
<i>vāx</i>	‘day’	<i>vrèz</i>	‘grass sp.’
<i>vđé</i>	‘penis’	<i>vrìlām</i>	‘submerge’
<i>vēdjé</i>	IND.DET.PL	<i>vrʒàk^w</i>	‘alone’
<i>védzēđ</i>	‘leaf, vegetation’	<i>vzék^w</i>	‘slime (inorganic)’
<i>védzēđ-védzēđ</i>	‘green’	<i>vzék^w</i>	‘small’
<i>vēđék^w</i>	‘newborn’		
<i>vékéj</i>	‘which’	W	
<i>vèlèŋgéd</i>	‘calf’	<i>wá</i>	‘breast, udder, milk’
<i>véléz</i>	‘game with seeds’	<i>wà</i>	‘talk(n)’
<i>véméj</i>	‘what’	<i>wábáw</i>	‘cry of grief’
<i>vēndzéz</i>	‘hot pepper’	<i>wádā</i>	‘woven roof cap’
<i>vépéj</i>	‘when’	<i>wàf</i>	‘standing up in the air’
<i>vérēk</i>	‘patience’	<i>wáj</i>	‘response’
<i>vērēx</i>	‘ridge’	<i>wāj-wāj</i>	‘whirlwind’
<i>vèrsèk^w</i>	‘spice’	<i>wājāk</i>	‘grasshopper’
<i>vēt</i>	‘signal to’	<i>wàjàwàj</i>	‘crazy’
<i>vétséj</i>	‘whose’	<i>wàk</i>	‘be.crazy, mad’
<i>vèvéw</i>	‘swinging’	<i>wàk-wàk</i>	‘throbbing’
<i>vgèm</i>	‘bird’	<i>wàl</i>	‘travel very early(v)’
<i>vg^wàm</i>	‘tree sp.’	<i>wāl</i>	‘isolate’
<i>vjā</i>	‘rainy season’	<i>wàl-wàl</i>	‘lamp, torch’

<i>wālā</i>	‘woman, wife’	<i>wdzēk ṅgés</i>	‘bladder (house of urine)’
<i>wālāṅ</i>	‘period’	<i>wdzēk sàsàr</i>	‘stomach’
<i>wālā-wālā</i>	‘maybe’	<i>wdāj</i>	‘wrestling(n)’
<i>wālā-wālā</i>	‘insufficient’	<i>wdāk</i>	‘decrease(v)’
<i>wám</i>	‘ten’	<i>wēd</i>	‘shine, disperse’
<i>wāmbāt</i>	‘sickle’	<i>wēlḃē</i>	‘nature spirit’
<i>wān</i>	‘sleep(v)’	<i>wēlék</i>	‘plant sp.’
<i>wān</i>	‘day, sleep’	<i>wélélé</i>	‘small pieces’
<i>wān</i>	‘hatred’	<i>wélélé</i>	‘cry to drive away’
<i>wánjā</i>	‘traditional song’	<i>wéléwélé</i>	‘sugar cane’
<i>wāntā</i>	‘mahogany tree’	<i>wélmbègém</i>	‘Welmbegem (trad.
<i>wàṅ</i>	‘spread out’	<i>wéndé</i>	IND.DET.SG
<i>wāṅgāḃ</i>	‘lift off’	<i>wéndzēk</i>	‘ashes’
<i>wǎp</i>	‘suddenly killing all’	<i>wénē</i>	‘dog’s tooth grass’
<i>wár</i>	‘still’	<i>wēṅ</i>	‘vein, thread’
<i>wárḃá</i>	‘fortunately’	<i>wér</i>	‘manner of fleeing’
<i>wàrdā</i>	‘crack in rocks’	<i>wēr</i>	‘slander(v)’
<i>wásāj</i>	‘thankyou’	<i>wér-wér</i>	‘healthy’
<i>wāstālā</i>	‘spread out’	<i>wēr-wēr</i>	‘curiosity, trickery,
<i>wātā</i>	‘compound, home’	<i>wèrdédé</i>	‘patchy’
<i>wātāṅmgbá</i>	‘black ant’	<i>wèrtsètsé</i>	‘spotted’
<i>wàtsà-wàtsá</i>	‘patchy (sky)’	<i>wértsxèw</i>	‘sneeze’
<i>wát-wát</i>	‘shiny (food)’	<i>wēsé</i>	DEM.DIST
<i>wàwà</i>	‘everywhere (talk)’	<i>wèskèḃ</i>	‘drive away’
<i>wāwāj</i>	‘close (a meeting)’	<i>wèwèk</i>	‘twirl(v)’
<i>wdā</i>	‘food, fufu’	<i>wézèṃ</i>	‘owl’
<i>wdā kájkāś</i>	‘bean doughnut’	<i>wjāj</i>	‘relaxed’
<i>wdàḃ</i>	‘make slightly mouldy’	<i>wjāj</i>	‘valuable’
<i>wdāl</i>	‘cut into sections’	<i>wlā</i>	‘neck, voice’
<i>wdzàm</i>	‘basket’	<i>wlāḃ</i>	‘clod (of earth)’
<i>wdzēk</i>	‘hut, house’	<i>wlāḃ</i>	‘speak imperfectly’
<i>wdzēk mbàw</i>	‘womb (house of child)’	<i>wlāḃ</i>	‘blind person’

<i>wlàk</i>	‘think’	<i>xādzáŋ</i>	‘pot for beer’
<i>wlé</i>	‘not yet’	<i>xádāk</i>	‘hiccough(n)’
<i>wlè</i>	‘place’	<i>xāf</i>	‘swell, inflate’
<i>wlèd</i>	‘pus’	<i>xàgàk</i>	‘shocked’
<i>wlèj</i>	‘hole’	<i>xágàm</i>	‘yawn(n)’
<i>wlès</i>	‘kidney’	<i>xājāk</i>	‘ground, land, soil, country’
<i>wḷāf</i>	‘sky, up high’	<i>xājŋg^{wāw}</i>	‘dry and stiff’
<i>wḷāf</i>	‘idol(n)’	<i>xāk</i>	‘prop up’
<i>wnáf</i>	‘heart’	<i>xáldmā</i>	‘girl, daughter’
<i>wnēb dāwān</i>	‘small of back’	<i>xālwā</i>	‘wall’
<i>wnèk</i>	‘be hot’	<i>xámá</i>	‘size, amount’
<i>wrād</i>	‘spread out’	<i>xāmālāŋgāy</i>	‘large root vegetable’
<i>wràf</i>	‘become lukewarm’	<i>xān</i>	‘cry, weep, mourn’
<i>wráf</i>	‘hail(n)’	<i>xāŋgá</i>	‘as if’
<i>wràḷ</i>	‘deafen’	<i>xàrdàŋ</i>	‘hooked’
<i>wràz</i>	‘fade’	<i>xàrlàŋ</i>	‘slithering (snake)’
<i>wrbám</i>	‘the fall of one dead’	<i>xàrḷàk</i>	‘lizard’
<i>wrèj</i>	‘vegetables, sauce’	<i>xàrḷàk</i>	‘tie (knot)’
<i>wsāx</i>	‘be in labour’	<i>xāts</i>	‘block, surround’
<i>wzà</i>	‘down there’	<i>xávdàn</i>	‘soot’
<i>wzàm</i>	‘tribe, village’	<i>xáwá</i>	‘shame, respect’
<i>wzjé</i>	‘children’	<i>xáxá</i>	‘regularly’
<i>wvá</i>	‘dispersed (animals)’	<i>xàxàndàr</i>	‘coagulate, clot’
x		<i>xáxār</i>	‘pity(n)’
<i>xá</i>	‘until(ful.)’	<i>xbār</i>	‘wait’
<i>xā</i>	‘head’	<i>xbàl</i>	‘stir, shake, move’
<i>-xā</i>	VNT.DIST	<i>xēb</i>	‘steer’
<i>xā</i>	‘on top, over’	<i>xêj</i>	‘hey!’
<i>xá-ndrèj</i>	‘malaria (lit. sorghum head)’	<i>xébēŋ</i>	‘grass sp.’
<i>xàb</i>	‘swallow(v)’	<i>xèdze</i>	1INCL.STAT
<i>xádá</i>	‘equal’	<i>xèdze</i>	‘person’
		<i>xèdze-</i>	1INCL.SBJ

