A Grammatical Description of the Buwal Language

Melanie Helen Viljoen

©2013, Melanie Helen Viljoen

License

This document is part of the SIL International Language and Culture Archives. It is shared ‘as is’ in order to make the content available under a Creative Commons license:

Attribution-NonCommercial-NoDerivativeWorks
(http://creativecommons.org/licenses/by-nc-nd/4.0/).

More resources are available at: www.sil.org/resources/language-culture-archives.
A GRAMMATICAL DESCRIPTION OF THE BUWAL LANGUAGE

Submitted by
Melanie Helen Viljoen
M. Eng. Sci. (Chem), BA. (Biblical Studies)
Grad. Dipl. of Social Sciences in Applied Linguistics

A thesis submitted in total fulfilment
of the requirements for the degree of
Doctor of Philosophy

School of Centre for Research on Language Diversity
Faculty of Humanities and Social Sciences

La Trobe University
Bundoora, Victoria 3086
Australia

March 2013
## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of tables</td>
<td>xii</td>
</tr>
<tr>
<td>List of figures</td>
<td>xv</td>
</tr>
<tr>
<td>List of maps</td>
<td>xvi</td>
</tr>
<tr>
<td>List of abbreviations</td>
<td>xvii</td>
</tr>
<tr>
<td>Summary</td>
<td>xix</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>xx</td>
</tr>
<tr>
<td>Statement of authorship</td>
<td>xxii</td>
</tr>
</tbody>
</table>

### Chapter 1 Introduction

1.1 The Buwal language

1.1.1 Location and number of speakers

1.1.2 Name of language

1.1.3 Language classification

1.1.4 Linguistic relationship with Gavar

1.1.5 Sociolinguistic situation

1.1.5.1 Multilingualism

1.1.5.2 Language attitudes

1.1.5.3 Literacy

1.1.5.4 Language viability

1.1.6 Previous linguistic research

1.2 The Buwal people

1.2.1 History

1.2.2 Buwal society

1.2.2.1 Authority structures

1.2.2.2 Clans

1.2.2.3 Marriage

1.2.3 Economy

1.2.4 Religion

1.2.4.1 Traditional religion

1.2.4.2 Islam

1.2.4.3 Christianity

1.2.5 Education

i
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.6 Health issues</td>
<td>20</td>
</tr>
<tr>
<td>1.3 Research Methodology</td>
<td>21</td>
</tr>
<tr>
<td>1.3.1 Fieldwork</td>
<td>21</td>
</tr>
<tr>
<td>1.3.2 Data Recording</td>
<td>24</td>
</tr>
<tr>
<td>1.3.3 Data Manipulation</td>
<td>24</td>
</tr>
<tr>
<td>1.4 Typological profile of the Buwal language</td>
<td>24</td>
</tr>
<tr>
<td>1.4.1 Phonology</td>
<td>24</td>
</tr>
<tr>
<td>1.4.2 Morphology</td>
<td>25</td>
</tr>
<tr>
<td>1.4.3 Syntax</td>
<td>26</td>
</tr>
<tr>
<td>1.5 Organisation of thesis</td>
<td>26</td>
</tr>
<tr>
<td><strong>Chapter 2 Phonology</strong></td>
<td>29</td>
</tr>
<tr>
<td>2.1 The skeleton of roots</td>
<td>29</td>
</tr>
<tr>
<td>2.2 Consonants</td>
<td>30</td>
</tr>
<tr>
<td>2.2.1 Criteria for determining the segmental nature of complex consonants</td>
<td>31</td>
</tr>
<tr>
<td>2.2.2 Plosives</td>
<td>34</td>
</tr>
<tr>
<td>2.2.3 Implosives</td>
<td>36</td>
</tr>
<tr>
<td>2.2.4 Fricatives</td>
<td>39</td>
</tr>
<tr>
<td>2.2.5 Affricates</td>
<td>40</td>
</tr>
<tr>
<td>2.2.6 Nasals</td>
<td>41</td>
</tr>
<tr>
<td>2.2.7 Prenasalised consonants</td>
<td>43</td>
</tr>
<tr>
<td>2.2.8 Labialised velar consonants</td>
<td>43</td>
</tr>
<tr>
<td>2.2.9 Liquids</td>
<td>45</td>
</tr>
<tr>
<td>2.2.10 Glides</td>
<td>45</td>
</tr>
<tr>
<td>2.2.11 Labial-velar plosives</td>
<td>47</td>
</tr>
<tr>
<td>2.3 Vowels</td>
<td>49</td>
</tr>
<tr>
<td>2.3.1 Palatalisation</td>
<td>51</td>
</tr>
<tr>
<td>2.3.2 Labialisation</td>
<td>56</td>
</tr>
<tr>
<td>2.3.3 Long vowels</td>
<td>64</td>
</tr>
<tr>
<td>2.4 Phonology of loan words</td>
<td>64</td>
</tr>
<tr>
<td>2.5 Phonology of interjections and ideophones</td>
<td>68</td>
</tr>
<tr>
<td>2.6 Phonotactics</td>
<td>70</td>
</tr>
<tr>
<td>2.6.1 Syllable types</td>
<td>70</td>
</tr>
<tr>
<td>2.6.2 Distribution of consonants</td>
<td>71</td>
</tr>
</tbody>
</table>
Chapter 3 Open word classes

3.1 Nouns

3.1.1 Structure of nouns

3.1.1.1 Simple noun roots
3.1.1.2 Reduplication
3.1.1.3 Possessed kinship nouns
3.1.1.4 Lexicalised nominal expressions
3.1.1.5 Plural marking for some animate nouns

3.1.2 Noun sub-classes

3.1.2.1 Common nouns
3.1.2.2 Mass nouns
3.1.2.3 Locative nouns
3.1.2.4 Temporal Nouns
3.1.2.5 Relational Nouns

3.1.3 Nominalisation
3.1.3.1 The nominaliser *ma* 141
3.1.3.2 Action nominalisation 148
3.1.3.3 Location nominalisation 151

3.2 Verbs 152
   3.2.1 Structure of verbs 152
      3.2.1.1 Simple verb roots 152
      3.2.1.2 Verbs derived from adjectives 153
         3.2.1.3 Reduplication 154
         3.2.1.4 The verbal word 156
   3.2.2 Verb sub-classes 169
      3.2.2.1 Intransitive verbs 169
      3.2.2.2 Ambitransitive verbs 170
      3.2.2.3 Transitive verbs 173
      3.2.2.4 Transitive verbs with lexically specified objects 174

3.3 Adjectives 176
   3.3.1 Structure of adjectives 176
      3.3.1.1 Simple adjective roots 177
      3.3.1.2 Reduplication 177
      3.3.1.3 Lexicalised adjectival expressions 179
      3.3.1.4 Approximative suffix 180
   3.3.2 Semantic domains of adjectives 181
   3.3.3 Adjective sub-classes 182
      3.3.3.1 Prototypical adjectives 182
      3.3.3.2 Non-prototypical adjectives 189
      3.3.3.3 Resultative participle 192

3.4 Adverbs 195
   3.4.1 Core adverbs 196
   3.4.2 Intensifier 200
   3.4.3 Clausal adverbs 201
   3.4.4 Focus particles 208

Chapter 4 Closed word classes 213
4.1 Pronouns and other pro-forms 213
   4.1.1 Personal pronouns 213
4.14.1 Subordinators
   4.14.1.1 Quotatives
   4.14.1.2 Relative marker
   4.14.1.3 Adverbialisers
4.14.2 Sequential markers
4.14.3 Coordinators
4.15 Topic markers
4.16 Emphatic marker
4.17 Interjections

Chapter 5 Noun phrases

5.1 Basic noun phrase
   5.1.1 Head
   5.1.2 Focus particles (FOC)
   5.1.3 Associative plural (ASS.PL)
   5.1.4 Possessive pronouns (POSS)
   5.1.4 Definite determiner (DEF.DET)
   5.1.5 Relative clause (REL)
   5.1.6 General plural marking (PL)
   5.1.7 Indefinite determiner (IND.DET)
   5.1.8 Adjectives (ADJ)
   5.1.9 Quantifiers (QUANT)
   5.1.10 Prepositional phrases (PP)
   5.1.11 Demonstratives (DEM)
5.2 Genitive constructions
   5.2.1 Genitive constructions formed by juxtaposition
      5.2.1.1 Head-modifier order
      5.2.1.2 Modifier-head order
   5.2.2 Genitive constructions formed using a genitive marker
5.3 Appositional noun phrases
5.4 Coordinate noun phrases
   5.4.1 Conjunctive coordination
      5.4.1.1 Coordinate noun phrases with éj
5.4.1.2 Coordinate noun phrases with léŋ
5.4.2 Asymmetric coordination
5.4.3 Disjunctive coordination

Chapter 6 Tense, aspect, mode and spatial verbal marking
6.1 Tense/aspect prefixes
   6.1.1 Imperfective
   6.1.2 Perfective
   6.1.3 Unmarked
   6.1.4 Future
6.2 Directional marking
   6.2.1 Ventive suffixes
   6.2.2 Itive marker
6.3 Verbal particles
   6.3.1 Completive marker āzzá
   6.3.2 Marker of simultaneity ārrá
   6.3.3 Marker of accomplishment āká
   6.3.4 Marker of anticipation ká
6.4 Possessive subject pronoun

Chapter 7 Prepositional phrases
7.1 Syntactic functions of prepositional phrases
7.2 Semantic functions of prepositional phrases
   7.2.1 Prepositional phrases with NP complements
      7.2.1.1 Preposition á
      7.2.1.2 Preposition ūj
      7.2.1.3 Preposition ḥābā
      7.2.1.4 Spatial prepositions beginning with á
      7.2.1.5 Preposition ánā
      7.2.1.6 Preposition màvdāj/màvāj
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2.2 Prepositional phrases with PP complements</td>
<td>408</td>
</tr>
<tr>
<td>7.2.3 Prepositional phrases with no complement</td>
<td>410</td>
</tr>
<tr>
<td>7.3 Coordinate prepositional phrases</td>
<td>412</td>
</tr>
<tr>
<td><strong>Chapter 8 Declarative clauses</strong></td>
<td><strong>415</strong></td>
</tr>
<tr>
<td>8.1 Verbal clauses</td>
<td>415</td>
</tr>
<tr>
<td>8.1.1 Structure of the basic verbal clause</td>
<td>415</td>
</tr>
<tr>
<td>8.1.1.1 Subject</td>
<td>416</td>
</tr>
<tr>
<td>8.1.1.2 Direct object</td>
<td>417</td>
</tr>
<tr>
<td>8.1.1.3 Indirect object</td>
<td>422</td>
</tr>
<tr>
<td>8.1.1.4 Oblique</td>
<td>424</td>
</tr>
<tr>
<td>8.1.2 Verbal clause types</td>
<td>425</td>
</tr>
<tr>
<td>8.1.2.1 Intransitive</td>
<td>426</td>
</tr>
<tr>
<td>8.1.2.2 Transitive</td>
<td>426</td>
</tr>
<tr>
<td>8.1.2.3 Extended Intransitive</td>
<td>427</td>
</tr>
<tr>
<td>8.1.2.4 Ditransitive</td>
<td>428</td>
</tr>
<tr>
<td>8.2.1.5 Zero-transitive</td>
<td>429</td>
</tr>
<tr>
<td>8.1.3 Adjusting transitivity</td>
<td>429</td>
</tr>
<tr>
<td>8.1.3.1 Transitivity suffix</td>
<td>430</td>
</tr>
<tr>
<td>8.1.3.2 Indirect causation</td>
<td>438</td>
</tr>
<tr>
<td>8.1.3.3 Impersonal</td>
<td>439</td>
</tr>
<tr>
<td>8.1.3.4 Reflexive</td>
<td>441</td>
</tr>
<tr>
<td>8.1.3.5 Reciprocal</td>
<td>442</td>
</tr>
<tr>
<td>8.2 Verbless clauses</td>
<td>444</td>
</tr>
<tr>
<td>8.2.1 Stative clauses</td>
<td>445</td>
</tr>
<tr>
<td>8.2.2 Existential clauses</td>
<td>454</td>
</tr>
<tr>
<td>8.3 Clauses with ‘copula’ verbs</td>
<td>457</td>
</tr>
<tr>
<td>8.4 Comparative clauses</td>
<td>461</td>
</tr>
<tr>
<td>8.4.1 Comparatives of equality</td>
<td>461</td>
</tr>
<tr>
<td>8.4.2 Comparatives of inequality</td>
<td>462</td>
</tr>
<tr>
<td><strong>Chapter 9 Non-declarative clauses</strong></td>
<td><strong>469</strong></td>
</tr>
<tr>
<td>9.1 Imperative clauses</td>
<td>469</td>
</tr>
<tr>
<td>9.1.1 Imperative</td>
<td>470</td>
</tr>
</tbody>
</table>

viii
9.1.2 Hortative

9.1.2.1 First person plural inclusive 471
9.1.2.2 First person inclusive dual 473

9.1.3 Jussive 474

9.2 Negation 475

9.2.1 Negative declarative verbal clauses 476
9.2.2 Negative imperative clauses 482

9.2.2.1 Second-person imperative 482
9.2.2.2 Hortative 483
9.2.2.3 Jussive 484
9.2.2.4 Obligation 485

9.2.3 Negative verbless clauses 486

9.2.3.1 Stative verbless clauses 486
9.2.3.2 Existential clauses 490

9.2.4 Negation of subordinate clauses 491
9.2.5 Emphatic negation 494
9.2.6 ‘Impossible’ negation 495
9.2.7 Constituent negation 496

9.3 Interrogative clauses 497

9.3.1 Polar interrogatives 498

9.3.1.1 Plain polar interrogatives 498
9.3.1.2 Alternative interrogatives 500
9.3.1.3 Speculative interrogatives 501
9.3.1.4 Disconfirmation interrogatives 503
9.3.1.5 Answering polar interrogatives 503

9.3.2 Content Interrogatives 508

9.3.2.1 Interrogative pronouns 508
9.3.2.2 Interrogative pro-numeral 511
9.3.2.3 Interrogative pro-adjective 512
9.3.2.4 Interrogative pro-adverb 514

9.3.3 Tag Questions 516

9.3.3.1 Confirmation tag questions 516
9.3.3.2 Imperative tag questions 518
Chapter 10 Clause combinations

10.1 Subordination
  10.1.1 Subordinating structures
    10.1.1.1 Syntactic embedding
    10.1.1.2 Subordinating morphemes
    10.1.1.3 Variation in participant coding.
    10.1.1.4 Special verb forms
  10.1.2 Complement clauses
    10.1.2.1 Structure of complement clauses
    10.1.2.2 Semantic types of complement clauses
  10.1.3 Speech reports
  10.1.4 Relative Clauses
    10.1.4.1 Relative clauses marked with má
    10.1.4.2 Existential relative clauses
  10.1.5 Adverbial Clauses
    10.1.5.1 Temporal clauses
    10.1.5.2 Locative clauses
    10.1.5.3 Manner clauses
    10.1.5.4 Reason clauses
    10.1.5.5 Cause clauses
    10.1.5.6 Conditional clauses
    10.1.5.7 Concessive clauses
    10.1.5.8 Indefinite concessive clauses
    10.1.5.9 Substitutive clauses
    10.1.5.10 Purpose clauses
    10.1.5.11 Absolutive clauses
  10.2 Sequential clauses
  10.3 Clause juxtaposition
  10.4 Clause Coordination
    10.4.1 Conjunctive coordination
    10.4.2 Disjunctive coordination
    10.4.3 Adversative coordination
<table>
<thead>
<tr>
<th>Chapter 11 Pragmatically marked structures</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1 Detached phrases</td>
<td>597</td>
</tr>
<tr>
<td>11.1.1 Left-detached phrases</td>
<td>597</td>
</tr>
<tr>
<td>11.1.2 Right-detached phrases</td>
<td>598</td>
</tr>
<tr>
<td>11.2 Topicalisation</td>
<td>599</td>
</tr>
<tr>
<td>11.2.1 Topic-comment construction</td>
<td>602</td>
</tr>
<tr>
<td>11.2.2 Function of topic markers</td>
<td>611</td>
</tr>
<tr>
<td>11.2.2.1 General topic marker</td>
<td>613</td>
</tr>
<tr>
<td>11.2.2.2 Contrastive topic maker</td>
<td>614</td>
</tr>
<tr>
<td>11.2.2.3 Emphatic topic marker</td>
<td>617</td>
</tr>
<tr>
<td>11.2.2.4 Additive topic marker</td>
<td>619</td>
</tr>
<tr>
<td>11.2.3 Presentation topic construction</td>
<td>621</td>
</tr>
<tr>
<td>11.3 Cleft constructions</td>
<td>623</td>
</tr>
<tr>
<td>11.3.1 Cleft</td>
<td>624</td>
</tr>
<tr>
<td>11.3.2 Pseudo-cleft</td>
<td>626</td>
</tr>
<tr>
<td>11.4 Verb repetition</td>
<td>628</td>
</tr>
<tr>
<td>11.4.1 Highlighted form</td>
<td>628</td>
</tr>
<tr>
<td>11.4.2 Pluractional</td>
<td>632</td>
</tr>
<tr>
<td>11.4.3 Durative</td>
<td>633</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appendices</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A Buwal lexicon</td>
<td>635</td>
</tr>
<tr>
<td>Appendix B Texts</td>
<td>673</td>
</tr>
<tr>
<td>Text 1 The stealing of the leper’s wife</td>
<td>673</td>
</tr>
<tr>
<td>Text 2 The story of the favoured and non-favoured wife</td>
<td>683</td>
</tr>
<tr>
<td>Text 3 The story of the baboon</td>
<td>692</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>705</td>
</tr>
</tbody>
</table>
# List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Summary of number Buwal informants providing texts</td>
<td>23</td>
</tr>
<tr>
<td>1.2</td>
<td>Summary of genres of Buwal texts</td>
<td>24</td>
</tr>
<tr>
<td>2.1</td>
<td>Skeleton structures for simple Buwal verb roots</td>
<td>29</td>
</tr>
<tr>
<td>2.2</td>
<td>Buwal consonant phonemes</td>
<td>30</td>
</tr>
<tr>
<td>2.3</td>
<td>Criteria for the segmental nature of complex consonants</td>
<td>31</td>
</tr>
<tr>
<td>2.4</td>
<td>Surface vowels in Buwal</td>
<td>49</td>
</tr>
<tr>
<td>2.5</td>
<td>Summary of the environments in which surface vowels occur</td>
<td>49</td>
</tr>
<tr>
<td>2.6</td>
<td>Variation in leftward spread of palatalisation from verb root to prefixes</td>
<td>53</td>
</tr>
<tr>
<td>2.7</td>
<td>Summary of leftward palatalisation spread from verb roots to prefixes</td>
<td>53</td>
</tr>
<tr>
<td>2.8</td>
<td>Variation in leftward spread of palatalisation from verb suffix</td>
<td>54</td>
</tr>
<tr>
<td>2.9</td>
<td>Summary of leftward palatalisation spread from a verbal suffix</td>
<td>54</td>
</tr>
<tr>
<td>2.10</td>
<td>Buwal syllable types</td>
<td>70</td>
</tr>
<tr>
<td>2.11</td>
<td>Buwal consonant distribution</td>
<td>72</td>
</tr>
<tr>
<td>2.12</td>
<td>Variation in length of inserted vowel in word initial CC clusters</td>
<td>80</td>
</tr>
<tr>
<td>2.13</td>
<td>Attested heterosyllabic consonant clusters</td>
<td>82</td>
</tr>
<tr>
<td>2.14</td>
<td>Attested word medial complex onsets</td>
<td>85</td>
</tr>
<tr>
<td>2.15</td>
<td>Tone melodies on monosyllabic noun roots with full vowels</td>
<td>88</td>
</tr>
<tr>
<td>2.16</td>
<td>Tone melodies on monosyllabic noun roots with epenthetic vowels</td>
<td>89</td>
</tr>
<tr>
<td>2.17</td>
<td>Tone melodies on monosyllabic noun roots with syllabic nasals</td>
<td>89</td>
</tr>
<tr>
<td>2.18</td>
<td>Tone melodies on disyllabic noun roots with full vowels</td>
<td>90</td>
</tr>
<tr>
<td>2.19</td>
<td>Tone melodies on disyllabic noun roots with epenthetic vowel</td>
<td>91</td>
</tr>
<tr>
<td>2.20</td>
<td>Tone melodies on disyllabic noun roots with a syllabic nasal</td>
<td>91</td>
</tr>
<tr>
<td>2.21</td>
<td>Tone melodies on trisyllabic nouns with full vowels</td>
<td>92-93</td>
</tr>
<tr>
<td>2.22</td>
<td>Tone melodies on monosyllabic verb roots with full vowels</td>
<td>94</td>
</tr>
<tr>
<td>2.23</td>
<td>Tone melodies on monosyllabic verb roots with epenthetic vowels</td>
<td>95</td>
</tr>
<tr>
<td>2.24</td>
<td>Tone melodies on monosyllabic verb roots with a syllabic nasal</td>
<td>95</td>
</tr>
<tr>
<td>2.25</td>
<td>Tone melodies on disyllabic verb roots</td>
<td>95</td>
</tr>
<tr>
<td>2.26</td>
<td>Buwal consonant graphemes</td>
<td>107</td>
</tr>
<tr>
<td>2.27</td>
<td>Buwal vowel graphemes</td>
<td>108</td>
</tr>
<tr>
<td>3.1</td>
<td>Summary of the functions of open word classes</td>
<td>115</td>
</tr>
<tr>
<td>3.2</td>
<td>Summary of noun root skeleton structures</td>
<td>118</td>
</tr>
<tr>
<td>3.3</td>
<td>Buwal possessed kinship terms</td>
<td>120</td>
</tr>
<tr>
<td>Table Reference</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Table 3.4: Animate nouns which take the plural suffix</td>
<td>125</td>
<td></td>
</tr>
<tr>
<td>Table 3.5: Buwal birth order names</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>Table 3.6: Group 1 temporal nouns</td>
<td>133</td>
<td></td>
</tr>
<tr>
<td>Table 3.7: Buwal days of the week</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>Table 3.8: Buwal months of the year</td>
<td>135</td>
<td></td>
</tr>
<tr>
<td>Table 3.9: Group 2 temporal nouns</td>
<td>136</td>
<td></td>
</tr>
<tr>
<td>Table 3.10: Buwal relational nouns</td>
<td>139</td>
<td></td>
</tr>
<tr>
<td>Table 3.11: Buwal ordinal numbers</td>
<td>146</td>
<td></td>
</tr>
<tr>
<td>Table 3.12: Summary of skeleton structures for simple verb roots</td>
<td>153</td>
<td></td>
</tr>
<tr>
<td>Table 3.13: Buwal verb roots derived from adjectives</td>
<td>154</td>
<td></td>
</tr>
<tr>
<td>Table 3.14: Gavar cognates of Buwal reduplicated verb roots</td>
<td>156</td>
<td></td>
</tr>
<tr>
<td>Table 3.15: Structure of Buwal verbal word</td>
<td>156</td>
<td></td>
</tr>
<tr>
<td>Table 3.16: Buwal person/number markers</td>
<td>158</td>
<td></td>
</tr>
<tr>
<td>Table 3.17: Buwal mā ‘mouth’ verbs</td>
<td>175</td>
<td></td>
</tr>
<tr>
<td>Table 3.18: Summary of skeleton structures of simple adjective roots</td>
<td>177</td>
<td></td>
</tr>
<tr>
<td>Table 3.19: Semantic domains of Buwal adjectives</td>
<td>181</td>
<td></td>
</tr>
<tr>
<td>Table 3.20: Buwal ideophones</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Table 3.21: Buwal modal clausal adverbs</td>
<td>204</td>
<td></td>
</tr>
<tr>
<td>Table 3.22: Buwal linking adverbs</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>Table 4.1: Buwal personal pronouns</td>
<td>214</td>
<td></td>
</tr>
<tr>
<td>Table 4.2: Buwal words which fulfil various functions indefinite pronouns.</td>
<td>221</td>
<td></td>
</tr>
<tr>
<td>Table 4.3: Buwal possessive pronouns</td>
<td>225</td>
<td></td>
</tr>
<tr>
<td>Table 4.4: Buwal interrogative pro-forms</td>
<td>228</td>
<td></td>
</tr>
<tr>
<td>Table 4.5: Buwal demonstratives</td>
<td>243</td>
<td></td>
</tr>
<tr>
<td>Table 4.6: Buwal basic cardinal numerals</td>
<td>265</td>
<td></td>
</tr>
<tr>
<td>Table 4.7: Buwal quantifiers</td>
<td>269</td>
<td></td>
</tr>
<tr>
<td>Table 4.8: Buwal complex prepositions</td>
<td>283</td>
<td></td>
</tr>
<tr>
<td>Table 4.9: Buwal prepositions taking PP complements</td>
<td>286</td>
<td></td>
</tr>
<tr>
<td>Table 4.10: Buwal prepositions with no complement</td>
<td>288</td>
<td></td>
</tr>
<tr>
<td>Table 4.11: Frequency of negative particles in verbal and verbless clauses</td>
<td>291</td>
<td></td>
</tr>
<tr>
<td>Table 4.12: Functions of ma in Buwal</td>
<td>303</td>
<td></td>
</tr>
<tr>
<td>Table 5.1: Structure of basic noun phrase</td>
<td>315</td>
<td></td>
</tr>
<tr>
<td>Table 5.2: Restrictions on the co-occurrence of various noun phrase constituents</td>
<td>320</td>
<td></td>
</tr>
</tbody>
</table>
Table 5.3: Structure of genitive construction formed by juxtaposition:
head-modifier  341
Table 5.4: Structure of genitive construction formed by juxtaposition:
modifier-head  347
Table 5.5: Structure of genitive constructions formed using a genitive marker  348
Table 5.6: Structure of coordinate noun phrases with the conjunction éj  354
Table 5.7: Structure of coordinate noun phrases with the conjunction lég  355
Table 5.8: Structure of symmetrical disjunctive coordination of noun phrases  357
Table 5.9: Structure of rejection disjunctive coordination of noun phrases  358
Table 6.1: Buwal tense/aspect prefixes  360
Table 6.2: Buwal verbal particles  379
Table 7.3: Structure of Buwal prepositional phrase  397
Table 7.4: Semantic roles of Buwal prepositional phrases with NP complements  399
Table 7.5: Semantic roles of prepositions with PP complements  408
Table 7.6: Semantic roles of Buwal prepositions with no complement  410
Table 8.1: Structure of the Buwal basic verbal clause  415
Table 8.2: Summary of semantic types of Buwal verbless clauses and their structures  445
Table 8.3: The Buwal stative verbless clause  446
Table 8.4: Structure of Buwal existential clause  454
Table 8.5: Structure of Buwal comparatives of inequality  461
Table 8.6: Structure of comparative of inequality with dāj ‘more’  463
Table 8.7: Structure of comparative of inequality with pá ‘at a level’  463
Table 9.1: Buwal imperative mood marking  469
Table 10.1: Formal and semantic properties of Buwal subordinate clauses  527
Table 10.2: Structure of Buwal complement clauses  530
Table 10.3: Summary of variety of meanings associated with different matrix predicates  541
Table 10.4: Structure of Buwal speech reports  542
Table 10.5: Frequency of methods of marking direct speech reports  543
Table 10.6: Structure of Buwal resumptive speech reports  552
Table 10.7: Structure of the Buwal relative clause marker with mà

Table 11.1: Structure of topic-comment construction

Table 11.2: Buwal topic markers

Table 11.3: Buwal presentation construction

Table 11.4: Structure of the Buwal cleft construction

Table 11.5: Structure of the Buwal pseudo-cleft construction

Table 11.6: Reduplicated forms of Buwal verbs

List of Figures

Figure 2.1: Waveform of [pʊ̄tōkʷ] ‘tear in passing’

Figure 2.2: Waveform of [fɐ̄t] ‘slice’ followed by [jám] ‘also’

Figure 2.3: Waveform of [skən] ‘thing’

Figure 2.4: Waveform of [kˈləŋ] ‘threshing floor’

Figure 2.5: Waveform of [kʷʊ̄ɮɐ̄ktəɗɐ̄k] ‘leech’

Figure 2.6: Waveform of the words [ɓɐ́ɓɐ̄] ‘deaf-mute’ and [bɐ̀bɐ̀t̺] ‘plough’

Figure 2.7: Waveform of the words [ɗɐ̄ɗɐ̄] ‘prickly grass seeds’ and [ɗɐ̀d̺p̺] ‘be beautiful’

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

Figure 2.9: Positive statement showing falling intonation at utterance boundary

Figure 2.10: Negative statement showing utterance final falling tone

Figure 2.11: Information question showing utterance final falling tone

Figure 2.12: Polar question showing utterance final falling intonation

Figure 2.13: Imperative showing utterance final falling tone

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

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

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

Figure 2.17: Verb with underlying mid tone non-pausal
Figure 2.18: Verb with underlying mid tone before a pause – mid becomes high 101
Figure 3.1: Illustration of example (3.38) showing the Buwal conception of ‘front’ 140
Figure 4.1: Contrasting formants of the vowel of the 3rd person stative pronoun

\[ \text{mb} \text{3SG vs the independent pronoun mbē.} \] 220
Figure 4.2: Croft’s (1991:6) Negative-existential diachronic cycle 293
Figure 10.1: Typological hierarchy of relativised elements 555

**List of Maps**

Map 1.1: Location of Buwal language area in Cameroon 2
Map 1.2: Location of Buwal language area in the Mandara mountains 3
Map 1.3: Buwal and neighbouring languages 5
Map 1.4: The village of Gadala and its environs 11
## List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1\textsuperscript{st} person</td>
</tr>
<tr>
<td>2</td>
<td>2\textsuperscript{nd} person</td>
</tr>
<tr>
<td>3</td>
<td>3\textsuperscript{rd} person</td>
</tr>
<tr>
<td>ACC</td>
<td>Accomplishment</td>
</tr>
<tr>
<td>ACT</td>
<td>Action</td>
</tr>
<tr>
<td>ADD</td>
<td>Additive</td>
</tr>
<tr>
<td>ANT</td>
<td>Anticipation</td>
</tr>
<tr>
<td>ASP</td>
<td>Aspect</td>
</tr>
<tr>
<td>ASS</td>
<td>Associative</td>
</tr>
<tr>
<td>BEN</td>
<td>Autobenefactive</td>
</tr>
<tr>
<td>C</td>
<td>Consonant</td>
</tr>
<tr>
<td>COL</td>
<td>Collective</td>
</tr>
<tr>
<td>COMPL</td>
<td>Completive</td>
</tr>
<tr>
<td>CONF</td>
<td>Confirmation</td>
</tr>
<tr>
<td>CONT</td>
<td>Contrastive</td>
</tr>
<tr>
<td>COP</td>
<td>Copula</td>
</tr>
<tr>
<td>DEF</td>
<td>Definite</td>
</tr>
<tr>
<td>DEM</td>
<td>Demonstrative</td>
</tr>
<tr>
<td>DET</td>
<td>Determiner</td>
</tr>
<tr>
<td>DIST</td>
<td>Distal</td>
</tr>
<tr>
<td>DOBJ</td>
<td>Direct object</td>
</tr>
<tr>
<td>DUAL</td>
<td>Dual</td>
</tr>
<tr>
<td>DUB</td>
<td>Dubitative</td>
</tr>
<tr>
<td>EMPH</td>
<td>Emphatic</td>
</tr>
<tr>
<td>EXCL</td>
<td>Exclusive</td>
</tr>
<tr>
<td>EXIST</td>
<td>Existential</td>
</tr>
<tr>
<td>FAM</td>
<td>Familiar</td>
</tr>
<tr>
<td>GEN</td>
<td>Genitive</td>
</tr>
<tr>
<td>fr.</td>
<td>French</td>
</tr>
<tr>
<td>ful.</td>
<td>Fulfulde</td>
</tr>
<tr>
<td>FUT</td>
<td>Future</td>
</tr>
<tr>
<td>HORT</td>
<td>Hortative</td>
</tr>
<tr>
<td>IMP</td>
<td>Imperative</td>
</tr>
<tr>
<td>INCL</td>
<td>Inclusive</td>
</tr>
<tr>
<td>IND</td>
<td>Indefinite</td>
</tr>
<tr>
<td>INF</td>
<td>Infinitive</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Meaning</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>IOBJ</td>
<td>Indirect object</td>
</tr>
<tr>
<td>IPFV</td>
<td>Imperfective</td>
</tr>
<tr>
<td>IT</td>
<td>Itive</td>
</tr>
<tr>
<td>JUS</td>
<td>Jussive</td>
</tr>
<tr>
<td>L</td>
<td>Low tone</td>
</tr>
<tr>
<td>M</td>
<td>Mid tone</td>
</tr>
<tr>
<td>MED</td>
<td>Medial</td>
</tr>
<tr>
<td>NEG</td>
<td>Negation</td>
</tr>
<tr>
<td>NOM</td>
<td>Nominalisation</td>
</tr>
<tr>
<td>PART</td>
<td>Participle</td>
</tr>
<tr>
<td>PAT</td>
<td>Patient</td>
</tr>
<tr>
<td>PFV</td>
<td>Perfective</td>
</tr>
<tr>
<td>PL</td>
<td>Plural</td>
</tr>
<tr>
<td>POL</td>
<td>Politeness</td>
</tr>
<tr>
<td>POSS</td>
<td>Possessive</td>
</tr>
<tr>
<td>PREP</td>
<td>Preposition</td>
</tr>
<tr>
<td>PROX</td>
<td>Proximal</td>
</tr>
<tr>
<td>PSP</td>
<td>Possessive subject pronoun</td>
</tr>
<tr>
<td>Q</td>
<td>Question</td>
</tr>
<tr>
<td>QUOT</td>
<td>Quotative</td>
</tr>
<tr>
<td>REL</td>
<td>Relative marker</td>
</tr>
<tr>
<td>RES</td>
<td>Resumptive</td>
</tr>
<tr>
<td>TOP</td>
<td>Topic marker</td>
</tr>
<tr>
<td>SBJ</td>
<td>Subject</td>
</tr>
<tr>
<td>SG</td>
<td>Singular</td>
</tr>
<tr>
<td>SIM</td>
<td>Simultaneity</td>
</tr>
<tr>
<td>SPEC</td>
<td>Speculative</td>
</tr>
<tr>
<td>INF</td>
<td>Infinitive</td>
</tr>
<tr>
<td>IT</td>
<td>Itive</td>
</tr>
<tr>
<td>STAT</td>
<td>Stative</td>
</tr>
<tr>
<td>TAG</td>
<td>Tag question</td>
</tr>
<tr>
<td>TNS</td>
<td>Tense</td>
</tr>
<tr>
<td>TOP</td>
<td>Topic</td>
</tr>
<tr>
<td>TRANS</td>
<td>Transitivity</td>
</tr>
<tr>
<td>V</td>
<td>Vowel</td>
</tr>
<tr>
<td>VNT</td>
<td>Ventive</td>
</tr>
<tr>
<td>VPt</td>
<td>Verbal particle</td>
</tr>
</tbody>
</table>
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.
Acknowledgements

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

Firstly, I would like to thank my husband Michael and my son Aaron for their encouragement and support. Thanks especially to Michael for his willingness to be flexible and play the role of house husband in order to give me the time to work on this project. Without his encouragement and belief in me, this achievement would not have been possible.

I would also like to express my warm appreciation of each one my supervisors. I consider myself privileged to have has such high quality supervision. Firstly, Yvonne Treis, who was the first to work with me, and later Birgit Hellwig, gave me many useful comments and suggestions and were eager to share their extensive knowledge of African languages and linguistics in general. Thanks also to Marija Tabain for her comments on the phonology chapter in the early stages. I also wish to thank Tonya Stebbins, my primary supervisor in the final year, for not only her many helpful suggestions in the area of structure and expression but also her warm sympathy and friendship.

Thanks is also due to the Centre for Research on Language Diversity (formerly the Research Centre for Linguistic Typology) for allowing me to conduct my research in an encouraging and stimulating environment. I have greatly enjoyed and benefitted from the various seminars and workshops held at the Centre as well interactions and friendships with individual members.

Various sources of funding supported me throughout my candidature, the most significant being an Australian postgraduate award and a top-up scholarship from the Faculty of Humanities and Social Sciences of La Trobe University. My first field trip was funded by the Research Centre for Linguistic Typology. The second fieldtrip was funded by the Sustainable Research Funding Scheme of the Faculty of Humanities and Social Sciences.

I also wish to thank my friends and colleagues from SIL Cameroon for their friendship and practical support during my fieldtrips. In particular, I would like to acknowledge Jolanda Walhout, Philip Burgess, Arjan Branger and Ndokobai Dadak from CABTAL.
Thanks also to our Language Programs Coordinator at the time, Teresa Heath. Richard Gravina, in his capacity as a linguistics consultant also gave me much valuable feedback on my analysis of the phonology and verbs of Buwal.

My research in Cameroon was made possible by the Ministry of Scientific Research and Innovation (MINRESI) of the government of Cameroon and the local authorities who gave their permission for me to live and work in the Buwal area.

Finally, I gratefully acknowledge the significant contribution of the Buwal people. They warmly welcomed our family into their community and were eager to assist in the language work. Firstly, I would like to thank his excellency Alhaji Haman Mokol, the chief of Gadala, for his permission to live and work in the area. Thanks also to Gondji Zra and Konai François, the presidents of the Comité de langue et culture Buwal (‘Buwal Language and Culture Committee’) and the Association des églises Buwals pour la traduction de la Bible (‘Association of Buwal Churches for the Translation of the Bible’) respectively, for their encouragement and practical support. I wish to express particular appreciation for my regular language informants, Deli Benjamin, Kodji Neftalim, Koyang Paul, Hamadou Matthieu and Dawai Térèse. They spent many hours with me making recordings and answering my questions about the language with patience and good humour. Without them, this project could not have been possible. I also acknowledge the contributions of others such as Konai Pascal, Mbouvai François, Koyang Ernest and Bouba Christophe in the collection of lexical data and the development of the Buwal orthography. Thanks also to the many other Buwal speakers who provided natural texts and allowed me to practise conversation with them. I am deeply grateful for the opportunity to live with and learn from this unique people group.
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. Vigen

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).

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.
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 Fula 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 Fula 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 Tchikou (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.


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 Ziegelmeier (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.


### 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.
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 *Mazkəd* 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 chiefdom 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 were 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](http://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 madarlaŋʷ, 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 Gawai (M. R. T. Viljoen 2008: 7).
1.2.2 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 (ga5avaj) 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 (kʷle) 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 (welɓe) may also be represented by idols,
with offerings being made to them for their appeasement. Another type of idol (w³af) 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 (dafaq) 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”) who are not sorcerers themselves but have special spiritual insight and are able to discern the identity of a sorcerer.

Blacksmiths (mlşa) 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”ók”às), who traditionally is a member of the chiefly clan of Mazay, presides over all these festivals. The first festival is Ghene (γènè) 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 (*xeftek*) 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 *kangay* 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 (*gadzamba*), a big flute with finger holes (*talga*) 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 (*nyenge*) and the shakers (*mek’edê*). 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 Cameroun) 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 practice 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

<table>
<thead>
<tr>
<th>Gender/Age</th>
<th>&lt;30yrs</th>
<th>30-45yrs</th>
<th>&gt;45yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5</td>
<td>11</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Genre</th>
<th>Code</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversation</td>
<td>C</td>
<td>18</td>
</tr>
<tr>
<td>Descriptive exposition</td>
<td>DE</td>
<td>21</td>
</tr>
<tr>
<td>Descriptive procedural</td>
<td>DP</td>
<td>13</td>
</tr>
<tr>
<td>Hortatory</td>
<td>HT</td>
<td>8</td>
</tr>
<tr>
<td>Narrative fiction</td>
<td>NF</td>
<td>7</td>
</tr>
<tr>
<td>Narrative history</td>
<td>NH</td>
<td>16</td>
</tr>
<tr>
<td>Prayer</td>
<td>BH</td>
<td>5</td>
</tr>
<tr>
<td>Prescriptive procedural</td>
<td>PP</td>
<td>6</td>
</tr>
<tr>
<td>Projection</td>
<td>EP</td>
<td>1</td>
</tr>
<tr>
<td>Traditional narrative</td>
<td>TN</td>
<td>4</td>
</tr>
</tbody>
</table>
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 égē 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 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 verbs roots.

Table 2.1: Skeleton structures for simple Buwal verb roots

<table>
<thead>
<tr>
<th>Structure</th>
<th>Example</th>
<th>Structure</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1C Ca</td>
<td>[dè] /dà/ ‘prepare/cook’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2C CaC</td>
<td>[wàn] /wān/ ‘sleep’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3C CCaC</td>
<td>[fɔ́dàx] /fə̀dāx/ ‘wake up’</td>
<td>CaCaC</td>
<td>[lìwàt’] /lāwād/ ‘play’</td>
</tr>
<tr>
<td>4C CCCaC</td>
<td>[ŋɔ̀bàl] /nɔ̀bāl/ ‘tire’</td>
<td>CaCCaC</td>
<td>[gʷɔ́rzàm] /gʷàrzàm/ ‘get up’</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th></th>
<th>Labial</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Labialised Velar</th>
<th>Labial-Velar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plosive-voiceless</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td>kʰ</td>
<td>kʷ</td>
<td>kp</td>
</tr>
<tr>
<td>Plosive-voiced</td>
<td>b</td>
<td>d</td>
<td>g</td>
<td>gʰ</td>
<td>gʷ</td>
<td>gb</td>
</tr>
<tr>
<td>Plosive – voiced, prenasalised</td>
<td>mb</td>
<td>ʰd</td>
<td>ʰg</td>
<td>ʰgʷ</td>
<td>ʰmgb</td>
<td></td>
</tr>
<tr>
<td>Implosive</td>
<td>ɓ</td>
<td>ɗ</td>
<td>x</td>
<td>xʰ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricative – voiceless</td>
<td>f</td>
<td>s</td>
<td>ɹ</td>
<td>ɹʰ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricative – voiced</td>
<td>v</td>
<td>z</td>
<td>ɣ</td>
<td>ɣʰ</td>
<td>ɣʷ</td>
<td></td>
</tr>
<tr>
<td>Affricate-voiceless</td>
<td>ts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affricate-voiced</td>
<td>dz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affricate-voiced, prenasalised</td>
<td>ʰdz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>m</td>
<td>n</td>
<td>ɲ</td>
<td>ɲʰ</td>
<td>ɲʷ</td>
<td></td>
</tr>
<tr>
<td>Lateral approximant</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral fricative-voiceless</td>
<td>ɬ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral fricative-voiced</td>
<td>ɮ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trill</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flap</td>
<td>ɻ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glides</td>
<td>j</td>
<td></td>
<td></td>
<td></td>
<td>w</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Consonant Type</th>
<th>Reduplication</th>
<th>Word final position</th>
<th>Reversed order</th>
<th>Epenthetic vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prenasalised</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>plosives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affricate</td>
<td>Yes</td>
<td>Voiceless only</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Labialised velars</td>
<td>Yes</td>
<td>Voiceless only</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

(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. [tsɛp’tsɛp’y] /tsάb-tsάb/ (/tsάb/) ‘a bit sour’
b. [kwɔtsɛk’wɔtsɛ] /kwʌtsʌ-k’wʌtsʌ/ (/kwʌtsʌ/) ‘here and there’
c. [mbɛrm’bɛr] /mbaɭ-mbaɭv/ (/mbaɭv/) ‘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]/  (/tráj/)  ‘dried out’
[brèfbrèj]  /brás-brás]/  (/brás/)  ‘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.  [tsëtsël]  /tsatsal/  (/tsal/)  ‘arrange’
b.  [kʷékʷéʃɛ́]  /kʷákʷásal/  (/kʷásal/)  ‘kindling’
c.  [“bèz”bèzè]  /m bàz-bázë/  (/m báz/)  ‘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 C₁V₁C₁C₂V₁C₃. 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)  [dëdrës]  /dâdrës/  (/drës/)  ‘blunten’
[këklëk]  /kâklâk/  (/klâk/)  ‘cackle’
[gëgrëŋ]  /gâgrëŋ/  (/grëŋ/)  ‘insufficient’
* [tëtsël]  /tatsal/  (/tsal/)
* [kʷëkʷëʃɛ́]  /kakʷasal/  (/kʷasal/)

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)  [gëgër]  /gàgàr]/  (/gàr/)  ‘rub’
[dëdëlëŋ]  /dàdàlëŋ]/  (/dàlëŋ/)  ‘circular’
[gëgëlëŋ]  /gàgàlëŋ]/  (/gàlëŋ/)  ‘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) $[tsɛŋtsɛt'] /tsântsâd/ (/ntsâd/) ‘flea’
$[kɛŋkâs] /kânkâs/ (/nkâs/) ‘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. $[hɛts] /xâts/ ‘surround’$
b. $[dōkʷ] /dâkʷ/ ‘horse’$

(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. $[ŋvə] /nvâ/ ‘excrement’
$[nŋʃ] /nsân/ ‘seed’
$[vnə] /vnâ/ ‘vomit’
$b. [skʷə]/skʷâj/ ‘calabash seed’
$[kʷs̪ə]/kʷsàm/ ‘body’
$[ŋpə]/ŋpə/ ‘late’
$[pəsə]/psâr/ ‘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) $[dənəz] /dnâz/ ‘tree sp.’
$[ɡi nəʃ] /gnâx/ ‘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) \[\text{b̃t} \] /bã/) ‘deceive’ \[\text{p̃t} \] /pã/) ‘wrap up’
\[m̃b̃s] /mãs/ ‘shoulder’ \[m̃p̃t] /mãt/ ‘morning’

(2.11) \[d̃m \] /dã/) ‘enter’ \[t̃m \] /tã/) ‘pour’
\[d̃t̃k \] /dãtã/) ‘dirty’ \[t̃t̃k \] /tãtã/) ‘chase’

(2.12) \[g̃d̃t̃ \] /gãdã/) ‘arrow’ \[k̃d̃k \] /kãdã/) ‘good’
\[h̃g̃m \] /hãgã/) ‘yawn’ \[p̃k̃m \] /pãkã/) ‘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 [pʊ̄tōkʷ] ‘tear in passing’ utterance final showing aspiration of word initial, intervocalic, and word final voiceless plosives.

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

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

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 [ɓɐ́ɓɐ̄] ‘deaf-mute’ and [bɐ̀bɐ̀t] ‘plough’ contrasting the Buwal bilabial implosive with the voiced bilabial plosive.

Figure 2.7: Waveform of the words [ɗɐ̄ɗɐ̄] ‘prickly grass seeds’ and [dɐ̀dɐ̀p] ‘be beautiful’ contrasting the Buwal alveoalar 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) [ɓês] /ɓās/ ‘laugh’ [ɗês] /ɗās/ ‘cultivate’
[kérɓ] /kárɓa/ ‘even though’ [sərɗ] /sərdá/ ‘marrow’

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

(2.14) [ɓês] /ɓās/ ‘laugh’ [ɓês] /ɓās/ ‘light (fire)’
[həɓl] /xɓāl/ ‘move’ [həɓ] /xɓār/ ‘watch over’

(2.15) [ɗ] /ɗā/ ‘draw’ [ɗ] /ɗā/ ‘cook’
[gəɗk] /gɗāk/ ‘reduce’ [gəɗk] /gɗāk/ ‘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) [jũpʻ] /jã́b/ ‘wash’ [bũtʻ] /bã́d/ ‘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) [fɛl] /fã́l/ ‘increase’ [vɛl] /vã́l/ ‘give’
[ʃɛfɛn] /ʃãfɛn/ ‘flower’ [ʃɛvɛn] /ʃãvɛn/ ‘guinea fowl’

(2.18) [sɛtʻ] /sã́d/ ‘besmear’ [zɛtʻ] /záð/ ‘not far’

(2.19) [hɛdɛ] /xãdã́/ ‘on it’ [yɛdɛ] /yãdã́/ ‘grass sp.’

(2. 20) [lɛ] /lã/ ‘arrange’ [bɛ] /bã́/ ‘cut’

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 intervocalically and after a consonant (2.21b) and the velar fricative [x] occurs in syllable final position (2.21c).
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. [sɐ́n] /sàn/ ‘know’ [ʃɛ̄ŋʃɛ̄ŋ] /sāŋsāŋ\(^Y\) ‘shadow’
    [msɐ́r] /msār/ ‘fray’ [mʃɛ́t] /msād\(^Y\) ‘nastiness’
    b. [zɐ́m] /zm̩m/ ‘eat’ [ʒɛ́ŋʒɛ́ŋ] /zàŋzàŋ\(^Y\) ‘python’
    [bə́zɐ́m] /bz̩m/ ‘chin’ [ɓɪ́ʒɛ́m] /ɓz̩m\(^Y\) ‘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) [ts̩] /ts̩/ ‘put’ [dz̩] /dz̩/ ‘hit’
    [ts̩ɛt̩s̩l] /ts̩ɛt̩sl/ ‘arrange’ [dz̩ɛz̩ɛr] /dz̩ɛz̩ɛr/ ‘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. [ts̩m] /ts̩m/ ‘pick up’ [tʃ̩m] /ts̩m\(^Y\)/ ‘defend’
    b. [dz̩] /dz̩/ ‘hit’ [dʒ̩] /dz̩\(^Y\)/ ‘elope’
    [dz̩ɛdz̩ɛk] /dz̩ɛdz̩ɛk/ ‘heap’ [dʒ̩ɛdz̩ɛk\(w\)] /dz̩ɛdz̩ɛk\(w\)/ ‘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 /ŋʷ/, 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) [mɐ̄] /mā/ ‘mouth’ [nɐ̄] /nā/ ‘ferment’
[dɔmɐ̄] /dmā/ ‘bride’ [vɔnɐ̄] /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 /ŋɡ/. 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 /ŋɡ/ in this position.

(2.26) a. [ʃɛm] /ʃam/ ‘ear’
[ʃɛn] /ʃan/ ‘work’
[ʃɛŋ] /ʃän/ ‘cross’
b. [ʒɛn] /zän/ ‘return’
[ʒɛŋ] /zän/ ‘hang up’
c. [lɛm] /läm/ ‘get, obtain’
[lɛŋ] /läŋ/ ‘plus’

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

(2.27) a. [dɛntsɛ] /däntsä/ ‘conjunctivitis’
[tsɛntsɛt] /tsäntsäd/ ‘flea’
b. \[\text{tʃɛ̄ntʃɛ́l}\] /tsǟntsə̄l/ ‘summit’
\[\text{tʃɛ̄ŋtʃɛ́lɛ́m}\] /tsǟŋtsə̄lə̄m/ ‘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. [ŋ̥v̥] /nvə̄/ ‘excrement’
[ŋ̥k̥m] /nkə̄m/ ‘stem’
b. [ŋ̥ʼk̥ˈax] /nkʷˈax/ ‘six’
[ŋ̥ʼh̥ˈə̄z] /nhʷˈə̄z/ ‘be drunk’
c. [ŋ̥ʃ̥ˈŋ̥] /nsə̄ŋ̥/ ‘seed’
[ŋ̥ʃ̥ˈɛ̄x] /ntsə̄x/ ‘groan’
d. [ŋ̥t̥v̥] ~ [ŋ̥t̥v̥] /ntsə̄v̥/ ‘sew’
[ŋ̥s̥ə̄l] ~ [ŋ̥s̥ə̄l] /nsə̄l/ ‘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) [ŋ̥t̥b̥ə̄l] /ntə̄l/ ‘tired’
\\[mb] ntə̄l/ → [mḅ ə̄l]
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. [ŋ̥ts̥ə̄] /mts̥ə̄/ ‘vagina’
[ŋ̥ts̥] ~ [ŋ̥ts̥] /nts̥ə̄/ ‘bite’
b. [ŋ̥ʃ̥ˈɛ̄t̥] /msə̄d̥ə̄/ ‘nastiness’
[ŋ̥ʃ̥ˈŋ̥] /nsə̄ŋ̥ə̄/ ‘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 /m/, alveolar /n/, velar /ŋ/ and labialised velar /gʷ/ points of articulation as well as the prenasalised voiced alveolar affricate /dz/. The labialised prenasalised velar plosive will be discussed in Section 2.2.8.

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

(2.31) 

- /mb̥t'/ ['mb̥d'] ‘change’ 
- /mb̥b̥z/ ['mb̥b̥r'] ‘deceive’

(2.32) 

- /nd̥/ ['nd̥a'] ‘go’ 
- /nd̥d̥l̥kʷ/ ['nd̥d̥d̥l̥k̊ẘ'] ‘prepare’

(2.33) 

- /nd̥ʒ̊/ ['nd̥d̊ax̊'] ‘eye’ 
- /v̊d̊ʒ̊x̊/ ['v̊d̊ʒ̊d̊jů'] ‘pepper’

(2.34) 

- /ŋ̊ɡ̊p̊/ ['ŋ̊ɡ̊s̊'] ‘transplant’ 
- /k̊ŋ̊ɡ̊m̊/ ['k̊ŋ̊ɡ̊d̊m̊'] ‘knead’

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 /kʷ/ and /gʷ/, voiceless and voiced fricatives /xʷ/ and /ɣʷ/, the prenasalised plosive /gʷ/ and the nasal /ŋʷ/.
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\er] /k\ar/ ‘pick up’ \[k\er] /k\ar/ ‘fence in’
\[t\ek^w\er] /t\ek\ar/ ‘roll up’ \[t\uk\er] /t\uk\ar/ ‘turtle’

(2.36) \[g^w\er] /g\ar/ ‘arrive’ \[g\er] /g\ar/ ‘stand’
\[l\eg^w\odh] /l\eg\ad\a/ ‘dust’ \[b\arg\ad\aŋ] /b\arg\ad\aŋ/ ‘storm’

(2.37) \[^g^w\of\] /^g\af/ ‘throw at’ \[^g\ep\] /^g\af/ ‘transplant’
\[m\eg^w\or\lem\] /m\eg\ar\l\a/ ‘throat’ \[m\eg\ug\r\ej\] /m\eg\ug\r\ej/ ‘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) \[h^w\op\]~\[x^w\op\] /x\af\/ ‘fertilise’ \[h\ep\]~\[x\ep\] /x\af/ ‘swallow’
\[^h^w\ol\] /nx\af/ ‘dry’ \[s\eh\el\] /s\ax\a/ ‘bamboo’

(2.39) \[^y^w\ol\] /^y\af/ ‘show’ \[^y\el\] /^y\af/ ‘female’
\[^b\ug^w\om\] /^b\ug\am/ ‘cheek’ \[^y\em\] /^y\am/ ‘war’

The labialised velar nasal /[^y^w]/, contrasts with its non-labialised counterpart /^y/ (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) \[d\ul\ou^w\] /d\um\/ ‘cat’ \[k\ul\en\] /k\um/ ‘threshing floor’
\[h^w\ov\en\] /x\en\/ ‘compost’ \[v\en\] /v\en/ ‘arrive’

(2.41) \[^h^w\ov\e\] /nx\af/ ‘goat’ \[^g^w\ou^w^k^w\et\] /g\ou^w^k\en\a/ ‘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) [kʷɔ́ɣ]   /kʷɔ́ɣ/ ‘have diarrhea’
[dɔ́ɡʷɔ́ʃ]   /dɔ́ɡʷɔ́ʃ/ ‘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 [ɾ] as an allophone in intervocalic position.

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

(2.43) a. [lɛ̀]   /là/ ‘act, do’
[lèm]   /lèm]/ ‘get’
[rɛ̀]   /rà/ ‘dig’
[rèx]   /rèx]/ ‘heal’

b. [dɛ́lɛ́]   /dàlɛ́/ ‘trap’
[ŋɛ́lɛ́]   /ŋàlɛ́/ ‘intestines’
[fɛ́ɾɛ́]   /fàrɛ́/ ‘horn’
[dʒɛ́ɾɛ́]   /dzàrɛ́/ ‘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) [ɣɔ́vɛ́]   /γɔ́vɛ́]/ ‘never’
[ʊvɛ́]   /wvɛ́/ ‘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. [jib] /já/ ‘say/call’ [wè] /wā/ ‘breast’
   [jìm] /jám/ ‘water’ [wém] /wám/ ‘ten’
   b. [hējìbk] /xājāk/ ‘ground’ [dēwēn] /dāwān/ ‘back’

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
/wādēz/ ‘tree’ [wūdēz] ~ [ʷūdēz] ~ [ūdēz]

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

(2.47) a. [ūdē] /wdā/ ‘food’ [ōnēf] /wnaf/ ‘heart’
   b. [ūlēʔ] /wlād’/ ‘pus’ [ūdʒēk] /wджk/ ‘hut’

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

(2.48) a. [tū’lēk] /tlāk’/ ‘circle’ [mētē’lē] /mātlā’/ ‘lie’

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) [kį’zēŋ] /kįzéŋ/ ‘first-born girl’
   [mīrdēnēk] /mjānāk/ ‘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 [ŋ] (2.52).

(2.51) [fēq] /sàw/ ‘bear with’
[dzēkēdēq] /dzākādzāw/ ‘plant sp.’

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

(2.52) [dɔː] /dāw/ ‘love, want’
[zədoː] /zādāw/ ‘night’

2.2.11 Labial-velar plosives

The labial-velar plosives /kp/, /gb/ and /ṅmb/ 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) [kpəŋ] /kpəŋ/ ‘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 /ɡb/ 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. [ɡbèk] /ɡbák/ ‘manner of grabbing something’
[ɡbóː] /ɡbáw/ ‘manner of finishing completely’
[ɡbəŋʷ] /ɡbāŋʷ/ ‘knock(v)’
[ɡbɛv] /ɡbāv/ ‘knock a hole in something(v)’
[ɡbɛbɔ́] /ɡbābɔ́/ ‘manner of body shining’
b. [ɡbèf] /ɡbàf/ ‘soak through’
[ɡbèk] /ɡbák/ ‘two’
[ɡbèn] /ɡbán/ ‘very close’
[ɡbèr] /ɡbár/ ‘straight’

Eight words containing the prenasalised labial-velar plosive /ŋmɡb/ 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. [ŋmɡbóxʷ] /ŋmɡbáxʷ/ ‘noise of something thrown down’
[ŋmɡbɛm] /ŋmɡbám/ ‘manner of tipping out something’
[ŋmɡbɛm] /ŋmɡbàm/ ‘manner of growing in bunches’
[ŋmɡbèk] /ŋmɡbāk/ ‘stop short’
[ŋmɡbɔ́kʷ] /ŋmɡbàkʷ/ ‘hit with elbow’
b. [ŋmɡbɛt] /ŋmɡbá/ ‘up’
[ŋmɡbɔ́kʷ] /ŋmɡbàkʷ/ ‘hump’
[wɛtɛŋmɡbɛ́] /wātāŋmɡbá/ ‘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. [ɡbèr] /ɡbár/ ‘straight’
[bûr] /bûr/ ‘against’
[fûr] /fûr/ ‘crack’
b. [³mbóxʷ] /³mbáxʷ/ ‘noise of something thrown down’
[”bóxʷ”] /”báxʷ/ ‘pardon’
[ŋbóxʷ] /n̥bāxʷ/ ‘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

<table>
<thead>
<tr>
<th>Underlying form</th>
<th>Surface forms</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Front</td>
<td>Non-Front</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unrounded</td>
<td>Rounded</td>
<td>Unrounded</td>
<td>Rounded</td>
</tr>
<tr>
<td>屑 /Ø/</td>
<td>i/ι</td>
<td>γ</td>
<td>ø</td>
<td>u/ʊ</td>
</tr>
<tr>
<td>Full /a/</td>
<td>e/ɛ</td>
<td>œ</td>
<td>ι</td>
<td>o/ʊ</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Underlying form</th>
<th>Surface forms</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-palatalisation</td>
<td></td>
<td>Palatalised</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>K^w</em> or <em>K^w</em></td>
<td><em>/j/</em></td>
<td><em>/w/</em> or <em>/w/</em></td>
<td><em>K^w</em> or <em>K^w</em></td>
</tr>
<tr>
<td>屑 /Ø/</td>
<td>[σ]</td>
<td>[u]</td>
<td>[ι]</td>
<td>[ι]</td>
</tr>
<tr>
<td>Full /a/</td>
<td>[v]</td>
<td>[v]</td>
<td>[v] or [o]</td>
<td>[ε]</td>
</tr>
</tbody>
</table>

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).
2.3.1 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) [dánt̑a] /dámā/ ‘glue’ [dám̑a] /dmā/ ‘bride’
[ˈɡe̞ɡ̑e̞] /ˈɡał̑a̞y̑/ ‘knife’ [ˈɡe̞ɡ̑e̞] /ŋɡ̑a̞y̑/ ‘forge’
[t̑e̞b̑े̞k̑w] /t̑ab̑ą̈k̑w̑y̑/ ‘bat’ [t̑e̞b̑े̞k̑w] /t̑b̑ą̈k̑w̑/ ‘chaff’
[t̑w̑è̞ȓ] /t̑w̑āȓ/ ‘walk’ [t̑w̑è̞ȓ] /twāȓ/ ‘(be) dizzy’

(2.59) [m̑ęl̑ęh̑ęj̑] /m̑ąl̑áh̑áj̑/ ‘mouse’
[ŋ̑k̑ǭd̑ęn̑] /nk̑d̑āŋ̑/ ‘stone’
[m̑ęd̑ǭw̑ên̑] /m̑ąd̑w̑ān̑/ ‘rat’
[k̑w̑ęl̑ęk̑w̑ę̈ȓ] /k̑w̑āl̑āk̑w̑äȓ/ ‘worn out thing’

[ŋ̑ęd̑ęęd̑ęn̑] /ŋ̑v̑ād̑v̑ād̑āŋ̑y̑/ ‘turtle’
[ŋ̑m̑ęm̑ę̈k̑] /ŋ̑m̑āk̑y̑/ ‘sheep’
[d̑ęd̑ęw̑ę̈k̑] /d̑ād̑w̑āk̑y̑/ ‘bitter’
[k̑w̑ęl̑ęę̈k̑] /k̑w̑āl̑āl̑āy̑/ ‘fine’

The concept of prosodies of palatalisation or labialisation, functioning at either the syllable or the world 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 [e] and the epenthetic vowel in such words is the front vowel [i]. (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 /d3z/. 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) [hɛ̄ʃɛ̄ŋ] /xāsāŋ^2/ ‘forget’
    [ʒɛ̄ʒɛ̄ɗɛ́] /zāzāɗā^2/ ‘giraffe’
    [tfɛ́tʃwɛ́r] /tsātswār^2/ ‘filter’
    [ɡèdʒɛ́rɛ̄] /ɡādzārā^2/ ‘shorts’
    [dibé] /dbā^2/ ‘termite hill’

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

1) Palatalisation spreads leftwards from:

(i) a verb root to its prefixes

(2.61)

```
sa^2 + kā + twlāk^2 → [ʃɛ̄kt̪ɛ̄l̪ek] ‘I am circling.’
1SG.SBJ I PFV circle
```

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 [sĩk̩̂ĵ̩m] ‘I am ____ing also’. 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

<table>
<thead>
<tr>
<th>Speaker 1</th>
<th>Token 1</th>
<th>Token 2</th>
<th>Token 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>[sɐ́kɛ̄tʏ̀lɛ̀k]</td>
<td>[sɐ́kɛ̄tʏ̀lɛ̀k]</td>
<td>[sɐ̄kɛ̄tʏ̀lɛ̀k]</td>
<td></td>
</tr>
<tr>
<td>Speaker 2</td>
<td>[sɛ́kɛ̄tʏ̀lɛ̀k]</td>
<td>[sɛ́kɛ̄tʏ̀lɛ̀k]</td>
<td>[ʃɛ́kɛ̄tʏ̀lɛ̀k]</td>
</tr>
<tr>
<td>Speaker 3</td>
<td>[ʃɛ́kɛ̄tʏ̀lɛ̀k]</td>
<td>[ʃɛ́kɛ̄tʏ̀lɛ̀k]</td>
<td>[ʃɛ́kɛ̄tʏ̀lɛ̀k]</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Speaker</th>
<th>No spread</th>
<th>1 syllable</th>
<th>2 syllables (vowel only)</th>
<th>2 syllables (incl. cons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaker 1 (501 tokens)</td>
<td>33.1%</td>
<td>66.3%</td>
<td>0.6%</td>
<td>-</td>
</tr>
<tr>
<td>Speaker 2 (126 tokens)</td>
<td>-</td>
<td>1.6%</td>
<td>98.4%</td>
<td>-</td>
</tr>
<tr>
<td>Speaker 3 (120 tokens)</td>
<td>44.2%</td>
<td>36.6%</td>
<td>14.2%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

(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 \[h^{w}kêđʒêh^{w}nê\] ‘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

<table>
<thead>
<tr>
<th>Speaker 1</th>
<th>Token 1</th>
<th>Token 2</th>
<th>Token 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>[hʷókédʒΩhʷen̥]</td>
<td>[hʷókédʒΩhʷen̥]</td>
<td>[hʷókédʒΩhʷen̥]</td>
<td></td>
</tr>
<tr>
<td>Speaker 2</td>
<td>[hʷókédʒΩhʷen̥]</td>
<td>[hʷókédʒΩhʷen̥]</td>
<td>[hʷókédʒΩhʷen̥]</td>
</tr>
<tr>
<td>Speaker 3</td>
<td>[hʷókɛ̃dʒΩhʷen̥]</td>
<td>[hʷókɛ̃dʒΩhʷen̥]</td>
<td>[hʷókɛ̃dʒΩhʷen̥]</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Speaker 1</th>
<th>Speaker 2</th>
<th>Speaker 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>(57 tokens)</td>
<td>(60 tokens)</td>
<td>(57 tokens)</td>
</tr>
<tr>
<td>No spread</td>
<td>28.1%</td>
<td>49.1%</td>
</tr>
<tr>
<td>1 syllable</td>
<td>49.1%</td>
<td>13.3%</td>
</tr>
<tr>
<td>2 syllables</td>
<td>8.8%</td>
<td>51.7%</td>
</tr>
<tr>
<td>3 syllables</td>
<td>14.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>4 syllables</td>
<td>-</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

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

(2.63)

```
PAL
/sponsor/ + /kw/ + /md/ + /w/ → [s̥k̥e̊m̥e̊d̥e̊] ‘I swallowed it.’
1SG.SBJ- PFV- swallow -3SG.DOBJ
```

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).
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 dwzáY tsá, dåɓ j dåɓakäjY wnäf äká…/
  at after TOP calm 3PL.SBJ calm-1SG.IOBJ heart ACC

  → [e d¥zé tsé, dèp’ i: dèbeké ü.nëf ëké…]
  ‘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]/ /vápäjY/ ‘when?’
     [ḥëj]/ /ḥäjY/ ‘meat’

b. [gëndëq]/ /gändäwY/ ‘palm’
   [bî ḥëq]/ /bëhäwY/ ‘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).
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. [⁰ɡjēj] /⁰ɡjä]/ ‘pap’
    [ʊ̃ˈʒi̍jé] /wʒjà]/ ‘children’

b. [vʲj̄] /vja/] ‘wet season’
    [fʲjm] /fjam/ ‘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 [ʊ]. 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) \[ hʷōsēp' \] /xʷásāb/ ‘cane rat’
\[ gʷōk'fēm \] /gʷásām'/ ‘ferocity’
\[ kʷōtēj \] /lák'/átāj/ ‘whip(n)’
\[ gʷōdērēk \] /gʷādārēk/ ‘vulture’
\[ tʷōrnēk' \] /tʷārṇāk/ ‘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) \[ kʷōp \] /kʷāp/ ‘throw at’
\[ ɓʊ̀ɣʷòm \] /ɓㄟgʷǎm/ ‘cheek’
\[ hʷōhʷop' \] /xʷāxʷāɓ/ ‘debris’
\[ t̚élɡʷōj \] /t̚āl̚gʷāj/ ‘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. \[ mētōkʷtōkʷɐ \] /mētēkʷtēkʷɐ/ ‘knee’
\[ ŋʷɤ̝ \] /nɤ̝'/ ‘goat’
\[ t̚ergʷɐ \] /tr̚gʷɐ/ ‘granary’

b. \[ dĩmtēkʷst' \] /d̚īmtēkʷd̚'/ ‘tree sp.’
\[ t̚ētʃ̚e̚gʷəfl̚ \] /ts̚ētʃ̚e̚gʷəfl̚/ ‘sorghum head stalk’
\[ n̚ewy \] /kʷewy/ ‘have diarrhea’
\[ kʷēk \] /kʷēk/ ‘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. /mātakʷtākʷā nā ěgāʃ/ → [mētōkʷtōkʷɐ nē (ɛ)g̚] knē 1SG.POSS PL
‘my knees’ (LL20-SE:30)
b. /ārā kʷákʷàs kʷáw/ → [ɐ̄ɾɐ̄ kʷó kʷɔ̄s kʷóː]
   COP sacrifice NEG
   ‘It’s not a sacrifice’

In palatalised words in word initial syllables [œ] appears to be in free variation with [o] ([ɔ] 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) [kʷœ̄kʷɛ̄t] ~ [kʷōkʷɛ̄t] /kʷākʷəd]/ ‘scatter’
    [gʷœ̄ɓɛ́] ~ [gʷōɓɛ́] /gʷāɓ⁄/ ‘fresh’
    [ɣʷœ̀rɡɛ̀] ~ [ɣʷɔ̀rɡɛ̀] /ɣʷərɡə]/ ‘mushroom’

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

(2.76) [t̥ıkʷɔ̄r̥] /t̥ikʷɜ̄r̥/ ‘namesake’
    [gʷɔ̀r̥z̥ɛ́m] /gʷɛ́r̥z̥ɛ́m/ ‘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) [t̥ebɔ̄kʷ] /t̥ebɔ̄kʷ]/ ‘bat’
    [b̥ebɔ̄kʷ] /b̥ebɔ̄kʷ]/ ‘bark (v)’
    [m̥el̥ėkʷd̥ē] /m̥el̥ɛ̄kʷd̥ā]/ ‘dung beetle’
    [m̥et̥okʷt̥okʷ] /m̥et̥akʷt̥akʷa]/ ‘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.
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 /xʷä-/ 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. /xʷä- + /bābāxʷ/ → [hʷōbēbōxʷ]
   2SG.SBJ- bark
   ‘You bark.’

b. /xʷä- + /kʷāp/ → [hʷōkʷōp]
   2SG.SBJ- throw at
   ‘You throw at.’

c. /xʷä- + /jàkʷ/ → [hʷōjōkʷ] ~ [hʷōjōkʷ]
   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 [mɛmɛ̀]. 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).

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, [-āhʷō] and [-āhʊ̀ n ɛ̀]. 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).

(2.80) a. /mɛmɛ̀/ + /bəbəxʷ/ → [mɛmɛ̀bəbəx] ~ [mɛmɛ́bəbəx jɛm]
   1DUAL.SBJ- bark
   ‘We two bark.’
   /mɛmɛ̀/ + /xʷɛlɛk/ → [mɛmɛhʷɛlɛk] ~ [mɛmɛhʷɛlɛk]
   1DUAL.SBJ - gouge
   ‘We two gouge.’

b. /mɛmɛ̀/ + /jəkʷ/ → [mɛmɛjɔkʷ]
   1DUAL.SBJ- shorten
   ‘We two shorten.’
   /mɛmɛ̀/ + /srəxʷ/ → [mɛmɛsərəxʷ]
   1DUAL.SBJ- slide
   ‘We two slide.’

(2.81) a. /sə-/ + /jə/ + /-əxʷəw/ → [sə̃jəhʷə]
   1SG.SBJ- call -2SG.DOBJ
   ‘I call you.’

b. /sə-/ + /sbə́y/ + /-əxʷəw/ → [sə̃bə́hʷə]
   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-/ + /nkrât/ + /-āxʷnàY/ → [sēŋkɾētʰw̃思索]
   1SG.SBJ- simmer -2PL.IOBJ
   ‘I simmer for you.’

b. /sā-/ + /hâp/ + /-āxʷnàY/ → [səŋpōh思索] → [səŋp锨思索]
   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. /brâY/ + /kʷājkwâjê/ → [brē kʷōjkwōjê]
   herd hyena
   ‘herd of hyenas’

b. /jâf/ + /gʷodê/ → [ŋf ŋgʷodê] ~ [ŋf ŋgʷodê]
   flour sorghum and beans
   ‘flour of sorghum and beans’

c. /ŋʷhʷa/ + /gʷâdʒâŋgʷâY/ → [ŋʷhʷô gʷôdʒâŋgʷâr] ~ [ŋʷhʷô gʷôdʒâŋgʷâr]
   goat chicken basket
   ‘goat of chicken basket’

Like palatalisation, labialisation does not spread across a pause (2.84).
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 [v]. 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 [u] or [u].

(2.85) a. [kuɗʊ̄ɗʊ̄p] /kʷdāp/ ‘lose’
    [dʊ̄ɡʷʊ̄bʊ̄s] /dɡʷəs/ ‘clay pot’

b. [ŋuɾɛ̄x] /ɡʷrāx/ ‘scratch’
    [hʊ̄dʊ̄dʊ̄kʷ] /xʷdākʷ/ ‘hooked’

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

(2.86) [bʊ̄kʷlʊ̄] /bkʷlʊ̄/ ‘skin’ [tʊ̄kʷsेस] /tkʷsās/ ‘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) [bʊ̄dʊ̄kʷ bʊ̄dʊ̄kʷ] /bdakʷ bdakʷ/ ‘hornbill’
    [hʊ̄bʊ̄f] /xʷbaf/ ‘foam’
    [kʊ̄sेम] ~ [kʊ̄sिम] /kʷsām/ ‘body’
    [xʷɾʊ̄m] /xʷārām/ ‘bend down’

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

(2.88) [mɪtskʷoxʷ] /matskʷaxʷ/ ‘evening’
    [pəɾʃʊ̄kʷ] /pärʃākʷ/ ‘escape’
    [hʊ̄ɔɾлёv] /xʷārləv/ ‘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) [dɔwɛn] /dɔwɛn/ ‘back’
[lɛwɛtʃ] /lɔwɛd/ ‘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) [wɔlɔl] /wɔlɔl/ ‘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) /wɔ/ + /wɛŋ/ → [wɔ wɛŋ] ~ [wɔ́ wɛŋ]
   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 [ɔː].

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

(2.92) a. [dɔwɛŋ] /dɔwɛŋ/ ‘debt’
   [zɔwɛŋ] /zɔwɛŋ/ ‘paint’

b. [brɔwɛŋ] /brɔwɛŋ/ ‘spear’
   [lɔwɛtʃ] /lɔwɛtʃ/ ‘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) [kẽ:vẽ] /kãvãk̅y/ ‘bird sp.’ (alternate: [kẽvẽk])
[gʷãːɮãm] /ɡʷáːɮãm/ ‘hole in tree trunk’ (alternate: [ɡʷóɽãm])
[ŋãːɬw] /ŋãːɬāw/ ‘plant sp.’
[dʒẽːdʒẽ] /dzãːdzã/ ‘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) [kẽj] ‘interjection, no’ (Fulfulde kay)
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). Furthermore 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)  
   [ʃěj] ‘tea’ ([ʃ] occurring before an unpalatalised vowel) (Fulfulde sha’i)

b. [něběm] ‘oil’ (Fulfulde nebbam)  
   [lěkʷól] ‘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) [ɓúndò] ‘well’ (Fulfulde bundu)  
   [fú] ‘all’ (Fulfulde fiwu)

(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 if word-final [ə] in loan words are given in (2.97).

(2.97) [kɪlʊmɛtɾə] ‘kilometre’ (French kilometre)  
   [pɪstɔ] ‘pastor’ (French pasteur)

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

(2.98) [mɛɡəzi] ‘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) [dɛlɛʒ] ‘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. [tʃ] → [sɛj]\(^4\) ‘tea’ (Fulfulde sha’i)

[koʃnɛj] → [kʰɛʃɛ] ‘doughnut’ (Fulfulde koosay)

b. [dʒɛŋɛŋ] → [dʒɛŋɡɛ] ‘read, study’ (Fulfulde janniga)

[pepɛːdɛ] → [pɛpɛdɛ] ‘doors’ (Fulfulde pareceje)

[deɾɛwɛl] → [deɾɛwɛl] ‘paper’ (Fulfulde derewol)

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

(2.101) [tum] → [tɛm] ‘daily, always’ (Fulfulde tum)

[luːmo] → [lʊmɛ] ‘market’ (Fulfulde luumo)

[deɾɛwɛl] → [deɾɛwɛl] ‘paper’ (Fulfulde derewol)

[koɾowɛl] → [kʰɔɾwɛl] ‘chair’ (Fulfulde korowal)

[tol] → [tɛl] ‘corregated iron’ (French tole)

---

\(^4\) 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)  
- [svkɾə] → [sʊˑkəɾ]  ‘sugar’  (French sucre)  
- [mɛtɾə] → [mɛntəɾ]  ‘teacher’  (French maître)  
- [mɨʃin] → [mɨʃên]  ‘machine’  (French machine)  
- [lɔː] → [lɛ́r]  ‘hour’  (French l’heure)

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

(2.103)  
- [beːbe] → [bëbë]  ‘father’  (Fulfulde baaba)  
- [fuː] → [fú]  ‘all’  (Fulfulde fiui)

(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)  
- [nɛbəm] → [nɛbəm]  ‘oil’  (Fulfulde nebbam)  
- [bʊndu] → [bʊndò]  ‘well’  (Fulfulde bunndu)  
- [dʒɪŋgɛ̀] → [dʒɪŋgɛ̀]  ‘read, study’  (Fulfulde jannga)  
- [sɛmbɛ] → [ʃɛmbɛ́]  ‘strength’  (Fulfulde semmbe)

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

(2.105)  
- [bɛlɔ] → [bɛlɔŋʷ]  ‘ball’  (French balon)  
- [ɡɛlɔ] → [ɡɛlɔŋʷ]  ‘bottle’  (French gallon)

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) [jë́ëː] ‘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) [héēèj] ‘hey!’

[jë́ëː] ‘noise of rain’

[=ë́bè̊jë̊] ‘manner of staring fixedly’

[fë́rë] ‘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) [pʰê̊hⁿ] ‘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) [m̄ʔm̄ː] hesitation
(v) Numerous repetitions may be used for repeated events or noises. Examples of this are given in (2.110).

(2.110) \[\text{ŋ̑g̑m ŋ̑g̑m ŋ̑g̑m ŋ̑g̑m}\] ‘noise of grinding with a stone’
    \[k̑ʊ́ɗ̑ɛ̑ k̑ʊ́ɗ̑ɛ̑ k̑ʊ́ɗ̑ɛ̑ k̑ʊ́ɗ̑ɛ̑ ...]\] ‘a bird cry’
    \[ɗ̑m ɗ̑m ɗ̑m]\] ‘noise of thunder’
    \[t̑p̑ t̑p̑ t̑p̑]\] ‘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) \[ɛ̃́ ə̃́ \] ‘hey?’
    \[w̑ȏ\] ‘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) \[ɛ̃́ \] ‘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. \[k̑t̑ʃ̑ k̑t̑ʃ̑ k̑t̑ʃ̑ k̑t̑ʃ̑ ...\] ‘cry of the guinea fowl’
    b. \[ŋ̑g̑ɛ̑\] ‘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) \[b̑f̑\] ‘suddenly come out’
    \[b̑j\] ‘suddenly’
    \[t̑t̑ȗ\] ‘manner of smoke ascending’
    \[ʊ̄ȓb̑ɛ̑m\] ‘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) [bʰm] ‘noise of sudden digging’
        [bʰtʊl] ‘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>
<thead>
<tr>
<th>Syllable Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>[eje] /ɐ̄jɐ̄w/</td>
</tr>
<tr>
<td>C</td>
<td>[msəɾ] /msəɾ/</td>
</tr>
<tr>
<td>CV</td>
<td>[də] /də/</td>
</tr>
<tr>
<td>CV:</td>
<td>[ŋɡəːləː] /ŋɡəːləː/</td>
</tr>
<tr>
<td>CVC</td>
<td>[ɡəl] /ɡəl/</td>
</tr>
<tr>
<td>CCV</td>
<td>[brɛː] /brɛː/</td>
</tr>
<tr>
<td>CCVC</td>
<td>[plɛm] /plɛm/)</td>
</tr>
</tbody>
</table>

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 /ɾ/ 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], [u] or [ɛ] in the environment of palatalisation (2.118).

\[
\begin{align*}
\text{(2.116)} & \quad [\text{m̩p̩k}] \sim [\text{ʌmp̩k}] \sim [\text{ɛmp̩k}] \quad /\text{mp̩k}/ \quad \text{‘shut’} \\
& \quad [\text{ŋ̩tẽn}] \sim [\text{ɛntẽn}] \sim [\text{ɛntẽn}] \quad /\text{ntẽn}/ \quad \text{‘lower’}
\end{align*}
\]

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).

\[
\begin{align*}
\text{(2.117)} & \quad /\text{n̩dr̩j ɛŋʷ̩jẽn ntsẽnẽ wɛsẽ/} \rightarrow [\text{n̩dr̩j ɛŋʷ̩jẽn ɛsẽnẽ wɛʃẽ}] \\
& \quad \text{corn 1EXCL.POSS DEM.DIST} \quad \text{‘that corn of ours’} \quad (\text{NH12-SN:1.1})
\end{align*}
\]

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.

\[
\begin{align*}
\text{(2.118) a.} & \quad [\text{ʃpẽk}] \quad /\text{sp̩k}/ \quad \text{‘late’} \\
& \quad [\text{sk̩n}] \quad /\text{sk̩n}/ \quad \text{‘thing’} \\
& \quad [\text{skʷ̩j}] \quad /\text{skʷ̩j}/ \quad \text{‘calabash seed’} \\
\text{b.} & \quad [\text{sفن}] \quad /\text{sfn}/ \quad \text{‘breathe’}
\end{align*}
\]

The voiceless labio-dental fricative could also be considered syllabic in the following example for the same reason (2.121).
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. \[r^\text{ɗ} \text{ɗ} \] /rd\text{ɗ}/ ‘rot’
   \[/så-kå-rd\text{ɗ}/ \] → \[[sê kërd\text{ɗ}]\]
   1SG.SBJ-IPFV-rot
   ‘I am rotting’

b. \[r^\text{ɡ}^\text{ʷ} \text{ं} \text{ts} \] /rg\text{ʷ}âts/ ‘clothes’
   \[/årâ r^\text{ɡ}^\text{ʷ}âts k^\text{ʷ}âw/ \] → \[[𝐸𝑟ë r^\text{ɡ}^\text{ʷ} âts k^\text{ʷ}ôː]\]
   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. \[p\text{ɾ} \text{ɬ]\] /pr\text{ɬ}/ ‘snatch’ \[d\text{ɾ} \text{ɨ}\] /dr\text{ɬ}/ ‘song’
   \[k\text{ɾ} \text{k}\] /kr\text{k}/ ‘tuck into’ \[dz\text{ɾ} \text{ɨ}\] /dz\text{ɬ}\text{ɬ}/ ‘stir’
   \[^\text{ɬ}\text{ɾ} \text{m}\] /n\text{ɾ}\text{m}/ ‘please’ \[v\text{ɾ}\] /v\text{ɾ}/ ‘many’
   \[s \text{r} \text{ōx}^\text{ʷ}\] /sr\text{ɬ}\text{x}^\text{ʷ}/ ‘slide’ \[h\text{r} \text{ēt}\] /xr\text{ɬ}\text{ts}/ ‘evaporate’
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)  
\[
\begin{array}{ll}
[k^w\text{r}e\text{t}] & /k^w\text{r}e/ \quad \text{‘strip’} \\
[g^w\text{r}e\text{x}] & /g^w\text{r}e/ \quad \text{‘scratch’} \\
k^w\text{\text{"o\text{\text{"}l}\text{e\text{"}p}}} & /k^w\text{\text{"o\text{\text{"}l}\text{e\text{"}p}}} / \quad \text{‘cover’} \\
g^w\text{\text{"o\text{\text{"}l}\text{e\text{"}k}}} & /g^w\text{\text{"l}}\text{e}/ \quad \text{‘argue’} \\
\end{array}
\]

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

(2.123)  
\[
\begin{array}{ll}
/x^w\text{\text{"a\text{"}k}^w\text{\text{"r}ae}} & /x^w\text{\text{"a\text{"}k}^w\text{\text{"r}ae}} \quad \text{‘galaď} \quad \text{’gàjaf ārā/} \\
2SG.SBJ\text{-strip-1SG.OBJ} \quad \text{unripe fruit guava SIM} \\
2SG.SBJ\text{-strip-1SG.OBJ} \quad \text{unripe fruit guava SIM} \\
\text{‘You stripped my unripe guavas on the way.’} \\
→ & [h^w\text{\text{"o\text{\text{"}k}^w\text{\text{"e\text{"}\text{"}t}}}^w\text{\text{"g}e\text{\text{"}t}}} \quad g^w\text{\text{"ojif ār}e\text{\text{"}t}}] \\
\end{array}
\]

b.  
\[
/d^w\text{\text{"a\text{"}k}^w\text{\text{"l}}\text{a\text{"}n}} \quad \text{lä} \quad \text{áz} \quad \text{átu mpā/} \\
\text{vine PRF-cover place COMPL on tree} \\
\text{‘The vine has covered the tree with leaves.’} \\
→ & [d\text{\text{"e\text{"}l}ē} \quad kōk^w\text{\text{"l}e\text{"}p} \quad (r)\text{\text{"z}e} \quad (r)\text{\text{"e\text{"}t}} \quad \text{mpē}] \\
\end{array}
\]

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)  
\[
\begin{array}{ll}
[b\text{\text{"o\text{\text{"}dē\text{"}m}] & /b\text{\text{"dē}}/ \quad \text{‘cave’} \\
[k\text{\text{"o\text{\text{"}vē\text{"}t}]} & /k\text{\text{"vē}}/ \quad \text{‘mix’} \\
[\text{\text{"d}ʒ\text{\text{"}wē\text{"}n}] & /\text{\text{"d}ʒ\text{\text{"}wē\text{"}n}] \quad \text{‘true’} \\
[t\text{\text{"i\text{"}dā\text{"}n}] & /t\text{\text{"i\text{"}dā\text{"}n}] \quad \text{‘tooth’} \\
[j\text{\text{"i\text{"}nē\text{"}x}]} & /j\text{\text{"i\text{"}nē\text{"}x}]} \quad \text{‘tree sp.’} \\
\end{array}
\]

\[
\begin{array}{ll}
[d\text{\text{"a\text{"}mē\text{"}s}] & /d\text{\text{"a\text{"}mē\text{"}s}] \quad \text{‘abdomen’} \\
[d\text{\text{"o\text{\text{"}mē\text{"}s}] & /d\text{\text{"o\text{\text{"}mē\text{"}s}] \quad \text{‘abdomen’} \\
[d\text{\text{"a\text{\text{"}bē\text{\text{"}s}] & /d\text{\text{"a\text{\text{"}bē\text{\text{"}s}] \quad \text{‘tendon’} \\
[x\text{\text{"zē\text{"}n}] & /x\text{\text{"zē\text{"}n}] \quad \text{‘dog’} \\
[v\text{\text{"i\text{"}j}] & /v\text{\text{"i\text{"}j}] \quad \text{‘wet season’} \\
[\text{\text{"b}lē\text{"}s}] & /\text{\text{"b}lē\text{"}s}] \quad \text{‘okra’} \\
\end{array}
\]

75
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).

\[ \begin{align*}
(2.125) & \text{ [ʊ̀ˑdɐ̄] /wdā/ } \text{ ‘food’} \\
& \text{ [ʊ̀ˑdʒɛ̄k] /wdzāk̥/ } \text{ ‘house’}
\end{align*} \]

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 \( [z̆b̆t̆] \) ‘a while’ remains even when preceded by the open syllable of \( [ndz̆] \) ‘stay’. This occurs even though a \( [z̆] \) cluster is possible word medially, for example in the word \( [ɣəz̆b̆n̥] \) ‘yellow’. Example (2.128b) is similar. This is evidence that the epenthetic vowel is phonologically visible.

\[ \begin{align*}
(2.126) & \text{ a. /lá-dzàv ká-ndzā zbát kādā̄/} \\
& \text{ NOM.ACT-assemble PFV-stay a while maybe} \\
& \text{ ‘The meeting has lasted a while maybe.’} \\
& \rightarrow \text{ [l̂d̂ẑ₇v k̂nd̂ẑ₇ zb̂t̂ k̂ɛ̂d̂]}
\end{align*} \]

\[ \begin{align*}
\text{ Cf. /ŷāẑb̂n̥/ [ŷẑb̂n̥] } \text{ ‘yellow’}
\end{align*} \]

\[ \begin{align*}
\text{ b. /ŵāl̂₄ á k̂ā-ŝ₃̄ ĝād̂ŵd̂₄ át̂₄ lŵatŝ₄/} \\
& \text{ woman 3SG.SBJ IPFV-put pot on fireplace} \\
& \text{ ‘The woman is putting the pot on the fire.’} \\
& \rightarrow \text{ [ŵêl̂(̄ə) ê k̂êt̂ŝ êĝd̂ŵd̂(̄ə) ét̂₄ l̂ŵɛ̂t̂f̂]} \\
\end{align*} \]

\[ \begin{align*}
\text{ Cf. /nd̂élŵên̥/ [nd̂élŵên̥] } \text{ ‘peanut and beef bones’}
\end{align*} \]

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

<table>
<thead>
<tr>
<th>Vowel Type</th>
<th>Consonant Types</th>
<th>Average Length (ms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional</td>
<td>obs + r</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>obs + l</td>
<td>31</td>
</tr>
<tr>
<td>Epenthetic</td>
<td>obs + obs</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>obs + son</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>son + obs</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>son + son</td>
<td>66</td>
</tr>
</tbody>
</table>

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.  
[dɔɡèv] /dɡəv/  ‘tree sp.’
[gɔdɛŋ] /ɡdəŋ/  ‘mold’
[dibɛ] /dbiɭ/  ‘termite hill’
[gù demfɛ] /ɡdámfəɭ/  ‘flour pot’

b.  
[tìbəkʷ] /tbàkʷ/  ‘chaff’
[ɡjìvɛr] /ɡvàɭ/  ‘clearing’
[gɔmɛz] /ɡməɭ/  ‘bellows’
[xɔzɛ] /xəɭ/  ‘dog’
[vì dɛ] /vðəɭ/  ‘penis’
[vì ʒʊk] /vzakoɭ/  ‘slime’

c.  
[xɔtɛn] /xtən/  ‘fog’
[lìwɛtʃ] /lwàtsɭ/  ‘fireplace’
[pìtɛl] /ptəɭ/  ‘nibble’
[xɔmɛn] /xmən/  ‘honour’
[sìjɛk] /sjakoɭ/  ‘anxiety’
[tòwɛx] /twakoɭ/  ‘good’

77
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. [ŋ̃fɪfɛ̄t] /ntʃaf/ ‘yam’
   b. [ŋɛ̄tɛ̄] /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) [mʊ̄sɛ̄] /mwsá/ ‘twin’
   [mɪ diệnɛ̄k] /mjdnāk/ ‘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) [dʊŋ̃g̃̄ʊ̄] /drɡ̃̄ãs/ ‘stump’
   [dɪfnɛ̄k] /dfnāk/ ‘dark’
   [tɜrg̃̄ɛ̄] /trɡ̃̄ā/ ‘grainery’
   [d̄d̄yklɛ̄m] /d̄klám/ ‘silk-cotton tree’
   [vɔrlɛ̄m] /vrlām/ ‘submerge’
   [pʊtʊk̃̄wɛ̄s] /ptk̃̄ās/ ‘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

<table>
<thead>
<tr>
<th>Consonant types</th>
<th>Attested clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>obs + obs</td>
<td>kt, kʷd, dɡʷ, tskʷ</td>
</tr>
<tr>
<td>obs + nas</td>
<td>kn</td>
</tr>
<tr>
<td>obs + fric</td>
<td>ks</td>
</tr>
<tr>
<td>fric + obs</td>
<td>ft, vd, fts, st, sk, skʷ, sg, sɓ, xk, xɗ, ṭp</td>
</tr>
<tr>
<td>fric + fric</td>
<td>sf, sx, xɬ, xz</td>
</tr>
<tr>
<td>fric + nas</td>
<td>fn</td>
</tr>
<tr>
<td>nas + obs</td>
<td>mp, mt, mb, mɓ, mts, nt, nts, ṇk, ṇkʷ, ṇts</td>
</tr>
<tr>
<td>nas + fric</td>
<td>mf, mɬŋ, mz, nz</td>
</tr>
<tr>
<td>nas + glide</td>
<td>nj</td>
</tr>
<tr>
<td>liq + obs</td>
<td>rp, rb, rd, rk, rg, rɓ, rcf, rts, rdz, rʷb, rʷd, rʷg, rʷgʷ, rʷdź</td>
</tr>
<tr>
<td></td>
<td>ld, lk, lg, lɓ, lŋ, lŋgʷ</td>
</tr>
<tr>
<td>liq + fric</td>
<td>rf, rv, rs, rz, rx, rɬ, rl, rɬŋ</td>
</tr>
<tr>
<td></td>
<td>lv, ls, lx, lɬy</td>
</tr>
<tr>
<td>liq + nas</td>
<td>rm</td>
</tr>
<tr>
<td>liq + liq</td>
<td>rl</td>
</tr>
<tr>
<td>liq + glide</td>
<td>ry, lw</td>
</tr>
<tr>
<td>glide + obs</td>
<td>yts, yʷgʷ</td>
</tr>
<tr>
<td>glide + liq</td>
<td>yɬ, wl</td>
</tr>
</tbody>
</table>

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).
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).

