Table of Contents
List of Abbreviations ..............................................................................7
List of Tables ..............................................................................................9
List of Figures ..........................................................................................11
Maps ..........................................................................................................12

1 Introduction ..........................................................................................14
  1.1 Language and speech community .................................................... 14
  1.1.1 The Tajio language .................................................................. 14
  1.1.2 The speech community .............................................................. 16
  1.2 Previous works ................................................................................. 18
  1.3 Fieldwork ......................................................................................... 18
  1.4 Typological profile of the language ................................................. 19

2 Phonetics and phonology ......................................................................22
  2.1 Orthographic conventions ................................................................ 22
  2.2 Consonant phonemes ...................................................................... 22
    2.2.1 Plosives .................................................................................... 23
      2.2.1.1 Oral voiceless plosives ....................................................... 23
      2.2.1.2 Voiced plosives ................................................................. 23
      2.2.1.3 Delayed release plosives .................................................. 23
      2.2.1.4 Glottal stop .................................................................... 25
    2.2.2 Affricates .................................................................................. 29
      2.2.2.1 Manner of articulation of [tʰ] and [dʰ] ................................ 29
      2.2.2.2 Place of articulation of [tʰ] and [dʰ] ................................... 32
    2.2.3 Nasals ........................................................................................ 33
    2.2.4 Fricatives .................................................................................. 33
    2.2.5 Trill and lateral .......................................................................... 34
    2.2.6 Approximants .......................................................................... 35
      2.2.6.1 Phonemic glides ................................................................. 35
      2.2.6.2 Non-phonemic glides ....................................................... 35
      2.2.6.3 Allophonic glides ............................................................. 36
  2.3 Vowel phonemes ............................................................................. 36
    2.3.1 Vowel phoneme inventory ......................................................... 36
    2.3.2 Vowel phoneme distribution ..................................................... 36
      2.3.2.1 Vowel /i/ .......................................................................... 36
      2.3.2.2 Vowel /u/ .......................................................................... 36
      2.3.2.3 Vowel /e/ .......................................................................... 37
      2.3.2.4 Vowel /o/ .......................................................................... 37
      2.3.2.5 Vowel /a/ .......................................................................... 38
3 Word structure ........................................................................................................55

3.1 Phonological words and grammatical words ..........................................................55
  3.1.1 Phonological words ..........................................................................................55
  3.1.2 Grammatical words .......................................................................................56

3.2 Formatives ...............................................................................................................57
  3.2.1 Lexical roots, stems and bases ........................................................................57
  3.2.2 Affixes .............................................................................................................57
  3.2.3 Stem-forming prefixes .....................................................................................59
  3.2.4 Clitics ...............................................................................................................59

3.3 Allomorphy .............................................................................................................62
  3.3.1 Morphophonemic allomorphy ........................................................................62
  3.3.2 Suppletive allomorphy ....................................................................................62
     3.3.2.1 Morphologically conditioned suppletion ...............................................62
     3.3.2.2 Lexically conditioned suppletion ...........................................................63

3.4 The structure of grammatical words .......................................................................63

3.5 Reduplication ..........................................................................................................66
  3.5.1 CV-reduplication or monosyllabic reduplication .............................................66
  3.5.2 Bisyllabic reduplication ..................................................................................67

3.6 Compounding ..........................................................................................................69

4 Word classes .............................................................................................................73
4.1 Morphological potential of lexical roots ................................................................. 73
  4.1.1 Single-class roots .................................................................................................. 73
  4.1.2 Dual-class roots .................................................................................................... 75
  4.1.3 Multi-class roots .................................................................................................. 77
4.2 Syntactic distribution of nouns and verbs ................................................................. 79
4.3 Closed word classes .................................................................................................. 81
  4.3.1 Pronouns ................................................................................................................ 81
    4.3.1.1 Personal pronouns .............................................................................................. 81
    4.3.1.2 Reflexive pronouns ............................................................................................ 85
    4.3.1.3 Demonstratives ................................................................................................... 86
  4.3.2 Numerals ................................................................................................................ 89
  4.3.3 Adverbs .................................................................................................................. 90
    4.3.3.1 Intensifying adverbs .......................................................................................... 90
    4.3.3.2 Temporal adverbs ............................................................................................. 91
    4.3.3.3 Directional and positional adverbs .................................................................... 92
    4.3.3.4 Limiting adverbs ............................................................................................... 94
  4.3.4 Quantifiers ............................................................................................................. 94
  4.3.5 Prepositions .......................................................................................................... 94
  4.3.6 Conjunctions ......................................................................................................... 96
  4.3.7 Interjections ........................................................................................................... 97
  4.3.8 Other closed classes .............................................................................................. 98

5 Mood, tense, modality and aspect ................................................................. 100
  5.1 Mood markers .......................................................................................................... 100
    5.1.1 Mood markers as tense markers ........................................................................... 100
    5.1.2 Interactions between mood and aspect ............................................................... 102
    5.1.3 Further functions of mood markers ...................................................................... 103
      5.1.3.1 Prohibition ....................................................................................................... 103
      5.1.3.2 Consecutive/purposive constructions ............................................................... 104
      5.1.3.3 Hypothetical and counterfactual constructions ................................................ 105
  5.2 Modality ................................................................................................................... 105
  5.3 Aspect ....................................................................................................................... 107
    5.3.1 Completive aspect =mo ......................................................................................... 107
    5.3.2 Continuative aspect =po ....................................................................................... 110