<i>xèdzè dàknàk</i>	‘human being (lit.black person)’	x^w	
<i>xēdzlér</i>	‘upside down’	<i>x^{wā}</i>	2SG.SBJ
<i>xēdé</i>	‘on it’	<i>x^{wā}</i>	2SG
<i>xēdé-xēdé</i>	‘justice, properness’	<i>x^{wā}</i>	2SG.STAT
<i>xēftsék</i>	‘Hefcek (trad. festival)’	<i>x^{wāb}</i>	‘fertilise’
<i>xégēŋ</i>	‘boulder’	<i>x^{wāb}</i>	‘bend(v)’
<i>xēj</i>	‘run, flee’	<i>x^{wābàk^w}</i>	‘manner of lying still’
<i>xēfékēd’</i>	‘spoon, ladle’	<i>x^{wādràk^w}</i>	‘shallow’
<i>xémpé</i>	‘magic product’	<i>x^{wādāk}</i>	‘average amount’
<i>xép</i>	‘killing by squashing’	<i>x^{wāh^wād’}</i>	‘press’
<i>xèrgédéŋ</i>	‘mold’	<i>x^{wājàx^wājá}</i>	‘dry (leaves)’
<i>xésēŋ</i>	‘forgotten’	<i>x^{wāk^w}</i>	‘strip off (bark)’
<i>xēsēŋ</i>	‘forget’	<i>x^{wāk^w-x^{wāk^w}}</i>	‘tight’
<i>xēsēŋ</i>	‘withered’	<i>x^{wām}</i>	‘collect a lot’
<i>xéxèlém</i>	‘eggshell’	<i>x^{wāmbàk^w}</i>	‘rinse mouth’
<i>xèzèd’ dzàdzāb</i>	‘grass. sp.’	<i>x^{wāptsá}</i>	‘manner of breaking’
<i>xḥàd’</i>	‘potsherd’	<i>x^{wār}</i>	‘serve (fufu)’
<i>xḥār</i>	‘side’	<i>x^{wārāb}</i>	‘drink a lot’
<i>xmàn</i>	‘praise name’	<i>x^{wārāk^w}</i>	‘evaporate’
<i>xmān</i>	‘honour, praise(v)’	<i>x^{wārām}</i>	‘bend down, roll
<i>xmās</i>	‘thatch(n)’	<i>x^{wārāp}</i>	‘munch hard’
<i>xrād’</i>	‘be sated’	<i>x^{wār̀bàts}</i>	‘bend under’
<i>xrāts</i>	‘scoop out’	<i>x^{wārlàv}</i>	‘bent’
<i>xtád’</i>	‘manner of cutting’	<i>x^{wār̀nddáj^w}</i>	‘bent’
<i>xtàf</i>	‘ashes’	<i>x^{wārvàts}</i>	‘curl up’
<i>xtāj</i>	‘non-blacksmith’	<i>x^{wās}</i>	‘reached’
<i>xtàn</i>	‘fog’	<i>x^{wās}</i>	‘reach’
<i>xvāts</i>	‘cut the top part’	<i>x^{wāsásāb}</i>	‘cane rat’
<i>xzā</i>	‘dog’	<i>x^{wātāmbā}</i>	‘rock badger’
<i>xzēd’</i>	‘tear strips’	<i>x^{wāx^wāb}</i>	‘debris’
		<i>x^{wāx^wāják}</i>	‘dried-up leaves’
		<i>x^{wāx^wāl̀bá}</i>	‘grass sp.’

<i>x</i> ^w <i>àx</i> ^w <i>âr</i>	‘be distressed’	<i>zāmbát</i>	‘fresh thing to eat’
<i>x</i> ^w <i>âx</i> ^w <i>ât</i>	‘dig a little’	<i>zār</i>	‘make branches’
<i>x</i> ^w <i>bâf</i>	‘foam(n)’	<i>zārāk</i>	‘horn (instrument)’
<i>x</i> ^w <i>bāk</i> ^w	‘assembly place’	<i>zàrlàx</i> ^w	‘elongated’
<i>x</i> ^w <i>bàr</i>	‘widen’	<i>zārm̄bā-kētēkēték</i>	‘chameleon’
<i>x</i> ^w <i>bàr</i>	‘wide’	<i>zàv</i>	‘join, infect’
<i>x</i> ^w <i>dzáj</i> ^w - <i>x</i> ^w <i>dzáj</i> ^w	‘deep’	<i>zāváj</i>	‘hunchback’
<i>x</i> ^w <i>édék</i>	‘scooping a little’	<i>zāvān</i>	‘guinea fowl’
<i>x</i> ^w <i>élélé</i>	‘broken and	<i>zāx</i>	‘pour’
<i>x</i> ^w <i>ēlēk</i>	‘gouge out’	<i>zàx</i> ^w	‘long, tall’
<i>x</i> ^w <i>ēp</i>	‘manner of killing	<i>zàx</i> ^w	‘appendix’
<i>x</i> ^w <i>èrsèk</i> ^w	‘small and short’	<i>zàzàk</i>	‘rest (v & n)’
<i>x</i> ^w <i>ḡām</i>	‘scratch(v)’	<i>zázān</i>	‘tree sp.’
<i>x</i> ^w <i>ndèk</i> ^w	‘hooked, crooked’	<i>zāzāw</i>	‘robe (man's gown)’
<i>x</i> ^w <i>ne-</i>	2PL.SBJ	<i>zāzrād</i>	‘worm’
<i>x</i> ^w <i>nè</i>	2PL	<i>zàk</i>	‘bean leaves’
<i>x</i> ^w <i>nè</i>	2PL.STAT	<i>zát</i>	‘a limited time’
<i>x</i> ^w <i>rāp</i> - <i>x</i> ^w <i>rāp</i>	‘covered (shoes)’	<i>zèr</i>	‘pout(v)’
<i>x</i> ^w <i>tār</i>	‘vampire’	<i>zēb-zēb</i>	‘secretive’
<i>x</i> ^w <i>vāj</i> ^w	‘compost’	<i>zēl-zēl</i>	‘column’
<i>x</i> ^w <i>zām</i>	‘crocodile’	<i>zēlzēl dāwán</i>	‘spine (lit.column of back)’
		<i>zèmbèl</i>	‘umbilical cord’
Z		<i>zèn</i>	‘return, give back’
<i>zā-</i>	TRANS	<i>zèn ḡāp</i>	‘answer (lit. return speech)’
<i>zāblā</i>	‘supernatural	<i>zèndē</i>	‘tonsil’
<i>zād</i>	‘short distance’	<i>zēnéj</i>	‘again, as well’
<i>zàdāw</i>	‘night’	<i>zēḡ</i>	‘hang up, weigh’
<i>zàjá-zàjá</i>	‘slowly’	<i>zèḡgèt</i>	‘make lean’
<i>zāl</i>	‘eagle’	<i>zèḡzèḡ</i>	‘python’
<i>zām</i>	‘eat’	<i>zèrètèw</i>	‘long, tall’
<i>zām bāj</i>	‘rule over’	<i>zètélvēḡ</i>	‘up high’
<i>zām wdzēk</i>	‘inherit’	<i>zēw</i>	‘teak tree’

<i>zēzēdē</i>	‘giraffe’
<i>zézēk^w</i>	‘snake’
<i>zèzèm</i>	‘mumble(v)’
<i>zfē</i>	‘billy goat’
<i>zkād</i>	‘type of wild fruit’
<i>zk^wānā</i>	‘recovered’
<i>zlāj</i>	‘laid down’
<i>zlām</i>	‘long and pointed’
<i>zmbàr</i>	‘throw from a distance’
<i>zmēŋ</i>	‘porcupine’
<i>zndē</i>	‘meat craving’
<i>zndēr</i>	‘hook(n)’
<i>zrèk</i>	‘large bird of prey’
<i>zvàw</i>	‘large billy-goat’
<i>zvér</i>	‘sprinkling lightly’
<i>zwāj</i>	‘mask, paint, whitewash(n)’
<i>zwèt</i>	‘soul, spirit’
<i>zxāj</i>	‘good fortune, glory, ease,
<i>zxēd</i>	‘birdlime’

Appendix B Texts

This section presents three interlinearised Buwal texts. Care was taken to select texts recounted by speakers of a variety of ages and genders. The first text is a story told by an older man, well known for his story-telling ability, in a public setting. A middle-aged woman provided the second text. In this case only the author was present. This story was selected because of the speaker's lively way of expressing herself as well as the cultural significance of the theme of the favoured and the non-favoured wife. In the final text a young man describes to his friend an incident from his childhood. Being a conversation, this text provides the opportunity to observe how the two men interact, especially the use of familiar speech forms.