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.

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

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.

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

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 /tkʷ/ is not an acceptable syllable onset, so an epenthetic vowel is inserted between the two consonants.

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 [ʊ̯].
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

<table>
<thead>
<tr>
<th>Consonant types</th>
<th>Attested clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>obs + alveolar trill</td>
<td>pr, dr, gr, mbr, ɡdr, ɡr, vr, sr, zr, řr</td>
</tr>
<tr>
<td>obs + alveolar lateral</td>
<td>bl, kl, gl, kvl, ɡgl, ɡvl, fl, dzl</td>
</tr>
</tbody>
</table>

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

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).

2.6.2 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>
<thead>
<tr>
<th>Cons Type</th>
<th>Cons</th>
<th>Root-Initial</th>
<th>Syllable-Initial (Root-medial)</th>
<th>Intervocalic</th>
<th>Syllable-Final (Root-medial)</th>
<th>Root-Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plosive</td>
<td>/p/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>/b/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/t/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/d/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/k/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>/ɡ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Implosive</td>
<td>/ɓ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/ɗ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fricative</td>
<td>/f/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/v/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/s/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/z/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/ʃ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/ʒ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Affricate</td>
<td>/ʦ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/dz/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/kʷ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>/ɡʷ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/xʷ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>/ɣʷ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>/m/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/n/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/ŋ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/ŋʷ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/mɒ́/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/d/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/ɡ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/ɡʷ/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Liquid</td>
<td>/l/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/v/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/v̵/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Glide</td>
<td>/j/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/w/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>labial-velar plosive</td>
<td>/kp/</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>/ɡb/</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>/mɒ́ɡb/</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

83
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).

\[(2.141) \quad [\text{gi dēgdē}] \quad /\text{gdādā}/ \quad \text{‘mat’} \\
[\text{dēbdēbē}] \quad /\text{dābdābā}/ \quad \text{‘stopper’}\]

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 /ŋʷ/, 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.

\[(2.142) \quad [\text{mbēŋ}] \quad /\text{bāŋ}/ \quad \text{‘winnow’} \\
/sā- \quad /\text{mbēŋ}/ \quad -\text{ānā}/ \quad \rightarrow \quad [\text{sē mbēŋēnē}] \\
1SG.SBJ- winnow -3SG.DOBJ \\
‘I winnow for him.’\]
(iv) The voiceless and voiced labial-velar and prenasalised labial-velar plosives, /kp/, /gb/ and /ŋmgb/, generally occur in the word initial position. Only one example was found of /ŋmgb/ 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)  [lĕm] /lăm/ ‘help’  [lĕm] /lăn/ ‘build’
 [bĕl] /băl/ ‘chop’  [bĕl] /băn/ ‘have funeral’
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. [vən] /vən/ ‘family’ [vən] /vən/ ‘rain’

b. [lələxʷ] /lələxʷ/ ‘hunting’ [lələxʷ] /lələxʷ/ ‘valley’

c. [təbə] /təbə/ ‘middle’ [təbə] /təbə/ ‘fishing net’

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).


b. [pəxʷ] /pəxʷ/ ‘cut up’ [pəxʷ] /pəxʷ/ ‘traced out’

c. [tər] /tər/ ‘invite’ [tər] /tər/ ‘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. [səkazədək] ‘I am resting.’

b. [səkazədək] ‘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____kʷāw ‘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>
<thead>
<tr>
<th>/H/</th>
<th>CV</th>
<th>CCV</th>
<th>CVC</th>
<th>CCVC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘milk’</td>
<td>‘herd’</td>
<td>‘mother’</td>
<td>‘palm rat’</td>
</tr>
<tr>
<td>------</td>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>/L/</td>
<td>/ndʒë/ /ndzə/ ‘sown last year’</td>
<td>/kwːlē/ /kwːləj/ ‘idol’</td>
<td>/lə́n/ /lə́n/ ‘work’</td>
<td>/drəf/ /drəf/ ‘song’</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>CV.CV</th>
<th>CV.CCV</th>
<th>CV.CVC</th>
<th>CV.CVC</th>
<th>CV.CCCVC</th>
<th>CV.CVCVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>/H/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/H/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/M/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/L/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>CV.CV</th>
<th>CV.CCV</th>
<th>CV.CVC</th>
<th>CV.CVC</th>
<th>CV.CCV</th>
<th>CV.CVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>/H/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/M/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/L/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>/HH/</th>
<th>CV.CV</th>
<th>CV.CCV</th>
<th>CV.CVC</th>
<th>CV.CV</th>
<th>CV.V.CVC</th>
<th>CV.C.CVC</th>
<th>CV.C.CVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ŋɡélɛ]</td>
<td>[sárlá]</td>
<td>[fírɛm]</td>
<td>[tʃjɛmpɛt']</td>
<td>/tsámpády/</td>
<td>'red'</td>
<td>'monkey'</td>
<td></td>
</tr>
<tr>
<td>/ŋɡélɛ/</td>
<td>/sárlá/</td>
<td>/fárám/</td>
<td>'horn'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘side’</td>
<td>'trousers'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ŋɡ̊ɛlɛ]</td>
<td>[bérɛlɛ]</td>
<td>[bãmãm]</td>
<td>/ɡãldãm/</td>
<td>'pizza'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ŋɡ̊ɛlɛ/</td>
<td>/bãrɛlã/</td>
<td>/bãmãm/</td>
<td>'bee'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘boundary’</td>
<td>'mountain'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[hèdʒɛ]</td>
<td>[gãvðã]</td>
<td>/ɡãvðã/</td>
<td>'tree sp.'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/hèdʒɛ/</td>
<td>/xàrdá/</td>
<td>/fárám/</td>
<td>'horn'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘side’</td>
<td>'trousers'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[fɛ̂tɛ]</td>
<td>[wãnjã]</td>
<td>/ɡãdãm/</td>
<td>/ɡãldãm/</td>
<td>'pig'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/fɛ̂tɛ/</td>
<td>/wãnjà/</td>
<td>/fãrm/</td>
<td>'horn'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘person’</td>
<td>'plant'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ŋɡ̊ɛmɛ]</td>
<td>[pãkãm]</td>
<td>/pãkãm/</td>
<td>/mãwãl/</td>
<td>'man'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ŋɡ̊ɛmɛ/</td>
<td>/pãkãm/</td>
<td>/mãwãl/</td>
<td>'man'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘friend’</td>
<td>'mouth'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[dã̄bɛ]</td>
<td>[dãntsɛ]</td>
<td>/dãntsɛ/</td>
<td>/dãntsɛ/</td>
<td>'vowel'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/dã̄bɛ/</td>
<td>/dãntsɛ/</td>
<td>/dãntsɛ/</td>
<td>'vowel'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘hut’</td>
<td>'hut'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ŋɡ̊ɛmɔ́]</td>
<td>[mãwãl]</td>
<td>/mãwãl/</td>
<td>/mãwãl/</td>
<td>'man'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ŋɡ̊ɛmɔ́/</td>
<td>/mãwãl/</td>
<td>/mãwãl/</td>
<td>'man'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘grandparent’</td>
<td>'grandparent'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ŋɡ̊ɛmɔ́]</td>
<td>[mãwãl]</td>
<td>/mãwãl/</td>
<td>/mãwãl/</td>
<td>'man'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ŋɡ̊ɛmɔ́/</td>
<td>/mãwãl/</td>
<td>/mãwãl/</td>
<td>'man'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘grandparent’</td>
<td>'grandparent'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>/HH/</th>
<th>Cv.CVC.CV</th>
<th>CV.Cv.CV</th>
<th>Cv.CV.CVC</th>
<th>CV.Cv.CV</th>
<th>CVC.Cv.CV</th>
<th>CVC.Cv.CV</th>
<th>CvC.Cv.CV</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>/HH/</th>
<th>N.CV.CV</th>
<th>N.CV.CVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>/HH/</td>
<td>[mj*zę́mkʰj] /msánj/</td>
<td>‘plant sp.’</td>
</tr>
<tr>
<td>/MM/</td>
<td>[ŋt̪ɛ̄lɛ́]/ntâlâ/</td>
<td>‘pond’</td>
</tr>
<tr>
<td>/HL/</td>
<td>[ŋt̪ɛ̄wɛ́n]/ntâwân/</td>
<td>‘type of fruit’</td>
</tr>
</tbody>
</table>

Table 2.21 lists the sixteen tone melodies which were found for trisyllabic noun roots.
<table>
<thead>
<tr>
<th>Tone Melodies</th>
<th>Table 2.21: Tone melodies on trisyllabic nouns with full vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV.CV.CV</td>
<td>CVC.CV.CV</td>
</tr>
<tr>
<td>/HHH/ [/rákátsá]/ ‘ostrich’</td>
<td>[sánkáré]</td>
</tr>
<tr>
<td>/LLL/</td>
<td></td>
</tr>
<tr>
<td>/HHM/ [/dəkətsə]/ ‘ankle ring’</td>
<td>[təjˈdəkətsə]/ ‘ankle ring’</td>
</tr>
<tr>
<td>/HHL/</td>
<td></td>
</tr>
<tr>
<td>/HLL/</td>
<td></td>
</tr>
<tr>
<td>/HMH/ [/kədəkə́]/ ‘sweet potato’</td>
<td></td>
</tr>
<tr>
<td>/HML/</td>
<td></td>
</tr>
<tr>
<td>/HLH/</td>
<td>CV.CV.CV</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
</tr>
<tr>
<td>[t̚etʃe]</td>
<td>/tátàjá/</td>
</tr>
<tr>
<td>/MHM/</td>
<td>[k̚ẽtʃewë]</td>
</tr>
<tr>
<td>/LLM/</td>
<td>[h̚õt̚bë]</td>
</tr>
<tr>
<td>/LMM/</td>
<td>[l̚b̚b̚r̚ë]</td>
</tr>
<tr>
<td>/LLH/</td>
<td>/d̚æ̃k̚d̚æ̃q̚/</td>
</tr>
<tr>
<td>/LHM/</td>
<td>[g̚ẽd̚r̚ẽ]</td>
</tr>
</tbody>
</table>
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 [dzéhìʁʃɛk] in the Kera system would be parsed into two feet as follows: (dzéhì)(ʃɛk) 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 than 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.

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**

<table>
<thead>
<tr>
<th></th>
<th>CV</th>
<th>CCV</th>
<th>CVC</th>
<th>CCVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>/M/</td>
<td>[tsɛ̃] /tsɛ̃/ /put’</td>
<td>[ɡrɛ̃] /ɡrɛ̃/ /‘see’</td>
<td>[mˈbɛŋ] /mˈbɛŋ]/ /‘winnow’</td>
<td>[prɛt̚]/ /prɛd̚]/ /‘split’</td>
</tr>
<tr>
<td>/L/</td>
<td>[rɛ̃] /rɛ̃/ /‘dig’</td>
<td>[vɛl̃] /vɛl̃/ /‘give’</td>
<td>[ˈdrɛm]/ /ndrɛm]/ /‘please’</td>
<td></td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>/M/</th>
<th>Cv.CV</th>
<th>Cv.CVC</th>
<th>Cv.CCVC</th>
<th>CvC.CVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>[vànã]</td>
<td>[xɔbɛr]</td>
<td>[dɔdrɔkʷ]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/vnã/</td>
<td>/xbã/</td>
<td>/dɔrãkʷ/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘vomit’</td>
<td>‘wait’</td>
<td>‘learn’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/L/</td>
<td>[tũkʷˈɛt]</td>
<td>[vərlɛm]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[jibɛ]</td>
<td>[tkʷad]</td>
<td>[kɪtʃãkɛt']</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/sbɔ́/</td>
<td>/wipɛ/</td>
<td>/ktskãd'/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘pay bride-price’</td>
<td>‘wipe’</td>
<td>‘stumble’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>/M/</th>
<th>C.CVC</th>
<th>C.CVC</th>
<th>C.CVC</th>
<th>C.CVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ŋtʃɛ́ŋkɛ́]</td>
<td>/mpãk/</td>
<td>/mpãk/</td>
<td>/mpãk/</td>
<td>/mpãk/</td>
</tr>
<tr>
<td>‘bite’</td>
<td>‘close’</td>
<td>‘close’</td>
<td>‘close’</td>
<td></td>
</tr>
<tr>
<td>/L/</td>
<td>[ŋtɛ́f]</td>
<td>[ŋkrɛ́t]</td>
<td>[ŋkɔ́dɔ́]</td>
<td>[ŋkɔ́dɔ́]</td>
</tr>
<tr>
<td>[ʃisɛ́kɛ́t]</td>
<td>/ntãt/</td>
<td>/nkrt/</td>
<td>/nkɔ́dɔ́/</td>
<td>/nkɔ́dɔ́/</td>
</tr>
<tr>
<td>‘spit’</td>
<td>‘simmer’</td>
<td>‘burn’</td>
<td>‘burn’</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>/M/</th>
<th>CV.CV</th>
<th>CV.CV</th>
<th>CV.CV</th>
<th>CV.CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>[nɛnɛ]</td>
<td>[hɛʃɛ́ŋ]</td>
<td>[dɛdrɔs]</td>
<td>[bɛŋkɛtɔ]</td>
<td>[ɡɛdɔ́bbɛ́n]</td>
</tr>
<tr>
<td>/nãnã/</td>
<td>/xãsãŋ/</td>
<td>/dãdrãs/</td>
<td>/bãŋkãts/</td>
<td>/ɡãdãbãŋ/</td>
</tr>
<tr>
<td>‘tremble’</td>
<td>‘forget’</td>
<td>‘blunt’</td>
<td>‘shake strongly’</td>
<td>‘crawl’</td>
</tr>
<tr>
<td>/L/</td>
<td>[tɛdɔ́kʷ]</td>
<td>[sɔ́sɛ́rãk]</td>
<td>[gʷɔ́rãzɔ́m]</td>
<td>[tɛtwɔ́wɛ́t']</td>
</tr>
<tr>
<td>[dɜdɔ́]</td>
<td>/tãdãkʷ/</td>
<td>/sãsrãk/</td>
<td>/gãrɔ́zɔ́m/</td>
<td>/tãtwɔ́d/</td>
</tr>
<tr>
<td>‘give’</td>
<td>‘descend’</td>
<td>‘learn, teach’</td>
<td>‘get up’</td>
<td>‘sling’</td>
</tr>
</tbody>
</table>

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/ [ʃɛʃɛ́dɛ́] /sɔ́sãdãm/ ‘slip’
 b. /L/ [tɛtɛŋɡɛ́] /tɛtɛŋɡɛ́l/ ‘roll on ground’
One effect of depressor consonants in Buwal is that the mid tone of a verbal prefix is lowered preceding a voiced obstruent (2.149a). Before other types of consonants the tone remains mid (2.149b).

(2.149)  
\[\text{a. } /\text{sá- } kā- \text{ dādār}/\rightarrow \text{[sūkēdēdēr]}\]  
1SG.SBJ-IPFV- wander  
‘I am wandering.’

\[/\text{sá- } kā- \text{ ūm}/\rightarrow \text{[sūkēyēm]}\]  
1SG.SBJ-IPFV- judge  
‘I am judging.’

\[\text{b. } /\text{sá- } kā- kʷāt}/\rightarrow \text{[sūkēkʷēt]}\]  
1SG.SBJ-IPFV-sharpen  
‘I am sharpening.’

\[/\text{sá- } kā- \text{ māɗ}/\rightarrow \text{[sūkēmēt]}\]  
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. /ərā ŋgámà āgā̄/ → [ərē ŋgm(v) əgë]
COP friend PL
‘They are friends.’

Figure 2.9: Positive statement showing falling intonation at utterance boundary

b. /sā- ndā āká ā dámāw kʷáw/ → [sṉd(ē) ŋk(ē) ŋ dēmō kʷô]
1SG.SBJ- go ACC PREP1 bush NEG
‘I didn’t come back from the bush.’

Figure 2.10: Negative statement showing utterance final falling tone
c. /xʷã- ká- wän vängá/ → [hʷökéwên věŋg̊]<br>2SG.SBJ-PFV- sleep how<br>‘How have you slept?’ (GE3-SE:30)

Figure 2.11: Information question showing utterance final falling tone

d. /xʷã- ká- zum wðə vəw/ → [hʷökézem õ.ðə vǒ:]<br>2SG.SBJ-PFV- eat food Q<br>‘Have you eaten food?’ (GE2-SE:4.1)

Figure 2.12: Polar question showing utterance final falling intonation
e. /lā mādzārā/y / → [lē медиэг]
arrange terrace wall
‘Build a terrace wall.’

(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/y ā- dāny-zā, jā ā- jā -bā gʷōmbōkʷ jám/
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 pèʃ wēndé, dēn ë dēnže, j(ë) é jëbē gʷōmbōkʷ jëm]
(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. /ärä bzäm kʷåw/ → [ërë bèzəm kʷô:]  
COP chin NEG  
‘It’s not a chin.’

b. /sä- sär bzäm/ → [sësär bëzəm]  
1SG.SBJ- look at chin  
‘I look at a chin.’

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

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- kā- tsātsāx jém/ → [sékētsētsēx jēm]  
1SG.SBJ- IPFV cut off pieces also  
‘I am cutting off pieces also.’

b. /ā- tsātsāx/ → [ē tsētsēx]  
3SG.SBJ- cut off pieces  
‘He cuts off pieces.’

Figure 2.17: Verb with underlying mid tone non-pausal

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 kʷāw⁶ (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 bzām kʷāw/ → [ɐ̄ɾɐ̄ bəzɔ̄m kʷɔ̄ː]
   COP chin NEG
   ‘It’s not a chin.’

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

(2.155) a. /ārā bāskʷār kʷāw/ → [ɐ̄ɾɐ̄ bəskʷɔ̄ː]
   COP bicycle NEG
   ‘It’s not a bicycle.’

b. /sā sār bāskʷār/ → [sər bəskʷər]
   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 kā- læm⁷ kàn tá zàm á wātā gʷāmbākʷ kʷāw/
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).
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)  
\[ \text{[tikɛt]} \sim \text{[tekt]} \] /tɪ̃kɛt/ ‘calabash’
\[ \text{[dɛ̃dɛj]} \] /dɛ̃dɛj/ ‘too much’
\[ \text{[mɛ̃kˈɛ̃mbɛn]} \] /mɛ̃kˈɛ̃mbɛn/ ‘large ant’
\[ \text{[ŋ̃ˈkˈɔrle]} \sim \text{[ŋ̃ˈkˈɔrle]} \] /ŋ̃ˈkˈɔrle/ ‘puff adder’
\[ \text{[kˈɛ̃mbɛlɛ]} \] /kˈɛ̃mbɛlɛ/ ‘shea-butter tree’
\[ \text{[kfrɛm]} \sim \text{[kɛrm]} \] /kɛrm/ ‘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 -zɐ is attached to the verb root (2.158).

(2.158)  
(a. ) \[ \text{[gʊj]} \] /gʊj/ ‘spoil’
/gʊj/ + /-zɐ/ \rightarrow gɔyɛ → [ɡiri] ‘Spoil that!’
spoil -TRANS

(b. ) \[ \text{[dʊɾ]} \] /dʊɾ/ ‘want, ask’
/dʊɾ/ + /-zɐ/ \rightarrow dɔwɛ → [dʊɾi] ‘Ask about that!’
want -TRANS

(c. ) \[ \text{[səɾ]} \] /səɾ/ ‘look at, visit’
/səɾ/ + /-zɐ/ \rightarrow [səɾi] ‘Visit him/her!’
look at -TRANS

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 ɡə̄j ‘spoil’ has the following three versions:

(2.159)  
| a. [ɡə̄jzə̄]  |
| b. [ɡɛ̄zə̄]     |
| c. [ɡiˑzə̄]    |

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 ɲ-gámə̀ áɡā́/  |
| COP friend PL |
| ‘They are friends.’ (NF4-SN:1.2)  |
| b. /dämə̀ a tə̀ rə̀ nkg̃ə̀ dājdą́/  |
| dirt PREP1 on hand 2SG.POSS too.much |
| ‘There is too much dirt on your hand.’ (NF4-SN:3.6)  |
| c. /xàdzə́ ntrə̀ váká́/  |
| 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. /dā̄ ə̄kā́ vámá́/  |
| bring -1SG.IOBJ what |
| ‘bring me whatever...’ (HT7-SN:1.9)  |
| b. /á̄ pə̀ sə̄ wə̀ də́ ákə́/  |
| PREP1 day IND.DET.SG EXIST |
| ‘There was a certain day....’ (NF4-SN:2.1)  |
c. /ánā  ámbā'à nyā'à/ → [én(ë) ëbè ñè,...]

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 à tsá, gʷömbök tsá,  ámb- ká- zám wdá/
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 ðy-ỳ à tsé, gʷömbök tsé, ểkëzëm ãòd(ë)...]

b. /b- mbàl ngàmà á xàdàγ, à wàrwàr à/  
3SG.SBJ-catch friend PREP1 on.it PREP1 trickery

‘He caught his friend about it, with trickery.’ (NH9-SN:2.2)

→ [ëmbàl ngàm(ë) ë hêdèë, ë wàrwàr]

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

(2.163) a. /xʷnà xàm vámá já màzày ágà/  
2PL.SBJ- cry what woman-PL mazay PL

‘What are you crying about, Mazay women?’ (NF2-SN:2.3)

→ [h õnë hën vëmë wîf; mëzë ëgë]

b. /ánà ḥjàm tsá, dmà, wàlà -jàγ, xàldmà - jáγ/  
like speech TOP bride woman -PL girl -PL

‘That is to say, brides, women, girls,...’ (DP2-SN:5.2)

→ [ënhë zëp tsë, dëmë, wîlìjë, hëldîmìjë,...]

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

<table>
<thead>
<tr>
<th>phoneme</th>
<th>grapheme</th>
<th>phoneme</th>
<th>grapheme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>capital</td>
<td>small</td>
<td>capital</td>
</tr>
<tr>
<td>/b/</td>
<td>B</td>
<td>b</td>
<td>/gb/</td>
</tr>
<tr>
<td>/ɓ/</td>
<td>B</td>
<td>ɓ</td>
<td>/n/</td>
</tr>
<tr>
<td>/ts/</td>
<td>C</td>
<td>c</td>
<td>/d/</td>
</tr>
<tr>
<td>/d/</td>
<td>D</td>
<td>d</td>
<td>/dz/</td>
</tr>
<tr>
<td>/ɗ/</td>
<td>D</td>
<td>ɗ</td>
<td>/ŋ/</td>
</tr>
<tr>
<td>/f/</td>
<td>F</td>
<td>f</td>
<td>/ɡ/</td>
</tr>
<tr>
<td>/g/</td>
<td>G</td>
<td>g</td>
<td>/ɡʷ/</td>
</tr>
<tr>
<td>/gb/</td>
<td>Gb</td>
<td>gb</td>
<td>/ŋʷ/</td>
</tr>
<tr>
<td>/ŋ/</td>
<td>Gh</td>
<td>gh</td>
<td>/p/</td>
</tr>
<tr>
<td>/ŋʷ/</td>
<td>Ghw</td>
<td>ghw</td>
<td>/r/</td>
</tr>
<tr>
<td>/gʷ/</td>
<td>Gw</td>
<td>gw</td>
<td>/s/</td>
</tr>
<tr>
<td>/x/</td>
<td>H</td>
<td>h</td>
<td>/t/</td>
</tr>
<tr>
<td>/xʷ/</td>
<td>Hw</td>
<td>hw</td>
<td>/u/</td>
</tr>
<tr>
<td>/dz/</td>
<td>J</td>
<td>j</td>
<td>/v/</td>
</tr>
<tr>
<td>/k/</td>
<td>K</td>
<td>k</td>
<td>/vʷ/</td>
</tr>
<tr>
<td>/kp/</td>
<td>Kp</td>
<td>kp</td>
<td>/w/</td>
</tr>
<tr>
<td>/kʷ/</td>
<td>Kw</td>
<td>kw</td>
<td>/j/</td>
</tr>
<tr>
<td>/l/</td>
<td>L</td>
<td>l</td>
<td>/z/</td>
</tr>
<tr>
<td>/m/</td>
<td>M</td>
<td>m</td>
<td>/ŋ/</td>
</tr>
<tr>
<td>/mʲ/</td>
<td>Mb</td>
<td>mb</td>
<td></td>
</tr>
</tbody>
</table>

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 [ɔ] 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

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Grapheme</th>
<th>Capital</th>
<th>Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ɐ/</td>
<td>A</td>
<td>a</td>
<td></td>
</tr>
<tr>
<td>/ɐ/ + PAL</td>
<td>E</td>
<td>e</td>
<td></td>
</tr>
<tr>
<td>Ø (+ PAL)</td>
<td>Ø</td>
<td>ø</td>
<td></td>
</tr>
<tr>
<td>Ø + LAB</td>
<td>U</td>
<td>u</td>
<td></td>
</tr>
</tbody>
</table>

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. [prəɛ]  
/prəɛ/  
< pərasl >  
‘snatch’
b. [pləm]  
/pləm/  
< pəłam >  
‘pull out’
c. [məpək]  
/mpək/  
< mpək >  
‘shut’

(2.165) a. [zəɓli]  
/zəɓli/  
< zəɓla >  
‘ghost’
b. [ɡə́ɡə̄məj]  
/gə́ɡə̄məj/  
< gə́ɡə̄məj >  
‘cotton’
c. [tɛtiOSəm]  
/tɛtIOSəm/  
< tɛtIOSəm >  
‘wind’

(2.166) a. [də́bdəɓlə]  
/dábdəɓlə/  
< dábdəɓlə >  
‘stopper’
b. [mə́pə́ɗə́khə́]  
/mə́pə́ɗə́khə́/  
< mapə́ɗə́khə́ >  
‘sweet potato’

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

(2.167) a. [ɔl̚dəŋ]  
/ɔl̚dəŋ/  
< zl̚dəŋ >  
‘tooth’
b. [vijà]  
/vjà/  
< vəyə >  
‘wet season’
c. [dʒə̄wə̄n]  
/dʒə̄wə̄n/  
< njə̄wə̄n >  
‘truth’
d. [mɛ̄tə̄lə]  
/mɛ̄tə̄lə/  
< metə̄lə >  
‘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. [gʷə̀lək]  
/gʷə̀lək/  
< gulak >  
‘argue’
b. [túkʷsə́sə́r]  
/túkʷsə́sə́r/  
< tuksə́sə́r >  
‘dry’
c. [t̚wə̍wə́tə́]  
/t̚wə̍wə́tə́/  
< tuwə́tə́ >  
‘finish’
d. [ʊ̄dʒə̄k]  
/ʊ̄dʒə̄k/  
< uə̄k >  
‘house’
e. [hə̄lə̄lə̣]  
/hə̄lə̣lə̣/  
< halula >  
‘wall’

Note that for all words beginning with syllabic /n/, the nasal is written < η > 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. [ŋ̚və́]  
/ŋ̚və́/  
< ŋ̚və́ >  
‘excrement’
b. [ŋ̚ʃə̄ŋ]  
/ŋ̚ʃə̄ŋ/  
< ŋ̚ʃə̄ŋ >  
‘seed’
c. [ŋ̚tə́v] ~ [ŋ̚tə́v]  
/ŋ̚tə́v/  
< ŋ̚tə́v >  
‘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/ <sākāwan> ‘I am sleeping.’  
b. /sákāwān] <sākāwan> ‘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.

\[(2.171)\]
\[\begin{array}{l}
\text{a. } \overline{\text{Ā}-\overline{\text{nā- lām} -\text{ātān}^{\text{y}}}} / \rightarrow <\text{ nelemetene}> \\
\text{3SG.SBJ- FUT- build -3SG.IOBJ} \\
\text{‘I will build for him.’} \\
\text{b. } \overline{\text{sā- mà}^{\text{d}}} -\text{za} -\overline{\text{ata}} / \rightarrow <\text{ sa mādžata}> \\
\text{1SG.SBJ- swallow -TRANS -3PL.DOBJ} \\
\text{‘I swallow them.’} \\
\text{c. } \overline{\text{ṅ ntsā}} / \rightarrow <\text{ ṇca}> \\
\text{INF bite} \\
\text{‘to bite’}
\end{array}\]

(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.

\[(2.172)\]
\[\begin{array}{l}
\text{a. } \overline{\text{la- rāx}^{\text{y}}}/ \rightarrow \overline{\text{lērēx}} \rightarrow <\text{ lereh}> \\
\text{NOM.ACT- heal} \\
\text{‘healing’} \\
\text{b. } \overline{\text{ma- dās}} / \rightarrow \overline{\text{mēdās}} \rightarrow <\text{ mādās}> \\
\text{NOM- cultivate} \\
\text{‘cultivator’}
\end{array}\]

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).
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).

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. /sä- dà –ānā/ → < sa déne >
1SG.SBJ- prepare -3SG.IOBJ
‘I prepare food for him.’

b. /sá- kā- 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 bwäl/ → < nene nj 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. bëřhëřë not bëřhëřë). Secondly, for prenasalised plosives the nasal is not written as a superscript (e.g. ndândàdáz not "dâ’dâdz"). 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

<table>
<thead>
<tr>
<th></th>
<th>Noun</th>
<th>Verb</th>
<th>Adjective</th>
<th>Adverb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argument of verbal Clause</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Complement of preposition</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Predicate of verbless clause with subject</td>
<td>X</td>
<td>_</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Predicate of verbless clause with COP</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Head of noun phrase</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Noun modifier</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>Focus particles</td>
</tr>
<tr>
<td>Predicate of verbal clause</td>
<td></td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Predicate of relative clause</td>
<td></td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Predicate of comparative clause</td>
<td>quality nouns and patient nominalisation</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Complement of clause with copula verb</td>
<td></td>
<td>-</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Core or clausal modifier</td>
<td>locative and temporal nouns</td>
<td>-</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bàk'w</td>
<td>‘lump/make a lump’</td>
</tr>
<tr>
<td>yāv</td>
<td>‘pride/boast’</td>
</tr>
<tr>
<td>yēm</td>
<td>‘fault/judge’</td>
</tr>
<tr>
<td>krēw</td>
<td>‘difficult farming/farm with difficulty’</td>
</tr>
<tr>
<td>ḥāp</td>
<td>‘speech/speak’</td>
</tr>
<tr>
<td>mbāw</td>
<td>‘child/give birth’</td>
</tr>
<tr>
<td>mēd'</td>
<td>‘oath/swear’</td>
</tr>
<tr>
<td>ngēs</td>
<td>‘urine/urinate’</td>
</tr>
<tr>
<td>sāsām</td>
<td>‘joy/rejoice’</td>
</tr>
<tr>
<td>wān</td>
<td>‘day/sleep’</td>
</tr>
<tr>
<td>vāx</td>
<td>‘day/pass the day’</td>
</tr>
<tr>
<td>zàzàk</td>
<td>‘rest/rest’</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>1V</th>
<th></th>
<th>2V</th>
<th></th>
<th>3V</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skeleton</td>
<td>Example</td>
<td>Skeleton</td>
<td>Example</td>
<td>Skeleton</td>
<td>Example</td>
</tr>
<tr>
<td>1C</td>
<td>Ca (13)</td>
<td>mā ‘mouth’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2C</td>
<td>CaC (63)</td>
<td>ḷām ‘ear’</td>
<td>CaCa (58)</td>
<td>wālā ‘woman’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CCa (43)</td>
<td>dzvā ‘breastbone’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3C</td>
<td>CCaC (150)</td>
<td>bzām ‘chin’</td>
<td>CaCaC (150)</td>
<td>dēlēk ‘bile’</td>
<td>CaCaCa (19)</td>
<td>lābārā ‘story’</td>
</tr>
<tr>
<td></td>
<td>CCCa (7)</td>
<td>ntrā ‘moon’</td>
<td>CaCCa (22)</td>
<td>gāvdā ‘bead’</td>
<td>CaaCa (3)</td>
<td>ṅgá:lāw ‘plant sp.’</td>
</tr>
<tr>
<td>4C</td>
<td>CCCaC (29)</td>
<td>nkrām ‘dry season’</td>
<td>CCaCaCa (3)</td>
<td>gdēmfè ‘flour pot’</td>
<td>CaCaCaCa (30)</td>
<td>bākātār ‘bag’</td>
</tr>
<tr>
<td></td>
<td>CCCaC (64)</td>
<td></td>
<td></td>
<td>yāmpāf ‘lungs’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CCaCaC (7)</td>
<td>ntāwān ‘tree sp.’</td>
<td>CaCCaCa (4)</td>
<td></td>
<td>sāgkārā ‘mastitis’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CaCCaCa (2)</td>
<td>xālwlā ‘wall’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5C</td>
<td>CCaCCaC (5)</td>
<td>dāmtkʷ‘atal ‘pestle’</td>
<td>CaCCaCaC (4)</td>
<td>gāţārvāj ‘ligament’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CCaCCaC (1)</td>
<td>mjīdnāk ‘bird sp.’</td>
<td>CaCCaCaC (12)</td>
<td>bārgādān ‘storm’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6C</td>
<td>CCaCCaCaC (2)</td>
<td>kʷţāktādāk ‘leech’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CCaCCaCaC (1)</td>
<td>ndrāmdāmţāj ‘large ground pea’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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)  
\begin{align*} 
pá-pá & \quad \text{`wing'} \\
kés-kès & \quad \text{`bird sp.'} \\
y\textsuperscript{w}àr\textsuperscript{w}á-y\textsuperscript{w}àr\textsuperscript{w}á & \quad \text{`snail'} \\
sésēk-sésēk & \quad \text{`tree sp.'} \\
\end{align*}

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)  
\begin{align*} 
tsā-tsāl & \quad \text{`plant sp.'} \\
zē-zēdē & \quad \text{`giraffe'} \\
tā-tālāj & \quad \text{`root'} \\
\end{align*}

(ii)  
Prefixal CVC reduplication  (11 nouns)

(3.4)  
\begin{align*} 
k\textsuperscript{w}áj-k\textsuperscript{w}ájá & \quad \text{`hyena'} \\
dāb-dābà & \quad \text{`stopper'} \\
bēd-bēdêŋ & \quad \text{`biggest drum'} \\
\end{align*}

(iii)  
Suffixal CV reduplication (14 nouns)

(3.5)  
\begin{align*} 
gānā-nā & \quad \text{`tongue'} \\
bēlē-lēr & \quad \text{`tomb stone'} \\
kālkā-kāk & \quad \text{`jaw'} \\
\end{align*}

(iv)  
Suffixal CVC reduplication (2 nouns)

(3.6)  
\begin{align*} 
kāzām-zām & \quad \text{`cricket (fatty)'} \\
kēbēv-bēv & \quad \text{`swimming'} \\
\end{align*}

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)  
\[ \text{bdāk}^w - \text{bdāk}^w \quad \text{‘hornbill’} \]
\[ \text{kédé-kédé} \quad \text{‘tickling’} \]
\[ \text{bèrdè-bèrdè} \quad \text{‘billowing dust’} \]

Example (3.8) is the name of a game which has been derived from a verb \( ndèw \) ‘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)  
\[ \text{ndèw-ndéw} \quad \text{‘game played with stones’} \]

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 \( māmān \) ‘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

<table>
<thead>
<tr>
<th>Kinship Term</th>
<th>General term</th>
<th>1st person (my, ours)</th>
<th>2nd person (yours (sg or pl))</th>
<th>3rd person (his/hers, theirs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>mán</td>
<td>mānā</td>
<td>mātsāxʷ</td>
<td>māmān</td>
</tr>
<tr>
<td>Father</td>
<td>tsèn</td>
<td>vānā</td>
<td>tsèxʷ</td>
<td>tsèn</td>
</tr>
<tr>
<td>Sibling</td>
<td>ḣāŋgān</td>
<td>ḣānā</td>
<td>ḣānāxʷ</td>
<td>ḣāŋgān</td>
</tr>
<tr>
<td>Maternal uncle</td>
<td>kʷzāŋʷān</td>
<td>kʷzākʷnā</td>
<td>kʷzākʷáxʷ</td>
<td>kʷzāŋʷān</td>
</tr>
</tbody>
</table>

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’, nkʷā ‘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) \[\text{Maman} \quad \text{tata} \quad a \quad \text{ŋgaya} \quad : \quad \text{Cehw} \quad \text{ŋkune}\]
\[\text{mámán} \quad \text{tátá} \quad á- \quad \text{ŋgājā} \quad \text{tsèxʷ} \quad \text{nkʷnē\hspace{1em}mother.3POSS\hspace{1em}3PL.POSS\hspace{1em}3SG.SBJ-\hspace{1em}saying\hspace{1em}father.2POSS\hspace{1em}2PL.POSS}\]
\[a \quad \text{kadam} \quad a \quad \text{daba} \quad \text{naka} \quad \text{kwaw} \quad \text{eze} .\]
\[á- \quad \text{kā-} \quad \text{dám á} \quad \text{dábá} \quad \text{nākā} \quad \text{kʷāw} \quad \text{ézē}\]
\[\text{3SG.SBJ-\hspace{1em}IPFV-\hspace{1em}enter\hspace{1em}PREP1\hspace{1em}women's.hut\hspace{1em}1SG.POSS\hspace{1em}NEG\hspace{1em}therefore\hspace{1em}The\hspace{1em}ir\hspace{1em}mother\hspace{1em}said,\hspace{1em}“Therefore\hspace{1em}your\hspace{1em}father\hspace{1em}is\hspace{1em}not\hspace{1em}coming\hspace{1em}into\hspace{1em}my\hspace{1em}hut.”’\]

(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) \[\text{cen} \quad \text{mbaw}, \quad \text{ey} \quad \text{man} \quad \text{mbaw}, \quad \text{øy} \quad \text{nda}, \quad \text{øy}\]
\[\text{tsèn} \quad \text{mbàw} \quad \text{ēj} \quad \text{mán} \quad \text{mbàw} \quad \text{j-} \quad \text{ndā} \quad \text{j-}\]
\[\text{father} \quad \text{child} \quad \text{and} \quad \text{mother} \quad \text{child} \quad \text{3PL.SBJ-\hspace{1em}go\hspace{1em}3PL.SBJ-}\]
\[\text{mpemene} \quad \text{haldōma}\]
\[\text{mpàm} \quad \text{-ēnē} \quad \text{xáldmā}\]
\[\text{look.for} \quad \text{-3SG.IOBJ} \quad \text{girl}\]

‘…the \text{father} \text{of the child, and the} \text{mother} \text{of the child, they go, they look for a girl for him…’\hspace{1em} (DE19-SN:3.1)

3.1.4 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)

<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
<th>Symbol</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>gàdwdà</td>
<td>‘fufu cooking pot’</td>
<td>wdà</td>
<td>‘fufu’</td>
</tr>
<tr>
<td>gèdwrèj</td>
<td>‘sauce cooking pot’</td>
<td>wrèj</td>
<td>‘sauce’</td>
</tr>
<tr>
<td>ngàrwålā</td>
<td>‘co-wife’</td>
<td>wålā</td>
<td>‘wife/woman’</td>
</tr>
<tr>
<td>mbèŋtsērēw</td>
<td>‘catfish’</td>
<td>mbàw</td>
<td>‘child’</td>
</tr>
</tbody>
</table>

(b) Phonological reduction of a phrase

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

(3.12) a. tàksájám ‘cup’ ← tēkēɗ má á tāsā jàm
calabash REL=PREP1 on drink water
‘calabash for drinking water’

b. tàktrg”ā ‘granary calabash’ ← tēkēɗ mālā trg”ā
calabash GEN granary
‘calabash for grainery’

c. tàkázwdā ‘fufu calabash’ ← tēkēɗ má á tāzàm wdā
calabash REL=PREP1 on eat fufu
‘calabash for eating fufu’

d. mbèndzwēn ‘shepherd’ ← mbā mā kēnjēn kàn ēgē
calabash REL=IPFV-follow animal =PL
‘child who follows animals’

e. sāmbwá ‘armpit’ ← á skā mbàw wā
PREP1 underneath child breast
‘underneath the child of the breast’

f. sāxā ‘nape of neck’ ← á skā xā
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. \textit{xáldmā} ‘girl/daughter’ vs. \textit{xāl dmā} ‘daughter of bride’

daughter bride

b. \textit{xéndrèj} ‘malaria’ vs. \textit{xā ndrèj} ‘head of sorghum’

head sorghum

c. \textit{mbàmawal} ‘boy’ vs. \textit{mbà māwàl} ‘child of man’

child man

\subsection*{3.1.1.5 Plural marking for some animate nouns}

Buwal has two ways of marking plural, a plural clitic \textit{égē} (see Section 4.5) which occurs
towards the end of the noun phrase and a plural suffix \textit{–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 \textit{–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’ \textit{wālā} contains the suffix \textit{wēljé} whilst the plural of ‘man’
\textit{māwàl, māwàl égē} uses the enclitic. Also the noun ‘chicken’ \textit{gāmtāk} may be marked
either way: \textit{gēmtjé} or \textit{gāmtāk égē}. The noun ‘child’ \textit{mbàw} is highlighted in Table 3.4
below because it has an irregular plural \textit{wzjé}. The plural of the indefinite determiner
‘another’ \textit{wéndé} (see Section 4.2.1) takes the plural suffix as well as a stem modification
to become \textit{vēdjé}. 
Table 3.4: Animate nouns which take the plural suffix

<table>
<thead>
<tr>
<th>Category</th>
<th>Gloss</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>person</td>
<td>xèdzè</td>
<td>xèdzjé</td>
<td></td>
</tr>
<tr>
<td>woman</td>
<td>wālā</td>
<td>wēljé</td>
<td></td>
</tr>
<tr>
<td>child</td>
<td>mbaw</td>
<td>wzjé</td>
<td></td>
</tr>
<tr>
<td>girl</td>
<td>xáldmá</td>
<td>xéldmjé</td>
<td></td>
</tr>
<tr>
<td>blacksmith</td>
<td>mhā</td>
<td>mhjé</td>
<td></td>
</tr>
<tr>
<td>Domestic animals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>goat</td>
<td>nxʷā</td>
<td>nxʷjé</td>
<td></td>
</tr>
<tr>
<td>ox</td>
<td>ḥā</td>
<td>ḥjé</td>
<td></td>
</tr>
<tr>
<td>sheep</td>
<td>ntmēk</td>
<td>ntmjé</td>
<td></td>
</tr>
<tr>
<td>chicken</td>
<td>gāmtāk</td>
<td>gēmtjé</td>
<td></td>
</tr>
<tr>
<td>kid</td>
<td>mbà xētsēkē</td>
<td>wzjé xētsjé</td>
<td></td>
</tr>
</tbody>
</table>

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 3\( rd \) person pronouns, deictics, anaphors and definite markers. For Mina (Frajzyngier and Johnston 2005: 60-63) he shows that plural is marked by –\( ẙi \) 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.  
\[
\begin{align*}
\text{xëdzè} & \quad \text{‘person’} \\
\text{wālā} & \quad \text{‘woman’} \\
\text{māwāl} & \quad \text{‘man’} \\
\text{mb̥ā} & \quad \text{‘blacksmith’} \\
\text{xtāj} & \quad \text{‘non-blacksmith’} \\
\end{align*}
\]

b.  
\[
\begin{align*}
\text{nxʷā} & \quad \text{‘goat’} \\
\text{gʷāmbākʷ} & \quad \text{‘toad’} \\
\text{gʷādārāk} & \quad \text{‘vulture’} \\
\text{xʷzām} & \quad \text{‘crocodile’} \\
\text{dzèdzwèd} & \quad \text{‘fly’} \\
\end{align*}
\]
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)  
\( A \quad \text{va} \quad \text{wese} \quad \text{ata} \quad \text{lambaw} \quad , \quad \text{ata} \quad \text{la} \)  
\( \text{á} \quad \text{vā} \quad \text{wēsē} \quad \text{ā} \quad \text{tā} \quad \text{lā-} \quad \text{mbāw} \quad \text{ā} \quad \text{tā} \quad \text{lā} \)  
\( \text{PREP1} \quad \text{year} \quad \text{DEM.DIST} \quad \text{PREP1} \quad \text{on} \quad \text{NOM.ACT-} \quad \text{give.birth} \quad \text{PREP1} \quad \text{on} \quad \text{do} \quad \text{damas} \quad \text{Kwanay} \quad \text{naka} \)  
\( \text{dmās} \quad \text{kʷánāj} \quad \text{nākā} \)  
pregnancy \( \text{Konay} \quad \text{1SG.POSS} \)  
‘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

<table>
<thead>
<tr>
<th>Order</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>( g^&quot;éndzē&quot; )</td>
<td>( kjzəŋ )</td>
</tr>
<tr>
<td>2</td>
<td>( zràj/zrà )</td>
<td>( mànámbà )</td>
</tr>
<tr>
<td>3</td>
<td>( dēlē )</td>
<td>( g^&quot;ádām )</td>
</tr>
<tr>
<td>4</td>
<td>( k^&quot;ánāj )</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>( k^&quot;édzē )</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>( k^&quot;átādāj )</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>( dāwāy )</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>( k^&quot;ádā )</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>( k^&quot;ájəŋ )</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>( k^&quot;átsəbā )</td>
<td></td>
</tr>
</tbody>
</table>
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)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>vān</td>
<td>rain</td>
</tr>
<tr>
<td>vākʷ</td>
<td>sand</td>
</tr>
<tr>
<td>jām</td>
<td>water</td>
</tr>
<tr>
<td>mávāw</td>
<td>beer</td>
</tr>
<tr>
<td>tātdām</td>
<td>air, wind</td>
</tr>
</tbody>
</table>

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

(3.17)  

\[
\text{leɓec} \quad \text{vakw gbak} \\
\text{lá- bêts vākʷ gbák} \\
\text{NOM.ACT- assemble sand two} \\
\text{‘Two groups of sand.’ (Fieldnotes)}
\]

Substances cannot be modified by the quantifier *vṛām* ‘many’ but must use *dākālā* ‘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)

\[
\text{Øy nda , øy dene mavaw ege a mna .} \\
\text{j ndâ j dâ -ēnē mávāw =ēgē á mnā} \\
\text{3PL.SBJ- go 3PL.SBJ- bring -3SG.IOBJ beer =PL PREP1 inside} \\
\text{‘They go, they bring different types of beer inside.’ (DE2-SN:9.2)}
\]

(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)
wēr-wēr ‘trickery’
sàsàm ‘joy’
yāv ‘boasting/admiration’
kʷétsér ‘intelligence’
zxāj ‘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)
ŋɡrèŋ ‘greed/greedy person’
màsáwlax ‘delinquency/delinquent’
klèŋ ‘wisdom/wise person’

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

(3.21) Wala ŋkwa pa ŋ kwécér aha mala naka .
wālā nkʷā pā ŋ kʷétsér ā 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)
dâmāw ‘bush’
wātā ‘compound/home’
wjēk ‘hut’
bārlā ‘mountain’
lā ‘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 ŋ́ ‘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. hejaye ay nja ŋ̱ barla , ay kadaw
xèjè -jé ķ ndzā ŋ̱ bārlā ĵ kā- dāw
person -PL 3PL.SBJ- live PREP2 mountain 3PL.SBJ- IPFV- want
ŋ̱ nja ŋ̱ varvara kwaw .
ŋ̱ ndzā ŋ̱ vārvarā kwāw
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 kangoŋa ndorey ase la ende .
ā- kā- ŋgā -bā ndrēj ā sā lā ēndē
3SG.SBJ- IPFV- break -BEN sorghum PREP1 under field PREP1 like.this.PROX
‘He was breaking sorghum for himself under the field¹ 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.
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).

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

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

(3.29) a. na nj a a Buwal.
ná- ndzā á bwäl
1EXCL.SBJ- stay PREP Buwal
‘…we stayed in Buwal.’
(NH11-SN:1.6)

b. Buwal ege ay kadaw ŋ da gham
bwäl =égē j- kā- dāw ŋ dā ŋām
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

<table>
<thead>
<tr>
<th>Temporal nouns</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>vjā</td>
<td>‘wet season’</td>
</tr>
<tr>
<td>nkràm</td>
<td>‘dry season’</td>
</tr>
<tr>
<td>mésfē</td>
<td>‘harvest season’</td>
</tr>
<tr>
<td>wālāŋ</td>
<td>‘period’</td>
</tr>
<tr>
<td>pès/wān/vāx²</td>
<td>‘day’</td>
</tr>
<tr>
<td>zàdàw</td>
<td>‘night’</td>
</tr>
<tr>
<td>ntrā³</td>
<td>‘month’</td>
</tr>
<tr>
<td>vā</td>
<td>‘year’</td>
</tr>
</tbody>
</table>

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) \[ \text{Va} \ \text{anta} \ \text{vanay} \ ? \]
\[ \text{vā} \ \text{ãntā} \ \text{vānáj} \]
\[ \text{year} \ \text{3SG.POSS} \ \text{how.many} \]
\[ \text{‘How old is he (lit. his years are how many)?’} \] (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. \[ \text{Walāŋ} \ \text{ŋgba} \ , \ \text{tatdàm} \ a \ \text{kamàf} \ \text{dakalà} \ . \]
\[ \text{wàlāŋ} \ \text{nyā} \ \text{tátìm} \ \text{á-} \ \text{kà-} \ \text{màf} \ \text{dàkàlà} \]
\[ \text{period} \ \text{DEM.PROX} \ \text{wind} \ \text{3SG.SBJ- IPFV- be.cold} \ \text{a.lot} \]
\[ \text{‘(During) this period, the wind is very cold.’} \] (GE27-SE:33.5)

b. \[ \text{Dtora} \ \text{jeb} \ , \ \text{sa} \ \text{kèwene ye} \ . \]
\[ \text{ntrà} \ \text{dzèx} \ \text{sà-} \ \text{kà-} \ \text{wàn} \ \text{-èjè} \]
\[ \text{month} \ \text{whole} \ \text{1SG.SBJ- PFV- lie} \ \text{-PART} \]
\[ \text{‘The whole month, I have been lying down.’} \] (GE27-SE:17)

² The word pès also means ‘sun’, the word wān ‘sleep’ and vāx ‘pass the day’. ³ The word ntrà also means ‘moon’. ³
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 *lúmà* ‘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>
<thead>
<tr>
<th>Day</th>
<th>Buwal name of day</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td><em>pès</em> <em>lúmà</em> <em>zāmāj</em></td>
<td>‘Zamay market day’</td>
</tr>
<tr>
<td>Tuesday</td>
<td><em>pès</em> <em>lúmà</em> <em>máfaw</em></td>
<td>‘Mofu market day’</td>
</tr>
<tr>
<td>Wednesday</td>
<td><em>pès</em> <em>lúmà</em> <em>làrbà</em></td>
<td>‘Wednesday market day’</td>
</tr>
<tr>
<td>Thursday</td>
<td><em>pès</em> <em>lúmà</em> <em>gāvār</em></td>
<td>‘Gavar market day’</td>
</tr>
<tr>
<td>Friday</td>
<td><em>pès</em> <em>lúmà</em> <em>gāzāwā</em></td>
<td>‘Gazawa market day’</td>
</tr>
<tr>
<td>Saturday</td>
<td><em>pès</em> <em>lúmà</em> <em>nkèf</em></td>
<td>‘Gawar Winde market day’</td>
</tr>
<tr>
<td>Sunday</td>
<td><em>pès</em> <em>lúmà</em> <em>bwāl</em></td>
<td>‘Buwal market day’</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Month</th>
<th>Buwal name of month</th>
<th>Gloss</th>
<th>Name Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>ntrā bwāl</td>
<td>‘month of Buwal’</td>
<td>Ethnic group</td>
</tr>
<tr>
<td>November</td>
<td>ntrā vārāw</td>
<td>‘month of Varo’</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>ntrā mātākām</td>
<td>‘month of Matakam’</td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>ntrā wēlmbēgēm</td>
<td>‘month of Welmbegem’</td>
<td>Festival</td>
</tr>
<tr>
<td>February</td>
<td>ntrā dēkēn</td>
<td>‘month of Deken’</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>ntrā dāmārā</td>
<td>‘month of Damara’</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>ntrā mēnslēd</td>
<td>‘seventh month’</td>
<td>Ordinal number</td>
</tr>
<tr>
<td>May</td>
<td>ntrā mādzāmāxkād</td>
<td>‘eighth month’</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>ntrā mādzāfād</td>
<td>‘ninth month’</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>ntrā mārwām</td>
<td>‘tenth month’</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>ntrā sārtāwāw</td>
<td>‘month of danger’</td>
<td>Characteristic</td>
</tr>
<tr>
<td>September</td>
<td>ntrā māxʷārāw</td>
<td>‘month of Mohoro’</td>
<td>Ethnic group</td>
</tr>
</tbody>
</table>

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)

wēlmbēgēm  ‘Welmbegem’
dāmārā    ‘Damara (misfortune)’
yènè      ‘Ghene’
xēftsēk   ‘Hefcek’
dēkēn     ‘Deken’

4 The name vārāw is what the Buwal called the Mbudum people.
5 The name mātākām is what the Buwal call the Mafia 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

<table>
<thead>
<tr>
<th>Temporal nouns</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>mpát</td>
<td>‘tomorrow’</td>
</tr>
<tr>
<td>vāgʷmtáɗ</td>
<td>‘day after tomorrow’</td>
</tr>
<tr>
<td>māpát</td>
<td>‘morning’</td>
</tr>
<tr>
<td>mátśkʷāxʷw</td>
<td>‘evening’</td>
</tr>
<tr>
<td>tāmbācā</td>
<td>‘today’</td>
</tr>
<tr>
<td>ndzwná</td>
<td>‘yesterday’</td>
</tr>
<tr>
<td>vāwātsə</td>
<td>‘this year’</td>
</tr>
<tr>
<td>mbārná</td>
<td>‘day before yesterday’</td>
</tr>
<tr>
<td>nwná</td>
<td>‘last year’</td>
</tr>
<tr>
<td>mākʷdā</td>
<td>‘next year’</td>
</tr>
<tr>
<td>ntsné</td>
<td>‘earlier’</td>
</tr>
<tr>
<td>kētsè</td>
<td>‘a bit later’</td>
</tr>
<tr>
<td>tāmāʔ</td>
<td>‘later/future’</td>
</tr>
<tr>
<td>dwzé</td>
<td>‘after/late’</td>
</tr>
</tbody>
</table>

The word vāwātsə ‘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.

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 vāgʷmtáɗ ‘day after tomorrow’ is never preceded by a preposition. This is shown in example (3.35) below.

(3.33) a. 

Aya mpat kázlarha , a kanda anta
äjä măpát ká- šär -xā á- kā- ndă ŏntă
so morning PFV- open -VNT.DIST 3SG.SBJ- IPFV- go 3SG.POSS
bēŋ
bēŋ
early.morning

‘So when the morning had begun (lit. opened), he left early…’

(NH9-SE:4.1)

b. 

A mpat meŋ pay ata la anta ma
á măpát mēŋ pāj á tā là ŏntă má
PREP1 morning antelope arrived PREP1 on place DEF.DET REL=
əy zlap
j- šāp
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 kadōmas .
á mpāt ŏntă zadāw zadāw j- kā- dmās
PREP1 tomorrow DEF.DET night night 3PL.SBJ- IPFV- dance

‘The next day, all night they were dancing.’

(NH7-SN:7.8)

b. 

Nene vāŋha a nuna wende .
nènè- vāŋh -xā á nwná wēndē
1EXCL.SBJ- arrive -VNT.PROX PREP1 last.year IND.DET.SG

‘We arrived here the year before last.’

(LL18-SE:41)
In addition, while ṭāmbācá ‘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? Vagumtd’ ege.
    xʷā- ndā vépéj vāgʷmtād’ = ēgē
 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- dā wādā a pēs mátskʷāxʷ
 1SG.SBJ prepare food PREP1 day evening
‘I prepare food during the afternoon.’ (LL18-SE:52)

b. Sey a kece pes.
    séj á kētsē pēs
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

<table>
<thead>
<tr>
<th>Relational noun</th>
<th>Gloss</th>
<th>Conceptual domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>tāmā</td>
<td>‘face, front, forwards’</td>
<td>OBJECT, SPACE/OBJECT, SPACE, DIRECTION</td>
</tr>
<tr>
<td>dwzé</td>
<td>‘behind, backwards’</td>
<td>SPACE/OBJECT, SPACE, DIRECTION</td>
</tr>
<tr>
<td>xā</td>
<td>‘head, top, above’</td>
<td>OBJECT, OBJECT/SPACE, SPACE</td>
</tr>
<tr>
<td>mándzràf</td>
<td>‘backside, bottom, below’</td>
<td>OBJECT, OBJECT/SPACE, SPACE</td>
</tr>
<tr>
<td>dāwān</td>
<td>‘back, outside part’</td>
<td>OBJECT, OBJECT/SPACE</td>
</tr>
<tr>
<td>dmàs</td>
<td>‘belly, inside part’</td>
<td>OBJECT, OBJECT/SPACE</td>
</tr>
<tr>
<td>wnάf</td>
<td>‘heart, centre’</td>
<td>OBJECT, OBJECT/SPACE</td>
</tr>
<tr>
<td>wlā</td>
<td>‘neck’</td>
<td>OBJECT, OBJECT/SPACE</td>
</tr>
<tr>
<td>kʷsàm</td>
<td>‘body/form’</td>
<td>OBJECT, OBJECT/SPACE</td>
</tr>
<tr>
<td>ḳâŋgâl</td>
<td>‘side, sideways’</td>
<td>SPACE/OBJECT, SPACE, DIRECTION</td>
</tr>
<tr>
<td>xḥār</td>
<td>‘beside (close, may touch)’</td>
<td>SPACE</td>
</tr>
<tr>
<td>ṭābā</td>
<td>‘middle, among, between’</td>
<td>OBJECT/SPACE, SPACE</td>
</tr>
<tr>
<td>bār</td>
<td>‘surface, against’</td>
<td>SPACE/OBJECT, SPACE</td>
</tr>
<tr>
<td>mēdēdē</td>
<td>‘point, opening’</td>
<td>OBJECT/SPACE</td>
</tr>
<tr>
<td>málśam</td>
<td>‘edge’</td>
<td>OBJECT/SPACE</td>
</tr>
<tr>
<td>ndâŋ’</td>
<td>‘bottom/base’</td>
<td>OBJECT/SPACE</td>
</tr>
<tr>
<td>ndâw</td>
<td>‘bottom/base’</td>
<td>OBJECT/SPACE</td>
</tr>
<tr>
<td>mádâdâkʷ</td>
<td>‘bottom/base’</td>
<td>OBJECT/SPACE</td>
</tr>
<tr>
<td>kvā</td>
<td>‘side, part’</td>
<td>OBJECT/SPACE</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Stage</th>
<th>Conceptual Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Body part of X</td>
</tr>
<tr>
<td>I</td>
<td>Subpart of X, spatially defined</td>
</tr>
<tr>
<td>II</td>
<td>Space as part of and adjacent to</td>
</tr>
<tr>
<td>III</td>
<td>Space adjacent to X</td>
</tr>
</tbody>
</table>

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, *dmâs* ‘belly’, *wnâf* ‘heart’ and *wlâ* ‘neck’ for instance, have only extended so far as to refer to a subpart of X; whilst others such as *tâmâ* ‘face’, *xâ* ‘head’ and *mándzràf* ‘backside’ have fully developed to include the meaning of the space adjacent to X. Interestingly *xâ* ‘head/above’ and *mándzràf* ‘backside/below’ can refer to space on a horizontal as well as on a vertical plane. On the horizontal *xâ* 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 ngôzlen ca, ara mbe.*

*wdzêk wéndé á tâmâ lâ ngôzên tsá ārâ mbé*

‘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)
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- kā- zlāp =éğē tsémēj mā- ndzā mànā
word REL= 2PL.SBJ IPFV- speak =PL TOP.CON JUS- stay (hesitation)
ŋ taba ŋkune .
ŋ tābā nkʷnē
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)
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.  **Mádás**  ege ay kazazak .
       má- dás =égē j- kā- zāzāk
       NOM- cultivate =PL 3PL.SBJ IPFV- rest

       ‘The farmers are resting.’                   (GE28-SE:2)

       b.  **Ara**  magam zāye ege .
       ārā mā- gām ḫā -jē =égē
       COP NOM- drive.away ox -PL =PL

       ‘They are oxen drivers.’                       (GE28-SE:1)

(b) Patient nominalisation

Payne (1997: 227) defines a **PATIENT NOMINALISTION** 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).
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).

(3.44) a. màgājāgāj ‘the spoilt one’ gāj ‘spoil’
màwānāwán ‘the lying down one’ wān ‘lie down’
màŋxʷāłāŋxʷāł ‘the dried one’ ġxʷāł ‘dry’

b. màdzàxʷàdzàxʷ ‘the pounded one’ dzàxʷ ‘pound’
mádasasdás ‘the cultivated one’ dās ‘cultivate’
máŋxlāŋxʷ ‘the grown one’ ġxʷ ‘grow’

(3.45) a. Lɔzlaw magażlagazl
ndɔram a taba zley.
hlàw má- gâł <á> gâł ndramid á tāba ḥēj
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. Ey kázam zley gɑmtak mamsamsar.
j̱- ká- zam ḥēj gám̱ták mà- msař <ā> msār
3PL.SBJ- PFV- eat meat chicken NOM- fry <NOM.PAT> fry
‘They ate fried chicken.’

(LL25-SE:27)
c. Maphwalaghwal
mà- nxʷāł -ā- nxʷāł má= sā- nxʷāł á
NOM- dry <NOM.PAT> dry REL= 1SG.SBJ- dry PREP1
njuna.
ndzwná
yesterday
‘The dried one which I dried yesterday.’

(GE9-SE:15)
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)  
\[ \text{Uda ngha pa} \quad \eta \quad \text{madada} \]
\[ \text{wdā nyā pá} \quad \eta \quad \text{má- dā} \quad <\text{á}> \quad \text{dā} \]
\text{food} \quad \text{DEM.PROX} \quad \text{at.a.level} \quad \text{in} \quad \text{NOM-} \quad \text{cook} \quad \text{<NOM.PAT>} \quad \text{cook} \]
\[ \text{aha} \quad \text{ma} \quad \text{a} \quad \text{njuna} \quad . \]
\[ \text{á} \quad \text{xā} \quad \text{má=} \quad \text{á} \quad \text{ndzw} \text{ná} \]
\text{PREP} \quad \text{over} \quad \text{REL=} \quad \text{PREP} \quad \text{yesterday} \]
\text{‘This food is more cooked than yesterday’s.’} \quad \text{(GE16-SE:33)}
\text{(lit. ‘This food is at a level in cookedness over that of yesterday.’)}

(c) Ordinal numbers

Ordinal numbers are formed by attaching the nominaliser \text{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 *mpâr* ‘first’ rather than the cardinal numeral *téŋ’lëŋ* ‘one’.

Note also *mâtąk’wâd* ‘last one’ can also be grouped with the ordinal numbers.

Table 3.11: Buwal ordinal numbers

<table>
<thead>
<tr>
<th>Ordinal numeral</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>mâmpâr</em></td>
<td>‘first one’</td>
</tr>
<tr>
<td><em>mâgbâk</em></td>
<td>‘second one’</td>
</tr>
<tr>
<td><em>màmâxkâd</em></td>
<td>‘third one’</td>
</tr>
<tr>
<td><em>mânfâd</em></td>
<td>‘fourth one’</td>
</tr>
<tr>
<td><em>màdzâšân</em></td>
<td>‘fifth one’</td>
</tr>
<tr>
<td><em>mânk‘âx</em></td>
<td>‘sixth one’</td>
</tr>
<tr>
<td><em>mënsléð</em></td>
<td>‘seventh one’</td>
</tr>
<tr>
<td><em>mâdzámâxkâd</em></td>
<td>‘eighth one’</td>
</tr>
<tr>
<td><em>mâdzâfâd</em></td>
<td>‘ninth one’</td>
</tr>
<tr>
<td><em>mâwâm</em></td>
<td>‘tenth one’</td>
</tr>
<tr>
<td><em>mâtâk’wâd</em></td>
<td>‘last one’</td>
</tr>
</tbody>
</table>

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.  
*mâmpâr* fâgwalakw ege ay ndaha

*NOM- first leper PL.3SG.SBJ- go VNT DIST*  
‘…the first of the lepers came…’  
(HT4-SN:33.2)

b.  
a  kâ- dâw ī tsâ wâlâ mâ- gbâk

*3SG.SBJ- IPFV- want INF put wife NOM- two*  
‘He wants to marry (lit. put) a second wife.’  
(HT3-SN:1.1)

c.  
*Mânfâd* anta heje dâs mewzel

*NOM- four INCL.SBJ cultivate removal of excess plants*  
‘Fourthly, we separate out excess plants.’  
(LL25-SE:5)
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

- mādārlāŋʷ ‘assistant’
- dārlāŋʷ ‘youth’
- mākwām ‘semen’
- kʷsām ‘body’
- mākwāhʷāw ‘log’
- kʷāhʷāw ‘fire’
- mētētēkʷ ‘poor person’
- tētēkʷ ‘poverty’

(3.49) ma- + adjective

- māxājŋgʷā ‘grass sp.’
- xājŋgʷā ‘dry and stiff’
- máxʷèrsèkʷ ‘bud’
- xʷèrsèkʷ ‘small and short’
- māza.xhtml:x ‘navel’
- zāxʷ ‘long/tall’

(3.50) ma- + Ideophone

- mèkʷèdèkʷèdè ‘rattle’
- kʷèdèkʷèdè ‘noise made by rattle’

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

- mētēŋʷ ‘metal flint’
- tēŋʷ ‘light fire with a metal flint’ (lit. ‘one that lights fires’)
- mādzā bākālāf ‘green mamba’
- dzā ‘kill’
- bākālāf ‘buffalo’ (lit. ‘one that kills the buffalo’)
- mēmè dēzēkʷ ‘heron’
- mèd ‘swallow’
- zēzēkʷ ‘snake’ (lit. ‘one that swallows the snake’)
- māpđāk xā ‘bush sweet potato’
- pđāk ‘slice’
- xā ‘head’ (lit. ‘one that slices the head’)

147
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. mènēnēs ‘fried bean leaves’ nēs ‘fry leaves’
b. mlād ‘broom’ hād ‘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) mādāngājām ‘deaf person’ dāngā ‘ear’
māndzāndzāxʷjām ‘spitting cobra’ ndzāndzāxʷ ‘water’
māvālgʷān ‘miserly person’ vāl ‘give’ ngʷān ‘water’
mēmbērvētekēm ‘dragonfly’ mbēr ‘fly’ vētekēm ‘water’

For many other nouns of this type the stem can no longer be identified (3.54).

(3.54) māvājvāj ‘red squirrel’
māmbāxʷālām ‘envy’
mātsālāj ‘head ornament’
mēsemlēvēg ‘first time mother’
mādzādzrāv ‘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).

\[\text{(3.55)}\]
\[
\begin{align*}
\text{lángàz} & \quad \text{‘advice/punishment’} \\
\text{lámár} & \quad \text{‘beginning’} \\
\text{lāwēd} & \quad \text{‘light’}
\end{align*}
\]
\[\etãgàz \quad \text{‘advise/punish’} \]
\[\text{mār} \quad \text{‘begin’} \]
\[\text{wēd} \quad \text{‘shine’} \]

\[\text{(3.56)}\]
\[
\begin{align*}
\text{lādzàv ṽgèm} & \quad \text{‘flock of birds’} \\
\text{lêbèz t̃af} & \quad \text{‘fork in road’} \\
\text{lāl̃á ṽdē} & \quad \text{‘circumcision’}
\end{align*}
\]
\[\text{dzàv} \quad \text{‘assemble’} \]
\[\text{bèz} \quad \text{‘divide’} \]
\[\text{bā ‘cut’} \]
\[\text{ṽdē} \quad \text{‘penis’} \]

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.

\[\text{(3.57)}\]
\[\text{a.} \quad \text{Lā caf} \quad \text{boyk} \quad ŋkwa \quad , \quad a \quad \text{kalahwaw}\]
\[
\begin{align*}
\text{lā-} & \quad \text{tsáf} \quad \text{bjk} \quad \text{nkʷā} \quad \text{ā-} \quad \text{kā-} \quad \text{lā-} \quad \text{āxʷāw} \\
\text{NOM.ACT-} & \quad \text{decorate} \quad \text{pen(fr.)} \quad \text{2SG.POSS} \quad \text{3SG.SBJ-} \quad \text{IPFV-} \quad \text{do} \quad \text{-2SG.IOBJ}
\end{align*}
\]
\[\text{masagal} \quad \text{kwaw} \quad \text{vaw} \quad ?\]
\[\text{māságāl} \quad \text{kʷāw} \quad \text{vāw}\]

\[\text{laziness} \quad \text{NEG} \quad \text{Q}\]

‘Decorating (with) your pen, doesn’t it make you lazy?’  (GE28-SE:15)

\[\text{b.} \quad \text{Lā caf} \quad \text{rougwac} \quad ŋkwa \quad a \quad \text{kalahwaw}\]
\[
\begin{align*}
\text{lā-} & \quad \text{tsáf} \quad \text{r̃gʷāts} \quad \text{nkʷā} \quad \text{ā-} \\
\text{NOM.ACT-} & \quad \text{decorate} \quad \text{clothes} \quad \text{2SG.POSS} \quad \text{3SG.SBJ-} \quad \text{kendre} \quad \text{mzekey} \\
\text{kā-} & \quad \text{ndrām} \quad \text{-zā} \quad \text{-ēkēj} \\
\text{IPFV-} & \quad \text{please} \quad \text{-TRANS} \quad \text{-1SG.IOBJ}
\end{align*}
\]

‘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).
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.
Farming (which is) with the hoe, it hurts (lit. holds the mouth) the back.’

(BE40-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) lābān ‘washing place’ bān ‘bathe, wash’
lāxbār ‘waiting place’ xbār ‘wait’
lādār ‘aligned place’ dār ‘align’
lānjā ‘seat’ ndzā ‘sit’
lāwān ‘bed’ wān ‘sleep’
lēdēŋ ‘standing place’ dēŋ ‘stand’
lāzāzāk ‘resting place’ zāzāk ‘rest’

(3.61) lādzā zlēj ‘killing place of meat’ dzā ‘kill’ zlēj ‘meat’
lēbēr zlāp ‘preaching place’ bēr ‘announce’ zlāp ‘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- ndá pá á tā là dzá ṭeį wēsē
    ‘So, she went to the level of [that] place of killing game.’ (NF5-SN: 3.1)

b. *Ara laban nycene*.
    ārā là bān ntsɛnɛ
    ‘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

<table>
<thead>
<tr>
<th></th>
<th>1V</th>
<th></th>
<th>2V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skeleton</td>
<td>Example</td>
<td>Skeleton</td>
</tr>
<tr>
<td>1C</td>
<td>Ca (26)</td>
<td>ɗą</td>
<td>CaCaC (43)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘prepare food’</td>
<td></td>
</tr>
<tr>
<td>2C</td>
<td>CaC (458)</td>
<td>wān</td>
<td>CCa (9)</td>
</tr>
<tr>
<td></td>
<td>‘sleep’</td>
<td>‘bless’</td>
<td></td>
</tr>
<tr>
<td>3C</td>
<td>CCaC (282)</td>
<td>fɗāx</td>
<td>CaCaC (28)</td>
</tr>
<tr>
<td></td>
<td>‘wake up’</td>
<td></td>
<td>‘get up’</td>
</tr>
<tr>
<td>4C</td>
<td>CCCaC (17)</td>
<td>ntbàl</td>
<td>CaCCaC (16)</td>
</tr>
<tr>
<td></td>
<td>‘tire’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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>
<thead>
<tr>
<th>Tone</th>
<th>Verb</th>
<th>Gloss</th>
<th>Tone</th>
<th>Adjective</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>xʷàs</td>
<td>‘reach’</td>
<td>L</td>
<td>xʷàs</td>
<td>‘reached’</td>
</tr>
<tr>
<td></td>
<td>xʷbàr</td>
<td>‘widen’</td>
<td></td>
<td>xʷbàr</td>
<td>‘wide’</td>
</tr>
<tr>
<td></td>
<td>ndràm</td>
<td>‘please/taste good’</td>
<td></td>
<td>ndràm</td>
<td>‘pleasing/good tasting’</td>
</tr>
<tr>
<td></td>
<td>ntōàl</td>
<td>‘tire’</td>
<td></td>
<td>ntōàl</td>
<td>‘tired’</td>
</tr>
<tr>
<td></td>
<td>drēļ</td>
<td>‘surround’</td>
<td></td>
<td>drēļ</td>
<td>‘around’</td>
</tr>
<tr>
<td>M</td>
<td>dāj</td>
<td>‘surpass’</td>
<td>M</td>
<td>dāj</td>
<td>‘more’</td>
</tr>
<tr>
<td></td>
<td>gʷär</td>
<td>‘arrive’</td>
<td></td>
<td>gʷär</td>
<td>‘arrived’</td>
</tr>
<tr>
<td></td>
<td>vāg</td>
<td>‘arrive’</td>
<td></td>
<td>vāg</td>
<td>‘arrived’</td>
</tr>
<tr>
<td>M</td>
<td>bē</td>
<td>‘fill (solid)’</td>
<td>H</td>
<td>bē</td>
<td>‘full’</td>
</tr>
<tr>
<td></td>
<td>ftēk</td>
<td>‘lose’</td>
<td></td>
<td>ftēk</td>
<td>‘lost’</td>
</tr>
<tr>
<td></td>
<td>yēf</td>
<td>‘fill (liquid)’</td>
<td></td>
<td>yēf</td>
<td>‘full’</td>
</tr>
<tr>
<td></td>
<td>k'āŋ</td>
<td>‘finish’</td>
<td></td>
<td>k'āŋ</td>
<td>‘used up’</td>
</tr>
<tr>
<td></td>
<td>kʷāŋ</td>
<td>‘lose’</td>
<td></td>
<td>kʷāŋ</td>
<td>‘lost’</td>
</tr>
<tr>
<td></td>
<td>ntākʷ</td>
<td>‘finish’</td>
<td></td>
<td>ntākʷ</td>
<td>‘finished’</td>
</tr>
<tr>
<td></td>
<td>tāl</td>
<td>‘complete number’</td>
<td></td>
<td>tāl</td>
<td>‘complete in number’</td>
</tr>
<tr>
<td></td>
<td>klāj</td>
<td>‘complete number’</td>
<td></td>
<td>klāj</td>
<td>‘complete in number’</td>
</tr>
<tr>
<td></td>
<td>twāđ</td>
<td>‘finish’</td>
<td></td>
<td>twāđ</td>
<td>‘finished’</td>
</tr>
<tr>
<td></td>
<td>gā</td>
<td>‘load up’</td>
<td></td>
<td>gā</td>
<td>‘sufficient’</td>
</tr>
<tr>
<td>MM</td>
<td>xēsēŋ</td>
<td>‘forget’</td>
<td>HM</td>
<td>xēsēŋ</td>
<td>‘forgotten’</td>
</tr>
</tbody>
</table>

### 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 later pattern applies to the vast majority of reduplicated verbs.

(i) Prefixal C reduplication (2)

(3.64) \( h_j-h_\text{āw} \) ‘lay something down on’
\( d-dr\text{āk}^w \) ‘begin to learn’

(ii) Prefixal CV reduplication (83)

(3.65) \( p_\text{ā}-p_\text{āl} \) ‘shell’
\( s_\text{ā}-s_\text{àm} \) ‘rejoice’
\( d_\text{ā}-d_\text{rās} \) ‘blunten’
\( t_\text{ē}-t_\text{wèd}^\prime \) ‘sling’

Note that prefixal CV of reduplication has produced four three syllable verbs (3.66).

(3.66) \( y_\text{à}-y_\text{àndàr} \) ‘snore’
\( x_\text{à}-x_\text{àndàr} \) ‘coagulate’
\( t_\text{ē}-t_\text{èngèl} \) ‘roll on ground’
\( s_\text{ē}-s_\text{ēdèm} \) ‘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) \( n_\text{ānā} \) ‘tremble’
\( k_\text{àkàd}^\prime \) ‘massage’
\( p_\text{àpàs} \) ‘spread out bits’
\( s_\text{àsàk} \) ‘sift’
\( ng_\text{āngèl} \) ‘sway’
\( dz_\text{àdzàr} \) ‘filter drop by drop’
\( j_\text{ājāx} \) ‘melt’
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

<table>
<thead>
<tr>
<th>Gloss</th>
<th>Buwal verb stem</th>
<th>Gavar verb stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘bark’</td>
<td>bàbàxʷ</td>
<td>bah</td>
</tr>
<tr>
<td>‘blunten’</td>
<td>dādrās</td>
<td>das</td>
</tr>
<tr>
<td>‘learn’</td>
<td>ddrākʷ</td>
<td>drakʷ</td>
</tr>
<tr>
<td>‘snore’</td>
<td>yâyândâr</td>
<td>yâden</td>
</tr>
<tr>
<td>‘suck’</td>
<td>sēsēɓ</td>
<td>seɓ</td>
</tr>
<tr>
<td>‘teach’</td>
<td>sâsrâk</td>
<td>srâk</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>(SBJ)</th>
<th>(ASP)</th>
<th>(TNS)/ (JUS)</th>
<th>Verb stem</th>
<th>(VNT)</th>
<th>(TRANS)</th>
<th>(BEN)</th>
<th>(1INCL.COL)</th>
<th>(IOBJ)</th>
<th>(DOBJ)</th>
</tr>
</thead>
</table>

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-, xʷa- 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 -āxʷnè 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

<table>
<thead>
<tr>
<th>Person/Number</th>
<th>Subject</th>
<th>Direct Object</th>
<th>Indirect Object</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>sa-</td>
<td>-ēkēj</td>
<td>-ēkēj</td>
<td>sā</td>
</tr>
<tr>
<td>2SG</td>
<td>xʷa-</td>
<td>-āxʷāw</td>
<td>-āxʷāw</td>
<td>xʷā</td>
</tr>
<tr>
<td>3SG</td>
<td>a-</td>
<td>-āw</td>
<td>-ēnē</td>
<td>mbē</td>
</tr>
<tr>
<td>1INCL</td>
<td>xèdze-</td>
<td>-āxèdżē</td>
<td>-āxèdżē</td>
<td>xèdżē</td>
</tr>
<tr>
<td>1EXCL</td>
<td>nènɛ/na-</td>
<td>-ēnɛ</td>
<td>-ēnɛ</td>
<td>nènɛ</td>
</tr>
<tr>
<td>1DUAL</td>
<td>màma/ma-</td>
<td>-āmàw</td>
<td>-āmàw</td>
<td>màmàw</td>
</tr>
<tr>
<td>2SG</td>
<td>xʷne-</td>
<td>-āxʷnɛ</td>
<td>-āxʷnɛ</td>
<td>xʷnɛ</td>
</tr>
<tr>
<td>3PL</td>
<td>ĵ-</td>
<td>-ātā</td>
<td>-ētēnɛ</td>
<td>tātā</td>
</tr>
</tbody>
</table>

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 ĵ- 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 kālaza mama kamajav  
gāţāvāj kā- lā -zā màmā- kā- nā- dzāv  
God PFV- do -TRANS 1DUAL.SBJ- IPFV- FUT- come.together

akwaw  
ákʷaw  
NEG.EXIST

‘…God has made it (so that) we will not be coming together…’

(HT1-SN:8.4)
b. Van a  \textit{kaafā} akwaw , ey metes a
vān á- kā- á- dā ákāw ēj mētēs á-
\textit{rain} 3SG.SBJ- \textit{IPFV}- \textit{FUT-} \textit{rain} \textit{NEG.EXIST} and \textit{hunger} 3SG.SBJ-
\textit{lahā} .
lā -xā
do -\textit{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 \textit{kā-} 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 \textit{ākā} as they express situations which are
ongoing.

The perfective marker may be related to the infinitive marker \textit{kə} found in both Mina
(Frajzyngier and Johnston 2005: 243) and Mbudum (Ndokobai et al 2012: 14) or \textit{ka} in
Daba (Lienhard and Wiesemann 1986: 47). In Mina \textit{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 \textit{ná-} and \textit{á-}, the first of which occurs more
frequently in the corpus. Gavar has \textit{á-} but not \textit{ná-} and therefore is a likely source of the
form \textit{á-}. A possible cognate of \textit{ná-} is found in Mina where the dependent future is marked
with \textit{nkə} or \textit{nɔkə}. Frajzyngier and Johnston (2005: 180) say the Mina future marker may
be a complex construction consisting of the location preposition \textit{nə} followed by the
infinitive marker. Another possible source of the Buwal marker \textit{ná-} is Mofu-Gudur which
has the near future prefix \textit{də-} (Barreteau 1988: 381).
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 $māndə$ ŋ daheje kwahwaw.
   toad IND.DET.SG JUS- go INF bring -1INCL.IOBJ fire
   ‘Let a toad go to bring us fire.’
   (NF 6-SN:3.5)

   b. Əy $mala$ werwer, Əy $madmas$ gwaygwaya
   3PL.SBJ- JUS- become healthy 3PL.SBJ- JUS- dance festival
   ndrəm.
   ndrəm 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.
   ŋāp -ěnē mā- ŋāp
   say -3SG.IOBJ JUS- speak
   ‘Tell him to speak (lit. let him speak).’
   (GE1-SE:20)

   b. $Magal$ gamtak.
   mā- ġāl gāmtāk
   JUS- raise chicken
   ‘Let him raise chickens.’
   (Verb Paradigms)
Mina has an apparently cognate marker with the form mə́, 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 ḫēj lā ā- lā
so take.out 3SG.SBJ- take.out -VNT.PROX meat add 3SG.SBJ- add
manda a hedē .
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)
(3.75)  

b.  

Hejaye  əy  kanda əha  , əy
xèdzè  -jé  j-  kā-  ndā  -xā  j-
person  -PL  3PL.SBJ-  IPFV-  go  -VNT.DIST  3PL.SBJ-
kanda əha  Buwal  ege  tewtew  , əy
kā-  ndā  -xā  bwāl  = ēgē  téw-téw  j-
IPFV-  go  -VNT.DIST  Buwal  =PL  all  3PL.SBJ-
jam əha  ġ  lekwal  .
dzām  -xā  Ĝ̀  lèkʷál
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  ġ  mbal əha  varvara  ġ  hayak
xʷā-  kā-  lèm  Ĝ̀  mbāl  -ā  -xā  vārvārā  Ĝ̀  xājāk
2SG.SBJ-  PFV-  get  INF  grab  -VNT.PROX  -VNT.DIST  land  INF  country
ŋkwa  a  wata  skʷaw
nkʷā  á  wātā  skʷāw
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. \textit{Mpak, haza ma ujek aka}.
\textit{mpāk -xā -zā mā wjēk āká}
\textit{close -VNT.DIST -TRANS mouth hut ACC}

‘Close the door (lit. mouth of hut) a little (before returning).’

(GE52-SE:14.6)

b. \textit{A zah za\textit{bā}, a zah za\textit{bā }\textit{ŋ}}
\textit{ā- zāx -zā -6ā ā- zāx -zā -6ā ŭ}
\textit{3SG.SBJ- pour -TRANS -BEN 3SG.SBJ- pour -TRANS -BEN PREP2}
\textit{takazuda anta wēsē}
\textit{tākāzdā āntā wēsē}
\textit{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 -\textit{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 –6ā 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.
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).

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 –akʷā 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 makudā heje nalamakwa ujek tewtew.
   á mākwā xējé- nā- lām -ākʷā wjēk tēw-tēw
   PREP1 next.year INCL.SBJ- FUT- build -INCL.COL. hut all
   ‘Next year we will all build a house together.’ (GE22-SE:3.3)

b. A makudā heje nalam ujek tewtew.
   á mākwā xējé- nā- lām wjēk tēw-tēw
   PREP1 next.year INCL.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 zama kwata ḡwōye.
   xējé- zām -ākʷā -ātā nxʷā -jē
   INCL.SBJ- eat -INCL.COL. -3PL.DOBJ goat -PL
   ‘We shepherd the goats together.’ (GE44-SE:3.14)

b. Heje zama kwene ḡwōye.
   xējé- zām -ākʷā -ēᵐē nxʷā -jē
   INCL.SBJ- eat -INCL.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
However, third person singular subject agreement cannot be marked for the perfective aspect (3.81b) or the jussive mood (3.81c).

(3.81) a. \( Sa \ k\text{kan}säk\text{amha} \quad s\text{kan} \text{ akwaw} \).
   \[
   \text{ISG.SBJ- IPFV- FUT- buy -VNT thing NEG.EXIST}
   \]
   ‘I will not be buying anything.’ (LL13-SN:17)

   b. \( Mana \ k\text{a}l\text{a} \text{ mavaw a } \text{ pes } \text{luma} \text{ Gavar} \).
   \[
   \text{1POSS PFV- make beer PREP1 day market(ful.) Gavar}
   \]
   ‘My mother made beer on Thursday.’ (NH3-SN:1.4)

   c. \( K\text{aw} \ v\text{ayay} \text{ meg\text{hwalza}} \quad z\text{lam} \text{ anta} \).
   \[
   \text{even(ful.) who JUS- show -TRANS name 3SG.POSS}
   \]
   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) \( H\text{eje} \ \text{zamakwa} \quad \text{nhweye} \).
   \[
   \text{1INCL.SBJ eat -1INCL.COL goat -PL}
   \]
   ‘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).
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).
b. *Kaw wende, sa dawgba*.

káw wéndé sá-daw -gba

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-

ŋgadahwata : kule uzlaf daba

ŋgād' -āxwāw -ātā kʷlè wḥāf dābā

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.  *Uzøye na ege ay kawu*
    wzjé nā =égē j- ka- wān
    children 1SG.POSS =PL 3PL.SBJ IPFV sleep
    ‘My children are sleeping.’  (NF4-SN:2.4)

b.  *Hoza a babahw ata ngwa .*
    xzā â- bàbàxʷ á tā nxʷā
dog 3SG.SBJ bark PREP1 on goat
    ‘The dog barked at the goat.’  (GE20-SE:1.3)

c.  *Ata pes ata pes sa babahwza hoza ege .*
    á tā pès á tā pès sā- bàbàxʷ -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 (*sēsēɗēm* ‘slip’), position (*dēŋ* ‘stand’), noise production (*ntsēx* ‘groan’), bodily function (*ŋɡēs* ‘urinate’), dynamic activity (*lāwāɗ* ‘play’), reciprocal activity (*gʷlāk* ‘argue’), state (*dàdà ɓ* ‘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 (*dmås ‘dance/trample’), actions – patient not overtly affected (*fēfēkʷ ‘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. **Hejɔye** vədɔye cekudę ende ɔy dās
   xèdzè -jé vèdjè tsekw’dē ēndē j- dās
   person -PL IND.DET.PL few like.this.PROX 3PL.SBJ- cultivate

   *ghwarnakw*.
   *y̎ wərməkʷ*
   onion
   ‘A few people cultivate onions.’
   (LL17-SE:23)

(3.88) a. **A** *kahan* ende ą-
   kā- xān ēndē
   3SG.SBJ- IPFV- cry like.this.PROX
   ‘He is crying like this.’
   (C12-SN:108.5)

   b. ɔy *han ngwav tata*.
   j- xān ngʷav tātā
   3PL.SBJ- mourn suffering 3PL.POSS
   ‘…they mourn their sufferings.’
   (DE17-SN:1.2)
In natural discourse, third person direct objects are frequently dropped. Therefore it is sometimes difficult to distinguish agentive ambitransitive verbs from transitive verbs with zero anaphora. According to Payne (1997: 170), this is a common problem in many languages of the world. This issue is discussed further in Section 8.1.1.2.

(b) Patientive ambitransitive verbs

**PATIENTIVE** ambitransitives refer to verbs involving a semantic patient as subject in intransitive clauses (Dixon & Aikhenvald 2000:5). They cover such semantic verb types as: factive (dàv ‘sprout/make sprout’), action processes (mbàw ‘be born/give birth’), movement (dàm ‘enter/make enter’), emotion (ɣʷàd‘be angry/anger’) and sensation (ndzèf‘smell, smell something’).