6 Verbal morphology .................................................................................................... 112
  6.1 Dynamic verbs .......................................................................................................... 112
  6.2 Stative verbs vs dynamic intransitive verbs .............................................................. 113
  6.3 Voice morphology ..................................................................................................... 115
    6.3.1 Actor voice and undergoer voice markers ............................................................ 115
      6.3.1.1 Actor voice markers ....................................................................................... 115
6.3.1.2 Undergoer voice markers ...............................................................116
6.3.2 AU-UV alternation ........................................................................117
6.3.2.1 AV and UV marking without a stem-forming prefix ..................117
6.3.2.2 AV and UV marking with a stem-forming prefix ......................119
6.4 Valency-changing operations .............................................................121
6.4.1 Valency-increase ............................................................................121
6.4.1.1 Applicatives ..............................................................................121
6.4.1.1.1 Applicative type I (with suffix -iAPPL) ..................................122
6.4.1.1.2 Applicative type II (with suffix -ao) ......................................125
6.4.1.2 Causatives ...............................................................................130
6.4.1.2.1 Basic causatives ..................................................................130
6.4.1.2.2 Requestive causatives ..........................................................133
6.4.2 Valency-decrease ...........................................................................135
6.4.2.1 Reciprocals ..............................................................................135
6.4.2.2 Resultatives and involuntary actions ......................................137
6.4.2.3 Reduplication ..........................................................................138
6.5 Verbal plurality ..................................................................................139

7 Noun phrases ......................................................................................142
7.1 Simple noun phrases .........................................................................142
7.1.1 Noun markers ...............................................................................142
7.1.1.1 Distribution of si= and te= ..........................................................142
7.1.1.2 Restrictions on the use of si= ....................................................144
7.1.1.3 Restrictions of the use of te= .....................................................145
7.1.2 Verbal modifiers ...........................................................................147
7.1.3 Numerals, quantifiers, classifiers and measure nouns ..................149
7.1.3.1 Modifier construction: numeral-classifier ................................149
7.1.3.2 Modifier constructions: numeral-measure nouns ....................152
7.1.3.3 Modifier construction: quantifiers ..........................................153
7.1.4 Demonstratives ............................................................................155
7.1.5 Nominal modifiers ........................................................................156
7.2 Complex noun phrases ......................................................................156
7.2.1 Genitive noun phrases ..................................................................156
7.2.1.1 Single genitive constructions ..................................................158
7.2.1.2 Multiple genitive constructions ..............................................159
7.3 NPs without head nouns ....................................................................159
7.4 Nominalization ..................................................................................161
7.4.1 Agentive nominalization ...............................................................161
7.4.2 Action/state nominalization ...........................................................162
7.4.3 Instrumental nominalization ...........................................................162
7.4.4 Locative nominalization ...............................................................163
8 Basic clause structures .......................................................... 167

8.1 Verbal clauses ....................................................................... 167
  8.1.1 Intransitive clauses ......................................................... 167
  8.1.2 Transitive clauses ............................................................ 169
    8.1.2.1 Actor voice constructions ........................................... 170
      8.1.2.1.1 Realization of subject and object in AV constructions ........................................................................... 170
      8.1.2.1.2 Word order in AV constructions .............................. 172
    8.1.2.2 Undergoer voice constructions ..................................... 173
      8.1.2.2.1 Realization of subject and object in UV construction ................................................................... 173
      8.1.2.2.2 Word order in UV constructions ......................... 174
  8.1.3 The object-doubling construction ..................................... 175

8.2 Existential and possessive clause ........................................... 177

8.3 Non-verbal clauses ............................................................... 179
  8.3.1 Equational clauses .......................................................... 180
  8.3.2 Locational clauses ......................................................... 180

8.4 Grammatical relations .......................................................... 181
  8.4.1 Subject ............................................................................ 181
    8.4.1.1 Relativization .......................................................... 181
    8.4.1.2 Control .................................................................. 182
    8.4.1.3 Raising .................................................................. 183
    8.4.1.4 Control in adverbial clauses ...................................... 185
    8.4.1.5 Secondary predicates and quantifier floating .............. 185
  8.4.2 Object, obliques and adjuncts .......................................... 187
    8.4.2.1 Secondary predicates and floated quantifiers .......... 187
    8.4.2.2 Word order ............................................................ 188
    8.4.2.3 Reflexive binding .................................................... 189
    8.4.2.4 Adjunct fronting and deletion .................................. 190

8.5 Symmetry in Tajio ............................................................... 191

9 Complex constituent structure ................................................. 193

9.1 Coordination ........................................................................ 193

9.2 Subordination ................................................................. 197
  9.2.1 Complement clauses ....................................................... 198
  9.2.2 Adverbial clauses .......................................................... 199
    9.2.2.1 Time ..................................................................... 199
    9.2.2.2 Purposive clauses ................................................... 200
    9.2.2.3 Conditional clauses ............................................... 200
    9.2.2.4 Causation ............................................................... 200
    9.2.2.5 Concessive clauses .................................................. 200
9.3 Serial verb constructions .............................................................................................................. 201
  9.3.1  mao-V2 ...................................................................................................................................... 202
  9.3.2  mai-V2 ...................................................................................................................................... 203
  9.3.3  minyei/minyau-V2 .................................................................................................................. 204
  9.3.4  No SVCs with ‘come’ .............................................................................................................. 204
# List of Abbreviations

1. **first person**
2. **second person**
3. **third person**
4. **actor**
5. **answer**
6. **agentive**
7. **applicative**
8. **actor voice**
9. **bisylabic reduplication**
10. **consonant**
11. **causative**
12. **classifier**
13. **completive**
14. **continuative**
15. **comparative marker**
16. **definite**
17. **directional**
18. **distal**
19. **dynamic**
20. **exclusive**
21. **existential**
22. **focus**
23. **genitive**
24. **group/collective activity**
25. **honorific**
26. **inclusive**
27. **interjection**
28. **ligature**
29. **literal**
30. **locative**
31. **medial**
32. **noun**
33. **negation**
34. **noun marker**
35. **nominalizer**
36. **noun phrase**
37. **noun phrase**
38. **non-realis**
39. **object**
40. **primary object**
41. **secondary object**
42. **oblique**
43. **oblique-object**
44. **predicate**
45. **plural**
46. **proper name**
47. **politeness marker**
List of Tables