Each text is divided into numbered paragraphs, and each paragraph into sentences. Paragraph divisions were determined by a change of setting and the use of certain discourse markers such as *jàw* 'so' (borrowed from Fulfulde) and *ājā* 'then'.

Text 1 The stealing of the leper's wife

As told by Gadji (a man in his sixties)

1.1 *Aya* , *fagwalakw wende aka* .
ājā fāg^wālāk^w wéndé ákā
so leper IND.DET.SG EXIST
'So, there was a certain leper.'

1.2 *A ba ujek a damaw a ya* .
ā- bā wjēk á dāmāw ā- jā
3SG.SBJ- make house PREP1 bush 3SG.SBJ- say
'He built a house in the bush, they say.'

1.3 *Aaw !*
á:w
Wow!
'Wow!'

1.4 *Wala anta tuwah deydey* .
wālā āntā twáx dējdēj
wife 3SG.POSS beautiful too.much(ful.)
'His wife was really beautiful.'

1.5 *Amba dāla a nda ara mbe ca a baw heje .*
 āmbá dālā ā- ndā á rā mbē tsá ā- bāw xèdzè
 then someone 3SG.SBJ- go PREP1 side 3SG TOP 3SG.SBJ- stab person
 ‘So then (when) someone went near her, he stabbed the person.’

1.6 *A baw heje .*
 ā- bāw xèdzè
 3SG.SBJ- stab person
 ‘He stabbed the person.’

1.7 *A baw heje delele .*
 ā- bāw xèdzè délélé
 3SG.SBJ- stab person direct
 ‘He stabbed the person straight away.’

2.1 *Ca bay a ngaya : « Kay ! »*
 tsá bāy ā- ngājā káj
 TOP chief 3SG.SBJ- QUOT Oh!
 ‘So the chief said “Oh!”’

2.2 *« Ma dekey wala fagwalakw ngha vayay ? »*
 má= dā -ēkēj wālā fāg^wālāk^w nyā vājáj
 REL= bring -1SG.DOBJ wife leper DEM.PROX who
 ‘‘Who (will) bring me the wife of this leper?’’

2.3 *a ya .*
 ā- jā
 3SG.SBJ- say
 ‘he said.’

2.4 *A , heje a ngaya : « Bay hwa han ata wala ca ,*
 á xèdzè ā- ngājā bāy x^wā- xān á tā wālā tsá
 ah! person 3SG.SBJ- QUOT chief 2SG.SBJ- cry PREP1 on woman TOP
sa kula . »
 sā k^wlā
 1SG.STAT able
 ‘Ah, a person said ‘‘Chief, (since) you are crying about that woman, I can (do it).’’’

2.5 *a ya* .

ā- jā
3SG.SBJ- say
'he said.'

2.6 *Aya bay a ŋgaya* : « *Kadak , mba naka , hwa*

ājā bāy ā- ŋgājā kádàk mbà nākā x^wā-
then chief 3SG.SBJ- QUOT good child 1SG.POSS 2SG.SBJ-

kédekey aza ca , sa zlahwaw hayak . »

ká- dā -ēkēj āzá tsá sā- ɣā -āx^wāw xājāk

PFV- bring -1SG.IOBJ COMPL TOP 1SG.SBJ- cut -2SG.IOBJ land

'Then the chief said, "Good, my child, (when) you have brought (her) to me, I (will) give you (lit. cut for you) some land."'

2.7 *a ya* .

ā- jā
3SG.SBJ- say
'he said.'

2.8 *Aya a ŋgaya* : « *Bay velekey ŋhwa* . »

ājā ā- ŋgājā bāy vāl -ēkēj nx^wā

then 3SG.SBJ- QUOT chief give -1SG.IOBJ goat

'Then he said, "Chief, give me a goat."'

2.9 « *Lekey manda* . »

lā -ēkēj mándá
add -1SG.IOBJ salt(ful.)
"Add some salt for me."

2.10 « *Sa nanda* . »

sā- ná- ndā
1SG.SBJ- FUT- go
"I will go."

2.11 *a ya* .

ā- jā
3SG.SBJ- say
'he said.'

2.12 *Bay mbal a mbelene ŋhwa leŋ manda , a nda .*
 bāy mbāl ā- mbāl -ēnē nx^wā léŋ mándá ā- ndā
 chief grab 3SG.SBJ- grab -3SG.IOBJ goat plus salt(ful.) 3SG.SBJ- go
 ‘The chief grabbed him a goat plus salt and he went.’

3.1 *Fagwalakw wende kamac ara mbe aka yam .*
 fāŋ^wālāk^w wéndé ká- mǎts á rā mbē ákā jám
 leper IND.DET.SG PFV- die PREP1 side 3SG EXIST also
 ‘There was also another leper who had died near him.’

3.2 *A nda , fətar a fətar aza .*
 ā- ndā ftàr ā- ftàr āzà
 3SG.SBJ- go dig.up 3SG.SBJ- dig.up IT
 ‘He went and he dug (him) up.’

3.3 *Mbaŋ , a razl aza ra anta .*
 mbánj ā- ràlʒ āzà rā āntā
 cut.suddenly 3SG.SBJ- cut IT hand 3SG.POSS
 ‘Wop! He cut off his hand.’

3.4 *A nda , kətek , a caza ara ŋ*
 ā- ndā kték ā- tsā -zā ārá ɲ
 3SG.SBJ- go putting.something.in.a.container 3SG.SBJ- put -TRANS SIM PREP2
bakatar leŋ ŋhwa wese fāt a fātaw , nah
 bākātār léŋ nx^wā wēsé fāt ā- fāt -āw nāx
 bag plus goat DEM.DIST slaughter 3SG.SBJ- slaughter -3SG.DOBJ drop
kəda ŋ kəva matakaŋ .
 kdā ɲ kvā matakān
 towards PREP2 side IND.DET
 ‘He went, putting it into a bag on the way, plus that goat, he slaughtered and dropped (it) into the other side.’

4.1 *Bəlah , a wal , a nda a mapat eze .*
 bláx ā- wəl ā- ndā á mǎpát ézē
 manner.of.leaving 3SG.SBJ- travel.early 3SG.SBJ- go PREP1 morning therefore
 ‘Therefore he left early, he went in the morning.’

4.2 *Van ma kaba ma dəm dəm dəm*
 vān má= k̄- bā má= dīm dīm dīm
 rain REL= IPFV- form REL= noise.of.thunder noise.of.thunder noise.of.thunder
dəm wese .
 dīm wēsé

noise.of.thunder DEM.DIST

‘The clouds (lit. rain) which were forming were making a thundering noise.’

4.3 *A wal a wata heje wese .*
 ā- wəl á wātā xèdzè wēsé

3SG.SBJ- travel.early PREP1 compound person DEM.DIST

‘He travelled early to that person's compound.’

4.4 *A nda a ya .*
 ā- ndā ā- jā

3SG.SBJ- go 3SG.SBJ- say

‘He went, they say.’

4.5 *A nda ca waa , van a kadā a ya .*
 ā- ndā tsá wā: vān á- k̄- dā ā- jā

3SG.SBJ- go TOP noise.of.rain rain 3SG.SBJ- IPFV- rain 3SG.SBJ- say

‘(While) he was going, the rain was falling, they say.’

4.6 *Mbəy pay .*
 mbj páj

3SG.STAT arrived

‘He arrived.’

4.7 *Fagwalakw wese a ŋgaya : « A ! »*

fāg^wālāk^w wēsé ā- ŋgājā á

leper DEM.DIST 3SG.SBJ- QUOT ah!

‘That leper said, “Ah!”’

4.8« *Ghwelzekey* *ma* *ŋkwa* , *akwaw* *ca* *sa*
 ɣ^wāl -zā -ēkēj mā nk^wā ák^wāw tsá sā-
 explain -TRANS -1SG.IOBJ problem 2SG.POSS NEG.EXIST TOP 1SG.SBJ-
ɓawahwaw *ka* . »

ɓàw -āx^wāw ká
 stab -2SG.DOBJ ANT
 “Tell me what you want, otherwise I will stab you first.”
 (lit. “Explain your problem to me, otherwise I (will) stab you in advance.”)

4.9 *A* *ŋgaya* : « *Mbahw* , *mbahw* , *mbahw* , *sa* *mbəlakw* , *sa*
 ā- ŋgājā mbáx^w mbáx^w mbáx^w sā mblàk^w sā
 3SG.SBJ- QUOT pardon pardon pardon 1SG.STAT stranger 1SG.STAT
mbəlakw , *sa* *mbəlakw* . »

mblàk^w sā mblàk^w
 stranger 1SG.STAT stranger
 ‘He said, “Pardon, pardon, pardon, I’m a stranger, I’m a stranger, I’m a stranger.”’