Examples (3.89 a & b) illustrate the use of one of a patientive ambitransitive verb in an intransitive and a transitive clause respectively.

(3.89) a.  
\[ A \quad kagal \]
\[ á- \quad kā- \quad gàl \]  
\[ 3SG.SBJ- \quad IPFV- \quad grow \]  
‘It is growing.’ (LL30-SE:4)

b.  
\[ Hwa \quad ma \quad cekzekey \quad y \quad gal \quad gamtak \]
\[ xʷā \quad mā= \quad cāk \quad -zā \quad -ēkēj \quad y \quad gàl \quad gàmtāk \]  
\[ 2SG \quad REL= \quad help \quad -TRANS \quad -1SG.OBJ \quad INF \quad raise \quad chicken \]  
‘(It’s) you who helped me raise chickens…’ (HT4-SN:34.5)

Some patientive ambitransitive verbs express situations that must be brought about by an outside agent and therefore have a ‘passive-like’ meaning (3.90a). Many agentive ambitransitive verbs can also function as patientive ambitransitives and have this type of meaning (3.90 b & c).

(3.90) a.  
\[ Mada \quad dālā \quad a \quad kangaz \quad kwaw \quad tew \]
\[ màdā \quad dālā \quad á- \quad kā- \quad ngāz \quad kʷāw \quad tēw \]  
\[ if \quad someone \quad 3SG.SBJ- \quad IPFV- \quad advise \quad NEG \quad finally \]  
‘If finally someone won’t be advised…’ (DE12-SN:4.2)
b. La ndorey a kadás.
lā ndrèj á- kā- dās
field sorghum 3SG.SBJ- IPVF- cultivate
‘The sorghum field is being cultivated.’

GE21-SE:16.2

c. Mce a kahan.
mtsè á- kā- xān
corpse 3SG.SBJ- IPVF- 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: bāk ‘slander’, tsētsēf ‘consider’, ŋēw ‘trap’, làm ‘help’, rā ‘insult and tāl ‘manage’.

(3.91) a. Hwa kecem zlambay.
x̂wā- kā- tsēm ġāmbāj
2SG.SBJ- IPVF- defend.with staff
‘You are defending with a staff.’

GE50-SE:11.1

b. *Zlambay a kecem.
ğımbāj á- kā- cēm
staff 3SG.SBJ- IPVF- defend.with
‘The staff is being defended with.’

(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 táf ‘give permission (lit. untie path), lèm táf ‘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  kejeɓ  uda  a  damaw.
    sā-  kā-  dzèɓ  wdā  ā  dāmāw
    1SG.SBJ- IPFV- Take  food  PREP1  bush
    ‘I am taking food to the bush.’ (Fieldnotes)

b. *Uda  a  kejeɓ.
    wdā  ā-  kā-  dzèɓ
    food  3SG.SBJ- IPFV- take
    ‘Food is being taken.’ (Fieldnotes)
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. \textit{Hejəye vedioye oy ketchezene}
\begin{center}
xɛdzɛ  -jɛʃɛdɛ  j  - kɛ - tɛh  -zɛ  -ɛtɛnɛ
\end{center}
\begin{center}
\textit{person -PL  IND.DET.PL  3SG.SBJ- IPFV- listen -TRANS -3PL.IOBJ}
\end{center}
\begin{center}
zəm  ɲ  bay  ege
\end{center}
\begin{center}
ɡəm  ɲ  bąj  = ɛgɛ
\end{center}
\begin{center}
\textit{ear PREP2 chief -PL}
\end{center}
\begin{center}
‘Certain people \textit{listen} (lit. the ear) to chiefs.’
\end{center}
\text{(DE8-SN:5.1)}

b. A \textit{kaɗa unaf} .
\begin{center}
á- kä dä wnaf
\end{center}
\begin{center}
\textit{3SG.SBJ- IPFV- bring heart}
\end{center}
\begin{center}
‘He is unhappy/annoyed.’
\end{center}
\text{(LL33-SE:3)}

Table 3.17 contains a list of verbs where the object is the noun mā ‘mouth’.

<table>
<thead>
<tr>
<th></th>
<th>Without mā</th>
<th>With mā</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Verb</strong></td>
<td><strong>Gloss</strong></td>
<td><strong>Verb</strong></td>
</tr>
<tr>
<td>bām</td>
<td>‘munch’</td>
<td>bām mā/pákäm*</td>
</tr>
<tr>
<td>lêm</td>
<td>‘get’</td>
<td>lêm mā</td>
</tr>
<tr>
<td>mbāl</td>
<td>‘hold’</td>
<td>mbāl mā</td>
</tr>
<tr>
<td>nāx</td>
<td>‘throw/drop’</td>
<td>nāx mā</td>
</tr>
<tr>
<td></td>
<td>nɛgɛl mā</td>
<td>‘meet’</td>
</tr>
<tr>
<td>ntsā</td>
<td>‘bite’</td>
<td>ntsā mā</td>
</tr>
<tr>
<td>ntār</td>
<td>‘pay’</td>
<td>ntār mā</td>
</tr>
<tr>
<td></td>
<td>pɛprɛk mā</td>
<td>‘race/compete’</td>
</tr>
<tr>
<td>sā</td>
<td>‘drink’</td>
<td>sā mā</td>
</tr>
<tr>
<td>tsā</td>
<td>‘put’</td>
<td>tsā mā</td>
</tr>
</tbody>
</table>

*pákäm 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

<table>
<thead>
<tr>
<th></th>
<th>1V</th>
<th>2V</th>
<th>3V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skeleton</td>
<td>Example</td>
<td>Skeleton</td>
<td>Example</td>
</tr>
<tr>
<td>1C</td>
<td>Ca (2)</td>
<td>ndzé ‘raw’</td>
<td></td>
</tr>
<tr>
<td>2C</td>
<td>CaC (21)</td>
<td>déf ‘short’</td>
<td>CaCa (7)</td>
</tr>
<tr>
<td></td>
<td>CCa (3)</td>
<td>vrè ‘red’</td>
<td></td>
</tr>
<tr>
<td>3C</td>
<td>CCaC (15)</td>
<td>‘gdàk’ ‘far’</td>
<td>CaCaC (13)</td>
</tr>
<tr>
<td></td>
<td>CàCaCaC (1)</td>
<td>msrë ‘old’</td>
<td>CàCaCa (1)</td>
</tr>
<tr>
<td>4C</td>
<td>CàCaCaC (6)</td>
<td>ërgbàd ‘sticky’</td>
<td>CàCaCaC (21)</td>
</tr>
<tr>
<td></td>
<td>CàCaCaCaC (1)</td>
<td>k’stàlax ‘messy’</td>
<td></td>
</tr>
<tr>
<td>5C</td>
<td>CàCaCaCaCaC (2)</td>
<td>métrsiw ‘naked’</td>
<td>CàCaCaCaC (1)</td>
</tr>
</tbody>
</table>

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)

dé-dé ‘appropriate’
bár-bár ‘salty’
kʷléɗ-kʷléɗ ‘smooth’
yʷéhék-yʷéhék ‘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)
sé-sé ‘thin’
pé-péék ‘white’
tá-tá:kʷɗaf ‘thick(liquid)’

(ii) Prefixal CVC reduplication (1 adjective)

(3. 97)
těs-těsēs ‘thickly sprouting’

(iii) Suffixal CV reduplication (22 adjectives)

(3. 98)
fáta-tá ‘vast’
t̪e̱lé̱s-l̪e̱w ‘thin(liquid)’
bárd̪a̱l̪a̱k ‘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. *kwēt* ‘sharpen’ *kʷét-kʷét* ‘sharp’  
b. *védzēɗ* ‘leaf/vegetation’ *védzēɗ-védzēɗ* ‘green’  
c. *mēskʷēɗ* ‘grind finely’ *kʷéɗ-kʷéɗ* ‘finely ground’  
d. *brēsē* ‘slowly (grow)’ *brēsbrēs* ‘slow growing’

3.3.1.3 Lexicalised adjectival expressions

The formation of adjectives by lexicalisation is a very restricted strategy in Buwal. Similative 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. *kʷlá* ‘able’ + *skʷāw* NEG

→ *kʷláskʷāw* ‘sick (lit. not able)’

b. *nkʷāɓ* ‘brain’ + *į* PREP2 + *xā* ‘head’

→ *nkʷāɓ į xā* ‘sensible, nice (lit. brain in head)’

Evidence that the form in (3.100a) has lexicalised, and is no longer simply the adjective *kʷlá* ‘able’ followed by the negation marker *skʷāw*, 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. *Kay, sa kulas kwaw akwaw*  

káj sā *kʷláskʷāw ákʷāw*  

no! ISG.STAT *sick* NEG.EXIST

No, I am *not sick.*  

(LL15-SE:13)
b. Əy sarza dāla me njwaŋŋ ŋ laŋ ha ŋ
j- sār -žā dālā má= nkʷāŋ ŋ xā ŋ
3PL.SBJ- look.at -TRANS someone REL= brain PREP2 head PREP2
tāba tata .
tābā 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. dâknàk ‘black’ dâknàkːá ‘blackish’
   b. gālābā ‘better’ gālābāːá ‘a little better’
   c. yéf ‘full’ yéfá ‘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’ zbáta ‘bit longer than a certain time’
   xʷádāk ‘average amount’ xʷádākːá ‘more than an average amount’
   dzèm ‘tall/long’ dzèmːá ‘bit longer’
   déf ‘short’ défːá ‘bit shorter’
   b. pépēdēk ‘white’ pépēdēkːá ‘less white/off-white’
   yéf ‘completely full’ yéfá ‘not completely full’
   ndék “ndék ‘sweet’ ndék “ndēkːá ‘less sweet’
   brdzālāx ‘sloped’ brdzālāxːá ‘less sloped’

180
### 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>
<thead>
<tr>
<th>Semantic Domain</th>
<th>Adjective</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>mëwè</td>
<td>’new’</td>
</tr>
<tr>
<td></td>
<td>msrā</td>
<td>’old’</td>
</tr>
<tr>
<td>Colour</td>
<td>dàknàk</td>
<td>’black’</td>
</tr>
<tr>
<td></td>
<td>vrè</td>
<td>’red’</td>
</tr>
<tr>
<td>Pattern</td>
<td>gʷzlèx</td>
<td>’striped’</td>
</tr>
<tr>
<td>Difficulty</td>
<td>gdag</td>
<td>’difficult’</td>
</tr>
<tr>
<td>Dimension</td>
<td>dàkāl</td>
<td>’big, important (person)’</td>
</tr>
<tr>
<td></td>
<td>dzèm</td>
<td>’long/tall’</td>
</tr>
<tr>
<td></td>
<td>kéō-téō</td>
<td>’narrow’</td>
</tr>
<tr>
<td></td>
<td>xʷbär</td>
<td>’wide’</td>
</tr>
<tr>
<td></td>
<td>xʷdzāŋʷ- xʷdzāŋʷ</td>
<td>’deep’</td>
</tr>
<tr>
<td>Physical Property</td>
<td>ngéngé</td>
<td>’spherical’</td>
</tr>
<tr>
<td></td>
<td>bār-bār</td>
<td>’hard/strong/difficult’</td>
</tr>
<tr>
<td></td>
<td>kēf-kēf</td>
<td>’light’</td>
</tr>
<tr>
<td></td>
<td>yén-yén</td>
<td>’sweet’</td>
</tr>
<tr>
<td></td>
<td>ntēbāl</td>
<td>’tired’</td>
</tr>
<tr>
<td></td>
<td>yēf</td>
<td>’full’</td>
</tr>
<tr>
<td>Position</td>
<td>mbēr-mbēr</td>
<td>’near’</td>
</tr>
<tr>
<td></td>
<td>gdāk</td>
<td>’far’</td>
</tr>
<tr>
<td></td>
<td>vāŋ</td>
<td>’arrived’</td>
</tr>
<tr>
<td>Time</td>
<td>ḫēkō</td>
<td>’long ago’</td>
</tr>
<tr>
<td></td>
<td>tlām</td>
<td>’recent’</td>
</tr>
<tr>
<td></td>
<td>nà</td>
<td>’now’</td>
</tr>
<tr>
<td>Qualification</td>
<td>dēdē</td>
<td>’appropriate’</td>
</tr>
<tr>
<td></td>
<td>ndzwēn</td>
<td>’true’</td>
</tr>
<tr>
<td></td>
<td>ndrām</td>
<td>’pleasing’</td>
</tr>
<tr>
<td>Similarity</td>
<td>mbēmbē</td>
<td>’same’</td>
</tr>
<tr>
<td></td>
<td>ndāl</td>
<td>’equal’</td>
</tr>
<tr>
<td></td>
<td>párpār</td>
<td>’different’</td>
</tr>
<tr>
<td>Value</td>
<td>tępēŋtēŋ</td>
<td>’good/honest’</td>
</tr>
<tr>
<td></td>
<td>frāw-frāw</td>
<td>’a bit strange’</td>
</tr>
</tbody>
</table>
Human propensity terms may either be nouns such as *srāx* ‘jealousy’ and *kʷetsér* ‘intelligence’ or verbs such as *sàsàm* ‘rejoice/be happy’ and *dzèjèk* ‘regret/be sorry’. Speed tends to be expressed by adverbs such as *ktság* ‘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 ŋ̣ ɗās .

6ár-ɓār tsá twáx ŋ̣ ɗās

**strong** TOP good **INF** cultivate

‘**Strength**, is good for farming.’  

(GE39-SE: 4)

b. **Pepelek** a **kaŋta** nje .

pépélek á- kā- ntā ndzé

**white** 3SG.SBJ- **IPFV**- take eye

‘**Whiteness** is covering (lit. taking) the eye.’  

(GE39-SE:39)

c. **Ditébal** aka , **kwaw cay** .

ntɓāl ákā kẉ̟aw tsáj

**tiredness** EXIST **NEG** **TAG.EMPH**

‘(Farming), makes you tired, doesn’t it!’  

(C8-SN:90)

(lit. **Tiredness** exists, doesn’t it!)

d. Ǝy valahwaw wala ata **taŋtaŋ** nkwa .

j- väl -āxẉaw wālā á tā tāŋ-ƕāŋ nḳwā

3PL.SBJ- **give** -2SG.IOBJ wife **PREP** on **good** 2SG.POSS

‘They give you a wife because of **your goodness.**’  

(GE39-SE:17)

e. **Barbar** ŋcène akwaw

6ár-ɓār ɓtsenè ákẉaw

**strong** 1EXCL.POSS **NEG(EX)**

‘We don’t have any **strength.**’  

(BH5-SN:1.5)

f. **Ujek** naka **mbermber** .

wjék nákā mbér-mbér

hut 1SG.POSS **near**

‘My house is **near(by).**’  

(GE39-SE:32.1)

g. **Ara** jem ga kaghavzhaww

ãrà dzèm mā= kā- yāv -zā -ax̣̟aw

**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
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.  
\[
\begin{aligned}
\text{Ata} & \quad \text{pepèdèk} & \quad \text{ey} & \quad \text{dakanak} & \quad , & \quad \text{oy} & \quad \text{kjav} & \quad \text{kwaw}. \\
\text{stä} & \quad \text{pëpëdèk} & \quad \text{ëj} & \quad \text{daknàk} & \quad \text{j-} & \quad \text{kā-} & \quad \text{dzàv} & \quad \text{kʷāw}
\end{aligned}
\]

\text{ASS.PL white and black 3PL.SBJ-IPFV- come.together NEG}

‘\text{White and black, they are opposite (lit. don’t come together)}.’

(GE39-SE:48)

b.  
\[
\begin{aligned}
\text{Jem} & \quad \text{wese} & \quad \text{ca} & \quad , & \quad \text{sa} & \quad \text{daw kwaw} . \\
\text{dzëm} & \quad \text{wësë} & \quad \text{tsá} & \quad \text{sā-} & \quad \text{daw} & \quad \text{kʷāw}
\end{aligned}
\]

tall DEM.DIST TOP 1SG.SBJ- want NEG

‘I don’t want to be that tall (lit. \text{That height, I don’t want it}.)’

(GE39-SE:53)

c.  
\[
\begin{aligned}
\text{Mbermber} & \quad \text{ujek} & \quad \text{ýkwa} & \quad \text{ege} & \quad \text{deydey} . \\
\text{mbér-mbér} & \quad \text{wjëk} & \quad \text{nkʷā} & \quad =\text{égē} & \quad \text{déjdéj}
\end{aligned}
\]

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.  
\[
\begin{aligned}
\text{Ndëkwndekw} & \quad \text{a} & \quad \text{ma} & \quad \text{aka} . \\
\text{ndékʷ-ndékʷ} & \quad \text{á} & \quad \text{mā} & \quad \text{ákā}
\end{aligned}
\]

sweet PREP1 inside EXIST

‘There is sweetness in it.’ (lit. ‘Sweetness in it exists.’)

(C11-SN:80.2)

e.  
\[
\begin{aligned}
\text{ŋkàdàŋ} & \quad \text{ŋ} & \quad \text{la} , & \quad \text{tuwàh} & \quad \text{ŋ} & \quad \text{dar mejere} . \\
\text{nkàŋ} & \quad \text{ŋ} & \quad \text{lä} & \quad \text{twáx} & \quad \text{ŋ} & \quad \text{dàr mëdzerë}
\end{aligned}
\]

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.  
\[
\text{Ujek mbermber } \text{ama } \text{lekwal } \text{ca , } \text{tuwah .}
\]
\[
\text{wjēk } \text{mbēr-mbēr } \text{ā } \text{mā } \text{lēkʷāl } \text{tsā } \text{twāx}
\]
\[
\text{hut near } \text{PREP1 edge school TOP good}
\]

‘A house close to (lit. near to the edge) of the school is good.’

(GE39-SE:62.1)

b.  
\[
\text{Ujek ma mbermber } \text{ege , a } \text{vecey ?}
\]
\[
\text{wjēk má= mbēr-mbēr } =\text{égē } \text{ā } \text{vétsėj}
\]
\[
\text{hut REL= near } =\text{PL } \text{PREP1 whose}
\]

‘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.  
\[
\text{Sa } \text{pa } \text{ŋ } \text{pszek } \text{aha } \text{hwa .}
\]
\[
\text{sā } \text{pā } \text{ŋ } \text{pszēkʷ } \text{ā } \text{xā } \text{xʷā}
\]
\[
\text{1SG.STAT at.a.level PREP2 small PREP1 over 2SG}
\]

‘I am smaller than you.’

(lit. ‘I am at a level in smallness over you.’)

(LL51-SE:2)

b.  
\[
\text{Hwa } \text{pa } \text{ma } \text{jem } \text{aha } \text{sa .}
\]
\[
\text{xʷā } \text{pā } \text{mā= dzem } \text{ā } \text{xā } \text{sā}
\]
\[
\text{2SG.STAT at.a.level REL= tall PREP1 over 1SG}
\]

‘You are taller than me.’

(lit. ‘You are at a level which is tall over me.’)

(GE16-SE:9.2)

(3.108) a.  
\[
\text{Nhwa mbēy ma pa } \text{ŋ } \text{dakāl .}
\]
\[
\text{nxʷā } \text{mbj } \text{mā= pā } \text{ŋ } \text{dakāl}
\]
\[
\text{goat 3SG.STAT REL= at.a.level PREP2 big}
\]

‘The goat is the biggest.’

(lit. ‘The goat is the one at a level in bigness.’)

(GE43-SE:40)
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 nkwa pa ma la ghav aha mala
wālā nkʷā pā 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).
In such constructions ordinary nouns must be preceded by a preposition (3.111 a & b).

(3.111)a.  
\[ Hwa \ nja \ \text{ana} \ \text{tabekw}, \ ketegere. \]
\[ x^{"a"}- \ ndz\ä \ \text{ánä} \ \text{tbèk}^{"w"} \ këtègré \]
\[ 2SG.SBJ- \ be \ \text{like} \ \text{chaff} \ \text{perhaps} \]
\[ \text{‘You are like chaff, perhaps.’} \]  
(3.111)b.  
\[ La \ \eta \ \text{ngama} \ naka! \]
\[ lā \ \jë \ \text{ngámà} \ nākā \]
\[ \text{become} \ \text{PREP2 friend} \ 1SG.POSS \]
\[ \text{‘Become my friend!’} \]
\[ \text{(lit. ‘Become into my friend’)} \]

(iv) General adjunct constructions
Buwal adjectives can function both as secondary predicates and as adverbs. A \textit{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). \textit{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 adverbal constructions have the same morphosyntactic structure which can be referred to by the cover term \textit{GENERAL ADJUNCT CONSTRUCTION} (Schultze-Berndt and Himmelmann 2004: 79).

Adjectives can function as secondary predicates, both as depictives and resultatives. Schultzze-Berndt and Himmelmann (2004: 65-66) differentiate depictives from resultatives semantically by stating that \textit{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 kendoremzekey yafyaf.*

\[\text{wrēj ū̌ēj á̌- kā- nəndrām -zā -ēkēj jā̀f-jāf}\]

sauce meat 3SG.SBJ- IPFV- please -TRANS -3SG.IOBJ delicious

‘Meat sauce pleases me, delicious.’  

(2064)

b. *Heje kézen aza təsl a wata.*

\[\text{xədzē- kā- zēn ā̌zā tā̀l á wātā}\]

1INCL.SBJ- PFV- return COMPL complete PREP1 home

‘We have returned home all together (lit. complete in number).’  

(2572)

(3.113) a. *Dala kāgal anta balahw.*

\[\text{dālā kā- gāl ā̌ntā b将领̃x}]

someone PFV- grow 3SG.POSS solid

‘Someone has grown up with a solid build.’  

(1698)

b. *Zla zla a zlene zley bē a taktərgwə anta.*

\[\text{hā hā ā̌- hā -ēnē hēj bē ā təktr̃g̃ā ā̌ntā}\]

cut cut 3SG.SBJ- cut 3SG.IOBJ meat full PREP1 calabash 3SG.POSS

wese  
wēsē  
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 kéyccwerha kadak.*

\[\text{sā̌- kā- ntswěr -xā kādāk}\]

1SG.SBJ- PFV- travel -VNT.PROX good

‘I travelled well.’  

(1696)

b. *Zla ñ̄yakw ñ̄yakw.*

\[\text{hā f̄jāk̃ f̄jāk̃}\]

cut fine fine

‘Cut it very finely.’  

(LL35-SE:29)
c. *gwaygwaya kánda ndréam vaw*

\[ g^w\text{áj}^w\text{áj}a ká- ndë ndréam vaw \]

celebration 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 dora₃ kad₃ kad₃ kad₃.*

j- kä- lā drāf kādāk kādāk kādāk

3PL.SBJ IPFV do song good good good

‘They sang very very well.’

(C1-SN:4.3)

b. *Ata macahw ey baba ɐkwa əy jem jem.*

äта mātsāxʷ ē j bābā nkʷā ʃ j đèm đèm

ASS.PL mother.2POSS and father 2SG.POSS 3PL.SING 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. *Foték ant₃ a kalalakzaheje.*

ᶠték äntä á- kā- lālāk -zā -āxèdzè

lost 3SG.POSS 3SG.SBJ IPFV be.afraid -TRANS -1INCL.IOBJ

‘His loss is making us afraid.’

(GE65-SE:8.1)
b. *Hesëŋ mə a njuna, dāla kândaha*
   xēsēŋ má = á ndzwná dālā ká- ndā -xā
   forgotten REL= PREP1 yesterday someone PFV- go -VNT.DIST
   nj mpam akwaw .
   nj mpâm ákʷāw
   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)  
   kʷlá ‘able’
   láb ‘ready/almost’
   dāk ‘gone’
   pāj ‘arrived’

(3.118)  
   a.  *Kula anta ca, vangay?*
      kʷlá āntā tsá vāŋgāj
      able DEF.DET TOP how
      ‘Is he capable?’
      (lit. ‘How is the ability?’)                  (GE66-SE:51)

   b.  *Slaō anta ca, vepey?*
      tāb āntā tsá vēpēj
      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. Ɗaɗa dâk, manda fât.
dâlâ dâk mâ- ndâ fât
someone gone JUS go for.good
‘Someone (who has) gone, let him go for good.’ (GE66-SE:67.2)

b. Ɗaɗa mâ slaɓ, hwa laɓaza ara.
dâlâ má= tâɓ xʷâ- lâɓ -â -zâ ārà
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. mɓoy vaŋ mgba ama Welɓe.
mbj vâŋ ɲmgɓà á mâ wêlɓê
3SG.STAT arrived up.there PREP1 edge.of Welbe
‘he (lit. was) arrived up there next to Welbe.’ (NH16-SN:1.5)

d. Mbay slaɓ ɲ mac.
mbj tâɓ ɲ mâts
3SG.STAT ready INF die
‘He is ready to die.’ (GE1-SE:3)

e. hwa dâw ɲ bâm pakam day aha mawâl kwaw.
xʷâ- dâw ɲ bâm pâkâm dâj á xâ mâwâl kʷâw
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 ɲ slaɓ aha hwa.
sâ pá ɲ tâɓ á xâ xʷâ
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 kʷlá ‘able’ can function as the complement of a copula verb and then only with the verb lâ ‘do, become’ (3.120).
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 āzá (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. Ə jé y jé kényeye
j- ká- ndzē -ējē
3PL.SBJ- PFV- sit PART
‘They were seated.’               (TN3-WN:3.3)
b. Mada ['kesakene']ye aza kwedkwed' te w ca,
màdà ['ka- skèn -e'] jà k'wèdk'wèd' té w tsà
def. grinda -PART COMPL. very.fine completely TOP
we laye ca, o y sasam ata hwa
wàlà -jè tsà jì sàsàm á tà x"à
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 ['kèbebedzeye']ye aza .
là ['ka- bàbàd' -zà -e'] jà
field def. plow -TRANS -PART COMPL.
‘The field has been ploughed a bit.’ (GE21-SE:14.12)

b. Mba ['kehenzeye']ye aza .
mbà ['ka- xàn -zà -e'] jà
child def. 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 egôbyz kélemeye
x"à- ndàw -zà -ènè á egljìz [ka- lâm -e'] jà
2SG.SBJ. find TRANS -3SG.IOBJ PREP1 church def. build -PART
‘…you (will) find a church (recently) build…’ (PP2-SN:4.2)
b. **Mbey kẽjeye** ỵ la anta ende,
m'bý ká- ndžā -ējē ụ lâ ântâ ândê

3SG.STAT PPV- sit PART PREP2 field 3SG.POSS like.this.PROX

kaw a kagal akwaw.

kâw â- kâ- gàl âkʷâw
even 3SG.SBJ- 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 vedye ma kẽjeye** a tal aka yam.

wdzēk vēdjē má= kâ- dzā -ējē â tal âkâ jám

hut certain REL= PPV- hit PART PREP1 iron.sheets EXIST also

‘…there are also some huts which are roofed with iron.’

(DE4-SN:1.4)

d. **Uda pa ụ kẽdye** aha ma a njuna.

wdâ pâ ụ kâ- dá -ējē á xâ má= á ndzwná

food level in PPV- 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 kẽjeye** yam

a- kâ- lâ -zâ làbârâ kâ- ndžā -ējē jám

3SG.SBJ- IPFV- do TRANS chatter PPV- 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).
b. Dekey  ngazleg ma  kédeye  wese  .
dâ  -ëkēj  ngğhêŋ  mâ=  kâ-  dâ  -ëjê  wêsê
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 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.  
\[ \text{Volangvolaŋ} \ , \ a \ nda \ , \ mbəy \ hwas \ . \]  
\[ \text{vlanyləŋ} \ \ à- \ ndäm \ mbxwaas \]  
walking.quickly 3SG.SBJ- go 3SG.STAT reached  
‘Walking quickly, he goes, he has reached (the place).’  
(GE54-SE:3.2)

b.  
\[ \text{Ndarey naka} \ , \ ccelele \ kādav \ aza \ . \]  
\[ \text{ndrèj nākā tséélélé kā- dāv āzā} \]  
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.  
\[ \text{Sa nda kēlek} \ . \]  
\[ \text{sā- ndā kēlek} \]  
1SG.SBJ- go beforehand  
‘I go on beforehand.’  
(GE54-SE:23.1)

d.  
\[ \text{Sa nevelene} \ uda \ kocan} \ ̣ \ mba \ naka \ . \]  
\[ \text{sā- nā- vāl ̀-ēnē wdā ktsān} \ ̣ \ mba nākā \]  
1SG.SBJ- FUT- give 3SG.IOBJ food fast PREP2 child 1SG.POSS  
‘I will give food to my child fast.’  
(GE54-SE:17.5)
b. *Sa nda koçaŋ koçaŋ a wata.*
   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 *ɓéɛ* ‘once during a period’, *kèlèk* ‘beforehand’ (3.125c), *kʷáɡʷá* ‘for the moment’ (3.125e), *fàt* ‘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).
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 tsàftsàlàv ‘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.  
\[ \text{Baba na } \text{càcàləv a ndəv anta} \]
\[ \text{bābā nā tsàftsàlāv ā- ndàv āntā} \]
father(ful.) falling.without.warning 3SG.SBJ- fall 3SG.POSS
\[ \text{ata hayak .} \]
\[ \text{ā tā xājāk} \]
\[ \text{PREP1 on ground} \]
‘My father \textbf{fell} to the ground \textit{without warning}.’  (NH3-SN:2.8)

b.  
\[ \text{Mana ja jələv ata hayak zeney .} \]
\[ \text{mānā dzàvdzàlāv ā tā xājāk zēnēj} \]
mother.1POSS falling.without.warning PREP1 on ground again
‘My mother \textbf{fell} to the ground \textit{without warning} \textbf{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

<table>
<thead>
<tr>
<th>Ideophone</th>
<th>Gloss</th>
<th>Corresponding Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ōkʷ</td>
<td>'movement of horse'</td>
<td>xēj 'run', mbēr 'jump'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>gār ‘stand/stop’, dēŋ ‘stand’</td>
</tr>
<tr>
<td>bāf [bōf]</td>
<td>‘suddenly come out’</td>
<td>dāmhā ‘come out’, ntād ‘dive’</td>
</tr>
<tr>
<td>bērdék</td>
<td>‘escaping’</td>
<td>xēj ‘run’, mbēr ‘jump’, ndā ‘go’,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>jār ‘flee’, pār[ā]k ‘escape’</td>
</tr>
<tr>
<td>bēp</td>
<td>‘throwing away’</td>
<td>nāx ‘drop/throw away’, fiēk ‘lose’,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>vāl ‘give’</td>
</tr>
<tr>
<td>tsdāv</td>
<td>‘jumping of a toad’</td>
<td>ndā ‘go’, mbēr ‘jump’, xēj ‘run’ (car)</td>
</tr>
<tr>
<td>dāp</td>
<td>‘noise of hitting’</td>
<td>gāl ‘beat’, dzā ‘hit’</td>
</tr>
<tr>
<td>dbār</td>
<td>‘fixing something to something’</td>
<td>bāl ‘shoot’, nēnēw ‘spear something’, mbāl ‘catch/hold’</td>
</tr>
<tr>
<td>pdŋʷ“āŋ”</td>
<td>‘rolling’</td>
<td>xēj ‘run’, tātŋʷ“āl ‘roll’</td>
</tr>
</tbody>
</table>

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. Volanvolan , a nda kocan .  
   vlānvlān ā- ndā ktsān  
   walking.quickly 3SG.SBJ- go fast  
   ‘Walking quickly, he went fast.’ (GE56-SE:9.1)

b. Perce , delele , a gwarzm .  
   pértse délélé ā- gʷärzām  
   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 māmbāz ‘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 dákalá ‘a lot’ and tsékʷdē ‘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. Tatđam a kamadaheje mambaza akwaw .
tátđam á- kā- mād -āxèdzè māmbāzā ákʷaw
wind 3SG.SBJ- IPFV- cold -1INCL.DOBJ so.much NEG.EXIST
‘The wind is not making us so cold.’ (GE54-SE:19.1)

b. Ɓarbar mambaza .
ɓar-ɓar māmbāzá
hard so.much
‘It’s so hard.’ (C12-SN:80.1)

c. A kehey kɔcaj mambaza .
á- kā- xēj ktsáj māmbāzā
3SG.SBJ- IPFV- run fast so.much
‘He is running so fast.’ (GE56-SE:5.1)

d. A kehey mambaza , haha .
á- kā- 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.
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).

(3.132a) Hejaye ay kazam uda aka eze .

xèdzè -jé kā- zàm wā dākā ēzē
person 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 .
kwāmdāntā ā- kā- ndā kwā wār
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: jām ‘also’, zēnéj ‘again’, tèw ‘finally, completely’, ēndē ‘like this’ and ēzē ‘therefore’. For example in (3.133a) where ēndē ‘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.  *Hejaye əy kazam uda aka ende.*

xèdzè -jé j- kā- zām wdā ākā  endē

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.  *Hejaye əy kazam uda endē aka.*

xèdzè -jé j- kā- zām wdā  endē  ākā

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 dāw ə nda a luma kwaw zeney.*

sā- dāw ə ndā á lwāmā kʷāw  zēnēj

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 dāw ə nda a luma zeney kwaw.*

sā- dāw ə ndā á lwāmā zēnēj kʷāw

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.*

sā- ndā á wātā wār  zēnēj

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.
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>
<thead>
<tr>
<th>Adverb</th>
<th>Gloss</th>
<th>Modality</th>
</tr>
</thead>
<tbody>
<tr>
<td>kʷlákʷ</td>
<td>‘obligatorily’</td>
<td>Deontic - obligative</td>
</tr>
<tr>
<td>xāŋgá</td>
<td>‘as if/it seems’</td>
<td>Epistemic - assumptive</td>
</tr>
<tr>
<td>kēdē</td>
<td>‘perhaps/maybe’</td>
<td>Epistemic - speculative</td>
</tr>
<tr>
<td>kātā</td>
<td></td>
<td></td>
</tr>
<tr>
<td>grē⁹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kētėgrē</td>
<td></td>
<td></td>
</tr>
<tr>
<td>āvá</td>
<td>‘hopefully’</td>
<td>Optative</td>
</tr>
<tr>
<td>wárbá</td>
<td>‘fortunately’</td>
<td>Desiderative</td>
</tr>
<tr>
<td>ndzwën¹⁰</td>
<td>‘true’</td>
<td>Epistemic – veridical</td>
</tr>
<tr>
<td>ŋgērē</td>
<td>‘true’</td>
<td></td>
</tr>
</tbody>
</table>


kʷlákʷ xʷā- ná- màts jām

obligatorily 2SG.SBJ- FUT- die also

‘Obligatorily, you will die also.’ (GE58-SE:4.1)

b. **Kédène** yam aza a mana hanga.

ká- dā -ēnē jām āzá á mānā xāŋgá

PRF- draw 3SG.OBJ water COMPL. PREP1 mother.1POSS it.seems

‘She has already drawn water for my mother it seems.’ (GE48-SE:7.10)

c. **Kata** uzoye oy kaja ula akwaw vaw ?

kātā wzjé j- kā- dzā wālā ákʷāw vāw

perhaps children 3PL.SBJ- IPFV- hit voice NEG.EXIST Q

‘Perhaps the children weren’t crying out?’ (C10-SN:11.2)

---

9 Note that the adverb grē is derived from the verb grē ‘see’ and that kētėgrē is a compound consisting of kātā plus grē.
10 Note that ndzwën and ŋgērē are in fact adjectives which can function as clausal adverbs.
d.  

\[
\text{d. kaw sa kampam kusam akwaw ngara .} \\
\text{káw sá- kā- mpām kʷsām ákʷāw ngārā} \\
\text{even 1SG.SBJ- IPFV- look.for fight NEG.EXIST true} \\
\text{‘…I am truly not even looking for a fight.’} \quad (C13-SN.26)
\]

(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>
<thead>
<tr>
<th>Adverb</th>
<th>Gloss</th>
<th>Semantic Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>ājā</td>
<td>‘then, so’</td>
<td>temporal sequence</td>
</tr>
<tr>
<td>āmbá</td>
<td>‘then’</td>
<td>temporal sequence</td>
</tr>
<tr>
<td>ēndzékēdē(^{11})</td>
<td>‘however’</td>
<td>contrast</td>
</tr>
<tr>
<td>ēvēlē</td>
<td>‘although/even so’</td>
<td>concession</td>
</tr>
<tr>
<td>ēzē</td>
<td>‘therefore’</td>
<td>consequence</td>
</tr>
<tr>
<td>jām</td>
<td>‘also’</td>
<td>addition</td>
</tr>
<tr>
<td>kārbā</td>
<td>‘even though’</td>
<td>concession</td>
</tr>
<tr>
<td>kēdē</td>
<td>‘however/so’</td>
<td>contrast/consequence</td>
</tr>
<tr>
<td>tēw</td>
<td>‘finally’</td>
<td>temporal conclusion</td>
</tr>
<tr>
<td>wār</td>
<td>‘still’</td>
<td>temporal continuation</td>
</tr>
<tr>
<td>zēnēj</td>
<td>‘again/as well’</td>
<td>addition</td>
</tr>
</tbody>
</table>

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.  

\[
\text{ngama anta wese a kandaha a wata} \\
\text{ŋgámâ āntā wēsē a- kā- ndā -xā á wētā} \\
\text{friend 3SG.POSS DEM.DIST 3SG.SBJ- IPFV- go -VNT.DIST PREP1 home} \\
\text{anta , əy kasa mavaw , əy kazam kan} \\
\text{āntā j- kā- sā mávāw j- kā- zām kān} \\
\text{3SG.POSS 3PL.SBJ- IPFV- drink beer 3PL.SBJ- IPFV- eat thing}
\]

\(^{11}\) It is possible that the adverb ēndzēkēdē ‘however’ is a compound formed from āndzā ‘if’ plus kēdē ‘perhaps’.
Kadak. *Enjeke*de a nda, a mbal ngama a hedé
go however 3SG.SBJ- go 3SG.SBJ- catch friend
a werwer.
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 tambacá damaw anta gway,..., sa nda aza vaw?
ná tambilá dambáw ántá ɡʷáj sá- ndá ázá váw
PREP1 today bush DEF.DET pal 1SG.SBJ- go DUB Q
**Karba** lelen̄ kála ca gway.
*p*Kárba lëlëŋ ká- lá tsá ɡʷáj
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. ay zlepene ma , a kalamza
j- ḥāp -ēnē mā á- kā- lám -zā
3PL.SBJ- speak -3SG.IOBJ problem 3SG.SBJ- IPFV- accept -TRANS
okwaw , na ṅgha ca, mbọy ma kala marava
skʷāw ná nyā tsá mbj má= kā- lá máravá
NEG now DEM.PROX TOP 3SG.STAT REL= IPFV- do regret
wese eže
wēsē 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 nawɗum ca, 

tsá vjá äntă tsá má= nawɗwm tsá 
TOP wet.season DEF.DET TOP REL= very.difficult(ful.) TOP 
ntəra mala Sarɓawa ŋgha ... Na ca Mahwaraw 
ntrā mālā sārbāwā nyā nā tsá māxʷáráw 
month gen dangerous DEM.PROX now TOP Mohoro 
kánda aza tew ca wese , ana ndərey ŋgwayaŋ 
ká- ndā āzá tew tsá wēsē ānā ndrēj ŋgʷájāŋ 
PFV- come COMPL finally TOP DEM.DIST like corn 
ma ata razl ege , ay kanṭak tew . 
má= á tā rā̃g = ēgē j- kā- ntāk tew 
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 kēɗé ‘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 simulative demonstratives ēndē ‘like this.PROX’, 
āndālə ‘like this.MED’ and āndwsé ‘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 andwsé_ 
dālā wéndé tsá ā- kā- làm -zā āndwsé 
someone IND.DET.SG TOP 3SG.SBJ- IPFV- accept -TRANS like.that 
skʷāw . 
skʷāw 
NEG 
‘Another person, he wouldn’t accept it like that.’          (C10-SN:45)
b. *Andwse, andwse*, *səkan ma ata zam a wata*  
ándwsé ándwsé skàn má= á tā zamá wātā
*like.that like.that* thing REL= PREP1 on eat PREP1 home
*anta askwaw*.
 āntā āskʷāw
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 kédéne yam akwaw ene, a*  
sä- ká- dā -énē jām ákʷāw énē á-
1SG.SBJ- PFV- draw -3SG.IOBJ water NEG.EXIST like.that 3SG.SBJ-  
ghwad’, a ya.  
γʷā’d á- 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 ŋkwa, hwa*  
énē sā- ndā -xā á wātā ŋkʷā xʷā
like.that 1SG.SBJ- come -VNT.DIST PREP1 home 2SG.POSS 2SG.STAT  
a wata akwaw.  
á wātā ákʷāw
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), vánván ‘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).

(3.141a) 

\[ \text{káw mba naka kála gay ca , hune} \]
\[ \text{káw mbā nākā kā- lā gāj tsā xʷné-} \]
\[ \text{even(ful.) child 1SG.POSS PFV- do sin TOP 2PL.SBJ-} \]
\[ \text{velekey} \]
\[ \text{vál -ēkēj} \]
\[ \text{give -1SG.IOBJ} \]

‘…even if my child has committed a sin, give (him) to me.’ (C10-SN:28.2)

(3.141b) 

\[ \text{káw kēndewzene a dala} \]
\[ \text{káw kā- -zā -ēnē á dālā} \]
\[ \text{even(ful.) PFV- find -TRANS -3SG.IOBJ PREP1 money(ful.)} \]
\[ \text{ākwaw} \]
\[ \text{NEG.EXIST} \]

‘… he didn’t even find any money.’ (C10-SN:10.2)
c. *kaw* ana wala ma , hwa gere ca a nda  
*káw* ánā wālā má xʷā- grē tsā ā- ndā  
even(ful.) like wife TOP.EMPH 2SG.SBJ- see TOP 3SG.SBJ- go antā . 3SG.POSS  
‘…for example even the wife, you see, she leaves.’ (DE12-SN:10.4)

d. *kaw* uzoye ṭkwa ege , a mpat ay  
káw wźjé nkʷā =égē ā mpát j-  
even(ful.) children 2SG.POSS =PL PREP1 tomorrow 3PL.SBJ- nanja a sasam  
ná- ndzā ā sāsām  
FUT- live PREP1 joy  
‘…even your children, tomorrow they will live in joy…’ (DE12-SN:7.12)

e. **Kaw** vepey ay nda ca ara hwa .  
káw vépéj j- ndā tsā ā rā xʷā  
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 ṭ dāsba *kaw* akwaw .  
sá- kā- sān ṭ dās -bā káw ákʷāw  
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 *sēj* ‘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 .  
sēj xējé- rāk -bā gālāvāj  
except(ful.) INCL.SBJ- pray -BEN God  
‘We must pray to God.’ (C12-SN:146)
b.  A  nda ŋ  sa  yam  sey ŋ  toker
ā-  ndā ŋ  sā  jám  séj ŋ  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

12 This sentence concerns a giant who was too big to drink out of a cup and so could only drink from a well.

12

(3.143) a.  a  mena  ca  yam  vozkw wese  .
ā-  mēn  -ā  tsā  jāŋ  vozkw  wēsē
3SG.SBJ- be.left  -VNT.PROX  TOP  only  ore  DEM.DIST
‘…it is left, only that ore.’  (DP9-SN:5.4)

b.  Hwa  kula ŋ  sokam kwaw  ca  ,  celebe  sa  vaw  ?
xʷā  kʷlā ŋ  skām  kʷāw  tsā  tsēlēbē  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 jām ‘also’, zēnēj ‘again/as well’ and wār ‘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  .
wʒāf  bèn  māwàl  jām  ā-  pāl  -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)

Other focus particles most frequently function as noun modifiers (3.143 a & b).
b. Yaw hejaye vedaye zeney, ay kanda
jaw xedze -je vedje zenej -ka- nda
so(ful.) person -PL IND.DET.PL as.well 3PL.SBJ- IPFV- go
ara malam ege
a rama malam =egi
PREP 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
sa jam war ma ma kal na ts -aaxaw ma
1SG also still TOP.EMPH REL IPFV- FUT- put -2SG.IOBJ mouth
ji nges a zadaw vayay ka vaw?
ji nges a zadaw vajaj ka vaw
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 nyomek, xwa-nada la ketegre a ntmek
2SG.SBJ- FUT- make.sacrifice.to place perhaps PREP1 sheep
ketegore a gamtak, ketegore a nywa.
ketegek a gamtek ketegek a nxwa
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.
bay dzemere we Jose gre
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). Interrogatives 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

<table>
<thead>
<tr>
<th>Person/Number</th>
<th>Independent Pronouns</th>
<th>Stative Pronouns</th>
<th>Subject Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>sā</td>
<td>sā</td>
<td>sa-</td>
</tr>
<tr>
<td>2SG</td>
<td>xʷā</td>
<td>xʷā</td>
<td>xʷa-</td>
</tr>
<tr>
<td>3SG</td>
<td>mbē</td>
<td>mbj</td>
<td>a-</td>
</tr>
<tr>
<td>1INCL</td>
<td>xèdzē</td>
<td>xèdzē</td>
<td>xèdze-</td>
</tr>
<tr>
<td>1EXCL</td>
<td>nènè</td>
<td>nènè</td>
<td>nène/na-</td>
</tr>
<tr>
<td>1DUAL</td>
<td>màmàw</td>
<td>màmàw</td>
<td>màma/ma-</td>
</tr>
<tr>
<td>2PL</td>
<td>xʷnè</td>
<td>xʷnè</td>
<td>xʷne-</td>
</tr>
<tr>
<td>3PL</td>
<td>tātā</td>
<td>/tātā/</td>
<td>/f-</td>
</tr>
</tbody>
</table>

The table shows that unlike many West Chadic languages such as Miya (Schuh1998: 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 plural\(^1\) (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, \textit{mbē} and \textit{mbē}̧, are related whilst the subject agreement marker \textit{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 /j. Dotlesś\(^{1}\), whilst the independent pronoun \textit{tātā} is different. In fact, \textit{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.

\textbf{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).

\begin{enumerate}
\item[(4.1)] a. \textbf{sa}, \textit{sa} \textit{ŋgazaw}.
\textit{sā} \textbf{sā-} \textit{ŋgāz} -āw
\textit{1SG} \textit{1SG.SBJ-} advise \textit{3SG.DOBJ}
\textit{‘…me, I advise him.’} (HT3-SN:2.2)
\end{enumerate}

\(^1\) 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).
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.  
\[Ara \quad mbe.\]
\[\text{ārā} \quad \text{mbē}\]
\[\text{PRED 3SG}\]
\[\text{‘It’s him.’}\]  

(GE29-WE:32)

b.  
\[Madās \quad ege, \quad tata.\]
\[\text{má-} \quad \text{dās} = \text{égē} \quad \text{tātā}\]
\[\text{NOM- cultivate =PL 3PL}\]
\[\text{‘The farmers, (it’s) them.’}\]  

(GE29-WE:34)
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. kəɗe  heje  lem nd rèy  ana  tata  wese  vaw ?
kdè  xèjè-  lèm  ndrèj  ánā  tätā  wēsē  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  nd rèy  .
ārā  mbē  mā=  kā-  skām  ndrèj
COP  3SG  REL=  1PFV-  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  hald̥m̥a  .
sā  xáldmā
1SG.STAT  girl
‘I am a girl.’
(GE15-SE:41.1)

b. Heje  mende  aka  , mboy  bəlahw  ana  ndaw  mataɓ  .
xèdzè  mëndē  ákā  mbj  blàxʷ  ánā  ndàw  mátāɓ
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.  nghị  ata  mpe .
j  á  tā mpe
3PL.STAT PREP1 on tree
They are in (lit. on) a tree. (GE15-SE:47.1)

For third person plural either j 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.  nghị  gbak .
j  gbák
3PL.STAT two
‘There were two of them (lit. they were two). ’ (C18-SN:84.1)

b. Tata mahkad’ .
tātā  māxkād
3PL three
‘There are three of them (lit. they are three). ’ (GE29-SE:5)

(4.6) a. Mazkad’ ege  nghị  vrām
mazkād =égē j  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  dākālā
3PL a lot
‘There are a lot of them (lit. they are a lot). ’ (GE29-WE:8)

(4.7) a. Ata macahw  ey  baba  ṭkwa  nghị  jem  jem .
ātā  mātsāxw  ēj  bābā  nkʷā  j  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)
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 *mbj* 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 *mbj* 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: *tsékʷdē* ‘a little/few’, *dákálá* ‘a lot’, *dējdēj* ‘too much’, *párxám* ‘insufficient’ and *tété* ‘average/enough’. For the stative pronoun, the frame *mbj* _________ ‘he is _______’ was used while the independent pronoun was recorded in the frame *něněkálā*.
“Jàn 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 mbj compared with mbē. The pitch of F2 is generally higher for mbj, 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 mbj 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.

<table>
<thead>
<tr>
<th>Functional Distinctions</th>
<th>Human</th>
<th>Thing</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>specific</td>
<td>known to speaker</td>
<td>mānāŋ ‘so and so’</td>
<td>skàn ‘thing’</td>
</tr>
<tr>
<td></td>
<td>unknown to speaker</td>
<td>dālā ‘someone’</td>
<td></td>
</tr>
<tr>
<td>non-specific</td>
<td>irrealis context</td>
<td>dālā ‘someone’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>negative polarity</td>
<td>dālā ‘someone’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>free choice</td>
<td>dālā ‘someone’</td>
<td></td>
</tr>
</tbody>
</table>

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).
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.  

\[ \text{Ma } nh\text{gel nhwa } ma\text{, ara } m\text{anāŋ} \]  
má= nxèl nxʷā 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.  

\[ \text{Mb}a \ m\text{anāŋ } cs\text{a } \text{may } cs\text{a } tw\text{áx vaw} ? \]  
mbà mānāŋ tsá sā- 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.  

\[ \text{Heje } wende\text{, budākwbudākw pay } e\text{ze } . \]  
\[ \text{xèdzè wéndé bdākʷ-} bdākʷ pāj ézē \]  
person IND.DET.SG hornbill arrived therefore  
‘Therefore another person, the hornbill, arrived.’  
(NF2-SN:2.1)

b.  

\[ \text{Ana } dāla ma } zam \text{ duwa } \text{heje } \text{wende} , \]  
\[ \text{ānā dālā má=} \text{ zam dwā xèdzè wéndé} \]  
like someone REL= eat debt person IND.DET.SG  
‘Like someone who is in debt to a certain person…’  
(DE16-WN:2.3)
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. *Sokan* a keycekey ata dawan.

```
skàn á- kā- ntsā -ēkēj á tā dāwān
```

‘Something is biting me on the back.’ (GE30-SE:24)

(lit. ‘A thing is biting me on the back.’)

b. *sokan* ma ata zam a wata anta askwaw.

```
skàn má- á tā zām á wātā āntā āskʷāw
```

‘…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
```

‘I go somewhere.’ (GE30-SE:38)

(lit. ‘I go to a place.’)

b. *Sa* nda ata la akwaw.

```
sā- ndā á tā lā ākʷāw
```

‘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

<table>
<thead>
<tr>
<th>Person/Number</th>
<th>Possessive Pronoun</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>nākā/nā*</td>
</tr>
<tr>
<td>2SG</td>
<td>nkʷā</td>
</tr>
<tr>
<td>3SG</td>
<td>ŋ̀ntā</td>
</tr>
<tr>
<td>1INCL</td>
<td>ntākʷâw</td>
</tr>
<tr>
<td>1EXCL</td>
<td>ntsènè</td>
</tr>
<tr>
<td>1DUAL</td>
<td>ntmàw</td>
</tr>
<tr>
<td>2PL</td>
<td>nkʷnè</td>
</tr>
<tr>
<td>3PL</td>
<td>tātā</td>
</tr>
</tbody>
</table>

*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 *nkʷā* and plural *nkʷnè* are very similar to the independent pronouns, *xʷā* and *xʷnè* respectively. The labialised velar fricative */xʷ/* is simply replaced with a plosive */kʷ/* 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 *tātā* differs only in tone from its independent counterpart *tātā*.

Possessive pronouns modify nouns (4.13).
Possessive pronouns can modify numerals (4.14), as Frajzyngier (1989: 148) found was also the case for Pero.

(4.14) a. \textit{Hwa tenguleŋ nkwa} , hwa ma
\begin{align*}
x^{wā} & \text{ 2SG.STAT} \quad \text{2SG.POSS} \\
\text{one} & \quad \text{2SG} \\
\text{kezlepzeney} & \quad .
\end{align*}
\begin{align*}
kā- & \quad \text{zāp} \\
\text{zhē} & \quad \text{zā} \\
\text{IPFV-.} & \quad \text{speak} \\
\text{TRANS} & \quad \text{1EXCL.DOBJ}
\end{align*}
‘You alone (lit. one of you), (it’s) you who is speaking to us.’ (BH2-SN:3.4)

b. \textit{əy javahune gbak nkune} .
\begin{align*}
f- & \quad \text{dzāv} \\
\text{-āx”nē} & \quad \text{gbāk nk”nē}
\end{align*}
\begin{align*}
\text{3PL.SBJ-.} & \quad \text{gather} \\
\text{-2PL.DOBJ} & \quad \text{two} \\
\text{2PL.POSS}
\end{align*}
‘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) \textit{aya nda əy nda tata eze} .
\begin{align*}
\text{ājā} & \quad \text{ndā} \\
\text{j-} & \quad \text{ndā} \\
\text{tātā} & \quad \text{ézē}
\end{align*}
\begin{align*}
\text{then go} & \quad \text{3PL.SBJ-.} \quad \text{go} \\
\text{3PL.POSS} & \quad \text{therefore}
\end{align*}
‘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 (4.16b & e).

(4.16) a. Ӓ nkwa ca , hwa reh , ujek kāghwaram akwaw.
á nkʷā tsá xʷā- rēh wjēk kā- yʷərām ákʷǣw
prech 2SG.POSS TOP 2SG.SBJ- save hut PFV- colapse NEG.EXIST
‘As for yours, you were saved, your house didn’t colapse.’ (GE34-WE:2)

b. Sa nan.tar mala yce ne tewtew
sā- nā- ntar mālā ntsēnē tēw-tēw
1SG.SBJ- FUT- pay GEN 1EXCL.POSS all
‘I will pay all of ours…’ (NH9-SN:6.13)

c.  búte naka ŋgha a anja ana mala anta .
nté nākā nyā ā- ndzā ānā 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. Nhwa ŋgha ca , ara mala naka .
nxʷā nyā tsā ārā mālā nākā
goat DEM.PROX TOP PRED GEN 1SG.POSS
‘As for this goat, it's mine.’ (GE15-SE:27)

e. Ӓ nkune vedye , ay reh .
á nkʷnē vēdjē j- rēh
prech 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 pro-
numeral, 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

<table>
<thead>
<tr>
<th>Part-of-speech</th>
<th>Pro-form</th>
<th>Gloss</th>
<th>Referent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>véméj</td>
<td>what(why)</td>
<td>non-human</td>
</tr>
<tr>
<td></td>
<td>vájáj</td>
<td>who</td>
<td>human</td>
</tr>
<tr>
<td></td>
<td>vékéj</td>
<td>which</td>
<td>category</td>
</tr>
<tr>
<td></td>
<td>vétséj</td>
<td>whose</td>
<td>possessor</td>
</tr>
<tr>
<td></td>
<td>váj</td>
<td>where</td>
<td>destination (distal)</td>
</tr>
<tr>
<td></td>
<td>kátáj</td>
<td>where</td>
<td>location, destination (proximate)</td>
</tr>
<tr>
<td>Numeral</td>
<td>vánáj</td>
<td>how many</td>
<td>number</td>
</tr>
<tr>
<td>Adjective/Adverb</td>
<td>vángáj</td>
<td>how</td>
<td>state/manner</td>
</tr>
<tr>
<td>Adverb</td>
<td>vépéj</td>
<td>when</td>
<td>time</td>
</tr>
<tr>
<td></td>
<td>màváj véméj/ á tā véméj</td>
<td>why</td>
<td>reason/cause</td>
</tr>
<tr>
<td></td>
<td>ý váj</td>
<td>for what purpose</td>
<td>purpose</td>
</tr>
</tbody>
</table>

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 véméj, benjer ?
    xʷá- tsāf á véméj béndžér
    2SG.SBJ- decorate PREP1 what squirrel
    ‘What did you decorate with, Squirrel?’       (NF2-SN:3.5)
b. \( hwa \ da \ zene \ vay \ ? \)
\[ x^\wedge \text{ā} - \ dā \ zēnēj \ vājāj \]
2SG.SBJ- bring again who
‘Who will you bring again?’  \( \text{(BH2-SN:3.5)} \)

c. \( Gwa \ gway \ gway \ a \ \text{la} \ \text{wan} \ vay \ ? \)
\[ g^\wedge \text{ājg} \text{ājā} \ \text{ā} - \ wān \ vānaj \]
festival 3SG.SBJ- do day how many
‘How many days does the festival last?’  \( \text{(LL46-SE:15)} \)

d. \( Hwa \ mbal \ urey \ vec \ ? \)
\[ x^\wedge \text{ā} - \ mbāl \ wrēj \ vētsēj \]
2SG.SBJ- pluck vegetables whose
‘Whose vegetables are you trimming?’  \( \text{(LL17-SE:50)} \)

e. \( Hwa \ nda \ vay \ ? \)
\[ x^\wedge \text{ā} - \ ndā \ ā \ vāj \]
2SG.SBJ- go PREP1 where
‘Where are you going?’  \( \text{(LL5-SE:10)} \)

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).

\( \text{(4.18)} \)

a. \( Kan \ ma \ a \ kadāw \ vēmēj \ cemēj \ , \ a \)
\[ kān \ mā= \ ā - \ kā- \ dāw \ vēmēj \ tsēmēj \ ā- \]
thing REL= 3SG.SBJ- IPFV- want what TOP.CON 3SG.SBJ-
ghweleney
\[ γ^\wedge \text{āl} \ \text{-ēnēj} \]
show -1EXCL.IOBJ
‘Whatever thing he wants, he shows us.’  \( \text{(NH1-SN:4.4)} \)

b. \( Ma \ ūta \ ha \ gamzak \ vay \ \text{ca} \ , \ ay \ nda \)
\[ mā= \ ntā \ xā \ gāmzāk\w vājāj \ tsā \ ā- \ ndā \]
REL= take head rooster who TOP 3PL.SBJ- go
‘Whoever won (lit. took the head of the rooster), they go…’  \( \text{(DP6-SN:3.6)} \)
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).

When an interrogative is preceded by the scalar focus particle kāw ‘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. **Kay vemey ca**, ara gazlavay ma ghwelzetene.

káw véméj tsá ārā gāłjàvāj má = γʷāl -zā -ētēnē

even what TOP COP God REL= show TRANS -3PL.IOBJ

‘Everything, it’s God who showed them.’ (C9-SN:138.2)

b. **Kay vakaj maghwalza zlam anta**.

káw vájāj mā- γʷāl -zā ḫām āntā

even who JUS show TRANS name 3SG.POSS

‘Let everyone introduce his name.’ (NH7-SN:3.5)

c. **Dekey kaw vekey ege**.

dā -čēj káw vēkēj =ēgē

bring -1SG.IOBJ even which =PL

‘Bring me every type.’ (GE37-SE:25)

d. **Na jam kaw vepey etc nghe**

nā- dzām káw vēpēj á tē nycē

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 kātāj ā- nā- lā -āxʷnē mā

even PREP1 where 3SG.SBJ- FUT- do -2PL.IOBJ situation

ma tāŋtāŋ.

má = tāŋ-tāŋ

REL= good

‘…everywhere, he will do good things for you.’ (NH7-SN:4.8)

Universal quantifiers formed from the interrogation pronouns véméj ‘what’, vājāj ‘who’ and vēkēj ‘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 kwak vekey*.

ārā kaw vēkēj
COP even which

‘It’s every type.’
(GE37-SE:23)

b. *Kaw vayay naka a kanda ata tar nkwa*

kaw vājāj nākā á- kā- ndā á tā tar nkʷā
even who 1SG.POSS 3SG.SBJ- IPFV- go PREP1 on chore 2SG.POSS

ākwaw .
ākwʷāw
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 ,*

kāw vēmēj má= xʷā- dā -zā á tāmbācā
even what REL= 2SG.SBJ- bring TRANS PREP1 today

ghwelzekey .
γʷāl -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 néjē. This markers occurs clause finally (4.22).

(4.22) hwa kédene ma neye ?
xʷā- kā- dā -ēnē mā néjē
2SG.SBJ- PFV- bring -3SG.IOBJ problem TAGCONF

‘…you caused her problems, didn’t you?’
(C17-SN:4)
There are also two imperative tag question markers, *méné* and *máj* or *má*. Both these markers also occur in clause final position (4.23 a & b).

(4.23) a.  
\[ maɓahɓa \quad aza \quad ménége \, ? \]
\[ mā- \, bāh \, -bā \, āzā \quad ménége \]
\[ JUS- \quad shelter \quad -BEN \quad COMPL \quad TAG.IMP \]
‘…let him shelter himself first, can’t he?’

b.  
\[ ndzè \quad -čēj \quad ndrēj \quad ċ \, zām \quad -bā \quad máj \]
\[ give \quad -1SG.IOBJ \quad sorghum \quad INF \quad eat \quad -BEN \quad TAG.IMP.POL \]
‘…give me sorghum to eat, won’t you?’

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 *ýyē* ‘no’. The existential negative marker *ákʷāw* (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.  
\[ Hwa \quad kélem \quad ċ \, ḋeretene \quad akwaw \quad vaw \, ? \]
\[ xʷā- \quad kā- \quad lêm \quad ċ \, ntār \quad -ētēnē \quad ákʷāw \quad vāw \]
\[ 2SG.SBJ- \quad PFV- \quad get \quad INF \quad pay \quad -3PL.IOBJ \quad NEG.EXIST \quad Q \]
‘Didn’t you get to pay them?’

b.  
\[ Ājāw \]
\[ *ājāw* \]
\[ yes \]
‘Yes.’
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

wéndé/méndé ‘a certain/another’
vēdjé ‘certain/some/another’
mátákān ‘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.

ājā fagʷ álákw 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.*
fagʷ álákw wéndé ká- māts á rā mbē ákā jām
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 vedaye ay wed kədā ŋ*
āmbá mazkad =égē vēdjé j- wēd kđā í
then Mazkad =PL IND.DET.PL 3PL.SBJ- disperse towards PREP2
*Gavar, vedaye kədā a Magaway, vedaye kədā*
gāvār vēdjé kđā á màgāwāj vēdjé kđā
Gavar IND.DET.PL towards PREP1 Magaway IND.DET.PL towards
a Watamgba, tewtew a Buwal .
á wātāmgbā tēw-ṭēw 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 *mátākān* ‘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 *mátākān* it is known. *Mátākān* does not have a special plural form but is pluralised with the plural enclitic *égē* (see Section 4.5.1).
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. \textit{Wende} ca hwa ḃam aka .
\textit{wéndé} tsá xʷā- bām ákā
\textbf{IND.DET.SG TOP 2SG.SBJ- munch EXIST}
‘There is another one, you munch (it).’ (DE9-SN:2.11)

b. \textit{Wende} kádam anta a uley .
\textit{wéndé} ká- dām āntā á wlèj
another PFV- enter 3SG.POSS PREP1 hole
‘Another one entered into a hole.’ (GE35-SE:4)

c. \textit{Gazlavay} mavalhwaw \textit{matakan} a tama .
\textit{gāɮāvāj} mā- vál -āxʷāw \textit{mátākān} 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. \textit{Velene} a \textit{wende} .
\textit{vål} -ēnē á \textit{wéndé}
give -3SG.IOBJ PREP1 IND.DET.SG
‘Give it to another.’ (GE35-SE:8)

e. \textit{Ara} \textit{vedaye} .
\textit{ārā} \textit{vēdjē}
\textbf{COP IND.DET.PL}
‘It’s others.’ (GE35-SE:12)
Some of the functions of indefinite determiners overlap with the indefinite pronoun \( \text{ɗālā} \) ‘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 determinant

Buwal has the definite determiner \( \text{āntā} \) 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 tā (tāŋ 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 ŋɡə̀ŋ. 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.

Faurrud (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, Nikoleava 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 Faurrud’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 kədə uza , taf anta a  
    xʷā- bāw tāf má kɗē wzā tāf āntā ā-
    2SG.SBJ- turn path REL= towards down path DEF.DET 3SG.SBJ-  
    bāw ā- ndā tá ŋ lekwal .  
    ‘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 yʷaf ákā màdā xʷā- kā jā dālā  
    GEN killing.sickness EXIST if 2SG.SBJ- PFV- kill someone  
    hwa zam menjevëk anta .  
    xʷā- zām 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 tekəd anta vayay ?  
    mā- ŋgā tēkəd āntā vájáj  
    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.
'In the olden times, the squirrel was digging up the Mazay womens' peanuts.' (NF2-SN: 1.1)

'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).

'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?')

'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?')

'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?')

'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?')

'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?')

'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?')

'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?')
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 ŋhwaye amá nà āntá tsá má= ká- ṣán ŋ zám nxʷá -jé but(ful.) now DEF.DET TOP REL= IPFV- know INF eat goat -PL zeneý vayay ? zênéj vájáj 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 wêsé á pes wêsé āntá j- PREP1 day DEM.DIST PREP1 day DEM.DIST DEF.DET 3PL.SBJ- kádaza ara . ká- dā -zā ārā 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 āntá 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’.

\[ (4.38) \hspace{1cm} Fəlakw \, heje \, wese \, a \, dene \, \text{wale} \, \text{anta} \]
\[ \text{flākʷ} \, \text{xēdzē} \, \text{wēsē} \, \text{ā-} \, \text{dā} \, -ēnē \, \text{wālā} \, \text{āntā} \]
\[ \text{snatch} \, \text{person} \, \text{DEM.DIST} \, \text{3SG.SBJ-bring} \, -\text{3SG.IOBJ} \, \text{woman} \, \text{DEF.DET} \]
\[ \text{aza} \, \text{pa} \, \text{ŋ̱} \, \text{bāy} \]
\[ \text{āzá} \, \text{pá} \, \text{ŋ̱} \, \text{bāy} \]
\[ \text{COMPL} \, \text{at.a.level} \, \text{PREP2} \, \text{chief} \]
\[ \text{‘Snatching her, that person brought the woman (or his wife) right to the chief.’} \]

(4.38) FTN1-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 simulative 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

<table>
<thead>
<tr>
<th>Distance</th>
<th>Nominal</th>
<th>Locative</th>
<th>Identifier</th>
<th>Similative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximal</td>
<td>nyā/nyē</td>
<td>tē</td>
<td>tsákʷā</td>
<td>éndē</td>
</tr>
<tr>
<td>Medial</td>
<td>èbè</td>
<td>ŋgē</td>
<td>tsāw</td>
<td>ándālā</td>
</tr>
<tr>
<td>Distal - visible</td>
<td>wēsē</td>
<td>twsē</td>
<td>tsāw</td>
<td>ándwsē</td>
</tr>
<tr>
<td>Distal - not visible</td>
<td>wēsē</td>
<td>twsē</td>
<td>_</td>
<td>ándwsē</td>
</tr>
<tr>
<td>Up</td>
<td>_</td>
<td>_</td>
<td>ŋmgbā</td>
<td>_</td>
</tr>
<tr>
<td>Down</td>
<td>_</td>
<td>_</td>
<td>wzā</td>
<td>_</td>
</tr>
</tbody>
</table>

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 twsē ‘there’, are contractions of á tā ŋgē ‘on this one’ and á tā wēsē ‘on that one’ respectively. The fact that tē ‘here’, while often followed by the proximal nominal demonstrative ŋgē ‘this’, can now occur independently is evidence that the form has become lexicalised (4.39a).

That the form twsē ‘there’ is also now lexicalised is demonstrated by the fact that it can be followed by another distal nominal demonstrative wēsē ‘that’ (4.39b).

(4.39) a. |javweye | vedaye | a | wata | juraw | ete | a
nxwā -jé vēdjé á wātā dzwāw ā tē á
goat -PL IND.DET.PL PREP1 compound sub-chief PREP1 here PREP1
Zukwadfanw aka.
zkʷādfanw ákā
Zukodfong EXIST
‘There are some goats at the sub-chief’s compound, here in Zukodfong.’
(NH8-SN:3.5)
b. A ɓawse wese, uzaye ay kasan ŋ zam
á twásé wêsé wzjé j- kā- sàn ŋ zâm
PREP the there DEM.DIST children -3PL.SBJ IPFV- know INF eat
ghwáye kwaw.
ngxwá -jé kxwáw
goat -PL NEG
‘There in that place, children don’t know how to watch over (lit. eat)
goats.’

The similative demonstratives are also related to the nominal demonstratives. The same
informant stated that éndē ‘like this (PROX)’ is derived from á ndā nɣē ‘it goes this one’,
ándālā ‘like this (MED)’ from á ndā á lā nyā ‘it goes to this place’ and ándwsé ‘like that
(DIST)’ from á ndā wēsé ‘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 nɣē ‘this’
and nyā ‘this’ respectively, they can also occur alone (4.40).

(4.40) a. A nja énde .
á- ndzā éndē
3SG.SBJ- be like.this.PROX
‘It is like this.’

b. Ndɔrey naka mbɔy ándala .
ndrɛj nəkā mbj ándalà
sorghum 1SG.POSS 3SG.STAT like.this,MED
‘My sorghum is like this.’

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 ngha , 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 ebc , a Haman .
wātā ëbë 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 wēsē 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 wēsē ‘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. *Njaɓa ata lanja wese*. *Hwa daw ŋ*
ndzā -ɓā á tā læ ndzā wēse xʷā- daw ŋ
sit BEN PREP1 on place sit DEM.DIST 2SG.SBJ- want INF
nja ata ebe nghe kwaw .
ndzā á tā êbē ngē kʷaw
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 kəɗa uza cemey ,*
xʷā- kā- ndā kďa wźa tsé mj
2SG.SBJ- IPFV- go towards down.there TOP.CON
gamata ata nhwaye ey ntmaye ege
gām -ātā ātā nxʷā -jē ēj ntmēk -jē = ēgē
drive.away -3PL.DOBJ ASS.PL goat -PL and sheep -PL =PL
ma kazam ŋ la wese .
má= kā- zâm ē jā wēse
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, *ŋyā* and *ŋyē*. It is difficult to
determine whether there is a genuine meaning difference between them. Certain language
informants told me that with *ŋyā* you can be holding the object or pointing to it but with
*ŋyē* 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. *ŋgaħa , caɓa ŋ pakam .*
ŋyā tsā -ɓā ŋ pákâm
DEM.PROX put BEN PREP2 mouth
‘Here, put it in your mouth.’ (DP10-SN:2.9)
(When handing someone a doughnut.)
b. *Nghe eze welaye Mazay ege*
   *nyē ēzē wälā -jē māzāj =ēgē*
   DEM.PROX therefore woman -PL Mazay =PL
   ‘Here therefore, Mazay women.’
   (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 ngaha.*
   *tēw -ēnē jām wēsē ā nyā*
   carry -3SG.IOBJ water DEM.DIST PREP1 DEM.PROX
   ‘Carry that water to this person (lit. this one).’
   (The water is near the addresssee, the recipient is near the speaker.)

b. *Sa dāw ebe kwaw.*
   *sā- dāw ēbē kʷāw*
   1SG.SBJ- want DEM.MED NEG
   ‘I don’t want this one.’
   (Indicating the thing not wanted.)

(4.44) b. *Tewene yam ngaha a wese.*
   *tēw -ēnē jām nyā ā wēsē*
   carry -3SG.IOBJ water DEM.PROX PREP1 DEM.DIST
   ‘Carry this water to that person (lit. that one).’
   (The water is near the speaker, the recipient is near the addresssee.)
(4.45) a. \( \text{ègba} \ \text{ege} \ \text{gbak} \).
\( \text{nyā} = \text{ègē} \ \text{gbäk} \)
\( \text{DEM.PROX} = \text{PL} \ \ \text{two} \)
‘There are two of these ones.’
(lit. ‘These ones are two.’)

b. \( \text{èbe} \ \text{ege} \ \text{ca} \ , \ \text{ây} \ \text{kedēdē} \ \text{mavaw} \ \text{a} \ \text{mna} \).
\( \text{èbè} = \text{ègē} \ \text{tsâ} \ \text{j-} \ \text{kâ-} \ \text{dēdē} \ \text{mâvaw} \ \text{á} \ \text{mnâ} \)
\( \text{DEM.MED} = \text{PL} \ \ \text{TOP} \ \text{3PL.SBJ-} \ \text{IPFV-} \ \text{pour.into} \ \text{beer} \ \text{PREP1} \ \text{inside} \)
‘These ones, they pour beer inside.’

(4.46) a. \( \text{ŋghe} \ \text{a} \ \text{mana} \)
\( \text{nyē} \ \ \text{á} \ \text{mânā} \)
\( \text{DEM.PROX} \ \text{PREP1} \ \text{mother.1POSS} \)
‘this one of my mother’s’

b. \( \text{èbe} \ \text{a} \ \text{mana} \)
\( \text{èbè} \ \ \text{á} \ \text{mânā} \)
\( \text{DEM.MED} \ \text{PREP1} \ \text{mother.1POSS} \)
‘this one of my mother’s’

(4.46) a. \( \text{ŋghe} \ \text{a} \ \text{mana} \)
\( \text{nyē} \ \ \text{á} \ \text{mânā} \)
\( \text{DEM.PROX} \ \text{PREP1} \ \text{mother.1POSS} \)
‘this one of my mother's’

b. \( \text{èbe} \ \text{a} \ \text{mana} \)
\( \text{èbè} \ \ \text{á} \ \text{mânā} \)
\( \text{DEM.MED} \ \text{PREP1} \ \text{mother.1POSS} \)
‘this one of my mother’s’

(4.46) a. \( \text{ŋghe} \ \text{a} \ \text{mana} \)
\( \text{nyē} \ \ \text{á} \ \text{mânā} \)
\( \text{DEM.PROX} \ \text{PREP1} \ \text{mother.1POSS} \)
‘this one of my mother's’

(4.46) a. \( \text{ŋghe} \ \text{a} \ \text{mana} \)
\( \text{nyē} \ \ \text{á} \ \text{mânā} \)
\( \text{DEM.PROX} \ \text{PREP1} \ \text{mother.1POSS} \)
‘this one of my mother's’

b. \( \text{èbe} \ \text{a} \ \text{mana} \)
\( \text{èbè} \ \ \text{á} \ \text{mânā} \)
\( \text{DEM.MED} \ \text{PREP1} \ \text{mother.1POSS} \)
‘this one of my mother’s’

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 ngba.
   ndżew āza á wātā bāy á tā lā ngyā
   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. ketegore kélem kan ata  la wese .
   kētēgrē kā- lēm kān á tā lā wēsē
   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 ngba menjevek ege a kefētek anta
   nà ngyā mēndźēvēk =ēgē ā- kē- fēk āntā
   now DEM.MED medicine =PL 3SG.SBJ PFV- lose 3SG.POSS
   ‘…now remedies are being lost.’ (DE9-SN:4.5)

   b. A va wese ata lambaw ,
   á vā wēsē á tā lá- mbēw
   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 ngba wese , sa kāja a mbe yam ,
   wjēk ngyā wēsē sa- kā- 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 ngehce mawal naka kwaw .
   ēbē ngyē māwāl nākā kʷāw
   DEM.MED DEM.PROX husband 1SG.POSS NEG
   ‘This one is not my husband.’ (HT7-SN:1.10)
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
    bèndzër à- dâw –zä g“ämbäk” wëndë wësë má =
squirrel 3SG.SBJ- ask TRANS toad IND.DET.SG DEM.DIS REL=
letene vemey ?
  là -ëtënë vemëj
do -3PL.IOBJ what  
‘The squirrel asked \textbf{that certain} toad, what happened to them?’  \hfill (NF6-WN:4.4)

(iii) Pragmatic Functions

Bwual nominal demonstratives serve a number of pragmatic functions. For example, a very common use for the distal nominal demonstrative wësë ‘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).
They called the people who were looking for the chiefdom…Those people who looked for the chiefdom introduced themselves.’

‘If it wasn’t for beer, beer, that one (brings) crime.’

‘That child of mine, it is only hurting him (lit. holding the mouth for him) like this.’

The proximal (4.52) and medial (4.53) nominal demonstratives can also be used anaphorically although this is not as common.
Mazay  a  mayfa  anta  aza  mahkad'.  *Kan*
imāzīj  ā-  māj  -bā  āntā  āzá  māxkād  kān
Mazay  3SG.SBJ- choose  BEN  3SG.POSS  COMPL  three  thing
me  tewtew  ɲgha,  a  veletene  ɲ  hejaye
mā=  tēw-tōw  nyā  ā-  vål  -ētēnē  ɲ  xèdzè  -jē
REL=  all  DEM.PROX  3SG.SBJ- give  -3PL.IOBJ  PREP2  person  -PL
ma  dā  gham  ege  .
mā=  dā  yām  =ēgē
REL=  draw  war  =PL
‘The Mazay chooses first three (animals).  All these things, he gives to the
soldiers.’  (NH11-SN:3.4)

Yaw,  mada  uz̄ye  mawal  ege  ca  ,  ñy
jāw  mādā  wzjē  māwāl  =ēgē  tsā  ā-
sō  if  children  man  =PL  TOP  3PL.SBJ-
nabādāhwaw  ca  vəram  ,  sa  ya  ,  ebe
nā-  bād  -āxʷāw  tsā  vrām  sā-  jā  ebē
FUT-  flatter  -2SG.DOBJ  TOP  many  1SG.SBJ-  say  DEM.MED
ɲgha  a  kandaha  ,  ebe  ɲgha  a
nyē  á-  kā-  ndā  -xā  ebē  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 the the previous discourse (4.54 b &
c), and CATAPHORIC, referring to the discourse which follows (4.54a).
(4.54) a. Dgahə , heje ndaha ete .

nyā xèdzé ndā -xā á tē

DEM.PROX INCL.SBJ go -VNT.DIST PREP1 here

‘In this way, we came here.’

(Includes how the Buwal came to live on the mountain.)

b. Sa sanaňa ca pa ata ebe .
sā- sân -ā -bā tsá pá á tā ēbē

1SG.SBJ- know -VNT.PROX BEN TOP at.a.level PREP1 on DEM.MED

‘(What) I know is at this level.’

(Refers to the portion of history just recounted.)

c. Wẹse cemey , mawal nkwa a nasasam ata

wēsē tsémēj māwāl nkʷā ā- nā- sāsām á tā

DEM.DIS TOP husband 2SG.POSS 3SG.SBJ- FUT- rejoice PREP1 on

hwa .

xʷā

2SG

‘In that way, your husband will rejoice over you.’

(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 ŋgē ‘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 kədā ete ma » a ya.
   ndzɛf -zā mtsār kɗa ā 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 kanda a Buwal ete
   hagda ŋnantā kā- ndā ā bwāl ā 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 ɲtaɓa lanja enge .
   ājā tsá ndā ŋ ntā -ɓa lā ndzā ā 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 sàt ā ɲgē ā wàtāmgbá
   3PL.SBJ- do up.to PREP1 over.there PREP1 Watamgba
   enge 
   ā ɲgē
   PREP1 over.there
   ‘…they did (it) up to over there at Watamgba over there.’ (C18-SN:99)

e. Ujek anta a twsè .
   wjēk ŋnantā ā twsè
   hut 3SG.POSS PREP1 there
   ‘His house is there.’ (GE36-SE:7)
(Where the addressee is.)
f.  
kaw  sa  a  twse  akwaw  ca  ,  kághwadāta
káw  sā  á  twsé  ákʷāw  tsá  ká-  yʷād’  -ātā
even  1SG.STAT  PREP1  there  NEG.EXIST  TOP  PFV-  anger  -3PL.DOBJ
aza  yam.
āzā  jām
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 ŋgē ‘over there’ (4.56 c & d) can be followed by both the proximal and distal nominal demonstratives. The distal locative demonstrative twsē ‘there’ however, can only co-occur with the distal nominal demonstrative (4.56e).

(4. 56)  

a.  Ete  ṃghe   ,  hwa  gwarzam  aka  ete
á  tē  nyē  xʷā-  gʷərzām  ākā  á  tē
PREP1  here  DEM.PROX  2SG.SBJ-  get.up  ACC  PREP1  here
ŋghe   .
nyē  
DEM.PROX
‘Right here, you leave (lit. get up) from right here.’  (PP2-SN:1.1)

b.  Ete  wese   ,  mamaw  a  wata  ŋkwa  .
á  tē  wēsē  màmàw  á  wātā  nkʷā
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   ṃghe   .
mwtàtsá  á  ŋgē  nyē
CAR  TOP  PREP1  over.there  DEM.PROX
‘The car is right over there.’  (LL6-SE:30)
d. **Enge ngaha wese**, hejaye ay
   á ngē nyā wēsē xēdzē -jé j-
   PREP1 over.there DEM.PROX DEM.DIST person -PL 3PL.SBJ-
   kasan ŋ ham ŋəzleŋ kwaw .
   IPFV- know INF crunch peanut NEG
   ‘Over there in that place, people don't know how to munch peanuts.’
   (GE36-SE:10)

e. **A towse wese**, uzaye ay kasan ŋ zam
   á twsē wēsē wzjé j- kā- sân ŋ zam
   PREP1 there DEM.DIST children -3PL.SBJ IPFV- know INF eat
   ngwayne kwaw .
   nxʷā -jé kʷāw
   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 nghe ca**, a ngaya
   làbārā āntā á tē nyē tsā ā- ngājā
   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 towse a walha beŋ**.
   á twsē ā- wāl -xā beŋ
   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 *tsákʷá* ‘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*.  
*ŋgɛžë mbɛ tsákʷá*  
knife 3SG.STAT here  
‘The knife is here.’  
(LL6-SE:15)

b. *Ujek caw*.  
*wjɛk tsár*  
hut there  
‘The hut is there.’  
(GE13-SE:20.1)

Buwal also has two directional demonstrative identifiers ṃgba ‘up there’ (4.59a) and wzà ‘down there’ (4.59b). The direction ‘up’ is upstream, whilst ‘down’ is downstream.

(4.59) a. *Ujek naka mgba ata ha mala anta*.  
*wjɛk nákā ṃgba á tă xă mălă āntă*  
hut 1SG.POSS up.there PREP1 on head GEN 3SG.POSS  
‘My house is up there, above his.’  
(GE39-SE:33.1)

b. *Ujek nkwa uzə a manjəraf mala naka*.  
*wjɛk nkʷə wzə á mándzərf mălă nákă*  
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 nyha ca, ara barla Mse.

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 nyha ca, barla 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.

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 ñ sa.

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, hejeye ñy kala ma cakwa ende

chief person -PL 3PL.SBJ- IPFV- do problem here like.this.PROX

‘Chief, people are making the problems here like this.’ (DE8-SN:3.11)
b. *Mgba a wata njene mgbasa asa*

\[ \text{ŋmgbà á wàtā ntsènè ŋmgbà á sà} \]

up.there \text{PREP} \text{compound 1EXCL.Poss up.there \text{PREP}} \text{under barla ca},

bārlā tsá

mountain \text{TOP}

‘Up there, at our compound up there below the mountain…’ (C16-SN:3)

c. *njew ay njew a wata bay uza ca*,

\[ \text{ndzèw j- ndzèw á wàtā bāy wzà tsá} \]

drag \text{3PL.SBJ- drag PREP} \text{compound chief down.there \text{TOP}}

‘…they dragged him to the chief’s compound down there…’ (C8-SE:48.1)

(4.62) a. *ɔy nda mgbasa ata Mse ŋ ja kusam*

\[ \text{j- ndā ŋmgbà á tā msé ŋ dzā k“sàm} \]

3PL.SBJ- go \text{up.there PREP} \text{on Mshe INF hit body}

‘They went up there onto Mshe to fight…’ (DE5-SN:1.3)

b. *hayak a nemenha uza asa*

\[ \text{xājāk ā- ná- mēn -xā wzà á sā} \]

dirt \text{3SG.SBJ- FUT- be.left -VNT down.there \text{PREP}} \text{under ndanw} .

ndāŋw

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 mgbasa ŋgba .*

\[ \text{mpè tsá ŋmgbà nyā} \]

tree \text{TOP up.there DEM.PROX}

‘The tree is up there.’ (LL6-SE:32)
b.  *Lekwal ca*  uza  *ŋgha* .
    lèkʷáł  tsá  wzà  nyá

    school  TOP  down.there  DEM.PROX

‘The school is down there.’  (LL6-SE:33)

(iii) Pragmatic functions

The proximal demonstrative identifier *tsákʷá* ‘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  »,  oy
    ā-  *ŋğájá*  tsákʷá  tsákʷá  ēndē  j-
    3SG.SBJ-  saying  here  here  like.this.PROX  3PL.SBJ-
    ghwelzene  a  bay .

    ɣʷál  –zā  –čēnē  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 ēndē ‘like this’ (4.65a), medial ąndālā ‘like this’ (4.65b) and distal ąndwse ‘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.
(ii) Distribution

Buwal simulative 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).
(4.67) a. Hejaye  ma  ende  ege.
xèdzè -jé má = éndè = égè
person -PL REL= like.this,PROX =PL
‘People who are like this.’ (GE36-SE:47)
b. Hejaye  ma  andala  ege.
xèdzè -jé má = ándalá = égè
person -PL REL= like.this,MED =PL
‘People who are like this.’ (GE36-SE:43)
c. Hejaye  ma  andwse  ege.
xèdzè -jé má = ándwse = égè
person -PL REL= like.that =PL
‘People who are like that.’ (GE36-SE:46)

(4.68) a. Mawal naka kan  ende  ca , sa  la  vangay?
mławal nákā kàn éndè tsá sā- lá váŋgáj
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. Sakan  andala , sa  kadáw  kwaw.
skàn ándalá sā- kā- daw kʷáw
thing like.this,MED 1SG.SBJ- IPFV- want NEG
‘A thing like this, I don't want.’ (GE36-SE:61.1)
c. Ujek  andwse , sa  kadáw  yam.
wjēk ándwse sā- kā- daw 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
xʷā-  ḷāá  éndè  éndè  éndè  éndè
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  nyga .
j- kā- lā  ándālā  nyā
3PL.SBJ- IPFV- do like.this,MED DEM.PROX
‘They act like this.’ (DE14-SN:4.4)

c. Hwa  sa  yam  anta  andowse ,  hwa  medew .
xʷā- sā  jām  āntā  āndwsē  xʷā- mèd -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  ngbe .
sā- nā- zēn -ēnē  lāp  ēndē  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  ngay : « Hwa  dāw
ājā  tēw  ēndē  ā-  ngājā  xʷā-  dāw
then finally like.this,PROX  3SG.SBJ- saying  2SG.SBJ- want
sa  cafāhwaw  aka  vaw ?
sā-  tsāf  -āxʷāw  ākā  vāw
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 ɡtakwza kwakwas anta ende .
j- ntākʷ -zā kʷákwās āntā ēndē
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 ŋgha .
téw ándālā ɲyā
finally like.this.MED DEM.PROX
‘Finally, it’s like this.’ (TN1-SN:7.7)
(At the end of a story.)

d. Andwsé , andwsé , sakan ma ata zam a wata anta
ándwsé ándwsé skān má= á tā zam á wātā āntā
like.that like.that thing REL= at on eat at home 3SG.POSS
askwaw .
áskʷwāw
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 similative demonstrative is frequently used in conversation to express agreement with what the other person has just said (4.72).

(4.72) N. Na , hōman ca ma dakal dakal ca , hōman ca na
nā xmān tsá má= dākāl dākāl tsá xmān tsá nā
now praise.name TOP REL= big big TOP praise.name TOP now
vrām .
vrām
many
‘Now as for big praise names, now there are many praise names.’

P. Andwsé .
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 dzámâxkáɗ‘eight’ and dzáfáɗ‘nine’ have been previously derived from dzâɓán ‘five’ and mãxkáɗ ‘three’, and dzâɓán ‘five’ and nfáɗ‘four’ respectively.

Table 4.6: Buwal basic cardinal numerals

<table>
<thead>
<tr>
<th>Cardinal numeral</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>bsé</td>
<td>‘zero, nothing’</td>
</tr>
<tr>
<td>téŋŋ’lēŋ</td>
<td>‘one’</td>
</tr>
<tr>
<td>gbâk</td>
<td>‘two’</td>
</tr>
<tr>
<td>mãxkáɗ</td>
<td>‘three’</td>
</tr>
<tr>
<td>nfáɗ</td>
<td>‘four’</td>
</tr>
<tr>
<td>dzâɓán</td>
<td>‘five’</td>
</tr>
<tr>
<td>nk’áx</td>
<td>‘six’</td>
</tr>
<tr>
<td>nsléɗ</td>
<td>‘seven’</td>
</tr>
<tr>
<td>dzámâxkáɗ</td>
<td>‘eight’</td>
</tr>
<tr>
<td>dzáfáɗ</td>
<td>‘nine’</td>
</tr>
<tr>
<td>wám</td>
<td>‘ten’</td>
</tr>
</tbody>
</table>

The numerals from eleven to nineteen are formed by the numeral ‘ten’, followed by the complex preposition á xă meaning ‘over’, then a basic numeral (4.73).

(4.73) wám á xă gbâk ‘twelve’
      ten over two

wám á xă dzâɓán ‘fifteen’
      ten over five

wám á xă dzáfáɗ ‘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) $rāgbāk$ ‘twenty’

\begin{align*}
  \text{hand-two} \\
  rāgbāk \ á \ xā \ téŋg”lēŋ & \quad \text{‘twenty-one’} \\
  \text{hand-two over one} \\
  rāgbāk \ á \ xā \ gbāk & \quad \text{‘twenty-two’} \\
  \text{hand-two over two} \\
  rādzābān & \quad \text{‘fifty’} \\
  \text{hand-five} \\
  rādzāmāxkād & \quad \text{‘eighty’} \\
  \text{hand-eight}
\end{align*}

The word for one hundred $témérè$ 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) $témérè$ $nsléd$ ‘seven hundred’

\begin{align*}
  \text{hundred seven} \\
  témérè \ gbāk \ á \ rāgbāk \ á \ xā \ téŋg”lēŋ & \quad \text{‘two hundred and twenty-one’} \\
  \text{hundred two prep1 hand-two over one}
\end{align*}

For a thousand the word $blāk”$ is used. It may originally have meant ‘any very large number’ but now it is used to count years (4.76).
Daka a mar aka ata va balakw a temere njad
dakà ã- mår åkå á tå vå blâkw å temerë njad
since 3SG.SBJ- begin ACC PREP1 on year thousand PREP1 hundred four
aha .
à xa
PREP1 over
‘It began from after the year fourteen hundred.’

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 ñterene ca baraw ragbak .
xwâ- ntår –ênë tså bâraw râgbâk
2SG.SBJ- pay -3SG.OBJ TOP thousand.francs twenty
‘You pay him, twenty thousand francs.’

b. Dala anta ca , hwa da , hwa da
dâlâ ântâ tså xwâ- dâ xwâ- dâ
money 3SG.POSS TOP 2SG.SBJ- bring 2SG.SBJ- bring

bâkatar .

bâkâtår
thousand.francs
‘Its cost, you bring, you bring a thousand francs.’

For ‘one hundred francs’ another borrowed word, kâbâl, may be used instead of témërë (4.79a). This comes from the Fulfulde word kâbâl ‘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 dâlâ from the Fulfulde dala (Noye 1974: 320) is five francs, so ten francs is two dâlâ, fifty francs is ten dâlâ and so forth (4.78a & b). Other words used to refer to coins which are at times borrowed from Fulfulde are slâj from...
suley ‘ten franc coin’ (Zoubko 1996: 448) and sāŋkʷāw from suŋku ‘five francs’ (Noye 1974: 342). The word dǎlā is also used in Buwal to refer to money in general.

(4.78) a. Akwaw ca, kābal gbak a dala wam ñgha
ákʷāw tsá kābal gbák á dālā wám ñyā
NEG.EXIST TOP hundred francs two PREP 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
sā- vāl -āxʷāw témérè gbák á dālā wām
1SG.SBJ- give -2SG.OBJ hundred two PREP money ten
aha jāban.
á xā dzābān
PREP 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 deijdéj ‘too much’ is borrowed from the Fulfulde word dey-dey ‘exact, as it should be’ (Noye 1974: 321)
Table 4.7: Buwal quantifiers

<table>
<thead>
<tr>
<th>Quantifier</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>dēj-dēj</td>
<td>‘too much’</td>
</tr>
<tr>
<td>dākālā</td>
<td>‘a lot’</td>
</tr>
<tr>
<td>gá</td>
<td>‘sufficient’</td>
</tr>
<tr>
<td>ndál</td>
<td>‘same/equal’</td>
</tr>
<tr>
<td>párxán</td>
<td>‘insufficient’</td>
</tr>
<tr>
<td>rāk-rāk</td>
<td>‘equal’</td>
</tr>
<tr>
<td>tété</td>
<td>‘enough/average’</td>
</tr>
<tr>
<td>těw-těw</td>
<td>‘all’</td>
</tr>
<tr>
<td>tsēkʷdē</td>
<td>‘a little/few’</td>
</tr>
<tr>
<td>vrām</td>
<td>‘many’</td>
</tr>
</tbody>
</table>

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. **Tenguleŋ** day aha bāse .
**tēngʷlēŋ** dāj á xā bsē
One more PREP1 over nothing
‘One is more than nothing.’ (LL48-SE:3)

b. **tete** a menha
**těté** ā- mēn –xā
average 3SG.SBJ- be.left -VNT.DIST
‘An average amount is left.’ (DP9-SN:4.9)

(4.80) a. **Kėlem** derewel jamahkad .
kā- lēm derewel dzāmākād
PFV- get paper eight
‘He got eight votes.’ (NH7-SN:5.7)
b. Yaw , hwa ndaw ujek gemtëye cekide aka yam .
   ñaw x"â- ndâw wdzëk gëmtâk -jé tsëk"dë ákâ jûm
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. welôye anta ege gbak .
wîlâ -jé ânta = ege gbâk
wife -PL 3SG.POSS =PL two
‘…he had two wives.’ (lit. ‘his wives were two’) (TN4-WN:1.1)

b. Gwaygwaya tata ca vram
  g"âjg"âjâ tâtâ 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 ,
  âk"âw tsâ mâ= jämâkkâd =égë tsâ ârâ ọjm wâlâ
NEG.EXIST TOP REL= eight =PL TOP COP name woman
ma tengulej mawal ege .
má= téng"lëŋ mâwâl =égë
REL= one man =PL
‘Otherwise, the eight ones are women's names, the one is for men.’
(C9-SN:20)

b. heje dakênak ma tewtew , a negore .
xîdzè dâknâk mâ= têw-têw â- nâ- grë
person black REL= all 3SG.SBJ- fut- see
‘…all humanity (lit. black person(s)) will see.’ (HT8-SN:12.22)

(4.83) a. A twsê ây nda gbâk a mzla .
  á twsê j- ndâ gbâk á mbâ
PREP1 there 3PL.SBJ- go two PREP1 blacksmith
‘Then she goes, the two of them with the blacksmith.’ (DE11-SN:1.12)

b. Hejôye baw ây këbecha vram
  xîdzè -jé bâw j- ká- bëts -xâ vram
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 ṛāgbāk ‘twenty’ and ṛāmāxkād ‘thirty’ refer to the people. The quantifier ṭsekʷɗē ‘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.  

Hejaye baw oy kébecha vəram , kaw xèdzè -jé bāw j- kā- bēts -xā vrām kāw  
person -PL TOP.ADD 3PL.SBJ- PRF- assemble -VNT many even day aha ṛāgbāk ege , kaw a laza rāmahkād dāj á xā ṛāgbāk =éğē kāw ā- lá =zā ṛāmāxkād more PREP over twenty =PL even 3SG.SBJ- do TRANS thirty aha ege .  
á xā =éğē PREP 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 hejaye oy kala a gwaygwaya ca tsékʷɗē má= xèdzè -jé j- kā- lá á ğʷājgʷājā tsá a.little REL= person -PL 3PL.SBJ- IPFV- do PREP festival TOP ana ebe .  
ánā ēbè 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.  

Welāye anta ege ṛab kutas , oy kambaw wālā -jé āntā =éğē ṛab tātā j- kā- mbāw  
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 njzute*.

xʷné ná- mēd’ xʷné tēw-tēw nkʷnē

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 *kezlame zlame parham*

á- kā- ḫmē ḫmē pāxām

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 kābāl ‘hundred francs’ is not repeated in example (4.87a).

(4.87) a. *kwadakwa anta ca kābāl gbak gbak*.

kʷádákʷá āntā tsá kābāl 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 gterekey cekude cekude*

xʷné- ntār -ēkēj tsēkʷdē tsēkʷdē

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. Sakan ege parpar mahad', ay
    skan = égō pärpär máxkad’ j-
    thing =PL different three 3PL.SBJ-
    kendoremzekey.
    kā- ndram -zā -ēkēj
    IPFV- please -TRANS -1SG.IOBJ
    ‘Three different things, they please me.’ (GE65-SE:27.1)

b. Ragwac ege vedye mewe varam’, ay
    rgʷats = égō vēdjē mewē vrām j-
    clothes =PL IND.DET.PL new many 3PL.SBJ-
    kendoremzekey.
    kā- ndram -zā -ēkēj
    IPFV- please -TRANS -1SG.IOBJ
    ‘Many new clothes, they please me.’ (GE65-SE:19.1)

(4.89) Dala jem cekude, kula ŋey.
    dālā dzēm tsēkʷdē kʷlā ŋēxēj
    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 égō 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) Ėy la menjevek ege ca parpar parpar parpar .
    j- lä méndzēvēk = égō tsā pārpār pārpār pārpār
    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 oj kākalza*

ājā mēl tātā =ēgē wēsē j- kā- kāl -zā
so oil 3PL.POSS =PL DEM.DIST 3PL.SBJ- PFV- smear TRANS
ata kūsam .
á tā kʷsām
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*

wēndé ārā kān má= kā- dāv -xā =ēgē ánā má=
IND.DET.SG COP thing REL= IPFV- sprout -VNT =PL like REL=
ŋ hayak .
jā 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 –jē 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. *Hējoye oj kadōmas .*

xēdzē -jē j- kā- dmās
person -PL 3PL.SBJ- IPFV- dance
‘People were dancing.’
(NH7-SN: 2.7)

b. *Hējoye ma ata hayak ege oj lamza*

xēdzē -jē má= á tā xājāk =ēgē 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).

\[ hwa \ gōre\ ca\ , \ kaw\ \ ata\ \ wam\ \ aha\ \ g̃sọlɛd' , \ xʷā-\ grē\ \ tsā\ \ kāw\ \ á\ \ tā\ \ wām\ \ á\ \ xā\ \ nslėd' \]

\( 2\text{SG.SBJ- see}\ \ TOP\ \ \text{even(ful.) PREP1 on ten PREP1 over seven} \)

\[ wām\ \ aha\ \ jāmahkəd',\ \ ha\ \ a\ \ ndā\ \ a\ \ tā\ \ wām\ \ á\ \ xā\ \ jāmāxkād'\ \ xā\ \ ā-\ \ ndā\ \ á\ \ tā\ \ ten\ \ \text{PREP1 over eight until 3SG.SBJ- go PREP1 on} \]

\[ \text{ragbak aha} \ \ gbak\ \ ege\ , \ mahkəd'\ \ ca\ , \ mawal\ \ ege \]

\[ \text{rāgbāk á \ xā\ gbák} = ɛɡē\ \ māxkād'\ \ tsā\ \ māwāl = ɛɡē \]

\[ \text{twenty PREP1 over two} = \text{PL} \quad \text{three TOP man} = \text{PL} \]

\[ \text{ay} \ \ \text{kaca} \ \ \text{wala} \ . \]

\[ \text{3PL.SBJ- IPFV- put wife} \]

‘…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).

\[ \text{Ara ege} \ \ \text{vayay}\ ? \]

\[ \text{ārā} = ɛɡē\ \ vājāj \]

\[ \text{COP =PL who} \]

‘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.’ Moravcisk (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 Moravcisk’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 ay ājā á mpát tsā ātā dzwrāw wēsē ndā j-
then PREP1 tomorrow TOP ASS.PL sub-chief DEM.DIS go 3PL.SBJ-
nda złađa ata Martan ey ata baba naka , ey ndā ḡābā ātā martan ēj ātā baba nākā ēj
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.
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 sakamha*  

\[ \text{sā-} \text{ ndā á lbumā ŋ skām -xā ätā nte ēj} \]  

1SG.SBJ- go PREP1 market INF buy -VNT.DIST ASS.PL shoe and *rgwac*.  

*rgʷats*  

clothes  

‘I go to the market to buy shoes and clothes.’  

(GE25-SE:5)

b. *Ata mbembe ny godak*,  

\[ \text{ätā mbér-mbér ēj gdāk ́j- kā- ntež -ējē} \]  

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 kʷlē *mālā* mwsā  
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 masbhaw* *aka*.  
*mālā* māsbāxʷ ákā  
gen bone.ache exist  
‘There is one for aching bones.’  
(DE9-SN:1.7)

b. *Sa fədāhha mala mapat* *beŋ ṣa nda ṣa*.  
sā- fḑāx -xā *mālā* māpāt bēŋ ṣa ndā ṣa  
1sg.sbj wake -vnt.dist gen morning early inf go prep2  
lekwal .  
lèkw’āl  
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 tsā *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).

\[
\begin{align*}
\text{(4.100)} & \quad Dəvər , \quad \text{ara} \quad \textit{mala mana} . \\
& \quad \text{dvăr} \quad \text{ārā} \quad \textit{mālā mānā} \\
& \quad \text{hoe} \quad \text{COP} \quad \text{GEN} \quad \textit{mother:1POSS} \\
& \quad \text{‘The hoe, it's my mother's.’} \\
\end{align*}
\]

\[(GE15-SE:31)\]

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 maker precedes a direct object while the completive marker follows it, so in fact both can occur in the one clause (4.101).

\[
\begin{align*}
\text{(4.101)} & \quad Hwa \quad \text{cawal} \quad \textit{a2a} \quad \textit{vorezl} \quad \textit{a2a} . \\
& \quad x^{wā}- \quad \text{tsāwāl} \quad \text{āzā} \quad \text{vrēł} \quad \text{āzā} \\
& \quad \text{2SG.SBJ- scoop} \quad \text{IT} \quad \text{sorghum.husk} \quad \text{COMPL} \\
& \quad \text{‘You scoop out the sorghum husks first.’} \\
& \quad \text{(PP4-SN:1.4)}
\end{align*}
\]

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).
Mina has an interesting construction which may give some insight into how the Buwal itive 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 maker za. The Buwal itive 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 Buwal itive 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).

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 kş 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 ōká and ká were derived historically from locatives of some kind and later developed temporal meanings.

The Buwal completive marker ōzá 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 ō and cliticises to the verb root (4.104b), making it identical to the Mina form.

(4.104) a. Sa kábal mpe ōza .
   sā- kā- bāl mpè ōzā
   1SG.SBJ- PFV- chop tree COMPL
   ‘I finished cutting the tree.’ (GE23-SE:4.4)

   b. Sa kábalza .
   sā- kā- bāl =zā
   1SG.SBJ- PFV- chop =COMPL
   ‘I finished chopping (it).’ (GE23-SE:4.3)

The Buwal marker of simultaneity ōrá 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’, ķ ‘in’, and ḋá ‘with’. All of these prepositions take NP complements (4.105 a to c).

The prepositions á and ķ 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 ķ can additionally take a verbal complement to form the infinitive construction (see Section 10.1.1.4).

(4.105)a. A nda á wata mzla
ā- ndā á wātā mlā

3SG.SBJ- go PREP1 home blacksmith
‘He goes to the blacksmith’s home…’ (DE11-SN:1.7)
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

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Gloss</th>
<th>Derived from</th>
</tr>
</thead>
<tbody>
<tr>
<td>á tā</td>
<td>‘on/about’</td>
<td></td>
</tr>
<tr>
<td>á sā</td>
<td>‘under’</td>
<td></td>
</tr>
<tr>
<td>á rā</td>
<td>‘at the side of’</td>
<td>rā ‘hand/arm’</td>
</tr>
<tr>
<td>á mā</td>
<td>‘at the edge of’</td>
<td>mā ‘mouth’</td>
</tr>
<tr>
<td>á xā</td>
<td>‘over, above’</td>
<td>xā ‘head’</td>
</tr>
<tr>
<td>á dāw</td>
<td>‘behind’</td>
<td>dāwān ‘back’</td>
</tr>
<tr>
<td>ánā</td>
<td>‘like, as’</td>
<td></td>
</tr>
<tr>
<td>màvdāj/màvāj²</td>
<td>‘because’</td>
<td>ma- NOM + váj ‘where’</td>
</tr>
</tbody>
</table>

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 tā ‘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.  
\[
\text{Sa} \, \text{daw} \, \text{ŋ} \, \text{nda} \, \text{a} \, \text{daw} \, \text{u}j\text{ek} .
\]
\[
\text{sā-} \, \text{daw} \, \text{ŋ} \, \text{ndā} \, \text{ā} \, \text{daw} \, \text{wjēk}
\]
\[
\text{1SG.SBJ-} \, \text{want} \, \text{INF} \, \text{go} \, \text{PREPI} \, \text{behind} \, \text{house}
\]
\[
\text{‘I want to go behind the house.’}
\]
\[\text{(LL6-SE:10)}\]

b.  
\[
\text{Sa} \, \text{nanda} \, \text{ara} \, \text{mbē}
\]
\[
\text{sā-} \, \text{nā-} \, \text{ndā} \, \text{ā} \, \text{rā} \, \text{mbē}
\]
\[
\text{1SG.SBJ-} \, \text{FUT-} \, \text{go} \, \text{PREPI} \, \text{side} \, \text{3SG}
\]
\[
\text{‘I will go to him (lit. the side of him)…’}
\]
\[\text{(HT3-SN:2.1)}\]

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 antā .  
\[
\text{mbāŋ} \, \text{ā-} \, \text{rā} \, \text{āza} \, \text{rā} \, \text{āntā}
\]
\[
\text{cut.suddenly} \, \text{3SG.SBJ-} \, \text{cut} \, \text{IT} \, \text{hand} \, \text{3SG.POSS}
\]
\[
\text{‘Wop! He cut off his hand.’}
\]
\[\text{(TN1-SN:3.3)}\]
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.  

\[ \text{Hwa kévelekey kan ma taŋtaŋ } \text{Mavay} \text{ } \]

\[ \text{xʷā- kā- vāl -ēkēj kān má= tāŋ-tāŋ màvāj} \]

\[ \text{2SG.SBJ- PFV- give -1SG.OBJ thing REL= good because} \]

\[ \text{anta } sa \text{ kadāwahwaw dakala} . \]

\[ \text{āntā } sā- kā- dāw -āxʷāw dākālā} \]

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.  

\[ \text{Sa kasasam mavay hwa} . \]

\[ \text{sā- kā- sāsām màvāj xʷā} \]

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

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>kdâ</td>
<td>‘towards (straight)’</td>
</tr>
<tr>
<td>kdë</td>
<td>‘towards (general direction)’</td>
</tr>
<tr>
<td>gbâg</td>
<td>‘just’</td>
</tr>
<tr>
<td>tsâlâx</td>
<td>‘beyond’</td>
</tr>
<tr>
<td>sât</td>
<td>‘up to’</td>
</tr>
<tr>
<td>pâ</td>
<td>‘at a level’</td>
</tr>
<tr>
<td>tâ</td>
<td>‘by, through’</td>
</tr>
<tr>
<td>xá</td>
<td>‘up to/until’</td>
</tr>
<tr>
<td>dâkâ</td>
<td>‘from/since’</td>
</tr>
</tbody>
</table>

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.  
```
hejøye ay kanda kôda a luma .
xèdzè -jé j- kā- ndâ kôda á lûmâ
person -PL 3PL.SBJ IPFV- go towards PREP1 market(ful.)
‘…people were going towards (lit. to) the market.’ (C16-SN:19)
```

b.  
```
hejøye ay ke tev ta âta ã dëlek wese
xèdzè -jé j- kâ- tèv tâ â tâ dëlek wëse
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 kôda ete nghe ma
ndzèf -zâ tâ kôda á tê nyë mâ
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 ñgmbâ ‘up there’ and wzą ‘down there’ as complements (see Section 4.3.3).