Table 1: Phonological differences in Tajio Sienjo and Tajio Kasimbar ........................................ 15
Table 2: Demonstratives and spatial deictics in Tajio Sienjo and Tajio Kasimbar ................................ 15
Table 3: Population in the Kasimbar subdistrict (2010 census) .................................................. 17
Table 4: Types of data recorded during the fieldwork ..................................................................... 19
Table 2-1: Consonant phonemes of Tajio ....................................................................................... 22
Table 2-2: Distribution of oral voiceless plosives ............................................................................ 23
Table 2-3: Distribution of voiced plosives ......................................................................................... 23
Table 2-4: Plosives in word-final position ......................................................................................... 25
Table 2-5: Distribution of the glottal stops ......................................................................................... 25
Table 2-6: Distribution of affricates .................................................................................................. 29
Table 2-7: Distribution of nasals ........................................................................................................ 33
Table 2-8: Distribution and allophonic variants of the fricatives ...................................................... 34
Table 2-9: Distribution of liquids ...................................................................................................... 35
Table 2-10: Distribution of approximants ......................................................................................... 35
Table 2-11: Vowel phonemes of Tajio ............................................................................................. 36
Table 2-12: Distribution of the vowel /i/ ........................................................................................... 36
Table 2-13: Distribution of the vowel /a/ ........................................................................................... 36
Table 2-14: Distribution of the allophone [e] ...................................................................................... 37
Table 2-15: Distribution of the allophone [e] ...................................................................................... 37
Table 2-16: Distribution of the allophone [a] ...................................................................................... 37
Table 2-17: Distribution of the allophone [o] ...................................................................................... 38
Table 2-18: Distribution of the vowel /a/ ........................................................................................... 38
Table 2-19: Logically possible vowel sequences ................................................................................. 38
Table 2-20: Sequences of two vowels in Tajio .................................................................................... 39
Table 2-21: Sequences of three and four vowels in Tajio ................................................................. 39
Table 2-22: Nasal-obstruent sequences ............................................................................................. 42
Table 2-23: Distribution of (C)V(C) and (C)(V)N syllables .............................................................. 46
Table 2-24: Type I vowel-harmonic changes ....................................................................................... 53
Table 2-25: Type II vowel-harmonic changes of the group/collective infix -ngV- .............................. 54
Table 3-1: Examples of stem formation and inflection ....................................................................... 57
Table 3-2: Complete list of inflectional and derivational affixes in Tajio .......................................... 58
Table 3-3: Complete list of clitics in Tajio ......................................................................................... 60
Table 3-4: Affix template of nouns ..................................................................................................... 64
Table 3-5: Affix template of stative intransitive verbs ....................................................................... 64
Table 3-6: Affix template of dynamic intransitive verbs ................................................................. 65
Table 3-7: Affix template of dynamic transitive verbs ...................................................................... 66
Table 3-8: Examples of CV-reduplication ......................................................................................... 67
Table 3-9: Examples of bisyllabic reduplication ............................................................................... 68
Table 3-10: The structure of compound nouns ................................................................................. 70
Table 3-11: Endocentric compounds in Tajio ................................................................................... 70
Table 3-12: Exocentric compounds in Tajio .................................................................................... 71
Table 3-13: Compound test by insertion of the noun marker te= and the genitive marker ni=/nu= ... 72
Table 3-14: Examples of semantically similar compounds and noun phrases ................................. 72
Table 4-1: Morphological potential of nominal single-class roots ............................................... 74
Table 4-2: Morphological potential of stative single-class roots ..................................................... 74
Table 4-3: Morphological potential of dynamic intransitive single-class roots .............................. 75
Table 4-4: Morphological potential of dynamic transitive single-class roots .................................. 75
Table 4-5: Morphological potential of nominal-stative dual-class roots type 1 ............................. 76
Table 4-6: Morphological potential of nominal-stative dual-class roots type 2 ............................. 76
Table 4-7: Morphological potential of nominal-verbal dual-class roots type 1 ............................. 76
Table 4-8: Morphological potential of nominal-verbal dual-class roots type 2 ............................. 77
Table 4-9: Morphological potential of verbal-stative dual-class roots ............................................ 77
Table 4-10: Morphological potential of nominal-verbal-stative multi-class roots ........................ 78
Table 1: Dynamic verbs taking the AV prefix noN-/no- ......................................................... 81
Table 2: Examples of the non-harmonic changes of the dynamic prefix ne-/no- and the harmonic changes of the stative prefix nV- ................................................................. 114
Table 3: Types of meanings of statives ..................................................................................... 114
Table 4: Complete list of AV and UV markers without stem-forming prefixes ......................... 117
Table 5: Examples of roots taking the AV marker noN- and the UV marker ni-(i) .................. 118
Table 6: Examples of roots taking the dynamic markers ne-/no- and the UV markers ni-(i) ... 119
Table 7: Complete list of AV and UV markers with stem-forming prefixes ............................ 119
Table 8: Examples of roots taking the AV prefix n-SF- and the UV markers ni-SF- ............... 120
Table 9: Applicative paradigms in Tajo .................................................................................... 122
Table 10: Examples applicative type I without stem former .................................................... 123
Table 11: Examples applicative type I with stem former ......................................................... 124
Table 12: Examples applicative type II ...................................................................................... 127
Table 13: Causative paradigms in Tajo .................................................................................... 130
Table 14: Examples of causative verb formations .................................................................... 132
Table 15: Examples of requestive causative verb formations .................................................. 134
Table 16: Examples of alternating reciprocals and mutual actions ........................................... 136
Table 17: Examples of verbal plurality ....................................................................................... 140
Table 18: Examples of repetitive actions marked by the suffix -iREP....................................... 141
Table 1: Classifiers in Tajo ...................................................................................................... 151
Table 2: Measure nouns in Tajo grouped into semantic classes ............................................... 153
Table 3: Examples of agentive nominalization ....................................................................... 162
Table 4: Examples of action/state nominalization ................................................................. 162
Table 5: Examples of instrumental nominalization ............................................................... 163
Table 6: Examples of locative nominalization ....................................................................... 164
Table 7: Examples of objective nominalization ...................................................................... 166
Table 8: Word orders in AV constructions .............................................................................. 172
Table 9: A highly marked word order option in AV ............................................................. 172
Table 10: Possible UV constructions and the realization of the objects .................................... 173
Table 11: Word orders in UV constructions ............................................................................ 175
List of Figures