4.10 *A* , *wala anta* *a* *ŋgaya* : « *A* , *mawal naka* *ava* *ara*
 á wālā āntā ā- ŋgājā á māwāl nākā āvā ārā
 ah! wife 3SG.POSS 3SG.SBJ- QUOT ah! husband 1SG.POSS tentatively COP
mbəlakw ca , *mabahba* *aza menege* ? ».

mblàk^w tsá mā- ɓāh -ɓā āzā ménégē
 stranger TOP JUS- shelter -BEN COMPL TAG.IMP
 ‘Ah, his wife said, “Ah, my husband, (since) he is a stranger, let him shelter himself, can’t he?”’

5.1 *Aya a* *kabāh* .
 ājā ā- kā- ɓāh
 so 3SG.SBJ- IPFV- shelter
 ‘So he was sheltering.’

5.2 *Tew van a* *kaŋta* *anta* *mac yaa* .
 téw vān ā- kā- ntā āntā mātš jâ:
 finally rain 3SG.SBJ- IPFV- take 3SG.POSS die noise.of.rain
 ‘Finally the raining was dying off.’

5.3 *Fara* , *a* *dádá* *ra* *fagwalakw* *wese* .
fără *ā-* *dâf* *-ā* *rā* *fāg^wālāk^w* *wēsé*
 pulling.out.quickly 3SG.SBJ- pull.out -VNT.PROX hand leper DEM.DIST
 ‘Quickly, he pulled out the hand of that leper.’

5.4 *Aya* *dâf* *a* *dádá* *zley* , *la* *a* *la* *manda*
ājā *dâf* *ā-* *dâf* *-ā* *ɣèj* *lā* *ā-* *lā* *mándá*
 then pull.out 3SG.SBJ- pull.out -VNT.PROX meat add 3SG.SBJ- add salt(ful.)
a *hedé* .
á *xēdé*
 PREP1 on.it
 ‘Then he took out the meat and he put salt on it.’

5.5 *Aya* *pa* *ata* *kwahwaw* .
ājā *pá* *á* *tā* *k^wāh^wāw*
 then put.aside PREP1 on fire
 ‘Then (he) put on the fire.’

5.6 *Msaw* *a* *msaw* , *bam* *bam* *a* *bamza* *zley* *wese*
msàw *ā-* *msàw* *bām* *bām* *ā-* *bām* *-zā* *ɣèj* *wēsé*
 roast 3SG.SBJ- roast munch munch 3SG.SBJ- munch -TRANS meat DEM.DIST
cekudé .
tsék^wdē
 a.little
 ‘He roasted and munched a little bit of that meat.’

5.7 *Aya* *pa* *a* *caza* *aka* .
ājā *pá* *ā-* *tsā* *-zā* *āká*
 then put.aside 3SG.SBJ- put -TRANS ACC
 ‘Then he put it down.’

5.8 *Daf* *a* *dâf* *ra* , *faa* , *a*
dâf *ā-* *dâf* *rā* *fá:* *ā-*
 stretch.out 3SG.SBJ- stretch.out hand put.hand.in.bag 3SG.SBJ-
njewa *ra* *heje* *fagwalakw* .
ndzèw *-ā* *rā* *xèdzè* *fāg^wālāk^w*
 pull -VNT.PROX hand person leper
 ‘He reached out his hand and pulled out the hand of the leper person.’

5.9 *Kwec* , *kwec* , *kwec* , *kwec* , *kwec* , *kwec* , *kwec* *a*
k^wèts *k^wèts* *k^wèts* *k^wèts* *k^wèts* *k^wèts* *k^wèts* *ā-*
sprinkle sprinkle sprinkle sprinkle sprinkle sprinkle sprinkle 3SG.SBJ-

kwec yam a hedè .

k^wèts jàm á xēdé

sprinkle water PREP1 on.it

‘He sprinkled water on it numerous times.’

5.10 *Pa a nahza aka ata kwahwaw* .

pá ā- nāx -zā āká á tā k^wāh^wāw

put.aside 3SG.SBJ- drop -TRANS ACC PREP1 on fire

‘He threw it onto the fire.’

5.11 *A , heje fagwalakw hwadák yam* .

á xèdzè fāg^wālāk^w x^wádák jàm

ah! person leper scoop.average.amount water

‘Ah, the leper scooped up some water.’

5.12 *A ngaya : « Kay ! »*

ā- ngājā káj

3SG.SBJ- QUOT hey!

‘He said, “Hey!”’

5.13 « *A nkwa ca lem̄ba kwedkwed̄eŋ* . »

á nk^wā tsá lèm -bā k^wēdk^wéd̄éŋ

PREP1 2SG.POSS TOP get -BEN small.piece

“(This is) yours, get a small piece.”

5.14 *a ya* .

ā- jā

3SG.SBJ- say

‘he said.’

5.15 *Fagwalakw wese , tap tap tap* .

fāg^wālāk^w wēsé tāp tāp tāp

leper DEM.DIST running.quickly running.quickly running.quickly

‘That leper ran away quickly.’

5.16 *Vakutaŋ* , *a zəmbar aza ra*
vàk^wtāŋ ā- zmbàr āzà rā
 throw.far 3SG.SBJ- throw.from.a.distance IT hand
marazlarazl wese .
 má= ràḷ -á- ràḷ wēsé
 REL= cut <NOM.PAT> cut DEM.DIST
 ‘He threw that cut off hand far away.’

6.1 « *Hey !* »

xê:j
 hey!
 “Hey!”

6.2 *a ŋgaya : « Hey ! »*

ā- ŋgājā xê:j
 3SG.SBJ- QUOT hey!
 ‘he said, “Hey!”’

6.3 *Hey !*

xê:j
 hey!
 “Hey!”

6.4 « *Dam hwa nadamha a mapat ca a bay .* »

dām x^wā- ná- dām -xā á māpát tsá á bāy
 enter 2SG.SBJ- FUT- enter -VNT.DIST PREP1 morning TOP PREP1 chief
 “You will enter in the morning, into the chief’s house.”

6.5 *Fəlakw , heje wese a dene wala anta aza*

flàk^w xèdzè wēsé ā- dā -ēnē wālā āntā āzá
 snatch.wife person DEM.DIST 3SG.SBJ- bring -3SG.IOBJ woman DEF.DET COMPL
pa ŋ bay .
pá ŋ bāy
 at.a.level PREP2 chief

‘Snatching (her), that person brought the woman right to (lit. to the level of) the chief.’

6.6 A *ngaya* : « *Bay* , *nghe* . »

ā- *ngājā* *bāy* *nyē*

3SG.SBJ- QUOT chief DEM.PROX

‘He said, “Chief, take her (lit. this one).”’

6.7 « *Sa* *kádahwaw* *wala* *ŋkwa* *wese* *aza* . »

sā- *ká-* *dā* -āx^wāw *wālā* nk^wā *wēsé* *āzá*

1SG.SBJ- PFV- bring -2SG.IOBJ wife 2SG.POSS DEM.DIST COMPL

‘I have brought you that wife of yours.’

6.8 « *Kadak mba naka* . »

kádàk *mbà* *nākā*

good child 1SG.POSS

‘Good, my child.’

6.9 « *Zam̄ba hayak eze* . »

zàm -*bā* *xājāk* *ézē*

eat -BEN land therefore

‘Therefore take (lit. eat) the land.’

7.1 *Aya mapat ca* , « *Bay* , *ŋseŋ ma zam fagwalakw ege enjekedē* ,

ājā *māpát* *tsá* *bāy* *nsēŋ* *má* = *zàm* *fāg^wālāk^w* = *égē* *éndzèkēdē*

then morning TOP chief type REL= eat leper =PL however

əy *kánda* *a* *wata* *naka* . »

j- *ká-* *ndā* *á* *wātā* *nākā*

3PL.SBJ- PFV- go PREP1 compound 1SG.POSS

‘Then in the morning, “Chief, the type of people who eat lepers came to my compound.”’

7.2 « *Sa rehaha* . »

sā- *rēh* -*ā* -*xā*

1SG.SBJ- save -VNT.PROX -VNT.DIST

‘I saved (myself) here.’

7.3 « *Wəy* ! »

wj

wow!

‘Wow!’