(4.110) a.  
```
Sa nda calab ñgbe ñgha .
sâ- ndâ tsâlâx ñgmbâ nyâ
1SG.SBJ- go beyond up.there DEM.PROX
```
‘I went further (lit. beyond), up there.’ (GE40-SE:27.3)

b.  
\[\text{hwa } \text{nda } \text{kda } \text{uzza} \]
\[\text{x\text{"a} } \text{nd} \text{a } \text{kda } \text{wz}a \]
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, ts\text{\text{"a}l}x ‘beyond’ and s\text{\text{"a}t} ‘up to’, the complement can be omitted if the location is known from the context.

The last two prepositions in Table 4.10 x\text{"a} ‘until’ and d\text{\text{"a}k}a ‘since’ are borrowed from the Fulfulde prepositions h\text{\text{"a}a} and d\text{\text{"i}g}a/d\text{\text{"a}g}a 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).

(4.11) a.  
\[\text{Sa } \text{g\text{\text{"o}wer}ha } \text{ha } \text{a } \text{Magaway} \]
\[\text{s\text{"a} } \text{ntsw\text{"e}r } \text{-x\text{"a} } \text{x\text{"a} } \text{á } \text{m\text{\text{"a}g\text{"a}w}áj} \]
1SG.SBJ- travel -VNT.DIST until(ful.) PREP1 Magaway
‘I travel up to (lit. until to) Magaway.’ (GE40-SE:32.3)

b.  
\[\text{\text{"E}y } \text{zlap } \text{ay } \text{la } \text{menjevek } \text{aka } \text{dak} \text{a } \text{a } \text{Zt\text{\text{"e}n}c} \]
\[\text{\text{"J} } \text{\text{"h\text{"a}p } \text{\text{"J} } \text{l\text{"a } \text{m\text{\text{"e}n\text{"d\text{"e}v}e}k } \text{ák} \text{a } \text{dak\text{"a } \text{á } \text{\text{"h\text{"e}nts} \]
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)
4.8.4 Prepositions taking no complement

There are a number of 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

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>á bzā</td>
<td>‘outside’</td>
</tr>
<tr>
<td>á mān/mnā/mā</td>
<td>‘inside’</td>
</tr>
<tr>
<td>á skā</td>
<td>‘underneath’</td>
</tr>
<tr>
<td>á xēdē</td>
<td>‘on top’</td>
</tr>
</tbody>
</table>

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.

\[(4.113)\text{a.}\quad \text{Hejaye ay kədəməs ara a səka } \]
\[\text{xədzə -j- kə- dməs ā rə ŋ səkə } \]
\[\text{person -PL 3PL.SBJ- IPFV- dance SIM PREP1 underneath} \]
\[\text{‘People were dancing along the way underneath (the chief mounted on a horse).’} \quad (\text{NH7-SN:7.2}) \]

\[\text{b. ay təwər a kəsəm a bəza } \]
\[\text{j- təwər ā kəsəm ā bəzə } \]
\[\text{3PL.SBJ- walk.around PREP1 body PREP1 outside} \]
\[\text{‘…they would walk around naked (lit. with the body on the outside).’} \quad (\text{C18-SN:1}) \]

\[\text{c. vəya ca heje a mənə } \]
\[\text{vəjā tsə xədzə ā mənə } \]
\[\text{wet.season TOP 1INCL.STAT PREP1 inside} \]
\[\text{‘Ah, the wet season, we are in it.’} \quad (\text{C5-SN:4}) \]

### 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).

\[(4.114)\text{a.}\quad \text{Ara məba zəŋgən bəbə ŋəntə } \]
\[\text{ārə mbə ŋəŋgən bəbə ŋəntə } \]
\[\text{COP child sibling father 3SG.POSS} \]
\[\text{‘It was his cousin.’} \quad (\text{NH3-SN:7.3}) \]

\[\text{b. Zlana ara məntər } \]
\[\text{ŋənə ŋəra məntər } \]
\[\text{sibling.IPOSS COP teacher(fr.)} \]
\[\text{‘My brother is a teacher.’} \quad (\text{GE15-SE:3}) \]

\[\text{c. Ara tətə mə=kə- skəm ndərəŋ } \]
\[\text{ārə tətə má= kə- skəm ndərəŋ } \]
\[\text{COP 3PL REL= IPFV- buy sorghum} \]
\[\text{‘It's them who is buying sorghum.’} \quad (\text{LL21-SE:7}) \]
Certain nearby languages have cognate markers. For example Lienhard (1978: 6) mentions an optional copula *adá* 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 *da* ‘be’ which takes verbal morphology and the third person singular verbal agreement marker like Buval is *a*—(author’s fieldnotes). The agreement marker and the verb may have fused to form the invariant particle *adá* as in Daba whilst a rhoticisation of the consonant led to the form *ara* in Buval.

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. *Sórah  aka*.  
  srāx  ákā  
  jealousy EXIST
  ‘There is jealousy.’ (lit. ‘Jealousy exists.’)  
  (HT3-SN :3.7)

b. *Menjevek  mala  faːɡwalakw  aka*.  
  méndzɛvek  mālā  faːləkʷ  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  Ṋgama  
  xɛdzɛ  wɛndɛ  ákā  j-  kā-  ndzā  á  Ṋgámą  
  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,…’

290
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 *kʷāw*/skʷāw (Section 4.11.1) and the existential negative *ákʷāw*/áskʷāw (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, tâkʷàm ‘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>
<thead>
<tr>
<th>Negation type</th>
<th>Form</th>
<th>Verbal*</th>
<th>Existential</th>
<th>Other verbless</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain</td>
<td><em>skʷāw</em></td>
<td>88</td>
<td>-</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td><em>kʷāw</em></td>
<td>335</td>
<td>-</td>
<td>56</td>
</tr>
<tr>
<td>Existential</td>
<td><em>ákā skʷāw</em></td>
<td>22</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td><em>áskʷāw</em></td>
<td>10</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><em>ákʷāw</em></td>
<td>310</td>
<td>86</td>
<td>45</td>
</tr>
<tr>
<td>‘Impossible’</td>
<td><em>tákʷàm</em></td>
<td>14</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>765</td>
<td>110</td>
<td>129</td>
</tr>
</tbody>
</table>

*Including imperative clauses*
4.11.1 Plain negative

The form of the plain negative marker in Buwal is $k^\text{ʷāw}/sk^\text{ʷāw}$. 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 $k^\text{ʷāw}$ occurs more frequently than $sk^\text{ʷāw}$.

For example, out of 423 verbal clauses negated with the plain negative, $sk^\text{ʷāw}$ was found in only 88 with $k^\text{ʷāw}$ in 335 (see Table 4.11).

4.11.2 Existential negative

The existential negative marker in Buwal has the form $âk^\text{ʷāw}/âsk^\text{ʷāw}$. This is a result of fusion and contraction of the existential marker $âkâ$ and the plain negative marker. In fact, the combination $âkâ sk^\text{ʷāw}$ can also still be found with the same meaning as $âk^\text{ʷāw}/âsk^\text{ʷāw}$ (4.117), although it occurs far less frequently than the fused version (see Table 4.11). Further evidence that $sk^\text{ʷāw}$ is the older form is that the combination $âkâ k^\text{ʷāw}$ is never found.


nä- ndā -xā wdā $âkâ$ sk$^\text{ʷāw}$ wdā $âk^\text{ʷāw}$

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](image)

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 skʷāw. Then these two markers fuse and contract to form ákʷāw/āskʷāw 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 skʷāw 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 dámwāw ákwāw
3SG.SBJ- IPFV- go to bush NEG.EX

‘She is **not** going to the bush.’ (C2-SN:12.2)
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 tàkʷàm 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 dà ‘to be’ (author’s fieldnotes) and in Mina the existential verb has the form dà 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 tasam a manhayak
ánä èbè tsá xʷā- ká- lêm sàsàm á män xājāk
like DEM.MED TOP 2SG.SBJ PFV- get joy PREP1 mother land

kwaw.
kʷāw
NEG
‘In this way, you did not have joy on the earth.’ (HT3-SN:5.1)
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)  
\[ H\text{wa } k\text{ezl\text{ô}me } n\text{jef } s\text{akwaw } v\text{aw }? \]  
\[ x\text{w\text{á}- } k\text{-h\text{m\text{é}} ndzèf } s\text{k\text{w\text{á}} } v\text{áw } \]  
\[ 2\text{sg.sbj- ipfv- detect odour neg q } \]  
‘Don't you smell something?’ (NF3-SN:2.6)
Both the existential negative marker ákʷāw/ás̱kʷāw (4.121b) and tâkʷàm ‘impossible’ (4.22b) can occur alone as a complete utterance. This is not the case for the plain negative kʷāw/skʷāw.

(4.121) a. A kawan aha nesle vaw?
á- kā- wān á xā nēlē vāw
3SG.SBJ- IPFV- lie PREP1 over egg Q
‘Was she (the hen) sitting (lit. lying) on eggs?’

b. Akwaw
ákʷāw
NEG.EXIST
‘No.’ (C4-SN:8-9.1)

(4.122) a. wala na ma kaw a kanda ŋ lemba
wālā nā má kāw á- kā- ndā ū lèm -bā
wife 1SG.POSS TOP.EMPH even(ful.) 3SG.SBJ- IPFV- go INF get -BEN
ŋ ndā ŋ laβa zlan a damaw akwaw . Mbəy
ŋ ndā ū lā -bā ḳān á dāmāw ákʷāw 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
tâkʷàm
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 akwáw vaw?  

twā- ká- nda á dámāw ákwá w vaw  

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 tątąŋ vaw?  
j- lā kān mā = tą tąŋ vaw  

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“á/sk“á which is used between friends (4.124). This may have been derived from the plain negative marker k“aw/sk“aw (see Section 4.11.1).

(4.124) Hwa nda aka a damaw yam səkva?  

twā- ndā ākā ā dámāw jām səkwa  

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 ?*

\[
\begin{align*}
\text{kātā } & \text{xʷā- ná- ndā á māpāt } \text{kā } \text{vāw} \\
\text{perhaps 2SG.SBJ- FUT- go PREP1 morning SPEC Q} \\
\text{‘Perhaps you will go in the morning maybe?’} \\
\end{align*}
\]

(4.125) (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 *āzā* 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 *kʷá/skʷá* (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 *kʷāw* (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 ?*

\[
\begin{align*}
\text{mā } & \text{āntā tsá kādāk aza vāw} \\
\text{situation DEF.DET TOP good DUB Q} \\
\text{‘The situation, is it really good?’} \\
\end{align*}
\]

(4.126) a. (GE52-SE:31.2)

b.  
*a dāwba tete a bār bār anta aza kwa ?*

\[
\begin{align*}
\text{ā- dāw -bā téte á bár-bár āntā aza kʷá} \\
\text{3SG.SBJ- want -BEN enough PREP1 strength 3SG.POSS DUB Q.FAM} \\
\text{‘…does he really want the amount appropriate to his strength?’} \\
\end{align*}
\]

(4.126) b. (C11-SN:87)
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 ŋɡājā, 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 Ꞅgayə : « Kay ! Ha anta
ā- ḥāp -ēnē ā- Ꞅgājā kāj xā āntā
3SG.SBJ- speak -3SG.OBJ 3SG.SBJ- QUOT Oh! head 3SG.POSS
ca , mala naka . Ha anta ca , mala naka ! »
tsā mālā nākā xā āntā tsā 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 mâtāŋgär 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 Ꞅgājā 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 hejye ma zlecle oge : « Wala dəlak
mâtāŋgär xedzè -jé má= ḥēhē =ēgē wālā dīlak
QUOT.RES person -PL REL= long.ago =PL woman mess
ma kāŋgaz wala dəlak » a ya .
má= kā- Ꞅgāz wālā dīlak a- 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  
matáŋgáŋ sā á nwná sā- jā gāĬavāj  
QUOT.RES 1SG PREP1 last.year 1SG.SBJ- say God  
menjenjekey mba yam may . »  
mā- ndzândzā -ēkēj mbà jām 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 3SG.SBJ- think noun 3POSS REFL- come NEG  
ā- dēŋ māmān má= kā- ndā kʷāw  
‘He thinks about his mother who hasn’t come (yet).’ (LL33-SE:18)
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)  

\[ [Mə \text{ } \text{ketehzetene } \text{zlam akwaw }] \text{cemey }, \]
\[ \text{mā= kā– tēh -zā -ētēnē ṭām ākʷāw tsēmēj } \]
\[ \text{REL= IPFV– listen -TRANS -3PL.DOBJ ear NEG.EXIST TOP.CON} \]
\[ \text{bay a mbalata} . \]
\[ \text{bāy ā– mbāl -ātā} \]
\[ \text{chief } \text{3SG.SBJ– arrest -3PL.DOBJ} \]
\[ \text{‘Those who don’t listen to them, the chief arrests.’} \quad (\text{DE8-SN:5.3}) \]

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

<table>
<thead>
<tr>
<th>Bound/Free</th>
<th>Function</th>
<th>Sub-types</th>
<th>Section Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bound</td>
<td>Nominaliser</td>
<td>Agent, Patient, Ordinal numbers, Lexicalised</td>
<td>3.1.3.1</td>
</tr>
<tr>
<td>Free</td>
<td>Relative marker</td>
<td>Temporal, Locative, Manner, Reason, Cause, Concessive</td>
<td>4.14.1.2</td>
</tr>
<tr>
<td></td>
<td>Adverbialiser</td>
<td>Emphatic</td>
<td>4.15 &amp; 11.2.2.3</td>
</tr>
</tbody>
</table>
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).

\[(4.131)\text{a. } Sa \text{ már} \text{ ŋ} \text{ da } u\text{da} .
\]

\[\text{sā- mār} \text{ ŋ dā } \text{ wdā} \]

1SG.SBJ- begin INF prepare food

‘I begin to prepare food.’ (GE61-SE:3.9)

\[Mār \text{ ŋ wān } , \text{ sa} \text{ zam } u\text{da } a\text{za} .
\]

\[\text{mār ŋ wān sā- zam wdā āzá} \]

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.

\[(4.132) \]

\[Màdā \text{ hwa } kázam \text{ u}da \text{ aza } \text{ deydey} , \text{ hwa } kula \]

\[màdā xʷā- ká- zam wdā āzá dējdēj xʷā kʷlā \]

if 2SG.SBJ- PFV- eat food COMPL too.much(ful.) 2SG.STAT able
ŋ wan kadak kadak kwaw .
ŋ wān kādāk kādāk kʷāw
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 mādā, is āndzā ‘if’ (4.133). This is perhaps related to the conditional particle āggā in Mina (Frajzyngier and Johnston 2005: 412).

If you have eaten too much, you are not able to sleep very well.’

(4.133)  Anja  a      kandaha    , sa     hōbaraw    .
āndzā  á-   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.’

Finally the adverbialisers ndār (4.134a) or less commonly tāp (variant: tpā) (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 ndār developed diachronically from the verb ndā ‘go.’

(4.134) a.  Nda  ŋ   badāba   wala  ca   , [ndar  a
ndā ŋ bād' -ā -bā wālā tsā ndār ā-
go INF flatter -VNT.PROX -BEN woman TOP so.that 3SG.SBJ-
ndaha ŋ dahwaw   uda   yam ]
ndā -xā ŋ dā -āxʷāw wā dā jām
go -VNT.DIST INF prepare -2SG.OBJ food also
‘Go to flatter a woman, so that she comes to prepare you food also.’

(4.134) b.  Tal  ŋ   la  zlan  ca   , [tāp hwa zamba sākan ]
tāl ŋ lā  ḥān tsā tāp xʷā-  zam -bā skān
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 kadaw n gtewekey ambá sa hey aza
á- kā- dāw n ntāw -ēkēj āmbá sā- xēj āzā
3SG.SBJ- IPFV- want INF whip -1SG.DOBJ then 1SG.SBJ- run IT
a ujēk
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 bāh a bahza ka
ā- mbāl āzā tsā ājā bāh ā- bāh -zā kā
3SG.SBJ- catch IT TOP then hide 3SG.SBJ- hide -TRANS ANT
asa ragwac ende
á sā rgʷâts ēndē
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 dōwze anta ca , ambá ma anta a la
á dzēzē āntā tsā āmbā mā āntā ā- lá
PREP1 after DEF.DET TOP then situation DEF.DET 3SG.SBJ- do
zebźe bana bēbe nghe
zeb-zeb ānā ḑēbē nyē
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 .
   xʷā- wlàk -zā xʷā- wlàk -zā kàdàk kàdàk
2SG.SBJ- think -TRANS 2SG.SBJ- think -TRANS good good
   Amba hwa nezenzene zlap ege .
   āmbá xʷā- ná- zèn -zā -ēnē ḥāp = ēgē
   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 dàdà ra fagwalak wese . Aya
   ā- dàď -ā rā fāgʷālākʷ wēsē ājā
3SG.SBJ- take.out -VNT.PROX hand leper DEM.DIST then
dàď ā- dàď -ā ḥēj
   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 ēj ‘and’ and léy ‘plus’. It is likely that ēj ‘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 [welbé ey kule].
gāɬjavāj tātá wēlbē éj kʷlē
3PL.POSS nature.spirit and(ful.) idol
‘…their gods were nature spirits and idols.’ (DE15-WN:2)

b. *A dwze anta sa zehzene [mɓa
dwzē āntā sā- zāx -zā -ēnē mɓā
PREP1 after DEF.DET 1SG.SBJ- pour -TRANS -3SG.IOBJ tamarind
léŋ sukar ].
léŋ swkār
plus sugar(fr.)
‘Afterwards, I pour in tamarind plus sugar.’ (DP5-SN:6)

(4.138) a. *Hwa kula ŋ cecketene aza ana gef
xʷā kʷlá ŋ tsāk -zā -ēnē āzā ānā gēf
2SG.STAT able INF help -TRANS -3PL.IOBJ COMPL like difficulty
vedjye ey ana ŋtābal ma mbalata yam
vēdjē éj ānā nbāl mā= mbāl -ātā jām
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 baremetene serek ŋ nhwēye leŋ
vānā ā- brām -ēnē nērēk ŋ nxʷā -jē léŋ
father.TOP POSS 3SG.SBJ- braid -3PL.IOBJ rope PREP2 goat -PL plus
ŋ ŋtēmaye .
ŋ ntmēk -jē
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 godak, aey kënteze ye.**

ātā mbēr-mbēr ēj gdāk ĵ- kā- ntēz -ēj

ASS.PL near and(ful.) far 3PL.SBJ- PFV- separate -PART

‘Near and far, they are separated.’ (GE66-SE:49)

b. **ŋkəɗaŋ nggha mbəy [Barɓar leŋ dakala].**

nkɗāŋ nyā mbj ɓār-ɓār leŋ dakālá

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, aey kabal mpe ṭ la ujek, man ey ay kazla hamas.**

māwāl =ēgē ĵ- kā- bāl mpē ĵ lā wjēk

man =PL 3PL.SBJ- IPFV- chop wood INF make hut

ēj ĵ- kā- ŋā xmās

and(ful.) 3PL.SBJ- IPFV- cut thatch

‘Men chop wood to make a hut and they cut thatch.’ (DE18-SN:2.9)

b. **Øy kabaɓad leŋ aey zlak ara.**

j- kā- bābād leŋ ĵ- ŋāk ārā

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 ēj ‘and’ can also be used at discourse level, beginning a sentence (4.141).

(4.141) **Ama hune katalaw, hune kālalak.**

āmā xʷnē- kā- tāl -āw xʷnē- kā- lálāk

but(ful.) 2PL.SBJ- PFV- manage -3SG.DOBJ 2PL.SBJ- PFV- be.afraid
deydey mambaza akwaw. **Ey Aba kāla zlan.**

dējđēj māmbāzā ākʷāw ēj aba kā- lā ŋān
too.much(ful.) so.much NEG.EXIST and(ful.) Aba PFV- do work
tete mala anta yam.

tétē 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- dzēj dámāw énē 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 ḫān 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.
The general and contrastive topic markers can also occur at the beginning of an utterance (4.144 a & b).

(4.144)a.  **Ca, ara sokan ma tanțan kwaw**.

\[
\text{tsá} \quad \text{ără} \quad \text{sòkàn} \quad \text{má} = \quad \text{tanț-тан} \quad \text{kʷăw}
\]

\textbf{TOP COP thing REL= good NEG}

‘So, it is not a good thing.’  

(HT2-SN:3.8)

b.  **Cemey , ara ngarey ege**

\[
\text{tsémēj} \quad \text{ără} \quad \text{ngărēj} \quad =\text{éğē}
\]

\textbf{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) ay cene zlam dawar ca, mala ma cemey ?
   j- tsá -ёнё .idea dawàr tsá málà mà tséméj
3PL.SBJ- put -3SG.OBJ 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- làkw äntä azá 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 ĕ ndàba , sa mlàlakw cay !
   sà- mär ĕ ndà -bà sà mlàlakw 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)  
á  ‘ah’  
ásádáj  ‘I don’t know/care.’  
ājá  ‘oh yes?’  
kéléléw  cry to chase away  
mànà  hesitation  
wábáw  cry of grief  
wáj  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)  
Kay,  mana   mana , dengez  kája   mawal  
káj  mànà   mànà  dēngēz  ká-   dzā  māwāl  
Oh! (hesitation) (hesitation) trap  PFV- kill husband  
na  aza  a  damaw !  
nā  āzá   á  dāmāw

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

<table>
<thead>
<tr>
<th>(FOC)</th>
<th>(ASS.PL)</th>
<th>HEAD</th>
<th>(POSS)</th>
<th>(DEF.DET)</th>
<th>(REL)</th>
<th>(PL)</th>
<th>(IND.DET)</th>
<th>(ADJ)</th>
<th>(QUANT)</th>
<th>(PP)</th>
<th>(DEM)</th>
<th>(FOC)</th>
</tr>
</thead>
</table>

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* ay fdāhha tewtew ɲ msaw

*gʷāmbąkʷ* =égę j- fdāx -xā téw-téw ɲ msąw

Toad =PL 3PL.SBJ- wake up -VNT.DIST all INF roast

*zley tata*

حة tātā

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 kasokam ndrey* .

ārā mbē má= kā- skām ndrēj

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 tāntāŋ* .

xʷné nā- máj tsá dālā má= tāntāŋ

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 nāntar mala ɲcene tewtew*

sā- nā- ntār mālā ɲtsēnē tēw-tēw

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 qa ha gamzakw vayay ca, oya nda*

má= ntā xā gāmzākʷ vájáj tsā 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 kāw vékēj =éê

bring -1SG.OBJ even which =PL

‘Bring me every type.’ (GE37-WE:25)

(vii) Indefinite determiners (Section 4.2.1)

(5.7) *Wende ma sa gore a njuna ca, ebe*

wēndé má= sā- grē á ndzwná tsā èbè

IND.DET.SG REL= 1SG.SBJ- see PREP1 yesterday TOP DEM.MED

kwaw.

kʷāw

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, oya kedēdē mavaw a mna.*

èbè =éê tsā j- kā- 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) \textit{Jem wese} ca, sa dàw kwaw.
\textit{dzèm wësé} tsá sā- dàw kʷāw
\textbf{tall DEM.DIST TOP 1SG.SBJ- want NEG}
‘I don’t want to be that tall (lit. \textbf{That height}, I don’t want it.)’
(GE39-SE:53)

(x) Cardinal numerals (Section 4.4.1)

(5.10) \textit{Tęnguleŋ} day aha base.
\textit{tęggʷlęŋ} dāj á xā bsé
\textbf{one more PREP\textsubscript{1} over nothing}
‘One is more than nothing.’
(LL48-SE:3)

(xi) Quantifiers (Section 4.4.2)

(5.11) \textit{cekude ma hejye ay kala a gwaygwaya}
tśékʷdē mā= xèdzè -jé j- kā- lā á gʷajgʷajā
\textbf{a.little REL= person -PL 3PL.SBJ- IPFV- do PREP\textsubscript{1} festival}
ca ana ebe.
tsá ánā Ḗbē
\textbf{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) \textit{kédenza dakala ata ma ay}
kā- dęŋ -zā dákałā ā tā mā= j-
\textbf{PFV- reflect TRANS a.lot PREP\textsubscript{1} on REL- 3PL.SBJ-
temzene dęgęz məvaw ŋ ĥa}.
tām -zā -ěnē dęgęz mávăw ŋ xā
\textbf{pour TRANS -3SG.IOBJ dregs beer PREP\textsubscript{2} head}
‘…he thought a lot about \textbf{how they poured the beer dregs onto his head.}
(TN3-WN:5.1)
Genitive constructions (Section 5.2)

(5.13) a dâdâ ra fagwalakw wese.

ā- dâd -ā rā fāgʷālākʷ wēsē

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 nkrām ‘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

<table>
<thead>
<tr>
<th>Head</th>
<th>ASS.PL</th>
<th>POSS</th>
<th>DEF.DET</th>
<th>REL</th>
<th>PL</th>
<th>DET</th>
<th>ADJ</th>
<th>QUANT</th>
<th>PP</th>
<th>DEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>common nouns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>mass nouns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>not NUM</td>
<td>X</td>
</tr>
<tr>
<td>abstract nouns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>not NUM</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>locative nouns</td>
<td>X</td>
<td>(X)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>(X)</td>
<td>X</td>
</tr>
<tr>
<td>temporal nouns (group 1)</td>
<td>X</td>
<td>(X)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>temporal nouns (group 2)</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>(X)</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>relational nouns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>independent personal pronouns</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>indefinite pronoun</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>independent possessives</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>interrogative pronouns</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>universal quantifiers</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>indefinite determiners</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>nominal demonstratives</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>adjectives</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>(X)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>cardinal numerals</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>quantifiers</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>headless relative clauses</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>genitive constructions</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

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, kāw ‘even’ and īnd ‘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 jámd ‘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, kâta, and the compound of these kêtegré,
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 msara  ege  ma  ndaha  ege
kâw  msrä  =égê  mà=  ndâ  -xâ  =égê
even old.person  =PL  REL=  go  -VNT.DIST  =PL
‘Even the old people who came…’ (DP8-SN:7.3)
b. Yaw  védjé  ege  yam  cemey  ,  hwa
jaw  vêdjé  =égê  jâm  tséméj  xʷâ-
so  IND.DET.PL  =PL  also  TOP.CON  2SG.SBJ-
debetene  unaf  aka  .
dêô  -ētênê  wnâf  ākâ
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  gare  baba  nkwa  gare  kâmac  anta  .
ârâ  gré  bâbâ  nkʷâ  gré  kâ-  mât  ântâ
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  gare  .
bây  dzemere  wêsâ  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 âtā 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 dòwze anta eze , ata Mazkad ege , ñy
á dwzé àntà ézè åtà mazkad =égè j-
PREP₁ after DEF.DET therefore ASS.PL Mazkad =PL 3PL.SBJ-
kadàw ɲ prasl bay aza ,
kà- dàw ɲ pràl bày åzá
IPFV- want INF seize chiefdom COMPL
‘Afterwards therefore, the Mazkad people and their associates, they
wanted to seize the chiefdom…’ (NH13-SN:2.6)

b.  Aya a əmpat ca ata juraw wese , ndà ñy
ájá á əmpáy tsá åtà dzrāw wèṣè ndà f-
then PREP₁ tomorrow TOP ASS.PL sub-chief DEM.DIS go 3PL.SBJ-
nda zlaɓa ata Martan ey ata baba naka , ey ata
ndà ḥàbà åtà martan ëj åtà baba nàkà ëj åtà
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 .
sà- ná- pàd’ wjèk nàkà
1SG.SBJ- FUT- wrap hut 1SG.POSS
‘I will thatch (lit. wrap¹) my hut.’ (DP7-SN:2.2)

¹ The verb pàd’‘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. **Uzeye ɲcene ege ma na**

wzjé ntsènè = égě má = ná-

children 1EXCL.POSS =PL REL= 1EXCL.SBJ-

kambawata ca , sey nene

kā- mbāw -ātā tsā séj nēnē-

IPFV- give.birth -3PL.DOBJ TOP except 1EXCL.SBJ-

ŋgazata .

ŋgāz -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 domas ŋkwa

sā- dam nākā á dmās nkʷā

1SG.SBJ- enter 1SG.POSS PREP1 belly 2SG.POSS

‘…I (will) enter your belly…’

(NF2-SN:4.7)

b. a dam anta a domas eze

ā- dam āntā á dmās ēzē

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 kavalhune  uđa řkune anta vayay ?
má= kā- vàl -āxʷnè wdā nkʷnè āntā vájáj
REL= IPFV- give -2PL.OBJ 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- dā wēsē tsá
like rain DEF.DET REL= IPFV- draw DEM.DIST TOP
‘Like that rain which is falling (lit. drawing)…’  (C7-SN:45.3)

c.  
Hejaye ma kasan menjevek ca hejaye
xèdzè -jé má= kā- sān mēndzēvēk tsá xèdzè -jé
person -PL REL= IPFV- know remedy TOP person -PL.
anta ege vedaye vedaye aka .
āntā =ēgē vēdjé vēdjé ākā
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 bəyzlaf ma mgba anta
séj á rā bāy w̱gāf má= ŋmgbā āntā
except PREP1 side chief up.high REL= up.there DEF.DET
ende tāŋ .
ěndē tāŋ
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.  
Nhwayne ŋkwa anta ege , ay kanda ŋ la .
nxʷā -jé nkʷā āntā =ēgē j- kā- ndā ğ 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. *Dhweye nkwa ege anta*, *ay kanda nj la*

*nx*e -jé *nk*e - =égeh *ánta* j- *ká- ndá nj lā
goose -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 ay*

á *pēs wēsē* á *pēs wēsē *ánta j-

PREP1 day DEM.DIST PREP1 day DEM.DIST DEF.DET 3PL.SBJ-
kádaza ara .
ká- dā -zā ārā

PFV- bring TRANS SIM

‘…on that day, on that day, they brought him along.’ (C10-SN:22)

b. *a zaman anta wese ca ay kadāw nj*

á *zāmān *ánta wēsē* tsā j- kā- daw nj

PREP1 time(ful.) DEF.DET DEM.DIST TOP 3PL.SBJ- IPFV- want INF

*ɓam* tata

ɓām 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).
Nouns may be modified by more than one relative clause (5.22).

(5.22) Hayak ma a nuna anta ma oy sler heje
xājāk má= á nwmá āntā má= j- tēr xèdzè
land  rel= prep1 times.past  def.det  rel= 3sg.sbj- exterminate  person
dakōnak.
dàknàk
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) uzaye ma vozək vozək ma ata hayak ege .
wzej má= vzēk vzēk má= á tā xājāk =ēgē
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 ēgē 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. \( Yata \quad hejye \quad nkwa \quad ege \).
\( \quad jā \quad -ātā \quad xêdzê \quad -jē \quad nkʷā \quad =ēgē \)
call -3PL.DOBJ person -PL 2SG.POSS =PL
‘Call your people.’ (NH8-SN:7.3)

b. \( Ma \quad a \quad wata \quad Dele \quad anta \quad ege \)
\( má= \quad ā \quad wātā \quad délē \quad āntā \quad =ēgē \)
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. \( kan \quad ma \quad kàdavha \quad ege \)
\( kàn \quad má= \quad kā \quad dáv \quad -xā \quad =ēgē \)
thing REL= IPFV- sprout -VNT.DIST =PL
‘…things which sprout…’ (DE9-SN:2.2)

b. \( Ana \quad menjevek \quad ege \quad ma \quad oy \quad kàkadà \)
\( ánā\quad mëndžëvēk\quad =ēgē \quad má= \quad j-\quad kàkàd\quad -ātā \)
like remedy =PL REL= 3PL.SBJ- squeeze -3PL.DOBJ
‘Like remedies that they squeeze…’ (DE9-SN:2.14)
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 ǝ nda a dunYa kwaw. kāw *zēzēkʷ* á- dāw ǝ ndā á dwnjā kʷáw 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 *kasan* kan ma a ujek anta. á- kā- sār kān 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 ṭkwa deydey. dāmā á tá *nkʷā* 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 *nakā* ege. sā- ɣʷāl -zā -āxʷāw ndzē *nākā* = ēgē 1SG.SBJ- show TRANS -2SG.OBJ 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 kɔdà a wata
á- kā- hàd' kàn =égë kɗe á wɔtâ
3SG.SBJ- IMPv- take.away thing =PL. towards PREPI home
maman eze .
mámán ezë
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 ay
á mpát āntā á pès lɔmâ mǎlâ gɔvàr j-
PREPI tomorrow DEF.DET PREPI day market(ful.) GEN Gavar 3PL.SBJ-
nda , ay mbål dɔmà ege .
ndâ j- mbål dɔmâ =égë
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 .
xʷā- kā- tsā wálâ gbák
2SG.SBJ- PFV- put wife two
‘You married (lit. put) two wife(s).’ (HT3-SN:3.4)

b. Kélem dərəwɛl jàmàhɔd .
ká- lɛm dərɛ YAML jàmɔhɔd
PFV- get paper(ful.) eight
‘He got eight vote(s).’ (NH7-SN:5.7)

c. Cën a da məvɔw kɔ daba vɔram .
tsɛn ā- dà mɔvɔw kɔ dąbà vɔrm
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 bejar bejar gbak gbak .
j- lâm ká ŋɡās =ēɡē bdzār bdzār gbāk gbāk
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 vedye voram
mà- dākāl =ēɡē j- lā ḥān =ēɡē vēḍjē vrām
NOM- big =PL 3PL.SBJ- do work =PL IND.DET.PL many
tewtew ana uzaye .
téw-téw ánā wżjé
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 kásokama zlāye wām .
sā- ká- skām -ā ḡā -jē wām
1SG.SBJ- PFV- buy -VNT ox -PL ten
‘I bought ten cows.’ (LL44-SE:7.1)

b. Hejaye voram əy kándaha .
xēdzē -jē vrām j- kā- 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 vedoye , əy dëdë mavaw a mna
kʷlẽ =ēgẽ vēdję j- dëdë màvāw 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 deder ata la vedoye ege
ā- dēdər ā tā lā vēdję =ēgẽ
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 kəvadāta ndaw mpe ege vedoye parpar
j- kvāɗ -ātā ndaw mpè =ēgẽ vēdję pāpār
3PL.SBJ- mix -3pDO base tree =PL IND.DET.PL different

parpar
pāpār
different
‘…they mix some different types of trees…’  (DE9-SN:2.5)

b. Hējye vedoYE cekude ene əy dās
xèdızè -jē vēdję tsékʷdē ēndē j- dās
person -PL IND.DET.PL a.few like,this.PROX 3PL.SBJ- cultivate
ghwarnakw .
yʷârnàkʷ	onion
‘A (lit. certain) few people like this grow onions.’  (LL17-SN:23)
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.  
\[\text{Dala jem ca , tuwah .}\]  
\[\text{dālā dzəm tsá twáx}\]  
\text{someone tall TOP great}\n
‘Anyone tall, is great.’  
(GE39-SE:58)

b.  
\[\text{Zlan ca , tuwah , ara kan tan tāŋ .}\]  
\[\text{jān tsá twáx ārā kān tāŋ-tāŋ}\]  
\text{work TOP great COP thing good}\n
‘Work, is great, it’s a good thing.’  
(DE12-SN:7.5)

(5.35) a.  
\[\text{Dala ma jem ca , tuwah .}\]  
\[\text{dālā má= dzəm tsá twáx}\]  
\text{someone REL= tall TOP good}\n
‘The tall person, is good.’  
(Talking about a person you can see.)  
(GE39-SE:58.2)
b.  
*Hune namay ca dala ma tanțanj.

t₂ⁿ̕é- ná- māj tsá dālā má= tāŋ-tāŋ

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 dakonak teٍtew meǧore zlan ŋtakwaw .

xèdʒe dākmāk tē-tēw mā- grē ḫān ntākʷaw

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 dendeļen ęy ghazbanj

kʷá̍p má= dēndēlen ēj ɣāzbanj

cup REL= circular and yellow

‘a cup which is circular and yellow’  (LL28-SE:46)

b.  
*Ara hejɔye ma jem vore ęge .

ārā xèdʒe -jé má= dzēm vrē = ěgē

COP person -PL REL= tall red =PL

‘They are people who are tall (and) red.’  (GE39-SE:70.1)

c.  
*Sa gorë dala cercer dakonak .

sā- grē dālā tsēr-tsēr dākmāk

1SG.SBJ- see someone thin black

‘I see someone thin (and) black.’  (GE65-SN: 31.1)
5.1.9 Quantifiers (QUANT)

Quantifiers, including cardinal numerals and other quantifiers such as vrām ‘many’ and tsékʷdē ‘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 kefšték akwaw .
            dālā téŋ钨lēŋ á- kā- ftēk ākʷāw
someone one 3SG.SBJ- IPFV- lose NEG.EXIST
‘Not one person is lost.’  (NH11-SN:2.12)

b.  Ḥejoye tewtew ca ọy kasan menjevek sokwaw .
            xèdzè -jé tèw-tèw tsá j- kā- tàn mēndzēvēk skʷāw
top all 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 -zā̊ -ēnē ā gʷāmbākʷ mā = téŋ钨lēŋ
3SG.SBJ- find -TRANS -3SG.IOBJ toad REL= one
zlabā zlej ŋ ra .
     ḥəbá ḥēj ŋ rā
with meat PREP2 hand
‘…he found the one toad with meat in (his) hand.’  (NF6-WN:4.3)
b. *Kan ma tewtew ngha*, a veletene ŋ

kàn mà = tèw-tèw nyā ā- vál -čēnē ŋ

ding REL= all DEM.PROX 3SG.SBJ- give -3PL.IOBJ INF

hejøye ma ðā gham ege .

xèdzè -jé mà = ðā yâm = 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. *hejøye dakànak tewtew a nasan ka*, ebe tuwah .

xèdzè dàknàk tèw-tèw ā- ná- sàn 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 ngha ca*

kàn mà = xʷā- kā- lá -ĕkēj tèw-tèw 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. *Dkədāŋŋ la*, tuwah ŋ dar mejere .

nkďànŋŋ là 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)
(5.42) a. *Sakan ata da uda akwaw.*

\[
\text{thing \ PREP1 on prepare food \ NEG.EXIST}
\]

‘There is nothing for preparing food.’

(GE40-SE:38.2)  
(lit. ‘a thing for preparing food does not exist’)  

b. *a rakha ndarey mavday sakan y zam askwaw.*

\[
\text{a- \ rak \ -xā \ ndrēj \ måvdāj \ skàn \ ý \ zàm \ áskw\̈aw}
\]

‘...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) *Ladas a dover ý la naka , a*  

\[
\text{la- \ dās \ á \ dvār \ ý \ là \ nākā \ á-}
\]

\[
\text{NOM.ACT \ cultivate \ PREP1 hoe \ PREP2 field \ 1SG.POSS \ 3SG.SBJ-}
\]

\[
\text{kelekey}
\]

\[
\text{kā- \ là \ -ēkēj}
\]

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*
   lábārā á tā bendzēr á-
   story PREP1 on squirrel 3SG.SBJ-
   kaβaszaheje .
   kā- bās -zā -āxèdzē
   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 ā g“āmbāk” ma = tēŋ”lēŋ
   3SG.SBJ- find TRANS -3SG.OBJ PREP1 toad REL= one
   zlaβa zleŋ ng ra .
   ḥąβá ḥēŋ 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*
   lábārā má= ā tā bendzēr á-
   story REL= PREP1 on squirrel 3SG.SBJ-
   kaβaszaheje .
   kā- bās -zā -ā xèdzē
   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. *ay 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).
5.1.11 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. *ŋhwɔye aŋa ege tewtew ngba ca*

\text{goat\text{-PL\ DEF.DET =PL all DEM.PROX TOP}}

‘…all these goats…’ (C13-SN:24.2)

b. *Ma a wata Mbecehay Bece ege wese yam vangay?*

\text{REL= PREP1 home Mbecehey Bece =PL DEM.DIST also how}

‘Also how are those at Mbecehey Bece’s home?’ (C5-SN:34)

(lit. ‘Those at Mbecehey 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. *Ndɔre ɲaka ngba ege ngba, ay*

\text{sorghum ISG.POSS DEM.PROX =PL DEM.PROX 3PL.SBJ- këbëmekey aza}

\text{PFV- munch -ISG.IOBJ COMPL}

‘This sorgum of mine, they have munched it all (lit. on me)…’

(C13-SN:7)

b. *a nkɔɗawata bejye wese ege .*

\text{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 ngba ege wese .*

\text{thing REL= ten DEM.PROX =PL DEM.DIST}

‘These ten things (previously mentioned).’ (HT8-SN:12.20)
b. *Ujek* ñg*ha* *wse*, *sa* *kája* *a* *mb*ē *yam*,
    wjēk *nyā* *wēsē* *sā- kā- dzā ā* *mbē jām*
    *hut* *DEM.PROX* *DEM.DIST* *1SG.SBJ- PFV- hit* *PREP1 3SG* *also*
    ‘This (previously mentionned) 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 though 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

<table>
<thead>
<tr>
<th>Head Noun</th>
<th>Modifying Noun/Genitive NP</th>
<th>Other Modifiers</th>
</tr>
</thead>
</table>

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) 

\[\begin{array}{c}
\text{a} & \text{dädà} & \text{ra} & \text{fagwalakw wese} \\
\text{ā-} & \text{däd } & -\text{ā} & \text{rā} & \text{fagʷalákʷ wēsē} \\
\text{3SG.SBJ-} & \text{take.out} & -\text{VNT.PROX} & \text{hand leper} & \text{DEM.DIST} \\
\text{He pulled out the hand of that leper.} & \text{TN1-SN:5.3} & \text{OR He pulled out that hand of the leper.}
\end{array}\]
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 faŋ“alāk”] ‘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
ŋgəŋ [wēlja māzāj ēgē] ‘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)  tseŋ xāldmā ‘girl’s father’ (DP3-SN:1.5)
father girl
wātā g”āmbāk” ‘toad’s home’ (NF4-SN:4.3)
home toad
mtsè mēŋ ‘antelope’s corpse’ (NF6-SN:2.11)
corpse antelope
ŋgās gā hãvāj ‘God’s feet’ (HT6-SN:8.1)
foot God

(ii)  Alienable possession

(5.53)  māvāw mānā ‘my mother’s beer’ (GE43-SE:25)
beer mother.1POSS
skān dzèdzē ‘grandparent’s thing’ (BH2-SN:1.1)
thing grandparent
jām wālā nk”ā ‘your wife’s water’ (GE16-SE:36)
water wife 2SG.POSS
(iii) Part-whole

(5.54) xā gānzākʷ ‘head of rooster’ (DE9-SN:4.5)
head rooster

lālālāj yʷāłyʷālhā ‘roots of a plant species’ (NH6-SN:2.5)
root plant sp.

várvarā dābā ‘floor of hut’ (TN4-WN:4.2)
floor hut

(iv) Location of head noun

(5.55) bāj mākʷālāw ‘chief of Mokolo’ (NH6-SN:1.9)
chief Mokolo

mpè bàrlā ‘tree of the mountain’ (DE11-SN:2.1)
tree mountain

ḥèj dámāw ‘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 mèndzēvēk ‘house of medicine (clinic)’ (BH5-SN:2.2)
house medicine

mbà kʷētsēr ‘child of intelligence’ (DE19-SN:6.1)
child intelligence

(vi) Purpose

(5.57) dgʷâj mávāw ‘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 kʷákʷâs ‘chief of ceremonies’ (NH11-SN:3.2)
chief ceremony
(vii) Name

(5.58) bārlā msé ‘mountain of Mshe’ (DP2-SN:3.1)

mountain Mshe

gʷājgʷājā yēnè ‘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)

cchild Buwal

màdākāl mādāgāmzām ‘leader of Madagamzam clan’ (NH11-SN:2.7)

NOM-big Madagamzam

wēljé māzāj ēgē ‘Mazay women’ (NF2-SN:1.1)

woman-PL Mazay =PL

(ix) Spatial relationship

(5.60) tàbā ngjēj ‘middle of porridge’ (DE9-SN:2.8)

middle porridge

tāmā mānā ‘front of my mother’ (NH3-SN:1.11)

front mother.1POSS

dwzē ǧē ‘behind the home’ (NH8-SN:6.3)

behind home

(x) Temporal relationship

(5.61) pès gʷājgʷājā ‘day of the festival’ (DP3-SN:1.3)

day festival

mpāt mátskʷ āxʷ ‘tomorrow evening’ (LL18-SE:3.1)
tomorrow evening
Nominalisation + object

(5.62) lāmār ḫàn ‘beginning of work’ (BH1-SN:3.2)
       NOM.ACT-begin work
lālā 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) dāfād’ gāmtāk ‘firefly’
sorcerer chicken
bèrdzēg dāmāw ‘zebra’
donkey bush
nfā nēlē ‘egg yolk’
flour egg
dzēdzē kʷālākʷār ‘great-grandparent’
gānānā gāmtāk ‘grass sp.’
tongue chicken

Many compounds of this sort are formed using the words wjēk ‘house’ (5.64), mbāw ‘child’ (5.65) (note mbā is the non-pausal form of this word) and mān ‘mother’ (5.66).

(5.64) wdzēk gʷāŋkʷād’ ‘cocoon’
       house caterpillar
wdzēk mālām ‘potter’s kiln’
       house NOM-build
wdzēk mbāw ‘womb’
       house child
wdzēk ngēs ‘bladder’
       house urine
(5.65)  mbà  mānā  ‘cousin’
child mother.1POSS
mbà  dākʷ  ‘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)  mān  gāmtāk  ‘hen’
mother chicken
mān  ḫā  ‘cow’
mother ox
mān  xājāk  ‘world, the earth’
mother land
mān  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)  ḇy  zlap  ca  ma  buwal  tenguleŋ  anta  .
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

<table>
<thead>
<tr>
<th>Modifying Noun</th>
<th>Head Noun</th>
<th>Other Modifiers</th>
</tr>
</thead>
</table>

Possible modifier-head constructions involve words which refer to male and female large domestic animals (5.68). Note that ḡāl ‘female animal’ only refers to young females that have not yet given birth, otherwise mān ‘mother’ is used (see 5.66).

(5.68) mērē ‘male animal’ dākw ‘horse’ mērē dākw ‘stallion’
ḡāl ‘female animal’ nxʷā ‘goat’ ḡāl nxʷā ‘female goat’

Certain compounds containing mbāw ‘child’ (5.65) and mān ‘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 mbā nvān ‘upper grinding stone’ and mān nvān ‘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 mērē dākw 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 mlā ‘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) mlā wālā ‘non-favoured/’ugly’ wife
blacksmith woman
wālā mlā ‘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’.

\[(5.70) \quad rg"ät \ msrā\]
\[\text{clothes old}\]
\[msrā \ rg"ät\]
\[\text{old clothes}\]

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 gāgmāj ēgē ‘cottons’ (5.71a).

Table 5.5: Structure of genitive constructions formed using a genitive marker

<table>
<thead>
<tr>
<th>(Noun Phrase/ Genitive construction)</th>
<th>mālā or á</th>
<th>Modifying Noun Phrase</th>
<th>Demonstrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5.71) a. Ata [dala mala [gagomay ege] wese] war .</td>
<td>á tā dālā mālā gāgmāj =ēgē wēsē wár</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
b.  

\[
\text{Sa ja [gwaygwaya naka madakal mala [hayak}
\]

sä- dzā 'gʷæjʷajā 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.  

\[
\text{əy kādādā [ [homas ujek ] mala}
\]

j- kā- dād -ā x̑mās wjēk mālā

3PL.SBJ- PFV- take.out -VNT.PROX thatch hut GEN

\[hejeye ma la kwakwas ege tewtew]]

x̑džē -jē má= lā kʷ̑ákʷas = ȇgē tēw-tēw

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.  

\[
\text{[Mala masbābw] aka .}
\]

mālā māsba̱xʷ ákā

GEN bone.ache EXIST

‘There is one for aching bones.’ (DE9-SN:1.7)

(lit. ‘One for aching bones exists.’)

b.  

\[
\text{[Mala heje nghe] .}
\]

mālā x̑džē nyē

GEN person DEM.PROX

‘It’s this man’s.’ (LL19-SE:5)

Genitive constructions containing a gentitive 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) \( xà \ màlà \ nxʷà \) ‘the head of the goat’ (GE41-SE:1.2)

\( \text{head GEN goat} \)

\( \text{wdzék màlà ŋgámà nàkà} \) ‘the house of my friend’ (GE41-SE:8.2)

\( \text{house GEN friend 3SG.POSS} \)

\( \text{nxʷjé màlà átà \ martan égé} \) ‘the goats of Martin and associates’ (NH8-SN:1.1)

\( \text{goat-PL GEN ASS.PL Martin =PL} \)

(ii) Alienable possession

(5.74) \( dàlà \ màlà \ dàla \ ántà \) ‘the money of the person’ (C5-SN:59.3)

\( \text{money GEN someone DEF.DET} \)

\( \text{bàskʷår màlà albe:} \) ‘the bicycle of Albert’ (NH12-SN:3.2)

\( \text{bicycle GEN Albert} \)

\( \text{rgʷàts màlà msrā} \) ‘the clothes of the old person’ (GE41-SE:16.3)

\( \text{clothes GEN old.person} \)

(iii) Part-whole

(5.75) \( sàsàbàj \ màlà \ mpè égë \) ‘the roots of trees’ (DE9-SN:2.3)

\( \text{root(s) GEN tree =PL} \)

\( \text{zlèj màlà zlà} \) ‘the meat of ox’ (C11-SE:130.1)

\( \text{meat GEN ox} \)

\( \text{ndàw màlà mpè} \) ‘the base of a tree’ (GE31-SE:13.2)

\( \text{base GEN tree} \)

(iv) Location of head noun

(5.76) \( złàn \ màlà \ dàmàw \) ‘work of the bush’ (DP13-SN:6.2)

\( \text{work GEN bush} \)

\( \text{lândzà \ màlà hàyàk} \) ‘dwelling place of the land’ (NH13-SN:2.7)

\( \text{place-dwell GEN land} \)

\( \text{mpè màlà bàrlà} \) ‘tree of the mountain’ (GE41-SE:19.2)

\( \text{tree GEN mountain} \)
(v) Purpose

(5.77) mēndzēvēk mālā fāgʷālākʷ ‘remedy for leprosy’
       remedy  GEN leprosy

bārdākʷ mālā lērēx ‘power for healing’
       power  GEN NOM.ACT-heal

dālā mālā gāgmāj ‘money for cotton’
       money  GEN cotton

(vi) Name

(5.78) gʷajgʷajā mālā ghēnē ‘festival of Ghene’
       festival  GEN Ghene

ntrā mālā sārbāwá ‘month of Sarbawa’
       month  GEN Sarbawa

hāl mālā dāwāj ‘the girl of Dawai’
       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 zēnes ‘in front of the youth’
       PREP1 front  GEN PREP1 youth(fr.)

á bār mālā á hāwlā ‘at the surface of the wall’
       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).
Note that for this construction to be possible, the object nominal must be referential and not generic.

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 *ay* tarha [uṣoJE
á tā vā wêndé j-tār –xā wzje
PREPJ on year IND.DET.SG 3PL.SBJ- invite -VNT.DIST children
heldmoye *tatá*, [Ndelem egé] ŋ cekzetene .
xalmdā -jé tátá ndelem =egé ŋ tsâk –zā -čēnē
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 anta], [Mazay madaka]
ārā bāj kʷákʷás āntā māzāj 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, ay laza eze.
tātā bāj = ēgē bāj = ēgē j- lā -zā ēzē
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], ay gemeney
nēnē mādāgāmzām = ēgē j- gām -ēnēj
1EXCL Madagamzam = PL 3PL.SBJ- drive.away -1EXCL.DOBJ
ŋ Gambala.
ŋ gambla
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

<table>
<thead>
<tr>
<th>(ASS.PL)</th>
<th>Noun Phrase</th>
<th>(Noun Phrase)°</th>
<th>éj</th>
<th>Noun Phrase</th>
</tr>
</thead>
</table>

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 than 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 meng ay ngel ma a damaw.*

*áta gʷāmbākʷ éj mēŋ j- ngēl 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 nhwayne ey n̩t̪m̩ayye.*

*sā- zam -xā nxʷā -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 Yese ey fagwalakw ege.*

*ā- zläp á tā jēs u éj fāgʷalākʷ =ēgē*  
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 ɲhwayne , ɲtameye ey zbye .
mбедзнен а- зым nxwâ -jé ntmèk -jé ġâ -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

<table>
<thead>
<tr>
<th>Noun Phrase</th>
<th>(Noun Phrase)“</th>
<th>léŋ</th>
<th>Noun Phrase</th>
</tr>
</thead>
</table>

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. ɲhwayne leŋ ɲtameye oy kýpolah aza a
nxwâ -jé léŋ ntmèk -jé j- ká- plâx ázá á
goat -PL plus sheep -PL 3PL.SBJ- PFV- detach COMPL PREP1
zâdâw .
zâdâw
night
‘The goats and (lit. plus) the sheep have escaped at night.’ (GE18-SE:3)

b. Bay mbal a mbelene ɲhwa leŋ manda
bâj mbâl â- mbâl –čnè nxwâ 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
sā- ndā á wātā mānā á mbā á dāwān léŋ
1SG.SBJ- go PREP1 home mother.1POSS PREP1 child PREP1 back plus
uda sta ha .
wādā 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) Tèŋgùlèŋ lenj tèŋgùlèŋ a jav anta gbak .
téngʷlèŋ lenj téngʷlèŋ ā- dzāv āntā gbāk
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 ēj, when multiple noun phrases are
coordinated, the conjunction léŋ only occurs before the final noun phrase (5.88).

(5.88) Kule makāba , kule wëlē , lenj kule māla kwakwas
kʷlē māk̃bā kʷlē wëlē̄ léŋ kʷlē mālā kʷākʷās
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.
5.4.3 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 ákʷāw (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

<table>
<thead>
<tr>
<th>Noun phrase</th>
<th>ákʷāw</th>
<th>(TOP)</th>
<th>Noun phrase</th>
</tr>
</thead>
</table>

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  ndòrey  .

dnzàndzà  -ēkēj  dālā  

give  -1SG.1OBJ  money(ful.)  

‘Give me money or sorghum.’

(GE19-SE:9)
b. *Sa kadəw uda, akwaw ca, ngayey.*
   sá- ká- daw wdā əkʷāw tsá ngjēj
   1SG.SBJ- IPFV- want fufu NEG.EXIST TOP porridge
   ‘I want food or pap.’ (GE19-SE:3)

c. *Sa kadəw say, akwaw ma, yam.*
   sá- ká- daw sáj əkʷəw má jäm
   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 *kʷāw* (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>
<thead>
<tr>
<th>Noun phrase</th>
<th><em>kʷāw</em></th>
<th>TOP, Noun phrase</th>
<th><em>kʷāw</em></th>
</tr>
</thead>
</table>

(5.91) a. *Dekey yam kwaw ca, say kwaw.*
   dā -ēkēj jäm əkʷāw tsá sáj əkʷəw
   bring -1SG.DOBJ water NEG TOP coffee/tea(ful.) NEG
   ‘Bring me water and not tea.’ (GE19-SE:13.2)

b. *Sa daw table kwaw ca, lanja kwaw.*
   sā- daw table əkʷəw tsá lá ndzá əkʷəw
   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 aspeutual 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: \( xʷągàl \) \( [hʷōğl] \) ‘You grow.’  
Perfective: \( xʷākágàl \) \( [hʷōk̄ğl] \) ‘You grew.’  
Imperfective: \( xʷākägàl \) \( [hʷōk̄ğl] \) ‘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: \( nèné gàl \) \( [nènè ğl] \) ‘We(excl.) grow.’  
Perfective: \( nèné kágàl \) \( [nènè k̄ğl] \) ‘We(excl.) grew.’  
Imperfective: \( nèné kāgàl \) \( [nènè k̄ğl] \) ‘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>
<thead>
<tr>
<th>Aspect/Tense</th>
<th>Affix</th>
<th>Subject marking</th>
<th>Tone on subject markers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Monosyllabic</td>
</tr>
<tr>
<td>Imperfective</td>
<td>( kā- )</td>
<td>Yes</td>
<td>High</td>
</tr>
<tr>
<td>Perfective</td>
<td>( k̄- )</td>
<td>Not 3s</td>
<td>Mid</td>
</tr>
<tr>
<td>Future</td>
<td>( ná-/ä- )</td>
<td>Yes</td>
<td>Mid</td>
</tr>
<tr>
<td>Unspecified</td>
<td>unmarked</td>
<td>Yes</td>
<td>Mid</td>
</tr>
</tbody>
</table>
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 (i.e. imperfective) and if finished it is bounded (i.e. 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 ketyev cekude.  
dakà á ndzwná jām á- kā- tēv cékdē  
since(ful.) PREP1 yesterday water 3SG.SBJ- PFV- climb a.little  
‘Since yesterday the water is climbing a little.’ (It will keep climbing.)

b. Daka a njuna yam ketyev cekude.  
dakà á ndzwná jām kā- tēv 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 tēv cekude.  
dakà á ndzwná jām ā- tēv 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)  
\[ \text{Ata} \quad \eta \text{tə} \quad \text{Welmbegem} \quad \text{heje} \quad \text{kazam} \quad \text{gagəmay} \]
\[ \text{á} \quad \text{tā} \quad \text{ntrā} \quad \text{welmbègèm} \quad \text{xèjē-} \quad \text{kā-} \quad \text{zäm} \quad \text{gágmāj} \]
\[ \text{PREP} \quad \text{on month} \quad \text{Welmbegem} \quad \text{1INCL.SBJ-} \quad \text{IPFV-} \quad \text{eat} \quad \text{cotton} \]
\[ \text{ey} \quad \text{heje} \quad \text{kara} \quad \text{ŋgəzlen} \]
\[ \text{ēj} \quad \text{xèjē-} \quad \text{kā-} \quad \text{rā} \quad \text{ŋgəzlen} \]
\[ \text{and(ful.)} \quad \text{1INCL.SBJ-} \quad \text{IPFV-} \quad \text{dig} \quad \text{peanut} \]
\[ \text{‘In January (lit. the month of Welmbegem) we harvest (lit. eat) cotton and we dig up peanuts.’} \quad \text{(LL29-SE:2)} \]

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)  
\[ \text{Sa} \quad \text{kasasorak} \quad \text{ma} \quad \text{buwal} \]
\[ \text{sā-} \quad \text{kā-} \quad \text{sāsrāk} \quad \text{mā} \quad \text{bwāl} \]
\[ \text{1SG.SBJ-} \quad \text{IPFV-} \quad \text{learn} \quad \text{language} \quad \text{Buwal} \]
\[ \text{‘I am learning the Buwal language.’} \quad \text{(LL3-SE:3)} \]

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.
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- kā- xān á- kā- tètèngèl
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. Hejaye na aye kafaw kān ege .
xèdzè -jé nā j- kā- dāw kān =égē
person -PL 1SG.POSS 3PL.SBJ- IPFV- need thing =PL
My people need things.                (DE8-SN:2.13)

c. Dele a kanahe ma a mapat.
delē á- kā- nāx má á māpāt
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 ketegøre kándav
á nwná āntā wālā wēsē kētēgrē kā- ndāv
PREP1 times.past DEF.DET woman DEM.DIST perhaps PFV- fall
a towse , ketegøre kèlem kan ata la wese .
á twsē kētēgrē kā- lêm kàn á tā lā wēsē
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.’
(6E1-SN:1.2)

b. a njuna cemey , na kāla kwanse a
á ndzwná tsémēj nā- kā- lā kʷānsē á
PREP1 yesterday TOP.CON 1EXCL.SBJ- PFV- do concert(fr.) PREP1
Hwadangaw .
xʷādángāw
Hodango
‘..yesterday, we held (lit. did) a concert in Hodango.’
(NH2-SN:1.1)

c. Sa kāwan kadak kadak .
sā- kā- wān kάdák kādák
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
mär sä- zën -xā xʷnè-
before 1SG.SBJ- return -VNT.DIST 2PL.SBJ-
kántakwza zlan ḥgha aza.
ká- ntákʷ -zā zlān nyā āzá
PFV- finish -TRANS work DEM.PROX COMPL

‘Before I return, you will have finished this work.’  (FUTQ: 18)

b. Mada mawal kánda aza , nene nanda a
màdā māwāl ká- ndā āzá nēnē- nā- ndā á
if husband PFV- come COMPL 1EXCL.SBJ- FUT- go PREP1
egələyz .
eggləz
curch(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 ṅhwa leŋ manda , a
bāy mbāl ā- mbāl -ēnē nxʷā léŋ mándā ā-
chief grab 3SG.SBJ- grab -3SG.OBJ goat plus salt(ful.) 3SG.SBJ-
nda . Fagwalakw wende kámac ara mbe aka
ndā fāgʷālākʷ wéndé ká- māts á rā mbē ákā
go leper IND.DET.SG PFV- die PREP1 side 3SG EXIST
yam . A ndā , fatar a fatar aza .
jám ā- ndā ftār ā- ftār āzá
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 mewe ata wan ɡsəled ɡtəra Mahwaraw .
j- tsā bāy méwè á tā wān ġsəled ntrā māxʷərəw
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 kēreheney aza a
ná- xān béndzēr kā- rēh -ēnēj āzá á
1EXCL.SBJ- cry squirrel PFV- save -1EXCL.IOBJ COMPL PREP1
dōbe .
dbé
termite.mound
‘We cry (that) the squirrel has saved himself (lit. on us) in the termite mound.’ (NF2-SN:2.5)

c. Sa  ɡhwalzahwaw  səkan ma  ay kala
sā- ɣʷäl -zā -āxʷəw skàn má= j- kā- lā
1SG.SBJ- explain -TRANS -2SG.IOBJ thing REL= 3PL.SBJ- IPFV- do
a  kule ege .
á  kʷlē = ēgē
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 , ay nja aka ata papalam .
j- ndā j- ndzā ākā á tā pápələm
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 kadomas. Wala a domas.
káw vájáj tsá á- ká- dmás wälā á- dmás
even(ful.) who TOP 3SG.SBJ- I PFV- dance woman 3SG.SBJ- dance
Mawal a domas. Darlaŋw ege oy domas.
máwàl á- dmás dárlàn w̕ = égë ú- dmás
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 njhel wese , a ndahə , a dam a ujek
äjä nxël wësé ā- ndà -xà ā- kam á wjëk
then thief DEM.DIST 3SG.SBJ- go -VNT.DIST 3SG.SBJ- enter PREP1 hut
ŋgama anta wese , a ngwaf ma ujek .
ŋgàmà ântā wësé ā- ngʷàf mà wjëk
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 oy lā pakam vekey ?
pátàw = égë ú- lā pákām vékëj
cat =PL 3PL.SBJ- do noise which
‘Which noise do cats make?’

oy hän
j- xān
3PL.SBJ- cry
‘They cry.’ (FUTQ:98)
b. *hejaye ma a nuna anta ege ca, ay*

xèdzè -jé mà = á nwná äntā =égē tsá j-

person -PL REL= PREP1 times.past DEF.DET =-PL TOP 3PL.SBJ-

* 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, welaye ay da*

á tā pes á tā pes wālā -jé j- ðā

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, welaye ay*

á tā pes á tā pes wālā -jé j-

PREP1 on day PREP1 on day woman -PL 3PL.SBJ-

**kada**

uda .

kā- ðā 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  \textit{nanda} a Maruwa ata wan mahkad’.
\textit{sā- nā- ndā á marwa á tā wān māxkād’}
1SG.SBJ- FUT- go PREP1 Maroua PREP1 on day three
‘I will go to Maroua in three days.’ (LL18-SE:43)

b. sa \textit{abanahwaw} la ma a damas aza.
\textit{sā- ā- bān -āxʷāw lā má = á dmās āzā}
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 ðwze anta , vorezl a \textit{metev} aza
\textit{ā ðwzē āntā vrèʒ ā- nā- tēv āzā}
PREP1 after DEF.DET sorghum.husk 3SG.SBJ- FUT- ascend IT
\textit{mgba} ata ha .
ηmgbā á tā xā
up.there PREP1 on head
‘Afterwards, the sorghum husks \textit{will go} up to the top.’ (PP4-SN:1.3)

b. hal tata cemej , a \textit{ala} nkwaɓ ŋ ha zeney .
xāl tātā tsémēj ā- ā- lā nkʷāb ŋ xa zēnēj
girl 3PL.POSS TOP.CON 3SG.SBJ- FUT- do brain PREP2 head again
‘…as for their daughter, she \textit{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).
Let each one explain, if he became chief, what he will do for people.'  
(NH7-SN:3.6)

‘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.

‘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 towse ca kede oy nemedza a pes á twsé tsá kede j- ná- méd -zá á pès PREP1 there TOP perhaps 3PL.SBJ- FUT- swear -TRANS PREP1 day luma Mařaw . lwma 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
mamá- kā- ná- dzáv ákʷáw 1DUAL.SBJ- IPFV- FUT- come.together NEG.EXIST
‘…we two will not be coming together (anytime)…’

(HT1-SN:8.4)

b. Ata ma oy 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
mbáxʷ 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 Meray (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 –ā and the distal –hā (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.  
\begin{align*}
\text{Dam} &\quad a \quad \text{ujēk}.
\end{align*}

dām á wjēk
enter PREP\textsubscript{1} hut
‘Go into the house.’
(Speaker is outside.) \hfill (LL10-SE:12)

b.  
\begin{align*}
\text{Dam} &\quad \text{ba} \quad a \quad \text{bzā}.
\end{align*}

dām -xā á bzā
come.out -\text{VNT.DIST} PREP\textsubscript{1} outside
‘Come outside.’
(Speaker is outside.) \hfill (LL10-SE:13)

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).
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.
b. A əskəmə Ꚉəkoʃə ꚇəlumə ə Buwal

ā- skām -ā nklēf ā lwmā bwāl
3SG.SBJ buy -VNT.PROX fish PREP1 market(ful.) Buwal ete .
ā tē PREP1 here

‘He bought fish at the Buwal market here.’ (GE51-SE:3.11)
(He has returned.)

c. A əskamə Ꚉəkošə ꚇəlumə Ꚉə Zamay .

ā- skām -xā nklēf ā lwmā 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 Ꚇlakə ꚇala ꚇnakə Ꚉnga .

sā- ṭāk -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 Ꚇlakə Ꚇala ꚇnakə a ꚇdama .

sā- ṭāk -xā lā nākā ā dāma
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 ŋ lā ā 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 bababa
xʷné- xēj ŋ bārlā ŋ 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- nā- gʷärzām -ā á tāmbācā 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 nagwarzamḅa vagumta’d .
ā- nā- gʷärzām -xā vāgʷmtād
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 Mazkaḍ ege  āy
ā nwná āntā mā = māzkāḍ̣ = ēgě j-
PREP1 times.past DEF.DET REL= Mazkad =PL 3PL.SBJ-
ija ba nju bay a Buwal .
ndzā -xā į bāy ā 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. \textit{Mesfe} a \textit{labha}, heje ja \textit{Welmbegem}.
\[\text{mēsfe } \text{ā-} \text{lā } \text{-xā xējē-} \text{dzā wēlmбегem} \]

‘When the harvest comes we celebrate Welmbegem.’  \hspace{1cm} (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. \textit{Hayak} \textit{Buwal} a \textit{marba} a \textit{pes wese}.
\[\text{xājāk bwāl } \text{ā-} \text{mār } \text{-xā } \text{ā pēs wēsē} \]
\text{country Buwal 3SG.SBJ- begin -VNT.DIST PREP1 day DEM.DIST}
‘The Buwal country began on that day.’  \hspace{1cm} (GE51-SE:13.2)
\text{(That day is over.)}

b. \textit{Hayak} \textit{Buwal} a \textit{mara} ata \textit{bolakw}
\[\text{xājāk bwāl } \text{ā-} \text{mār } \text{-ā } \text{ā tā blākw} \]
\text{country Buwal 3SG.SBJ- begin -VNT.PROX PREP1 on thousand}
\text{tenguleñ a temere nfač‘.}
\text{tēŋ‘lēn } \text{ā tēmērē } \text{nfaḍ‘}
\text{one PREP1 hundred four}
‘The Buwal country began in 1400.’  \hspace{1cm} (GE51-SE:13.4)
\text{(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) \textit{Sa nanda} a \textit{Maruwa} ata \textit{luma} ma
\[\text{sā- nā- ndā } \text{ā marwa } \text{ā tā lŵmā } \text{mā=} \]
\text{1SG.SBJ- FUT- go PREP1 Maroua PREP1 on market(ful.) REL=}
\text{kanda\textit{ha}}.
\text{kā- ndā } \text{-xā}
\text{PFV- go -VNT.DIST}
‘I will go to Maroua next week (lit. the market which is coming).’  \hspace{1cm} (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. \( A \) kas\kam\( aha \) \( \eta k\eta l\( eft \) a \\
\( \tilde{a}-k\tilde{a}\)-sk\( \tilde{a}m \)-\( a \)-\( x\tilde{a} \)-nkl\( \tilde{e}f \) \( \tilde{a} \)
3SG.SBJ- IPFV- buy -VNT.PROX -VNT.DIST fish PREP1
luma .
lw\( \tilde{m}a \)
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. \( a\)y n\( d\)a enge \( c\)a , \( a\)y n\( d\)a \( \eta \)
\( j\)-nd\( \tilde{a} \) \( \tilde{a} \)-ng\( \tilde{e} \)-ts\( \tilde{a} \) \( j\)-nd\( \tilde{a} \) \( \tilde{\eta} \)
3PL.SBJ- go PREP1 over.there TOP 3PL.SBJ- go INF
law\( \tilde{a}d\)\( aha \)
l\( \tilde{w}\)(\( \tilde{a} \) -\( x\tilde{a} \)
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 \( \tilde{a}z\tilde{a} \) 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. Vakut\( \tilde{a}g \) , a z\( \tilde{\omega}m\)bar aza ra marazlarazl
\( \tilde{v}\)\( \tilde{a}\)k\( \tilde{a}\)\( \tilde{t}\)\( \tilde{\eta} \) \( \tilde{a}-zmb\tilde{a}r \) \( \tilde{a}z\tilde{a} \) \( \tilde{r}\)\( \tilde{\alpha} \)-\( r\tilde{\alpha} \)\( \tilde{\alpha} \)-\( r\tilde{\alpha} \)
throw.far 3SG.SBJ- throw.far IT hand NOM- cut -NOM.PAT- cut
w\( \tilde{e}\)se .
w\( \tilde{\omega}\)s\( \tilde{e} \)
DEM.DIST
‘He threw away that cut off hand.’ (TN1-SN:5.16)
In contrast to ventive suffixes (see Section 6.2.1), the deictic reference point of āzā 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  
\texttt{tadakw} \texttt{ha}  \texttt{aza} \texttt{ata}  \texttt{hayak} .

\begin{align*}
\text{Hune} & \quad \text{tadakw} & \text{ha} & \quad \text{aza} & \quad \text{ata} & \quad \text{hayak} & . \\
\text{(2PL.SBJ-} & \quad \text{descend} & \quad \text{VNT.DIST} & \quad \text{IT} & \quad \text{PREP1} & \quad \text{on ground} & \\
\text{‘You come down from there onto the ground!’} & & & & & & \text{NH6-SN:1.12} \\
\text{(Speaker on the ground.)} & & & & & & \\
\end{align*}

b.  
a \texttt{zen} \texttt{a}  \texttt{aza} \texttt{ŋ Azerbaijani}  \texttt{nda} \texttt{ŋ}  \texttt{basl} \texttt{dəvar}

\begin{align*}
a & \quad \text{zen} & \quad \text{aza} & \quad \text{ŋ Azerbaijani} & \quad \text{nda} & \quad \text{ŋ} & \quad \text{basl} & \quad \text{dəvar} \\
\text{(3SG.SBJ-} & \quad \text{return} & \quad \text{VNT.PROX} & \quad \text{IT} & \quad \text{PREP2} & \quad \text{INF} & \quad \text{go INF} & \quad \text{forge hoe} & \\
\text{‘…he comes back from there into the forge (lit. to go) to forge a hoe.’} & & & & & & & & \text{DP9-SN:4.6} \\
\end{align*}

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.  
\textit{Mbal} \texttt{aza gamtak} .

\begin{align*}
\textit{Mbal} & \quad \text{aza} & \quad \text{gamtak} \\
\text{(catch IT} & \quad \text{chicken} & \quad \text{catch} & \quad \text{IT} & \quad \text{chicken} & \\
\text{‘Catch the chicken from there!’} & & & & & & \text{GE52-SE:18.1} \\
\text{(The addressee is near the chicken. He catches it and brings it away with him.)} & & & & & & \\
\end{align*}
b. *Sa sāken aza ndrey mavaw a masen.*
sā- skèn ąza ndrēj mávāw ā māsēn
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 sāken ndrey mavaw a masen.*
sā- skèn ndrēj mávāw ā māsēn
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>
<thead>
<tr>
<th>Marker</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completive</td>
<td>āzá</td>
</tr>
<tr>
<td>Simultaneity</td>
<td>ārá</td>
</tr>
<tr>
<td>Accomplishment</td>
<td>āká</td>
</tr>
<tr>
<td>Anticipation</td>
<td>ká</td>
</tr>
</tbody>
</table>

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 āzá 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 ārá indicates that the fish will be bought at the same time as doing something else, in this case travelling home. The marker of accomplishment āká in example (6.34c) indicates that the subject has just come from buying fish at the market. Finally the marker of anticipation ká
in example (6.34d) expresses the idea that the fish is bought ahead of time in case it may run out.