Figure 1: Unreleased [palit̚] and delayed release [palitː] ........................................ 24
Figure 2: Spectrogram of the word ambur ................................................................. 26
Figure 3: Spectrogram of the word oyot ................................................................. 26
Figure 4: Spectrogram of the word ‘aug ................................................................. 26
Figure 5: Spectrogram of the word niambing ......................................................... 27
Figure 6: Spectrogram of the word ro’augi .............................................................. 27
Figure 7: Spectrogram of the word nituba’i ........................................................... 28
Figure 8: Spectrogram of the word monudai .......................................................... 29
Figure 9: Spectrogram of the word kacang ‘bean’ .................................................. 30
Figure 10: Spectrogram of the word ujang ‘rain’ ..................................................... 30
Figure 11: Spectrogram of [c] and [ʃ] in Hungarian .................................................. 30
Figure 12: Spectrogram of [dʒ] in the word jaang ‘boil’ ........................................... 31
Figure 13: Spectrogram of [tʃ] in the word colo ‘matches’ ....................................... 31
Figure 14: Spectrogram of [tʃ] and [dʒ] in English .................................................... 32
Figure 15: Spectrogram of [tʃ] in Nunggubuyu (Ladefoged 2001:143) ...................... 32
Figure 16: Place of articulation of palatal plosives and palato-alveolar affricates (Ladefoged 1996:32; 2001:144,147) ................................................................. 32
Figure 17: A palatogram (on the left) showing the roof of the speaker’s mouth and a linguagram (on the right) showing the tongue after producing [dʒ] between two [a] (i.e., aja) in Tajio. ......................................................... 33
Figure 18: Intensity curve of the word diiti ‘to pull’ ................................................. 39
Figure 19: F0 contour of the word diiti ‘to pull’ in which /ii/ is pronounced as two short vowels [ii] ................................................................. 40
Figure 20: F0 contour of the word diiti ‘to pull’ in which /ii/ is pronounced as a long vowel [i:] ................................................................. 40
Figure 21: Timing unit to pronounce /nd/ in ndaang ‘branch’ .................................... 43
Figure 22: Timing unit to pronounce /nd/ in ndiisi ‘to take a bath’ .............................. 43
Figure 23: Timing unit to produce the phoneme /n/ in the word veeni ‘to give’ .......... 44
Figure 24: Timing unit to produce the phoneme /n/ in the word pudei ‘to break’ ...... 44
Figure 25: F0 extraction of the word jilo’ [jilɔʔi] ‘to lick’ ......................................... 47
Figure 26: F0 extraction of the word jilo’ [jilɔʔi] ‘to lick’ ......................................... 47
Figure 27: F0 extraction of the word vu’u [ˈbuʔu] ‘bone’ ......................................... 48
Figure 28: F0 extraction of the noun phrase vu’u nusu ‘rib’ ........................................ 48
Figure 29: The use of si= and te= based on the animacy hierarchy of the head nouns .... 143
Figure 30: Alignment between grammatical relations and semantic roles in AV and UV constructions ........................................................................................................ 169
Maps

Map 1: Language area of Tajio (Himmelmann 2001)
Map 2: Location of Tajio speech community (Himmelmann 2001)
1 Introduction

This work is a description of Tajio, a Western Malayo-Polynesian language spoken in Central Sulawesi, Indonesia. It covers the essential aspects of Tajio grammar without being exhaustive.

This chapter provides basic information on Tajio, the speech community and the data corpus used for my analysis. In Section 1.1.1 I present some general information about the language and its genetic affiliation. Concerning dialectal variation, I briefly compare the Tajio data I collected in Kasimbar with data collected by Himmelmann in the village of Sienjo in the 1990s. Section 1.1.2 turns to the sociolinguistic situation and provides information about the Tajio speech community, with particular attention paid to the villages of Kasimbar and Kasimbar Barat. Section 1.2 lists previous works and scholars who have conducted research on other Tomini-Tolitoli languages in the area. Section 1.3 concerns my fieldwork and the type of data that I have collected and analyzed. Finally, Section 1.4 offers a typological profile of Tajio.

1.1 Language and speech community

1.1.1 The Tajio language

Tajio is an Austronesian language and belongs to the Tomini-Tolitoli language group\(^1\). The term Tomini-Tolitoli was introduced by Masyhuda (1975/81) in order to indicate a certain subgrouping, and also as an alternative to the East Coast-centered term ‘Tomini’, which was first used by Adriani and Kryut (1941) (Himmelmann 2001:14–16).

To date, it is still unclear whether the Tomini-Tolitoli languages for a low-level genetic subgroup of Western Malayo-Polynesian or whether they are just geographically related (Himmelmann 2001:19). Based on an extensive linguistic survey conducted from August 1988 to January 1989 and from February 1993 to April 1993, Himmelmann (2001) classifies eleven languages as belonging to this group: Totoli, Buano, Ampibabo-Lauje, Lauje, Tialo, Dondo, Balaesang, Pendau, Dampelas, Taje and Tajio.