7.4 « *Sa kaslangal enjekede sa menza η hey*
 sā- kā- ɬaŋgāl éndzèkēdē sā- mèn -zā ɲ xēj
 1SG.SBJ- IPFV- measure however 1SG.SBJ- be.left -TRANS INF ran
vaw gway ! »

vāw g^wāj

Q pal

“However I reckon (lit. measure) (that) I ran all out didn’t I (lit. did I leave off running?), pal!”

7.5 *Na kámbal wala naka .*
 nà ká- mbāl wālā nākā

now PFV- grab wife 1SG.POSS

“Now he grabbed my wife.”

7.6 « *Káɓamza . »*

ká- ɓām -zā

PFV- munch -TRANS

“He munched her up.”

7.7 *Tew , andala ŋgha .*

téw ándālā nyā

finally like.this.MED DEM.PROX

“Finally, it's like this.”

Text 2 The story of the favoured and non-favoured wife

As told by Marie, Deli Benjamin’s wife (a woman in her 30s)

1.1 *Mesleje anta a ndaha a damaw .*

mēlédzè āntā ā- ndā -xā á dāmāw

neighbour 3SG.POSS 3SG.SBJ- go -VNT.DIST PREP1 bush

‘His neighbour came from the bush.’

1.2 *A nda , a ŋgaya : « Weləye , weləye ! »*

ā- ndā ā- ŋgājā wālā -jé wālā -jé

3SG.SBJ- come 3SG.SBJ- QUOT woman -PL woman -PL

‘He came, he said, “Women, women!”’

1.3 « A way ! »

á wáj
ah (response)
“Here!”

1.4 « Mawal nkune ... » « A ? »

māwàl nk^wnè á
husband 2PL.POSS ah!
“Your husband.....” “Yes?”

1.5 « Kája zley damaw ene , ama ngamngam

ká- dzā ʒèj dāmāw éné àmá ngām-ngām
PFV- kill meat bush like.that but(ful.) trap(ful.)

kájaza » a ya .

ká- dzā -zā ā- jā
PFV- kill -TRANS 3SG.SBJ- say

“He killed some game (lit. bush meat) like that, but a trap killed him” he said.’

1.6 « Kámac anta » a ya .

ká- mātš āntā ā- jā
PFV- die 3SG.POSS 3SG.SBJ- say

“He died” he said.’

2.1 Aya mzla wala wese a ngaya , da a da teked’

ājā mʒā wālā wēsé ā- ngājā dā ā- dā tēkēd’
then blacksmith wife DEM.DIST 3SG.SBJ- QUOT bring 3SG.SBJ- bring calabash
sefé a tərgwa .

séfé á trg^wā

unused.calabash PREP1 granary

‘Then they say the non-favoured wife (lit. blacksmith wife) got an unused calabash from the granary.’

2.2 *A da teked sefe a tǝrgwa wese , ca a*
 ā- dā tēkēd séfē á trǵ^{wā} wēsé tsā ā-
 3SG.SBJ- bring calabash unused.calabash PREP1 granary DEM.DIST put 3SG.SBJ-
ca ata ha .
 tsā á tā xā
 put PREP1 on head
 ‘She got that unused calabash and put it on (her) head.’

2.3 « *Kay !* »

káj
 Oh!
 “Oh!”

2.4 « *Law law law !* »

láv láv láv
 (cry of grief) (cry of grief) (cry of grief)
 “No, no, no!”

2.5 *a ja ula .*

ā- dzā wlá
 3SG.SBJ- hit voice
 ‘she cried out (lit. hit voice).’

2.6 « *Hwa ja ula vemey ?* »

x^{wā}- dzā wlá véméj
 2SG.SBJ- hit voice what
 “Why are you crying out?”

2.7 « *Kay , mana mana , dengez kája mawal na aza*

káj mǎnà mǎnà dēngēz ká- dzā mǎwàl nā āzá
 Oh! (hesitation) (hesitation) trap PFV- kill husband 1SG.POSS COMPL
a damaw ! »
 á dāmāw
 PREP1 bush
 “Oh! A trap killed my husband in the bush!”

2.8 « *Dengez kája mawal na aza a damaw !* »

dēŋgēz ká- dzā māwàl nā āzá á dāmāw

trap PFV- kill husband 1SG.POSS COMPL PREP1 bush

‘A trap killed my husband in the bush!’

2.9 *a ya .*

ā- jā

3SG.SBJ- say

‘she said.’

2.10 *Ca a ca teked' wese ara ata ha eze , a*

tsā ā- tsā tēkēd' wēsé ārá á tā xā ézē á-

put 3SG.SBJ- put calabash DEM.DIST SIM PREP1 on head therefore 3SG.SBJ-

kanda a mbe eze .

kā- ndā á mbē ézē

IPFV- go PREP1 3SG therefore

‘Therefore she put that unused calabash on her head on the way, and was going with it.’

2.11 « *Wabaw , wabaw !* »

wábáw wábáw

(cry of grief) (cry of grief)

‘What can I do! What can I do!’

2.12 *a kahan ara .*

á- kā- xān ārá

3SG.SBJ- IPFV- cry SIM

‘she was crying along the way.’

2.13 *Wala madaraf ca kwaw , a kadaw ŋ nda kwaw .*

wālā mā- dáráf tsá k^wāw á- kā- dāw ŋ ndā k^wāw

wife NOM- favoured TOP NEG 3SG.SBJ- IPFV- want INF go NEG

‘As for the favoured wife, no, she didn't want to go.’

2.14 A *kazlad' kan ege kəda a wata maman*
 ā- kā- ʒādf kàn =égē kdā á wātā māmán
 3SG.SBJ- IPFV- take.away thing =PL towards PREP1 compound mother.3POSS
eze .

ézē

therefore

‘She was taking things away to (lit. towards) her mother’s compound.’

3.1 *Yaw , a nda pa ata laja zley wese* .
 jàw ā- ndā pá á tā lā dzá ʒèj wēsé
 so(ful.) 3SG.SBJ- go at.a.level PREP1 on place kill meat DEM.DIST

‘So, she went right to that place where the game was killed.’

3.2 *Kədə ca a gere mawal anta , kégereye* .
 kdē tsá ā- grē māwəl āntā ká- gār -ējē
 however TOP 3SG.SBJ- see husband 3SG.POSS PFV- stand -PART

‘However, she saw her husband standing up.’

3.3 A *zlepene a mesleje anta wese : « Gway , hwa*
 ā- ʒāp -ēnē á mēlédzè āntā wēsé g^wāj x^wā-
 3SG.SBJ- say -3SG.IOBJ PREP1 neighbour 3SG.POSS DEM.DIST pal 2SG.SBJ-

bedzekey ka η vay ! »

bādf -zā -ēkēj ká íj vāj

deceive -TRANS -1SG.DOBJ ANT PREP2 where

‘She said to that neighbour of hers, “Pal, why did you deceive me?”’

3.4 « *Gway , hwa bedzekey ka η vay ! »*

g^wāj x^wā- bādf -zā -ēkēj ká íj vāj

pal 2SG.SBJ- deceive -TRANS -1SG.DOBJ ANT PREP2 where

‘Pal, why did you deceive me?’

3.5 « *Hwa ya : "Kan kája mawal ηkwa aza a damaw*
 x^wā- jā kàn ká- dzā māwəl nk^wā āzá á dāmāw
 2SG.SBJ- say thing PFV- kill husband 2SG.POSS COMPL PREP1 bush

ene . " »

énē

like.that

“You said, “Something killed your husband in the bush.””

3.6 « *Enjekedē hwa bedzekey* . »

éndzèkēdē x^wā- bād -zā -ēkēj

however 2SG.SBJ- deceive -TRANS -1SG.DOBJ

“However you deceived me.”

3.7 « *Ba !* »

bá

bah!

“Bah!”

3.8 « *Sa zen naka a wata* . »

sā- zèn nākā á wātā

1SG.SBJ- return 1SG.POSS PREP1 home

“I (will) return home.”

3.9 *Mawal anta wese a ngaya : « Ndaha wala*

māwāl āntā wēsé ā- ngājā ndā -xā wālā

husband 3SG.POSS DEM.DIST 3SG.SBJ- QUOT go -VNT.DIST wife

naka ! »

nākā

1SG.POSS

‘Her husband said, “Come here, my wife!”’

3.10 *əy* .

ā jā

3SG.SBJ- say

‘he said.’

3.11 « *Ndaha !* »

ndā -xā

go -VNT.DIST

“Come here!”