(6.34) a.  
\[
\text{Sa sk̃am nḡol̃ef aza a luma .} \\
\text{sä- skäm nkl̃ef āzā á lw̃} \\
\text{1SG.SBJ- sell fish COMPL PREP1 market(ful.)} \\
\text{‘I sell fish at the market first.’ (GE52-SE:2.3)}
\]

b.  
\[
\text{Sa sk̃am nḡol̃ef ara a wata .} \\
\text{sä- skäm nkl̃ef ār̃á á w̃} \\
\text{1SG.SBJ- buy fish SIM PREP1 compound} \\
\text{‘I buy fish on the way home.’ (GE52-SE:2.1)}
\]

c.  
\[
\text{Sa sk̃am nḡol̃ef aka a luma .} \\
\text{sä- skäm nkl̃ef āk̃á á lw̃} \\
\text{1SG.SBJ- buy fish ACC PREP1 market(ful.)} \\
\text{‘I come back from buying fish at the market.’ (GE52-SE:2.2)}
\]

d.  
\[
\text{Sa sk̃am nḡol̃ef ka a luma .} \\
\text{sä- skäm nkl̃ef k̃á á lw̃} \\
\text{1SG.SBJ- buy fish ANT PREP1 market(ful.)} \\
\text{‘I buy fish at the market in advance.’ (GE52-SE:2.4)}
\]

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  kampam  menjevek  aza  mar  a  nda a  j-  kā-  mpām  mēndzēvēk  āzā  mār  ā-  ndā ā  
3PL.SBJ-  IPFV-  look.for  remedy  COMPL  before  3SG.SBJ-  go  PREP1  
lupital  anta  ege  aka  .  
lwpjtal  āntā  = ēgē  ākā  
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  kēbecata  aza  ,  əy  j-  kā-  bēts  -ātā  āzā  j-  
3PL.SBJ-  PFV-  assemble  -3PL.DOBJ  COMPL  3PL.SBJ-  
ŋgadata  eze  .  
ŋgād'  -ātā  ēzē  
count  -3PL.DOBJ  therefore  
‘They have already assembled them (i.e. votes), therefore they count them.’  
(DP6-SN:3.5)

c. sa  nenjeve  ma  anta  aza  kadak  kadak  .  
sā-  nā-  ndzēf  -zā  mā  āntā  āzā  kādāk  kādāk  
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  njtar  duwa  ma  ata  ha  anta  māwāl  tsā  ā-  ntār  dwā  mā = ā  tā  xā  āntā  
husband  TOP  3SG.SBJ-  pay  debt  REL=  PREP1  on  head  3SG.POSS  
aza  ,  wala  a  kaba  akwaw  .  
āzā  wālā  ā-  kā-  bā  ākwāw  
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  njel  aza  amba  ay  nala  guma
\[\text{j- mä- mbäl äzä nxèl äzá ämbá j- ná- là g"mä} \]
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  däs  la  anta  aza  ,  sler  a
däs  ā-  däs  là  āntā  aza  lër  ā-
cultivate 3SG.SBJ- cultivate field 3SG.POSS COMPL exterminate 3SG.SBJ-
slerata  aza  tewtew  ,  zam  a  zamata
lër  -ātā  aza  tèw-tèw  zäm  ā-  zàm  -ātā
exterminate -3PL.DOBJ COMPL all  eat 3SG.SBJ- eat -3PL.DOBJ
aza .
āza
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  sëkemene  njêlef  aza  a  wala  naka .
sä- skäm -ēnē nklèf aza á wālā nākā
1SG.SBJ- buy -3SG.OBJ fish COMPL PREP1 wife 1SG.POSS
‘I buy fish first for my wife.’
(GE52-SE:2.7)

382
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 kʷlè wēsē tsá j-
even 3PL.SBJ- IPFV- make.sacrifice idol DEM.DIST TOP 3PL.SBJ-
̣kayaza gazlavay ara a  mna .
kā- jā -zā gāţi̊vāj ārā 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  kādaza  ara a  wata bay ,
j- kā- dā -zā ārā 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- nā- zèn -xā ā- nā- ndā ā-
3SG.SBJ- FUT- return -VNT.DIST 3SG.SBJ- FUT- go 3SG.SBJ-
̣nasarza ara .
á- sār -zā ārā
FUT- look.at -TRANS SIM
‘He will come back, he will go, he will visit him on the way.’
(HT6-SN:6.10)
(6.40) \textit{Slakşt\textbar a ara nj zlam}

\begin{itemize}
\item \texttt{t\textbar a k -6ā ārō ŋ ľām}
\item \texttt{tuck -BEN SIM PREP2 ear}
\end{itemize}

‘Tuck it in (your) ear on the way.’

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. \texttt{Sa mpekene ma ujēk ara a mana}.

\begin{itemize}
\item \texttt{sā- mpāk -ēnē mā wjēk ārā ā mānā}
\item \texttt{1SG.SBJ- close -3SG.IOBJ mouth hut SIM PREP1 mother.1POSS}
\end{itemize}

‘I close the door (lit. mouth of hut) at the same time for my mother.’

(GE52-SE:1.7)

b. \texttt{Sa mpekene ma ujēk a mana ara}.

\begin{itemize}
\item \texttt{sā- mpāk -ēnē mā wjēk ā mānā ārā}
\item \texttt{1SG.SBJ- close -3SG.IOBJ mouth hut PREP1 mother.1POSS SIM}
\end{itemize}

‘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 ākā

The marker of ACCOMPLISHMENT ākā 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 tōwse , kaw vayay ca a dēŋ ama ujek á twsé káv vájá tsá ā- dēŋ á mā wjēk PREP1 there even who TOP 3SG.SBJ- stand PREP1 edge hut tāta , tātā 3PL.POSS

‘Then each one, he stands in front of his booth..’ (DP6-SN:2.5)

b. Mba a dēŋ a kāŋ ca sarla. mbāw ā- dēŋ ākā f tsā sārlá 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 a kā . wālā mįjā ā- kā- tsāf gādwdā ākā woman blacksmith 3SG.SBJ- IPFV- decorate cooking.pot ACC

‘The blacksmith woman is decorating the clay pot.’ (LL17-SE:90)
The marker of accomplishment can also be used to code RETROSPECTIVE aspect, ‘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- zām -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  
zd u da aka  tlam , amb a sā z l a me la han .  
sā-  
zd wda āká tlám āmbá sā- īmē lá- xān 
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 āzá (see Section 6.3.1) in coding events which occur before other events (6.44 a & b).

(6.45) a. 
Sa nazam  uda aká ha sa hərad’ .
sā- ná- zām wdā āká xá sā xərd’
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  ɲhwəye aká , amba sa
sā- zām -ā -xā nxʷā -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 aká , amba sa nda a damaw .
sā- zām wdā āká āmbá sā- ndā á dámāw
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- zām wdā āzá āmbá sā- ndā á dámāw
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 a kā a mana .
   sā- mpāk -ēnē mā wjēk ākā á mānā
   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 a kā .
   sā- mpāk -ēnē mā wjēk á mānā ākā
   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 sakam nkəlef kā a luma .
   sā- skām nklèf kā á lũmā
   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 kādapēa ka a ŋkusaf .
   sā- kā- dáp -ōsā kā 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.)
Like the other verbal particles, the marker of anticipation can co-occur with all primary tenses and aspects, such as imperfective (6.49a), pefective (6.48b), future (6.49b) as well as the unmarked verb (6.48a).

(6.49) a. *egolayz yam baw a *kasokamba
   
   ‘...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. *ay nampak ka pes gbak , mahkad*

   ‘...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 , déb ka.*

   ‘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 ākā 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 ŋkəlef aža a wala naka.
   sā- skām -ēnē nklēf akā ā 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 ŋkəlef kā a wala naka.
   sā- skām -ēnē nklēf kā ā 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 aža a wata.
   sā- zām wdā akā ā wātā
   1SG.SBJ- eat food ACC PREP1 home
   ‘I just ate food at home.’  (GE53-SE:12.1)

b. Sa zam uda kā a wata.
   sā- zām wdā kā ā 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.
6.4 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.

(6.53) a. \[\textit{Sa mpekene ma ujek ka a mana .} \]
\[\text{1SG.SBJ- close -3SG.IOBJ mouth hut ANT PREP1 mother} \]
\[\text{‘I close the door (lit. mouth of hut) in advance for my mother.’} \]
\[\text{(GE52-SE:1.14)} \]

b. \[\textit{Sa mpekene ma ujek a mana ka .} \]
\[\text{1SG.SBJ- close -3SG.IOBJ mouth hut PREP1 mother.3POSS ANT} \]
\[\text{‘I close the door (lit. mouth of hut) for my mother in advance.’} \]
\[\text{(GE52-SE:1.15)} \]

(6.54) a. \[\textit{Benjer a ñgaya : « Hune ma kasanaw ,} \]
\[\text{béndzēr ā- ñgājā xʷnè ma= kā- sān -āw} \]
\[\text{squirrel 3SG.SBJ- saying 2PL.STAT REL= IPFV- know -3SG.DOBJ} \]
\[\text{sa nda \textit{naka} .} \]
\[\text{sā- ndā \textit{nakā}} \]
\[\text{1SG.SBJ- go 1SG.POSS} \]
\[\text{‘Squirrel said, “You are the ones who know about it, I'm leaving.”’} \]
\[\text{(NF6-SN:4.7)} \]
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 fall’ (6.55a), or change of state like bāw ‘change’, màts ‘die’, gāj ‘spoil’ and gàl ‘grow’ (6.55b).

(6.55) a. *heje  kodeder  njakaw* .
   xêjé- kâ- dèdèr njàkàw
   1INCL.SBJ IPFV- wander 1INCL.POSS
   ‘…we are wandering.’

   b. *Kágal  anta  tew  cemey , oj  dene*
   kâ- gàl ãntã téw tsémêj j- dâ -ênê
   PFV- grow 3SG.POSS finally TOP.CON 3PL.SBJ- bring -3SG.OBJ
   a  mba  tata  eze .
   ñ mbà tätà  ézë
   PREP1 child 3PL.POSS therefore
   ‘She has finally grown up, therefore they bring her to their son.’

(GE15-SE:61)
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 (6.56a & b). This is an indication that possessive subject pronouns are not coding a specifically inchoative meaning in Buwal.

(6.56) a. *Dala kácak anta*.
    
    dálá ká- tsák āntā
    
    money(ful.) PFV- contribute 3SG.POSS
    ‘Money was contributed.’
    
    (GE21-SE:25.10)

b. *Mce ngha 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- dā
    
    food 3SG.SBJ- PFV- cook
    ‘The food is cooking.’
    (It is cooking how you want it to.)
    
    (GE47-SE:6.1)

b. *Uda a kada anta*.
    
    wdā á- kā- dā āntā
    
    food 3SG.SBJ- PFV- cook 3SG.POSS
    ‘The food is cooking! ’
    (You don’t want it to cook quickly but it does.)
    
    (GE47-SE:6.2)
(6.58) a. *Sa kándav*.  
1SG.SBJ. PFV. fall  
‘I have fallen.’  
(I wanted to fall.)

b. *Sa kándav naka*.  
1SG.SBJ. PFV. fall 1SG.POSS  
‘I have fallen!’  
(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. *Mɓa a kabac*.  
3SG.SBJ. PFV. crush  
‘The tamarind is being crushed.’

b. *Mɓa a bac anta*.  
3SG.SBJ. PFV. crush 3SG.POSS  
‘The tamarind can be crushed.’

(6.60) a. *Hejye əy kébec*.  
PL 3PL.SBJ. PFV. assemble  
‘The people have assembled.’  
(Possibly unplanned.)

b. *Hejye əy kébec tata*.  
PL 3PL.SBJ. PFV. assemble 3PL.POSS  
‘The people have assembled themselves.’  
(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

<table>
<thead>
<tr>
<th>Preposition</th>
<th>(Complement)</th>
</tr>
</thead>
</table>

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 (v) 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. Gmèɬ monkey PREP2 mountain 3PL.SBJ- flee PREP1 on person NEG
‘Monkeys in the mountains, they don’t flee from a person.’

b. Lā field 1SG.POSS beyond PREP1 edge river
‘My field is beyond (at) the edge of the river.’

c. Kā- lèm -1INCL.IOBJ get mbà child REL= PREP1 on.it
‘…it has got fruit (lit. child fruit) which is on it for us…’

d. Hwa xʷā- 2SG.SBJ- be like chaff perhaps
‘You are like chaff, perhaps.’

e. A, zlam dawar ege ca , āy kecetene
ē gē tsā j- kā- tsā -ētēnē
ah! name misfortune -PL TOP 3PL.SBJ- IPFV- put -3PL.IOBJ
ā 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.’

f. Ėy nābas 3PL.SBJ- FUT- laugh PREP1 on 2PL
‘They will laugh at you.’
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

<table>
<thead>
<tr>
<th>Preposition Type</th>
<th>Preposition</th>
<th>Semantic/Grammatical Role</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>á</td>
<td>Spatial (Loc/All/Abl)</td>
<td>‘at/to/from’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Temporal</td>
<td>‘at’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Comitative</td>
<td>‘with’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instrument</td>
<td>‘with’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manner</td>
<td>‘with’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Material</td>
<td>‘out of’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indirect object</td>
<td></td>
</tr>
<tr>
<td>Complex</td>
<td>á tā</td>
<td>Spatial</td>
<td>‘on’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Temporal</td>
<td>‘on’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cause</td>
<td>‘due to’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Content</td>
<td>‘about’</td>
</tr>
<tr>
<td></td>
<td>á sā</td>
<td>Spatial</td>
<td>‘under’</td>
</tr>
<tr>
<td></td>
<td>á rā</td>
<td>Spatial</td>
<td>‘at the side of’</td>
</tr>
<tr>
<td></td>
<td>á mā</td>
<td>Spatial</td>
<td>‘at the edge of’</td>
</tr>
<tr>
<td></td>
<td>á xā</td>
<td>Spatial</td>
<td>‘over/above’</td>
</tr>
<tr>
<td></td>
<td>á dāw</td>
<td>Spatial</td>
<td>‘behind’</td>
</tr>
<tr>
<td></td>
<td>ánā</td>
<td>Similative</td>
<td>‘like’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manner</td>
<td>‘like’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example</td>
<td>‘like’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Asserter</td>
<td>‘according to’</td>
</tr>
<tr>
<td></td>
<td>māvdāj/māvāj</td>
<td>Reason</td>
<td>‘because’</td>
</tr>
</tbody>
</table>
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 dāmāw
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 ā wātā mķā
3SG.SBJ- go PREP1 home blacksmith
“He goes to the blacksmith’s home.” (DE2-SN:8.4)

c. Mesleje  anta  a  nda  ha  a  damaw .
mēlēdzē āntā ā- ndā -xā ā dāmāw
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  kēgōrehwaw  a  njuna  ata  taf’ .
sā- kā- grē –xʷāw ā ndzwnā ā tā tāf
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.
a. *Bay a ndaha a madarlangə anța*
   bāj ā-nndā -xā ā mā- dárlaŋʷ anțā
   chief 3SG.SBJ- go -VNT.DIST PREP1 NOM- young.man 3SG.Poss
   =ěgē
   =PL
   ‘The chief came with his assistants.’ (NH7-SN:2.1)

b. *Hejaye əy bal ndrecy a wambat.*
   xèjè -jé j- bāl ndrēj ā wāmbāt
   person -PL 3PL.SBJ- chop millet PREP1 sickle
   ‘People cut millet with a sickle.’ (LL41-SE:1)

c. *Uzaye əy kala muta a ɓarʒəm.*
   wzjé j- kā- lā mwtā ā ɓārʒəm
   children 3PL.SBJ- IPFV- make car(ful.) PREP1 iron
   ‘Children make cars out of iron.’ (DE1-SN:1.6)

d. *Sa 1a zlan a ɡef.*
   sā- lā ɓān ā ɡēf
   1SG.SBJ- do work PREP1 difficulty
   ‘I do work with difficulty.’ (LL35-SE:8)

The preposition ā can also introduce an indirect object (7.5).

(7.5) *na kānda j jene mbahw a mawal Kwada*
   nā- kā- ndā j dzā -ēnē mbāxʷ ā māwāl kʷādā
   1EXCL.SBJ- PFV- go INF hit -3SG.OBJ pardon PREP1 husband Koda
   mana
   mānā
   mother.1POSS
   ‘…we went to plead with (lit. hit pardon to) the husband of my mother’s Koda.’ (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 ŋ́

After á, the preposition ŋ́ 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. Uzaye, pes pes ąy kavah ŋ́ bedam a twse.
wʒjé pes pes j- kā- vāx ŋ́ bdām á twsē
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 ŋ́ gaduda
ā- daf rā delēlé ŋ́ gadwā
d3SG.SBJ- reach hand directly PREP2 cooking.pot
‘He reached directly into the pot.’ (NH3-SN:1.8)

c. Sa da tasaw ŋ́ dabaskayam.
sā- dā tāsāw ŋ́ dābā-skā-jām
1SG.SBJ- bring dish(ful.) PREP2 kitchen
‘I get a dish from in the kitchen.’ (GE40-SE:20.2)

The preposition ŋ́ can also be used to mark the indirect object (7.7).

(7.7) ąy lene wasay ŋ́ gazlavay.
juana -ēnē wāsāj ŋ́ gāḥāvāj
3PL.SBJ- do -3SG.OBJ thankyou PREP2 God
‘…they give thanks to God.’ (DP2-SN:4.1)

7.2.1.3 Preposition ɮàɓá

The preposition ɮàɓá ‘with’ is used to head prepositional phrases with a comitative meaning.
(7.8) a. Əy kahan zlaɓa maman tata .
   j- kā- xān ūbā māmān tātā
   3PL.SBJ- IPFV- cry with mother.3POSS 3PL.POSS
   ‘They were crying along with their mother.’ (TN3-WN:2.5)

b. ay yak talgway aka zlaɓa ngenge
   j- jāk tālgʷāj ākā ūbā ngēngē
   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 ū and the preposition ūbā 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 is 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 lumā a ngāma naka .
   nēnē- ndā ā lwmā ā ngāmā nākā
   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 lumā zlaɓa ngāma naka .
   nēnē- ndā ā lwmā ūbā ngāmā nākā
   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 ū

Complex prepositions beginning with ū that have spatial semantics include: ū tā ‘on’, ū sā
‘under’, ū rā ‘at the side of’, ū mā ‘at the side of’, ū xā ‘over’ and ū dāw ‘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 ū 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 ṣhwaye a daw ujek anta
j- pāl nxwā -jé á dāw wdzēk ŋntā
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 an.
sā- dāw ŋ 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 nkədāŋ a daw muta an.
sā- ntā nkədāŋ á dāw mwṭā
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 ṣwoled nyara Mahwaraw an.
j- tsā bāy méwè á tā wān nslēd ntrā māxʷarāw
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 kadā gham aта va aта va
j- kā- dā ḣam 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 ngka a nasasam ata hwa* .

mäwäl nkʷá ā- ná- sàsàm á tā xʷā
husband 2SG.POSS 3SG.SBJ- FUT- rejoice PREP1 on 2SG
‘…your husband will rejoice over you.’  

b.  *Hune zen zlap ata ma anta* .

xʷné- zên ḥāp á tā mā āntā
2PL.SBJ- return speech PREP1 on 3SG.POSS
‘You discuss (lit. return speech about) the problem.’  

7.2.1.5 Preposition ánà

The preposition ánà ‘like’ introduces prepositional phrases which can have semantic roles such as simulative (7.13a) and manner (7.13b).

(7.13) a.  *hejɔye ay cakza kule ca a nja ana* 

xèdzè -jé j- tsāk –zā kʷlè tsā ā- ndzá ánà
person -PL 3SG.SBJ- believe -TRANS idol TOP 3SG.SBJ- is like gazlavay.

gāḥāvāj

God
‘…people believe an idol, it is like God.’  

b.  *ay kala ana Buwal ege yam* .

j̣- kā- lā ánà bwāl =ēgē jām
3PL.SBJ- IPFV- do like Buwal =PL also
‘They do (it) like the Buwal people also.’  

This preposition is frequently used to introduce noun phrases which are given as examples (7.14).
(7.14)  

Kule ege vedye , ay dèdè mavaw a mna , ana
kivyè =égë vëdjë j- dèdè mëvåw å mna ånå
idol =PL IND.DET.PL 3PL.SBJ- pour.in beer PREP1 inside like
kule mejøve , ana uzlaf tørgwa , ana uzlaf daba ,
kivyè mëdzvè ånå wëñf tøgwå ånå wëñf dàbå
idol ancestor.idol like idol granary like idol women's.hut
ana uzlaf ben , ana senge .
ånå wëñf bën ånå sëngè
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.’

(7.15) a.  « Sa , sa maja gwazla » ana benjer
sä sä mä- dzå giv|hëå ånå bëndzë
1SG 1SG.STAT NOM- kill elephant according.to squirrel
ay .
å jå
3SG.SBJ- say

“Me, I am the killer of the elephant.” according Squirrel, he (Squirrel) said.’

b. Ęy nda , Ęy sëkamata ana ma a
j- ndå j- skäm -ätå ånå mä= å
3PL.SBJ- go 3PL.SBJ- sell -3PL.DOBJ according.to REL= at
nuna anta ege
nwnå åntå =égë
times.past DEF.DET =PL

‘They went, they sold them, according to those of the old days…’

The preposition ånå can mean ‘according to’ the speech of someone (7.15 a & b).
Finally, this preposition can be found in the expression ánā ḥāp (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 .
kaw ánā wəzjé má xʷə- grë tsá j- xéj tâtá
even(ful) like children TOP.EMPHE 2SG.SBJ- see TOP 3PL.SBJ- flee 3PL.POSS
Anə zəp ca , ge a wed' anta .
ánə ḥəp tsá gə ā- wəd' āntə
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.’

7.2.1.6 Preposition məvdāj/məvāj

The preposition məvdāj or its variant məvāj ‘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= PREP Buwal =PL 3PL.SBJ-
kázlara nje aza cekudé , məveday
ká- ḡər -ā ndzé āzá tsékʷdē məvdāj
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…’

b. mac a mac anta məvay lehey
māts ā- māts āntə məvāj lā- xéj
die 3SG.SBJ- die 3SG.POSS because NOM.ACT run
‘…he died because of running…’
Prepositional phrases introduced with *màvdaŋ/màvaj* give reasons that could have happened at any time in any place, whereas cause prepositional phrases introduced with *ātā* ‘on’ (see Section 7.2.1.4) refer to a cause in the immediate vicinity. For example, in (7.18a) the subject referrents 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 kaɓas *mavay mbaw*.  
j- kā- ɓās *mavaj mbaw*  
3PL.SBJ- IPFV- laugh *because child*  
‘They are laughing *because of the child.*’ (GE40-SE:23.4)

b. Əy kaɓas *ata mbaw*.  
j- kā- ɓās á *tā mbaw*  
3PL.SBJ- IPFV- laugh **PREP** 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>
<thead>
<tr>
<th>Preposition</th>
<th>Semantic role</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>kdà</em></td>
<td>Allative</td>
<td>‘towards (straight)’</td>
</tr>
<tr>
<td><em>kdè</em></td>
<td>Allative</td>
<td>‘towards (general direction)’</td>
</tr>
<tr>
<td><em>gbàŋ</em></td>
<td>Locative</td>
<td>‘just’</td>
</tr>
<tr>
<td><em>tsálàx</em></td>
<td>Locative</td>
<td>‘beyond’</td>
</tr>
<tr>
<td><em>sát</em></td>
<td>Allative</td>
<td>‘up to’</td>
</tr>
<tr>
<td><em>pà</em></td>
<td>Locative</td>
<td>‘at a level’</td>
</tr>
<tr>
<td><em>tà</em></td>
<td>Path</td>
<td>‘by, through’</td>
</tr>
<tr>
<td><em>xà</em></td>
<td>Allative</td>
<td>‘up to’</td>
</tr>
<tr>
<td></td>
<td>Temporal</td>
<td>‘until’</td>
</tr>
<tr>
<td><em>dàkà</em></td>
<td>Ablative</td>
<td>‘from’</td>
</tr>
<tr>
<td></td>
<td>Temporal</td>
<td>‘since’</td>
</tr>
</tbody>
</table>
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.  
\[ a \text{ kanda } k\ddot{a}da \text{ a } Zamay \]
\[ \text{á- kā- ndā } kdā \text{ á } zāmāj \]
3SG.SBJ- IPFV- go towards PREP1 Zamay
‘…he was going towards (to) Zamay…’  
(C12-SN:64)

b.  
\[ Taʃ ma \text{ ta }ŋ \text{ barla } godak . \]
\[ tāf mā= tā ū baŋlā gdāk \]
path REL= through PREP2 mountain far
‘The path which is through (in) the mountains is far.’  
(GE40-SE:26.10)

c.  
\[ A \text{ nda } pa \text{ ama } ŋgozle \]
\[ ā- ndā pā á mā ŋgē \]
3SG.SBJ- go level PREP1 edge forge
‘He goes to the level at the edge of the forge…’  
(DP9-SN:4.7)

The prepositions \( \text{tá} \) ‘by, through’ (7.20a) and \( \text{pá} \) ‘at a level’ (7.20b) can also be used with a figurative as well as a purely physical sense.

(7.20) a.  
\[ gazlavay a \text{ nasar } la \text{ ca } ta ū kule . \]
\[ gāɮāvāj a- nā- sār lā tsā ū kʷlē \]
God 3SG.SBJ- FUT- watch place TOP through PREP2 idol
‘…God will watch the place, through idols.’  
(DE2-SN:18.6)

b.  
\[ Mbəy pa ū cencer aha sa . \]
\[ mbj pā ū tsēr-tsēr ā xā sā \]
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 \( \text{xā} \) ‘until’ and \( \text{dākā} \) ‘since’, both borrowed from Fulfulde, can carry both temporal (7.21a & 7.22a) and spatial (7.21b & 7.22b) meanings.
(7.21) a.  Sa nga a Buwal ha a makuθa .  
sä- ndzā á bwāl xā á mākʷdā
1SG.SBJ- live PREP1 Buwal until(ful.) PREP1 next.year
‘I (will) live at Buwal until next year.’  

b.  Sa tev ha į̄ kelkel .  
sä- tēv xā į̄ kēl-kēl
1SG.SBJ- climb until(ful.) PREP2 summit
‘I climb up to the summit.’  

(7.22) a.  Hejaye ay jamha daka mala mapat .  
xèdzè -jé dzām -xā dākâ mālā māpāt
person -PL 3PL.SBJ- gather -VNT.DIST since(ful.) GEN morning
‘The people (have) gathered since the morning.’  

b.  Mar aka daka ete , calah mgba , ara la mār ākā dākâ á tē tsaláx ṣmgbà 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.’  

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

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Semantic role</th>
<th>Gloss</th>
<th>Replaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>á bzā</td>
<td>Spatial</td>
<td>‘outside’</td>
<td></td>
</tr>
<tr>
<td>á mān/mnā/mā</td>
<td>Spatial Temporal</td>
<td>‘inside’ ‘during’</td>
<td>ḣ ‘in’ + NP</td>
</tr>
<tr>
<td>á skā</td>
<td>Spatial</td>
<td>‘underneath’</td>
<td>á sā ‘under’ + NP</td>
</tr>
<tr>
<td>á xēdē</td>
<td>Spatial</td>
<td>‘on top’</td>
<td>á tā ‘on’ + NP</td>
</tr>
</tbody>
</table>
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.  
\[
\text{Hune kegøre heje anta kénjeye a}
\]
\[
x^\text{nē}- \text{kā- grē xèdzè āntā kā- ndžā -ējē á}
\]
\[
2\text{PL.SBJ- IPFV- see person DEF.DET PFV- sit -PART PREP1}
\]
\[
\text{soka skā}
\]

\underline{underneath}

‘You see the person seated underneath…’  (HT6-SN:8.11)

b.  
\[
\text{əy kelene wa a man zency kwa ?}
\]
\[
\text{j- kā- lā -ēnē wá á mān zēnēj kʷá}
\]
\[
3\text{SG.SBJ- IPFV- do -3SG.IOBJ milk PREP1 inside again Q.FAM}
\]

‘…do they add (lit. do) milk to it (lit. inside) as well?’  (C11-SN:73)

c.  
\[
\text{əy daza a boza}
\]
\[
\text{j- dā -zā á bzā}
\]
\[
3\text{SG.SBJ- bring -TRANS PREP1 outside}
\]

‘…they bring it outside…’  (DP1-SN:3.6)

The preposition á mān/mnā/mā can also be used to refer to something occurring during a particular period of time or activity (7.24).

(7.24)  
\[
\text{welǝye əy kaja mekwedkwede ata ŋgas ,}
\]
\[
\text{wålā -jé j- kā- dzā mèkʷēdkwēdē á tā ŋgās}
\]
\[
\text{woman -PL 3\text{PL.SBJ- IPFV- hit rattle PREP1 on foot}}
\]
\[
\text{əy kesleŋ a mna .}
\]
\[
\text{j- kā- lēŋ á mnā}
\]
\[
3\text{PL.SBJ- IPFV- jump.dance PREP1 inside}
\]
...women would shake (lit. hit) rattles on (their) feet, they would do a jumping dance at the same time (lit. inside).’

In addition to spatial meaning, the preposition á xēɗé ‘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 . Hejaye á màdà dàlā kʷlásḵʷāw á wātā ákā xèdzè -jé ah! if someone sick PREP1 home EXIST person -PL yam baw , əy kededer a hede . jám bāw j- kā- dèdèr á xèdè 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).’

b. Əy rak gazlavay a hede . j- rāk gāɮāvāj á xèdè 3PL.SBJ- pray God PREP1 on.it ‘They pray to God about it.’

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, ēj ‘and’ léŋ ‘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 ə cekzetene aza ana gef xʷä kʷlā ə tsāk -zā -ētnē āzā ānā gēf 2SG.STAT able INF help -TRANS -3PL.IOBJ COMPL like difficulty vēdjye ey ana ŋtābal ma mbalata yam vēdjé ēj ānā ntābal 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 ntworye len ata

‘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

|-----|--------|----|-------|-------|------|-------|-------|----------|-------|-------|-------|-------|

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 mźla a kacaf gaduda aka.*

woman blacksmith 3SG.SBJ- IPFV- decorate cooking pot ACC

‘The blacksmith woman is decorating the clay pot.’ (LL17-SE:90)

b. *Nhwayne tata ege āy wan a boza.*

goat -PL 3PL.POSS =PL 3PL.SBJ- sleep PREP1 outside

‘Their goats slept outside.’ (NH8-SN:2.2)

c. *Baba na cafcalav a ndav anta.*

father(ful.) 1SG.POSS falling.suddenly 3SG.SBJ- fall 3SG.POSS

ata hayak.

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.
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)  

\[ \text{Tata, oy kasan nj bal zley.} \]
\[ \text{tätā j- kā- sān nj bal ḥēj} \]
\[ 3PL 3PL.SBJ IPFV know INF shoot meat} \]
\[ ‘Them, they know how to shoot game (lit. meat).’ \]

(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)  

\[ \text{A ba ujek a damaw} \]
\[ \text{ā- bā wjēk ā dāmāw} \]
\[ 3SG.SBJ- create hut PREP1 bush} \]
\[ ‘He built a hut in the bush…’ \]
b. A wata ay tew aza bay.
á wātā j- tēw āzā bāy

PREP 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 gazlabwaw.
sā- gāƛ̓ -āxʷāw
1SG.SBJ- beat -2SG.DOBJ
‘I beat you.’
(GE29-SE:20.1)

b. Sa gazl bwa.
sā- gāƛ̓ xʷā
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 vangha ma sa kazamaaw.
ā- vāŋ̓ -xā má = sā- kā- zam -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 vagha ma sa kazam a wata.
ā- vāŋ -xā má = sā- kā- zām 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 vagha ma sa kazamaw,
ā- vāŋ -xā má = sā- kā- zām -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
sā- kā- lēm -bā dālā sā- ndā sā-
1SG.SBJ- PFV- get -BEN money(ful.) 1SG.SBJ- go 1SG.SBJ-
sokamba 
. skām -bā
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 tekəd' sefə a tərgwa wese , ca a 
ā- dā tekəd' séfə á trgʷə wēsè tsā ā-
3SG.SBJ- bring calabash unused PREP1 granary DEM.DIST put 3SG.SBJ-
cə ata ha .
tsā ā tä 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 nasəkəmahwaw səkan ma hwa
sā- nā- skām -āxʷāw skān má = xʷā-
1SG.SBJ- FUT- buy -2SG.IOBJ thing REL= 2SG.SBJ-
kadāwaw .
kā- dāw -āw
IPFV- want -3SG.DOBJ
‘I will buy for you the thing that you want (lit want it).’
(GE45-SE:15.1)

c. *Sa nasəkəmahwaw səkan ma hwa
sā- nā- skām -āxʷāw skān má = xʷā-
1SG.SBJ- FUT- buy -2SG.IOBJ thing REL= 2SG.SBJ-
kadāw .
kā- dāw
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).

420
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.

sä- kā- tēh ʒam
1SG.SBJ IPFV listen ear
‘I am listening.’
(lit. ‘I am listening the ear.’)
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 ŋ́. 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 ŋ́ 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 ŋ́ 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  zlepene  a  heje  anta  .
  sā- ḥāp -ēnē  ā  xèdzē  āntā
  1SG.SBJ- speak  -3SG.IOBJ  PREP1  person  DEF.DET
‘…I spoke to the person.’  (NH3-SN:4.3)

b.  
gwambakw  a  zlepene  ŋ  meŋ
  ɡʷāmbākʷ  ā- ḥāp -ēnē  ŋ  mēŋ
  toad  3SG.SBJ- say  -3SG.IOBJ  PREP1  antelope
‘…the toad spoke to the antelope…’  (NF6-WN:1.1)
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).

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 y zlangan mana .
    sâ- mbâl -ênë wrêj ū ḡâŋân mânâ
    1SG.SBJ- pluck -3SG.OBJ vegetables PREP2 sibling mother.1POSS

    ‘I pluck vegetables for my aunt.’ (GE46-SE:5.1)

b. Sa mbal urey y zlangan mana .
    sâ- mbâl wrêj ū ḡâŋân mânâ
    1SG.SBJ- pluck vegetables PREP2 sibling mother.1POSS

    ‘I pluck vegetables for my aunt.’ (GE46-SE:5.2)

c. Sa mbelene y zlangan mana .
    sâ- mbâl -ênë ū ḡâŋân mânâ
    1SG.SBJ- pluck -3SG.OBJ PREP2 sibling mother.1POSS

    ‘I pluck (it) for my aunt.’ (GE46-SE:5.3)

d. * Sa mbal l y zlangan mana .
    sâ- mbâl l ū ḡâŋân mânâ
    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 .
    sâ- väl -ênë gâmtâk
    1SG.SBJ- give -3SG.OBJ chicken

    ‘I give him a chicken.’ (GE29-SE:23.1)

d. Sa velene gamtak y mbe .
    sâ- väl -ênë gâmtâk ū mbê
    1SG.SBJ- give -3SG.OBJ chicken PREP2 3SG

    ‘I give a chicken to him.’ (GE29-SE:23.2)
8.1.4 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 mzla .
     j- nā- ndā ā mīgā
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 kaboəla ata mpe ana mbe .
   sā- kā- bļā ā tā mpe ānā mbe
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 ghwəye a
   nā- ndāw -zā -ētēnē ā nxʷā -jē ā
1EXCL.SBJ- find -TRANS -3PL.IOBJ PREP1 goat -PL PREP1

wata juraw gbak .
wātā dzwrāw gbāk

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.  
\[ \text{Uzaye } \text{na ege ay kawan} \]
\[ \text{wazjé } \text{ná =égē j- ka- wān} \]
\[ \text{children ISG.POSS =PL 3PL.SBJ- IPFV- sleep} \]
\[ \text{‘My children are sleeping.’} \]  
\[ \text{(NF4-SN:2.4)} \]

b.  
\[ \text{dakw a } \text{kandaha } \text{, akw } \text{, } \text{dák̂ } \text{ā- kā- ndā -xā ākʷ } \]
\[ \text{horse ISG.SBJ- IPFV- come -VNT.DIST horse.arriving} \]
\[ \text{akw ākʷ } \]
\[ \text{horse.arriving} \]
\[ \text{‘The horses were arriving, clip clop…’} \]  
\[ \text{(NH5-SN:2.4)} \]

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.  
\[ \text{benjer a hey antä kwawah a dobe } \]
\[ \text{béndzēr ā- xēj antä kʷáwāx ā dbē} \]
\[ \text{squirrel 3SG.SBJ- flee 3SG.POSS enter.to.hide PREP1 termite.hill} \]
\[ \text{‘The squirrel fled into the termite mound.’} \]  
\[ \text{(NF2-SN:1.6)} \]

b.  
\[ \text{sa nda naka } \]
\[ \text{sā- ndā nākā} \]
\[ \text{1SG.SBJ- go 1SG.POSS} \]
\[ \text{‘…I’m leaving.’} \]  
\[ \text{(NF6-WN:4.7)} \]

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

**kʷvāxʷ** ā- **kʷākʷāɓ** -ā mā

**monitor.lizard** 3SG.SBJ- rinse.quickly -VNT.PROX mouth

‘The monitor lizard rinsed out (his) mouth.’

(8.19) b. **Mana** kāla **mavaw** a pes luma Gavar.

māna kā- lā mávāw ā pes lwāmā gāvār

**mother.1POSS** PFV- make **beer** PREP1 day market(ful.) Gavar

‘My mother made beer on Thursday (lit. Gavar market day).’

(8.20) a. **uszye** wese **ege** əy zlepene ŋ cen

wzjē wēsē =ēgē j- ḫāp -ēnē ŋ tsēn

**children DEM.DIST** =PL **3PL.SBJ- speak** -3SG.IOBJ PREP2 father

**tata**

tātā

**3PL.POSS**

‘Those children spoke to their father.’

(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. The reflects the wide range of semantic roles which the indirect object can fill.

(8.20) a. **uszye** wese **ege** əy zlepene ŋ cen

wzjē wēsē =ēgē j- ḫāp -ēnē ŋ tsēn

**children DEM.DIST** =PL **3PL.SBJ- speak** -3SG.IOBJ PREP2 father

**tata**

tātā

**3PL.POSS**

‘Those children spoke to their father.’
b. *nda* *ndewzetene* *a* *nyhwayne*  *a*
   *ná-* *ndāw* *-zā* *-ēnē*  *ā* *nxâ* *-jē*  *ā*
   1EXCL.SBJ- find  -TRANS  -3PL.IOBJ PREP1 goat  -PL  PREP1
   *wata* *juraw*  *gabák* .
   wātâ  dzwrâw  *gbâk*

   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* .
   *kâ-* *ndâ* *-ēnē*  *āzâ*  *ā*  *wnâf*  *āntâ*
   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* *ay*  *ghwelene*  *menjevek*  *a*
   *mâ-*  *dâkâl*  =*ēgê*  *j-*  *yâl*  *-ēnē*  *mândzêvêk*  *ā*
   NOM- big  =PL  3PL.SBJ- show  -3SG.IOBJ remedy  PREP1
   *dala*  *ma*  *ŋkwâb*  *ŋ*  *ha* .
   *dâlâ*  *mâ*  *nkâb*  *ŋ*  *xâ*

   someone  REL= brain  PREP2 head
   ‘The leaders show remedies to someone sensible.’ (DE9-SN:3.4)

b. *ay*  *keghwedetene*  *unaf*  *a*  *musa*  *ege*  .
   *j-*  *kâ-*  *yâl*  *-ēnē*  *wnâf*  *ā*  *mwsâ*  =*ēgê*
   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.  

\[\text{ā-} \quad \text{mena} \quad \text{wende} \quad \text{zeney} \].
\[\text{ā-} \quad \text{mēn} \quad \text{ā} \quad \text{wēndē} \quad \text{zēnēj} \].
\[3\text{SG.SBJ-} \quad \text{be.left} \quad -\text{VNT.PROX} \quad \text{IND.DET.SG} \quad \text{again} \]

‘There is another part left as well.’ (DP9-SN:4.10)
(lit. ‘It is left another again.’)

b.  

\[\text{ā-} \quad \text{mbēlekey} \quad \text{ma} \quad \text{ŋ̌} \quad \text{ha} \].
\[\text{ā-} \quad \text{mbāl} \quad -\text{ēkēj} \quad \text{mā} \quad \text{ŋ̌} \quad \text{xā} \].
\[3\text{SG.SBJ-} \quad \text{hold} \quad -\text{ISG.IOBJ} \quad \text{mouth} \quad \text{PREP2} \quad \text{head} \]

‘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 –zā 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 nje ata papalam.
   sā- ndzā á tā pāpalām
   1SG.SBJ- sit PREP1 on plank
   ‘I sit on a plank.’ (LL57-SE:35)

   b. Bay a nda , a njaza ī karawal
      bāy ā- ndā ā- ndzā -zā ī kārāwāl
      chief 3SG.SBJ- go 3SG.SBJ- sit -TRANS PREP2 chair(ful.)

431
ata lanja .
á tá là 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.  Hoza a babahw ata ghwa .
xzá á- babáxʷ á tá nxʷā
dog 3SG.SBJ- bark PREP1 on goat
‘The dog barked at the goat.’  
(GE20-SE:1.3)

b.  Hwa babahwza hoza anta ka ḫ vay ?
xʷā- babáxʷ -zā xzá āntā ká ḫ váj
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’, ḫāp ‘speak/make speak (e.g. a radio)’ and sàsràk ‘learn/teach’.

(8.25) a.  Mba a kahan .
mbá á- kā- xān
child 3SG.SBJ- IPFV- cry
‘The child is crying.’  
(GE21-SE:17.1)

b.  Hejaye oy 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.  Uzaye oy kahanza mbàw .
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* ṣeŋ a *uley*.  
á- *kā* nāx nsēŋ á ṭlēj  
3SG.SBJ IFV- drop seed PREP1 hole  
‘He is **dropping** the seed into the hole.’  
(LL30-SE:2)

b. *ay* *nahza* gajak wese ḥ kwahwa w  
*j- nāx -zā* gàdzàk wësé ḥ kʷₚₜₜₚw  
3PL.SBJ drop -TRANS gourd DEM.DIST PREP2 fire  
‘…they **threw** that gourd into the fire.’  
(NH4-SN:1.1)

(8.27) a. *Sa* jeb centro naka ḥ lupital .  
sā- *dzēbā* mbā nākā ḥ 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* jebza centro naka ḥ lupital .  
sā- *dzēbā* -zā mbā nākā ḥ 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) dëŋ ‘think/worry’  
dëpzā ‘reflect/decide’
(c) Transitivity

Interacting with the function of agentivisation is the notion of transitivisation. According to Kittilä (2009: 83), transitivisation 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 transitivisation. 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. \( Sa \ t\ am \ y\ am \ . \)

\( s\ å \- t\ am \ j\ am \)

1SG.SBJ- pour.out water

‘I pour out water.’ (GE21-SE:2.1)

(Any water)

(8.28) cont...

\( g\ åm \)

‘drive away’ \( g\ åm\ åz\)

‘push away/over’

\( nts\ åk\ ^w \)

‘push’ \( nts\ åk\ ^w\ åz\)

‘push away/get rid of’

\( ts\ åk \)

‘contribute’ \( ts\ åk\ z\ å \)

‘help’

\( f\ ån \)

‘imitate/try’ \( f\ ån\ z\ å \)

‘try on/make an effort’

\( ts\ å\ m\ å \)

‘accompany’ \( ts\ å\ m\ å\)

‘guide’

\( b\ åd\) ‘flatter’ \( b\ ådz\ å\)

‘deceive’

\( d\ åw \)

‘want’ \( d\ åw\ åz\)

‘ask’

\( s\ år \)

‘look at’ \( s\ årz\ å \)

‘visit/examine’

\( h\ åp \)

‘speak’ \( h\ åpz\ å \)

‘greet’

\( n\ åd\ åw \)

‘come upon’ \( n\ åd\ åw\ åz\)

‘find (while looking)’

\( b\ åx \)

‘hide’ \( b\ åxz\ å \)

‘store/put aside’

\( d\ å \)

‘bring/get’ \( d\ åz\ å \)

‘bring somewhere’

\( d\ åw \)

‘come upon’ \( d\ åw\ åz\)

‘find (while looking)’

\( b\ åx \)

‘hide’ \( b\ åxz\ å \)

‘store/put aside’

\( d\ å \)

‘bring/get’ \( d\ åz\ å \)

‘bring somewhere’

\( g\ åm \)

‘drive away’ \( g\ åm\ åz\)

‘push away/over’

\( nts\ åk\ ^w \)

‘push’ \( nts\ åk\ ^w\ åz\)

‘push away/get rid of’

\( ts\ åk \)

‘contribute’ \( ts\ åk\ z\ å \)

‘help’

\( f\ ån \)

‘imitate/try’ \( f\ ån\ z\ å \)

‘try on/make an effort’

\( ts\ å\ m\ å \)

‘accompany’ \( ts\ å\ m\ å\)

‘guide’

\( b\ åd\) ‘flatter’ \( b\ ådz\ å\)

‘deceive’

\( d\ åw \)

‘want’ \( d\ åw\ åz\)

‘ask’

\( s\ år \)

‘look at’ \( s\ årz\ å \)

‘visit/examine’

\( h\ åp \)

‘speak’ \( h\ åpz\ å \)

‘greet’

\( n\ åd\ åw \)

‘come upon’ \( n\ åd\ åw\ åz\)

‘find (while looking)’

\( b\ åx \)

‘hide’ \( b\ åxz\ å \)

‘store/put aside’

\( d\ å \)

‘bring/get’ \( d\ åz\ å \)

‘bring somewhere’
b.  
\[ \text{Sa } \text{tamza } \text{yam} \].
\[ \text{sā- } \text{tām } -\text{zā } \text{jām} \]
\[ \text{1SG.SBJ-pour.out } -\text{TRANS water} \]
‘I pour out the water.’  
(GE21-SE:2.2)

(8.30) a.  
\[ \text{Sa } \text{dam sērek } \text{ŋ gejere naka} \].
\[ \text{sā- } \text{dām } -\text{zā } \text{sērēk } \text{ŋ } \text{gēdzērē nākā} \]
\[ \text{1SG.SBJ-enter string } \text{PREP2 shorts } \text{1SG.POSS} \]
‘I enter string into my shorts.’  
(GE21-SE:12.2)

(Whichever string)

b.  
\[ \text{Sa } \text{damza } \text{sērek } \text{ŋ gejere naka} \].
\[ \text{sā- } \text{dām } -\text{zā } \text{sērēk } \text{ŋ } \text{gēdzērē nākā} \]
\[ \text{1SG.SBJ-enter } -\text{TRANS string } \text{PREP2 shorts } \text{1SG.POSS} \]
‘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.  
\[ \text{Sa } \text{bar ujek naka aka} \].
\[ \text{sā- } \text{bār } \text{wjēk nākā ākā} \]
\[ \text{1SG.SBJ-crack hut } \text{1SG.POSS ACC} \]
‘I crack my hut.’  
(GE21-SE:4.5)

(Still doing it.)

b.  
\[ \text{Sa } \text{barza ujek naka aka} \].
\[ \text{sā- } \text{bār } -\text{zā } \text{wjēk nākā ākā} \]
\[ \text{1SG.SBJ-crack } -\text{TRANS hut } \text{1SG.POSS ACC} \]
‘I cracked my hut.’  
(GE21-SE:4.4)

(Already finished.)
(8.32) a. Sa kəcem zlambay.
   sá- ká- tsēm ẖāmbāj
   1SG.SBJ. IPFV. defend staff
   ‘I am defending with a stick.’ (GE50-SE:11.7)
   (Doing it now.)

b. Sa kəcemza zlambay.
   sá- ká- tsēm -zā ẖāmbāj
   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’, ḡān ‘taste’, mpāk ‘close’, dāɗ ‘pull out’ and skēn ‘grind’.

(8.33) a. Sa babad la.
   sá- bābāɗ lá
   1SG.SBJ. plow field
   ‘I plow the field.’ (GE21-SE:14.1)

b. Sa babadza la.
   sá- bābāɗ -zā lá
   1SG.SBJ. plow -TRANS field
‘I plow the field a bit.’  

(8.34) a.  
\[
\text{hwā lam ujak a mbe}.
\]
\[
x^{wā}-łām \ \text{wdzēk á mbē}
\]
\[
2\text{SG.SBJ-} \ \text{build} \ \text{hut} \ \text{PREP} \text{ 3SG}
\]

‘…you build a house with it.’  

b.  
\[
sā lamzāba ujak
\]
\[
sā-łām \ -zā \ -bā \ \text{wdzēk}
\]
\[
1\text{SG.SBJ-} \ \text{build} \ -\text{TRANS} \ -\text{BEN} \ \text{hut}
\]

‘…I fix up (lit. build a bit) a hut for myself…’  

However, the attenuative use is also found with verbs which have objects with non-patient-like semantic roles (8.35b), for example tēh ‘listen’, dzējēkʷ ‘regret’ and nkāp ‘wait for’.

(8.35) a.  
\[
\text{sa kēfēkw đeraf}.
\]
\[
sā-kā- fēkw drāf
\]
\[
1\text{SG.SBJ- IPFV-} \ \text{whistle} \ \text{song}
\]

‘I am whistling a song.’  

(I know the song.)

b.  
\[
\text{a kēfēkwza đeraf}.
\]
\[
ā-kā- fēkw -zā \ drāf
\]
\[
3\text{SG.SBJ- IPFV-} \ \text{whistle} \ -\text{TRANS} \ \text{song}
\]

‘He is trying to whistle a song.’  

(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.  
\[
\text{sa kehenezene banay a}
\]
\[
sā-kā- xān -zā -ēnē \ \text{banaj á}
\]
\[
1\text{SG.SBJ- IPFV-} \ \text{mourn} \ -\text{TRANS} \ -\text{3SG.OBJ} \ \text{suffering(ful.)} \ \text{PREP}
\]
neighbour 1SG.POSS
‘I am mourning the sufferings of my neighbour (as part of a group).’
(GE21-SE:17.5)

b. Sa  celezene  a  mana  ŋ  tew  kan .
sā-  tsāk  -zā  -ēnē  á  mānā  ŋ  tēw  kān
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 zām
‘eat’, sā ‘drink’, ḫān ‘taste’ and bā ‘taste’ and verbs of perception like sār ‘look at’, grē
‘see’, ndzēf ‘smell’ and ḫmē ‘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).
8.1.3.3 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 .
f- læ měndźěvěk =ěgě tsá pärpär pärpär pärpār
3PL.SBJ- make medicine =PL TOP different different different
‘They make remedies in different ways.’ (DE9-SN:2.1)

b. əy kágazl zlana .
f- kā- gāɭ ʰjānā
3PL.SBJ- PFV- beat sibling.1POSS
‘They have beaten my brother.’ (GE30-SE:46.1)

(8.40) a. Hejaye əy kěghelene ŋhwə mesleje
xèdzé -jé f- ká- nxèl -ěnē nxʷā mêlédžè
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. Hejaye əy kágazl zlana .
xèdzé -jé f- kā- gāɭ ʰjānā
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 ŋtora Welmbegem heje kazam gagəmaya ey
á tā nträ welməbėgəm xèdzé- kā- zəm gəməj ēj
PREP on month Welmbegem 1INCL.SBJ- IPFV- eat cotton and
heje kara ŋgəzəlen .
xèdzé- kā- rə ŋhənə
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 ḥā ‘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.  
\[\text{Hejye} \quad \text{ma} \quad \text{mpam} \quad \text{bay} \quad \text{ege} \quad \text{wese} \quad , \quad \text{ay} \]
\[\text{xèdzè} \quad -jé \quad \text{má} = \quad \text{mpám} \quad \text{bày} \quad = \quad \text{égē} \quad \text{wēsē} \quad \text{j-} \]
\[\text{person} \quad -\text{PL REL= look.for chiefdom =PL DEM.DIST 3PL.SBJ-} \]
\[\text{ghwalza} \quad \text{ha} \quad \text{tata} \quad . \]
\[\text{y”āl} \quad -\text{zā} \quad \text{xā} \quad \text{tātā} \]
\[\text{show} \quad -\text{TRANS} \quad \text{head 3PL.POSS} \]

‘Those people who looked to be chief, they introduced (lit. showed) themselves.’         (NH7-SN:3.10)

b.  
\[\text{Kābawza} \quad \text{ha} \quad \text{anta} \quad \text{aza} \quad \text{ŋ} \quad \text{gadaŋ} . \]
\[\text{kā-} \quad \text{bāw} \quad -\text{zā} \quad \text{xā} \quad \text{āntā} \quad \text{āzā} \quad \text{ŋ} \quad \text{gādāŋ} \]
\[\text{PFV- change} \quad -\text{TRANS} \quad \text{head 3SG.POSS COMPL PREP2 idiot} \]

‘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 -ɓā (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.  
\[\text{A kavalɓāa} \quad \text{gamtak} \quad \text{a} \quad \text{mbē} . \]
\[\text{ā-} \quad \text{kā-} \quad \text{vāl} \quad -\text{ɓā} \quad \text{gāmtāk} \quad \text{ā} \quad \text{mbē} \]
\[\text{3SG.SBJ- IPFV- give -BEN chicken PREP1 3SG} \]
‘He is giving a chicken to himself.’

b. **Sa daw jə sakambə njwa jə sa.**
   **sə- dəw j skäm -bə nxʷə j sə**
   1SG.SBJ- want INF buy -BEN goat PREP2 1SG
   ‘I want to buy a goat for myself.’

**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 dekəbə a ha antə a**
   **ā- dək -ā -bə á xə ñntə ñ**
   3SG.SBJ- hobble –VENT(PROX) -BEN PREP1 head 3SG.POSS PREP1
   **zlambay yam.**
   ljəmbāj jám
   staff also
   ‘…he hobbles out *himself* (lit. with his head) with a staff also.’
   (C5-SN:37.2)

b. **A lam lwec a ha antə**
   **ā- lám lwəts á xə ñntə**
   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 kʷsəm ‘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.

If there are more than two people in the group kʷsàm ‘body’ is followed by the plural marker égē (8.46).

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.
Reciprocals in which the subject and the indirect object are coreferential, are expressed by the prepositional phrase ɬ y tæbæ tæta ‘amongst them’ (8.48 a & b).

(8.48) a. ɬ y kaval gemtæye ɬ tabæ tæta. 3PL.SBJ-IPFV give chicken -PL PREP2 middle 3PL.POSS  ‘They give chickens to each other.’  (GE49-SE:18)

b. ɬ y kada uda ɬ tabæ tæta. 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

<table>
<thead>
<tr>
<th>Meaning</th>
<th>Subject</th>
<th>Copula</th>
<th>Predicate type</th>
<th>Predicate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equational</td>
<td>NP or Stative pronoun</td>
<td>Optional ārā</td>
<td>Nominal</td>
<td>NP (referential) or independent pronoun</td>
</tr>
<tr>
<td>Proper inclusion</td>
<td>NP or Stative pronoun</td>
<td>Optional ārā</td>
<td></td>
<td>NP (non-referential)</td>
</tr>
<tr>
<td>Characterisation</td>
<td>NP or Stative pronoun</td>
<td>Optional ārā</td>
<td></td>
<td>NP</td>
</tr>
<tr>
<td>Specification</td>
<td>NP</td>
<td>Optional ārā</td>
<td></td>
<td>NP (non-referential)</td>
</tr>
<tr>
<td>Genitive</td>
<td>NP</td>
<td>Optional ārā</td>
<td></td>
<td>Genitive marker plus NP or possessive pronoun</td>
</tr>
<tr>
<td>Naming</td>
<td>NP</td>
<td>Optional ārā</td>
<td></td>
<td>Proper noun</td>
</tr>
<tr>
<td>Attribution</td>
<td>NP or Stative pronoun</td>
<td>None, ndzā ‘be’</td>
<td>Adjective</td>
<td>Adjective, numeral or quantifier</td>
</tr>
<tr>
<td>Locative I</td>
<td>NP or Stative pronoun</td>
<td>None</td>
<td></td>
<td>Demonstrative identifier</td>
</tr>
<tr>
<td>Locative II</td>
<td>NP or Stative pronoun</td>
<td>None or ndzā ‘be’</td>
<td>Prepositional phrase</td>
<td>Prepositional phrase</td>
</tr>
<tr>
<td>(incl. possession)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporal</td>
<td>NP or Stative pronoun</td>
<td>None</td>
<td></td>
<td>Prepositional phrase</td>
</tr>
<tr>
<td>Similative</td>
<td>NP or Stative pronoun</td>
<td>None or ndzā ‘be’</td>
<td>Prepositional phrase</td>
<td>Prepositional phrase</td>
</tr>
<tr>
<td>Comitative</td>
<td>NP or Stative pronoun</td>
<td>None or ndzā ‘be’</td>
<td>Prepositional phrase</td>
<td>Prepositional phrase</td>
</tr>
<tr>
<td>(incl. possession)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existential</td>
<td>NP or independent pronoun</td>
<td>No</td>
<td>Existential marker</td>
<td></td>
</tr>
<tr>
<td>(incl. possession)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>(Subject NP)</th>
<th>(Stative pn)/(Copula)</th>
<th>Predicate</th>
</tr>
</thead>
</table>

á nwná nxʷā nākā fťék
PREP1 last.year goat 1SG.POSS lost¹
‘Last year my goat (was) lost.’ (GE15-SE:46.2)

á váwātsá nxʷā nākā fťék
PREP1 this.year goat 1SG.POSS lost
‘This year my goat (is) lost.’ (GE15-SE:46.3)

á mākʷdā nxʷā nākā fťék
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 [welbē ey kule ]Pred.
gâbâvâj tâtá welbē ej kʷlë
god 3PL.POSS nature.spirit and idol
‘…their gods (were) nature spirits and idols.’ (DE15-WN:2)

âṭâ gʷâmbâkʷ éj mën̂ skân dámâw =égē
ASS.PL toad and antelope thing bush =PL
‘The toad and the antelope (are) wild animals (lit. things of the bush).’

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 fťék ‘lost’ is functioning as an adjective rather than a verb (see Section 3.2.1.3).
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).

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 ada 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.
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. \[
\text{ŋgəzəŋ} \text{NP} [a \text{ wata naka }] \text{Pred}.
\]
\[
\text{ŋgəzəŋ} \text{ á wātā nākā}
\]
\[
\text{peanuts} \text{ PREP1 compound 1SG.POSS}
\]
\[
\text{‘(Some) peanuts are at my home.’} \quad \text{(GE15-SE:17)}
\]

b. \[
\text{ŋgəzəŋ} \text{NP [mbəy]pn [a \text{ wata naka }]Pred}.
\]
\[
\text{ŋgəzəŋ} \text{ mbj á wātā nākā}
\]
\[
\text{peanut} \text{ 3SG.STAT PREP1 compound 1SG.POSS}
\]
\[
\text{‘The peanuts are at my home.’} \quad \text{(GE15-SE:19)}
\]

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. \[
\text{Ara} \text{ Cop [vemey]Pred} ?
\]
\[
\text{árā vémēj}
\]
\[
\text{COP what}
\]
\[
\text{‘What is it?’} \quad \text{(GE15-SE:81.1)}
\]

b. \[
\text{Ara} \text{ Cop [həza]Pred} .
\]
\[
\text{árā xzā}
\]
\[
\text{COP dog}
\]
\[
\text{‘It’s a dog.’} \quad \text{(GE15-SE:81.2)}
\]
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
\[ xʷā wālā nākā 2SG.STAT wife 1SG.POSS \]
‘…you (are) my wife…’  (DE7-SN:1.4)

b. \[ Ṉyzera ny ]NP \[ ñjzerja ]PN \[ ma ndaha ]ŋ \[ ndaha ]ŋ
\[ njzerja =égē j má= ndā -xā ŋj 3PL.STAT REL = 1SG.POSS -xā INF \]
Nigeria =PL 3PL.STAT REL = COME -VNT.DIST INF
\[ gayzaheje ka ]Pred
\[ gāj -zā -åxèdzè ká spoil TRANS -1INCL.DOBJ ANT \]
‘The Nigerians are the ones who came to spoil us in advance…’

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).
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.

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 \text{NP }[mala \ mana \text{ } ]\text{Pred }\]

\[dvər \quad mələ \quad mənə \]

hoe  \quad \text{GEN} \quad \text{mother.\text{1POSS}}

‘The hoe (is) my mother’s.’  

(b)  \([Wənde \text{NP }[mala \ mbəlah \text{ } ege \text{ } ]\text{Pred }\]

\[wəndə \quad mələ \quad mbləx = \text{̄} \text{ege} \]

\text{IND.DET.SG} \quad \text{GEN} \quad \text{wound} = \text{PL}

‘Another (is) for wounds.’  

(c)  \([Ihwa \text{NP }[mala \ naka \text{ } ]\text{Pred }\]

\[nxʷə \quad mələ \quad nəkə \]

goat  \quad \text{GEN} \quad \text{1SG.POSS}

‘The goat (is) mine.’

(d)  \([Ihwa \text{ } ngha \quad ca \text{ } ]\text{TOP} \quad [ \text{ara } \text{Cop }[mala \ naka \text{ } ]\text{Pred }\]

\[nxʷə \quad nəyə \quad tsə \quad ərə \quad mələ \quad nəkə \]

goat  \quad \text{DEM.PROX} \quad \text{TOP} \quad \text{COP} \quad \text{GEN} \quad \text{1SG.POSS}

‘As for this goat, it’s mine.’

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.  \([zləm \text{ } antə \text{ } ]\text{NP }[\text{Haman } \text{ Makwal } \text{ } ]\text{Pred.}\]

\[ʒəm \quad əntə \quad xəmən\quad məkʷəl\]

name  \quad \text{3SG.POSS} \quad \text{Haman} \quad \text{Mokol}

‘His name (was) Haman Mokol.’

b.  \(Zlənə \quad ara \quad \text{Dele} \quad .\]

\[ʒənə \quad ərə \quad dələ\]

sibling.\text{1POSS} \quad \text{COP} \quad \text{Deli}

‘My brother is Deli.’

(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 \text{ATTRIBUTION}. The copula \(ərə\) 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 dējdēj
wife 3SG.POSS beautiful too.much(ful.)

‘His wife (was) too beautiful.’  
(TN1-SN:1.4)

b. \[Hejæ dawar\] NP \[mbay zukwana\] Pred.
xēdzè dāwār mbj zkʷānā
person sickness 3sSTAT better

‘The sick person is better.’  
(1811)

(8.62) a. \[zlæ ye \-jé ox na\] NP \[cekudē\] Pred
\[bjā \-PL 1SG.POSS \=é ě̄gē \tsékʷ \-dē\]
onx -PL 1SG.POSS =PL few
‘…my cows (are) few…’  
(DE4-SN:9.2)

b. \[nene nènè gbak a wala naka\] Pred
\[nënë gbāk á wālā nākā\]
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 tsákʷ á
house medicine here
‘The clinic (lit. house of medicine) is here.’  
(GE15-SE:77.1)

b. \[Dhwa ma hanga mala naka wese\] NP \[caw\] Pred.
xʷā má = xāŋgá mālā nākā wēsē tsāw
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 (8.64a & b, 8.64a), temporal (8.64b), similitative (8.64c) and comitative (8.64d). The copula cannot be used with this type of clause.

(8.64) a. \[ Ya ]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  vaya ] Pred .
    \[ xèdzè á vjā \]
    1INCL.STAT  PREP1 wet.season
    ‘We (are) in the wet season.’  (LL24-SE:2)

c. \[ mbey ]pn [ ana  mpe nghe ] 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
    \[ xʷnè á gèf \]
    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.
    \[ tsār dējdēj á rā mbē \]
    stubbornness too.much(ful.) PREP1 side 3SG
    ‘…she has too much stubborness.’  (C1-SN:21.2)
    (lit. ‘..too much stubbornness is at her side.’)
b. \[mbəy\] pn \[a\] metes \[Pred\]
mbj á mētēs 
3SG.STAT PREP1 hunger
‘...he has hunger…’  
(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 \(ākā\) 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>
<thead>
<tr>
<th>Table 8.4: Structure of Buwal existential clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Subject)</td>
</tr>
</tbody>
</table>

The subject may be an independent pronoun (8.66a), or any noun phrase (8.66 b-e).

(8.66) a. \[Tata\] pn \(aka\) .
tātā \(ākā\)
3PL EXIST
‘They exist.’  
(GE29-SE:15)

b. \[dala\ ma\ ata\ n'ter\ zlam\ ege\ wese\ ]NP \(aka\)
dālā má= á tā n'tèr ḷ'am =égē wēsē \(ākā\)
money REL= PREP1 on write name -PL DEM.DIST EXIST
‘...there is that money which is for writing names…’  
(lit. ‘...that money which is for writing names exists.’)  
(C1-SN:29.4)

c. \[bezle\ nhwaye\ ]NP \(aka\) .
bēlē̑ ngʷā -jē \(ākā\)
enclosure goat -PL EXIST
‘...there is a goat enclosure.’  
(lit. ‘...a goat enclosure exists.’)  
(DE4-SN:6.1)
d. [Mala masəɓəhwa]NP aka.
   mālā màsbāxʷ ákā
   GEN bone.ache EXIST
   ‘There is one for aching bones.’ (DE9-SN:1.7)
   (lit. ‘One for aching bones exists.’)

e. [Ŋhwəye vədəye a wata juraw ete
   nxʷā -jé vēdjē á wātā dzwrāw á tē
goat -PL IND.DET.PL PREP1 home sub-chief(ful) PREP1 here
   a Zukwadʃəŋw]NP aka.
   á zkʷäddfänʷ 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 vədəye]NP a wata juraw ete a
   nxʷā -jé vēdjē á wātā dzwrāw á tē á
goat -PL IND.DET.PL PREP1 compound sub-chief(ful) PREP1 here PREP1
   Zukwadʃəŋw aka.
   zkʷäddfänʷ 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).
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 .
   ákwáw má ḫèj ḫā
   NEG.EXIST TOP.EMPH meat ox
   ‘Otherwise, beef (lit. ox meet).’
   (Speaker A)

b. Aka .
   ákā
   EXIST
   ‘There is some.’ (lit. ‘(It) exists.’)
   (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 , sê gbak a mzla , sê
   á wálā mënèdè ákā j gbák á mlā j-  ah!
   woman IND.DET.SG EXIST 3PL.STAT two PREP1 blacksmith 3PL.SBJ- kanda η da la .
   kā- ndā η 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. \([Dəvər \ naka]\) NP aka.
    dvər nākā ākā
    hoe 1SG.POSS EXIST
    ‘I have a hoe.’ (LL19-SE:9)
    (lit. ‘My hoe exists.’)

b. \([Zābālə \ mala \ Madagamzam]\) NP aka.
    zāblā mālā mādāgāmzām ākā
    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 simulative (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 simulative 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. \(Mb\o y\ \bar{b}ar\bar{b}ar\).
mbj  bár-bár
3SG.STAT hard
‘It is hard.’ (GE15-SE:35)

b. A \(nj\a\ \bar{b}ar\bar{b}ar\).
ā- ndzā  bár-bár
3SG.SBJ- sit hard
‘It is (lit. sits) hard.’ (GE15-SE:34)

(8.73) a. \(Wata\ naka\ ,\ mb\o y\ a\ Kuvahwam\).
wātā nākā mbj á kʷvàxʷám
compound 1SG.POSS 3SG.STAT PREP1 Kuvohom
‘My home, it is in Kuvohom.’ (GE15-SE:33)

b. \(Wata\ na\ cemey\ ,\ a\ nj\a\ \eta\ Kuvahwam\)
wātā nā tsémēj ā- ndzā ĵ kʷvàxʷám
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. \(Hwa\ ara\ nene\).
xʷā á rā nēnē
2SG.STAT PREP1 side 1EXCL
‘You are with (lit. at the side of) us.’ (GE15-SE:91.2)

b. hwa \(nja\ \ a\ nene\)
xʷā- ná- ndzā á nēnē
2SG.SBJ- FUT- sit PREP1 1EXCL
‘You will be (lit. sit) with us.’ (BH1-SN:2)

(8.75) a. \(Hwa\ ana\ tebekw\).
xʷā ánā tēbēkʷ
2SG.STAT like bat
‘You are like a bat.’ (GE15-SE:39)

b. \(Hwa\ nj\a\ ana\ tebekw\).
xʷā- ndzā ánā tēbēkʷ
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 kàṇja ꞌy ꞌbay
káw vájáj má- ꞌyꞌál -zā màdā ká- ndzā ꞌy ꞌbáy
even who JUS- explain -TRANS if PFV- sit PREP2 chief
cà, a neletene a hejaye ca vemej ꞌ?
tsá á- ná- lā -ētēnē á xèdzè -jē tsá vémēj
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)
The inchoative meaning ‘become’ in Buwal is expressed using the ambitransitive verb lä ‘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.  

\[
\text{Sa} \quad \text{nda}^\text{ba} \quad \text{ama} \quad \text{kwa}^\text{h} \quad \text{waw} \quad \eta \quad \text{la} \\
\text{s}^\text{a}- \quad \text{nd}^\text{a} \quad -\text{ba} \quad \text{Á} \quad \text{m}^\text{a} \quad \text{k}^\text{w}^\text{a}^\text{h}^\text{w}^\text{a} \quad \eta \quad \text{la} \\
\text{1SG.SBJ-} \quad \text{go-} \text{BEN PREP1} \quad \text{edge fire} \quad \text{INF} \quad \text{do} \\
\text{b}^\text{ah}^\text{w}^\text{b}^\text{ah}^\text{w}.
\]

báx”-báx”

warm

‘I go next to the fire to become (lit. do) warm.’  

(2092)

b.  

\[
\text{mb}^\text{ol}^\text{ah} \quad \text{anta} \quad \text{a} \quad \text{la} \quad \text{zuk}^\text{w}^\text{a} \quad \text{n}^\text{a} \\
\text{m}^\text{b}^\text{l}^\text{x} \quad \text{ánt}^\text{a} \quad \text{á} \quad \text{l}^\text{a} \quad \text{z}^\text{k}^\text{w}^\text{a} \text{n}^\text{a} \\
\text{wound 3SG.POSS 3SG.SBJ- do better} \\
\text{‘...his wound becomes (lit. does) better.’} \\
\text{(HT6-SN:8.10)}
\]
If the result of the process is expressed by a noun it must be introduced by the preposition ŋ́ (8.78).

(8.78) A makudá sa nala ŋ́ wala .
á mákʷɗá sā- ná- lá ŋ́ 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>
<thead>
<tr>
<th>Table 8.5: Structure of Buwal comparatives of inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
</tr>
</tbody>
</table>

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 similative 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.
\[xʷā \] dzēm 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 \[pepedek \]Pred \[ana \]MS \[gagmāj \]S.
\[rgʷàts āntā pépedek ánā gagmāj\]
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.
mmbā ā- lā ḫān ánā tsēn
child 3SG.SBJ- do work like father
‘The child does work the same (lit. like) the father.’ (GE16-SE:41.5)

b. \[Hwa \]C \[kēnjeye \]Pred \[ana \]MS \[sa \]S.
\[xʷā- kā- ndzā -ējē ánā sā\]
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’

<table>
<thead>
<tr>
<th>Subject</th>
<th>dāj ‘more’</th>
<th>á xā ‘over’</th>
<th>Oblique</th>
</tr>
</thead>
</table>


tęŋg’lęŋ   dāj   á xā   bsé
one   more   PREP1 over nothing
‘One is more than zero.’ (LL48-SE:3)


j   dāj   á xā   nsēŋ   vēdjé   =ēgē   tēw-tēw
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 pā ‘at a level’ (see Section 4.8.3) followed by either the
preposition jɨ, or the relative marker mā (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 pā ‘at a level’

<table>
<thead>
<tr>
<th>Subject</th>
<th>Predicate</th>
<th>á xā ‘over’</th>
<th>Oblique</th>
</tr>
</thead>
</table>

pā ‘at a level’  jɨ or mā  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.  
\[ \text{[Sa } C \text{ [pa } ķ \text{ pozek ]Pred [aha ]MS [hwa ]S} . \]
\[ \text{sā } pā ķ pozę kém } \text{ á } xā xʷā\]
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.  
\[ \text{[Hwa } C \text{ [pa ma def ]Pred [aha ]MS [sa ]S} . \]
\[ xʷā pā má = déf á xā sā\]
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.  
\[ \text{[Mbøy } C \text{ [pa } ķ \text{ day ]Pred [aha ]MS [sa ]S} . \]
\[ \text{mbj pā ķ dāj } á xā sā\]
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.  
\[ \text{[Jsledf] } C \text{ [pa ma day ]Pred [aha ]MS [ja} ã \text{ ]S} . \]
\[ \text{nslēd } pā má = dāj } á xā dzābán\]
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. \([Mbəy ]C \quad [p_a \quad \eta \quad kəbəy] \quad ]Pred \quad [aha ]MS \quad [sa ]S .\)
   mbj  \quad p\acute{\text{a}} \quad \acute{\eta} \quad k\acute{\text{a}}- \quad x\acute{\text{e}}\check{j} \quad á \quad xā \quad sā
   3SG. STAT at.a.level \quad PREP_2 \quad PFV- \quad run \quad PREP_1 \quad over \quad 1SG
   ‘He ran faster than me.’
   (GE16-SE:13.4)
   (lit. ‘He is at a level in having run over me.’)

b. \([Mbəy ]C \quad [p_a \quad m_a \quad s_a n] \quad ]Pred \quad [aha ]MS \quad [sa ]S .\)
   mbj  \quad p\acute{\text{a}} \quad m\acute{\text{a}}= \quad s\acute{\text{a}}n \quad á \quad xā \quad sā
   3SG. STAT at.a.level \quad REL= \quad know \quad PREP_1 \quad over \quad 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) \([Uda \quad nγha ]C \quad [p_a \quad \eta \quad madada] \quad ]Pred\)
   wdā nyā  \quad p\acute{\text{a}} \quad \acute{\eta} \quad m\acute{\text{a}}- \quad dā \quad -\acute{\text{a}}- \quad dā
   food \quad DEM.PROX at.a.level \quad PREP_2 \quad NOM- \quad cook \quad NOM.PAT \quad cook
   [aha ]MS \quad [m_a \quad a \quad njuna ]S .\)
   á \quad xā \quad m\acute{\text{a}}= \quad á \quad ndzwná
   PREP_1 \quad over \quad REL= \quad PREP_1 \quad 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. \[
[Haldəma]C [\text{pa} \ \text{ŋ} \ \text{kέngezeye}] \text{Pred}
\]
\[
\text{Hal} \text{də} \text{mə} \ \text{pá} \ \text{ŋ} \ \text{ká-} \ \text{ŋgàz} \ -\text{ējē}
\]
girl \text{at.a.level PREP2 PFV- discipline -PART}
\[
[\text{aha}]MS [\text{hal} \ \text{heje} \ \text{ŋhe}]S.
\]
\[
\text{ā} \ \text{xā} \ \text{xàl} \ \text{xèdzè} \ \text{nyē}
\]
\text{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. \[
[Səkan \ \text{ŋgha} \ \text{mbəy}]C [\text{pa} \ \text{ma} \ \text{kέkzeveye}] \text{Pred}
\]
\[
\text{Skàn} \ \text{nyā} \ \text{mbî} \ \text{pá} \ \text{má=} \ \text{ká-} \ \text{kēf} \ -\text{ējē}
\]
thing \text{DEM.PROX 3SG.STAT at.a.level REL=} \text{PFV- lift -PART}
\[
[\text{aha}]MS [\text{ma} \ \text{caw} \ \text{ŋgha}]S.
\]
\[
\text{ā} \ \text{xā} \ \text{má=} \ \text{tsáw} \ \text{nyā}
\]
\text{PREP1 over REL=} \text{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 than when a noun is used as the standard of comparison, it may only be preceded by the preposition \text{ŋ́}. If the relative marker \text{má} is used, the noun must be part of a larger verbal clause.

(8.87) a. \[
[Wala \ \text{ŋkwa}]C [\text{pa} \ \text{ŋ} \ \text{dédehw}] \text{Pred} [\text{aha}]MS [\text{mala}]
\]
\[
\text{Wālā} \ \text{nkʷā} \ \text{pá} \ \text{ŋ} \ \text{dédēxʷ} \ \text{ā} \ \text{xā} \ \text{mālā}
\]
wife \text{2SG.POSS at.a.level PREP2 tardiness PREP1 over GEN}
\[
\text{naka} \ ]S.
\]
\[
\text{nākā}
\]
\text{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 ngkwa]C [pa ma la dedehw]Pred [aha]MS

wālā nkʷā pā má lā dōdēxʷ á xā

wife 2SG.POSS at.a.level REL= do tardiness PREP 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

<table>
<thead>
<tr>
<th>Mood</th>
<th>Person/Number</th>
<th>Subject Agreement Marking</th>
<th>Verbal Affixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperative</td>
<td>2SG</td>
<td>Optional</td>
<td>Ø-</td>
</tr>
<tr>
<td></td>
<td>2PL</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hortative</td>
<td>1INCL</td>
<td>Infinitive marker ʝ</td>
<td>-ākʷā</td>
</tr>
<tr>
<td></td>
<td>1DUAL</td>
<td>No</td>
<td>-w*</td>
</tr>
<tr>
<td>Jussive</td>
<td>3SG</td>
<td>No</td>
<td>mā-</td>
</tr>
<tr>
<td></td>
<td>3PL</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

*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*!
    gʷāj ndā -xā á wātā nākā
    pal go -VNT.DIST PREP1 compound 1SG.POSS
    ‘Pal, come to my compound!’ (NF4-SN:3.2)

b. *Hwa* *ŋterekey* ende.
    xʷā- ntār -ēkēj ēndē
    2SG.SBJ- pay -1SG.OBJ 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 *sakwaw*!
    xʷā- xēj skʷāw
    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. *bune* kwakwaɓ ma a *yam* a *yam*!
    xʷnē- kʷākʷāɓ mā á jām á jām
    2PL.SBJ- rinse.quickly mouth PREP1 water PREP1 water
    ‘…rinse out your mouths with water.’ (NF2-SN:1.8)
b. *Hune*  
\[x^\text{wne} \rightarrow \text{gâš} \ k^\text{wâw}\]
\[2\text{PL.SBJ-} \text{beat NEG}\]
‘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 \(\text{ŋ́}\), which is used to form the infinitive (see Section 10.1.1.4), before the verb stem. The first person inclusive collective suffix \(-\text{ak}^\text{wâ}\) (see Section 3.2.1.4) is also attached to the verb stem (9.4 a & b).

\[(9.4) \ a. \ \text{ŋ́} \ \text{tewakwa} \ \text{ujek na eze}. \]
\[\text{ŋ́} \ \text{tew} \ -\text{ak}^\text{wâ} \ \text{wjēk nà ézē} \]
\[\text{INF carry -INCL.COL hut now therefore}\]
\[\text{‘Let’s carry the root (lit. hut) now therefore.’} \]  

(DP7-SN:2.6)

\[b. \ \text{ŋ́} \ \text{lakwâ} \ \text{ujek tewtew !} \]
\[\text{ŋ́} \ \text{lâm} \ -\text{ak}^\text{wâ} \ \text{wjēk têw-têw} \]
\[\text{INF build -INCL.COL hut all}\]
\[\text{‘Let’s all build a house.’} \]

(LL10-SE:64)

In Buwal the special hortative form of the verb ‘go’ is \(\text{āzâ}\). 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 \(\text{ndâ}\). 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.  
\textit{Azakwa} \quad əzā \quad ą \quad \textit{jakwa} \quad veječ’ \quad ą \quad \textit{damaw} .

\textbf{go.HORT \ -1INCL.COL INF cut \ -1INCL.COL vegetation \ PREP1 bush}

‘Let’s go to cut vegetation in the bush!’

\textit{(DE7-SN:5.2)}

b.  
\textit{Azakwa} \quad ą \quad \textit{ama} \quad \textit{yam} .

\textbf{Azakwa} \quad ą \quad \textit{ama} \quad \textit{yam} .

\textbf{go.HORT \ -1INCL.COL PREP1 edge \ water}

‘Let's go to the edge of the water!’

\textit{(DE18-SN:8.9)}

In contrast to other verbs, əzā 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.  
\textit{Azakwa} \quad ą \quad \textit{go.HORT \ -1INCL.COL}

‘Let's go!’

\textit{(GE22-SE:4.2)}

(The speaker is encouraging others to go on ahead.)

b.  
\textit{Kazakwa} \quad kā- \quad ą \quad \textit{go.HORT \ -1INCL.COL}

‘Let’s get going!’

\textit{(GE22-SE:4.3)}

(Stronger. Very much an order.)

c.  
\textit{Mazakwa} \quad mā- \quad ą \quad \textit{go.HORT \ -1INCL.COL}

‘Let's go!’

\textit{(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.

\[(9.7)\]
\[
\begin{align*}
Aza & \quad \eta \quad \text{sasərakakwa} \quad dərəf \quad ara \quad tata . \\
\text{āzā} & \quad \eta \quad \text{sàsràk} \quad -\text{ākʷə} \quad \text{drəf} \quad á \quad \text{rā} \quad \text{tātā} \\
\text{go.HORT} & \quad \text{INF} \quad \text{learn} \quad -\text{1INCL.COL} \quad \text{song} \quad \text{PREP1} \quad \text{side} \quad \text{3PL}
\end{align*}
\]
\text{‘Let's go to learn songs with them.’} \quad (\text{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).

\[(9.8)\]
\[
\begin{align*}
a. \quad \text{Aza} & \quad \text{w} . \\
\text{āzā} & \quad \text{-w} \\
\text{go.HORT} & \quad \text{-1DUAL.HORT} \\
\text{‘Let the two of us go!’} \quad (\text{GE22-SE:5.2})
\end{align*}
\]
\[
\begin{align*}
b. \quad \text{Kaza} & \quad \text{w} . \\
\text{kā-} & \quad \text{āzā} \quad \text{-w} \\
\text{IPFV-} \quad \text{go.HORT} & \quad \text{-1DUAL.HORT} \\
\text{‘Let the two of us be going!’} \quad (\text{GE22-SE:5.3})
\end{align*}
\]
\[
\begin{align*}
c. \quad \text{Maza} & \quad \text{w} . \\
\text{mā-} & \quad \text{āzā} \quad \text{-w} \\
\text{JUS-} \quad \text{go.HORT} & \quad \text{-1DUAL.HORT} \\
\text{‘Let the two of us go!’} \quad (\text{GE22-SE:5.4})
\end{align*}
\]

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).
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.

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.

9.1.3 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 it is included (9.11b).

(9.11) a. *Gazlavay məvəlahwaw matakan a tama*  
发展空间 -əxʷāw màtákān á tāmā  
God  just  -2SG.IOBJ IND.DET  PREP1 front  
‘May God give you another (wife) in the future…’  

b. əy megere zlan ətankwaw  .  
3PL.SBJ  just  see work 1INCL.POSS  
‘Let them see our work.’

The jussive can be used to express both orders (9.12a) and wishes (9.12b).

发展空间 -yʷāl -zā  hām āntā  
even(ful.) who  just  -TRANS name 3SG.POSS  
‘Let everyone reveal (lit. show) his name.’  

b. əy mala werwer , əy madamas gwaygwaya  
3PL.SBJ  do healthy 3PL.SBJ  just  dance festival  
ndaram  .  
ndrām  
pleasing  
‘May they become (lit. do) healthy, may they dance the festival well (lit. pleasingly).’

9.2 Negation

There are two main negative markers in Buwal; the plain negative kʷāw/skʷāw (see Section 4.11.1) and the existential negative əkʷāw/əskʷāw (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 tâkʷàm ‘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 kʷāw/skʷāw, the existential negative ākʷāw/āskʷāw or the ‘impossible’ negative tâkʷàm. 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 $k^\text{wāw}/sk^\text{wāw}$ 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 $\text{ák}^\text{wāw}/\text{āsk}^\text{wāw}$ 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. $Hwa \ k\text{ázam} \ u\text{da} \ v\text{aw} \ ?$
   $x^\text{wā}- \ k\text{ā-} \ \text{zām} \ wd\text{ā} \ \text{vāw}$
   ‘Have you eaten food?’

   (GE11-SE:11.1)

   b. $Sa \ s\text{ā-} \ k\text{ā-} \ \text{zām} \ wd\text{ā} \ k^\text{wāw}$
   ‘I haven’t eaten food (yet).’

   (The speaker wants food and is planning to eat.)

   (GE11-SE:11.2)

   c. $Sa \ s\text{ā-} \ k\text{ā-} \ \text{zām} \ wd\text{ā} \ \text{āk}^\text{wāw}$
   ‘I haven’t eaten food.’

   (The person doesn’t want food.)

   (GE11-SE:13)

(9.14) a. $Hwa \ nd\text{ā-} \ a \ l\text{u}m\text{ā} \ v\text{aw} \ ?$
   $x^\text{wā}- \ nd\text{ā-} \ \text{á} \ \text{lwm\text{ā} \ vāw}$
   ‘Are you going to the market?’

   (GE11-SE:3.1)
b.  Sa  nda  a luma  kawaw.  Sa  nda  a wata
    sā-    ndā ā lwmà  kʷāw  sā-    ndā ā wātā
1SG.SBJ- go  PREP1 market(ful.)  NEG  1SG.SBJ- go  PREP1 compound
mana
    mānā
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.
    sā-    ndā ā lwmà  ákʷāw
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  kadās  vaw ?
    xʷā-  kā-  dās  vāw
2SG.SBJ- IPFV- cultivate  Q
'Are you cultivating?' (GE11-SE:42.1)

b.  Sa  kadās  kawaw.
    sā-  kā-  dās  kʷāw
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  kadās  akwaw.
    sā-  kā-  dās  ákʷāw
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.
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.
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.

‘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 \( kʷāw/skʷāw \). Note that for second person singular imperatives the subject agreement marker is obligatory in negative clauses (see Section 9.1.1).

\[
\begin{align*}
(9.20)\ a. & \quad Hwa & ja & kāŋgān & ara & kʷāw! \\
& xʷā- & dzā & kāŋgān & ārá & kʷāw \\
& 2SG.SBJ- & hit & drum & SIM & NEG \\
& \text{‘Don’t hit the drum along the way!’} & \text{(NF4-SN:3.2)} \\

& b. & Hune & gazl & kʷāw! \\
& xʷné- & gāz & kʷāw \\
& 2PL.SBJ- & beat & NEG \\
& \text{‘Don’t beat (him)!’} & \text{(C10-SN:46.3)}
\end{align*}
\]

The use of the existential negative \( ākʷāw/āskʷāw \) 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.  \( Sa \ \eta tά̄ a \ \text{vaw} \) ?
\[
\begin{array}{c}
\text{sā-} \\
\text{ntā} \\
\text{-bā} \\
\text{vāw}
\end{array}
\]
1SG.SBJ- take -BEN Q
‘Should I take it?’

b.  \( Hwa \ \eta tά \ \text{kwaw} \)
\[
\begin{array}{c}
\text{xʷā-} \\
\text{ntā} \\
\text{kʷāw}
\end{array}
\]
2SG.SBJ- take NEG
‘Don’t take it (for now)!’

c.  \( Sa \ \eta taw \)
\[
\begin{array}{c}
\text{sā-} \\
\text{ntā} \\
\text{-āw}
\end{array}
\]
1SG.SBJ- take -3SG.DOBJ
‘I (will) take it!’

d.  \( Hwa \ \eta tά \ \text{akwaw} \)
\[
\begin{array}{c}
\text{xʷā-} \\
\text{ntā} \\
\text{ākʷāw}
\end{array}
\]
2SG.SBJ- take NEG.EXIST
‘You are not to take it (ever)!’

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.  \( \text{iʃ} \ \text{lamakwa} \ \text{ujek} \ \text{kwaw} \).
\[
\begin{array}{c}
\text{íʃ} \\
\text{lām} \\
\text{-ākʷā} \\
\text{wjēk} \\
\text{kʷāw}
\end{array}
\]
INF build -1INCL.COL hut NEG
‘Let’s not build the hut.’

(Something is preventing it.)

483
b. Ń ŋ́ INF lamakwa ujek ŋ́. Ń lām -ākʷā wjēk ākʷā

‘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 -ākʷā á dámāw kʷāw āzā -ākʷā

gō.hort -1incl.col prep1 bush neg gō.hort -1incl.col
ŋ barla .
ŋ bārlā

‘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 -ākʷā á dámāw ākʷāw

gō.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 kʷāw
jus- stay neg
‘Let it not stay!’ (GE10-SE:8.2)

b. Manja akwaw !
mā- ndzā ākʷāw
jus- stay neg.exist
‘It is never to stay!’ (GE10-SE:8.3)
(9.25) a. \( M\) \( a d\) \( a\) \( w\) \( a\) \( \mu k\) \( \mu w\) !
\[ m\- n\- a \- \ w\- n\- a \- n\- k\- w\- a \- k\- w\- a \]
\[ J U S- \ g o \ P R E P \ c o m p o u n d \ 2 S G . P O S S \ N E G \]
\[ \text{‘Let him not go to your compound!’} \] (GE10-SE:9.2)

b. \( M\) \( a d\) \( a\) \( w\) \( a\) \( a k\) \( \mu w\) !
\[ m\- n\- a \- \ w\- n\- a \- n\- k\- w\- a \- a k\- w\- a \]
\[ J U S- \ g o \ P R E P \ c o m p o u n d \ 2 S G . P O S S \ N E G . E X I S T \]
\[ \text{‘Let him never go to your compound!’} \] (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 \( d\- w\) ‘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. \( H\) \( w a \) \( d\- w\) \( \eta \) \( r\- a\) \( -\- a t\- a \) \( w\- j\- e \) \( m\- w\- a l \) \( =\- e g\) \( k\- w\- a w \).
\[ x\- n\- a \- d\- w \- \eta \- r\- a \- -\- a t\- a \- w\- j\- e \- m\- w\- a l \- =\- e g \- k\- w\- a w \]
\[ 2 S G . S B J \- \ w a n t \ \ I N F \ \ i n s u l t \ \ - 3 P L . D O B J \ \ c h i l d r e n \ \ m a n \ \ = P L \ \ N E G \]
\[ \text{‘You should not insult the young men.’} \] (HT1-SN:1.4)
\[ \text{(lit. ‘You don’t want to insult the male children.’)} \]

b. \( h e j e \) \( d\- w\) \( \eta \) \( b\- a h \) \( s o k\) \( w\- a w \).
\[ x\- e j\- e \- d\- w \- \eta \- b\- a h \- s o k\- w\- a w \]
\[ 1 I N C L . S B J \- \ w a n t \ \ I N F \ \ h i d e \ \ N E G \]
\[ \text{‘…we shouldn’t hide.’} \] (HT8-SN:7.11)
\[ \text{(lit. ‘…we don’t want to hide.’)} \]

Another type of clause expressing negation involves the use of the focus particle \( s\- e j \) ‘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.
9.2.3 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

\( k^w\text{"aw}/sk^w\text{"aw} \) (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. \textit{ara wala wese kwaw}.