Within the Tomini-Tolitoli language group, Himmelmann makes a further distinction between the Tolitoli subgroup and the Tomini subgroup. Tolitoli and Tomini in this subgrouping are primarily used as geographical terms rather than genealogical ones. This is based on observations concerning lexical and phonological similarities and dissimilarities between Tomini-Tolitoli languages. The tentative subgrouping of the Tomini-Tolitoli languages proposed by Himmelmann is as follows:

Tolitoli subgroup
- Totoli
- Buano

Tomini subgroup
- Northern Tomini
  - Ampibabo-Lauje
  - Lauje
  - Tialo
  - Dondo
- Southern Tomini
  - Balaesang
  - Pendau
  - Dampelas
  - Taje
  - Tajio

(Himmelmann 2001:19–20)

Note that the Tomini subgroup proposed by Himmelmann is fairly similar to the one proposed by Adriani and Kryut (1914) and Barr and Barr (1979).

Based on Himmelmann’s tentative subgrouping, Tajio thus belongs to the Southern Tomini subgroup together with Balaesang, Pendau, Dampelas and Taje.

\(^1\) Sneddon (1993) refers to this group as the Tomini languages.
In the 1990s, Himmelmann recorded the Sulawesi Umbrella Word list (SUW) in the village of Sienjo and about 300 items were cross-checked in Maninili for dialectal variation, as McKenzie (1991) mentions that a different dialect is spoken in that village. McKenzie (1991:24) includes Kasimbar and Sienjo in one dialect group, which he calls the ‘central dialect’, although he admits that there is a difference between them. In 2011 and 2012, I recorded the same word list in the village of Kasimbar. Comparing the data collected by Himmelmann in Sienjo and the data that I collected in Kasimbar, it seems that there is a dialectal difference between the Tajio varieties spoken in these two villages. For example, /g/ in some words in Sienjo is found as /k/ in Kasimbar. Some words which occur with a glottal stop /ʔ/ in Sienjo appear without a glottal stop in Kasimbar. Examples are given in Table 1.

<table>
<thead>
<tr>
<th>Phonological differences</th>
<th>Tajio Sienjo</th>
<th>Tajio Kasimbar</th>
</tr>
</thead>
<tbody>
<tr>
<td>/g/ vs /k/</td>
<td>langgai ‘male’</td>
<td>langkai ‘male’</td>
</tr>
<tr>
<td></td>
<td>barenggong ‘to throw’</td>
<td>barengkong ‘to throw’</td>
</tr>
<tr>
<td></td>
<td>teonggong ‘arm’</td>
<td>teongkong ‘arm’</td>
</tr>
<tr>
<td></td>
<td>teulingga ‘coconut’</td>
<td>teulingka ‘coconut’</td>
</tr>
<tr>
<td></td>
<td>ganing ‘time(s)’</td>
<td>kaning ‘time(s)’</td>
</tr>
<tr>
<td>/ʔ/ vs Ø</td>
<td>vu’u ‘bone’</td>
<td>vuu ‘bone’</td>
</tr>
<tr>
<td></td>
<td>ti’ol ‘bamboo’</td>
<td>tiol ‘bamboo’</td>
</tr>
<tr>
<td></td>
<td>tu’u ‘knee’</td>
<td>tuu ‘knee’</td>
</tr>
<tr>
<td></td>
<td>va’i ‘head’</td>
<td>vai ‘head’</td>
</tr>
<tr>
<td></td>
<td>-a’o ‘APPL’</td>
<td>-ao ‘APPL’</td>
</tr>
</tbody>
</table>

Table 1: Phonological differences in Tajio Sienjo and Tajio Kasimbar

In addition to phonological differences, Tajio Sienjo and Tajio Kasimbar also show morphological differences. Tajio Sienjo and Tajio Kasimbar make use of a different prefix to mark the non-real is of the undergoer voice. In Sienjo it is marked by the prefix ro-, whereas in Kasimbar it occurs as nu-. The locative preposition used in Tajio Sienjo is ri ‘at, in’, whereas in Tajio Kasimbar there are two forms that are used, i and ri. Ri, which is used to mark prepositional phrases and spatial deictics in Tajio Sienjo, has a more limited distribution in Tajio Kasimbar. In Kasimbar, prepositional phrases are mostly marked by the preposition i, whereas ri is limited to mark spatial deictics. Furthermore, there are also some lexical variants between demonstratives and spatial deictics, which are used in Tajio Sienjo and Kasimbar as listed in Table 2.

<table>
<thead>
<tr>
<th>Tajio Sienjo</th>
<th>Tajio Kasimbar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstratives</td>
<td></td>
</tr>
<tr>
<td>eini, he’ee ‘this (PROX)’</td>
<td>eini ‘this (PROX)’</td>
</tr>
<tr>
<td>eitu, ha’aa ‘that (MED)’</td>
<td>eitu ‘that (MED)’</td>
</tr>
<tr>
<td>amai/amai’ee ‘that (DIST)’</td>
<td>eua ‘that (DIST)’</td>
</tr>
<tr>
<td>Spatial deictics</td>
<td></td>
</tr>
<tr>
<td>riini ‘over here’</td>
<td>riini ‘over here’</td>
</tr>
<tr>
<td>ri’aa, riitu ‘over there’</td>
<td>riitu ‘over there’</td>
</tr>
<tr>
<td>riamai ‘over there (DIST)’</td>
<td>riua ‘over there (DIST)’</td>
</tr>
</tbody>
</table>

Table 2: Demonstratives and spatial deictics in Tajio Sienjo and Tajio Kasimbar

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2 The list of demonstratives and spatial deictics in Tajio Sienjo is based on Himmelmann (2001:99 – 100).
1.1.2 The speech community