3.12 *Zla zla a zlene zley be a taktərgwa anta*
 ʒā ʒā ā- ʒā -ēnē ʒèj bé á tàktrg^wā āntā
 cut cut 3SG.SBJ- cut -3SG.IOBJ meat full PREP1 granary.calabash 3SG.POSS
wese , a zlene zley wese .
 wēsé ā- ʒā -ēnē ʒèj wēsé
 DEM.DIST 3SG.SBJ- cut -3SG.IOBJ meat DEM.DIST
 ‘He cut up meat for her, filling her granary calabash, he cut up that meat for her.’

3.13 *Tel , əy nda a wata .*
 tél j- ndā á wātā
 manner.of.going 3PL.SBJ- go PREP1 home
 ‘They went home.’

4.1 *A nda a wata ca kəde ca wala anta wese mbəy*
 ā- ndā á wātā tsá kdê tsá wālā āntā wēsé mbj̄
 3SG.SBJ- go PREP1 home TOP however TOP wife 3SG.POSS DEM.DIST 3SG.STAT
ete aka səkwaw .
 á tē ákā sk^wāw
 PREP1 here EXIST NEG
 ‘He went home, however that wife of his was not there (lit. here).’

4.2 *Kəde ca a ŋgaya : « Həla , hwa dák a vay ? »*
 kdê tsá ā- ŋgājā xlā x^wā dák á vāj
 so TOP 3SG.SBJ- QUOT girl 2SG.STAT gone PREP1 where
 ‘So he said, “Girl, where did you go?”’

4.3 « *Sa dák a wata mana .* »
 sā dák á wātā mánā
 1SG.STAT gone PREP1 compound mother.1POSS
 ‘I went to my mother’s compound.’

4.4 « *Hwa nda ŋ la a wata macahw vemey ?* »
 x^wā- ndā ŋ lā á wātā mātsāx^w véméj
 2SG.SBJ- go INF do PREP1 compound mother.2POSS what
 ‘What did you go to do at your mother's compound?’

4.5 « *Akwaw* . »

ák^wāw

NEG.EXIST

“Nothing.”

4.6 « *Kan ŋgha mbəy a katay ?* »

kàn ŋyā mbj á kátáj

thing DEM.PROX 3SG.STAT PREP1 where

“Where is this thing?”

4.7 « *Mbəy a wata mana* . »

mbj á wātā mānā

3SG.STAT PREP1 compound mother.1POSS

“It is at my mother’s compound.”

4.8 « *Kan ŋgha mbəy a katay ?* »

kàn ŋyā mbj á kátáj

thing DEM.PROX 3SG.STAT PREP1 where

“Where is this thing?”

4.9 « *Mbəy a wata mana* . »

mbj á wātā mānā

3SG.STAT PREP1 compound mother.1POSS

“It is at my mother’s compound.”

5.1 *Mesleje anta a ŋgaya* : « *Gway , sa*

mēlédzè āntā ā- ŋgājā g^wāj sā-

neighbour 3SG.POSS 3SG.SBJ- QUOT Pal 1SG.SBJ-

kázlapahwaw . »

ká- ɬāp -āx^wāw

PFV- say -2SG.IOBJ

‘His neighbour said, “Pal, I told you (so).”’

5.2 « *Mbalaḅa wala ṅkwa ka ene , hwa ya : "*
 mbāl -ā -bā wālā nk^{wā} ká éné x^{wā}- jā
 take.hold -VNT.PROX -BEN wife 2SG.POSS ANT like.that 2SG.SBJ- say

Sa kadāw kwaw . " »

sá- ká- dāw k^{wā}

1SG.SBJ- IPFV- love NEG

“Take hold of your wife like that, you said “I don't love her.””

5.3 « *hwa ya zeny . »*

x^{wā}- jā zēnéj

2SG.SBJ- say again

“you said (it) again.”

5.4 « *Sar la na ca ma hanahwaw na ca mzla wala ,*
 sār lā nà tsá má= xān -āx^{wā} nà tsá mḷā wālā
 look.at place now TOP REL= mourn -2SG.DOBJ now TOP blacksmith wife
kwaw aza vaw ? »

k^{wā} āzà vāw

NEG DUB Q

“Look now, the one who is crying for you is the non-favoured wife, isn't it?”

5.5 *A ṅgaya : « Njəwen gway , wabaw ! »*

ā- ṅgājā ndzwèn g^{wāj} wábáw

3SG.SBJ- QUOT true pal (cry of grief)

‘He says, “(It's) true, pal, what can I do!”’

5.6 « *Sa kásan kwaw . »*

sā- ká- sà n k^{wā}

1SG.SBJ- PFV- know NEG

“I didn't know.”

5.7 « *Sa kasan ana ebe ca , nja a nja a*

sá- ká- sà n 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^{wā}

compound 1SG.POSS NEG

“(If) I knew about this, she would not dwell at my compound.”

6 *Mawal anta wese , gam a gamza , a*
 māwāl āntā wēsé gām ā- gām -zā ā-
 husband 3SG.POSS DEM.DIST drive.away 3SG.SBJ- drive.away -TRANS 3SG.SBJ-
ya .
jā
 say
 ‘That husband of hers, he drove her away, they say.’

Text 3 The story of the baboon

As recounted by Kodji, Neftalim to Koyang, Paul (both in their late twenties)

1 N. *Pawl gway , sa zlapahwaw ma , ma heje uzəye*
 pawl g^wāj sā- ɣāp -āx^wāw mā má= xèdzè wzejé
 Paul pal 1SG.SBJ- say -2SG.IOBJ situation REL= 1INCL.STAT children
pəzekw pəzekw ende wese .
 pzék^w pzék^w éndē wēsé
 small small like.this.PROX DEM.DIST
 ‘Paul pal, I (will) tell you (about) a situation when we were very small children like this.’

2 P. *Ayaw .*

ājāw
 yes
 ‘Yes.’

3 N. *Mgba a wata ɲcene mgba asa barla ca ,*
 ɲmgbà á wātā ntsènè ɲmgbà á sā bārlā tsá
 up.there PREP1 compound 1EXCL.POSS up.there PREP1 under mountain TOP
hwa kasan ujek anta mbəy a mazlam a zeney
 x^wā- kā- sàñ wjēk āntā mbj á máɣàm á zēnej
 2SG.SBJ- IPFV- know house DEF.DET 3SG.STAT PREP1 edge PREP1 again
neye ?
nejé
 TAG.CONF

‘Up there at our compound, up there under the mountain, you know the house, it is at the edge (of the mountain) as well, isn't it?’

4 P. *A* .

á

ah

‘Ah.’

5 N. *Ca* , *a* *pes wese* , *əy kahəbar* .

tsá á pès wēsé j- k̄- xbār

TOP PREP1 day DEM.DIST 3PL.SBJ- IPFV- watch.over

‘So, on that day, they were watching over (the sorghum).’

6 P. *Mm* .

mm

mm

‘Mm.’

7 N. *Ca* , *madakal dakal ege əy a wata akwaw* .

tsá mà- dākāl dākāl =égē j- á wātā ák^wāw

TOP NOM- big big =PL 3PL.SBJ- PREP1 compound NEG.EXIST

‘So, the adults (lit. very big ones) weren’t at home.’

8 P. *Mm* .

mm

mm

‘Mm.’

9 N. *Sa* *teŋguleŋ naka* , *sa mbaw a zeney* .

sā téŋg^wlèŋ nākā sā mbàw á zēnéj

1SG.STAT one 1SG.POSS 1SG.STAT child PREP1 again

‘I was alone (lit. one of me), I was a child as well.’

10 P. *Mm* .

mm

mm

‘Mm.’

11 N. *Kədə́ ca , mere gəmesl wende aka mbəy pay , a*
 kdē tsá mēré gmèł wéndé ákā mbj páj ā-
 however TOP male baboon IND.DET.SG EXIST 3SG.STAT arrived 3SG.SBJ-
kandaha η *nga ndərey* .
 kā- ndā -xā íj ṅā ndrèj
 IPFV- go -VNT.DIST INF break sorghum
 ‘However, there was a certain male baboon, he arrived, he was coming to break the
 sorghum (to eat it).’

12 P. *Ayaw , wese ca hwa mbaw .*
 ājāw wēsé tsá x^wā mbàw
 yes DEM.DIST TOP 2SG.STAT child
 ‘Yes, at that time, you were a child.’

13 N. *Sa mba pəzekw ende .*
 sā mbà pzék^w éndē
 1SG.STAT child small like.this.PROX
 ‘I was a small child like this.’

14 P. *Mm .*
 mm
 mm
 ‘Mm.’

15.1 N. *Sa kénjeye ata ṅkədəŋ .*
 sā- ká- ndzā -ējē á tā nkďāŋ
 1SG.SBJ- PFV- sit -PART PREP1 on rock
 ‘I was sitting on a rock.’