\( \text{ārā wālā wēsē k"aw} \)

\text{COP woman DEM.DIST NEG}

‘…it’s not that woman.’  
(DP9-SN:2.1)
b. sa mba buwal kwaw
   sā mbāw bwāl k’āw
   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 gcene sakwaw .
   bērdzēŋ má mālā ntsēnē sk’āw
   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 āk’āw/āsk’āw (9.30 a & b). This is because there is no time limit on the situation expressed by the clause.

(9.30) a. Kay , mbey zukwana akwaw .
   káj mbj zk’anā āk’āw
   no! 3SG.STAT better NEG.EXIST
   ‘No, he (is) not better.’ (LL15-SE:9)

b. Dala dakala akwaw .
   dālā dākālā āk’āw
   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 ndoram $kwaw$.
wrëj anțā ndrām $k^wāw$
sauce DEF.DET pleasing NEG
‘The sauce (is) not pleasing.’
(You see it and are still eating it.)

b.  
Urey anta ndoram $akwaw$.
wrëj anțā ndrām $āk^wāw$
sauce DEF.DET pleasing NEG.EXIST
‘The sauce (was) not pleasing.’
(It has already been eaten.)

The adjective $k^włā$ ‘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.

(iii) Predicate prepositional phrases can be negated using either the plain (9.33a) or the existential negative marker (9.33b).
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 mbɔy ŋ jajaɓ kwaw.
            bɛrdzẽŋ mbj ŋ dzâdzâɓ kwaw
                    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 mbɔy ŋ jajaɓ akwaw.
            bɛrdzẽŋ mbj ŋ dzâdzâɓ akwaw
                    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 mbɔy ata kwahwaw kwaw.
            gâdwdâ mbj á tā kʷâhʷâw kwaw
                    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 mbɔy ata kwahwaw akwaw.
            gâdwdâ mbj á tā kʷâhʷâw akwaw
                    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 ákʷāw/āskʷāw (9.36 a & b) or the non-contracted version ákā skʷāw (9.36c) (see Section 4.11.2).

(9.36) a.  *Fagwalakw zeny akwaw.*

fāqʷālākʷ zēnej ákʷāw

leprosy again NEG.EXIST

‘There was no more leprosy.’  
(lit. ‘Leprosy again didn’t exist.’)

(HT4-SN:24.3)

b.  *səkan ŋ zam askaw.*

skān ŋ̱ zam áskʷāw

thing INF eat NEG.EXIST

‘…there was nothing to eat.’  
(lit. ‘A thing to eat didn’t exist.’)

(TN3-WN:1.6)

c.  *Na ndaha,  uda aka sakwaw.*

nā- ndā -xā wdā ákā skʷāw

1EXCL.SBJ- go -VNT.DIST food EXIST NEG

‘We came, there was no food.’  
(lit. ‘We came, food did not exist.’)

(NH11-SN:1.7)

This also applies to existential clauses expressing possession (9.37).

(9.37)  *Berjeŋ naka akwaw.*

bèrdzēŋ nākā ákʷāw

donkey 1SG.POSS NEG.EXIST

‘I don’t have a donkey.’  
(lit. ‘My donkey does not exist.’)

(LL19-SE:15)

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 \textit{akwaw}.
\[\text{dālā á rā sā ákʷāw}\]
money(ful.) PREP1 side 1SG NEG.EXIST
‘I do \textbf{not} have money.’
(lit. ‘Money (is) \textbf{not} with me.’)

b. [Dala ara sa ]NP [\textit{akwaw}] Pred.
\[\text{dālā á rā sā ákʷāw}\]
money(ful.) PREP1 side 1SG NEG.EXIST
‘I do not have money.’
(lit. ‘Money with me \textbf{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. \[Hwa dāw ü zlap ca : « [ Hwa mbamawal ma xʷā- dāw ü ḫāp tsá xʷā mbà māwàl má=\]
\[2SG.SBJ- want INF speak TOP 2SG.STAT child man REL=\]
tan' \textit{tang} \textit{sakwaw}SR » \textit{kwaw}MC.
\[tān-tān skʷāw kw̃āw\]
good NEG NEG
‘You shouldn’t (lit. don’t want to) say, “You are \textbf{not} a good young man.”’
(HT1-SN:1.8)
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 ɗāw ‘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.  
\[ Hwa \ dāw \ ŋ \ ulakza \ hwa \ ya : \ « \ Ebe \ ca , \]
\[ xʷā- \ dāw \ ŋ \ wlāk \ -zā \ xʷā- \ jā \ ēbē \ tsā \]
\[ 2SG.SBJ- \ want \ INF \ think \ -TRANS \ 2SG.SBJ- \ say \ DEM.MED \ TOP \]
\[ pəzek \ » \ kwāw . \]
\[ pəzek \ kʷāw \]
\[ small \ NEG \]
\[ ‘You shouldn't (lit. don't want to) think saying, "This one is small."’ \]
\[ OR \]
\[ ‘You should (lit. want to) think saying, “This one is not small.”’ \]
\[ (HT7-SN:1.13) \]

b.  
\[ A \ nuna \ anta \ jeje \ ege \ ay \ kazlap \]
\[ á \ nwnā \ āntā \ dzèdzē = égē \ j- \ kā- ḥāp \]
\[ PREP1 \ times.past \ DEF.DET \ grandparent =PL \ 3PL.SBJ- \ IPFV- \ speak \]
\[ ata \ dāla \ ma \ kadāw \ ŋ \ dās \ kwāw . \]
\[ á \ tā \ dālā \ má= \ kā- \ dāw \ ŋ \ dās \ kʷāw \]
\[ PREP1 \ on \ someone \ REL= \ IPFV- \ want \ INF \ cultivate \ NEG \]
\[ ‘In olden times, the grandparents talked about someone who didn't want to cultivate.’ \]
\[ OR \]
\[ ‘In olden times, the grandparents didn’t talk about someone who wanted to cultivate.’ \]
\[ (TN3-WN:1.1) \]

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.  
\[ Sa \ kadāw \ hwa \ denza \ ma \ kwāw . \]
\[ sá- \ kā- \ dāw \ xʷā- \ deŋ \ -zā \ mā \ kʷāw \]
\[ 1SG.SBJ- \ IPFV- \ want \ 2SG.SBJ- \ reflect \ -TRANS \ problem \ NEG \]
\[ ‘I don't want (that) you think about the problem.’ \]
\[ (GE31-SE:9) \]
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 sokan ma tanťaŋ
ā- săsām ākwaw màvāj kā- lēm skān mà= tāŋ-tāŋ
3SG.SBJ- rejoice NEG.EXIST because PFV- get thing REL= good

akwaw
ākwaw
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 mpe kwaw ndār 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 kāw ‘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 kwaw akwaw .
sā- dāw -bā kān zēnēj kāw ākwaw
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 kā- lá lēkwāl kāw ākwāw
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 tàkʷàm ‘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- lēm lā- ndā á pēs
daughter 3SG.POSS 3SG.SBJ- get NOM.ACT- go PREP1 day
mbaca a lekwal] takwam mavay mbøy kulaskwaw.
mbācā á lekwal tàkʷàm māvāj mbj kʷlàskʷāw
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. [ŋy la ma anta a tówse] takwam
j- lā mā āntā á tówṣé tàkʷàm
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 .
ďa vān tsá dā tàkʷàm
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- kā- dā -ēnē mā ŋ mbāw ěndē
1SG.SBJ- PFV- bring 3SG.IOBJ problem INF give.birth like.this.PROX
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 (9.47a & b). The perfective prefix or the imperfective prefix alone do not occur with \( \text{tak}^w\text{am} \).

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.

\[ \begin{align*} \text{(9.47) a.} & \quad A & \text{nazlar} & \text{takwam} & . \\
& \quad \text{ä-} & \text{ná-} & \text{ḥār} & \text{tak}\text{胺} & . \\
& \quad 3\text{SG.SBJ-} & \text{FUT-} & \text{open impossible} & . \\
& \quad \text{‘It is impossible that it will open.’} & \quad \text{(GE33-SE:8.1)} \\
& \quad \text{(lit. ‘It will open impossible.’)} & . \\
\text{b.} & \quad A & \text{kanazlar} & \text{takwam} & . \\
& \quad \text{ä-} & \text{kā-} & \text{ná-} & \text{ḥār} & \text{tak\text{胺}} & . \\
& \quad 3\text{SG.SBJ-} & \text{IPFV-} & \text{FUT-} & \text{open impossible} & . \\
& \quad \text{‘It is impossible that it will be opening.’} & \quad \text{(GE33-SE:8.2)} \end{align*} \]

### 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 \( \text{k}^w\text{āw/sk}^w\text{āw} \). Compare (9.48a) and (9.49b) with (9.48b) and (9.49b) where the existential negative negates the verb and not the adjective.

\[ \begin{align*} \text{(9.48) a.} & \quad \text{Sa} & \text{ca} & \text{rogwac ma} & \text{papedēk kwaw} & \text{, ma vère} . \\
& \quad \text{sā-} & \text{tsā} & \text{rg\text{̄}ats mā } & \text{papedēk} & \text{k\text{̄}aw} \quad \text{mā } & \text{vēr} & . \\
& \quad 1\text{SG.SBJ-} & \text{put clothes REL=} & \text{white NEG REL=} & \text{red} & . \\
& \quad \text{‘I put on clothes which are not white, which are red.’} & \quad \text{(GE65-SE:28.1)} \end{align*} \]
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- vàl -ēnē kān kādák kʷāw á mba āntā
3SG.SBJ- give -3SG.IOBJ thing good NEG PREP1 child 3SG.POSS
‘He gives something (that is) not good to his child.’

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 kʷá/skʷá, 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- kā- wān á xā nēlē vāw
3SG.SBJ IPFV lie PREP1 over egg Q
‘Was she sitting (lit. lying) on eggs?’ (C4-SN:8)

b.  ay kelene wa a man zeney kwa ?
j- kā- lā –ēnē wā á mān zēnēj kʷá
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.  Hejaye nghe ege ca , hune kasanata
xēdzē -jé nyē =ēgē tsā xʷnē- kā- sān -ātā
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 kājāba zley aza vaw

xʷⁿè- ká- jā -bā ḷēj āzā vaw

2PL.SBJ- PFV- kill -BEN meat COMPL Q

‘…did you kill yourselves some meat?’ (NF6-SN:3.1)

c. Ḣy nezenha na na ḳgha vaw?

ǰ- ná- zên -xā nā nā 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 sakan patakwar vaw?

ārā skān pátákʷār vāw

cop thing hoof Q

‘Is it an animal (lit. thing of hoov(es))?’ (LL3-SE:30)

b. Hwa werwer vaw?

xʷā wēr-wēr vāw

2SG.SBJ- healthy Q

‘Are you healthy?’ (LL1-SE:7)

c. Ḥy a wata vaw?

ǰ ā wātā vāw

3PL.SBJ- PREP1 compound Q

‘Are they at home?’ (LL16-SE:4)

d. Zley kan ḳgha aka vaw

ḧēj kān nyā ākā vāw

meat thing DEM.PROX EXIST Q

‘Is there this type meat (at this restaurant)?’ (C11-SN:124.1)
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_?
   té té  _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*  _sokan bāse_  _vaw_?
   ārā  dālā  _vāw_  ārā  skān  bsē  _vāw_
   COP  someone  Q  COP  thing  zero  Q
   ‘Is it someone or is it a simple (lit. zero) thing?’  (LL3-SE:24)

b.  *Hwa*  _dawbā*  ŋ  _saba_  _say_  _vaw_ ,  _yam_  _vaw_?
   xšā-  dāw  -bā  ŋ  sā  -bā  sāj  _vāw_  jām  _vāw_
   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 ńgha ca, pataw vaw, həza vaw?** Rav, ńgha ca, pataw vaw, həza vaw?
   má= zam ḋəj nyə tsá pátáw vaw xzə vaw
   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. **ŋkwaɓ tata anta ca, a nda kalkal a**
   nkʷäɓ tätá ŋntä tsä å- ndä kalkal á
   mind 3SG.POSS DEF.DET TOP 3SG.SBJ go equal(ful.) PREP1
   medëɗë vaw, parpar parpar vaw .
   mēɗëɗë vaw păpăr păpăr vaw
   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 ńgas vaw, a muta?**
   xʷä- ndä á ńgas vaw á mwta
   2SG.SBJ- go PREP1 foot Q PREP1 car(fr.)
   ‘Are you going by foot or by car?’ (LL34-SE:4)

f. **Əy kávalzaɓ aza cekudè ca aka vaw, j- ká- вал -zä -ɓä ázä tsékʷdë tsä ákä vaw**
   3PL.SBJ- PFV- give -TRANS -BEN COMPL a.little.bit TOP EXIST Q
   akwaw vaw ?
   ákʷä vaw
   NEG.EXIST Q
   ‘Did they give a little 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 *vaw* preceded by a speculative modal marker *ká* (see Secton 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.  
\[ \text{Gore } \text{sa } \text{navalahwaw } \text{dala } \eta kwa \ a \]
gré sā- nā- vál -āxʷāw dálānkʷā á
maybe 1SG.SBJ- FUT- give -2SG.IOBJ money(ful.) 2SG.POSS PREP1
mapat \( kā \) \( vāw \) ?
māpā́t \( ká \) \( vāw \)
morning \ SPEC \ Q
‘Maybe I will give you your money tomorrow?’  (GE48-SE:3.4)

b.  
\[ \text{Gore } \text{hwa } \text{nda a } \text{Makwalaw ca ,} \text{} \eta t e k e y \text{ ara} \]
gré xʷā- ndá á màkʷälāw tsá ntā -ēkēj ērá
maybe 2SG.SBJ- go PREP1 Mokolo TOP take -1SG.DOBJ SIM
\( kā \) \( vāw \) ?
kā \( vāw \)
\ 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.  
\[ \text{gore } \text{heje } \text{lābā } \text{vangay } \text{ka } \text{vāw} \ ? \]
gré xējé- lä -bā vāngāj kā vāw
maybe 1INCL.SBJ- do -BEN how \ SPEC \ Q
‘…what (lit. how) do we do maybe?’ (C12-SN:28.1)

b.  
\[ \text{Ca gore ma } \text{anta a } \text{nagwar pa a} \]
tsá gré mā āntā ā- nā- gʷār pá á
TOP maybe problem DEF.DET 3SG.SBJ- FUT- arrive at.a.level PREP1
\( katāj \) \( kā \) \( vāw \) ?
kátā́j \( ká \) \( vāw \)
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 āzà vāw ?
    xʷā- zam wdā á wātā nākā tsá ākā 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. vedye ay kahan ca hwa daw ca sa sa
    vēdję j- kā- xān tsá xʷā- daw tsá sā sā-
    other 3PL.SBJ- IPFV- cry TOP 2SG.SBJ- want TOP 1SG 1SG.SBJ-
    sasam āzà vāw
    såsām 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 āzà vāw ?
    á- kā- wsta ákʷāw 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 kája kába zley aza
káj q̰ʷàmðàkʷ =égë xʷnè ká- jà -bà ḥjej âzá
Oh! toad =PL 2PL.SBJ- PFV- kill -BEN meat COMPL
vaw ? »
vaw
Q
‘Hey toads, did you kill yourselves some meat?’

b. Gwambakw ege ay nguya : « Ayaw . »
g̰ʷàmðàkʷ =égë j- ngàjá ājàw
toad =PL 3PL.SBJ- QUOT yes
The toads said “Yes”.

(9.61) a. Hwa kulaskwaw vaw ?
xʷā k̰ʷlàskʷāw vāw
2SG.SBJ sick Q
‘Are you sick?’

b. Ayaw , sa kulaskwaw .
ājàw sā k̰ʷlàskʷāw
yes 1SG.SBJ sick
‘Yes, I am sick.’

(LL15-SE:11-12)

The pro-sentence ājàw ‘yes’ can also be used to answer negative questions (9.62 a & b)
confirming the truth of the negative proposition.

(9.62) a. Hwa kànda a luma akwaw vaw ?
xʷā- ká- ndā á ḻw♠à ákʷ̰ẉāw vāw
2SG.SBJ- PFV- PREP1 market(ful.) NEG.EXIST Q
‘Didn’t you go to the market?’

b. Ayaw , sa kànda a luma akwaw .
ājàw sā- ká- ndā á ḻw♠à ákʷ̰ẉāw
yes 1SG.SBJ- PFV- 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 ŋ́ɣè ‘no’, like the plain negative marker kʷāw 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 ?
    xʷā-  ndā  āká  á  dámāw  vāw
    2SG.SBJ-  go  ACC  PREP₁  bush  Q
‘Did you come back from the bush?’

b.  ḅge ,  sa  nda aka a  damaw kwaw .  Sa  nda aka
    ŋ́ɣè  sā-  ndā  āká  á  dámāw  kʷāw  sā-  ndā  āká
    1SG.SBJ-  go  ACC  PREP₁  bush  NEG  1SG.SBJ-  go  ACC
    a  luma  .
    á  lwmā
    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  kánḍa  ŋ̄ sarata  ma  a  wata
    xʷā-  kā-  ndā  ŋ̄  sār  -ātā  má=  á  wātā
    2SG.SBJ-  PFV-  go  INF  visit  -3PL.DOBJ  REL=  PREP₁  compound
    baba  ŋkwa  ege  yam .
    bābā  nkʷā =égē  jām
    father(ful.)  2SG.POSS =PL  also
‘You have also gone to visit those at your father’s compound.’

b.  ḅge .
    ŋ́ɣè
    no
‘No.’
   (C4-SN:13-14.1)
The existential negative marker ákʷāw (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 ákʷāw 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?*  
2SG.SBJ- go PREP1 house God PREP1 on today Q  
‘Did you go to church (lit. God’s house) today?’

   b. *Akwaw, sa kánda akwaw.*  
   NEG.EXIST 1SG.SBJ- go NEG.EXIST  
   ‘No, I didn’t go.’  
   (GE11-SE:46.1-2)

(9.66) a. *Macahw a da unaf akwaw vaw, zlanahw*  
mother.2POSS 3SG.SBJ- bring heart NEG.EXIST Q sibling.2POSS  
‘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.*  
   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 kadaw  uda vaw?*
   x̂wā- kā- dāw wdā vāw
2SG.SBJ- IPFV- want food Q
‘Are you wanting food?’

b.  *Kay sa  kadaw  uda kwaw.*
   kāj sā- kā- dāw wdā k̂ŵaw
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?*
   x̂wā- kā- ḳām wdā á wrēj ḥēj gāmtāk 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.*
   kāj sā- kā- ḳām wdā á wrēj ḥēj gāmtāk āk̂ŵaw
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 *kāj* can be used to answer negative questions (9.69 a & b). Unlike the existential negative (see above), *kāj* in this case is used to deny the truth of the negative presupposition.

(9.69) a.  *Zla ŋkwa akwaw vaw?*
   ḥā nk̂wā āk̂ŵaw vāw
ox 2SG.POSS NEG.EXIST Q
‘Don’t you have a ox?’

b.  *Kay, zla naka aka.*
   kāj ḥā nākā ākā
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 véméj?  
ārā véméj  
COP what  
‘What is it?’

b.  

Ara həza .  
ārā xzə  
COP dog  
‘It’s a dog.’ (GE15-SE:81.1-2)

(9.71) a.  

Heje a ngəra vékéj?  
xèdzə ā ntrā vékéj  
INCL.STAT PREP1 month which  
‘Which month are we in?’
b. Heje a ğtəra pes.
xèdzè á nträ 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 ŋgha] vayay?
má= dā -ekek wālā fāgʷālākʷ n̓yā 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 ŋkwa vemey?
xʷā- lá -ēnē á māwāl nkʷā veméj
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?
xʷā- mbāl -ēnē wrēj á vájáj
2SG.SBJ- trim -3SG.IOBJ vegetables PREP1 who
‘For whom are you trimming vegetables?’ (LL17-SE:51)
(9.73) Hwa caf a vemej', benjer?
xʷā- tsāf á vēmēj béndzēr
2SG.SBJ- decorate PREP1 what squirrel
‘What did you decorate with, squirrel?’ (NF2-SN:3.5)

The interrogative pronoun vētsēj ‘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 vēcey?
xʷā- mbāl wrēj vētsēj
2SG.SBJ- pluck vegetables whose
‘Whose vegetables are you trimming?’ (LL17-SE:50)

b. Ujek ma tuwah ngha mala vēcey?
wjēk má= twáx nyangā mālā vētsēj
hut REL= great DEM.PROX GEN whose
‘Whose is this great hut?’ (GE3-SE:34)

c. Əy kāŋkōɗ aw wende zeney a vēcey?
j- kā- nkōaw wēndé zēnēj á vētsēj
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 kātāj. Each of these is always preceded by a preposition, most frequently á (9.75a), but j is also possible (9.75b).

(9.75) a. Əy dák a vay?
j dák á váj
3PL.STAT gone PREP1 where
‘Where did they go?’ (LL6-SE:7)
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 ṣkwa a katój ?
   wjēk nkʷā á kátáj
   house 2SG.POSS PREP1 where
   ‘Where is your house?’ (LL6-SE:1)

b. Hwa nda a katój ?
   xʷā- 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 vanyay ?
   ɡʷäjɡʷäjä ä- lä wān vánáj
   festival 3SG.SBJ- do day how many
   ‘How many days does the festival last?’ (LL46-SE:15)
b. \textit{Welzye anta ege vana}y ?
\[\text{wālā -jé āntā = ēgē vānāj}\]
\textit{wife -PL 3SG.POSS =PL how.many}
‘How many wives does he have?’ \hspace{1cm} (GE3-SE:52)
(lit. ‘His wives are how many?’)

c. \textit{Ŋgəzlen nkwa kēzenjeyeye vana}y ?
\[\text{ŋŋɔzlen nkˈwà ká- zēj -ējē vānāj}\]
\textit{peanut 2SG.POSS PFV- weigh -PART how.many}
‘How much did your peanuts weigh?’ \hspace{1cm} (GE3-SE:53)

The answer to a question with \textit{vānāj} ‘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 \textit{vāngāj} ‘how’ (see Section 9.3.2.3 below).

(9.78) a. \textit{Hejaye vana}y ?
\[\text{xèdxè -jé vānāj}\]
\textit{person -PL how.many}
‘How many people (are there)?’ \hspace{1cm} (GE3-SE:54.1)
(lit. ‘The people are how many?’)

b. \textit{Hejaye mabhad}.
\[\text{xèdxè -jé māxkād}\]
\textit{person -PL three}
‘There are three people.’ \hspace{1cm} (GE3-SE:54.2)
(lit. ‘The people are three.’)

\subsection{9.3.2.3 Interrogative pro-adjective}

The interrogative pro-adjective \textit{vāngāj} ‘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 ŋkune ege yam vangay?
má = á wätä nkʷnē =égē jäm vāŋgāj
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 njā vangay?
dzēm āntā ā- ndzā vāŋgāj
length 3SG.POSS 3SG.SBJ- sit how
‘How long is it?’ (LL28-SE:28)
(lit. ‘Its length sits how?’)

When inquiring about the amount of a mass nouns (9.80a) or the size of something (9.81a) the word xámá ‘amount/size’ may precede vāŋgāj ‘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 vangay?
vākʷ āntā xámá vāŋgāj
sand DEF.DET amount how
‘How much sand is there?’ (GE3-SE:55.1)
(lit. ‘How is the amount of sand?’)

b. Dakala.
dākālā
a.lot
‘A lot.’ (GE3-SE:55.2)

(9.81) a. Jem wala nkwa , mbay hama vangay?
dzēm wālā nkʷā mj xámá vāŋgāj
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. Mbay 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 váŋjáj ‘how’ (9.82 a & b).

(9.82) a.  
\[ \text{Yam} \quad \text{anta} \quad \text{gàr} \quad \text{vangay} \quad ? \]
\[ \text{jàm} \quad \text{ântà} \quad \text{gàr} \quad \text{váŋjáj} \]
water DEF.DET state how
‘How is the state of the water?’  
(GE3-SE:56.10)

b.  
\[ \text{Dëdëwek} \quad . \]
\[ \text{dédwëk} \]
bitter
‘Bitter.’  
(GE3-SE:56.11)

9.3.2.4 Interrogative pro-adverb

The interrogative pro-form váŋjáj ‘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.  
\[ \text{Hwa} \quad \text{káwan} \quad \text{vangay} \quad ? \]
\[ \text{xʷä-} \quad \text{ká-} \quad \text{wān} \quad \text{váŋjáj} \]
2SG.SBJ- PFV- sleep how
‘How did you sleep?’  
(GE3-SE:30)

b.  
\[ \text{Ngama} \quad \text{ege} \quad \text{ay} \quad \text{zlapza} \quad \text{kusam} \quad \text{ca} \quad \text{vangay} \quad ? \]
\[ \text{ŋjámà} \quad \text{=égē} \quad \text{j-} \quad \text{ţāp} \quad \text{-zā} \quad \text{kʷsàm} \quad \text{tsá} \quad \text{váŋjáj} \]
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).
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 màväj (or nγam
borrowed from Fulfulde) ‘because’ (9.85a) or á tā ‘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 vemy ?

xʷä- dzä wlä véméj

2SG.SBJ- hit neck what
‘Why are you crying out (lit. hit neck)?’

b.  
Hwa la sakan ma da ebe vemy ?

xʷä- lā skän má dā ēbē véméj

2SG.SBJ- do thing REL= resemble DEM.MED what
‘Why do you do things like (lit. which resemble) this?’

(9.86) a.  
Hwa poreslène la anta aza mavay vemy ?

xʷä- präl -ēnē lā äntā ēzā màväj véméj

2SG.SBJ- seize -3SG.OBJ field 3SG.POSS COMPL because what
‘Why (lit. because of what) did you seize his field?’

b.  
Hwa gazl mba anta ata vemy ?

xʷä- gäl mba äntā ā tā véméj

2SG.SBJ- beat child 3SG.POSS PREP1 on what
‘Why (lit. on what) do you beat his child?’
Another complex form involving the preposition ŋ́ 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.  
\[g\text{way , hwa bedzekey ka } ŋ \text{ vay} !\] 
\[g^w\text{aj } x^w\text{a- bàd } -z\text{a } -čkēj kā ŋ\text{ váj}\] 
\[2\text{SG.SBJ- deceive } -\text{TRANS } -1\text{SG.DOBJ ANT PREP2 where}\] 
The term for what purpose did you deceived me? (NF2-SN:3.3)

b.  
\[Hwa zam uda aza tewtew } ŋ \text{ vay} ?\] 
\[x^w\text{a- zām wdā āzá tēw-tēw ŋ\text{ váj}\] 
\[2\text{SG.SBJ- eat food } \text{COMPL all PREP2 where}\] 
The term 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 nějé 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.  
\[a kandoram neye g\text{way} ?\] 
\[á- kā- ndrām nějé g^w\text{aj}\] 
\[3\text{SG.SBJ- IPFV- please TAGCONF pal}\] 
‘…it was pleasing, wasn’t it, pal?’ (C15-SN:29)
(9.89) a. Ca a lahawaw hahar a zeney neye?
tsá ā- lā -āxʷāw xáxār á zēnēj nējé
TOP 3SG.SBJ- do -2SG.IOBJ pity PREP1 again TAG.CONF
‘So it made you have pity once again, didn’it?’

b. A lekey hahar.
ā- lā -ēkēj xáxār
3SG.SBJ- do -1SG.IOBJ pity
‘It made me have pity.’

Another type of confirmation tag question is formed using the plain negative maker
kʷāw/skʷāw 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 pēs má= xʷā ā- kā- dā tsá sā- kā-
PREP1 day REL= 2SG.SBJ- 3SG.SBJ- IPFV- cook TOP 1SG.SBJ- IPFV-
sa kayahwaw , kwaw vaw?
sā- kā- jā -āxʷāw kʷāw vāw
1SG.SBJ- IPFV- call 2SG.DOBJ NEG Q
‘…on the day that you…, she is cooking, I am, I am calling you, aren’I?’

b. Andwsé , andwsé , sa naghwalzahune.
ándwsé ándwsé sā- ná- yʷāl -zā -āxʷnē
like.that like.that 1SG.SBJ- FUT- show -TRANS 2PL.IOBJ
‘(It’s) like that, (it’s) like that, I will show you.’

517
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 méné. 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 ŋ  ban  aza  menego  ?
    ndā ʃ  bān  əzā  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  menego?
    má=  jā  -āxʷāw  tsā  vájāj  kēs  əzā  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 méné is derived from mānā ‘my/our mother’ plus the plural marker ēgē (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)  Hejóye  ay  kada  ndreý  kədā  ŋ  damaw ,
    xèdzè  -jé  j-  kā-  dā  ndrēj  kðā  ĕ  dámāw
    person  -PL  3PL.SBJ  IPFV-  bring  sorghum  towards  PREP2  bush
    sa  nda  ŋ  zlakahā  yam  menego  ?
    sā-  ndā  ŋ  ëk  -ā  -bā  jām  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* *may* ?

\[
\begin{align*}
\text{mā-} & \quad \text{ŋ} & \quad \text{sār} & \quad -zā & \quad -ēkēj & \quad \text{jām} & \quad \text{máj} \\
\text{JUS-} & \quad \text{INF} & \quad \text{visit} & \quad -\text{TRANS} & \quad -\text{1SG.DOBJ} & \quad \text{also} & \quad \text{TAG.IMP.POL}
\end{align*}
\]

‘Let him also come and visit me please?’  (C12-SN:128.1)

b. *mpam* *serek* *ma* *tañtañ* *ma* ?

\[
\begin{align*}
\text{mpām} & \quad \text{sērēk} & \quad \text{mā} = & \quad \text{tāŋ-tāŋ} & \quad \text{má} \\
\text{look.for} & \quad \text{rope} & \quad \text{REL} = & \quad \text{good} & \quad \text{TAG.IMP.POL}
\end{align*}
\]

‘…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* *may* ?

\[
\begin{align*}
\text{sā-} & \quad \text{bā} & \quad \text{jām} & \quad \text{máj} \\
\text{1SG.SBJ-} & \quad \text{taste} & \quad \text{also} & \quad \text{TAG.IMP.POL}
\end{align*}
\]

‘(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  kāla  anta  ete
sā-   tsāk  vjā  kā-  lā āntā  ā  tē
1SG.SBJ- believe rainy.season PFV- do 3SG.POSS PREP1 here
tew]    .
tēw
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 ].
   xʷā- sān dālā má = mbāw -xā
   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- dā wnāf màvāj bābā āntā
   3SG.SBJ bring heart because father(ful.) 3SG.POSS
   kévelene dala akwaw . ]
   kā- vál -ēnē dālā ākwāw
   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
   kārbā j- nā- lēm dālā j- kā- dāw
   even.though 3PL.SBJ- FUT- get money(ful.) 3PL.SBJ- IPFV- want
   ŋ la zlan kwaw .
   ŋ lá ʒān kʷāw
   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 ay ya hejye [ma kampam bay] ege.*
   jā j- jā xèdzè -jé má= kā- mpàm bāy =ēgē
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 maslagà anta [ ma ata təkad’ *
   j- lā mátàgà āntā má= ā tā tκād’
   3PL.SBJ- make piece.of.cloth DEF.DET REL= PREP on wrap.around
   a 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 ay dedew [ndár a *
   mālā mátskʷaxʷ j- dedē -āw ndár ā-
   GEN evening 3PL.SBJ- pour.into -3SG.DOBJ so.that 3SG.SBJ-
   na zadāw zadāw . ]
   nā zadāw zadāw
   ferment night night
   ‘…in the evening they pour it into (pots) so that it ferments all night.’
   (DP2-SN:2.4)
b. 

\[
\text{[Ndar bwa nazlar a taba heje tewtew .]}
\]

\[
\text{ndár xʷá- ná- ḏār á tābā xèdzè téw-téw}
\]

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 \(\mathbf{ŋ́}\). 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 \(\mathbf{ŋ́}\), which also marks indirect objects with a benefactive role (see Section 8.1.1.3).

(10.5) a. 

\[
\text{a rakha ndørey mavøday sakan [ŋ zam askwaw .}
\]

\[
\text{ā- rāk -xā ndrēj māvdāj skā ŋ zam āskwāw}
\]

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. 

\[
\text{Sa kasan [ŋ das ghwarnakw] .}
\]

\[
\text{sā- kā- sān ŋ das yʷarnakʷ}
\]

1SG.SBJ- IPFV- know INF cultivate onion

‘I know (how) to cultivate onions.’

(GE28-SE:50)

c. 

\[
\text{hejøye øy kanda aza [ŋ njen ngas]}
\]

\[
\text{xèdzè -jé j- kā- ndā āzā ŋ ndzēn ngās}
\]

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 tā ‘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 ŋ́, a verb introduced by á tā 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 mèl má= á tā dà wrēj
COP oil REL= PREP1 on prepare sauce

‘It’s oil for preparing sauce.’ (C6-SN:15)

b.  
ŋgozlenŋ ngwayaŋ naka [ata ra] .
ŋgőzlenŋ ngʷąjāŋ nākā á tā rā
ground.peas 1SG.POSS PREP1 on dig

‘My ground peas are for digging.’ (DP13-SN:4.2)

c.  
Sa dorezlza la naka aza [ata
sā- drḗ źā lä nākā āzā á tā
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 .
tāk ākā ŋ̣ ẓ́am ēzē ā- kā- ndā ēzē skʷá
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

<table>
<thead>
<tr>
<th>Subordinate clause category</th>
<th>Formal type</th>
<th>Subordination strategy</th>
<th>Semantic types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complement</td>
<td>Sentence-like</td>
<td>-Embedding only</td>
<td>-Propositional attitude</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Comentative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Immediate perception</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Jussive</td>
<td>-Obligation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Manipulative</td>
</tr>
<tr>
<td>Reduced sentence-like</td>
<td>-Limited tense/aspect marking</td>
<td></td>
<td>-Desiderative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Obligation</td>
</tr>
<tr>
<td>Infinitive</td>
<td>-Infinitive verb form</td>
<td>-Desiderative</td>
<td>-Ability</td>
</tr>
<tr>
<td></td>
<td>-Complement subject omitted</td>
<td></td>
<td>-Permission</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Achievement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Phasal</td>
</tr>
<tr>
<td></td>
<td>-Infinitive verb form</td>
<td>-Manipulative</td>
<td>-Ability (teach)</td>
</tr>
<tr>
<td></td>
<td>-Complement subject expressed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech reports</td>
<td>Direct</td>
<td>-Quotative marker ṣgājā (opt.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Utterance verb before comp. (opt.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Utterance verb after comp (opt.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-No marking (opt.)</td>
<td></td>
</tr>
<tr>
<td>Subordinate clause category</td>
<td>Formal type</td>
<td>Subordination strategy</td>
<td>Semantic types</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------------</td>
<td>------------------------</td>
<td>----------------</td>
</tr>
</tbody>
</table>
| Speech reports (cont…)     | Indirect    | -Quotative marker *ngājā* (opt.)  
-Utterance verb before comp. (opt.)  
-Utterance verb after comp (opt.)  
-Variation in pronouns | |
| Resumptive                 | -Quotative marker *m à tąngār* + NP  
-Utterance verb before comp. (opt.) | |
| Relative                   | Marked with relative marker  
-Relative marker *má* | |
| Sentence-like              | -NP omission  
-Agreement marking  
-Pronouns | -Subject, Direct Object (3SG non-pausal), Oblique  
-Direct Object, Indirect Object  
-Oblique, Possessor |
| Deranked                   | -Participle  
-á tą + verb | -Attributive  
-Purpose |
| Verbless                   | -NP omission | -Attributive, Location etc |
| Existential                | -Existential marker *ákā* at end of clause  
- Existential marker *ákā* following relativised NP | -Subject  
-Direct object, Indirect object, Oblique, Possessor |
| Adverbial                  | Sentence-like  
-‘place’ + REL  
- ánā + REL | Locative  
-Manner — real & hypothetical  
-Example  
-According to  
-Manner-hypothetical  
-Manner-real |
|                           | -xāngá ‘as if’ alone  
-xāngá ‘as if’ + REL | Reason |
|                           | -màvāj/màvdāj  
‘because’ + (REL) | |
|                           | -á tą + REL | Cause |
|                           | -kārbā ‘although’ + (REL)  
OR évēlē ‘although’ | Concessive |
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>
<thead>
<tr>
<th>Matrix Clause</th>
<th>Complement Clause</th>
</tr>
</thead>
</table>

Table 10.2: Structure of Buwal complement clauses

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)  
\[ Sa \text{ } \text{ke gore [ a } \text{ } \text{katawar a } \text{ } \text{mb } \text{ } \text{njowen }] . \]
\[ 1 \text{SG.SBJ-IPFV-see 3SG.SBJ-IPFV-travel PREP1 3SG true} \]
\[ \text{‘I see that it’s true that he is travelling with him.’} \]  
\[ \text{(C12-SN:111.2)} \]
\[ \text{(lit. ‘I am seeing he is travelling with him truely.’)} \]

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 daw [hwa san [mba nkwa a gore [muta
sā- dāw xʷā- sàn mbā nkʷā ā- grē mwtı́
1SG.SBJ- want 2SG.SBJ- know child 2SG.POSS 3SG.SBJ- see car(ful.)
a kehey ata taf]].
ā- kā- xēj á tā taf
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 gore [a nda ], [a ghwalza a tama
xʷā- grē ā- ndā ā- yʷāl -zā ā tămā
2SG.SBJ- see 3SG.SBJ- go 3SG.SBJ- explain -TRANS PREP1 front
hejaye ma ber zlap gazlavay ege ]
xèdzē -jé má= bēr ḃāp gāšāvāj = ēgē
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’, **dēŋ** ‘think/reflect’, **wlàk** ‘think’ and **lāŋgāl** ‘measure/reckon’. These take sentence-like complements (10.10).

(10.10) \( Sa \ cak \ [ hwa \ kadas \ ghwarnakw \ . \ ] \)
   \( \begin{array}{lll}
   \text{sā-} & \text{tsāk} & \text{xwā-} \ kā- \ dās \ \text{yˈārnàkʷ} \\
   1\text{SG.SBJ-} & \text{believe} & 2\text{SG.SBJ-} \ \text{IPFV-} \ \text{cultivate onion} \\
   \end{array} \)

   ‘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 **dzējèkʷ** ‘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 kereheney aza a
ná- xán bédžēr ká- rēh -ēnēj āzā ā
1EXCL.SBJ- mourn squirrel PFV- save -1EXCL.OBJ COMPL PREP1
dbē ].

dbē
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 sān ‘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 sān 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 bērmē ‘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 kāsanza [ara ndorey ma nda
xèdzē wēsē kā- sān -zā ārā ndrēj má= ndā
person DEM.DIST PFV- know -TRANS COP sorghum REL= come
a wata āntā ].

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- sān ā- nā- ndā á marwa á mpat
1SG.SBJ- know 3SG.SBJ- FUT- go PREP1 Maroua PREP1 tomorrow
‘I know he will go to Maroua tomorrow.’ (GE39-SE:13.7)

(10.13a). Kézlame [mavaw a wata dāla].
kā- ḥmē mávāw á wātā dālā
PFV- hear beer PREP1 house someone
‘He heard beer was at someone’s house.’ (TN3-WN:1.3)

b. Hwa gāre [a dāw ŋ lemba kan ta zam].
xʷā- grē ā- dāw ŋ lēm -bā kān tá zām
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’, tsātsān ‘notice’, ndāw ‘find/come upon’, ndzèf ‘smell’, ḥmē ‘hear, feel, understand’ and ḡàn ‘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).

(10.14a). Heje kegāre [vejed’ aka].
xējé- kā- grē vēdzēf ākā
1INCL.SBJ- IPFV- see leaf EXIST
‘...we see there are leaves...’ (C7-SN:11.1)

b. Sa njeʃ [zley a kada ata kwahwaw].
sā- ndzèf ǰeʃ ā- kā- dā á tā kʷāhʷāw
1SG.SBJ- smell meat 3SG.SBJ- IPFV- cook PREP1 on fire
‘I smell meat cooking on the fire.’ (GE39-SE:16.1)
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 dąw, 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- kā- dāw xʷnē- ntiř ā mā bwāl  
1EXCL.SBJ- IPFV- want 2PL.SBJ- write PREP1 language Buwal  
‘We want you to write in the Buwal language.’ (LL3-SE:19)

ā- dāw ŋ ntāw -āxʷāw  
3SG.SBJ- want INF whip -2SG.DOBJ  
‘He wanted to whip you.’ (C16-SN:16)

c. Sa dāw [sa ndā jam ] .  
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 dēŋ and wľāk ‘think’ have a desiderative meaning when followed by an infinitive complement (10.16).
‘…they are thinking of giving (lit. to give) thanks to God…’

(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 $d\dot{a}w$ ‘want’ (10.17a) or $l\dot{e}m$ ‘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).

When taking an infinitive complement, the verb $d\dot{a}w$ ‘want’ can also be used to express obligation or the giving of advice (10.18). The verb $l\dot{e}m$ ‘get’ when taking an infinitive complement does not express obligation but achievement (see point (x)).
(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 ḡāp ‘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. \[sa \hspace{1em} zlepene \hspace{1em} a \hspace{1em} [mawal \hspace{0.5em} naka \hspace{0.5em} ē]\]
\[sā- \hspace{0.5em} ḡāp \hspace{0.5em} -ēnē \hspace{0.5em} á \hspace{0.5em} māwāl \hspace{0.5em} nākā \hspace{0.5em} ī]
\[1SG.SBJ- \hspace{0.5em} tell \hspace{0.5em} -3SG.IOBJ \hspace{0.5em} PREP1 \hspace{0.5em} husband \hspace{0.5em} 1SG.POSS \hspace{0.5em} INF \]
\[ndaha \]
\[ndā \hspace{0.5em} -xā\]
\[come \hspace{1em} -VNT.DIST\]
\]['I tell to my husband to come.'  (GE39-SE:35.6)

b. \[Zlepetene \hspace{1em} [əy \hspace{1em} mayakza \hspace{1em} aka ] \]
\[ḡāp \hspace{0.5em} -ētēnē \hspace{0.5em} ī \hspace{0.5em} mā- \hspace{0.5em} jāk \hspace{0.5em} -zā \hspace{0.5em} ākā\]
\[tell \hspace{0.5em} -3PL.IOBJ \hspace{0.5em} 3PL.SBJ- \hspace{0.5em} JUS- \hspace{0.5em} leave \hspace{0.5em} -TRANS \hspace{0.5em} ACC\]
\['Tell them that they should leave it there.' \hspace{1em} (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: ṛāk ‘ask’, bāɗ ‘trick’ and tāk ‘oblige’. In this case, however, the person being manipulated is coded as the direct object.

(10.20) \[sa \hspace{1em} karak \hspace{1em} [hejye \hspace{0.5em} ē \hspace{0.5em} pad \hspace{0.5em} ujek \hspace{0.5em} naka ] \]
\[sā- \hspace{0.5em} kā- \hspace{0.5em} ṛāk \hspace{0.5em} xèdzè \hspace{0.5em} -jē \hspace{0.5em} pād \hspace{0.5em} wjēk \hspace{0.5em} nākā\]
\[1SG.SBJ- \hspace{0.5em} IPFV- \hspace{0.5em} ask \hspace{0.5em} person \hspace{0.5em} -PL \hspace{0.5em} INF \hspace{0.5em} wrap \hspace{0.5em} hut \hspace{0.5em} 1SG.POSS\]
\[‘…I am asking people to thatch (lit. wrap) my hut.’\]  (DP7-SN:2.3)
(viii) Ability

ABILITY can be expressed through predicates containing the adjective *kʷ lá ‘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. *Mbɔy kula [ŋ hẽɓ baskwar ].*

mbɛ̃ kʷ lá ŋ hẽɓ bāskʷ ār
3SG.SSTAT able INF steer bicycle

‘He is able to ride a bicycle.’

(GE1-SE:4)

b. *Sa san [ŋ das ndarey ].*

sā- sān ŋ das ndrēj
1SG.SBJ- know INF cultivate sorghum

‘I know how to cultivate sorghum.’

(GE39-SE:34.1)

c. *Sa kāsasərakzata [uz̄ye ŋ ja balaŋw ].*

sā- kā- sàsràk -zā -ātā wzjē ŋ dzā bālāŋʷ
tpV 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 *kʷ lá ‘able’* as a predicate with an infinitive complement (10.22).

(10.22) *Hwa kula [ŋ nja aka ete nγhe ].*

xʷā kʷ lá ŋ ndzā ākā á tē nγē
2SG.SSTAT able INF sit ACC PREP1 here DEM.PROX

‘You can (lit. are able to) sit down right here.’

(LL9-SE:9)
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’, tål ‘make an effort’, làn ‘try’ and xēsēŋ ‘forget’. Each of these takes an infinitive complement (10.23 a & b).

(10.23) a. hwa kēlem [ŋ mbalaha varvara ŋ]
   xʷā- kā- lèm ŋ mbāl -ā -xā vāvārā ĭ
   2SG.SBJ- PFV- get INF hold -VNT.PROX -VNT.DIST land INF

   hayak ŋkwā a wata ] sēkwaw
   xājak nkʷā á wātā skʷaw
   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 ŋ lān -zā ŋ lām wjēk
   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 sān ‘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 ]
   xējē- sān -zā -ēnē ĭ lā -ēnē wāsāj
   1INCL.SBJ- know -TRANS -3SG.IOBJ INF do -3SG.IOBJ thanks

   ‘…we remember to give him thanks…’ (HT4-SN:36.3)
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 ķ mpâm wjēk tá ĸ wârâw
1EXCL.SBJ- begin INF search hut by PREP1 neighbourhood(ful.)
ŋtakwaw ata la ngha . ]
ntâkʷàw á tâ lá nîyâ
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 ķ xēj á màɮâɮáj
antelope 3SG.SBJ- hurry INF run PREP1 intensity
‘The antelope ran even faster…’
(lit. ‘The antelope hurried to run with intensity…’)
(NF6-WN:2.8)

Imminent events can be expressed with either the adjective láɓ ‘almost/ready’ (10.27a) or with the verb dâw ‘want’ (10.27b).

(10.27)a. Sa slaɓ [ŋ nda a luma ]
sā láɓ ķ ndâ ĸ lûmâ
1SG.STAT ready INF go PREP1 market(ful.)
‘I am about (lit. ready) to go to the market.’
(GE13-SE:15.1)
b. \[ \text{Nene } d\text{aw } [\eta \text{ la ma } ] \].
\[ \text{nèné- } d\text{aw } \dddot{\text{j}} \text{ lā mā} \]
\[ \text{EXCL.SBJ- want INF do problem} \]
‘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**

<table>
<thead>
<tr>
<th>Predicate</th>
<th>Semantic type</th>
<th>Complement type</th>
</tr>
</thead>
<tbody>
<tr>
<td>dèŋ ‘think/reflect’</td>
<td>Propositional attitude (i)</td>
<td>Sentence-like</td>
</tr>
<tr>
<td>wÌàk ‘think’</td>
<td>Desiderative (v)</td>
<td>Infinitive</td>
</tr>
<tr>
<td>sàŋ ‘know’</td>
<td>Knowledge (iii)</td>
<td>Sentence-like</td>
</tr>
<tr>
<td></td>
<td>Ability (viii)</td>
<td>Infinitive</td>
</tr>
<tr>
<td></td>
<td>Achievement (x)</td>
<td>Infinitive</td>
</tr>
<tr>
<td>grē ‘see’</td>
<td>Immediate perception (iv)</td>
<td>Sentence-like</td>
</tr>
<tr>
<td>ḥmē ‘hear’</td>
<td>Acquisition of knowledge (iii)</td>
<td>Sentence-like</td>
</tr>
<tr>
<td>dàw ‘like, want’</td>
<td>Desiderative (v)</td>
<td>Sentence-like (different subject)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Infinitive (same subject)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Obligation (vi)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sentence-like (impersonal subject)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Infinitive (2nd person subject)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phasal (xi)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Infinitive</td>
</tr>
<tr>
<td>lèm ‘get’</td>
<td>Obligation (vi)</td>
<td>Sentence-like (impersonal subject)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Achievement (x)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Infinitive</td>
</tr>
<tr>
<td>k‘lā ‘able’</td>
<td>Ability (viii)</td>
<td>Infinitive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Permission (ix)</td>
</tr>
</tbody>
</table>
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 of 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

<table>
<thead>
<tr>
<th>(Matrix clause containing utterance predicate)</th>
<th>(Quotative marker ŋgājā)</th>
<th>Speech Complement</th>
<th>(Utterance verb)</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>Quotative marker</th>
<th>Utterance verb preceding</th>
<th>Utterance verb following</th>
<th>( k\an\ v\v\  \text{‘thing Q’} + \text{utterance verb} )</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>98</td>
</tr>
<tr>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>107</td>
</tr>
<tr>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>79</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>44</td>
</tr>
<tr>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>42</td>
</tr>
<tr>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>45</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>3</td>
</tr>
<tr>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>7</td>
</tr>
<tr>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>3</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>459</td>
</tr>
</tbody>
</table>

217 158 99 16

Table 10.5 shows that the most frequent method of marking a speech report is the use of a quotative marker \( \ŋ\g\ā\j\ā \) (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. \( \text{Ey zlepê} \text{ne} \text{oy} \text{ngay} \text{a} : \text{‘Hune nj a aka} \)
\( \text{j-} \text{hāp -ētēnē j-} \text{ŋgājā xʷné- ndzā ākā} \)
\( 3\text{PL.SBJ- speak} -3\text{PL.IOBJ} 3\text{PL.SBJ- QUOT} 2\text{PL.SBJ- sit ACC} \)
\( \text{kwa ꩍwa .} \)
\( \text{kʷāgʷā} \)

firstly

‘They spoke to them saying, "Firstly, you sit down.”” (NH7-SN:2.9)

b. \( \text{Meŋ a ngay} \text{a} : \text{‘Gwambakw , hwa bās ata} \)
\( \text{mēŋ ā-} \text{ŋgājā gʷāmbākʷ xʷā- bās ā tā} \)
\( \text{antelope 3SG.SBJ- QUOT toad 2SG.SBJ- laugh PREP1 on} \)
\( \text{sa vaw ? ”} \)
\( \text{sā vāw} \)

\( 1\text{SG Q} \)

‘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 ngaya* : « *Nene navalahwaw*  uda

\[
x^{\text{w}}\text{nē}- \text{ngājā} \quad \text{nēnē-} \quad \text{nā-} \quad \text{vāl} \quad -\text{āx}^{\text{w}}\text{āw} \quad \text{wda}\n\]

\[
\text{2PL.SBJ- saying} \quad \text{1EXCL.SBJ- FUT- give} \quad -\text{2SG.IOBJ food}
\]

\[
\text{akwaw} \quad .
\]

\[
\text{NEG.EXIST}
\]

‘You said, "We will not give you food."’ (GE59-SE:13.10)

b. *Sa ya* : « *Gomesl mbøy asa*  \text{la}  ».

\[
sā- \quad \text{jā} \quad \text{gmēl} \quad \text{mbj} \quad \text{ā} \quad \text{sā} \quad \text{lā}
\]

\[
\text{1SG.SBJ- say} \quad \text{monkey} \quad \text{3SG.STAT} \quad \text{PREP1} \quad \text{under field}
\]

‘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) *ay dawzata a ngaya* : « *Kan aka

\[
\text{f-} \quad \text{daw} \quad -\text{zā} \quad -\text{ātā} \quad \text{ā-} \quad \text{ngājā} \quad \text{kān} \quad \text{ākā}
\]

\[
\text{3PL.SBJ- ask} \quad -\text{TRANS} \quad -\text{3PL.DOBJ} \quad \text{3SG.SBJ- saying} \quad \text{thing} \quad \text{EXIST}
\]

\[
vāw \ ? \ *Kan aka* \quad \text{vāw} \ ? \ »
\]

\[
vāw \quad \text{kān} \quad \text{ākā} \quad \text{vāw}
\]

\[
\text{Q} \quad \text{thing} \quad \text{EXIST} \quad \text{Q}
\]

‘…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’, *zēn* ‘return/reply’, *ngād*  

\(^1\) 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’, ɬâp ‘tell story’ etc. The verb zèn ‘return’ is frequently followed by the noun zlâp ‘speech’ to give the meaning ‘return speech’ or ‘respond’. The addressee is generally coded as the indirect object. However, for the verb dâwzâ ‘ask’ (which is the verb dâw ‘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 zlepene* : « Gwambakw, kay, nda ɬa
    bâmâm ɬ- ɬâp - ēnē ɭəmbâk wá káj ndâ ɬj
    bee 3SG.SBJ- speak -3SG.IOBJ speak toad no! go INF
    ban aza ra aza. Dama atá ra ɭəkwa
    bân ězâ râ ězâ dâmâ á tâ nák wâ
    wash IT hand COMPL dirt PREP1 on hand 2SG.POSS
    deydéj »

déjdéj
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 dâwza mawal ɭəkwa aza* : « Mawal naka
    x̂wâ- dâw -zâ məwâl nk wâ ɭəzá məwâl nákâ
    2SG.SBJ- ask -TRANS husband 2SG.POSS COMPL husband 1SG.POSS
    kan ende ca , sa la vângay ? »
    kâñ éndé tsâ sâ- lâ vângáj
    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 jâ ‘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).

(10.32a) « Kámac anta » a ya.
   ká- māts āntā  ā- jā
   PFV- die 3SG.POSS 3SG.SBJ- say
   “He has died.” he said.’ (NF5-SN:1.6)

b. a ngaya: « Hwa dāw sa cafahwaw aka
    ā- ngājā xʷā- dāw sā- tsāf -āxʷāw ākā
    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 kāngāŋ aka a
    sā- ká- ḥāp -āxʷāw tsā -zā kāngāŋ ākā ā
    1SG.SBJ- PFV- speak -2SG.IOBJ put -TRANS drum ACC PREP1
    watā akwaw ca uzójye naka ēge ay
    wātā ākʷāw tsā wzjé nákā =ēgē j-
    home NEG.EXIST TOP children 1SG.POSS =PL 3PL.SBJ-
    nafədahha aza » sa ya.
    nā- ḡāx -xā āzá sā- 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)
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 ŋ (10.33b).

(10.33a)  

A dawze anta oy ghwalza eze : « Bay ca á dwzé ántā j- ṣā wāl -zā ēzē bāy ṭsā PREP after DEF.DET 3PL.SBJ- show -TRANS therefore chief TOP heje ṭgha » a ya .  
xēdzē 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)

nākā ā- jā  
1SG.POSS 3SG.SBJ- say  
‘That husband of hers said, “Come here, my wife” he said.’ (NH5-SN:3.9)
For added emphasis or to insist on what was said, the words (énē) kàn vāw ‘(like.that) thing Q’ may precede a speech verb which follows the speech complement (10.34 a & b). This method may also be used in combination with other ways of marking speech reports (see Table 10.5).

(10.34)a. « Nda ɨŋkwa » kàn vaw sa ya .
   ndā nkʷā kàn vāw sā- jā
go 2SG.Poss thing Q 1SG.SBJ- say

   “‘Leave!’ I said didn’t I?’

b. A  zlepene a gamtak a ngaya : « Bah
   ā- ḋāp -énē á gāmtāk ā- ngājā bāh
3SG.SBJ- speak -3SG.OBJ PREP1 chicken 3SG.SBJ- saying hide
   ākā énē kān vāw ā- jā
ACC like.that thing Q 3SG.SBJ- say

‘He spoke to the chicken saying, “Hide!” he said, like that, didn’t he?’
   (NH3-SN:4.9)

Speech reports in natural speech are sometimes not marked at all (98 out of 459 in the corpus). Typically this occurs when it is clear that someone is speaking and who is speaking. For example (10.35) is a brief exchange between a thief (T) and some children (C) who discovered him in a hut where he shouldn’t be, as recounted by a single speaker. The children begin by asking the thief what he is doing. Only this utterance is marked. Thereafter the speech reports are unmarked. The fact that the exchange consists of two questions and their answers indicates the taking of turns makes clear the identity of the speaker. A longer pause than usual between the utterances also helps to indicate a change of speaker.

(10.35)C. « Hwa la vemey ? » ay ca ,
   xʷā- lā vēmēj j jā tsā
2SG.SBJ- do what 3PL.SBJ- say TOP

   ‘"What are you doing?” they said,’
T. « A, sa a ujek ete ca. »
á sā á wjēk á tē tsā
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 x̂wā á wjēk á tē tsā x̂wā- lā á wjēk
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 sā- ndzā ēndē
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 ŋgayya hal anta kámac
ká- ḷāp -ēkēj ā- ŋgājā xāl āntā ká- màts
PFV- speak -1SG.OBJ 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)
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.  
\[
A \quad \text{ŋgaya} : \quad \text{« Sa } \quad \text{navalahwaw } \quad \text{uda } \quad \text{akwaw } \quad \text{»} \\
\text{ā- } \quad \text{ŋgājā } \quad \text{sā- } \quad \text{nā- } \quad \text{vl } \quad \text{-āxʷāw } \quad \text{wdā } \quad \text{ākʷāw} \\
3\text{SG.SBJ- QUOT} \quad 1\text{SG.SBJ- FUT-} \quad \text{give} \quad 2\text{SG.OBJ- food} \quad \text{NEG.EXIST} \\
\text{‘He said, “I will not give you food.”’} \quad \text{(GE59-SE:13.4)}
\]

(10.37)b.  
\[
A \quad \text{ŋgaya} : \quad a \quad \text{navalahwaw } \quad \text{uda } \quad \text{akwaw} \quad . \\
\text{ā- } \quad \text{ŋgājā } \quad \text{ā- } \quad \text{nā- } \quad \text{vl } \quad \text{-āxʷāw } \quad \text{wdā } \quad \text{ākʷāw} \\
3\text{SG.SBJ- QUOT} \quad 3\text{SG.SBJ- FUT-} \quad \text{give} \quad 2\text{SG.OBJ- food} \quad \text{NEG.EXIST} \\
\text{‘He said (that) he will not give you food.’} \quad \text{(GE59-SE:13.5)}
\]

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. \( \text{Nene} \ ngaya : \ « \text{Nene} \ navalhaww \ uda \)
\( \text{nènè-} \ ngājā \ nènè- \ ná- \ vàl \ -āxʷāw \ wdā \)
\( \text{1EXCL.SBJ- QUOT 1EXCL.SBJ- FUT- give 2SG.IOBJ food} \)
\( \text{akwaw} . » \)
\( \text{ākʷāw} \)
\( \text{NEG.EXIST} \)

‘We said “We will not give you food.”’
OR ‘We said (that) we will not give you food.’

(10.39) a. \( \text{A} \ ba \ ujek \ a \ damaw \ a \ ya . \)
\( \text{ā-} \ bā \ wjēk \ á \ dámāw \ ā- \ jä \)
\( \text{3SG.SBJ- create hut PREP1 bush 3SG.SBJ- say} \)

‘He built a house in the bush, they say.’

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).
(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>
<thead>
<tr>
<th>màtáŋgär</th>
<th>NP or pronoun</th>
<th>(Utterance predicate)</th>
<th>Speech complement</th>
</tr>
</thead>
</table>

Resumptive speech reports are marked using the morpheme màtáŋgär ‘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.  

\[
\text{Matangar sá , a nuna sá ya : « Gazlavay mátángár sá á nwná sá- jā gālāvāj QUOT.RET 1SG PREP1 last.year 1SG.SBJ- say God menjenjekey mba yam may . » mā- ndzándzà -čēj mbà jām máj JUS- give -1SG.IOBJ child also TAG.IMP.POL 'According to what I said, last year I said, “May God also give me a child please.”'}}
\]

(GE39-SE:10.2)
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

<table>
<thead>
<tr>
<th>(Head NP)</th>
<th>má</th>
<th>Relative clause</th>
</tr>
</thead>
</table>

(10.41)a.  

\[
\text{ara ndooney ma nda a wata anta .}
\]

\[
\text{ārā ndrēj má= ndā á wātā āntā}
\]


COP sorghum REL= come PREP1 home 3SG.POSS

‘...it was the sorghum which came from his home.’ (NH9-SN:5.4)

b.  

\[
\text{Ma dew ḋ nda ḋ la cemey , ara gamtak .}
\]

\[
\text{má= dew ḋ ndā ḋ læ tsēmēj ārā gāmtāk}
\]

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.  

\[
\text{Heje [ma jem ], [ma sa gore a njuna ], [ma}
\]

\[
\text{xēdzè má= dzèm má= sā- grē ā ndzwná má=}
\]

person REL= tall REL= 1SG.SBJ- see PREP1 yesterday REL=

\[
\text{lam ujek ᵃŋha ], kāndaha .}
\]

lām wjēk nępā kā- 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.  

\[
\text{Hejye [ma gore ᵃŋhel [ma keŋhel ᵃŋbwa [ma}
\]

\[
\text{xēdzè -jë má= grē nxēl má= kā- nxēl nxʷā má=}
\]

person -PL REL= see thief REL= IPFV- steal goat REL=

\[
\text{ŋ ᵃŋ bežle tata ]], ᵃy kenjen ᵃŋgas .}
\]

ŋ bežē tātā j- kā- ndzēn ngās

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) Hejäye [ma mpam bay] ege wese , øy xèdzè -jé má= mpäm bāy =égē wēsē j-
person -PL REL= look.for chiefdom =PL DEM.DIST 3PL.SBJ-
ghwalza ha tata .
y“āl -zā xā tātā
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 \([ma\ səy\ kala]\)

\( sə-\ ỵʷəl\ -zā\ -äx̣ʷäw\ səkəн\ ma=\ j-\ kə-\ lə\)

1SG.SBJ- explain -TRANS -2SG.IOBJ thing REL= 3PL.SBJ- IPFV- do a kule ege ].

á kʷ̣̣lè =égē

PREP1 idol =PL

'I will explain to you the things **that they do with idols.**'  
(DE2-SE:4)

b. \( səy\ nasəbar\ kan\ [ma\ darlæŋ\ ege\ səy]\)

\( j-\ ná-\ sbər\ kən\ má=\ dárlæŋʷ=égē\ j-\)

3PL.SBJ- FUT- follow thing REL= youth =PL 3PL.SBJ-kalaw]

kə- lə -äw

IPFV- do -3SG.DOBJ

'They will follow the thing(s) **that the youth are doing (lit. it)**...’  
(C1-SN:13.4)

c. \( səy\ ŋgadəta\ ,\ dərewel\ [ma\ səy]\)

\( j-\ ŋgædə\ -ətä\ dərewəl\ má=\ j-\)

3PL.SBJ- count -3PL.DOBJ paper(ful.) REL= 3PL.SBJ-nahzəta ] ege wəsə
nəx -zə -ətə =égē wəsə

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).
‘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. welaye aye nda ama zlzlar [ ma yam a
wälä -jé j- ndā á mā ḥāḥār má= jām 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 hejaye aye tawar kusam a bəza ] ,
vāx má= xèdzè -jé j- tāwār k"sām á bzā
day REL= person -PL 3PL.SBJ- walk.around body PREP1 outside
kànda anta zlezle .
kā- ndā āntā ḡēḡē
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 teguleŋ [ma sa kawan a mna ]

wjěk někā téŋ’lěŋ má= sā- kā- wān ā mńā

hut 1SG.POSS one REL= 1SG.SBJ- IPFV- sleep PREP1 inside

ara tal .

ārā tāl

COP corregated.iron(fr.)

‘…my one hut where I sleep inside, it’s corregated iron.’ (DE4-SN:2.1)

b. kaw ana skan ma sa kehey a mbe , muta

káw ánā skān má= sā- kā- xēj ā mbē mwētā
even(ful.) like thing REL= 1SG.SBJ- IPFV- run PREP1 3SG car(ful.)

ege , wese ca sa kadaw zeney .

=égē wēsē tsā sā- kā- dāw zēnēj

=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 ṇga anta ] wese ,

wālā má= dāwār āntā ā- ṇgā āntā wēsē

woman REL= water.pot 3SG.POSS 3SG.SBJ- break 3SG.POSS DEM.DIST

a kanda a wata mzlā .

ā- kā- ndā ā wātā mŋā

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.  \textit{Gam} aza ghwa [ma képeleye ] wese .
\textit{gām} āzā nxʷā má = ká- pāl -ējē wēsē
\textit{drive.away IT goat REL= PFV- untie -PART DEM.DIST}
‘Drive away that goat \textbf{which has been untied}.’  \hfill (GE14-SE:5)

b.  \textit{Əy ca ka} [ma kēkeceye ] , [\textit{ma}
\textit{j- tśā kā má = kā- kāts -ējē má =
3PL.SBJ- put ANT REL= PFV- take.part -PART REL= kēkeceye ]
\textit{kā- bākʷ -ējē PFV- make.lump -PART}
‘For the time being, they put \textbf{that which was taken, that which had formed into lumps}.’  \hfill (DP9-SN:2.5)

The second type of deranked relative clause involves the use of the verb introduced by the preposition á tā ‘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.  \textit{Əy la maslaga anta} [ma ata
\textit{j- lá málāgā āntā má = á tā
3PL.SBJ- make piece.of.cloth DEF.DET REL= PREP1 on
tkād' a mbē . ]
\textit{tkād' á mbē}
\textit{wrap.around PREP1 3SG}
‘They make the cloth \textbf{which is for wrapping around (the body) (lit. with it.)}’  \hfill (DP1-SN:3.4)
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 dala [ma tantaŋ].

xʷné- ná- māj tsá dālā 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 mbay ata ha

má = kádāk kʷāw tsá mbj á tā xā

REL= good NEG TOP 3SG.SBJ- PREP1 on top

‘…that which is not good, it is on top…’     (DP9-SN:3.7)

(10.52)a. Ana gomesl [ma nda a wata].

ánā gmēl má = nda a wātā = ēgē

like monkey REL= PREP1 mountain =PL

‘Like the monkeys which are in the mountain(s).’    (DE21-SE:1.6)
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 áká (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. ɗālā [a kaŋhwaz ] ǝká .

 dorsal á- kā- nhʷàz ǝkā
someone 3SG.SBJ- IPFV- get.drunk EXIST
‘…there is someone (who) gets drunk.’ (DE12-SN:2.7)

b. ǝy [kanda a ɲgas vaŋ a Garuwa ege ] ǝká .

 j- kā- ndā á ɲgās vāŋ á gaŋwa =éɡē ǝkā
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.

fāgʷālākʷ wéndé ká- màts á rā mbē ākā 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. *jèb aka [a uzaye anta ege]*.

ká- bā -ētēnē dzèb ākā á wzēj 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 [a] maslalaw aka [ata jekejew]* .

j- lá målālaw ākā 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. *Uzaye əy kala zlan ege aka yam* .

wzēj j- kā- lá hān =égē ākā 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 cekudë aka*

évéë̀ lâ- lêm mëndzëvëk tsëk’ôdé âkâ

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*

ánâ wëndë k’âw tsâ ã- nà- têh -zâ -ënë
like IND.DET.SG NEG TOP 3SG.SBJ- FUT- listen -TRANS 3SG.IOBJ

*zlam aza ] aka*

𐤔’am ãzâ ākâ

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 at ] heje mende aka*

kâ- ɬâŋɡāl -ënë â tâ xëdzë méndë âkâ

PFV- mesure -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 kandaɓa at ] la aka vaw ?*

ã- kâ- ndâ -bâ â tâ lâ âkâ vâw

3SG.SBJ- IPFV- go -BEN PREP1 on place EXIST Q
‘…are there places (that) he is going to?’  (C5-SN:35.3)
Again, for a possessor existential relative clause the existential marker follows the relativised noun phrase.

(10.58) \[ \text{a} \ y \ ngewzene \ a \ wata \ ] \ heje \ mende
\[
\text{j} - \ ndw \ -zā -ēnē \ á \ wātā \ xēdzē \ mēndē
\]
\[ \text{aka} . \]
\[ \text{akā} \]
\[ \text{EXIST} \]

‘...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 bāmām a kāvaŋha] cemey ,
    má = bāmām ā- kā- vāŋ -xā tséméj
    REL= bee 3SG.SBJ- IPFV- arrive -VNT.DIST TOP.CON
    gwambakw a zlepene a ŋgay : « Hwa ja
    gʷāmbākʷ ā- ḫāp -ēnē ā- ŋgājā xʷā- dzā
toad 3SG.SBJ- speak -3SG.OBJ 3SG.SBJ- QUOT 2SG.SBJ- hit
    kāŋgāŋ ara kwāw ! »
kāŋgāŋ ārá kʷāw
    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 \[ ma kánc \]
a- žàm bāy á wlè äntā \( má = ká- \) māts
3SG.SBJ- eat chief PREP1 place 3SG.POSS REL= PFV- die
anta . ]
äntā
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 ka kàca ca
\( má = xʷā- \) lèm ūjām äntā tsā \( xʷā- kά- \) lā tsā
REL= 2SG.SBJ- get name DEF.DET TOP 2SG.SBJ- PFV- do TOP
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- dā
time REL= bride PREP1 home 1SG.POSS EXIST 1SG.SBJ- prepare
uda ca besl .
wdā tsā bēl
food TOP once
‘(At) the time when there was a bride at my home, I prepared food once.’ (GE54-SE:20.1)
(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.  

[Á  
dwze ma sa kánda na a egloyz]  
á  
dwzé má= sá- ká- ndá nā á egljz  
PREP1 after REL= 1SG.SBJ- PFV- go 1SG.POSS PREP1 church(fr.)  
ca , a la zenej .  
tsá å- tá zênéj  
TOP 3SG.SBJ- do again  
‘After (lit. after when) I had gone to church, he did (it) again.’  
(NH3-SN:6.3)
b. [Ā ḏwze sa kāban aza ], sa nanda
ā ḏwzē sā- kā- bān āzā sā- nā- ndā
PREP1 after 1SG.SBJ- PFV- wash COMPL 1SG.SBJ- FUT- go
a luma .
ā lwmā
PREP1 market(ful.)
‘After I have washed, I will go to the market.’ (GE61-SE:2.5)

c. [Ā ḏwze laban ], sa kānda a
ā ḏwzē lā- bān sā- kā- ndā ā
PREP1 after NOM.ACT wash 1SG.SBJ- PFV- go PREP1
luma .
lwmā
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 ṣkwā́ anta aza [már hwa nda
xʷā- sār -zā nkwā́b āntā āzā már xʷā- ndā
2SG.SBJ- look.at -TRANS mind 3SG.POSS COMPL before 2SG.SBJ- go
a sōka ]
ā skā
PREP1 underneath
‘…you (should) look at his mind first before you marry him (lit. go underneath)…’ (HT1-SN:2.1)

b. [Már ṣ wan ], sa zam uda aza .
már ́j wān sā- zām wdā āzā
before INF sleep 1SG.SBJ- eat food COMPL
‘Before sleeping, I eat food first.’ (GE61-SE:3.3)
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. 

\[ D à k à mà= \text{ndà}-xà \]  

\[ \text{since(ful.) REL=} \text{heat go -VNT.DIST 1SG.SBJ-} \]  

\[ kawan a \text{ ujek akwaw} \]  

\[ kà- wàn á wjèk ákʷàw} \]  

\[ \text{IPFV- sleep PREP1 hut NEG.EXIST} \]  

‘Since (lit. since when) the heat came, I have not been sleeping in the hut.’  

(GE61-SE:4.5)

b. 

\[ D à k à mà= \]  

\[ \text{since(ful.) REL=} \text{speech God go -VNT.DIST PREP2} \]  

\[ hayak \text{ ntakwaw , hejaye ay kala zlan a} \]  

\[ xàjàk ntàkʷàw xèdzè -jé j- kà- là ìjàn á} \]  

\[ \text{country INCL.POSS person -PL 3PL.SBJ- IPFV- do work PREP1} \]  

\[ lùmà \text{ buwal kwaw} \]  

\[ \text{market(ful.) Buwal NEG} \]  

‘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 màr ‘begin’ followed by the marker of accomplishment àkà (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 à tā ‘on’ follows the adverbialiser (10.64b).
(10.64) a. \[\text{Mar aka ma sa vaŋha }, \text{ sa kasasərak}\]
\[\text{mär ākā má= sā- vāŋ -xā sā- kā- sāsrāk}\]
\text{begin ACC REL= 1SG.SBJ- arrive -VNT.DIST 1SG.SBJ- IPFV- learn}\n\text{ma buwal .}\\
\text{mā buwal language Buwal}\n\text{‘Beginning from when I arrived, I have been learning the Buwal}\n\text{language.’} \quad \text{(GE61-SE:4.11)}

b. \[\text{Mar aka ata lavaŋ naka ete}\]
\[\text{mär ākā á tā lā- vāŋ nākā á tē}\]
\text{begin ACC PREP1 on NOM.ACT arrive 1SG.POSS PREP1 here}\n\text{ŋghe , sa kasasərak ma buwal .}\\
\text{n̥yē sā- kā- sāsrāk mā buwal}\n\text{DEM.PROX 1SG.SBJ- IPFV- learn language Buwal}\n\text{‘Beginning from my arrival here, I have been learning the Buwal}\n\text{language.’} \quad \text{(GE61-SE:4.9)}

(iv) ‘Until’
Clauses which express the meaning ‘until’ are preceded by the preposition \text{xā}, another borrowing from Fulfulde. The relative marker can optionally co-occur (10.65 a & b).

(10.65) a. \[\text{j- lām kʷlē āntā kā xā má= gāmāta}\]
\[\text{3PL.SBJ- build idol 3SG.POSS ANT until(ful.) REL= Gamata}\]
\[\text{mana a kada ŋgha }\].\\
\text{mānā á- kā- dā n̥yā}\n\text{mother.1POSS 3SG.SBJ- IPFV- make.sacrifice DEM.PROX}\n\text{‘…they made his idol in advance until (lit until when) my mother’s (son)}\n\text{Gamata is (now) making sacrifices to this one.’} \quad \text{(NH4-SN:2.18)}
b.  `Meŋ a vas y hey a mazlay [ha mbôy mëŋ a- vās ū xēj á mà̃šāj ха mbj antelope 3SG.SBJ- hurry INF run PREP1 intensity until(ful.) 3SG.STAT gtōbəl .] ntōbəl 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 ā tā lā má= ĵ- 3SG.SBJ- put -3PL.IOBJ mouth PREP1 on place REL= 3PL.SBJ- ŋkən ŋhwəye ] . nkān nxwā -jé tie.up goat -PL ‘…he accompanied them to the place where they tied up the goats.’ (NH8-SN: 6.2)

b.  A kadāw ū nda kədā ū [kova ma əhel ā- kā- dāw ū ndā kdā ū kvā má= nxèl 3SG.SBJ- IPFV- want INF go towards PREP2 side REL= thief a jēbza , a sokama ndrèj ] ā- dzēb -zā ā- skām –ā ndrèj 3SG.SBJ- transport –TRANS 3SG.SBJ- sell –VNT.PROX sorghum kwaw . kʷāw 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 \(\text{ánā} \) ‘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 \(\text{māŋgāľŋgāl} \) ‘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. \( \text{Sa mbaz talgway [\text{ana ma vana a}} \begin{array}{l}
\text{sā- mbáz tál̂g̊aj \text{ ánā má=} vāná ā-} \\
\text{1SG.SBJ- blow flute like REL= father.1POSS 3SG.SBJ-} \\
\text{ghwelzekey} \\
\text{̄ ŷŵal -zā -ēk̊êj} \\
\text{show TRANS -1SG.IOBJ} \\
\text{‘I play the flute like my father showed me.’} \\
\text{(GE61-SE:6.2)}
\end{array} \)

b. \( A \text{ kazam uda [\text{ana ma a kadaw kwaw ]}.} \begin{array}{l}
\text{ā- kā- zām wā dā \text{ ánā má=} ā- kā- dāw k̊ŵaw} \\
\text{3SG.SBJ- IPFV- eat food like REL= 3SG.SBJ- IPFV- want NEG} \\
\text{‘He is eating food as if (lit. like) he doesn't want it.’} \\
\text{(GE610-SE:6.5)}
\end{array} \)

c. \( \text{Sa la mănggalŋgal [\text{ana ma sa nda a wata ]}.} \begin{array}{l}
\text{sā- lā māŋgāIŋgāl ōnā má=} sā- ndā ā wātā} \\
\text{1SG.SBJ- do pretending like REL= 1SG.SBJ- go PREP1 home} \\
\text{‘I pretend that (lit. like) I am going home.’} \\
\text{(GE61-SE:6.7)}
\end{array} \)

d. \( \text{Sa nda mănggalŋgal [\text{ana ma ū bada}} \begin{array}{l}
\text{sā- ndā māŋgālŋgāl ōnā mā ū bād -ā} \\
\text{1SG.SBJ- go pretending like REL= INF flatter -VNT.PROX} \\
\text{wala].} \\
\text{wālā} \\
\text{woman} \\
\text{‘I go pretending (lit. like) to flatter women.’} \\
\text{(3051)}
\end{array} \)
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. 

\[ hwa \ daw \ ŋ \ laža \ mba \ ŋkwa \ [ \text{ana ma} \ ŋ \ x^{wā} - \ daw \ ŋ \ làō \ -zā \ mbā \ nk^{wā} \ ánā \ má= ŋ \ ] \]

\[ 2\text{SG.SBJ- want} \ \text{INF send} \ \text{-TRANS child} \ 2\text{SG.POSS like REL= INF} \]

\[ jəngə \ á \ lek\̂wəl \ ] \]

dzṉgə́ á lek\̂wəl

study(ful.) \ prep\  school(fr.)

‘…you want to send your child \textit{for example} (lit. like) to study at school…’

(C6-SN:81)

b. 

\[ \text{[Ana ma} \ ŋy \ kada \ kule \ ]. \]

\[ ánā \ má= \ j- \ kā- \ dá \ k^{\text{wèle}} \]

\[ \text{like REL=} \ \text{3PL.SBJ- IPFV- make.sacrifice idol} \]

‘\textit{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) 

\[ \text{[Ana ma} \ sa \ đenža \ ] \ cemey , \ [\text{ma} \ sa \ gəre \ ánā \ má= \ sā- \ dēŋ \ -zā \ tsēmēj \ má= \ sā- \ grē \]

\[ \text{like REL=} \ \text{1SG.SBJ- think} \ \text{-TRANS TOP.CON REL=} \ \text{1SG.SBJ- see} \]

\[ yam \ ] \ cemey , \ gwaygwaya \ kānda \ ndəram \ . \]

\[ jām \ tsēmēj \ g^{\text{ājg}^{\text{ājį}}} \ kā- \ ndā \ ndrām \]

\[ \text{also TOP.CON celebration PFV- go pleasing} \]

‘\textit{According to what} I think, \textit{what} I see also, the celebration went well.’

(C1-SN:2 &4)

The second way of marking manner clauses is with the clausal adverb xăngắ ‘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].
ā- kā- zām wdā xāngā ā- kā- dāw k̄āw
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 ṷhel [hanga ma cen a kenhel a
ā- nxèl xāngā má= tsèn ā- kā- nxèl ā
3SG.SBJ- steal as if REL= father 3SG.SBJ- IPFV- steal PREP1
nuna anta ].
nwnā 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 mādāj or its variant māvāj ‘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 mā without changing the meaning.

(10.71) a. uzāye ay kahan [mavday yam a
wzjé ḣ- kā- xān mādāj jām ā-
children 3PL.SBJ- IPFV- cry because water 3SG.SBJ-
kazahha ata tātā ].
kā- zāx -xā ā 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 sākan ma tāntāŋ ].
ā- sāsām māvāj kā- lēm skān mā= tāŋ-tāŋ
3SG.SBJ- be.happy because PFV- get thing REL= good
‘He is happy because he got something good.’ (LL33-SE:13)
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)  
\[ \text{Van a dà [mavoday ŋ gal səkan ege]}. \]
\[ \text{vän ä- dà mavadā ŋ gal skàn =ēgē} \]
\[ \text{rain 3SG.SBJ- rain because INF grow thing =PL} \]
\[ \text{‘It rains in order to (lit. because to) grow things.’} \]  
\[ \text{(GE61-SE:11.4)} \]

10.1.5.5 Cause clauses

Cause clauses are formed by a relative clause preceded by the preposition à tā ‘on’ which could be translated as meaning ‘due to the fact that’ (10.73 a & b). This use parallels certain prepositional phrases introduced by à tā (see Section 7.2.1.4).

(10.73) a.  
\[ \text{[Ata ma əy kaampak] ca , ja a} \]
\[ \text{á tā má= j- kā- ā- mpāk tsá dzā ā-} \]
\[ \text{PREP1 on REL= 3PL.SBJ- IPFV- FUT- shut TOP hit 3SG.SBJ-} \]
\[ \text{ja mbahw} \]
\[ \text{dzā mbāxʷ} \]
\[ \text{hit pardon} \]
\[ \text{‘Due to the fact that they were going to imprison (lit. shut) (him), he pleaded for mercy (lit. hit pardon)…’} \]
\[ \text{(NH8-SN:12.3)} \]
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.

(10.74a) ŋtəmek kámac anta [ŋtə ma a sa
ntmēk kā- mãts āntā á tā má= ā- sā
sheep PFV- die 3SG.POSS PREPI on REL= 3SG.SBJ- drink
menjevek ].
mēndzēvēk
remedy
‘The sheep died due to the fact that it drank a remedy.’  (GE61-SE:12.1)

(10.74b) ŋtəmek kámac anta [mavay a sa menjevek ].
nutmēk kā- mãts āntā mâvāj ā- sā mēndzēvēk
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).

(10.75a) Əy jetene mbahw [mada oy keghwedetene j- dzā -ētēnē mbāxʷ màdā j- kā- yʷâd -ētēnē 3PL.SBJ- hit -3PL.IOBJ pardon if 3PL.SBJ- IPFV- anger -3PL.IOBJ unaf a musa ege ].
wnāf á mwsá = ēgē heart PREP1 twin =PL
‘They ask them forgiveness if they anger the heart of twins.’ (DE2-SN:6.10)

b. [Mada kāsākam ṣhwa] ca , na nazam zley .
mādā kā- skām nxʷā tsā nā- nā- zaman ḫēj 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 hēbaraw .
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. 

\[\text{Kede} \ a \ njuna \ heje \ kájav \ ] \ ca , \ heje \ 
\textit{perhaps} \ \text{PREP} \ \text{yesterday} \ \text{INCL.SBJ- \ PFV- \ assemble \ TOP \ INCL.SBJ-}
\text{nasacakwa} \ ma \ \eta\text{takwaw} \ aza . \n
\text{FUT- \ resolve \ \text{-INCL.COL \ problem \ INCL.POSS \ COMPL}}

‘\textit{Perhaps if yesterday we had assembled, we would have resolved our problem together already.’} \quad (\text{GE61-SE:13.2})

b. \[\text{Kede} \ hejaye \ \text{oy} \ kájam \ ma \ dakal \ dakal \ 
\textit{perhaps} \ \text{ PERSON-PL \ 3PL.SBJ- \ PFV- \ gather \ REL= \ big \ big}
\text{ege}] \ , \ [\text{oy} \ kájamha \ a \ \text{egälvez} \ ] \ ca , \ 
\text{=égē \ j- \ ká- \ dzām \ -xā \ á \ egljz \ tsá}
\text{=PL \ 3PL.SBJ- \ PFV- \ gather \ \text{-VNT.DIST \ PREP1 \ church(fr.) \ TOP}}
\text{a \ \text{nanda \ ndram \ kede \ zenej \ eze}
\text{ā- \ nā- \ ndā \ ndrm\ kēdē \ zēnēj \ ézē}
\text{3SG.SBJ- \ FUT \ go \ pleasing \ perhaps \ again \ therefore}

‘\textit{Perhaps if people had gathered the leaders, (if) they had gathered at church, it would have therefore gone even better’} \quad (\text{C1-SN:35.1})

(c) Concessive conditional clauses

\textit{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 \textit{kāw ‘even’} (10.77 a & b) (see Section 3.4.4).

(10.77)a. \[\text{Kaw} \ a \ \text{rahwaw}], \ [\text{kaw} \ a \ 
\textit{even(ful.)} \ \text{3SG.SBJ- \ insult \ -2SG.DOBJ \ even(ful.) \ 3SG.SBJ-}
gazlahwaw], \ \text{sey \ hwa \ sewew} . \n\text{gāɿ} \ -\text{āxwāw} \ sēj \ \text{xwā-} \ sēw \ -āw
\text{beat \ -2SG.DOBJ \ except(ful.) \ 2SG.SBJ- \ bear \ -3SG.DOBJ}

‘\textit{Even if he insults you, even if he beats you, you must bear it.’} \quad (\text{HT1-SN:3.4})
b. \[ Kaw \ ay \ kada \ kule \ wese \ ] ca ,
\kaw \ j- \ kā- \ dā \ kʷlē \ wēsē \ tsá
\text{even(ful.)} \ 3\text{PL.SBJ- IPFV- make.sacrifice idol DEM.DIST TOP}
\ay \ kayaza \ gəzləvəy \ ara \ a \ mna .
\j- \ kā- \ jā- \ -zā \ gəhəvāj \ ārā \ á \ mnā
\text{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 \textit{kāw} ‘even’ can also co-occur with the possible conditional marker \textit{màdā} ‘if’ (10.78).

(10.78) \[ Mada \ kaw \ hwa \ kāmay \ mawal \ aza \ ] cemey ,
\màdā \ kaw \ xʷā- \ kā- \ māj \ māwāl \ āzá \ tsémēj
\text{if even(ful.)} \ 2\text{SG.SBJ- PFV- choose husband COMPL TOP.CON}
a \ dāw \ ca \ hwa \ nda , \ hwa \ ɣhwelzene
ā- \ dāw \ tsā \ xʷā- \ ndā \ xʷā- \ ɣʷāl- \ -zā \ -ēnē
\text{3SG.SBJ- want TOP 2SG.SBJ- go 2SG.SBJ- show -TRANS -3SG.IOBJ}
\text{ata} \ \text{macahw} \ \text{ey} \ \text{baba} \ \text{i̯kwa} .
\text{ātā} \ mātsāxʷ \ ēj \ bābā \ nkʷā
\text{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 \textbf{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): \textit{kārbā} or \textit{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 \textit{kārbā} may be optionally followed by the relative marker \textit{mā} (10.79c).
Although they will get money, they don't want to do work.’  (GE24-SE:5)

b. [Kándaha ], nene kála zlan evele .
ká- ndā -xā nèné- ká- lá ījān ēvēlē
PFV- go -VNT.DIST 1EXCL.SBJ- PFV- do work even so
‘He had come, we worked even so.’       (LL55-SE:1)

c. Ndarey kágal anta dakala , [karba ma van ndrēj kā- gāl āntā dākālā kárba má= vān sorghum PFV- grow 3SG.POSS a.lot although REL= rain kādā parham ].
kā- dā járxām
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. [Káw hwa laša vangay ], sa nala war .
káw xʷa- lā -bā vāngāj sā- nā- 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\ á-\  predecess\  àxʷáw\ mā\ vékéj\ xʷá-
even(ful.)\ 3SG.SBJ-\ speak\ \-2SG.IOBJ\ word\ \which\ 2SG.SBJ-

lām\ -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 dàw ‘want’ followed by an infinitive complement. They are preceded by the modal adverb kēɗé ‘perhaps’ (10.81 a & b).

(10.81)a. \[Kédé\ a\ daw\ ŋ\ nda\ a\ luma\], mboj\ dák
kēɗé\ á-\ daw\ ŋ\ ndā\ á\ lwāmā\ mbj\ dák
perhaps\ 3SG.SBJ-\ want\ INF\ go\ \PREP1\ market(ful.)\ 3SG.STAT\ gone
a\ \damaw\.
adāmaw
PREP1\ bush
‘Perhaps he wanted to go to the market, (but) he went to the bush (instead).’

(GE61-SE: 15.1)

b. \[Kédé\ a\ daw\ ŋ\ qhēl\], ay\ kēgoreza
kēɗé\ á-\ daw\ ŋ\ nxēl\ j-\ kā-\ grē\ -zā
perhaps\ 3SG.SBJ-\ want\ INF\ steel\ \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 ay dedew [ndár a
mālā mátskʷāxʷ j- dēdē -āw ndár ā-
GEN evening 3PL.SBJ- pour.into -3SG.DOBJ so.that 3SG.SBJ-
na zadaw zadaw ].
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 rəda
xèjé- kā- á tā ʒèj ʒà- rəda
1INCL.SBJ- add PREP1 on meat so.that meat 3SG.SBJ- rot
səkwaw ].

Neg

‘We add (salt) to meat so that the meat doesn’t rot.’  (HT8-SN:2.5)

\[ Nədar hwa zaməa uə kadak kadak ] ca , tal
Ndər xʷə- zäm -əə wa kədək kədək tə təl
so.that 2SG.SBJ- eat -BEN food good good TOP make.effort
ŋ la zlan  .
ŋ lə ʒən
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).
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).

(10.84a)  
\[ A \ nda \ a \ wata \ mzla \ [\eta \ sakamha \ jene \ ] . \]  
\[ 3SG.SBJ- \ go \ PREP1 \ home \ blacksmith \ INF \ buy \ -VNT.DIST \ axe \]  
‘He went to the blacksmith’s house to buy an axe.’  
(TN3-WN:5.3)

b.  
kaw \ vayay \ a \ da \ baraw \ gbak \ gbak \ [\eta \ nda \]  
káw \ vájáj \ ā- \ dā \ bārāw \ gbāk \ gbāk \ ē \ ndā \  
even(ful.) \ who \ 3SG.SBJ- \ bring \ thousand(ful.) \ two \ two \ INF \ go \  
[\eta \ sakam med’ \ ] \]  
\[ \eta \ skām \ mēd’ \]  
\[ INF \ buy \ oath \]  
‘…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) \[ Na \ sla \ ka \ ata \ lanja \ ŋcene \ ...
\]
\begin{verbatim}
1EXCL.SBJ- prepare ANTPREP1 on NOM.ACT be 1EXCL.POSS
[ndár \ ŋ lem \ lanja \ ma \ taŋtaŋ \ ara \ hwa ].
\end{verbatim}

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 māpāt* ‘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. \[ Sa \ dāw \ [ŋ \ da \ uda \ mala \ māpāt] .
\]
\begin{verbatim}
1SG.SBJ- want INF prepare food GEN morning
\end{verbatim}

‘I want to prepare food in the morning.’
(GE61-SE:9.11)
A second, less common type of deranked purpose clause involves a non-finite verb preceded by the preposition á tā ‘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 doreliza la naka aza [ata cap.]
   sā- drēŋ -zā là nākā āzá á tā 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 káčədanza la [ata zlaka]
   sā- ká- kdāŋ -zā là á tā ḥāk -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 ṣ zlam eze ], a kanda eze səkwa .
   ākā ṣ lām ēzē ā- kā- ndā ēzē s̥əkwá
   tuck ACC in ear therefore 3SG.SBJ- PFV- 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-tētēngēl á tā xājāk wār

‘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) \[Ị nda ama jeɓ \], ọụy tadakw aza ka ata

ŋ ndā á mā dzēb j- tādákʷ 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. ọụy zlanza zley amba ọụy mac .

j- ḥàn -zā ḥẹj āmbá j- māts

3PL.SBJ- taste -TRANS meat then 3PL.SBJ- die

‘They tasted the meat then they died.’ (NF6-WN:4.5)
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.