Tajio is spoken by approximately 12,000–18,000 speakers (figures taken from Himmelmann 2001 and McKenzie 1991) respectively in Central Sulawesi province. Tajio people inhabit a continuous stretch of villages on the East Coast (Pantai Timur), extending from the village of Toribulu in the Kecamatan Ampibabo (Ampibabo subdistrict) to the village of Sipayo in the Kecamatan Tinombo (Himmelmann 2001:32) (see Map 2). Under the Indonesian decentralization policy, which encouraged emerging independent subdistricts from within the provinces, Kasimbar formerly belonging to the Ampibabo subdistrict has now become a new subdistrict called Kasimbar subdistrict since 2004. Thus, Tajio is now spoken in four subdistricts, i.e., Ampibabo, Kasimbar, Tinombo and Sindue. The neighbouring languages of Tajio are Ampibabo-Lauje, Pendau and Lauje (see Map 1).

The geographic center of the Tajio speech community is Kasimbar and, perhaps unsurprisingly, Kasimbar is an alternative name for the Tajio language, or at least its main dialect (see Himmelmann 1991, 2001). Kasimbar is located ca. 200km north of Palu, the capital of the province of Central Sulawesi.

According to folk memory, the old name for Kasimbar is Tanainolo, which also referred to the area inhabited by the Tajio and Pendau people. Its inhabitants lived in groups led by leaders called Toi Bagis, each ruling an area called boya. There were seven boya in Tanainolo: Boya Mayapo, Boya Vintonung, Boya Lioving, Boya Sambali, Boya Tagali, Boya Apes and Boya Ranang. Each boya had its own local wisdom, thus there were pitu pole or sanja pitu ‘seven values’ known and practiced by the Tanainolo people. This information seems to be related to a narrative told by my contributor, Bapak Jafar Tanggulado, in the village of Kasimbar. As he told me about the harvest ceremony tevunja, he said that in this ceremony, people made seven dolls out of sago branches. These dolls symbolize the seven owners of Tajio village.

The settlements of the Tanainolo people in boya changed when Mandar traders came to this area: at the end of the 17th century, powerful Bugis and Mandar Kingdoms in South Sulawesi took control of the Tomini-Tolitoli coastlines along with their Kaili allies whom they had subjugated some time before (Himmelmann 2001:51).

According to Bapak Olumsyah Saehana, the former head of the Kasimbar subdistrict, the word Kasimbar is claimed to be derived from simbar ‘dawn; rise’ and ka- as a shortened form of karajaan ‘kingdom’ (p.c. 2010). Kasimbar thus originally means ‘the rising kingdom’. The name was given to the village in the middle of the 14th century by a Mandar trader, Arajang Petta Karikacci, as he moored his ship at the shore of the river Tanainolo as dawn was breaking.

Today the subdistrict Kasimbar consists of the following eight villages: Donggulu, Laemanta, Kasimbar Selatan (South Kasimbar), Kasimbar, Kasimbar Barat (West Kasimbar), Tovalo, Posona and Silampayang. Unfortunately, there are no official data which give reliable information about the number of Kasimbar inhabitants who speak Tajio as their first language. The only data available for the Kasimbar subdistrict is the population breakdown, based on the 2010 census; this is presented in Table 3.

<table>
<thead>
<tr>
<th>Name of village</th>
<th>Number of inhabitant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donggulu</td>
<td>3,611</td>
</tr>
<tr>
<td>Laemanta</td>
<td>2,169</td>
</tr>
<tr>
<td>Kasimbar Selatan</td>
<td>3,043</td>
</tr>
</tbody>
</table>

3 This information is found in a blog Randa nu Tajio ‘a Tajio young woman’ posted on 12th March 2012 at the following address: http://randanutajio.blogspot.co.id/2012/03/sejarah-singkat-kecamatan-kasimbar.html. This blog is written by Nur Iftitah Rini, a young woman from Kasimbar. I have tried to get in contact with her, but have not received any response.

4 Mandar is the name of an ethnic group that spreads over the island of Sulawesi.
In addition to the two native groups of the Tajio and the Pendau, Kasimbar is inhabited by other indigenous groups such as the Kaili people, especially Kaili Ledo and Rai. Mandar and Bugis are early migrants originally from South Sulawesi; other migrants from North Sulawesi come from Minahasa, Sangir and Manado. Due to a transmigration project by the Indonesian government, which re-located inhabitants from over-populated parts of Indonesia to less populated areas, migrants from Bali and Java came to Kasimbar in the 1970s.

As the Tajio area is inhabited by different ethnic groups, Indonesian serves as a lingua franca used in interaction between speakers of local Sulawesi languages and the non-Sulawesi migrants. Among speakers of the local languages (i.e., Kaili and Tomini people), Kaili is used as the main language for social interaction.

Among the older Tajio people, Tajio is still used in everyday communication. Tajio elders are either bilingual in Tajio and, to different degrees, in Indonesian, or multilingual in Indonesian and at least one further language they have come in contact with. For example, one of my language consultants, Bapak Jafar Tanggulado (at the time 69 years old), speaks Indonesian, Kaili and Pendau, in addition to Tajio.

During my stay in Kasimbar and West Kasimbar, I hardly heard the younger generation (i.e., people under the age of 20) speak Tajio. Tajio children are no longer learning their native language. Instead, they use Indonesian within the family as well as in school.

In mixed marriages, Indonesian is frequently chosen by the parents as the lingua franca. Consequently, their children grow up in an Indonesian-speaking environment. But, even in native Tajio families, I found that even parents who do speak Tajio rarely do so with their children. The children usually prefer to speak Indonesian with each other, although most of them still understand Tajio.