15.2 N. *Sa gəre ca , sa la , sa jene ula ca ,*
 sā- grē tsá sā- lā sā- dzā -ēnē wlā tsá
 1SG.SBJ- see TOP 1SG.SBJ- do 1SG.SBJ- hit -3SG.IOBJ voice TOP
a kadāw η hey kwaw .
 á- kā- đāw íj xēj k^wāw
 3SG.SBJ- IPFV- want INF flee NEG
 ‘I saw (him), I did..., I cried out (lit. hit voice) at him, he didn’t want to flee.’

15.3 N. A *təwse ca , sa gəre ca , a*
 á tswé tsá sã- grē tsá á-
 PREP1 there TOP 1SG.SBJ- see TOP 3SG.SBJ-
kendezekey ende zlaḃa lakwatay ca ,
 kã- ndã -zã -ēkēj éndē ḃàḃá lãk^wátãj tsá
 IPFV- come -TRANS -1SG.IOBJ like.this.PROX with whip TOP
sa telhey a ujek .
 sã- tēlxēj á wjēk
 1SG.SBJ- run.fast PREP1 house
 ‘Then I saw he was coming at me like this with a whip, I ran fast into the house.’

16 P. A *dãw ŋ ŋtawahwaw .*
 ā- dãw ŋ ntàw -ãx^wãw
 3SG.SBJ- want INF whip -2SG.DOBJ
 ‘He wanted to whip you.’

17 N. A *dãw ŋ ŋtewekey mba , kəḃe ca , sa*
 ā- dãw ŋ ntàw -ēkēj mbà kḃē tsá sã-
 3SG.SBJ- want INF whip -1SG.DOBJ child however TOP 1SG.SBJ-
kahan , sa kahan , sa nda delele , ḃah sa ḃah
 kã- xãn sã- kã- xãn sã- ndã délélé ḃãh sã- ḃãh
 IPFV- cry 1SG.SBJ- IPFV- cry 1SG.SBJ- go direct hide 1SG.SBJ- hide
aka ŋ ben mejəve .
 ākã ŋ bèn médzvè
 ACC PREP2 man's.hut ancestor.idol
 ‘He wanted to whip me, child, however I kept on crying, I went straight and hid in the ancestor idol hut.’

18 P. *Aha .*
 āxá
 aha
 ‘Aha.’

19 N. *Aya* , *warba* wese *ca* , *a* *pes luma* *Zambaw* ,
 ājā wár bá wēsé tsá á pès lwmà zàmbàw

so fortunately DEM.DIST TOP PREP1 day market(ful.) Zambo

hejəye əy *kanda* *kəda* *a* *luma* .

xèdzè -jé j- kã- ndā kdā á lwmà

person -PL 3PL.SBJ- IPFV- go towards PREP1 market(ful.)

‘So, fortunately at that time, (it was) the Zambo market day, people were going towards the market.’

20 P. *Ayaw* .

ājāw

yes

‘Yes.’

21.1 N. *Sa* *karav* *ula* *a* *ujek* *ca* , *a* *ngaya* : « *Mba*

sá- kã- ràv wlā á wjèk tsá ā- ngājā mbà

1SG.SBJ- IPFV- resound voice PREP1 hut TOP 3SG.SBJ- QUOT child

anta *a* *han* *ca* , *dāla* *a* *wata* *akwaw* *vaw* ? »

āntā ā- xān tsá dālā á wātā ák^wāw vāw

DEF.DET 3SG.SBJ- cry TOP someone PREP1 compound NEG.EXIST Q

‘I was making a noise (lit. resounding the voice) in the hut, they said, “The child is crying, is nobody at home?”’

21.2 N. « *Mba anta* *a* *han vemey* ? »

mbà āntā ā- xān véméj

child DEF.DET 3SG.SBJ- cry what

‘Why does the child cry?’

21.3 N. *Kədē ca , əy nda ca , əy ndewzekey ,*
kdē tsá j- ndā tsá j- ndèw -zā -ēkēj
 so TOP 3PL.SBJ- go TOP 3PL.SBJ- find -TRANS -1SG.IOBJ
sa η ben mejəve mala baba naka , a
sā íj bèn médzvè mālā bābā nākā ā-
 1SG.STAT PREP2 man's.hut ancestor.idol GEN father(ful.) 1SG.POSS 3SG.SBJ-
ngaya : « Hwa han vemey ? »
ngājā x^wā- xān vé méj
 QUOT 2SG.SBJ- cry what
 ‘So, they went and found me, I was in my father’s ancestor idol hut, they
 (lit. he) said, “Why are you crying?”’

21.4 N. *a ya .*
ā- jā
 3SG.SBJ- say
 ‘they (lit. he) said.’

21.5 N. *Sa ya : « Sa han kwaw ca , gəmesl a*
sā- jā sā- xān k^wāw tsá gmèł a-
 1SG.SBJ- say 1SG.SBJ- cry NEG TOP baboon 3SG.SBJ-
ndewzekey mgbā ata ηkədaŋ mgbā , sa
ndèw -zā -ēkēj ηmgbā á tā nkdaŋ ηmgbā sá-
 find -TRANS -1SG.IOBJ up.there PREP1 on rock up.there 1SG.SBJ-
kahəbar ca , a kadāw η ηtewekey amba
kā- xbār tsá á- kā- dāw íj ntàw -ēkēj āmbá
 IPFV- watch.over TOP 3SG.SBJ- IPFV- want INF whip -1SG.DOBJ then
sa hey aza a ujek » sa ya .
sā- xēj āzà á wjēk sā- jā
 1SG.SBJ- run IT PREP1 hut 1SG.SBJ- say
 ‘I said, “I am crying, otherwise, a baboon found me up there on a rock up there, I
 Was watching over (the sorghum), he wanted to whip me, then I ran away into the
 hut.” I said.’

22 P. *Kánda* *ŋ* *ndewzahwaw* *akwaw* ?

ká- ndā ń ndèw -zā -āx^wāw ák^wāw

PFV- go INF find -TRANS -2SG.IOBJ NEG.EXIST

‘He hadn’t gone to find you?’

23.1 N. *Kánda* *ŋ* *ndewzekey* *a* *ujek* *akwaw* .

ká- ndā ń ndèw -zā -ēkēj á wjēk ák^wāw

PFV- go INF find -TRANS -1SG.IOBJ PREP1 hut NEG.EXIST

‘He hadn’t gone to find me in the hut.’

23.2 N. *A* *kaŋgaɓa* *ndərey* *asa* *la* *ende* .

ā- kā- ŋgā -ɓā ndrēj á sā lā éndē

3SG.SBJ- IPFV- break -BEN sorghum PREP1 under field like.this.PROX

‘He was breaking sorghum in (lit. under) the field like this.’

24 P. *Ama* ,

àmá

but(ful.)

‘But...’

25 N. *Ayaw* , *heje* *wese* ...

ājāw xèdzè wēsé

yes person DEM.DIST

‘Yes, that person...’

26 P. *hwa* *gəre* *a* *dāw* *ŋ* *lɛmba* *kan* *ta* *zam* .

x^wā- grē ā- dāw ń lèm -ɓā kàn tá zàm

2SG.SBJ- see 3SG.SBJ- want INF get -BEN thing for eat

‘...you see he wanted to get something to eat.’

27 N. *Ayaw* .

ājāw

yes

‘Yes.’

28 P. *Ama a tɔwse ca , hwa gɔre a kalalak ata*
 àmá á twsé tsá x^wā- grē á- kā- ləl̀àk á t̄a
 but(ful.) PREP1 there TOP 2SG.SBJ- see 3SG.SBJ- IPFV- be.afraid PREP1 on
hwa akwaw aza cay !

x^wā ák^wāw āzà tsáj
 2SG NEG.EXIST DUB EMPH

‘But at that time, you see he was not afraid of you, was he!’

29.1 N. *A lalak akwaw , sa mba aza cay !*

ā- ləl̀àk ák^wāw s̄a mbà āzà tsáj
 3SG.SBJ- be.afraid NEG.EXIST 1SG.STAT child DUB EMPH

‘He wasn’t afraid, I was a child wasn’t I!’

29.2 N. *Aya heje wese ca , a ŋgaya : « Ca na ŋgha ,*

ājā xèdzè wēsé tsá ā- ŋgājā tsá nà nyā
 then person DEM.DIST TOP 3SG.SBJ- QUOT TOP now DEM.PROX

mbəy a katay ? »

mbj́ á kátáj

3SG.STAT PREP1 where

‘Then that person, he said, “So now, where is he?”’