(10.91a)  
\[
\begin{align*}
\text{[M}a \text{ sa } \text{kana} & \text{v}a \text{ŋ } a \text{ wata }] , \text{amba ay} \\
\text{má=} & \text{ sā- kā- ná- vāŋ } \text{á wātā } \text{āmbá j-} \\
\text{REL=} & \text{ 1SG.SBJ- IPFV- FUT- arrive PREP1 home then 3PL.SBJ-} \\
\text{nazam } & \text{uda } . \\
\text{ná- } & \text{zām wdā } \\
\text{FUT- eat food} \\
\text{‘When I arrive (lit. will be arriving) at home, then they will eat food.’} \\
\end{align*}
\]

(10.91b)  
\[
\begin{align*}
\text{[ ma } \text{he} & \text{jaye ay zlap tewtew } ] \text{ca , aya nda ay} \\
\text{má=} & \text{ xēdzē } \text{-j- ħāp téw-téw tsā } \text{ājā } \text{ndā j-} \\
\text{REL=} & \text{ person -PL 3PL.SBJ- speak all TOP then go 3PL.SBJ-} \\
\text{nda } & \text{tata ēzē } . \\
\text{ndā } & \text{tātā } \text{ézē } \\
\text{go 3PL.POSS therefore} \\
\text{‘…when all the people spoke, then they left.’}
\end{align*}
\]

(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 baṇba aza*, [ndar amba sa nda ā]
sā- bān -bā āzā ndār āmbā sā- ndā ā
1SG.SBJ- wash -BEN COMPL so.that then 1SG.SBJ- go INF
tawarha ].
tāwar -xā
walk.around -VNT.DIST
‘I wash first, so that then I go for a walk.’ (GE61-SE:8.9)

b. *ay manda ā sarzata kwagwa*
j̣- mā- ndā ā sār -zā -ātā kʷāgʷā
3PL.SBJ- JUS- go INF look.at -TRANS -3PL.DOBJ for.the.moment
[amba ā teh ma anta ]
āmbā ā teh 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 ɓam tekeɗ, na ɓam mba dàmbazl a
ná-ɓam tēkēɗ ná-ɓam mbà dàmbàŋ̀é à
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
káŋtawa ñkəlef íŋ zlazlar .
ká-ntāw-ā nklèf íŋ ḥàŋgàr
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).
They began to steal (them) first, they drove away the goats of Martin and others and of Nicholas.’

‘…he entered the hut of that friend of his, he broke down the door.’

‘The quiver was used up, the arrows were used up.’

‘They went, they were going towards home.’

‘They went, they were going towards home.’
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 /əy/ /əy/ fataw /fataw/ əy /əy/ daw /daw/ əy /əy/ zamaw /zamaw/ əy /əy/ sasam 

A- ɗa /A-ɗa/ yam /yam/ a- da /a-da/ uda /uda/ mbəy /mbəy/ ŋtəɓ /ŋtəɓ/ àl /àl/ ntəɓal /ntəɓal/ 

‘They slaughter it, they prepare it, they eat it, they rejoice.’  (NH11-SN:3.5)

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 léŋ ‘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 ]  léŋ  [əy  nada]
جر  داك  ي  بانه  يد  ناد  
3PL.SHORT  gone  INF  wash  VNT.DIST  plus  3PL.SBJ Fut  draw

熠  ارا
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  dobas]  ey  [kawkaw  oy]
أتوال  في  تودم  يا  كوك  ي
smoke.rising  3SG.SBJ  billow  and(ful.)
suddenly  3PL.SBJ

 وجت م  واز  ازا
take  2SG.IOBJ  children  COMPL

‘The smoke billows and suddenly they take your children.’  (NH4-SN:1.2)

b.  Ata  ngtara Welmbegem  [heje  kazam  gagamay]
أنا  قتارا  ويلمبهجام  حي  كازام  غامميه
PREP1  on  month  Welmbegem  INCL.SBJ  IPFV  eat  cotton

 ey  [heje  kara  ngazlen]
حي  كرا  نغازلن
and(ful.)  INCL.SBJ  IPFV  dig  peanut

‘In January (lit. the month of Welmbegem) we harvest cotton and we dig up peanuts.’  (LL29-SE:2)
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 ákʷāw (see Section 4.11.2) followed by an optional topic marker (see Section 4.15) (10.99 a & b).

(10.99) a.  

\[
\begin{align*}
\text{Hwa velekey dala}, & \text{ akwaw ca}, \text{ hwa} \\
& \text{xʷā- vál -ēkēj dālā ákʷāw tsá xʷā-} \\
& \text{2SG.SBJ- give -1SG.IOBJ money(ful.) NEG.EXIST TOP 2SG.SBJ-} \\
& \text{dekey ndrey} . \\
& \text{dā -ēkēj ndrēj} \\
& \text{bring -1SG.IOBJ sorghum} \\
& \text{‘Give me money, or bring me sorghum.’} \\
\end{align*}
\]  

(BH1-SN:1.5)
b.  *Sa lam ujek, akwaw ma*, sa ca wala.

sā- lām wjēk  ámbāw má sā- 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 kāŋgāŋ aka a wata, akwaw ca, uzāye*

tsā- zā kāŋgāŋ ākā á wātā ákāw tsā wzjē

put -TRANS drum ACC PREP1 home NEG.EXIST TOP children

naka ege øy naʃdaʃha aza

nākā = ēgē j- ná- fdūx -xā āzā

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 *kʷāw* (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 ndā a luma kwaw ca, sa ndā a*

sā- ndā á lūmā kʷāw tsā sā- ndā á

1SG.SBJ- go PREP1 market(ful.) NEG TOP 1SG.SBJ- go PREP1
damaw kwaw.

dāmāw kʷāw

bush NEG

“I go to the market and not to the bush.’

(GE19-SE:13.7)
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- zām kān ákwāw āmā sā- kā- jājāŋ
1SG.SBJ-(IPFV- eat thing NEG.EXIST but(ful.) 1SG.SBJ-(IPFV- shine
kusam naka parpar .
kwām nākā pārpār
body 1SG.POSS different
‘I am not eating anything but I shine, my body is different.’ (C11-SN:182)

b. hwa ndewzene a egɔlɛyz
xwā- ndaw -zā -éné á egļjz
2SG.SBJ- find -TRANS -3SG.OBJ PREP1 church(fr.)
kélemyɛye ama ay kája ujek anta
kā- lām -ɛjɛ āmā j- kā- dzā wjɛk āntā
PFV- build -PART but(ful.) 3PL.SBJ- PFV- hit house DEF.DET
kwagwā kwaw .
kwagwā kwaw
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. Gwambilkw , hwa bas ata sa vaw ?
   g"ambilkw x"a- bäs 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 jebçata war!
    káj  x"né- dzēb -zā -ātā wār
    Oh! 2PL.SBJ- take -TRANS -3PL.DOBJ still
    ‘Oh, take them (away) still!’  (NH9-SN:6.9)

c.  kpaŋ  ,  a  daša  jene  anta  .
    kpâŋ  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.  Ajaw,  sa  káwan  kadak  kadak  .
    ājāw  sā-  kā-  wān  kādāk  kādāk
    yes  1SG.SBJ- PFV- sleep  good  good
    ‘Yes, I slept well.’  (LL1-SE10)

e.  Yaw  ,  a  twsē  a  nda  ,  kânda  ma  mbəy
    jâw  á  twsē  ā-  ndā  kā-  ndā  má=  mbj
    well(ful.)  PREP1 there  3SG.SBJ- go  PFV- go  REL=  3SG.STAT
    haldmâ  .
    xâldmâ
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  wekye  Mazay  ege?**
    x"né- xān  vēmēj  wālā  -jé  māzāj  = ēgē
    2PL.SBJ- mourn  what  woman  -PL  Mazay  =PL
    ‘What are you mourning Mazay women?’  (NF2-SN:2.3)

b.  **Nda  kəcaŋ  berjeŋ  .**
    ndā  ktsāŋ  bêrdzēŋ
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 e).

(11.3) a. *hune nemed*, *hune tewtew n'kune*.
   
   **xʷnè-ná-mēd**  **xʷnè tew-tew nəkʷnè**
   
   2PL.SBJ- FUT- swear 2PL all 2.PL.POSS
   
   ‘…you will swear, all of you.’  
   
   (NH8-SN:7.10)

b. *Kádam*, *kézledēne*  **kan ege aza**.
   
   **ká-dám**  **ká-ähltə-ënə  kən = eɡə əzə**
   
   PFV- enter PFV- pick.up -3SG.IOBJ thing =PL COMPL
   
   *nd rèy*.
   
   *ndrèj*
   
   sorghum
   
   ‘He entered, he picked up things (to his friend’s detriment), (such as) sorghum.’  
   
   (NH9-SN:3.5)

c. *Kéŋhel*  **sakan ege vedye**, *nd rèy*, *ŋozley*, *kwáləŋwaj*
   
   **ká-nxél skən = eɡə vədjə**  **ndrèj ŋəʃən kʷələŋwaj**
   
   PFV- steal thing =PL certain sorghum peanut baggage
   
   **ege ləŋ rəgwac ege**.
   
   = əɡə ləŋ rəgwats = əɡə
   
   =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 Muyang (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 **BACKGROUNDBACKGROUNDING** 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 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 Vezpembem .
   jáwà labārā vēzpēmbēm
good(ful.) story Vezpembem
   ‘Good, the story of Vezpembem.’
   (TN5-SN:1)

b. Vezpembem ca , ara ɲseŋ Madagamzam .
   vēzpēmbēm βsā ārā ɲsēŋ mādāɡāmzām
   Vezpembem TOP COP clan Madagamzam
   ‘Vezpembem was of the clan of Madagamzam.’
   (TN5-SN:2.1)

c. A nuna anta ca əy kayaɓa
   á nwná āntā tsá j- kā- jā -ɓā
   PREP1 times.past DEF.DET TOP 3PL.SBJ- IPFV- call -BEN
   madam Gavar , ata ma a kanda ŋ
   mâ- dām gāvār á tā má= á- kā- ndā ŋ
   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-
   zle debtor kan ege aza tew-tew .
   ġād' -ētēnē kān =égē āzā tēw-tēw
   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>
<thead>
<tr>
<th>Topic</th>
<th>(TOP), Comment</th>
</tr>
</thead>
</table>

(11.5) a. $[\text{Dala} \quad \text{ghel}]\text{TOP}, \quad \text{hune} \quad \text{kámayaw}, \quad \text{a}$

dālā nxèl xʷnè- kā- māj -āw ā-
someone thief 2PL.SBJ- PFV- choose -3SG.DOBJ 3SG.SBJ-

nagayzahune ná- gāj -zā -āxʷnè

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. $[\text{Ebe} \quad \text{ca}]\text{TOP}, \quad \text{ara} \quad \text{bay} \quad \text{ŋtakwaw}.$

èbè tsá ārā bāy ntākʷāw

DEM.MED TOP COP chief 1INCL.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 \textit{a} kazam \textit{uda} .
\[gʷāmbākʷ tsá ̣ a- kā- zām wá \]
\textit{toad TOP 3SG.SBJ IPFV- eat food}
‘...as for the toad, \textit{he} was eating the food.’ (NF4-SN:2.13)

b. \[mbe ca \]TOP , kāla zlan dakala tew .
\[mbē tsá kā- lā ḡān dākālā tēw \]
\textit{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 .
\[káw mētēs mā xʷne- sēw kʷāgʷá \]
even(ful.) hunger TOP.EMPH 2PL.SBJ- bear.with for.the.moment
‘Even hunger, \textit{you} bear with for the moment.’ (C4-SN:32.4)

b. \[Zowet ca \]TOP , hwa leme \textit{w}.
\[zwēt tsá xʷā- lēm -āw \]
eternal.life TOP 2SG.SBJ- get -3SG.DOBJ
‘As for eternal life, \textit{you} (will) get \textit{it}.’ (HT6-SN:3.17)

C. \[Hejaye nghe ege ca \]TOP , hune
\[xēdźē -jē nỳē =ēgē tsá xʷnē- \]
person -PL DEM.PROX =PL TOP 2PL.SBJ-
(iii) Indirect Object

A topicalised indirect object is indexed within the comment clause by indirect object agreement marking on the verb (11.8 a & b) (see Section 8.1.1.3).

(11.8) a. \[Mba\ kuzakwəna\ ma\ caw\ ŋgha\ ca\ ]TOP, a
mbà\ kʷzākʷnā\ má=\ tsáw\ nyā\ tsá\ á-
child\ maternal.uncle.1POSS\ REL=\ there\ DEM.PROX\ TOP\ 3SG.SBJ-
kembelcəne\ ma
kā-\ mbāl\ -ēnē\ mā
IPFV-\ hold\ -3SG.IOBJ\ mouth
‘As for the child of my uncle who is over there, it is hurting him (lit. holding for him the mouth).’ (C5-SN:72)

b. \[Mba\ naka\ cemey\ ]TOP, sa nevelcəne\ uda
mbà\ nākā\ tsémēj\ sā-\ nā-\ vàl\ -ēnē\ wdā
child\ 1SG.POSS\ TOP.CON\ 1SG.SBJ-\ FUT-\ give\ -3SG.IOBJ\ food
ule .
wélé
not.yet
‘As for my child however, I will not give him food yet.’ (GE62-SE:11.2)

(iv) Oblique

Oblique arguments may also be topicalised. A location, for example, may be fronted with (11.9a) or without (11.9a) a preposition and then is indexed within the comment clause using a non-complement taking preposition (see Section 4.8.4).
"In that new way of making judgments, there are many other things in it…"  

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).
(v) Clausal adverb

Certain clausal adverbs (see Section 3.4.3) may also be topicalised (11.11 a & b).

(11.11) a. \([njəwen\ ca]\TOP, hwa\ kádaw\ ŋ\ denza\ ŋkwaɓ\)
\[\text{ndzwën tsá\ } xʷə\-\ká\-\daw\ ŋ\ déŋ\ -zā\ nkʷāɓ}\]
true\ TOP\ 2SG.SBJ\ PFV\-\ want\ INF\ reflect\ -TRANS\ brain\ cekudē\ .
tsékʷdē\ a.little\ ‘…truly, you should have (lit. wanted to) reflected a little.’ \(\text{(C8-SN:35)}\)

b. \([Kəɗe\ ca]\TOP, pakam\ a\ kala\).
\[\text{kdē\ tsá\ pákam\ á-\kā-\lá}\]
however\ TOP\ noise\ 3SG.SBJ\ IPFV\-\ do\ ‘However, noise was happening.’ \(\text{(NH3-SN:3.3)}\)

(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 Kinnaird (1999: 16) for Ouldeme and by Haller and Watters (1984: 37) for Zulgo.

(11.12) \(\text{evele\ [}\text{landa}\ naka\ ]\TOP1, [}\text{gwarzam\ a\ naka}\)
\[\text{évēlē\ là-}\ ndā\ nākā\ gʷərzêm\ á\ nākā\]
although\ NOM.ACT\ go\ 1SG.Poss\ get.up\ PREP1\ 1SG.Poss\ a\ wata\ ]\TOP2, sa\ dāw\ ŋ\ ndā\ ata\ la\ naka\]
á\ wātā\ sā-\ dāw\ ŋ\ ndā\ á\ tā\ là\ 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)…’ \(\text{(HT6-SN:6.6)}\)
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 daw ŋ ca ca]TOP, kede uzye anta ege.
   j- daw ŋ tsā tsā kēdē wzej antā =ēge
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 tsā ŋ mbā 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 xʷā- nā- dām -xā á māpāt tsā ā
enter 2SG.SBJ- FUT- enter -VNT.PROX PREP1 morning TOP PREP1
   bāy.
   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 tsā ŋmgbām
3SG.SBJ- sprout -VNT.PROX TOP bunches.spread.out
   mgbam ende
   ŋmgbām ēndē
   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 ɡore ca]TOP, a kendezekey
   sā- grē tsá ā- kā- ndā -zā -ēkēj
   1SG.SBJ- see TOP 3SG.SBJ- IPFV- come -TRANS -1SG.IOBJ
   ende zlaɓa lakwatay
   ēndē ḫābā lákʷátāj
   like.this.PROX with whip
   ‘…I saw, it was coming on me like this with a whip…’ (C16-SN:15.3)

b. [Sa zlane ]TOP, əy kala labara.
   sā- ḫmē j- kā- lā lābārā
   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. [ŋhel ca]TOP, ara kan ma taŋtaŋ kwaw
   nxèl tsá ārā kàn má= tāŋ-tāŋ kʷāw
   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 mesfē ca]TOP, dakala.
   ḫān mālā mēsfé 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. [leɓez ca]TOP, aka.
   lá- bēz tsá ākā
   NOM.ACT divide TOP EXIST
   ‘…as for division, it exists.’ (C9-SN:126)
b. [lazazak tata ca] TOP, akwaw.
   lá- zàzàk tātá tsá ākʷāw
   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. [Kéme ndrey ñgha ca] TOP, kadak.
   ká- mè ndrèj nyā tsá kādåk
   PFV- swallow sorghum DEM.PROX TOP good
   ‘He has swallowed this sorghum, (it’s) good.’ (GE39-SE:1.17)

b. [I dàs a damaw] TOP, a
   ñ dàs á dàmāw ā-
   INF cultivate PREP1 bush.country 3SG.SBJ-
   kàŋtəɓ alzaheje. kā- ntōål -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- ndå 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
sä- ká- zâm wdâ ãzá mânâ ā-
1SG.SBJ PFV eat food COMPL mother 1POSS 3SG.SBJ
kedêfekey ma .
kâ- dâf -êkêj mâ
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 dôres]TOP, sa nalam ujek .
sä- kâ- lâ drêś sä- ná- lâm wjêk
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 kâdas la dakala ca]TOP, hwa nelem
xʷâ- kâ- dâs lâ dâkâlâ tsá xʷâ- ná- lêm
2SG.SBJ PFV cultivate field a.lot TOP 2SG.SBJ FUT get
kan dakala yam .
kàn dâkâlâ jâm
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 kâbial gbak
kʷâdâkʷâ tsá dâ kâbâl gbâk
sweet potato TOP bring hundred.francs(ful.) two
‘…as for the sweet potato, bring two hundred francs…’ (C6-SN:175.1)
elicitation session one Buwal informant considered that more than one topic was not possible.

(11.20)a. [A dəwże anta yam baw]TOP1, [kaw vayay ca]TOP2, á dwzé äntä jám bāw kāw vājāj tsā
PREP1 after DEF.DET also TOP.ADD even(ful.) who TOP
a kəm kəm ma ata nda a wata.
á- kā- mpəm təf 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.’

(11.20)b. [A naka na ca]TOP1, [kémentekey ca]TOP2,
á nəkā nə tə tə mən -ēkēj tsā
PREP1 1SG.POSS now TOP PFV- be.left -1SG.IOBJ TOP
wān təkʷdē ēndē
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.
‘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>
<thead>
<tr>
<th>Name</th>
<th>Marker</th>
<th>Meaning/Function</th>
<th>Occurances</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>tsá</td>
<td>Highlights comment as important</td>
<td>2921</td>
</tr>
<tr>
<td>Contrastive</td>
<td>tséméj</td>
<td>Comment is contrary to expectation or only a possibility</td>
<td>314</td>
</tr>
<tr>
<td>Emphatic</td>
<td>má</td>
<td>Emphasises and adds topic topic, strengthening expectation of comment</td>
<td>181</td>
</tr>
<tr>
<td>Additive</td>
<td>bāw</td>
<td>Adds a similar topic or additional information to the same topic.</td>
<td>147</td>
</tr>
</tbody>
</table>
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 māpāt 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.’

b. A cemey , nene nanda a Maruwa .
á māpāt 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.’

(In answer to someone saying they want to come and visit you that morning.)

c. A tambaca , sa a wata akwaw . A mpat
á tāmbācā sā á wātā ákʷāw á mpat
PREP1 today 1SG.STAT PREP1 home NEG.EXIST PREP1 tomorrow
bāw , sa ndā a Maruwa .

bāw sā- 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 māpāt 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.  
\[ hune \ kwakwaɓ \ ma \ a \ yam \]  
\[ xⁿé-\ kwákʷäɓ \ mā \ á \ jám \]  
\[ 2^{\text{PL}}.\text{SBJ- rinse} \ \text{mouth PREP1 water} \]  
‘…you rinse out your mouth(s) with water…’  
\[ \text{(NF2-SN:1.8)} \]

b. \[ Kuvahw \ a \ kwakwaɓa \ ma \ ca , \ mbambaz . \]
\[ kʷväxʷ \ á-\ kwákʷäɓ \ -ä \ mā \ tsá \ mbámбаź \]  
\[ \text{monitor.lizard} \ 3^{\text{SG}}.\text{SBJ- rinse} \ -\text{VNT.PROX mouth TOP blood} \]  
‘(When) the monitor lizard rinsed out his mouth, blood.’  
\[ \text{(NF2-SN: 1.11)} \]

c. \[ Benjer \ a \ kwakwaɓ \ ma \ ca , \ ŋgəzleŋ \ paskakad´ \]
\[ béndzër \ á-\ kwákʷäɓ \ mā \ tsá \ ŋgɮèŋ \ pàskàkàd´ \]  
\[ \text{squirrel} \ 3^{\text{SG}}.\text{SBJ- rinse} \ \text{mouth TOP peanut many.small.pieces} \]
\[ kɔdə \ a \ ma . \]
\[ \text{kdā \ á \ mā} \]  
\[ \text{towards PREP1 inside} \]  
‘(When) the squirrel rinsed out his mouth, many small pieces of peanut
were (lit. towards) inside.’  
\[ \text{(NF2-SN:11.12)} \]

### 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.

(11.24a. A pes wende aka , gwambakw a tar ŋamam ŋ
á pès wéndé ákā gʷāmbākʷ á- tār ŋamam ŋ
PREP1 day IND.DET.SG EXIST toad 3SG.SBJ- invite bee INF
nda ŋ zama uda a wata anta .
ndā ŋ žām -ā wādā 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 .
 ŋamam á- ndā -xā
bee 3SG.SBJ- come -VNT.DIST
‘The bee came.’ (NF4-SN:2.2)
c. Ma ŋamam a kavaŋha cemey ,
má= ŋamam á- kā- vāŋ -xā tséméj
REL= bee 3SG.SBJ- IPFV- arrive -VNT.DIST TOP.CON
gwambakw a zlepene a ŋgay : « Hwa ja
gʷāmbākʷ á- ḥāp -ēnē á- ŋgājā xʷā- dzā
toad 3SG.SBJ- say -3SG.IOBJ 3SG.SBJ- saying 2SG.SBJ- hit
kavgā ara kwaw !
kavgā āra kʷāw
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)

(11.25a. A kavas ŋ zam uda anta war .
á- kā- vās ŋ žām wādā āntā wār
3SG.SBJ- IPFV- hurry INF eat food DEF.DET still
‘He was still hurrying to eat the food.’ (NF4-SN:2.15)
b. Ha ŋamam a zenha cemey, uda ŋtakw .
xā ŋamam ā- zēn -xā tséméj wādā ntâkʷ
till 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- ká- dàw -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 kʷáqʷá*
    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.
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. \( \text{Sa zam } \underline{ca} \), \( \text{uda} \).
\( \text{sā- zam tsá wdā} \)
\( 1SG.SBJ- \text{ eat TOP fufu} \)
‘I eat, fufu.’
(GE62-SE:13.1)
(Implies that I only eat fufu.)

b. \( \text{Sa zam } \underline{ma} \), \( \text{uda} \).
\( \text{sā- zam má wdā} \)
\( 1SG.SBJ- \text{ eat TOP.EMPH fufu} \)
‘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. \( \text{Hwa gore wende } \underline{ma} \), \( \text{ana ma} \), \( \text{øy} \)
\( \text{xʷä- grē wéndé má ánā má=} \text{j-} \)
\( 2SG.SBJ- \text{ see IND.DET.SG TOP.EMPH like REL=} \text{ 3PL.SBJ-} \)
gazlahwaw, \( \text{øy tayahwaw ata mbolah aka} \).
\( \text{gàłš -äxʷäw j- tāj -äxʷäw á tā mblāx ákā} \)
\( \text{beat -2SG.OBJ 3PL.SBJ- patch -2SG.OBJ PREP1 on wound EXIST} \)
‘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. \( \text{Wende } \underline{ma} \), \( \text{øy slar maslaraslar} \)
wéndé \( \text{má j- lār má=} \text{lār -å- lār} \)
\( \text{IND.DET.SG TOP.NAR 3PL.SBJ smear NOM- smear -NOM.PAT- smear} \)
\( \text{ata la anta} \).
\( \text{á tā lā ántā} \)
\( \text{PREP1 on place DEF.DET} \)
‘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* xʷā- ndzèf -zā  
*IND.DET.SG*  *TOP.NAR*  *2SG.SBJ-* smell  *-TRANS*  
møjefenjef  
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*, *mbay* a *wata akwaw*.  
māwāl bāw mbj á wātā ákwāw  
*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
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.

\[(11.31)\text{ a.}\]

\[əy\ kaðas\ a\ gamtak . A\ dəwze\ anta\]
\[j-\ kā-\ dās\ á\ gāmtāk\ á\ dwzē\ āntā\]
\[3PL.SBJ-\ IPFV-\ cultivate\ PREP1\ chicken\ PREP1\ after\ DEF.DET\]
\[PATAW,\ Mbay\ pay .\]
\[pâtāw\ mbj\ pāj\]
\[cat(ful.)\ 3SG.STAT\ arrived\]

‘He was farming with the chicken. Afterwards the cat, he arrived.’

\[(NF3-SN:1.3-4)\]

\[b.\]

\[A\ dəwze\ anta\ əy\ kaðas\ a\ PATAW\]
\[á\ dwzē\ āntā\ j-\ kā-\ dās\ á\ pâtāw\]
\[PREP1\ after\ DEF.DET\ 3PL.SBJ-\ IPFV-\ cultivate\ PREP1\ cat(ful.)\]
\[wese\ yam\ baw ,\ həza\ Mbay\ pay .\]
\[wēsē\ jām\ bāw\ xzā\ mbj\ pāj\]
\[DEM.DIST\ also\ TOP.ADD\ dog\ 3SG.STAT\ arrived\]

‘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.
‘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

<table>
<thead>
<tr>
<th>(Topic)</th>
<th>IND.DET</th>
<th>EXIST</th>
<th>Comment</th>
</tr>
</thead>
</table>

This type of topic often corresponds to the subject of the comment clause (11.33 a & b).

(11.33) a.  

\[ \text{nghel wende aka, kàdamaza} \]  
\[ \text{nxèl wèndé ákà kà-dàm -à -zà} \]  
\[ \text{thief IND.DET.SG EXIST PFV- plunder -VNT.PROX -TRANS} \]  
\[ \text{mesleje nkwa aza} \]  
\[ \text{mèlèdzè nkʷà ázá} \]  
neighbour 2SG.POSS COMPL  
‘…there was a certain thief, he plundered your neighbour…’  
(C10-SN:3.1)

b.  

\[ \text{Hejye vedoye aka, oy keveletene ada} \]  
\[ \text{xèdzè -jé vèdjé ákà j- kà- vàl -ëtëné wdà} \]  
\[ \text{person -PL IND.DET.PL EXIST 3PL.SBJ- IPFV- give -3PL.OBJ food} \]  
\[ \text{a uzóye tata ege} \]  
\[ \text{á wźjé tátá =égë} \]  
[PREP] 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)  

\[ \text{Heje wende aka, a nuna anta, welaye} \]  
\[ \text{xèdzè wèndé ákà á nwná àntà wàlā -jé} \]  
\[ \text{person IND.DET.SG EXIST PREP1 times.past DEF.DET wife -PL} \]  
\[ \text{anta ege gbak} \]  
\[ \text{àntà =égë gbák} \]  
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).
11.3 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>
<thead>
<tr>
<th>(COP)</th>
<th>Noun Phrase/Independent pronoun</th>
<th>Relative Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11.4: Structure of the Buwal cleft construction

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. \textit{Ara mbe ma keghe}l \textit{ŋhwə naka}.  
\textit{ārə mbē má = kā- nxēl nxʷā nākā}  
\textit{COP 3SG REL= IPFV- steal goat 1SG.POSS}  
‘\textit{It's him} who is stealing my goat.’  
\textit{(GE63-SE:7.1)}

b. \textit{Mbe ma keghe}l \textit{ŋhwə naka}.  
\textit{mbē má = kā- nxēl nxʷā nākā}  
\textit{3SG REL= IPFV- steal goat 1SG.POSS}  
‘(\textit{It's}) \textit{him} who is stealing my goat.’  
\textit{(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. \textit{Ma mar ŋ bal ŋayak bunawal ca}, \textit{ara Ghelay ege}.  
\textit{mā = mār ŋ bāl xājāk bwāl tsā ārā ylāj =égē}  
\textit{REL= begin INF clear country Buwal TOP COP Ghelay =PL}  
‘The \textit{ones who began to clear the Buwal country}, it was the Ghelay clan.’  
\textit{(NH13-SN:2.4)}
b.  \( Ma \ yhel \ aza \ gbwa \ ca \), \( ara \ hwa \).
\[ \text{má }= \text{nxèl ꙅnxwā tsā }\ \\
\text{REL=} \text{steal IT goat TOP COP 2SG}
\]
‘The one who stole away the goat, it’s you.’  \(\text{NH8-SN:8.4}\)

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.  \( Ma \ yhel \ gbwa \ ma \), \( ara \ manaŋ \).
\[ \text{má }= \text{nxèl nxwā má }\ \\
\text{REL=} \text{steal goat TOP.EMPH COP so.and.so}
\]
‘Even the one who stole the goat, it’s so and so.’  \(\text{NH8-SN:11.8}\)

b.  \( Ara \ bwa \ ma \ lekey \).
\[ \text{ārā }xwā \ \\
\text{COP 2SG REL=} \text{do -1SG.IOBJ}
\]
‘It’s you who did (it) to me…’  \(\text{NH14-SN:3.5}\)

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.  \( ara \ mpe \ ma \ mbalaw \).
\[ \text{ārā } \text{mpè má }= \text{mbāl -āw}
\]
‘…it’s a tree which got hold of him.’  \(\text{DE14-SN:7.1}\)

b.  \( Ma \ nga \ tekeɗ’ \ anta \ vayay ? \)
\[ \text{má }= \text{ngā tēkēɗ’ āntā vājáj}
\]
‘Who broke the calabash?’  \(\text{LL28-SE:2}\)
c. *Ara mbe ma nga ma a kalawad*.  
ārā mbà má= ngā má= ā- kā- 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>
<thead>
<tr>
<th>(Noun phrase)</th>
<th>Stative pronoun</th>
<th>Relative Clause</th>
</tr>
</thead>
</table>

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. *Hejaye ma pepedēk ege ọy ma laza*  
xèdzè -jé má= pepēdēk = ĝē j má= lā -zā  
person -PL REL= white =PL 3PL.STAT REL= make -TRANS  
sōkwa, hejaye ma dākənāk ege aza 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.  Hejaye  ma  dakənak  ege  ,  hejaye  ma  dakənak
xèdzè  -jé  má=  dàknàk  =égë  xèdzè  -jé  má=  dàknàk

person  -PL  REL=  black  =PL  person  -PL  REL=  black

ege  ,  pat  aŋy  ma  laza  .
=égë  pát  j  má=  là  -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)  aŋy  ma  nta  Mazay  aza  a  Mazagway  ma
j  má=  ntä  māzāj  āzā  á  mazaəaj  má=
3PL.STAT  REL=  take  Mazay  COMPL  PREP  Mazagway  REL=

ata  nje  naka  yam  .
á  tā  ndzé  nākā  jám
PREP  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)  Mboj  ma  kasəkam  ndōrey  .
mbj  má=  kā-  skäm  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 plurational 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

<table>
<thead>
<tr>
<th>Underlying Tone</th>
<th>Verb Root</th>
<th>Repeated form</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>[bën]</td>
<td>[bën ëbën]</td>
<td>‘he washes’</td>
</tr>
<tr>
<td></td>
<td>[tsëtsëx]</td>
<td>[tsëtsëx ëtsëtsëx]</td>
<td>‘he cuts off pieces’</td>
</tr>
<tr>
<td></td>
<td>[jejëdim]</td>
<td>[jejëdim ëjejëdim]</td>
<td>‘he slips’</td>
</tr>
<tr>
<td>L</td>
<td>[gëbë]</td>
<td>[gëbë ëgëbë]</td>
<td>‘he beats’</td>
</tr>
<tr>
<td></td>
<td>[dëdëhë]</td>
<td>[dëdëhë ëdëdëhë]</td>
<td>‘he heaps up’</td>
</tr>
<tr>
<td></td>
<td>[tëtëngël]</td>
<td>[tëtëngël ëtëtëngël]</td>
<td>‘he rolls around’</td>
</tr>
</tbody>
</table>

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.
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.
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 ḡwa len manda  
bāy mbāl ā- mbāl -ēnē nxʷā lēn 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.  
\[
\text{Sa} \quad \text{tal} \quad \text{ca} \quad \text{mana} \quad , \quad \text{da} \quad \text{sa} \quad \text{da}
\]
\[
sā- \quad tāl \quad tsā \quad mānā \quad dā \quad sā- \quad dā
\]
1SG.SBJ- prepare.hot.drink TOP (hesitation) draw 1SG.SBJ- draw

yam aza mpar ñ keserwal .

jām āzá mpār ñ kēsērwal

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.  
\[
\text{dam} \quad \text{oy} \quad \text{kadamas} \quad \text{ara} \quad \text{taf} \quad \text{taf} \quad \text{vaj} \quad \text{a} \quad \text{wata} .
\]
\[
dmās \quad j- \quad kā- \quad dmās \quad ārā \quad tāf \quad tāf \quad vānj \quad á \quad wātā
\]
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.  
\[
\text{Dam} \quad \text{hwa} \quad \text{nadamba} \quad \text{a} \quad \text{mapat} \quad \text{ca} \quad \text{a} \quad \text{bay} .
\]
\[
dām \quad xʷā- \quad ná- \quad dām \quad -xā \quad á \quad māpāt \quad tsā \quad á \quad bāy
\]
enter 2SG.SBJ- FUT- enter -VNT.DIST PREP1 morning TOP PREP1 chief

‘You will enter in the morning, to the chief’s (house).’

(TN1-SN:6.4)

Finally, unlike the Mina construction, the Buwal reduplicated form may occur in negative clauses (11.47).

(11.47)  
\[
\text{Sa} \quad \text{kasan} \quad \text{ana} \quad \text{ebe} \quad \text{ca} , \quad \text{nja} \quad a \quad \text{nja} \quad a
\]
\[
sā- \quad kā- \quad sān \quad ānā \quad èbè \quad tsā \quad ndzā \quad ā- \quad ndzā \quad á
\]
1SG.SBJ- IPFV- know like DEM.MED TOP dwell 3SG.SBJ- dwell PREP1

wata naka k\text{waw} .

wātā nākā kʷəw

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.  
\textit{Gazl} gazl \textit{a} gazl, a ηgene ja a  
gəɓŋ gəɓŋ ə- gəɓŋ ηŋá -ēŋē dzá á  
\textit{beat} beat \textit{3SG.SBJ-} \textit{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.  
\textit{Kwec} kwec kwec kwec kwec kwec kwec kwec  
kʷɛts kʷɛts kʷɛts kʷɛts kʷɛts kʷɛts  
\textit{sprinkle} sprinkle sprinkle sprinkle sprinkle sprinkle sprinkle  
a kwec yam a heɗe .  
ā- kʷɛts jām á xēɗe  
\textit{3SG.SBJ-} sprinkle \textit{water} \textit{PREP1 on.it}  
`He sprinkled water on it \textbf{ numerous times}.’

(TN1-SN:5.9)

A nominal subject occurs before the first verb root (11.49).

(11.49) \textit{Uzaye} wese ege ndaɗ' ndaɗ' ay ndaɗ' nkdāŋ wese aza .  
wzię wēsé =ɛgē ndaɗ' ndaɗ' j- ndaɗ' nkdāŋ wēsé āzā  
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. *Hejye ay ketev, ay ketev,*

xèdzè -jé j- kā- tèv j- kā- tèv

_person -PL 3PL.SBJ- IPFV- climb 3PL.SBJ- IPFV- climb*

ay ketev, ay dak, ay kànda tata

j- kā- tèv j dák j- kā- ndà tátà

*3PL.SBJ- IPFV- climb 3PL.STAT gone 3PL.SBJ- PFV- go 3PL.POSS ganak. ganak*

far

‘People kept on climbing, they were gone, they had gone far away.’

(TN2-WN:3)

b. *mzla wese ca, a jam ara, a*

mľā wēsē 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
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 má ḥāḥār 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- kāts āzā ā- kā- kāts āzā ā-`

IPFV- take.part IT 3SG.SBJ- IPFV- take.part IT 3SG.SBJ-

`kakac aza vəzəkw wèsé`

`kā- kāts āzā vəzək wēsē`

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

| 3SG.SBJ  | ásádāj | ‘I don't know!’ |
| NOM.PAT  | ātā   |
| FUT      | āvā   |
| PREP1    | āw    |
| VNT.PROX | -āx "āw" |
| 1INCL.DOBJ, 1INCL.IOBJ | -āx "nè" |
| 3SG.DOBJ | 3PL.DOBJ |
| ASS.PL   | ‘smoke rising’ |
| ‘tentatively’ |
| ‘taste(v)’ |
| ‘create, make, form’ |
| ‘father(ful.)’ |
| ‘fast growing’ |
| ‘plough(v)’ |
| ‘roar, rustle (leaves)’ |
| ‘erosde’ |
| ‘bark (as dog)’ |
| ‘smear a powder’ |
| ‘batchelor’ |
| ‘deceive, flatter’ |
| ‘buffalo’ |
| ‘bag, pocket’ |
| ‘empty out’ |

| NOM.PAT | átā |
| ‘then’ |
| ‘like, according to’ |
| ‘like this.MED’ |
| ‘like that’ |
| ‘if’ |
| DEF.DET | bādāg "ār" |
| 3SG.Poss | bād’ |
| SIM | bākālāf |
| COP | bākātār |
| ‘horse arriving’ |
| ‘then’ |
| ‘but(ful.)’ |
| ‘first’ |
| ‘then’ |
| ‘like, according to’ |
| ‘like this.MED’ |
| ‘like that’ |
| ‘if’ |
| DEF.DET | bādāg "ār" |
| 3SG.Poss | bād’ |
| SIM | bākālāf |
| COP | bākātār |
| ‘horse arriving’ |
| ‘then’ |
| ‘but(ful.)’ |
| ‘first’ |
| ‘then’ |
| ‘like, according to’ |
| ‘like this.MED’ |
| ‘like that’ |
| ‘if’ |
| DEF.DET | bādāg "ār" |
| 3SG.Poss | bād’ |
| SIM | bākālāf |
| COP | bākātār |

| 3SG.SBJ  | ásádāj | ‘I don't know!’ |
| NOM.PAT  | ātā   |
| FUT      | āvā   |
| PREP1    | āw    |
| VNT.PROX | -āx "āw" |
| 1INCL.DOBJ, 1INCL.IOBJ | -āx "nè" |
| 3SG.DOBJ | 3PL.DOBJ |
| ASS.PL   | ‘smoke rising’ |
| ‘tentatively’ |
| ‘taste(v)’ |
| ‘create, make, form’ |
| ‘father(ful.)’ |
| ‘fast growing’ |
| ‘plough(v)’ |
| ‘roar, rustle (leaves)’ |
| ‘erosde’ |
| ‘bark (as dog)’ |
| ‘smear a powder’ |
| ‘batchelor’ |
| ‘deceive, flatter’ |
| ‘buffalo’ |
| ‘bag, pocket’ |
| ‘empty out’ |
bak’w ‘itch(v)’
bàl ‘cut down (tree), chop’
bål ‘funeral, have a funeral’
báláκ ‘awning’
báláŋ’w ‘ball(fr.)’
bálg’âd ‘uproot’
bálvār ‘winnowing’
bā́ ‘clear(v)’
bármbráx ‘flat out’
bân ‘bathe, wash’
báng’ârâŋ’w machete
bār ‘against, along’
bārâf ‘thing left behind’
bārāj ‘second weeding’
bārâw ‘thousand (ful)’
bārbār ‘salty’
bárdzádzâx’w ‘slope’
bárdādāk ‘slightly sour’
bārgādāŋ ‘storm, harmattan’
bārkālāf ‘plant sp.’
bārlā ‘mountain’
bārlấhá ‘patchy’
bās ‘light (fire)’
bās ‘ignore’
bāsk ‘á ‘bicycle’
bāt ‘sink, pour’
bāts ‘operate bellows, inflate’
bāts ‘crush into pieces’
bāv ‘open, start (meeting)’
bāw ‘change, turn’

bāw ‘tree sp.’
bàw-bàw ‘cry out’
bāx ‘plant sp.’
bàx ‘chief, chiefdom’
bāyk ‘name of a large rock’
bām ‘cave, den, lair’
bàx-’bàx ‘plant sp.’
båł ‘hornbill’
båł ‘tear deeply’
bålm ‘name of a large rock’
bålâŋ ‘branching’
bålā̃ ‘thing left behind’
bålmé ‘man’s sleeping hut’
bålz ‘roar’
bålb ‘big(gest) drum’
båldè ‘stone for sealing tomb’
bålē ‘natron’
bålē ‘animal enclosure’
bålēr ‘squirrel’
bålr ‘salty’
bålē ‘hate, betray’
bålē ‘thousand (ful)’
bålēs ‘man’s sleeping hut’
båls ‘squirrel’
båls ‘donkey’
båls ‘bicycle’
båls ‘skin’
båls ‘eyelid’
bålt ‘change, turn’

TOP.ADD

blák ‘thousand’
bláx ‘manner of leaving’
bláx ‘solid’
blèk ‘spread over’
blèr  ‘hippopotamus’
blèr  ‘volcano’
blméɗ  ‘flying termite’
bhā  ‘blessing’
bhā  ‘bless, praise’
bhāk  ‘slander(v)’
bhāx  ‘break off’
bhɛw  ‘break out, break down’
bnāb  ‘gold’
bnēk  ‘smell bad’
brā  ‘hip, waist’
brāf  ‘boil over, ooze, leak’
brām  ‘braid’
brāx w  ‘well up’
brāz  ‘injure’
brdzālāx w  ‘sloped’
bré  ‘herd(n)’
brfāk w  ‘light gray’
brwēŋ  ‘lance, spear’
bsē  ‘nothing, zero’
wāl  ‘Buwal’
bw “ām  ‘salt’
bx “ām  ‘eat big mouthfuls’
bsā  ‘outside’
bsām  ‘chin’

6  ‘bah!’
-bā  BEN
bābā  ‘deaf-mute’
bāf  ‘heat, boil’
bāh  ‘hide, store, shelter(v)’
bāk w  ‘lump (clay, mud)’
bāk w  ‘make/form lumps’
bāl-bāl  ‘rectum’
bālgām  ‘small smelly animal’
bāl  ‘forge(v)’
bāɡ  ‘destroy all together’
bām  ‘munch, crunch’
bām mā  ‘make noise’
bāmām  ‘bee’
bāŋkāl  ‘large calabash’
bār  ‘crack’
bār-bār  ‘hard, strong’
bārām  ‘antenna’
bārdāk w  ‘power, strength’
bārřām  ‘iron(n)’
bās  ‘laugh(v)’
bāw  ‘stab, pierce’
bāw  ‘peel away’
bāx w-bāx w  ‘warm(adj)’
bē  ‘full’
bē  ‘fill’
bēbēl  ‘sprinkle’
bēlven  ‘tree sp.’
bēl  ‘once’
bēl  ‘fence, join together’
bēl  ‘prune(v)’
bēp  ‘manner of throwing away’
bēr  ‘stand strong’
bērēhēl  ‘patterned’
bēsē  ‘liquid filtered through ashes’

637
<table>
<thead>
<tr>
<th>bêts</th>
<th>‘assemble’</th>
</tr>
</thead>
<tbody>
<tr>
<td>bèz</td>
<td>‘divide, separate’</td>
</tr>
<tr>
<td>ɓỳ</td>
<td>‘cheek’</td>
</tr>
<tr>
<td>brâl</td>
<td>‘faint(v)’</td>
</tr>
<tr>
<td>brés-brés</td>
<td>‘slow growing’</td>
</tr>
<tr>
<td>brèsé</td>
<td>‘slowly (physical growth)’</td>
</tr>
<tr>
<td>ɓzèm</td>
<td>‘mouse sp.’</td>
</tr>
<tr>
<td>dà</td>
<td>‘prepare (food)’</td>
</tr>
<tr>
<td>dā</td>
<td>‘bring, make sacrifice to’</td>
</tr>
<tr>
<td>dábá</td>
<td>‘woman’s hut’</td>
</tr>
<tr>
<td>dábá-ská-jám</td>
<td>‘kitchen’</td>
</tr>
<tr>
<td>dábádâm</td>
<td>‘clay chicken house’</td>
</tr>
<tr>
<td>dábdaɓà</td>
<td>‘stopper, plug’</td>
</tr>
<tr>
<td>dâblà</td>
<td>‘child born after twins’</td>
</tr>
<tr>
<td>dâblàj</td>
<td>‘ignorant person’</td>
</tr>
<tr>
<td>dâdaɓ</td>
<td>‘stuttering’</td>
</tr>
<tr>
<td>dâdaɓ</td>
<td>‘be beautiful’</td>
</tr>
<tr>
<td>dâdak</td>
<td>‘manner of catching’</td>
</tr>
<tr>
<td>dâdak</td>
<td>‘dirty(v)’</td>
</tr>
<tr>
<td>dâdak râ</td>
<td>‘threaten’</td>
</tr>
<tr>
<td>dâdak w</td>
<td>‘difficulty’</td>
</tr>
<tr>
<td>dâdak</td>
<td>‘heap up’</td>
</tr>
<tr>
<td>dâdân</td>
<td>‘stopper, plug’</td>
</tr>
<tr>
<td>dâdap</td>
<td>‘convince, cover up’</td>
</tr>
<tr>
<td>dâdāw</td>
<td>‘small of back’</td>
</tr>
<tr>
<td>dâdâw</td>
<td>‘evil, bad person’</td>
</tr>
<tr>
<td>dâdâz</td>
<td>‘redden’</td>
</tr>
<tr>
<td>dâdâs</td>
<td>‘blunten’</td>
</tr>
<tr>
<td>dâdâl</td>
<td>‘blunten’</td>
</tr>
<tr>
<td>dâd</td>
<td>‘pull, stretch’</td>
</tr>
<tr>
<td>dâdâk</td>
<td>‘long’</td>
</tr>
<tr>
<td>dâdâγ ‘âts</td>
<td>‘Pleiades’</td>
</tr>
<tr>
<td>dâfâd</td>
<td>‘sorcerer’</td>
</tr>
<tr>
<td>dâg ‘āf</td>
<td>‘impotent’</td>
</tr>
<tr>
<td>dâj</td>
<td>‘more’</td>
</tr>
<tr>
<td>dâk</td>
<td>‘gobble’</td>
</tr>
<tr>
<td>dâk</td>
<td>‘tread on, press down’</td>
</tr>
<tr>
<td>dâkà</td>
<td>‘since (ful.)’</td>
</tr>
<tr>
<td>dâkâ</td>
<td>‘dregs’</td>
</tr>
<tr>
<td>dâkā</td>
<td>‘dregs’</td>
</tr>
<tr>
<td>dâkā</td>
<td>‘big’</td>
</tr>
<tr>
<td>dâkâl</td>
<td>‘a lot’</td>
</tr>
<tr>
<td>dâklaj</td>
<td>‘gossip(n)’</td>
</tr>
<tr>
<td>dâknâk</td>
<td>‘black’</td>
</tr>
<tr>
<td>dâk w</td>
<td>‘dip(v)’</td>
</tr>
<tr>
<td>dâk w</td>
<td>‘horse’</td>
</tr>
<tr>
<td>dâk ‘ær</td>
<td>‘shin’</td>
</tr>
<tr>
<td>dâlā</td>
<td>‘money (ful.)’</td>
</tr>
<tr>
<td>dâlād’</td>
<td>‘bachelor’</td>
</tr>
<tr>
<td>dâlāj</td>
<td>‘young girl’</td>
</tr>
<tr>
<td>dâl</td>
<td>‘block(v)’</td>
</tr>
<tr>
<td>dām</td>
<td>‘enter, exit, plunder’</td>
</tr>
<tr>
<td>dâmâ</td>
<td>‘glue (from a fruit)(n)’</td>
</tr>
<tr>
<td>dâmā</td>
<td>‘dirt’</td>
</tr>
<tr>
<td>dâmârâ</td>
<td>‘misfortune, cold(head)’</td>
</tr>
<tr>
<td>dâmâw</td>
<td>‘bush country’</td>
</tr>
<tr>
<td>dâmtâk ‘ād</td>
<td>‘tree sp.’</td>
</tr>
<tr>
<td>dâmtk ‘āl</td>
<td>‘pestle, pounding stick’</td>
</tr>
<tr>
<td>dân mbâw</td>
<td>‘miscarry’</td>
</tr>
<tr>
<td>dângâl</td>
<td>‘sort, separate out’</td>
</tr>
<tr>
<td>dângâz</td>
<td>‘ram(n)’</td>
</tr>
<tr>
<td>dâp</td>
<td>‘big piece’</td>
</tr>
<tr>
<td>dâp</td>
<td>‘noise of hitting’</td>
</tr>
<tr>
<td>dàp</td>
<td>‘cover ’</td>
</tr>
<tr>
<td>dår</td>
<td>‘found, begin’</td>
</tr>
<tr>
<td>dår</td>
<td>‘shake by hitting on ground’</td>
</tr>
<tr>
<td>dår</td>
<td>‘plant in the ground’</td>
</tr>
<tr>
<td>dărąf</td>
<td>‘favourite’</td>
</tr>
<tr>
<td>dărjāk w</td>
<td>‘stubbornness’</td>
</tr>
<tr>
<td>dărłāŋ w</td>
<td>‘young man’</td>
</tr>
<tr>
<td>dărğa</td>
<td>‘crowded’</td>
</tr>
<tr>
<td>dār</td>
<td>‘shake by hitting on ground’</td>
</tr>
<tr>
<td>dāv</td>
<td>‘grow, sprout’</td>
</tr>
<tr>
<td>dāvās</td>
<td>‘knock down, knock over’</td>
</tr>
<tr>
<td>dāw</td>
<td>‘back(n)’</td>
</tr>
<tr>
<td>dāwān</td>
<td>‘illness, misfortune’</td>
</tr>
<tr>
<td>dāwăr</td>
<td>‘hill’</td>
</tr>
<tr>
<td>dāx “ām</td>
<td>‘bark for brides’</td>
</tr>
<tr>
<td>dāx “zāk w</td>
<td>‘termite hill’</td>
</tr>
<tr>
<td>dāzi-k</td>
<td>‘begin to learn something’</td>
</tr>
<tr>
<td>dāzāk w</td>
<td>‘cricket’</td>
</tr>
<tr>
<td>dāk</td>
<td>‘clay bed’</td>
</tr>
<tr>
<td>dākē</td>
<td>‘centipede’</td>
</tr>
<tr>
<td>dāntsā</td>
<td>‘conjunctivitis’</td>
</tr>
<tr>
<td>dānām</td>
<td>‘vine sp.’</td>
</tr>
<tr>
<td>dēbhēbēr</td>
<td>‘clay bed’</td>
</tr>
<tr>
<td>dēbhēr</td>
<td>‘clay bed’</td>
</tr>
<tr>
<td>dēbh</td>
<td>‘calm, appease’</td>
</tr>
<tr>
<td>dēbō</td>
<td>‘moisten’</td>
</tr>
<tr>
<td>dēbōr</td>
<td>‘wander’</td>
</tr>
<tr>
<td>dēdēr</td>
<td>‘tardiness’</td>
</tr>
<tr>
<td>dēdēx w</td>
<td>‘encourage’</td>
</tr>
<tr>
<td>dēd</td>
<td>‘push while following’</td>
</tr>
<tr>
<td>dēf</td>
<td>‘low, short’</td>
</tr>
<tr>
<td>dēf</td>
<td>‘amass’</td>
</tr>
<tr>
<td>dēf</td>
<td>‘amass’</td>
</tr>
</tbody>
</table>
dnāz  ‘tree sp.’
drād’ ‘eat fufu with meat’
drāf’ ‘song’
drèŋ ‘surround’
drèš ‘around’
drēs ‘clay’
/drəŋgʷáŋ/ ‘tree stump’
dvār ‘hoe’
dvēz mā ‘lip’
dwā ‘debt’
dwzé ‘behind, after’

dwłːá ‘heifer’

**dz**
dzā ‘show itself’
dzā ‘hit(v)’
dzāb ‘turn over, spill’
dzābán ‘five’
dzàdzāb ‘marsh’
dzē ‘whole’
dzàdzàk ‘heap up soil’
dzàdzàr ‘filter drop by drop’
dzàdzàr ‘filtered liquid’
dzàfād ‘nine’
dzàjá ‘light brown’
dzāk ‘limp, lean’
dzākār ‘crest, partition’
dzākw ‘stack, pile up’
dzām ‘assemble, gather’
dzāmāl ‘accumulate’
dzám āk ‘eight’
dzāndzār ‘mouse sp.’
dzāŋkʷārākʷ ‘peanut stick’
dzāŋʷ- dzāŋʷ ‘bottle’
dzāŋʷ ‘tall and thin’
dzàv ‘assemble’
dzāw ‘fasten, attach’
dzáxàṛāk ‘grass sp.’
dzàxʷ ‘pound(v)’
dzè ‘elope’
dzēːdzē ‘every type’
dzēb ‘transport, take’
dzēb ‘grave(n)’
dzèdzē ‘grandparent’
dzèdzwēd’ ‘fly(n)’
dzējêkʷ ‘regret(v)’
dzēk ‘lean against’
dzēkdêzēw ‘plant sp.’
dzêm ‘long, tall’
dzēnē ‘axe’
dzērē ‘locust’
dăw ‘patchy’
dzànak ‘knead, mix dough’
dzkāw ‘latrine, toilet’
dzkēd’ ‘thorn, thorny plant’
dzkēd’ ndrēj ‘tree sp.’
dzkʷàd’ ‘hair, fur’
dznāk ‘manner of falling’
dzngē ‘study, read(ful.)’
dzrād’ ‘stir(v)’
dzrāv ‘move up and down’
dzvā ‘breastbone’
dzvād’ ‘tangle’
dzvāk ‘resow’
| dzwrap | ‘sub-chief(ful.)’ |
| dz:ɛ | ‘large (animal)’ |

| d’ |  |
| dā | ‘draw water, rain’ |
| dād’ | ‘pull out’ |
| dādāj | ‘prickly grass seeds’ |
| dādāráj | ‘phlegm’ |
| dāf | ‘stretch out’ |
| dāk | ‘gone’ |
| dālā | ‘someone’ |
| dālāz | ‘trap(n)’ |
| dāł | ‘form abcess’ |
| dāmbāł | ‘pumpkin’ |
| dāp | ‘patch up’ |
| dār | ‘fresh grass’ |
| dās | ‘cultivate, farm’ |
| dāw | ‘love, want, need, ask’ |
| dāwāp | ‘rag’ |
| dāwār | ‘canari’ |
| dāx-dāx | ‘sour’ |
| dbās | ‘flame(v)’ |
| dbāt | ‘relieve pain with heat’ |
| dēdē | ‘appropriate’ |
| dēdwēk | ‘pour into’ |
| dēk-dēk | ‘bitter’ |
| dēk “-dēk” w | ‘very black’ |
| dēlēk | ‘vine sp.’ |
| dēlēk | ‘bile, gall, gall bladder’ |
| dēm | ‘manner of fleeing as a group’  |
| dēm-dēm | ‘bland’ |
| dēmbēl | ‘pick(v)’ |
| dēmbēz | ‘calabash for serving’ |
| dēn | ‘bowl’ |
| dēŋgēr | ‘carry on head’ |
| dērēwēl | ‘paper, book(ful.)’ |
| dēts | ‘wring out, milk’ |
| dēz | ‘calabash (edible)’ |
| dī’g “ār” | ‘hump (of cow)’ |
| dlāk | ‘mess’ |
| dlāy | ‘cat’ |

| e | DEM.MED |
| èbè | PL |
| ègē | ‘and(ful.)’ |
| éj | PART |
| -ějé | 1SG.DOBJ, 1SG.IOBJ |
| -ěkēj | ‘like this.PROX’ |
| éndē | ‘however, so’ |
| éndzèkèdē | ‘like that’ |
| énē | 3SG.IOBJ |
| -ēnēj | 1EXCL.DOBJ, 1EXCL.IOBJ |
| -ētēnē | 3PL.IOBJ |
| èvēlē | ‘although’ |
| èző | ‘therefore’ |

| f |  |
| fā | ‘putting hand in a bag’ |
| fārā | ‘manner of running slowly’ |
| fād | ‘shave’ |
| fāfān | ‘flower’ |
| fāg “āj” | ‘stubbornness’ |
| fāg “ālāk” w | ‘leprosy, leper’ |
| fāl | ‘increase(v)’ |
fângâlâw ‘madness’
fâng “álâr ‘hollow(adj)’
fâr ‘manner of leaving’
fârâ ‘pulling out quickly’
fârâm ‘horn’
fât ‘slice, cut up, slaughter’
fâ ‘for good’
fâtâtâ ‘vast’
fâx: ‘soaring’
fâx ‘wake up’
fêdêdê ‘roof matting’
fêdê ‘diminish’
fêdêk ‘whistle(v)’
fêdêk ‘shrink’
fêdê ‘thin’
fêdêk ‘use up’
fêlêx ‘do little by little’
fê ‘blow nose’
fêg ‘scented’
fêsêd ‘tiny’
fê ‘blow, fan’
fê ‘pepper(n)’
fê ‘fine, thin’
fê ‘weevil’
fê ‘stuffing mouth’
fê ‘tiredness from eating’
fê ‘snatch woman’
fê ‘manner of leaving’
fê ‘manner of leaving’
fê ‘sleeping better’
frâ ‘dislocate’
frâ ‘a bit strange’
frêw ‘sniff, sip’
frê ‘steal everything’
flân ‘spark(n)’
flâr ‘dig up’
flêk ‘lost’
flêk ‘lose’
flêl ‘manner of running’
flêt ‘vast’
fâ ‘slice, cut up, slaughter’
fâ ‘for good’
fât ‘for good’
flê ‘manner of running’
flê ‘vast’
fâ ‘pulling out quickly’
flât ‘hollow(adj)’
flât ‘manner of leaving’
fâ ‘for good’
flât ‘manner of running’
flâ ‘tiredness from eating’
flâ ‘sleeping better’
flâ ‘dislocate’
flâ ‘a bit strange’
gá ‘sufficient’
gâ ‘load(v)’
gâb ‘knead, paddle’
gâbär ‘deer’
gâdâd ‘arrow’
gâdâd ‘stinger’
gâdbâg ‘craw’
gâdwdâ ‘cooking pot’
gâdân ‘idiot’
gâdzâk ‘gourd, bottle’
gâdzâmbâl ‘harp’
gâgât ‘gulp down’
gâgmâj ‘cotton’
gâgrânj ‘insufficient’
gâ ‘spoil’
gâj ‘badness, sin’
gâ ‘grow up, raise’
gâl ‘better’
gâl ‘hangar, shelter’
gâl ‘exhausted’
gâlâgâl ‘enclosed area’
gâlân ‘jerry-can(fr.)’
<table>
<thead>
<tr>
<th>gäldäm</th>
<th>‘pig’</th>
<th>gdàŋ</th>
<th>‘hard, difficult’</th>
</tr>
</thead>
<tbody>
<tr>
<td>gälāŋ</td>
<td>‘single’</td>
<td>gdàŋ</td>
<td>‘mold (pottery)’</td>
</tr>
<tr>
<td>gàŋ</td>
<td>‘beat, thresh’</td>
<td>gdégdē</td>
<td>‘mat (traditional)’</td>
</tr>
<tr>
<td>gälkängär</td>
<td>‘hat’</td>
<td>gdémfē</td>
<td>‘pot for flour’</td>
</tr>
<tr>
<td>gälšārvāj</td>
<td>‘ligament’</td>
<td>gdāk</td>
<td>‘reduced’</td>
</tr>
<tr>
<td>gälšāvāj</td>
<td>‘God, sky’</td>
<td>gdām</td>
<td>‘gather’</td>
</tr>
<tr>
<td>gām</td>
<td>‘drive away, herd’</td>
<td>gē</td>
<td>‘house’</td>
</tr>
<tr>
<td>gāmbär bāmām</td>
<td>‘beeswax’</td>
<td>gēb</td>
<td>‘abandon, leave’</td>
</tr>
<tr>
<td>gāmḥā</td>
<td>‘star’</td>
<td>gēdwrēj</td>
<td>‘sauce pot’</td>
</tr>
<tr>
<td>gāmtāk</td>
<td>‘chicken’</td>
<td>gēdzērē</td>
<td>‘shorts, loincloth’</td>
</tr>
<tr>
<td>gāmzāk w</td>
<td>‘rooster (cock)’</td>
<td>gēdzērḗg</td>
<td>‘tooth decay’</td>
</tr>
<tr>
<td>gāmzāk w</td>
<td>‘wisdom, wise’</td>
<td>gēf</td>
<td>‘physical difficulty’</td>
</tr>
<tr>
<td>gānānā</td>
<td>‘tongue’</td>
<td>gēķēy</td>
<td>‘summit of hill’</td>
</tr>
<tr>
<td>gānānā gāmtāk</td>
<td>‘grass sp.’</td>
<td>gēngér</td>
<td>‘palm branch, frond’</td>
</tr>
<tr>
<td>gānglāj</td>
<td>‘praying mantis’</td>
<td>gēngér</td>
<td>‘want more’</td>
</tr>
<tr>
<td>gāp</td>
<td>‘put on weight,</td>
<td>gēngrḗg</td>
<td>‘rub(v)’</td>
</tr>
<tr>
<td>gār</td>
<td>‘state’</td>
<td>gēr</td>
<td>‘harp’</td>
</tr>
<tr>
<td>gār</td>
<td>‘stand, liven up’</td>
<td>gēr</td>
<td>‘all disappear’</td>
</tr>
<tr>
<td>gārāk</td>
<td>‘shield(n)’</td>
<td>gēr</td>
<td>‘look (for) intently’</td>
</tr>
<tr>
<td>gārāwāl</td>
<td>‘robe(ful.)’</td>
<td>gēr</td>
<td>‘scoop out sorghum’</td>
</tr>
<tr>
<td>gārdādāŋ</td>
<td>‘palate’</td>
<td>gēs</td>
<td>‘touch, feel’</td>
</tr>
<tr>
<td>gārksāŋ</td>
<td>‘tie’</td>
<td>gēsgēl</td>
<td>‘folere’</td>
</tr>
<tr>
<td>gās</td>
<td>‘time(s)’</td>
<td>gēvdē</td>
<td>‘tree sp.’</td>
</tr>
<tr>
<td>gāsāŋ</td>
<td>‘virgin’</td>
<td>gēz</td>
<td>‘rust(n)’</td>
</tr>
<tr>
<td>gāt</td>
<td>‘eat with hands’</td>
<td>glèō</td>
<td>‘kneel’</td>
</tr>
<tr>
<td>gāvār</td>
<td>‘Gavar’</td>
<td>gmāz</td>
<td>‘bellows’</td>
</tr>
<tr>
<td>gāvdā</td>
<td>‘bracelet, bead’</td>
<td>gmēt</td>
<td>‘monkey, baboon’</td>
</tr>
<tr>
<td>gāw</td>
<td>‘hunter’</td>
<td>gnēx</td>
<td>‘apply lightly’</td>
</tr>
<tr>
<td>gāwlā</td>
<td>‘Gawla (ceremony)’</td>
<td>gré</td>
<td>‘maybe’</td>
</tr>
<tr>
<td>gāzāwā</td>
<td>‘Gazawa’</td>
<td>grē</td>
<td>‘see’</td>
</tr>
<tr>
<td>gāzgāz</td>
<td>‘mane’</td>
<td>gzā</td>
<td>‘section’</td>
</tr>
<tr>
<td>gdāk</td>
<td>‘far’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gb</td>
<td>gbàf</td>
<td>‘soak through’</td>
<td>gbàk</td>
</tr>
<tr>
<td>----</td>
<td>-----</td>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td>gʷ</td>
<td>gʷâŋ</td>
<td>‘rub(v)’</td>
<td>gʷāŋk</td>
</tr>
<tr>
<td>gʷ</td>
<td>gʷâñ</td>
<td>‘entrance hut’</td>
<td>gʷēbê</td>
</tr>
<tr>
<td>gʷ</td>
<td>gʷ‘klâm</td>
<td>‘term of address’</td>
<td>gʷ‘nât</td>
</tr>
<tr>
<td>gʷ</td>
<td>gʷ‘papaya’</td>
<td>Y</td>
<td>gʷ‘yâyândâr</td>
</tr>
<tr>
<td>Yalá</td>
<td>‘boundary’</td>
<td>Yèvé</td>
<td>‘breaking clay objects’</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------</td>
<td>-----------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Yàbh</td>
<td>‘eat raw’</td>
<td>Yèw</td>
<td>‘catch in a trap’</td>
</tr>
<tr>
<td>Yàbhàlaw</td>
<td>‘bad (to eat)’</td>
<td>Yjàd’</td>
<td>‘throb of pain’</td>
</tr>
<tr>
<td>Yàn</td>
<td>‘war’</td>
<td>Yjàm’</td>
<td>‘noise of pain’</td>
</tr>
<tr>
<td>Yàmbák</td>
<td>‘manner of getting up’</td>
<td>Ylày</td>
<td>‘Ghelay (clan name)’</td>
</tr>
<tr>
<td>Yàmpáf’</td>
<td>‘lung’</td>
<td>Yrad’</td>
<td>‘scrape(v)’</td>
</tr>
<tr>
<td>Yàr</td>
<td>‘stare(v)’</td>
<td>Y rèk</td>
<td>‘a bit large’</td>
</tr>
<tr>
<td>Yàr</td>
<td>‘be late’</td>
<td>Y rèw</td>
<td>‘lots(n)’</td>
</tr>
<tr>
<td>Yàràd’</td>
<td>‘tree sp.’</td>
<td>Yvèny</td>
<td>‘never’</td>
</tr>
<tr>
<td>Yàràmnyàram</td>
<td>‘unripe/tough’</td>
<td>Yw’</td>
<td>‘noise of toad’</td>
</tr>
<tr>
<td>Yàràw’</td>
<td>‘short-sighted’</td>
<td>Y“Ak’</td>
<td>‘throwing down’</td>
</tr>
<tr>
<td>Yàv</td>
<td>‘pride, admiration’</td>
<td>Y’àb’</td>
<td>‘annoy, get angry’</td>
</tr>
<tr>
<td>Yàv</td>
<td>‘boast, admire’</td>
<td>Y’ad’</td>
<td>‘killing sickness’</td>
</tr>
<tr>
<td>Yàzỳanja</td>
<td>‘yellow’</td>
<td>Y’àf’</td>
<td>‘noise of falling’</td>
</tr>
<tr>
<td>Yèbí</td>
<td>‘manner of abandoning’</td>
<td>Y’ajàm’</td>
<td>‘show, explain’</td>
</tr>
<tr>
<td>Yèbè-yèbè</td>
<td>‘numerous’</td>
<td>Y’àl’</td>
<td>‘uproot’</td>
</tr>
<tr>
<td>Yèdè</td>
<td>‘grass sp.’</td>
<td>Y’al’</td>
<td>‘get fatter’</td>
</tr>
<tr>
<td>Yèf</td>
<td>‘full’</td>
<td>Y’ài’</td>
<td>‘fat, swollen’</td>
</tr>
<tr>
<td>Yèf</td>
<td>‘fill, pour into’</td>
<td>Y’àby’àb’</td>
<td>‘plant sp.’</td>
</tr>
<tr>
<td>Yèyèdèk</td>
<td>‘throat irritation’</td>
<td>Y’àby’àb’</td>
<td>‘grass sp.’</td>
</tr>
<tr>
<td>Yèlé</td>
<td>‘intestines’</td>
<td>Y’ãmtṣàk’</td>
<td>‘come out, dig out’</td>
</tr>
<tr>
<td>Yèxèw</td>
<td>‘underdevoped’</td>
<td>Y’ãndàd’</td>
<td>‘insert something into’</td>
</tr>
<tr>
<td>Yèm</td>
<td>‘doing all together’</td>
<td>Y’àràk’</td>
<td>‘make a hole’</td>
</tr>
<tr>
<td>Yèm</td>
<td>‘judgement, fault’</td>
<td>Y’aràk’</td>
<td>‘colapse(v)’</td>
</tr>
<tr>
<td>Yèmbèv</td>
<td>‘grass sp.’</td>
<td>Y’arhà-y’arhàá</td>
<td>‘snail’</td>
</tr>
<tr>
<td>Yèn-yèn</td>
<td>‘sweet’</td>
<td>Y’arhàhàj’</td>
<td>‘peanuts’</td>
</tr>
<tr>
<td>Yèndèw</td>
<td>‘hook onto’</td>
<td>Y’arñàk’</td>
<td>‘onion, garlic’</td>
</tr>
<tr>
<td>Yèndzèk</td>
<td>‘weak’</td>
<td>Y’ärndzàlàŋ’</td>
<td>‘crooked’</td>
</tr>
<tr>
<td>Yènè</td>
<td>‘Ghene (trad. festival)’</td>
<td>Y’ãrǹg’ãm</td>
<td>‘cactus’</td>
</tr>
<tr>
<td>Yènènèb</td>
<td>‘wet, too much water’</td>
<td>Y’átàtá’</td>
<td>‘slightly acidic’</td>
</tr>
<tr>
<td>Y“åv</td>
<td>‘rot slightly’</td>
<td>jàx“</td>
<td>‘thread(v)’</td>
</tr>
<tr>
<td>Y“åz-Y“åz</td>
<td>‘silk, hair (of maize)’</td>
<td>-jé</td>
<td></td>
</tr>
<tr>
<td>Y“éjść-Y“éjść</td>
<td>‘clean’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y“ënë-Y“ënë</td>
<td>‘tickle(n)’</td>
<td>k</td>
<td>DUB</td>
</tr>
<tr>
<td>Y“èrdëdë</td>
<td>‘patterned’</td>
<td>ká</td>
<td>ANT</td>
</tr>
<tr>
<td>Y“èrgè</td>
<td>‘mushroom’</td>
<td>ká</td>
<td>PFV</td>
</tr>
<tr>
<td>Y“èstsésé</td>
<td>‘acidic’</td>
<td>kà</td>
<td>IPFV</td>
</tr>
<tr>
<td>Y“rg“m</td>
<td>‘bird sp.’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j</td>
<td>3PL.SBJ</td>
<td>kàdàk</td>
<td>‘good’</td>
</tr>
<tr>
<td>j-</td>
<td>3PL.STAT</td>
<td>kàd`</td>
<td>‘move(v)’</td>
</tr>
<tr>
<td>jà</td>
<td>‘say, invite, call’</td>
<td>kàf</td>
<td>‘raise, lift(v)’</td>
</tr>
<tr>
<td>jà:</td>
<td>‘noise of rain’</td>
<td>kàh</td>
<td>‘dig’</td>
</tr>
<tr>
<td>jàb</td>
<td>‘wash’</td>
<td>kàj</td>
<td>‘Oh!, No!(ful.)’</td>
</tr>
<tr>
<td>jàf-jàf</td>
<td>‘too delicious’</td>
<td>kàkàd</td>
<td>‘squeeze, massage’</td>
</tr>
<tr>
<td>jàjá</td>
<td>‘invitation, call’</td>
<td>kàkàr</td>
<td>‘take into consideration’</td>
</tr>
<tr>
<td>jàjàŋ</td>
<td>‘shine brightly’</td>
<td>kàklàk</td>
<td>‘cackle (chicken)’</td>
</tr>
<tr>
<td>jàjàx</td>
<td>‘melt’</td>
<td>kàl</td>
<td>‘smear(v)’</td>
</tr>
<tr>
<td>jàk</td>
<td>‘leave, abandon, stop’</td>
<td>kàl-kàl</td>
<td>‘confusion’</td>
</tr>
<tr>
<td>jàk“</td>
<td>‘shorten’</td>
<td>kàl-kàl</td>
<td>‘equal (ful)’</td>
</tr>
<tr>
<td>jàt</td>
<td>‘hatch, produce’</td>
<td>kàlalàw</td>
<td>‘bouncing child on belly’</td>
</tr>
<tr>
<td>jàhàhà</td>
<td>‘heavily (rain)’</td>
<td>kàlkàkàk</td>
<td>‘jaw’</td>
</tr>
<tr>
<td>jàm</td>
<td>‘also’</td>
<td>kàlsàsàŋ</td>
<td>‘underneath ear’</td>
</tr>
<tr>
<td>jàm</td>
<td>‘water, juice’</td>
<td>kàlá</td>
<td>‘maybe’</td>
</tr>
<tr>
<td>jàŋ</td>
<td>‘move away, migrate’</td>
<td>kàlàfàj</td>
<td>‘danger’</td>
</tr>
<tr>
<td>jàŋ</td>
<td>‘only’</td>
<td>kàlpàráx</td>
<td>‘flat and oval’</td>
</tr>
<tr>
<td>jàp</td>
<td>‘deep’</td>
<td>kàmbàŋ</td>
<td>‘tree sp.’</td>
</tr>
<tr>
<td>jàr</td>
<td>‘flee’</td>
<td>kàmpàx</td>
<td>‘dove(n)’</td>
</tr>
<tr>
<td>jàts</td>
<td>‘flee in secret’</td>
<td>kàngàŋ</td>
<td>‘drum (medium sized)’</td>
</tr>
<tr>
<td>jàw</td>
<td>‘so(ful.)’</td>
<td>kànkàs</td>
<td>‘bean(s)’</td>
</tr>
<tr>
<td>jàx-jàx</td>
<td>‘sweet (average), diluted’</td>
<td>kàp</td>
<td>‘manner of covering’</td>
</tr>
</tbody>
</table>
káp  ‘manner of hitting with force’

káp  ‘manner of sitting’

kār  ‘fence in’

kārwāl  ‘chair(ful.)’

kārbā  ‘even though’

kārkājāx  ‘shell(n)’

kāta  ‘perhaps’

kātādāj  ‘omnipresent one’

kātáj  ‘where’

kāts  ‘take a part’

kāw  ‘even(ful.)’

kāw  ‘do once again’

kāwkāw  ‘suddenly’

kāwlāwlāw (exclamation)

kāzānzām  ‘cricket (fatty)’

kdā  ‘towards’

kdāŋ  ‘used up’

kdāŋ  ‘finish’

kdāp  ‘tip out’

kdē  ‘however, so’

kdē  ‘towards’

kēvēk  ‘bird sp’

kēcēwē  ‘grass sp.’

kēdē  ‘perhaps if’

kēdē-kēdē  ‘tickling’

kēf-kēf  ‘light (weight)’

kēfē  ‘rock (large)’

kēl-kēl  ‘summit, top’

kēlēk  ‘beforehand’

kēlélēw  ‘cry to chase away’

kēlēngēd  ‘weak’

kēlēvēlēn  ‘swimming’

kēmtsē  ‘grass sp.’

kērkēm  ‘dried leftover fufu’

kērgēl  ‘bone’

kēs  ‘leave, make leave’

kēs-kēs  ‘bird sp.’

kēt  ‘bring good’

kētēgré  ‘perhaps’

kētsē  ‘a bit later’

kēvējē  ‘ancient’

klāj  ‘complete(adj)’

klāj  ‘complete the number’

klāŋ  ‘threshing-floor’

klāw  ‘hook onto’

klēŋ  ‘wisdom, wise person’

krād  ‘approach(v)’

krāk  ‘tuck into’

krāp  ‘press down’

krāw-krāw  ‘large (seeds)’

krēw  ‘difficult farming’

krēw  ‘farm with difficulty’

ktād  ‘manner of cutting’

ktēk  ‘putting in a container’

ksān  ‘fast’

ksāx  ‘cough(v)’

ktskēd  ‘stumble(v)’

ktskēm  ‘start (jump)(v)’

kvā  ‘side’

kvād  ‘mix(v)’

kp  ‘manner of getting’
kʷ
kʼádákʼá ‘sweet potato’
kʼáťáláx w ‘dusty colour’
kʼá própá ‘for the moment’
kʼáy ‘have diarrhea’
kʼáh ’áw ‘fire, heat’
kʼáj ‘scatter’
kʼájk ’ájá ‘hyena’
kʼái lálán ‘sour’
kʼái tsálán ‘sour’
kʼák ‘heat(n)’
kʼák ’ár ‘rinse’
kʼák ’ás ‘sacrifice(n)’
kʼák ’ásh ‘set aside chaff’
kʼák ’ján ‘mystery, enigma’
kʼálá ‘tobacco pipe’
kʼáláj ‘drought, rainbow’
kʼáláá ‘scattered’
kʼáláŋ ‘burden, baggage’
kʼálár ‘egg (unfertilized)’
kʼáláš ‘worn out thing’
kʼám ‘load(v)’
kʼándád ‘crop (of bird)’
kʼánzán ‘coil of iron’
kʼáp ‘throw at’
kʼár ‘pick up’
kʼárk ’árdéđem ‘cicada’
kʼárláláj ‘open landscape’
kʼármbálá ‘shea-butter tree’
kʼárndzálax ‘agama lizard’
kʼártsáf ‘wrinkle(v)’
kʼásásáb ‘cane rat’
kʼásáxál ‘ugly, strange’
kʼátsá-k ’átsá ‘here and there’
kʼáw ‘entering to hide’
kʼáwá ‘lost’
kʼáwáp ‘lose’
kʼáy ’ám ‘manner of swallowing’
kʼédk ’éd ‘very fine’
kʼédk ’édéŋ ‘small (piece)’
kʼék ’éd ‘scatter’
kʼék ’êsé ‘mite’
kʼék ’ésé ‘kindling’
kʼék ’é ‘used up’
kʼélélé ‘fine’
kʼélén-k ’élén ‘stop (rain)(v)’
kʼélén ‘easily, quickly’
kʼélfé’d-k ’elfé’d ‘soft’
kʼélfé’d ‘easy to swallow’
kʼélyé’d ‘line scratched in skin’
kʼét ‘underpants’
kʼété ‘disorder’
kʼétrhøj ‘open, clear (not covered)’
kʼétrhøj ’étrhøj ‘doughnut(ful.)’
kʼétrhøj ’étrhøj ‘sharpen’
kʼétrhøj ‘indicate, point’
kʼétrhøj ‘tail(n)’
kʼétrhøj ‘sharp’
kʼétrhøj ‘sprinkle’
kʼétrhøj ‘spread out’
kʼétrhøj ‘intelligence’
kʼétrhøj ‘dash(n)’
kʼétrhøj ‘moving back and forth’

648
| k“lá” | ‘able’ | lág“āw | ‘leather bow string’ |
| k“làb” | ‘paint, cover with leaves’ | lák-lák | ‘tree sp.’ |
| k“lák” | ‘obligatory’ | lák“w | ‘lose weight’ |
| k“lāp” | ‘dent, wrinkle’ | lák“āt | ‘major river’ |
| k“lásk” | ‘sick’ | lák“ātāj | ‘whip(n)’ |
| k“lè” | ‘idol’ | lālāk | ‘be afraid’ |
| k“léfl-k“léf” | ‘smooth’ | lālāx“w | ‘valley’ |
| k“ḫāktádāk” | ‘leech’ | lālāx“w” | ‘hunting’ |
| k“ḥè” | ‘darkness’ | lām | ‘admit (a wrong)’ |
| k“náw” | ‘sorghum drink’ | lām | ‘help(v)’ |
| k“ráb” | ‘manner of kneeling’ | lām | ‘build, make’ |
| k“ràt” | ‘pick in quantity’ | lāmbāg | ‘litter(n)’ |
| k“réj-k“réj” | ‘open landscape’ | lāp | ‘fold, hem(v)’ |
| k“rndzāx” | ‘rough’ | lāw | ‘cry of grief’ |
| k“sàm” | ‘body’ | lāwāḍ | ‘game’ |
| k“sē” | ‘fishing net’ | láwāḍ | ‘play’ |
| k“stālāx” | ‘messy, rough’ | láwán | ‘bed’ |
| k“tsēk” | ‘chicken basket’ | lāwār | ‘start of dry season’ |
| k“vāx” | ‘monitor lizard’ | lāx-lāx | ‘pleasant’ |
| k“zāk“āx” | ‘maternal uncle.2POSS’ | lēbēd | ‘plead with’ |
| k“zāk“nā” | ‘maternal uncle.1POSS’ | lēbēr-lēbēr | ‘flexible’ |
| k“zāŋg“ān” | ‘maternal uncle.3POSS’ | lēk“āl” | ‘school(fr.)’ |