These observations are in line with the findings reported by Mead (2013), who has conducted a study on the vitality of the indigenous languages in Sulawesi. According to his classification, which is based on the vitality/endangerment rating scale from UNESCO, Tajio is a “definitely endangered language” (Mead 2013:113). According to the EGIDS scale, Tajio is on level 7, which means it is shifting. A language is rated as shifting when the speakers of the child-bearing generation know the language well enough to use it among themselves but no longer transmit it to their children.

Another factor which speeds up the language shift from Tajio to Indonesian is a general change in lifestyle. Members of Tajio’s younger generation who have received a higher level of education than their parents tend to become pegawai (public servant) rather than working as rattan drawers, farmers or fishermen. As a consequence, they tend to leave the village and search for work in the cities.

Furthermore, as in most other parts of Sulawesi, the majority of the population in the Tajio area are now Muslims (Balinese migrants, who kept their Hindu beliefs, are an exception). Thus, religious ceremonies such as weddings and funerals follow mainstream Indonesian Islam. While in many ceremonies Muslim tradition intermingles with traditional Tajio elements, knowledge of the origins of these practices is restricted to a few older people and has been effectively lost within the younger

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5 The rating system used in this research is the UNESCO rating system and the EGIDS (the Expanded Graded Intergenerational Disruption Scale) rating system. The vitality of Tajio is based on evidence from recent fieldwork and direct observation in a representative sampling of locations (Mead 2013:113).
generation. Religious ceremonies thus do not serve as a domain where the local language could survive.

During my last visit in Kasimbar, for example, Bapak H.M. Pamasi (then 73 years old), who could spontaneously make pantuns (a kind of traditional rhyme) for wedding proposals, passed away. With his death, this tradition, which had not been properly transmitted to the younger generations, ceased to be remembered. Likewise, other traditional practices, such as playing the traditional instrument santum, making sumpit (a kind of blowing spear) and weaving rattan to craft bingga or tambobo’ (a traditional container to carry goods or paddy), are today rarely practiced in Tajio villages (at least not in the two villages I visited, Kasimbar and Kasimbar Barat).

1.2 Previous works

There are only two scholars who have conducted research on Tajio. In addition to Himmelmann (2001), who has collected data on Tajio as a part of his survey study on the Tomini-Tolitoli languages, the sociolinguistic situation in Tajio has been investigated by McKenzie (1991). Using lexicostatistics, McKenzie (1991:24) identifies three dialects: northern, central and western.

Other scholars have conducted research on neighboring languages of Tajio. Quick (2007) has written a comprehensive grammar of Pendau; Moro (2010) has written a sketch grammar on Dampelas for her Master’s thesis; Riesberg (2014) has conducted research on symmetrical voice systems in western Austronesian languages and analyzed Tolitoli together with three other languages (Indonesian, Balinese and Tagalog); Himmelmann and Riesberg (2013) have published a paper on symmetrical voice and applicative alternations in Totoli.

Other works on languages in Sulawesi include, among others, a grammar of Muna written by Van den Berg (1989), a sketch grammar of Toratan (Ratahan) by Himmelmann and Wolff (1999) and Donohue’s grammar of Tukang Besi (1999).

1.3 Fieldwork

Before going into the field, I had already started to build a database of Tajio based on the recordings of the Sulawesi word lists (Himmelmann 2001) and sentence lists (Himmelmann 1992 unpublished) compiled by Nikolaus Himmelmann, who conducted fieldwork on Tajio in the villages of Sienjo and Maninili in the 1990s. Having performed a preliminary analysis of this material, I decided to do my fieldwork in the villages of Kasimbar and Kasimbar Barat (West Kasimbar) in order to verify and increase the amount of data. My first fieldtrip took place for eight weeks from 12th April to 12th June 2011, the second was conducted in the same villages for four weeks between 21st July and 21st August 2012. During my fieldwork I stayed in Kasimbar Barat, which was chosen for me by the head of the Kasimbar subdistrict. Kasimbar Barat and Kasimbar are about eight kilometers apart and are connected by an asphalt road.

My data comprise recordings of the Sulawesi word lists and elicited data, as well as narratives, conversations and stimulus data such as a pear film (Chafe et al. 1980) and a frog story (Mayer 1969) recording.

The age of my language consultants ranges between 31–73 years. They work as farmers, teachers, rattan drawers and school administrative staff.

The elicited and recorded lexical items were compared with the data compiled by Himmelmann in the 1990s. In addition to the lexical items, I also elicited and recorded phonological and intonational data which were used to validate the phonological analysis I had done based on Himmelmann’s data. Most of the morphosyntactic data were recorded based on the research questions prepared before going into the field. These data capture a wide range of morphosyntactic issues, such as word classes, aspect and mood, voice and valency, basic clause structure, grammatical relations, noun phrases, and clause combining. I also collected data which was elicited by using video stimuli developed by the Max Planck Institute for Psycholinguistics in Nijmegen. The word lists and elicited data were – in addition to being recorded – written directly in a field note book and transcribed by myself. The transcription of elicited data was then checked by my language consultants.
The narrative topics are mostly related to speakers’ daily lives and activities, the villages’ histories, and procedures explaining how to make traditional instruments or foods. Every topic in the narratives was recorded after I conducted short interviews. The contributors of the narratives had been recommended by my language consultants based on the topic mastered by the contributors. For example, the contributor of the narrative Teompas ‘pandanus mat’ is a mat-weaver; the contributor of the narrative Sejarah Kasimbar ‘History of Kasimbar’ is an elder of Kasimbar village. In addition to those narratives, the stimulus data, i.e., the pear story and the frog story, are also in the form of narratives. The conversations were recorded when speakers were sitting together discussing certain topics or talking about their routines. Both narrative and conversational data were transcribed with the help of the following native speakers: Bapak Asman (42 years old), Ibu Rosmin H. Tjako (32 years old) and Ibu Rosnawati, H. Tjako, S.Pd. (31 years old), my co-workers during both stays. Table 4 summarizes the different types of data that make up my corpus.