29.3 N. *Sa ya : « Gəmesl mbəy asa la ».*

s̄a- jā gmèł mbj́ á s̄a lā
 1SG.SBJ- say baboon 3SG.STAT PREP1 under field

‘I said, “The baboon is in the field.”’

29.4 N. *A nda ca , a ndewzene ŋ gəmesl ca ,*

ā- ndā tsá ā- ndàw -zā -ēnē ń gmèł tsá
 3SG.SBJ- go TOP 3SG.SBJ- find -TRANS -3SG.IOBJ PREP2 baboon TOP

kénjeye ata ha ŋkəɗaŋ dɔzze ende , a

ká- ndzā -ējē á t̄a xā nkɗaŋ dzzé éndē ā-

IPFV- sit -PART PREP1 on head rock large like.this.PROX 3SG.SBJ-

kabamba ndərey .

kā- bām -bā ndrèj

IPFV- munch -BEN sorghum

‘He went, he found the baboon sitting on top of the rock, large like this, he was munching sorghum.’

30 P. *Hwa gəre ca* .

x^wā- grē tsá

2SG.SBJ- see TOP

‘You see.’

31 N. *Mm , a təwse ca , heje wese tatak a tatakza ca ,*

mm á twsé tsá xèdzè wésé tātāk ā- tātāk -zā tsá

mm PREP1 there TOP person DEM.DIST chase 3SG.SBJ- chase -TRANS TOP

sa zlapahwaw a mpat anta əy , sa

sā- ɣāp -āx^wāw á mpát āntā j jā sā

1SG.SBJ- say -2SG.IOBJ PREP1 tomorrow DEF.DET 3PL.SBJ- say 1SG.STAT

mbaw .

mbàw

child

‘Mm, then that person chased him, I say to you after that (lit. the next day), they say, I was a child.’

32 P. *Mm* .

mm

mm

‘Mm.’

33 N. *Əy a wata akwaw ca , mala ghəvbeŋ sa*

j á wātā ák^wāw tsá mā- lā ɣv'éŋ sā-

3PL.STAT PREP1 home NEG.EXIST TOP JUS- do never 1SG.SBJ-

kagar a təwse zeney vaw ?

kā- gār á twsé zēnéj vāw

IPFV- stand PREP1 there again Q

‘(When) they were not at home, would I ever (lit. let it be never) stand there again?’

34 P. *Ij nda mgba ...*

ij ndā ŋmgbà

INF go up.there

‘To go up there...’

- 35 N. *ata nkɔdɔŋ ...*
 á tã nkɔdɔŋ
 PREP1 on rock
 ‘...on the rock...’
- 36 P. *ata nkɔdɔŋ zeney akwaw .*
 á tã nkɔdɔŋ zɛnɛj ák^wãw
 PREP1 on rock again NEG.EXIST
 ‘...on the rock again.’
- 37 N. *... a , sa kalaɓ zeney akwaw .*
 á sá- kã- làɓ zɛnɛj ák^wãw
 ah! 1SG.SBJ- IPFV- agree again NEG.EXIST
 ‘...ah, I wouldn't agree (to it) anymore.’
- 38 P. *A nala tam a kasarahwaw neye ?*
 ā- ná- lã tám á- kã- sãr -ãx^wãw nɛjɛ
 3SG.SBJ- FUT- do always(ful.) 3SG.SBJ- IPFV- look.at -2SG.DOBJ TAG.CONF
 ‘It could be he was always looking at you, couldn't it?’
- 39 N. *A , asadɔj , sa sanaba a katay gway ?*
 á ásádɔj sã- sãn -ã -ɓã á kátáj g^wáj
 ah! I.don't.know 1SG.SBJ- know -VNT.PROX -BEN PREP1 where pal
 ‘Ah, I don't know, how (lit. where) would I know, pal?’
- 40.1 P. *Akwaw ca , a daw ŋ mpamba kan ta zam , a*
 ák^wãw tsá ā- daw ŋ mpàm -ɓã kãn tá zàm á
 NEG.EXIST TOP 3SG.SBJ- want INF look.for -BEN thing for eat PREP1
dɔwze kálalak anta ata hwa .
 dwzé ká- làlàk āntã á tã x^wã
 after PFV- be.afraid 3SG.POSS PREP1 on 2SG
 ‘Otherwise, he wanted to look for something to eat, after, he was afraid of you.’

40.2 P. *A* *dāw* *ŋ* *nda* *ŋ* *ŋtawahwaw* *ca* , *a* *zlap* : « *Mba*
ā- *dāw* *ŋ* *ndā* *ŋ* *ntàw* *-āx^wāw* *tsá* *ā-* *ʒāp* *mbà*
3SG.SBJ- want INF go INF whip -2SG.DOBJ TOP 3SG.SBJ- say child
ma *caw* *ŋgha* *a* *nanda* *ŋ* *ŋgwefēkey* . »
má= *tsáw* *nyā* *ā-* *ná-* *ndā* *ŋ* *ŋg^wāf* *-ēkēj*
REL= there DEM.PROX 3SG.SBJ- FUT- go INF throw.at -1SG.DOBJ
‘He wanted to go and whip you, he said, “That child over there, he will come and
throw (stones) at me.”’

41 N. *Hwa* *kasan* *mere* *gəmesl* *ma* *a* *nuna* *anta* *ege* *ca* ,
x^wā- *kā-* *sàn* *méré* *gmèl* *má=* *á* *nwná* *āntā* =*égē* *tsá*
2SG.SBJ- IPFV- know male baboon REL= PREP1 times.past DEF.DET =PL TOP
gwaya *deydey* .
g^wājā *dējdej*
aggression too.much(ful.)
‘You know the male baboons of the old days, (they had) too much aggression.’

42 P. *Gwaya* *aka* .
g^wājā *ákā*
aggression EXIST
‘There was aggression.’

43.1 N. *Əy* *gəzl* *uzəye* *deydey* *kam* .
ǰ- *gàʒ* *wzjé* *dējdej* *kàm*
3PL.SBJ- beat children too.much(ful.) TOP(ful.)
‘They beat children too much.’

43.2 N. *Kaw* *wala* *ma* , *gula* *ŋ* *həbar* *kwaw* .
káw *wālā* *má* *g^wlā* *ŋ* *xbār* *k^wāw*
even(ful.) woman TOP.EMPH able INF watch.over NEG
‘Even a woman, (she) wasn’t able to watch over (the sorghum).’

44 P. Əy zlapahwaw ma kaw heje kazam ɲhwəye
 j- ʒāp -āx^wāw má = káw xèjé- kǎ- zàm nx^wā -jé
 3PL.SBJ- say -2SG.IOBJ REL= even(ful.) 1INCL.SBJ- IPFV- eat goat -PL
 wese ca , əy zlapahwaw ca , əy dāw ɲ nda ɲ
 wēsé tsá j- ʒāp -āx^wāw tsá j- dāw ɲ ndā ɲ
 DEM.DIST TOP 3PL.SBJ- say -2SG.IOBJ TOP 3PL.SBJ- want INF go INF
 pərasl ɲhwəye ca ata gwaya ca .
 prət nx^wā -jé tsá á tā g^wājā tsá
 sieze goat -PL TOP PREP1 on force TOP
 ‘They tell you (that) even when we were shepherding (lit. eating) those goats, they
 tell you, they wanted to go to seize the goats by force.’

45 N. Ama heje uzəye pəzekw pəzekw ende wese
 àmá xèdzè wzejé pžék^w pžék^w éndē wēsé
 but(ful.) 1INCL.STAT children small small like.this.PROX DEM.DIST
 du !
 dw
 EMPH(ful.)
 ‘But we were those very small children like this!’

46 P. A .
 á
 ah!
 ‘Ah.’

47 N. A , əy pərasl ɲhwəye ata gwaya ende ca .
 á j- prət nx^wā -jé á tā g^wājā éndē tsá
 ah! 3PL.SBJ- seize goat -PL PREP1 on force like.this.PROX TOP
 ‘Ah, they seized goats by force like this.’

48 P. Əy nda ɲ pərasl ɲhwəye ca , a gwaya ende ɲgara
 j- ndā ɲ prət nx^wā -jé tsá á g^wājā éndē ɲgārá
 3PL.SBJ- go INF seize goat -PL TOP PREP1 force like.this.PROX true
 ca .
 tsá
 TOP
 ‘They went and seized goats with force like this, it’s true.’

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