1

NOM.ACT

| la | ‘place, field, | lēm mā | ‘meet’ |
| lā | ‘do, add, make’ | lēg | ‘plus’ |
| lā | ‘story, chatter(n)’ | lēŋgēd | ‘hockey-like game’ |
| làbārā | ‘story, chatter(n)’ | lēs | ‘tight’ |
| làb | ‘send (something)’ | lēvērē | ‘lion’ |
| làb | ‘accept, agree to’ | lēz | ‘narrow’ |
| làb | ‘wet(v)’ | lēf | ‘make dirty’ |
| lāg“ādā” | ‘dust’ | lgē | ‘pasture’ |
| ɬpèt | ‘moisten’          | ɭèr | ‘exterminate’    |
| ɭvà  | ‘baby sling’       | ɭèr | ‘splinter, sliver’ |
| ɭvàŋ-ɭvàŋ | ‘dark’              | ɭèw | ‘catch (object in air)’ |
| ɭwèts | ‘fireplace’        | ɭkàɗ | ‘change skin colour’ |
| ɭwàmà | ‘market(ful.)’     | ɭkàr | ‘kick(v)’         |

| ɭ | ‘prepare, arrange’ |
| ɭàb | ‘almost, ready’ |
| ɭàɗ | ‘ask repeatedly’ |
| ɭàqàf | ‘long broad leaf’ |
| ɭàk | ‘tuck(v)’ |
| ɭàlàlàj | ‘root’ |
| ɭàlàp | ‘cover lightly’ |
| ɭàtàr | ‘pursue’ |
| ɭàlàr | ‘paint(v)’ |
| ɭàlàr | ‘crawl (lizard)(v)’ |
| ɭàmàj-ɭàmàj | ‘wrong way around’ |
| ɭàn | ‘try, imitate’ |
| ɭàŋgàl | ‘measure(v)’ |
| ɭàŋgàl | ‘time’ |
| ɭàp | ‘tell, recount’ |
| ɭàr | ‘smear a little(v)’ |
| ɭàràmà | ‘date palm’ |
| ɭàx | ‘tear(v)’ |
| ɭéb-ɭéb | ‘narrow’ |
| ɭédèk ’w” | ‘grass sp.’ |
| ɭéðàx | ‘needle (very long)’ |
| ɭéfèdèk ’w” | ‘skin of stalk’ |
| ɭéfèd | ‘remove skin’ |
| ɭèn | ‘dance and jump(v)’ |
| ɭèŋ | ‘set (trap)’ |

| ɭì | ‘dark’ |
| ɭìŋ-ɭìŋ | ‘catch (object in air)’ |
| ɭìkà | ‘kick(v)’ |
| ɭìlàj | ‘place horizontally’ |

| ɭpàts | ‘throw liquid’ |
| ɭràb | ‘cover, patch(v)’ |

<p>| ɭàx | ‘ear’ |
| ɭàm | ‘name’ |
| ɭàm | ‘cocoym (lit. elephant’s ear’) |
| ɭàm g’àlì | ‘cow’ |
| ɭàm màlaxàj | ‘vine sp. (lit. ‘mouse ear’)’ |
| ɭàm báj | ‘cane, staff’ |
| ɭàm báx ’w” | ‘sorghum dust’ |
| ɭàm | ‘work(n)’ |
| ɭàn | ‘taste(v)’ |
| ɭàn | ‘sibling.1POSS’ |
| ɭàn | ‘sibling.2POSS’ |</p>
<table>
<thead>
<tr>
<th>Arabic Word</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ɬāŋ</td>
<td>‘cross(v)’</td>
</tr>
<tr>
<td>ɬāŋgāl</td>
<td>‘edge(n)’</td>
</tr>
<tr>
<td>ɬāŋgān</td>
<td>‘sibling 3POSS’</td>
</tr>
<tr>
<td>ɒp</td>
<td>‘swollen’</td>
</tr>
<tr>
<td>ɒp</td>
<td>‘say, speak, greet’</td>
</tr>
<tr>
<td>ɒp</td>
<td>‘speech, discourse’</td>
</tr>
<tr>
<td>ɜr</td>
<td>‘open, uncover’</td>
</tr>
<tr>
<td>ɜr</td>
<td>‘be popular’</td>
</tr>
<tr>
<td>ɜrāwāj</td>
<td>‘yellow sorghum’</td>
</tr>
<tr>
<td>ɜrādāj</td>
<td>‘gap’</td>
</tr>
<tr>
<td>ɜv</td>
<td>‘strain, filter, trickle’</td>
</tr>
<tr>
<td>ɜx“dāj</td>
<td>‘dark grey’</td>
</tr>
<tr>
<td>ɜz</td>
<td>‘capsize, turn over’</td>
</tr>
<tr>
<td>ɜdēj</td>
<td>‘tooth’</td>
</tr>
<tr>
<td>ɜdēb</td>
<td>‘overlap(v)’</td>
</tr>
<tr>
<td>ɜēj</td>
<td>‘flesh, meat’</td>
</tr>
<tr>
<td>ɜkēlēv</td>
<td>‘skin of stem’</td>
</tr>
<tr>
<td>ɜēhē</td>
<td>‘long ago’</td>
</tr>
<tr>
<td>ɜhēhēvēr</td>
<td>‘forest’</td>
</tr>
<tr>
<td>ɜrēk</td>
<td>‘fingernail, claw’</td>
</tr>
<tr>
<td>ɜlāw</td>
<td>‘okra’</td>
</tr>
<tr>
<td>ɜlāw</td>
<td>‘lay something down on’</td>
</tr>
<tr>
<td>ɜmbāl</td>
<td>‘shelf’</td>
</tr>
<tr>
<td>ɜmē</td>
<td>‘hear, understand, feel’</td>
</tr>
<tr>
<td>ɜrāts</td>
<td>‘pour grain into’</td>
</tr>
<tr>
<td>ɜrāv</td>
<td>‘grass sp.’</td>
</tr>
<tr>
<td>ɜrmbād</td>
<td>‘sticky’</td>
</tr>
<tr>
<td>ɜvēr</td>
<td>‘open place, clearing’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ma-</td>
<td>NOM</td>
</tr>
<tr>
<td>má</td>
<td>TOP.EMPH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Syllable</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ɬāŋ</td>
<td>‘mouth, language, problem’</td>
</tr>
<tr>
<td>ɬā</td>
<td>‘front, edge’</td>
</tr>
<tr>
<td>ɬā-</td>
<td>JUS</td>
</tr>
<tr>
<td>mābāk</td>
<td>‘grass sp.’</td>
</tr>
<tr>
<td>mābālmād</td>
<td>‘bald’</td>
</tr>
<tr>
<td>mābānbān</td>
<td>‘salt’</td>
</tr>
<tr>
<td>mābās</td>
<td>‘shoulder’</td>
</tr>
<tr>
<td>mābjkāraj</td>
<td>‘large cricket’</td>
</tr>
<tr>
<td>mādā</td>
<td>‘if’</td>
</tr>
<tr>
<td>mādābāj</td>
<td>‘awkward (physically)’</td>
</tr>
<tr>
<td>mādādāk</td>
<td>‘base’</td>
</tr>
<tr>
<td>mādādāk</td>
<td>‘heel’</td>
</tr>
<tr>
<td>mādādāk</td>
<td>‘elbow’</td>
</tr>
<tr>
<td>mādādār</td>
<td>‘blight(n)’</td>
</tr>
<tr>
<td>mādāngājā</td>
<td>‘deaf person’</td>
</tr>
<tr>
<td>mādār</td>
<td>‘plant sp.’</td>
</tr>
<tr>
<td>mādārlāg</td>
<td>‘soldier, assistant’</td>
</tr>
<tr>
<td>mādāwān</td>
<td>‘hill’</td>
</tr>
<tr>
<td>mādzā</td>
<td>‘green mamba’ (lit. ‘buffalo killer’)</td>
</tr>
<tr>
<td>mādzādār</td>
<td>‘waterfall’</td>
</tr>
<tr>
<td>mād</td>
<td>‘be.cold(v)’</td>
</tr>
<tr>
<td>mād</td>
<td>‘finish(v)’</td>
</tr>
<tr>
<td>māfādā</td>
<td>‘chest’</td>
</tr>
<tr>
<td>māfādlāk</td>
<td>‘turkey’</td>
</tr>
<tr>
<td>mādān</td>
<td>‘drizzle’</td>
</tr>
<tr>
<td>māflāflā</td>
<td>‘tarantula’</td>
</tr>
<tr>
<td>mālāglā</td>
<td>‘man who has done Gaola’</td>
</tr>
<tr>
<td>māgl</td>
<td>‘pap made with beans’</td>
</tr>
<tr>
<td>mā “ālbāj</td>
<td>‘pap made only with flour’</td>
</tr>
<tr>
<td>mā “ārbā</td>
<td>‘bird sp.’</td>
</tr>
<tr>
<td>mā “ārbā</td>
<td>‘shortsighted person’</td>
</tr>
</tbody>
</table>
māyramyram ‘cartilage’
māh ‘abák ‘ cloud’
māj  TAG.IMP.POL
māj ‘choose, pick’
mājá ‘saliva’
mākālafaj ‘misfortune’
mākaráná ‘upside down’
mākobá ‘name of sacrifice’
māk ‘āh ‘āw ‘log’
māk ‘ālmbáŋ ‘ant (large)’
māk ‘ándarováj ‘small circular root’
māk ‘dá ‘next year’
māk ‘sám ‘semen’
mālā GEN
māláí ‘only child’
mālwlā ‘demon, evil spirit’
mālágā ‘piece of cloth’
mālālw ‘venom, poison’
mālāľ ‘tree sp.’
mālaxáj ‘mouse’
mālaxtā ‘arthritis’
mālāzháj ‘intensity’
mālāzhár ‘river bank’
mālām ‘edge(n)’
mālān ‘haw’
mālārbabáw ‘spider’
māmá- 1DUAL.SBJ
mámán ‘mother.3POSS’
mámaw 1DUAL
mámaw 1DUAL.STAT
mámbarzáj ‘ant (medium)’
māmbáx ‘álām ‘envy’
māmbáza ‘so much’
mān ‘mother’
māná ‘pay back’
mān ám ‘inside’
mān nvá ‘lower grinding stone’
mān xáják ‘world’
mānának “forehead’
mānánáx ‘bitterness’
mānáy ‘so and so’
māndá ‘pancreas’
māndáō ‘salt(ful.)’
māndálá ‘beer sorhugum liquid’
māndárá ‘age mate’
māndársák ‘mouse sp.’
māndáxám ‘pest’
māndván ‘hare’
māndwán ‘rat’
māndzándzăx “jām ‘spitting cobra’
māndzráf ‘end, backside’
mānjám ‘grass sp.’
māngálá ‘single seed’
māngálngál ‘pretending’
māngárá ‘butting heads’
māngáráj ‘red teeth’
māngárzáj ‘bow-legged’
māngdáw ‘grass sp.’
māngráw ‘thumb’
máng “ārá ‘throat’
máng “ārlám ‘insect sp.’
máng “āvraŋ “morning’
mápát
<table>
<thead>
<tr>
<th>Term</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>mappidkxai</td>
<td>‘bush sweet potato’</td>
</tr>
<tr>
<td>mar</td>
<td>‘before’</td>
</tr>
<tr>
<td>mar</td>
<td>‘begin’</td>
</tr>
<tr>
<td>marad</td>
<td>‘plane(n)’</td>
</tr>
<tr>
<td>maravä</td>
<td>‘regret’</td>
</tr>
<tr>
<td>marrzangal</td>
<td>‘Orion’</td>
</tr>
<tr>
<td>marpa</td>
<td>‘fiancé’</td>
</tr>
<tr>
<td>mas</td>
<td>‘type of weed’</td>
</tr>
<tr>
<td>masagal</td>
<td>‘laziness’</td>
</tr>
<tr>
<td>masalam</td>
<td>‘sword’</td>
</tr>
<tr>
<td>masawam</td>
<td>‘water beetle’</td>
</tr>
<tr>
<td>masawlum</td>
<td>‘delinquent’</td>
</tr>
<tr>
<td>masbaxw</td>
<td>‘ache in the bones’</td>
</tr>
<tr>
<td>masen</td>
<td>‘mill(fr.)’</td>
</tr>
<tr>
<td>mask ‘alaj</td>
<td>‘strong willed’</td>
</tr>
<tr>
<td>masx ‘vrazj</td>
<td>‘sore throat’</td>
</tr>
<tr>
<td>matbwa</td>
<td>‘last born’</td>
</tr>
<tr>
<td>matb</td>
<td>‘baobab tree’</td>
</tr>
<tr>
<td>matakăn</td>
<td>IND.RET</td>
</tr>
<tr>
<td>matak ‘ad’</td>
<td>‘last one’</td>
</tr>
<tr>
<td>matak ‘am’</td>
<td>‘desire to see’</td>
</tr>
<tr>
<td>matak ‘tak ‘a</td>
<td>‘knee’</td>
</tr>
<tr>
<td>matamías</td>
<td>‘guinea corn’</td>
</tr>
<tr>
<td>matágár</td>
<td>QUOT.RET</td>
</tr>
<tr>
<td>matatólgy ‘a</td>
<td>‘gecko’</td>
</tr>
<tr>
<td>mats</td>
<td>‘die’</td>
</tr>
<tr>
<td>matsa‘haj</td>
<td>‘head ornament’</td>
</tr>
<tr>
<td>matsarbaľ</td>
<td>‘adult tooth behind baby’</td>
</tr>
<tr>
<td>matsaxw</td>
<td>‘mother.2POSS’</td>
</tr>
<tr>
<td>mátsk ‘axw</td>
<td>‘evening’</td>
</tr>
<tr>
<td>mavi</td>
<td>‘slave(n)’</td>
</tr>
<tr>
<td>mavit</td>
<td>‘because’</td>
</tr>
<tr>
<td>mavaj</td>
<td>‘red squirrel’</td>
</tr>
<tr>
<td>mavalug ‘an</td>
<td>‘selfish person’</td>
</tr>
<tr>
<td>mavavä</td>
<td>‘old (former)’</td>
</tr>
<tr>
<td>mavaw</td>
<td>‘beer (traditional)’</td>
</tr>
<tr>
<td>mavadaj</td>
<td>‘because’</td>
</tr>
<tr>
<td>mawá</td>
<td>‘tree sp.’</td>
</tr>
<tr>
<td>mawal</td>
<td>‘man, husband’</td>
</tr>
<tr>
<td>mawalaj</td>
<td>‘youth meeting’</td>
</tr>
<tr>
<td>maxaylg ‘aw</td>
<td>‘grass sp’</td>
</tr>
<tr>
<td>maxantvaj</td>
<td>‘plant sp.’</td>
</tr>
<tr>
<td>maxkaď</td>
<td>‘three’</td>
</tr>
<tr>
<td>max ‘abag ‘am</td>
<td>‘mumps’</td>
</tr>
<tr>
<td>max ‘ajax ‘ajá</td>
<td>‘grass’</td>
</tr>
<tr>
<td>max ‘ersék w</td>
<td>‘bud(n)’</td>
</tr>
<tr>
<td>mazalak</td>
<td>‘pile of sorghum’</td>
</tr>
<tr>
<td>mazambak</td>
<td>‘red sorghum’</td>
</tr>
<tr>
<td>mazaxw</td>
<td>‘navel’</td>
</tr>
<tr>
<td>mbá</td>
<td>‘tamarind’</td>
</tr>
<tr>
<td>mebélme</td>
<td>‘inarticulate’</td>
</tr>
<tr>
<td>mederőség</td>
<td>‘bedbug’</td>
</tr>
<tr>
<td>medégkődék</td>
<td>‘snake sp.’</td>
</tr>
<tr>
<td>medzélęj</td>
<td>‘pit’</td>
</tr>
<tr>
<td>medzémbéđew</td>
<td>‘bump, knock’</td>
</tr>
<tr>
<td>medzérő</td>
<td>‘terrace wall’</td>
</tr>
<tr>
<td>medzkéd</td>
<td>‘front yard’</td>
</tr>
<tr>
<td>medzkné</td>
<td>‘spit’</td>
</tr>
<tr>
<td>medzve</td>
<td>‘ancestor idol’</td>
</tr>
<tr>
<td>měď</td>
<td>‘swallow, peck’</td>
</tr>
<tr>
<td>medď</td>
<td>‘oath’</td>
</tr>
<tr>
<td>medď</td>
<td>‘swear an oath’</td>
</tr>
<tr>
<td>medđe</td>
<td>‘case’</td>
</tr>
<tr>
<td>medđedě</td>
<td>‘point, end’</td>
</tr>
</tbody>
</table>
mēdēdē  ‘successive ones’
mēdēf  ‘mud wasp’
mēdēlē  ‘someone resembling’
mēfēk  ‘peanut and fat’
mēfēftē  ‘mouse sp.’
mēfēs  ‘muscle’
mēg  ‘clitoris’
mēk  ‘rattle(n)’
mēk  ‘large lizard’
mēl  ‘oil’
mēlē  ‘tree sp.’
mēlēk  ‘dung beetle’
mēlxēd  ‘fine and soft’
mēlēdzē  ‘neighbour’
mēlēmpēd  ‘bush sweet potato’
mēlēpēts  ‘foam on beer’
mēmbērvētēkēm  ‘dragonfly’
mēmēdēzēk  ‘heron’ (lit. ‘snake swallower’)
mēmēn  ‘leopard, panther’
mēmētsèr-mtsèr  ‘mouse’
mēn  ‘left’
mēndē  ‘sword’
mēndēvēk  ‘medicine’
mēndzēw  ‘mosquito’
mēnēgē  ‘insect imp.’
mēnēkēt  ‘ring sp.’
mēnēkēt  ‘ring worm’
mēnēmēts  ‘fried bean leaves’
mēnētēr  ‘teacher(fr.)’
mēpētsēk  ‘bark for young girls’
mērē  ‘male animal’
mērēfrēj  ‘rice’
mēsēk  ‘ant (tiny)’
mēsēlēbē  ‘headscarf’
mēsēmēlēvēg  ‘first-time mother’
mēsēsēk  ‘charcoal’
mēsēswēd’  ‘snake sp.’
mēsfē  ‘harvest season’
mēskēd’  ‘grind finely, soften’
mētēlēm  ‘fetish’
mētēnē  ‘malnutrition’
mētēsēk  ‘metal flint’
mētēs  ‘famine, hunger’
mētētēk  ‘poor man’
mēthē  ‘true’
mētrsēg  ‘naked’
mētsēd’  ‘spark(n)’
mētsēfēk  ‘granary lid’
mētsēt  ‘chisel(n)’
mētwēl  ‘lie(n)’
mēvēdvēdēj  ‘turtle (water)’
mēwē  ‘new’
mēwzēl  ‘removal of excess plants’
mēxēlēz  ‘dried, slightly off fufu’
mēxēsēfēj  ‘grass sp.’
mēxēs-xēsē  ‘annoyance’
mēzēnjēd’  ‘jigger, sand flea’
mēzērēf  ‘prostitution’
mjānāk  ‘bird sp.’
mīād  ‘broom’
| mbā | ‘blacksmith’ |
| mpād’ | ‘take little by little’ |
| mpāk | ‘close, shut’ |
| mpāl | ‘cut(v)’ |
| mpām | ‘look for’ |
| mpār | ‘first’ |
| mpās | ‘bury’ |
| mpāt | ‘tomorrow’ |
| mpē | ‘wood, tree’ |
| mpsèl | ‘testicle’ |
| mrēd’ | ‘stretch, grow a little’ |
| msāk | ‘red earth’ |
| msār | ‘fry’ |
| msāw | ‘roast(v)’ |
| msāxāj | ‘plant sp.’ |
| msēd’ | ‘nastiness’ |
| msēd’ | ‘louse’ |
| msrā | ‘old, old person’ |
| mtāx’w | ‘orphan’ |
| mtsā | ‘vagina’ |
| mtsād’ | ‘tweezers (small)’ |
|mtsār | ‘nose’ |
| mtsē | ‘corpse, deceased’ |
|mwsā | ‘twin’ |
| mzā | ‘fat’ |
| mzār | ‘small(est) drum’ |

**mb**

mbā | ‘unfinished’ |
mbā gādād’ | ‘arrow head’ |
mbāxētsēkē | ‘kid(n)’ |
mbādàb | ‘plant sp.’ |
mbād | ‘domesticate, tame’ |
mbād | ‘exchange, change’ |
mbād | ‘rub(v)’ |
mbād-mbād | ‘chaff’ |
mbādàk’w | ‘underneath chin’ |
mbāg”āf | ‘mouse species’ |
mbāj | ‘grabbing hold of’ |
mbāj | ‘cassava’ |
mbāk”w | ‘evaporate’ |
mbāl | ‘hold, grab, catch(v)’ |
mbāl mā | ‘give pain, hurt’ |
mbālà | ‘type of beer’ |
mbāmbàz | ‘boy, son’ |
mbāmbè | ‘blood’ |
mbānà | ‘water fight’ |
mbāj | ‘cutting suddenly’ |
mbānggàs | ‘toe’ |
mbārá | ‘finger’ |
mbārlà | ‘rope’ |
mbàrnà | ‘day before yesterday’ |
mbàw | ‘child’ |
mbàw | ‘give birth, be born’ |
mbàwàk | ‘small flute’ |
mbàx”w | ‘pardon, forgiveness’ |
mbàx”w | ‘wrap up with cloth’ |
mbàz | ‘blow(v)’ |
mbē | 3SG |
mbèdwèn | ‘sibling after’ |
mbèdèdék | ‘fish sp.’ |
| mbèlèw       | ‘alone’                                      | nāx             | ‘drop, throw away’                |
| mbèlgém      | ‘sling-shot’                                  | nāx mā          | ‘leave’                            |
| mbèɬ         | ‘crouch against, wink’                       | nbāx w’         | ‘pull apart’                       |
| mbèlèm       | ‘one-eyed’                                    | nèf             | ‘stick on the end of(v)’           |
| mbèlxé       | ‘fixedly’                                     | nèjé            | TAG.CONF                           |
| mbèmbē       | ‘same’                                        | nèlè            | ‘egg’                              |
| mbèndzwën    | ‘shepherd’                                    | nèm             | ‘wrinkle (eyes)(v)’                |
| mbèg         | ‘winnow’                                      | nèm-nèm         | ‘dew’                              |
| mbègtsèrēw   | ‘mudfish’                                     | nèné-           | 1EXCL.SBJ                          |
| mbèr         | ‘jump(v)’                                      | nènè            | 1EXCL                             |
| mbèr-mbèr    | ‘near’                                        | nènè            | 1EXCL.STAT                         |
| mbèx         | ‘very small’                                  | nènèw           | ‘throw from far away’              |
| mbèz-mbèzè   | ‘beetle’                                      | nès             | ‘fry leaves’                       |
| mbj          | 3SG.STAT                                      | nèts            | ‘light(v)’                         |
| mblàk w’     | ‘guest, stranger’                             | ntā             | ‘flour’                            |
| mblám        | ‘tree sp.’                                    | ntā nēlè        | ‘yolk (of egg)’                    |
| mblàm        | ‘foreigner, ethnic group’                     | ntād’           | ‘four’                             |
| mblàx        | ‘wound, sore’                                 | ntərə           | ‘forearm’                          |
| mbrāļ         | ‘squash(v)’                                   | nyā             | DEM.PROX                           |
|              |                                               | nyē             | DEM.PROX                           |
|              |                                               | ńyè             | ‘no’                               |
| ná-          | FUT                                           | nh w’ innovate  | ‘get drunk’                        |
| nā           | ‘now’                                         | nkàn            | ‘tie up, bind’ tether              |
| nā           | ‘ripen, ferment’                              | nkāp            | ‘wait’                             |
| nāk          | ‘stop up’                                     | nkđūl           | ‘stone (small)(n)’                 |
| nākā         | 1SG.POSS                                      | nkđaw           | ‘burn, grumble’                    |
| nām-nām      | ‘liver’                                       | nkđēx           | ‘crime’                            |
| nānā         | ‘shiver, tremble’                             | nkēf            | ‘abandoned compound’               |
| nāsàrā       | ‘white man(ful)’ foreigner                    | nkēm            | ‘stalk (maize, sorghum)’           |
| nāt          | ‘lick(v)’                                      | nkłēf           | ‘fish’                             |
| nāw          | ‘dry in sun’                                  | nkkrāf          | ‘boil (water), bubble up’          |
| nkram | 'dry season'        | ntaw | 'whip(v)'       |
| nkraŋ | 'delay(v)'          | ntaw | 'take out mystically' |
| nkrap | 'hide (animal) for women' | ntaw | 'catch'          |
| nkрат | 'simmer'            | ntəwāl | 'thigh'         |
| nksāf | 'grass'             | ntāwān | 'type of fruit' |
| nkʷā | 2SG.POSS            | ntābāl | 'tire'         |
| nkʷāō | 'brain'             | ntōē | 'tired'         |
| nkʷākʷ | 'hernia'            | ntē | 'shoe, sandal'  |
| nkʷārlā | 'puff adder'       | ntēō | 'bend down, stoop' |
| nkʷāx | 'six'               | ntēf | 'spit(v)'       |
| nkʷlāf | 'weakness'          | ntēlē | 'pond, lake'    |
| nkʷnē | 2PL.POSS            | ntēm | 'mouse sp.'     |
| nsāl | 'mate(v)'           | ntēŋ | 'lower(v)'      |
| nsēŋ | 'seed, clan, type'  | ntēr | 'write, draw'   |
| nslōd' | 'seven'             | ntēz | 'divide, separate' |
| ntā | 'take, subtract'    | ntkʷāl | 'curl up'      |
| ntā | 'burst'             | ntmāw | 1DUAL.POSS  |
| ntā nvá | 'defecate'         | ntmēk | 'sheep'        |
| ntāō | 'twist'             | ntrā | 'moon, month'  |
| ntād' | 'dive, dip'         | ntrābō | 'grab, take'  |
| ntād' | 'deafen'            | ntrákʷ | 'well (traditional)' |
| ntād' | 'pull apart'        | ntrām | 'ebony tree'   |
| ntāk | 'crush'             | ntrām | 'spur(n)'      |
| ntākʷ | 'finished'          | ntsā | 'bite, gnaw, sting' |
| ntākʷ | 'finish, complete'  | ntsā mā | 'bite finger' |
| ntākʷāl | 'tree sp.'         | ntsād' | 'belongings'  |
| ntākʷāw | 1INCL.POSS       | ntsād' | 'enrich'       |
| ntāł | 'seven'             | ntsākʷ | 'push'        |
| ntāl | 'take, subtract'    | ntsālā | 'gizzard'     |
| ntār | 'support'           | ntsēb | 'insert into wood' |
| ntārmā | 'support'           | ntsēkʷ | 'tighten'      |
| ntāv | 'sew'               | ntsēnē | 1EXCL.POSS
| ndâv | ‘fall, fell’ |
| ndâv/ndèw | ‘find’ |
| ndàw | ‘base, foundation’ |
| ndéb-ndéb | ‘heavy’ |
| ndédék”w | ‘good for the body’ |
| ndédéz | ‘baby, newborn’ |
| ndék”w-ndék”w | ‘sweet’ |
| ndél | ‘barreness’ |
| ndéléx-ndéléx | ‘heavy’ |
| ndélwén | ‘peanut and beef bones’ |
| ndéndéélék | ‘fresh’ |
| ndéndéd | ‘squeeze(v)’ |
| ndéndéélék”w | ‘short and circular section’ |
| ndér | ‘crush lightly’ |
| ndèw | ‘throw and catch’ |
| ndèw-ndèw | ‘game played with stones’ |
| ndk”lém | ‘silk-cotton tree’ |
| ndláf | ‘solid and stong’ |
| ndlāj | ‘place horizontally’ |
| ndlám | ‘in pieces’ |
| ndlaj”w | ‘same, similar’ |
| ndrám | ‘pleasing’ |
| ndrâm | ‘please, satisfy’ |
| ndrámdámليف | ‘ground pea’ |
| ndrâw | ‘crush(v)’ |
| ndrêj | ‘sorghum’ |
| ndrêj ng”âjäg | ‘maize, corn’ |
| ndvâl | ‘hammer’ |

**nd**

| ndâ | ‘go, walk’ |
| ndâblâm | ‘young female chicken’ |
| ndâd | ‘align’ |
| ndâkâbâj | ‘mud’ |
| ndâkâtsä | ‘ankle ring, bangle’ |
| ndâl | ‘equal’ |
| ndâlâ | ‘pile of sorghum stalks’ |
| ndândâdáz | ‘tree sp.’ |
| ndâj”w | ‘coming agressively’ |
| ndâj”w | ‘bottom, relation’ |
| ndâr | ‘so that, in order to’ |
| ndâry”âz | ‘catfish’ |

**ndz**

| ndzâ | ‘sit, live, dwell,’ |
| ndzâd | ‘wrap around with cloth’ |
| ndzàk'w  | ‘transport(v)’ | ngàd'  | ‘mix’ |
| ndzàndzà | ‘give’        | ngàd'  | ‘count, tell, recount’ |
| ndzàndzàr | ‘clear throat’ | ngàjā | QUOT |
| ndzäng “alāj | ‘type of peanut’ | ngàl | ‘hit hard with a staff’ |
| ndzé | ‘raw’ | ngàl | ‘set apart’ |
| ndzé | ‘eye(n)’ | ngàl | ‘grow old’ |
| ndzè | ‘sown last year’ | ngàlā | ‘side (of body)’ |
| ndzèf | ‘odour, smell’ | ngəlāɗ | ‘unripe fruit’ |
| ndzèf | ‘smell(v)’ | ngəlāŋ | ‘strength, means’ |
| ndzèk | ‘do up, clip on’ | ngələŋgāl | ‘spherical’ |
| ndzèl | ‘grass sp.’ | ngələŋgāl | ‘beating with a stick’ |
| ndzèł | ‘join two things’ | ngələŋgād’ | ‘grass sp.’ |
| ndzèn | ‘follow’ | ngəm | ‘crushing noise’ |
| ndzéndzèyéw | ‘fruit bat’ | ngəmŋəm | ‘trap (iron)(ful.)’ |
| ndzéndzén | ‘debris’ | ngəmgəm | ‘friend’ |
| ndzéréŋ | ‘string game’ | ngəmŋəm | ‘sway(v)’ |
| ndzèw | ‘drag, pull, drive’ | ngəmŋəm | ‘crowd in’ |
| ndzèx | ‘rub, scrub’ | ngər | ‘gossip, slander(n)’ |
| ndzrám | ‘palm rat’ | ngərā | ‘true, worthy’ |
| ndzrēɓ | ‘sip(v)’ | ngərəwālā | ‘fellow-wife’ |
| ndzrēł | ‘remove, pull out’ | ngəs | ‘foot’ |
| ndzwën | ‘true’ | ngəts | ‘tighten’ |
| ndzwná | ‘yesterday’ | ngəz | ‘advise, punish,’ |
| ŋ | PREP2 | ngā | ‘transplant, plant’ |
| ŋ́ | INF | ngāb | ‘over there’ |
| ŋ́ | ‘transplant, plant’ | ngē | ‘over there’ |
| ŋ́ | ‘over there’ | ngēf | ‘over there’ |
| ŋ́ | ‘over there’ | ngēl mā | ‘over there’ |
| ŋ́ | ‘over there’ | ngēlè | ‘over there’ |
| ŋ́ | ‘over there’ | ngēlēlēm | ‘over there’ |
| ŋ́ | ‘over there’ | ngēlēngēl | ‘over there’ |
| ŋ́ | ‘over there’ | ngēlēŋē | ‘over there’ |
| ŋ́ | ‘over there’ | ngēlēŋē | ‘over there’ |
NGÉNGÉ
‘reed’

NGÈR
‘develop’

NGÈS
‘urinate’

NGÈS
‘urine’

NGÉJ
‘pap, porridge’

NGLÁ
‘joint’

NGHÈ
‘forge(n)’

NGHÈN
‘pap, porridge’

NGHÈN NGÀJÀNY ‘Bambara pea(s)’

NGRÀJ
‘stretch, squeeze shut’

NGRÀJ
‘weaver-bird’

NGRÀW
‘make noise’

NGRÈN
‘scratch(v)’

NGTÀW
‘rip(v)’

NGÀ
‘betrayal’

NGÀF
‘throw at’

NGÀLÀLÀN ‘hip’

NGÀNGÀÆN ‘develop (sore)’

NGÀNGÀLÀJ ‘non-ground, raw’

NGÀNGÀR ‘hum, grumble’

NGÀNGÀV ‘rubbish’

NGÀRLÀLÀ ‘coarse’

NGÀRLÀLÀ ‘grain (unground)’

NGÀRTSÀF ‘get goosebumps, scrunch’

NGÀ ‘suffer’

NGÀV ‘suffering, sorrow’

NGÀN ‘sorghum mixed with beans’

NGÀSÈM ‘violence, aggression’

NGÀRéF ‘colapse’

NGÀRéX ‘scratch(v)’

NGMÈB

NGMÈÀK ‘bump, knot (in tree)’

NGMÈBÀ ‘up there’

NGMÈBÀK ‘stop short,’

NGMÈBÀK À ‘hit with elbow(v)’

NGMÈBÀM ‘tipping out’

NGMÈBÀX À ‘growing in bunches’

NGMÈBÀX À ‘noise of something thron’

NGMÈJÀ ‘weaver-bird’

NGMÈJÀ ‘make noise’

NGMÈ ‘put aside’

NGMÈ ‘at a level’

NGMÈ ‘wrap up’

NGMÈÀ ‘lighting up’

NGMÈ ‘mouth (inside)’

NGMÈ ‘pulling up peanuts’

NGMÈ ‘alone’

NGMÈ ‘untie, release’

NGMÈ ‘allow, permit’

NGMÈ ‘grass sp.’

NGMÈ ‘pour libation’

NGMÈÀPÀ ‘lighting up’

NGMÈÀPÀ ‘mouth (inside)’

NGMÈÀPÀ ‘pulling up peanuts’

NGMÈÀ ‘alone’

NGMÈÀ ‘untie, release’

NGMÈÀ ‘allow, permit’

NGMÈÀ ‘grass sp.’

NGMÈÀ ‘pour libation’

NGMÈÀ ‘lighting up’

NGMÈÀ ‘mouth (inside)’

NGMÈÀ ‘pulling up peanuts’

NGMÈÀ ‘alone’

NGMÈÀ ‘untie, release’

NGMÈÀ ‘allow, permit’

NGMÈÀ ‘grass sp.’

NGMÈÀ ‘pour libation’

NGMÈÀ ‘lighting up’

NGMÈÀ ‘mouth (inside)’

NGMÈÀ ‘pulling up peanuts’

NGMÈÀ ‘alone’

NGMÈÀ ‘untie, release’

NGMÈÀ ‘allow, permit’

NGMÈÀ ‘grass sp.’

NGMÈÀ ‘pour libation’

NGMÈÀ ‘lighting up’

NGMÈÀ ‘mouth (inside)’

NGMÈÀ ‘pulling up peanuts’

NGMÈÀ ‘alone’

NGMÈÀ ‘untie, release’

NGMÈÀ ‘allow, permit’

NGMÈÀ ‘grass sp.’

NGMÈÀ ‘pour libation’

NGMÈÀ ‘lighting up’

NGMÈÀ ‘mouth (inside)’

NGMÈÀ ‘pulling up peanuts’

NGMÈÀ ‘alone’

NGMÈÀ ‘untie, release’

NGMÈÀ ‘allow, permit’

NGMÈÀ ‘grass sp.’

NGMÈÀ ‘pour libation’

NGMÈÀ ‘lighting up’

NGMÈÀ ‘mouth (inside)’

NGMÈÀ ‘pulling up peanuts’

NGMÈÀ ‘alone’

NGMÈÀ ‘untie, release’

NGMÈÀ ‘allow, permit’

NGMÈÀ ‘grass sp.’

NGMÈÀ ‘pour libation’

NGMÈÀ ‘lighting up’

NGMÈÀ ‘mouth (inside)’

NGMÈÀ ‘pulling up peanuts’

NGMÈÀ ‘alone’

NGMÈÀ ‘untie, release’

NGMÈÀ ‘allow, permit’

NGMÈÀ ‘grass sp.’

NGMÈÀ ‘pour libation’
<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pàr</td>
<td>'come apart, pull apart'</td>
</tr>
<tr>
<td>párak-párak</td>
<td>'overflowing'</td>
</tr>
<tr>
<td>pàrdwm</td>
<td>'noise of dancing'</td>
</tr>
<tr>
<td>pàrjág</td>
<td>'escape, get away'</td>
</tr>
<tr>
<td>párpar</td>
<td>'different'</td>
</tr>
<tr>
<td>pàrxám</td>
<td>'insufficient'</td>
</tr>
<tr>
<td>pàskákàd</td>
<td>'in small pieces'</td>
</tr>
<tr>
<td>pàsxàt</td>
<td>'come undone'</td>
</tr>
<tr>
<td>páták &quot;är</td>
<td>'hoof'</td>
</tr>
<tr>
<td>pátáw</td>
<td>'cat(ful.)'</td>
</tr>
<tr>
<td>páx</td>
<td>'cut traced out'</td>
</tr>
<tr>
<td>páx</td>
<td>'cut in small pieces'</td>
</tr>
<tr>
<td>páx-w-páx</td>
<td>'threshing stick'</td>
</tr>
<tr>
<td>páx-ák</td>
<td>'pull away'</td>
</tr>
<tr>
<td>pdák</td>
<td>'slice(v)'</td>
</tr>
<tr>
<td>pdáktawàj</td>
<td>'butterfly, moth'</td>
</tr>
<tr>
<td>pdèk</td>
<td>'razor'</td>
</tr>
<tr>
<td>pdèm</td>
<td>'deep'</td>
</tr>
<tr>
<td>pdìg &quot;ãg&quot;</td>
<td>'manner of rolling'</td>
</tr>
<tr>
<td>pèdfèl</td>
<td>'movement of small animal'</td>
</tr>
<tr>
<td>pèk</td>
<td>'shake to separate out skins'</td>
</tr>
<tr>
<td>pélém</td>
<td>'vast'</td>
</tr>
<tr>
<td>pélèj</td>
<td>'come apart'</td>
</tr>
<tr>
<td>pèłèj</td>
<td>'manner of shining in eye'</td>
</tr>
<tr>
<td>pèj</td>
<td>'cut at an angle(v)'</td>
</tr>
<tr>
<td>pèpèjél</td>
<td>'escapade'</td>
</tr>
<tr>
<td>pèpédél</td>
<td>'manner of scampering'</td>
</tr>
<tr>
<td>pèpéjèk</td>
<td>'white'</td>
</tr>
<tr>
<td>pèpèjèg</td>
<td>'fish-scale, eggshell'</td>
</tr>
<tr>
<td>pèprèk mā</td>
<td>'race, compete'</td>
</tr>
<tr>
<td>pèr</td>
<td>'prevent, shut in'</td>
</tr>
<tr>
<td>pèr</td>
<td>'sprinkle with the mouth'</td>
</tr>
<tr>
<td>péré-péré</td>
<td>'full to overflowing'</td>
</tr>
<tr>
<td>pèrédéj</td>
<td>'door(ful.)'</td>
</tr>
<tr>
<td>pèrtsé</td>
<td>'manner of getting up'</td>
</tr>
<tr>
<td>pès</td>
<td>'sun, day'</td>
</tr>
<tr>
<td>pèt</td>
<td>'sharpen, shape, harvest'</td>
</tr>
<tr>
<td>pèts</td>
<td>'gouge out'</td>
</tr>
<tr>
<td>pèw</td>
<td>'be disobedient'</td>
</tr>
<tr>
<td>pèx-w</td>
<td>'noise of entering'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'sum, day'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'pierce'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'loosening with length'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'cut up'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'detach, divide'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'split, pick (corn)'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'cut into pieces'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'blow away'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'break wind'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'spit out'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'nibble(v)'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'gain weight rapidly'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'blink'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'shake up and down'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'explode'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'small'</td>
</tr>
<tr>
<td>pèxr</td>
<td>'preclude, shut in'</td>
</tr>
</tbody>
</table>

661
<table>
<thead>
<tr>
<th>Letter</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>r</td>
<td>rà</td>
<td>‘dig’</td>
</tr>
<tr>
<td>rà</td>
<td>‘side(n)’</td>
<td></td>
</tr>
<tr>
<td>rā</td>
<td>‘insult(v)’</td>
<td></td>
</tr>
<tr>
<td>rā</td>
<td>‘arm, hand’</td>
<td></td>
</tr>
<tr>
<td>ràdákál</td>
<td>‘majority’</td>
<td></td>
</tr>
<tr>
<td>ràd̊</td>
<td>‘press down (flour)’</td>
<td></td>
</tr>
<tr>
<td>râte</td>
<td>‘taste of butter or milk’</td>
<td></td>
</tr>
<tr>
<td>ràk</td>
<td>‘ask, request’</td>
<td></td>
</tr>
<tr>
<td>ràk-ràk</td>
<td>‘equal, half’</td>
<td></td>
</tr>
<tr>
<td>ràt</td>
<td>‘scratch lightly’</td>
<td></td>
</tr>
<tr>
<td>rànd</td>
<td>‘cut(v)’</td>
<td></td>
</tr>
<tr>
<td>ráp</td>
<td>‘all together’</td>
<td></td>
</tr>
<tr>
<td>ráp</td>
<td>‘manner of eating all’</td>
<td></td>
</tr>
<tr>
<td>raráb</td>
<td>‘growl loudly, shout at’</td>
<td></td>
</tr>
<tr>
<td>ràràm</td>
<td>‘growl(v)’</td>
<td></td>
</tr>
<tr>
<td>ràv</td>
<td>‘resound’</td>
<td></td>
</tr>
<tr>
<td>rd̊</td>
<td>‘rot(v)’</td>
<td></td>
</tr>
<tr>
<td>rèdzè</td>
<td>‘scorpion’</td>
<td></td>
</tr>
<tr>
<td>rèh</td>
<td>‘heal, cure, save, escape’</td>
<td></td>
</tr>
<tr>
<td>rèp</td>
<td>‘manner of sitting/resting’</td>
<td></td>
</tr>
<tr>
<td>rg “àts</td>
<td>‘article of clothing’</td>
<td></td>
</tr>
<tr>
<td>rwràb</td>
<td>‘heat(n)’</td>
<td></td>
</tr>
<tr>
<td>s</td>
<td>sàd’</td>
<td>‘apply (ointment), smear’</td>
</tr>
<tr>
<td>sãfaj</td>
<td>‘erase, change the subject’</td>
<td></td>
</tr>
<tr>
<td>sàj</td>
<td>‘coffee/tea(ful.)’</td>
<td></td>
</tr>
<tr>
<td>sákátaj</td>
<td>‘blowing everywhere’</td>
<td></td>
</tr>
<tr>
<td>sālák-sālák</td>
<td>‘crow(n)’</td>
<td></td>
</tr>
<tr>
<td>sāmbwà</td>
<td>‘armpit’</td>
<td></td>
</tr>
<tr>
<td>sànj</td>
<td>‘know, remember’</td>
<td></td>
</tr>
<tr>
<td>säng “àf</td>
<td>‘pouring out all together’</td>
<td></td>
</tr>
<tr>
<td>säng “àjà</td>
<td>‘naked’</td>
<td></td>
</tr>
<tr>
<td>sängkárà</td>
<td>‘mastitis’</td>
<td></td>
</tr>
<tr>
<td>sārik</td>
<td>‘weaken’</td>
<td></td>
</tr>
<tr>
<td>sār</td>
<td>‘undercook’</td>
<td></td>
</tr>
<tr>
<td>sār</td>
<td>‘look at, watch, visit’</td>
<td></td>
</tr>
<tr>
<td>sār</td>
<td>‘stiffen’</td>
<td></td>
</tr>
<tr>
<td>sārbáwà</td>
<td>‘August’</td>
<td></td>
</tr>
<tr>
<td>sàrdà</td>
<td>‘bone marrow’</td>
<td></td>
</tr>
<tr>
<td>sàrlà</td>
<td>‘trousers’</td>
<td></td>
</tr>
<tr>
<td>sàrlàj</td>
<td>‘rabies’</td>
<td></td>
</tr>
<tr>
<td>sàsábài</td>
<td>‘bark (of tree)’</td>
<td></td>
</tr>
<tr>
<td>sàsād’</td>
<td>‘inside part of stalk’</td>
<td></td>
</tr>
<tr>
<td>sàsàk</td>
<td>‘sift’</td>
<td></td>
</tr>
<tr>
<td>sàsàk w</td>
<td>‘shake to empty’</td>
<td></td>
</tr>
<tr>
<td>sàsàlài</td>
<td>‘leg’</td>
<td></td>
</tr>
<tr>
<td>sàsàm</td>
<td>‘rejoice’</td>
<td></td>
</tr>
<tr>
<td>sàsfàt</td>
<td>‘change skin, hatch’</td>
<td></td>
</tr>
<tr>
<td>sàsràk</td>
<td>‘learn, teach’</td>
<td></td>
</tr>
<tr>
<td>sàt</td>
<td>‘up to’</td>
<td></td>
</tr>
<tr>
<td>sàx-sàx</td>
<td>‘slightly sour’</td>
<td></td>
</tr>
<tr>
<td>sàxá</td>
<td>‘nape of neck’</td>
<td></td>
</tr>
<tr>
<td>sàxàl</td>
<td>‘bamboo’</td>
<td></td>
</tr>
<tr>
<td>sàxr</td>
<td>‘plant. sp.’</td>
<td></td>
</tr>
<tr>
<td>sbàk w</td>
<td>‘discussion, denial’</td>
<td></td>
</tr>
</tbody>
</table>

662
| sbär   | ‘follow’          | skām   | ‘buy, sell’          |
| sbè    | ‘pay bride-price’| skàn    | ‘thing, animal’      |
| sbè    | ‘bride-price’    | skāw    | ‘hug(v)’             |
| sбāŋ   | ‘plant sp.’      | ské     | ‘fig tree’           |
| sбèŋ   | ‘nasal mucus, snot’| skèn    | ‘grind, crush’       |
| sēbēlēŋ | ‘middle-aged woman’| sk ”á  | Q.FAM               |
| sēf    | ‘cool down, dry lightly’| sk ”āj | ‘inside part of a calabash’ |
| sēfē   | ‘unused calabash’| sk ”āx w| ‘in-law’            |
| séj    | ‘except(ful.)’   | slām    | ‘caress(v)’          |
| sēk    | ‘pouring all at once’| smbār   | ‘comb, nail, needle’ |
| sēk w  | ‘become tense’   | snēx w  | ‘tree sp.’           |
| sēmtēį | ‘taciturn’       | spēk    | ‘late’               |
| sēntēx w| ‘dregs of beer’  | srāb    | ‘pick in large quantity’ |
| sēŋgē | ‘funeral pots’   | srāx    | ‘jealousy’           |
| sēŋsēŋ | ‘shadow(n)’      | srāx w  | ‘slide(v)’           |
| sēŋsēŋ | ‘shadow(n)’      | srk ”ātāk w| ‘letting drop more than one’ |
| sērēk  | ‘string, rope’   | t          | ‘by’                 |
| sērēm  | ‘descend into a valley’| tá  | ‘on, about’          |
| sēsē   | ‘measles’        | tábā    | ‘hunting net’        |
| sēsēb   | ‘suck(v)’        | tábá    | ‘middle, between’    |
| sēsēdēm | ‘slip(v)’       | tábāx   | ‘middle’             |
| sēsēf  | ‘spit (rain)(v)’ | tábāxá  | ‘crown of head’      |
| sēsēk/sēsēk | ‘tree sp.’  | tādāk w | ‘descend, go down,      |
| sēsēk w| ‘whisper(v)’     | tāf     | ‘path, road’         |
| sēsēr  | ‘drip(v)’        | tāfsālā | ‘ladder’             |
| sēw    | ‘bear (with)’    | tāj     | ‘patch(v)’           |
| séwēt  | ‘stick for stirring’| tāk    | ‘oblige, forbid, obstruct’ |
| sfān   | ‘breathe, pant’  | tākād  | ‘sharpen’            |
| sfē   | ‘breath’         | tākār   | ‘tortoise, turtle’   |
| sfē   | ‘mourning string’| tākāzwā  | ‘calabash for fufu’  |
tâksâjâm ‘cup’
tâktrg “ä ‘granary calabash’
tâk “âm ‘impossible’
tâk “ār ‘roll up, curl up’
tâk “ārā ‘namesake’
tâl ‘manage, make an effort’
tâl ‘weed(v)’
tâl ‘sharpen’
tâl ‘boil, prepare hot drink’
tâlg “âj ‘flute (for men)’
tâl ‘complete in number’
tâl ‘complete the number’
tâl-tâl-tâl ‘hard (skin)’
tâm ‘daily(ful.)’
tâm ‘pour out’
tâm ‘move up and down’
tâm ‘front, before’
tâm ‘face(n)’
tâm bâc ‘today’
tâm tâk w ‘club, cudgel’
tâm târ ‘courtyard’
tâj ‘only(ful.)’
tâj-tân ‘good, honest’
tâp ‘so that’
tâp ‘running quickly’
tâp ‘tobacco’
tâpsâm ‘movement of animal hide’
târ ‘for good’
târ ‘invite to help’
târgâl ‘polish(v)’
tâsâw ‘dish(ful.)’

3PL.POSS tâtá
3PL tâtâ
‘cucumber’
‘chase’
‘molar tooth’
‘mortar’
‘cover with layers’
‘cackle(v)’
‘thick (liquid)’
‘roll up, curl up’
‘impossible’
‘chase’
‘roll(v)’
‘walk (go for a), travel’
‘flat’
‘cut with something blunt’
‘chaff’
‘beat well’
‘here’
‘bat’
‘miss(v)’
‘listen, wait’
‘driving in deeply’
‘calabash, plate’
‘short’
‘manner of going’
‘run a lot’
‘snap’
‘hundred(ful.)’
‘balafon, bell’
‘set foot’
‘one’
‘light fire with metal flint’
<table>
<thead>
<tr>
<th>tsāp</th>
<th>‘fence in’</th>
<th>tsétsēg ūé́hyth</th>
<th>‘stalk of sorghum head’</th>
</tr>
</thead>
<tbody>
<tr>
<td>tsāp</td>
<td>‘drop small amounts’</td>
<td>tsétsēr</td>
<td>‘pour a little’</td>
</tr>
<tr>
<td>tsāp-tsāp</td>
<td>‘stalking’</td>
<td>tsétsweř</td>
<td>‘filter(n)’</td>
</tr>
<tr>
<td>tsār</td>
<td>‘stubbornness’</td>
<td>tsèv</td>
<td>‘pierce (lightly)’</td>
</tr>
<tr>
<td>tsāngāl</td>
<td>‘crab’</td>
<td>tsēw</td>
<td>‘prune(v)’</td>
</tr>
<tr>
<td>tsātsāf</td>
<td>‘plant sp.’</td>
<td>tsēx ū</td>
<td>‘father.2POSS’</td>
</tr>
<tr>
<td>tsātsāl</td>
<td>‘arrange, solve, resolve’</td>
<td>tsfēk ū</td>
<td>‘squat’</td>
</tr>
<tr>
<td>tsātsān</td>
<td>‘notice’</td>
<td>tsfēk ū- tsfēk ū</td>
<td>‘weak’</td>
</tr>
<tr>
<td>tsātsāx</td>
<td>‘cut off pieces’</td>
<td>tsy ūāb</td>
<td>‘soak’</td>
</tr>
<tr>
<td>tsāw</td>
<td>‘there is’</td>
<td>tsk ūdāf</td>
<td>‘being blinded’</td>
</tr>
<tr>
<td>tsāwāl</td>
<td>‘scoop out from water’</td>
<td>tsk ūèf</td>
<td>‘crouch’</td>
</tr>
<tr>
<td>tsāk ū</td>
<td>‘in a pile’</td>
<td>tslāb</td>
<td>‘dip finger’</td>
</tr>
<tr>
<td>tsāv</td>
<td>‘toad hopping’</td>
<td>tslák</td>
<td>‘failure’</td>
</tr>
<tr>
<td>tsēb-tsēb</td>
<td>‘sharp’</td>
<td>tspē</td>
<td>‘stealthy’</td>
</tr>
<tr>
<td>tsēdēk-w-tdēk-w</td>
<td>‘light’</td>
<td>tsrād ū</td>
<td>‘twist off’</td>
</tr>
<tr>
<td>tsēf</td>
<td>‘beautify’</td>
<td>tsrāh ū</td>
<td>‘pile(v)’</td>
</tr>
<tr>
<td>tsēktśégērk</td>
<td>‘kingfisher’</td>
<td>v</td>
<td>‘spend the year’</td>
</tr>
<tr>
<td>tsēk ūdē</td>
<td>‘a little, few’</td>
<td>vā</td>
<td>‘year’</td>
</tr>
<tr>
<td>tsēlēbē</td>
<td>‘how much more’</td>
<td>vā</td>
<td>‘year’</td>
</tr>
<tr>
<td>tsēlēlē</td>
<td>‘not one missing’</td>
<td>vāg ūmtād</td>
<td>‘day after tomorrow’</td>
</tr>
<tr>
<td>tsēlēlēw</td>
<td>‘light, thin (liquid)’</td>
<td>vāj</td>
<td>‘where’</td>
</tr>
<tr>
<td>tsēl</td>
<td>‘dribble(v)’</td>
<td>vājāj</td>
<td>‘who’</td>
</tr>
<tr>
<td>tsēm</td>
<td>‘defend’</td>
<td>vāk ū</td>
<td>‘sand’</td>
</tr>
<tr>
<td>tsēmēj</td>
<td>TOP.CON</td>
<td>vāk ūtāŋ</td>
<td>‘throwing far’</td>
</tr>
<tr>
<td>tsēmpēd’</td>
<td>‘monkey (small, red)’</td>
<td>vāk ūtāŋ</td>
<td>‘throwing far’</td>
</tr>
<tr>
<td>tsēn</td>
<td>‘father’</td>
<td>vāl</td>
<td>‘give, offer’</td>
</tr>
<tr>
<td>tsēntsēl</td>
<td>‘summit, highest point’</td>
<td>vān</td>
<td>‘family’</td>
</tr>
<tr>
<td>tsēŋk ūōd’</td>
<td>‘long and thin’</td>
<td>vān</td>
<td>‘rain’</td>
</tr>
<tr>
<td>tsēngtsēlēm</td>
<td>‘firewood’</td>
<td>vānā</td>
<td>‘father.1POSS’</td>
</tr>
<tr>
<td>tsēr-tsēr</td>
<td>‘thin’</td>
<td>vānāj</td>
<td>‘how many’</td>
</tr>
<tr>
<td>tsētse</td>
<td>‘today’</td>
<td>vānvan</td>
<td>‘especially’</td>
</tr>
<tr>
<td>tsētsēf</td>
<td>‘consider’</td>
<td>vāŋ</td>
<td>‘arrived’</td>
</tr>
</tbody>
</table>
vāŋ 'arrive'
vāŋgáj 'how'
vāŋg "ār 'spend a long time'
vār 'burn a part lightly'
vārvārā 'court yard, plain'
vās 'hurry, do quickly'
vāvār 'burn a little'
vāw Q
vāwātsā 'this year'
vāx 'spend time, pass time'
vāx 'day'
vdē 'penis'
vedjé IND.DET.PL
védzēd' 'leaf, vegetation'
védzēd-védzēd' 'green'
vēdēk 'newborn'
vēkéj 'which'
vēlēngēd' 'calf'
vēlēz 'game with seeds'
vémēj 'what'
vēndzēx 'hot pepper'
vēpéj 'when'
vērēk 'patience'
vērēx 'ridge'
vērsēk "w 'spice'
vēt 'signal to'
vētsēj 'whose'
vēvēw 'swinging'
vgēm 'bird'
vg "ām 'tree sp.'
vjā 'rainy season'
vlāng-vlāng 'walking quickly'
vlēx 'bow (hunting)'
vhlāk "w 'movement of catching'
vhlēw 'take suddenly'vnā 'vomit(v)'vnām 'needle'
vrām 'many'
vrē 'red'
vrēh 'separate out'
vrēh 'sorghum husk'
vrēŋ 'misbehaviour'
vrēz 'grass sp.'
vrēlām 'submerge'
vrēlāk "w 'alone'
vrēk "w 'slime (inorganic)'
vēk "w 'small'
w wā 'breast, udder, milk'
wā 'talk(n)'
wābāw 'cry of grief'
wādā 'woven roof cap'
wāf 'standing up in the air'
wāj 'response'
wāj-wāj 'whirlwind'
wājāk 'grasshopper'
wājāwāj 'crazy'
wāk 'be.crazy, mad'
wāk-wāk 'throbbing'
wāl 'travel very early(v)'
wāl 'isolate'
wāl-wāl 'lamp, torch'
<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>wālā</td>
<td>'woman, wife'</td>
</tr>
<tr>
<td>wālāŋ</td>
<td>'period'</td>
</tr>
<tr>
<td>wālā-wālā</td>
<td>'maybe'</td>
</tr>
<tr>
<td>wālā-wālā</td>
<td>'insufficient'</td>
</tr>
<tr>
<td>wām</td>
<td>'ten'</td>
</tr>
<tr>
<td>wāmbāt</td>
<td>'sickle'</td>
</tr>
<tr>
<td>wān</td>
<td>'sleep(v)'</td>
</tr>
<tr>
<td>wān</td>
<td>'day, sleep'</td>
</tr>
<tr>
<td>wān</td>
<td>'hatred'</td>
</tr>
<tr>
<td>wānjā</td>
<td>'traditional song'</td>
</tr>
<tr>
<td>wāntā</td>
<td>'mahogany tree'</td>
</tr>
<tr>
<td>wāŋ</td>
<td>'spread out'</td>
</tr>
<tr>
<td>wāngād</td>
<td>'lift off'</td>
</tr>
<tr>
<td>wāp</td>
<td>'suddenly killing all'</td>
</tr>
<tr>
<td>wār</td>
<td>'still'</td>
</tr>
<tr>
<td>wārēbā</td>
<td>'fortunately'</td>
</tr>
<tr>
<td>wārdā</td>
<td>'crack in rocks'</td>
</tr>
<tr>
<td>wāsāj</td>
<td>'thankyou'</td>
</tr>
<tr>
<td>wāstālā</td>
<td>'spread out'</td>
</tr>
<tr>
<td>wātā</td>
<td>'compound, home'</td>
</tr>
<tr>
<td>wātāmgbá</td>
<td>'black ant'</td>
</tr>
<tr>
<td>wātsā-wātsā</td>
<td>'patchy (sky)'</td>
</tr>
<tr>
<td>wāt-wāt</td>
<td>'shiny (food)'</td>
</tr>
<tr>
<td>wāwā</td>
<td>'everywhere (talk)'</td>
</tr>
<tr>
<td>wāwāj</td>
<td>'close (a meeting)'</td>
</tr>
<tr>
<td>wādā</td>
<td>'food, fufu'</td>
</tr>
<tr>
<td>wādā kāŋkās</td>
<td>'bean doughnut'</td>
</tr>
<tr>
<td>wādāf</td>
<td>'make slightly mouldy'</td>
</tr>
<tr>
<td>wādāl</td>
<td>'cut into sections'</td>
</tr>
<tr>
<td>wādzām</td>
<td>'basket'</td>
</tr>
<tr>
<td>wādzēk</td>
<td>'hut, house'</td>
</tr>
<tr>
<td>wādzēk mbāw</td>
<td>'womb (house of child)'</td>
</tr>
<tr>
<td>wādēk</td>
<td>'bladder (house of urine)'</td>
</tr>
<tr>
<td>wādēk sāsār</td>
<td>'stomach'</td>
</tr>
<tr>
<td>wādj</td>
<td>'wrestling(n)'</td>
</tr>
<tr>
<td>wādēk</td>
<td>'decrease(v)'</td>
</tr>
<tr>
<td>wādēk sēksàsàr</td>
<td>'shine, disperse'</td>
</tr>
<tr>
<td>wālāŋ</td>
<td>'period'</td>
</tr>
<tr>
<td>wālāŋ - wālāŋ</td>
<td>'maybe'</td>
</tr>
<tr>
<td>wālāŋ-wālāŋ</td>
<td>'insufficient'</td>
</tr>
<tr>
<td>wām</td>
<td>'ten'</td>
</tr>
<tr>
<td>wāmbāt</td>
<td>'sickle'</td>
</tr>
<tr>
<td>wān</td>
<td>'sleep(v)'</td>
</tr>
<tr>
<td>wān</td>
<td>'day, sleep'</td>
</tr>
<tr>
<td>wān</td>
<td>'hatred'</td>
</tr>
<tr>
<td>wānjā</td>
<td>'traditional song'</td>
</tr>
<tr>
<td>wāntā</td>
<td>'mahogany tree'</td>
</tr>
<tr>
<td>wāŋ</td>
<td>'spread out'</td>
</tr>
<tr>
<td>wāngād</td>
<td>'lift off'</td>
</tr>
<tr>
<td>wāp</td>
<td>'suddenly killing all'</td>
</tr>
<tr>
<td>wār</td>
<td>'still'</td>
</tr>
<tr>
<td>wārēbā</td>
<td>'fortunately'</td>
</tr>
<tr>
<td>wārdā</td>
<td>'crack in rocks'</td>
</tr>
<tr>
<td>wāsāj</td>
<td>'thankyou'</td>
</tr>
<tr>
<td>wāstālā</td>
<td>'spread out'</td>
</tr>
<tr>
<td>wātā</td>
<td>'compound, home'</td>
</tr>
<tr>
<td>wātāmgbá</td>
<td>'black ant'</td>
</tr>
<tr>
<td>wātsā-wātsā</td>
<td>'patchy (sky)'</td>
</tr>
<tr>
<td>wāt-wāt</td>
<td>'shiny (food)'</td>
</tr>
<tr>
<td>wāwā</td>
<td>'everywhere (talk)'</td>
</tr>
<tr>
<td>wāwāj</td>
<td>'close (a meeting)'</td>
</tr>
<tr>
<td>wādā</td>
<td>'food, fufu'</td>
</tr>
<tr>
<td>wādā kāŋkās</td>
<td>'bean doughnut'</td>
</tr>
<tr>
<td>wādāf</td>
<td>'make slightly mouldy'</td>
</tr>
<tr>
<td>wādāl</td>
<td>'cut into sections'</td>
</tr>
<tr>
<td>wādzām</td>
<td>'basket'</td>
</tr>
<tr>
<td>wādzēk</td>
<td>'hut, house'</td>
</tr>
<tr>
<td>wādzēk mbāw</td>
<td>'womb (house of child)'</td>
</tr>
</tbody>
</table>

668
<table>
<thead>
<tr>
<th>English</th>
<th>Kinya</th>
</tr>
</thead>
<tbody>
<tr>
<td>think’</td>
<td>xădzăŋ</td>
</tr>
<tr>
<td>not yet’</td>
<td>xădăk</td>
</tr>
<tr>
<td>place’</td>
<td>xăf</td>
</tr>
<tr>
<td>‘pus’</td>
<td>xăgăk</td>
</tr>
<tr>
<td>hole’</td>
<td>xăgăm</td>
</tr>
<tr>
<td>kidney’</td>
<td>xăjąk</td>
</tr>
<tr>
<td>‘sky, up high’</td>
<td>xăjăng “āw</td>
</tr>
<tr>
<td>‘prop up’</td>
<td>xāk</td>
</tr>
<tr>
<td>‘hiccough(n)’</td>
<td>xāmá</td>
</tr>
<tr>
<td>‘swell, inflate’</td>
<td>xālmdă</td>
</tr>
<tr>
<td>‘ground, land, soil, country’</td>
<td>xālwă</td>
</tr>
<tr>
<td>‘shocked’</td>
<td>xāłmá</td>
</tr>
<tr>
<td>‘yawn(n)’</td>
<td>xāmá</td>
</tr>
<tr>
<td>‘wall’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘kidney’</td>
<td>xālwlă</td>
</tr>
<tr>
<td>ground, land, soil, country’</td>
<td>xālwlă</td>
</tr>
<tr>
<td>‘hole’</td>
<td>xālwlă</td>
</tr>
<tr>
<td>‘yawn(n)’</td>
<td>xālwlă</td>
</tr>
<tr>
<td>‘be hot’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘size, amount’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘place’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘prop up’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘swell, inflate’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘be hot’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘kidd’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘be in labour’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘block, surround’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘heart’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘regularly’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘vegetables, sauce’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘lizard’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘tie (knot)’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘be in labour’</td>
<td>xāmă</td>
</tr>
<tr>
<td>‘block, surround’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘down there’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘shame, respect’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘tribe, village’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘regularly’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘children’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘coagulate, clot’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘dispersed (animals)’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘pity(n)’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘wait’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘until(ful.)’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘head’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘stir, shake, move’</td>
<td>xăts</td>
</tr>
<tr>
<td>VNT.DIST</td>
<td>xăts</td>
</tr>
<tr>
<td>‘steer’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘hey!’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘grass sp.’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘malaria (lit. sorghum head)’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘person’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘swallow(v)’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘equal’</td>
<td>xăts</td>
</tr>
<tr>
<td>‘person’</td>
<td>xăts</td>
</tr>
</tbody>
</table>
xèdzè dâknàk  ‘human being (lit. black person)’

xèdzlér  ‘upside down’

xèdë  ‘on it’

xèdë-xèdë  ‘justice, properness’

xèftsék  ‘Hefcek (trad. festival)’

xègëñ  ‘boulder’

xèj  ‘run, flee’

xèulkëd  ‘spoon, ladle’

xèmpé  ‘magic product’

xèp  ‘killing by squashing’

xèrgëdëñ  ‘mold’

xèsëñ  ‘forgotten’

xèsëñ  ‘forget’

xèsëñ  ‘withered’

xèxélëm  ‘eggshell’

xèzë’d dzâdzâb  ‘grass. sp.’

xhâd  ‘potsherd’

xhâr  ‘side’

xmâñ  ‘praise name’

xmâñ  ‘honor, praise(v)’

xmâs  ‘thatch(n)’

xrâd  ‘be sated’

xrâts  ‘scoop out’

xtâd  ‘manner of cutting’

xtâf  ‘ashes’

xtâj  ‘non-blacksmith’

xtân  ‘fog’

xvâts  ‘cut the top part’

xzâ  ‘dog’

xzêd  ‘tear strips’

xêm  ‘magic product’

xêm  ‘average amount’

xêm  ‘withered’

xêm  ‘forget’

xêm  ‘collect a lot’

xhrâvâ  ‘reached’

xhrâvâ  ‘reach’

xrâfs  ‘bend down, roll up’

xrâfs  ‘reach’

xvâx  ‘cane rat’

xvâx  ‘rock badger’

xvâx  ‘debris’

xvâx  ‘dried-up leaves’

xvâx  ‘grass sp.’
<p>| x^&quot;ax &quot;ar | 'be distressed' | zämbát | 'fresh thing to eat' |
| x^&quot;ax &quot;at | 'dig a little' | zār | 'make branches' |
| x^&quot;bâf | 'foam(n)' | zârāk | 'horn (instrument)' |
| x^&quot;bâk w | 'assembly place' | zârlàx w | 'elongated' |
| x^&quot;bâr | 'widen' | zârmbā-kētēkētēk | 'chameleon' |
| x^&quot;bâr | 'wide' | zâv | 'join, infect' |
| x^&quot;dzâj w-x^&quot;dzâj w | 'deep' | zâvâj | 'hunchback' |
| x^&quot;cēdēk | 'scooping a little' | zâvân | 'guinea fowl' |
| x^&quot;cēlēlé | 'broken and' | zâx | 'pour' |
| x^&quot;cēk | 'gouge out' | zâx w | 'long, tall' |
| x^&quot;êp | 'manner of killing' | zàzâk | 'appendix' |
| x^&quot;êrsēk w | 'small and short' | zâzân | 'rest (v &amp; n)' |
| x^&quot;gâm | 'hooked(v)' | zâzâw | 'tree sp.' |
| x^&quot;ndēk w | 'covered, crooked' | zâzâd | 'robe (man's gown)' |
| x^&quot;ne- | 2PL.SBJ | zâzâd | 'worm' |
| x^&quot;nē | 2PL | zâk | 'bean leaves' |
| x^&quot;nē | 2PL.STAT | zâk | 'a limited time' |
| x^&quot;râp-x^&quot;râp | 'covered (shoes)' | zbēr | 'pout(v)' |
| x^&quot;târ | 'vampire' | zēb-zēb | 'secretive' |
| x^&quot;vânj w | 'compost' | zēl-zēl | 'column' |
| x^&quot;zâm | 'crocodile' | zēlzēl dâwân | 'spine (lit. column of back)' |
| | | zēmbēl | 'umbilical cord' |
| | | zēn | 'return, give back' |
| | TRANS | zēn hâp | 'answer (lit. return speech)' |
| zâ- | | zēndē | 'tonsil' |
| zâblâ | 'supernatural' | zēnēj | 'again, as well' |
| zâd | 'short distance' | zēnj | 'hang up, weigh' |
| zâdâw | 'night' | zēngēt | 'make lean' |
| zâjâ-zâjâ | 'slowly' | zēnzhēj | 'python' |
| zâl | 'eagle' | zērētēw | 'long, tall' |
| zâm | 'eat' | zērētvēj | 'up high' |
| zâm bâj | 'rule over' | zēw | 'teak tree' |
| zâm wdzēk | 'inherit' | | |</p>
<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>zezede</td>
<td>'giraffe'</td>
</tr>
<tr>
<td>zestekw</td>
<td>'snake'</td>
</tr>
<tr>
<td>zestem</td>
<td>'mumble(v)'</td>
</tr>
<tr>
<td>ztē</td>
<td>'billy goat'</td>
</tr>
<tr>
<td>zkad</td>
<td>'type of wild fruit'</td>
</tr>
<tr>
<td>zkwaná</td>
<td>'recovered'</td>
</tr>
<tr>
<td>zláj</td>
<td>'laid down'</td>
</tr>
<tr>
<td>zlám</td>
<td>'long and pointed'</td>
</tr>
<tr>
<td>zmbår</td>
<td>'throw from a distance'</td>
</tr>
<tr>
<td>zmēy</td>
<td>'porcupine'</td>
</tr>
<tr>
<td>znde</td>
<td>'meat craving'</td>
</tr>
<tr>
<td>zndēr</td>
<td>'hook(n)'</td>
</tr>
<tr>
<td>zrēk</td>
<td>'large bird of prey'</td>
</tr>
<tr>
<td>zvaw</td>
<td>'large billy-goat'</td>
</tr>
<tr>
<td>zvēr</td>
<td>'sprinkling lightly'</td>
</tr>
<tr>
<td>zwāj</td>
<td>'mask, paint, whitewash(n)'</td>
</tr>
<tr>
<td>zwēt</td>
<td>'soul, spirit'</td>
</tr>
<tr>
<td>zxāj</td>
<td>'good fortune, glory, ease,</td>
</tr>
<tr>
<td>zxēd</td>
<td>'birdlime'</td>
</tr>
</tbody>
</table>
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 women 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 ħaw ‘so’ (borrowed from Fulfulde) and ājā ‘then’.

Text 1 The stealing of the leper’s wife

As told by Gadjī (a man in his sixties)

1.1 Aya, faguwalakw wende aka.
ājā fāɡʷālākʷ wéndé ākā
so leper IND.DEF.SG EXIST
‘So, there was a certain leper.’

1.2 A ba ujek a damaw a ya.
ā- bā wjēk a dámāw ā- jā
3SG.SBJ- make house PREP1 bush 3SG.SBJ- say
‘He built a house in the bush, they say.’

1.3 Aaw!
āw
‘Wow!’

1.4 Wala anta tuwah dcydey.
wālā āntā twáx dējdēj
wife 3SG.POSS beautiful too.much(ful.)
‘His wife was really beautiful.’
1.5 Amba āmbā ā- ndā ā rā mbē tsā ā- bāw xēdzē
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 bāw xēdzē .
ā- bāw xēdzē
3SG.SBJ- stab person
‘He stabbed the person.’

1.7 A bāw xēdzē delele .
ā- bāw xēdzē délélélé
3SG.SBJ- stab person direct
‘He stabbed the person straight away.’

2.1 Ca bay a ngaya : « Kay ! »
tsā bāy ā- ngājā kāj
TOP chief 3SG.SBJ- QUOT Oh!
’So the chief said “Oh!”’

2.2 « Ma dekey wala fagwalakw ngha vayay ? »
mā= dā -ēkēj wālā fāgʷālākʷ nyā vājāj
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 ,
ā xēdzē ā- ngājā bāy xʷā- xān ā tā wālā tsā
ah! person 3SG.SBJ- QUOT chief 2SG.SBJ- cry PREP1 on woman TOP
sa kula . »
sā kʷḷá
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 ngaya : « Kadak , mba naka , hwa
ājā bāy ā- ngājā kādāk mbā nākā xʷā-
then chief 3SG.SBJ- QUOT good child 1SG.POSS 2SG.SBJ-
kēdekey aza ca , sa zlahwaw hayak . »
kā- dā -ēkēj āzā tsā sā- ḫā -āxʷāw 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 ngaya : « Bay velekey nhwa . »
ājā ā- ngājā bāy vál -ēkēj nxʷā
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- nā- 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 ṣhwa leŋ manda, a nda.
   bāy mbāl ā- mbēl ēnē nxʷā leŋ māndā ā- ndā
   chief grab 3SG.SBJ- grab -3SG.IOBJ goat plus salt(ful.) 3SG.SBJ- go
   ‘The chief grabbed a goat plus salt and he went.’

3.1 Fagwalakw wende kāmac ara mbē aka yam.
   fāɡʷālākʷ wēndé kā- màts ā rā mbē ākā jām
   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, festar a festar aza.
   ā- ndā ftār ā- ftār āzā
   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.
   mbāŋ ā- rāl āzā rā āntā
   cut.suddenly 3SG.SBJ- cut IT hand 3SG.POSS
   ‘Wop! He cut off his hand.’

3.4 A nda, katek, a caza ara ṣa
   ā- ndā ktk ā- tsā -zā ārā ṣa
   3SG.SBJ- go putting.something.in.a.container 3SG.SBJ- put -TRANS SIM PREP2
   bakatar leŋ ṣhwa wese fāt a fataw, nah
   bākātār leŋ nxʷā wēsē fāt ā- fāt -āw nāx
   bag plus goat DEM.DIST slaughter 3SG.SBJ- slaughter -3SG.DOBJ drop
   kədā ṣa kəva matakān.
   kādā ṣa kvā mātākān
   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 Bolah, a wal, a nda a mapat eze.
   blāx ā- wāl ā- ndā ā māpāt 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 dom dom dom  
van má= kā- bā má= dim dim dim  
rain REL= IPFV- form REL= noise.of.thunder noise.of.thunder noise.of.thunder  
dom wese .  
dim wēsē 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- wāl á wātā xèdzè wēsē
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 tsā wā: vān ā- kā- 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 Mbēy pay .  
mbj pāj
3SG.STAT arrived  
‘He arrived.’

4.7 Fagwalakw wese a ñgaya : « A ! »  
fāg̊“ālākʷ wēsē ā- ñgājā ā  
leper DEM.DIST 3SG.SBJ- QUOT ah!  
‘That leper said, “Ah!”’
4.8 «Ghwelzekey ma ñkwa , akwaw ca sa
γʷāl -zā -ēkēj mā nkʷā ākʷāw tsā sā-
explain -TRANS -1SG.IOBJ problem 2SG.POSS NEG.EXIST TOP 1SG.SBJ-
awahwaw ka »
ɓāw -āxʷāw kā
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 ñgay : «Mbahw , mbahw , mbahw , sa mbəlakw , sa
ā- ñgājā mbáxʷ mbáxʷ mbáxʷ sā mbləkʷ sā
3SG.SBJ- QUOT pardon pardon pardon 1SG.STAT stranger 1SG.STAT
mbəlakw , sa mbəlakw . »
mbləkʷ sā mbləkʷ 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 ñgay : « A , mawal naka ava ara
á wālā āntā ā- ñgājā ā māwāl nākā āvā ārā
ah! wife 3SG.POSS 3SG.SBJ- QUOT ah! husband 1SG.POSS tentatively COP
mbəlakw ca , məbəhə aza menege ? ». 
mbləkʷ tsā mā- bāh -bā āzá mənəgē
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 kaɓah .
ājā ā- kā- bāh
so 3SG.SBJ- IPFV- shelter
‘So he was sheltering.’

5.2 Tew van a kaŋta anta mac yaa .
tew vān ā- kā- ntā āntā māts já:
finally rain 3SG.SBJ- IPFV- take 3SG.POSS die noise.of.rain
‘Finally the raining was dying off.’
5.3 Fara, a dâdâ ra fagwalakw wese.
Fára ā- dâdâ -ā râ fāgʷālākʷ wēsē
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 dâd’ a dâdâ zley, la a la manda
ājâ dâd’ ā- dâd’ -ā ḫēj lā ā- lā mândā
then pull.out 3SG.SBJ- pull.out -VNT.PROX meat add 3SG.SBJ- add salt(ful.)
â xēdē.
PREP1 on.it
‘Then he took out the meat and he put salt on it.’

5.5 Aya pa ata kwahwaw.
ājâ pā á tā kʷāhʷāw
then put.aside PREP1 on fire
‘Then (he) put on the fire.’

5.6 Msaw a msaw, bām bām a bāmza zley wese
msāw ā- msāw bām bām ā- bām -zā ḫēj wēsē
roast 3SG.SBJ- roast munch munch 3SG.SBJ- munch -TRANS meat DEM.DIST
cēkudē.
tsēkʷdē
a.little
‘He roasted and munched a little bit of that meat.’

5.7 Aya pa a caza aka.
ājâ pā ā- tsā -zā ākā
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 fā: ā-
stretch.out 3SG.SBJ- stretch.out hand put.hand.in.bag 3SG.SBJ-
ndzèw -ā rā xēdžè fāgʷālākʷ
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 a
kʷèts kʷèts kʷèts kʷèts kʷèts kʷèts á-
sprinkle sprinkle sprinkle sprinkle sprinkle sprinkle 3SG.SBJ-
kwec yam a hedé .
kʷèts jām 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 kʷāhʷāw
put.aside 3SG.SBJ- drop -TRANS ACC PREP1 on fire

‘He threw it onto the fire.’

5.11 A , heje fāgwalakw hwadāk yam .
á xēdzè fāgʷālākw xʷádāk jām
ah! person leper scoop.average.amount water

‘Ah, the leper scooped up some water.’

5.12 A ngaya : « Kay ! »
ā- ngājā kāj
3SG.SBJ- QUOT hey!

‘He said, “Hey!”’

5.13« A ṅkwa ca lemba kwedkwedēŋ . »
á nkʷā tsā lēm -bā kʷēdkʷēdēŋ
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 Fāgwalakw wese , tap tap tap .
fāgʷālākw wēsē tāp tāp tāp
leper DEM.DIST running.quickly running.quickly running.quickly running.quickly

‘That leper ran away quickly.’
5.16 Vakutaŋ

vâk“tân ā- zmbär āzà râ throw.far 3SG.SBJ- throw.from.a.distance IT hand

marazlarazl wese.
mâ= râḷ râḷ wēsē REL= cut <NOM.PAT> cut DEM.DIST‘He threw that cut off hand far away.’

6.1 « Hey! »

xêj

hey!

“Heey!”

6.2 a ngay a « Hey! »

ā- ngâjâ xêj

3SG.SBJ- QUOT hey!

‘he said, “Hey!”’

6.3 Hey!

xêj

hey!

“Heey!”

6.4 « Dam hwa nadamha a mapat ca a bay . »

dâm x“ā- nā- dâm -xā á māpāt 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 Fôlakw , heje wese a dene wala anta aza

flâk“ xèdzè wēsē ā- dā -ēnē wālā āntā āzā snatch.wife person DEM.DIST 3SG.SBJ- bring -3SG.IOBJ woman DEF.DET COMPL

pa ñ bāy .
pá ñ 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 ŋgay : « Bay , ŋhe . »
ā- ŋgājā bāy nyē
3SG.SBJ- QUOT chief DEM.PROX
‘He said, “Chief, take her (lit. this one).”’

6.7 « Sa kádahwaw wala ŋkwā wese aza . »
sā- kā- dā -āxʷāw wālā nkʷā wēsē 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 . »
kádāk mbā nākā
good child 1SG.POSS
“Good, my child.”

6.9 « Zamba hayak eze . »
zām -bā xājāk ēzē
eat -BEN land therefore
“Therefore take (lit. eat) the land.”

7.1 Aya mapat ca , « Bay , ůseŋ ma zam fāgwalakw ege enjekēdē ,
ājā māpāt tsā bāy nsēŋ má= zam fāgʷālākʷ =ēgē ēndzēkēdē
then morning TOP chief type REL= eat leper =PL however
əy kānda a wata naka . »
j- kā- ndā ā 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 « Way ! »
wj
wow!
“Wow!”
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 .
neighbour 3SG.POSS 3SG.SBJ- go -VNT.DIST PREP1 bush
‘His neighbour came from the bush.’

1.2 A nda , a ngaya : « Welaye , welaye ! »
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 ? »
máwál nkⁿnè á
husband 2PL.POSS ah!
“Your husband……” “Yes?”

1.5 « Kája zley damaw ene , ama ngamŋgam
ká- dzä ḋēj dámaw énē àmá ngäm-ngäm
PFV- kill meat bush like.that but(ful.) trap(ful.)
kájaza » a ya .
ká- dzä -zä 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- màts 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 mḥā wālā wēsé ā- ngājā dā ā- dā tēkēd'
then blacksmithwife DEM.DIST 3SG.SBJ- QUOT bring 3SG.SBJ- bring calabash
sefé a tērgwa .
séfé á trgʷā
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 tekeɗ sefē a targwa wese , ca a*
ā- dā tēkēɗ sēfē ā trg“ā wēsē tsā ā-
3SG.SBJ- bring calabash unused.calabash PREP1 granary DEM.DIST put 3SG.SBJ-
ca ata ha .
tsā ā tā xā
put PREP1 on head
‘She got that unused calabash and put it on (her) head.’

2.3 « *Kay ! »
kāj
Oh!
“Oh!”

2.4 « *Law law law ! »
lāw lāw lāw
(cry of grief) (cry of grief) (cry of grief)
“No, no, no!”

2.5 *a ja ula .*
ā- dzā wlā
3SG.SBJ- hit voice
‘she cried out (lit. hit voice).’

2.6 « *Hwa ja ula vemej ? »
xʷā- dzā wlā vēmēj
2SG.SBJ- hit voice what
“Why are you crying out?”

2.7 « *Kay , mana mana , dengez kāja mawal na aza kāj mànā mànā dēŋgēz kā- dzā māwāl nā āzā*
Oh! (hesitation) (hesitation) trap PFV- kill husband 1SG.POSS COMPL
*a damaw ! »
ā dāmāw
PREP1 bush
“Oh! A trap killed my husband in the bush!”
2.8 "Deŋgez kája mawal na aza a damaw!"

dēŋgēz ká- dzā māwāl nā āzā 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’ wēsē ārá á tā xā ézē ā-

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!"

wābāw wābāw

(cry of grief) (cry of grief)

“What can I do! What can I do!”

2.12 a kahan ara.

ā- kā- xān ārá

3SG.SBJ- IPFV- cry SIM

‘she was crying along the way.’

2.13 Wala madaraf ca kwaw, a kādaw ŋ nda kwaw.

wālā mā- dārāf tsā kʷāw ā- kā- dāw ŋ ndā kʷāw

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 kazlād' kan ege kədā a wata maman
ā- kā- ḥād' kān = ēgē kədā á wātā māmān
3SG.SBJ- PFV- take.away thing =PL towards PREP1 compound mother.3POSS
ēzē
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 .
jaw ā- ndā pā á tā lā dzā ḥēj wēsē
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 Kdē ca a gøre mawal anta , kégereye .
kdē tsā ā- grē māwāl āntā kā- 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- ḥāp -ēnē á mēlēdzē āntā wēsē gʷāj xʷā-
3SG.SBJ- say -3SG.JOBJ PREP1 neighbour 3SG.POSS DEM.DIST pal 2SG.SBJ-
bedžekey ka ɲ vay ! »
bād -zā -ēkēj kā ɲ 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 bedžekey ka ɲ vay ! »
gʷāj xʷā- bād -zā -ēkēj kā ɲ vāj
pal 2SG.SBJ- deceive -TRANS -1SG.DOBJ ANT PREP2 where
“Pal, why did you deceive me?”

3.5 « Hwa ya : "Kan kája mawal ţkwa aza a damaw
xʷā- jā kān kā- dzā māwāl nkʷā āzā 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 « Enjekede  hwa  bedzekey  »

éndzèkèdè  x"ā-  bāɗ  -zā  -ēkēj

however  2SG.SBJ- deceive  -TRANS  -1SG.DOBJ

“However you deceived me.”

3.7 « Ba  !  »

bā

bah!

“Bah!”

3.8 « Sa  zen  naka  a  wata  »

sā-  zēn  nākā  á  wātā

1SG.SBJ- return  1SG.POSS  PREP1  home

“I (will) return home.”

3.9 Mawal  anta  wese  a  ngaya  :  « Ndahā  wala

māwāl  āntā  wēsē  ā-  ŋgājā  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 aŋjā

ā  jā

3SG.SBJ- say

‘he said.’

3.11 « Ndahā  !  »

ndā  -xā

go  -VNT.DIST

“Come here!”
3.12 Zla zla a zlene zley be a taktərgwa anta
   ḥā ḥā ā- ḥā -ēnē ḥēj bé á tāktrə"ā antā
cut cut 3SG.SBJ- cut -3SG.IOBJ meat full PREP1 granary.calabash 3SG.POSS
wese , a zlene zley wese .
wēsē ā- ḥā -ēnē ḥēj wēsē
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 .
tēl j- ndā á wātā
manner.of.going 3PL.SBJ- go PREP1 home
‘They went home.’

4.1 A nda a wata ca kədə ca wala anta wese mboj
   ā- ndā á wātā tsā kədə tsā wālā āntā wēsē mbj
3SG.SBJ- go PREP1 home TOP however TOP wife 3SG.POSS DEM.DIST 3SG.STAT
ete aka səkwaw .
á tē ákə sk"əw
PREP1 here EXIST NEG
‘He went home, however that wife of his was not there (lit. here).’

4.2 Kədə ca a əngaya : « Həla , hwa dək a vay ? »
kədə tsā ā- əngājə xlə x"ə dək á vāj
so TOP 3SG.SBJ- QUOT girl 2SG.STAT gone PREP1 where
‘So he said, “Girl, where did you go?”’

4.3 « Sa dək a wata mana . »
sə dək á wātā mənə
1SG.STAT gone PREP1 compound mother.1POSS
“I went to my mother’s compound.”

4.4 « Hwa ndə ə la a wata macahw vemey ? »
x"ə- ndə ə lá á wātə mətsəx" vəməj
2SG.SBJ- go INF do PREP1 compound mother.2POSS what
“What did you go to do at your mother's compound?”
4.5 « Akwaw »
ákʷāw
NEG.EXIST
“Nothing.”

4.6 « Kan ng̓ha mbey a katay? »
kàn ṭyā mbj á kátáj
thing DEM.PROX 3SG.STAT PREP1 where
“Where is this thing?”

4.7 « Mbey a wata mana. »
mbj á wātā mānā
3SG.STAT PREP1 compound mother.1POSS
“It is at my mother’s compound.”

4.8 « Kan ng̓ha mbey a katay? »
kàn ṭyā mbj á kátáj
thing DEM.PROX 3SG.STAT PREP1 where
“Where is this thing?”

4.9 « Mbey 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 ng̓ay̓a : « Gway, sa
mēlēdzē āntā ā- ngājā gʷâj sā-
neighbour 3SG.POSS 3SG.SBJ- QUOT Pal 1SG.SBJ-
kázlapahwaw . »
kâ- ḥ̱̱̱p -āxʷāw
PFV- say 2SG.IOBJ
‘His neighbour said, “Pal, I told you (so).”’

690
5.2 «Mbalaɓa wala ŋkwa ka ene , hwa ya : "
mbāl -ā -bā wālā nkʷā ká ēnē xʷā- jā
take.hold -VNT.PROX -BEN wife 2SG.POSS ANT like.that 2SG.SBJ- say
Sa kadaw kwaw ." »
sá- kā- dāw kʷāw
1SG.SBJ- IPFV- love NEG
"Take hold of your wife like that, you said “I don't love her.”"

5.3 « hwa ya zeney . »
xʷā- jā zēnēj
2SG.SBJ- say again
"you said (it) again.”

5.4 « Sar la na ca ma hanahwaw na ca mzla wala ,
sār lā nā tsā má= xān -āxʷāw nā tsā mḥā wālā
look.at place now TOP REL= mourn -2SG.DOBJ now TOP blacksmith wife
kwaw āza vaw ? »
kʷāw āzā vāw
NEG DUB Q
“Look now, the one who is crying for you is the non-favoured wife, isn’t it?”

5.5 A ngaya : « Njowen gway , wabaw ! »
ā- ngājā ndzwèn ɡʷāj wābāw
3SG.SBJ- QUOT true pal (cry of grief)
‘He says, “(It's) true, pal, what can I do!”’

5.6 « Sa kāsan kwaw . »
sā- kā- sān kʷāw
1SG.SBJ- PFV- know NEG
“I didn't know.”

5.7 « Sa kasan ana ebe ca , nja a nja a
sā- kā- sān ānā ēbē tsā ndzā ā- ndzā á
1SG.SBJ- IPFV- know like DEM.MED TOP dwell 3SG.SBJ- dwell PREP1
wata naka kwaw . »
wātā nākā kʷāw
compound 1SG.POSS NEG
“(If) I knew about this, she would not dwell at my compound.”
‘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 uzoye
   pawl gʷaj sā- ḥāp -āxʷāw mā má= xèdzè wzjé
   Paul pal 1SG.SBJ- say -2SG.IOBJ situation REL= 1INCL.STAT children
   pozekw pozekw ende wese.
   pzékʷ pozékʷ 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 gcene mgba asa barla ca,
   ŋmgbà á wātā ntsēnè ŋmgbà á sā bārlā tsá
   up.there PREP compound 1EXCL.POSS up.there PREP1 under mountain TOP
   hwa kasan ujek anta mboy a mazlam a zene
   xʷā- kā- sān wjēk antā mbj á máḥam á zēnē
   2SG.SBJ- IPFV- know house DEF.DET 3SG.STAT PREP1 edge PREP1 again
   nēye ?
   nējé
   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, ay kahobar.
tsá á pès wēsé j- kā- 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 ay a wata akwaw.
tsá mà- dākāl dākāl =égē j- ā wātā ākʷāw
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 tenguleŋ naka, sa mbaw a zeney.
sā téŋʷlèŋ nākā sā mbàw ā 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.’
However, there was a certain male baboon, he arrived, he was coming to break the sorghum.

Yes, at that time, you were a child.

I was a small child like this.

I was sitting on a rock.

I saw (him), I did…, I cried out (lit. hit voice) at him, he didn’t want to flee.
'Then I saw he was coming at me like this with a whip, I ran fast into the house.'

'He wanted to whip you.'

'He wanted to whip me, child, however I kept on crying, I went straight and hid in the ancestor idol hut.'

'Aha.'
19 N. Aya, waría wese ca, a pes luma Zambaw, 
ājā wárba wēsē tsá á pēs lwā mā zâmbâw
so fortunately DEM.DIST TOP PREP1 day market(ful.) Zambo
hejaye ay kanda kədə a luma .
xèdzè -jé j- kə- ndə kədə á lwā mā
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 .
ājâw
yes
‘Yes.’

21.1 N. Sa karav ula a ujeck ca, a ngayâ : « Mba
sâ- kə- râv wīâ á wjēk tsá ā- ngâjâ mbâ
1SG.SBJ- IPFV- resound voice PREP1 hut TOP 3SG.SBJ- QUOT child
anta a han ca, dâla a wata akwaw vaw ? »
ântâ ā- xān tsá dâlā á wâtā âḳwāw vâw
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 ? »
mbâ ântâ ā- xān veméj
child DEF.DET 3SG.SBJ- cry what
“Why does the child cry?”
21.3 N. Køɗe ca , əy nda ca , əy ndewzekey ,
kɗe tsá j- ndā tsá j- ndèw -zā -ēkēj
so TOP 3PL.SBJ- go TOP 3PL.SBJ- find -TRANS -1SG.IOBJ
sa əy ben mejøve mala baba naka , a
sā ēy bèn médzvè mālā bābā nākā ā-
1SG.STAT PREP2 man's.hut ancestor.idol GEN father(ful.) 1SG.Poss 3SG.SBJ-
ŋgayə : « Ḥwa Ḥan vemey ? »
ŋgajā xʷā- xān vēmēj
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 , əmesl a
sā- jā sā- xān kʷāw tsā ĝmēl a-
1SG.SBJ- say 1SG.SBJ- cry NEG TOP baboon 3SG.SBJ-
ndewzekey mga bā ata ĕkōdāŋ mga bā , sa
ndèw -zā -ēkēj ěmgbā ā tā nkōdāŋ ěmgbā sā-
find -TRANS -1SG.IOBJ up.there PREP1 on rock up.there 1SG.SBJ-
kahōbar ca , a kadāw ēnt ewekey amba
kā- xbār tsā ā- kā- daw ēnt āw -ēkōj āmbā
IPFV- watch.over TOP 3SG.SBJ- IPFV- want INF whip -1SG.DOBJ then
sa heya aza a əjek » sa ya .
sā- xēj ājā əjēk 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- ndá ŋ ndèw -zā -āxʷāw ńkʷāw
   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- ndá ŋ ndèw -ēkēj ā wjēk ńkʷāw
   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 kangaɓa nderey asa la ende .
   ā- kā- ŋgā -bā ndrēj ā sā lā ēndē
   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 wēsē
   yes person DEM.DIST
   ‘Yes, that person...’
26. P. hwa gøre a daw ŋ lemba kan ta zam .
   xʷā- grē ā- dāw ŋ lēm -bā kān tá zām
   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.’
But at that time, you see he was not afraid of you, was he!

He wasn’t afraid, I was a child wasn’t I!

Then that person, he said, “So now, where is he?”

I said, “The baboon is in the field.”

He went, he found the baboon sitting on top of the rock, large like this, he was munching sorghum.
30. Hwa gare ca.
   xʷā-grē-tsá
   2SG.SBJ-see-TOP
   ‘You see.’

31. Mm, a təwse ca, heje wese tatak a tatakza ca,
   mm á twsé tsá xędzè wēsē tātāk ā- tātāk -zā tsá
   mm PREP1 there TOP person DEM.DIST chase 3SG.SBJ- chase -TRANS TOP
   sa zlapahwaw a mpat anta ay, sa
   sā- ḥşāp -āxʷāw á mpat āntā j jā să
   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. Mm.
   mm
   mm
   ‘Mm.’

33. Ėy a wata akwaw ca, mala ghəvbeŋ sa
   j á wātā ákʷāw tsá mā- lā ɣvēŋ sā-
   3PL.STAT PREP1 home NEG.EXIST TOP JUS- do never 1SG.SBJ-
   kagar a təwse zeney vaw?
   kā- gār ā twsé zēnēj 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. Inda mgba ...
   j ndā ƞmbà
   INF go up.there
   ‘To go up there...’
35 N. ata ŋkəɗaŋ ...
a tā nkđāŋ
PREP1 on rock
‘...on the rock...’

36 P. ata ŋkəɗaŋ zeney akwaw .
a tā nkđāŋ zēnéj ákwāw
PREP1 on rock again NEG.EXIST
‘...on the rock again.’

37 N. ... a , sa kalaɓ zeney akwaw .
a sā- kā- làb zēnéj ákwāw
ah! 1SG.SBJ- IPFV- agree again NEG.EXIST
‘...ah, I wouldn't agree (to it) anymore.’

38 P. A a- nala tam a kasarahwaw neye ?
ā- nā- là tām ā- kā- sār -ākwāw nējé
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 , asaday , sa sanaɓa a katay gway ?
a āsādāj sā- sān -ā -bā ā kātaj ĝāj
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 dāw ŋ mpambा kan ta zam , a
ākwāw tsā ā- dāw ŋ mpām -bā kān tā zām ā
NEG.EXIST TOP 3SG.SBJ- want INF look.for -BEN thing for eat PREP1
dōwze kālalak anta ata hwa .
dwzē kā- làlāk āntā ā tā xwa
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 daw ŋ nda ŋ twahwaw ca , a zlap : « Mba ā- daw ŋ ndā ŋ twāw -āxwāw tsā ā- ḥāp mbā 3SG.SBJ- want INF go INF whip 2SG.DOBJ TOP 3SG.SBJ- say child ma caw nggha a nanda ŋ ngwefēkey . » má= tsāw nyā ā- nā- ndā ŋ ngwēfēkey -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 gomesl ma a nuna anta ege ca , xwā- kā- sān mērē gmēl má= á nwnā ântā = égē tsā 2SG.SBJ- IPFV- know male baboon REL= PREP1 times.past DEF.DET =PL TOP gwaya deydey . gʷājā dejēj aggression too.much(ful.) ‘You know the male baboons of the old days, (they had) too much aggression.’

42 P. Gwaya aka . gʷājā ākā aggression EXIST ‘There was aggression.’

43.1 N. ḃy gazl uzaye deydey kam . ŋ gāš wzjē dejēj kām 3PL.SBJ- beat children too.much(ful.) TOP(ful.) ‘They beat children too much.’

43.2 N. Kaw wala ma , gula ŋ hōbar kwaw . kāw wālā má gʷlā ŋ xār kʷāw even(ful.) woman TOP.EMPH able INF watch.over NEG ‘Even a woman, (she) wasn’t able to watch over (the sorghum).’
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.

But we were those very small children like this!

Ah, they seized goats by force like this, it’s true.
49 N. Ayaw, zlēne sa zlapahwaw ha
ājāw ɭnē sā- ħāp -āxʷāw xá
yes sibling.IPOSS 1SG.SBJ- say -2SG.IOBJ until(ful.)
kēlelekekey aza kam .
ká- làlàk -zā -ēkēj āzá làm
PFV- be.afraid -TRANS -1SG.DOBJ COMPL TOP(ful.)
‘Yes, my brother I tell you, until it made me afraid.’

50 P. Hwa lalak dey ?
xʷā- làlàk déj
2SG.SBJ- be.afraid TAG.CONF(ful.)
‘You were afraid were you?’

51 N. Mm .
mm
mm
‘Mm.’

52 P. Aya .
ājá
Oh.yes?
‘Oh yes?’

53 N. Ayaw .
ājāw
yes
‘Yes.’

54 P. A , wasay .
á wásāj
ah! thankyou
‘Ah, thankyou.’
References


BLEVINS, JULIETTE and ANDREW PLOWLEY. 2010. Typological implications of Kalam predictable vowels. Phonology 27.1-44.


CYFFER, NORBERT, ERWIN EBERMANN and GEORG ZIELGELMAYER. *Negation patterns in West African languages and beyond*. Amsterdam: John Benjamins.


GRAVINA, RICHARD. 2007b. Prosodization, compensatory reduplication and other phonological processes in the history of Central Chadic A. unpublished manuscript.


HASELMATH, MARTIN. 1997b. From space to time. Munuch: LIMCOM EUROPA.