Over the two years between 2011–2013 I kept in touch with my language consultants by telephone, short message service (SMS) and social media, such as Facebook in order to check grammatical points.

<table>
<thead>
<tr>
<th>No.</th>
<th>Type of data</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lexical items</td>
<td>11:24:56</td>
</tr>
<tr>
<td>2.</td>
<td>Phonetic elicitation</td>
<td>02:45:21</td>
</tr>
<tr>
<td>3.</td>
<td>Prosodic data</td>
<td>00:22:21</td>
</tr>
<tr>
<td>4.</td>
<td>Morphosyntactic elicitation</td>
<td>01:05:44</td>
</tr>
<tr>
<td>5.</td>
<td>Songs (3)</td>
<td>00:10:26</td>
</tr>
<tr>
<td>6.</td>
<td>Narrative stories (20)</td>
<td>01:11:20</td>
</tr>
<tr>
<td>7.</td>
<td>Conversations (5)</td>
<td>01:44:50</td>
</tr>
<tr>
<td>8.</td>
<td>Frog story (1)</td>
<td>00:05:15</td>
</tr>
<tr>
<td>9.</td>
<td>Pear film (1)</td>
<td>00:02:24</td>
</tr>
<tr>
<td>10.</td>
<td>Pantun (Rhyme) (1)</td>
<td>00:05:40</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>18:58:17</td>
</tr>
</tbody>
</table>

Table 4: Types of data recorded during the fieldwork

1.4 Typological profile of the language

This section gives a brief overview of the main typological characteristics of Tajio with a focus on those topics that take center stage in this grammar. These include phonological features, morphology and syntax.

Tajio has a medium sized phoneme inventory consisting of twenty consonants and five vowels. The language does not have lexical (word) stress; rather, it has a phrasal accent. This phrasal accent regularly occurs on the penultimate syllable of an intonational phrase, rendering this syllable auditorily prominent through a pitch rise.

Possible syllable structures in Tajio are (C)V(C). V and CV syllables occur in all positions in a word: initially, medially and finally. VC and CVC syllable structures featuring a non-nasal consonant are restricted to word-final position. In other positions only CVN structures are allowed as closed syllables, but CVN syllables in word-medial position are not frequent. As in other languages in the area, the only sequence of consonants allowed in native Tajio words are sequences of nasals followed by a homorganic obstruent. The homorganic nasal-obstruent sequences found in Tajio can occur word-initially and word-medially but never in word-final position. Evidence from timing (i.e., the time needed to produce a consonant) and reduplication support the analysis of nasal-obstruent sequences as clusters.
As in many Austronesian languages, word class classification in Tajio is not straightforward. As will be discussed in Chapter 4, the classification of words in Tajio must be carried out on two levels: the morphosyntactic level and the lexical level. The open word classes in Tajio consist of nouns and verbs. Verbs are further divided into intransitive verbs (dynamic intransitive verbs and statives) and dynamic transitive verbs.

Based on their morphological potential, lexical roots in Tajio fall into three classes: single-class roots, dual-class roots and multi-class roots.

A noun phrase in Tajio minimally consists of a noun. A non-minimal NP contains a head noun and its modifier(s). Modifiers can either precede or follow the head noun. Of the two possible structures, [head noun modifier] and [modifier head noun], the former is considered to be the basic NP structure (representing unmarked information structure). Demonstratives found in Tajio are *eini / ini* ‘this’, *eitu / itu* ‘that’ and *eua / uua* ‘that (distal)’. As modifiers, they always occur at the very end of the noun phrase. Morphological processes involved in nominalization are affixation, reduplication and compounding. Regarding the types of the derived nouns, nominalizations can be classified into agentive, action/state, instrumental, locative and objective nominalizations.

Tajio has singular and plural pronouns for the first, second and third person. A further distinction is made between first-person plural inclusive (which includes addressee) and first-person plural exclusive (which excludes addressee). Personal pronouns in Tajio do not inflect for gender. The discussion of the singular pronouns is separated from plural pronouns as both are formed differently. Singular pronouns can be expressed by independent forms, clitics and prefixes depending on their function. They occur as genitive clitics when functioning as possessors or as objects in undergoer voice constructions. First and second person singular pronouns occur as prefixes when used to express actors in non-realis undergoer-voice constructions. The plural forms of the personal pronoun, however, are analyzed as bound roots. Morphologically they consist of bound forms which attach to either the honorific prefix *si*- or the genitive prefix *ni-. There is no syntactic context where these prefixes can be omitted and only the bare roots are used.

Tajio has two noun markers, the proclitics *si-* and *te-*, which occur as pre-head modifiers. The choice between *si-* and *te-* depends on the animacy of their host. The analysis of *te-* poses some difficulties in that it shows characteristics of both an article and a noun marker.

There are two basic transitive constructions in Tajio: Actor Voice and Undergoer Voice, where the actor or undergoer argument respectively serves as subjects. It shares many characteristics with symmetrical voice languages, yet it is not fully symmetric, as arguments in AV and UV are not equally marked. Neither subjects nor objects are marked in AV constructions. In UV constructions, however, subjects are unmarked while objects are marked either by prefixation or clitization.

Evidence from relativization, control and raising constructions supports the analysis that AV and UV are in fact transitive, with subject arguments and object arguments behaving alike in both voices. Only the subject can be relativized, controlled, raised or function as the implicit subject of subjectless adverbal clauses. In contrast, the objects of AV and UV constructions do not exhibit these features.

In addition to the basic voice alternation, Tajio has a number of productive valence changing affixes. It has two applicative suffixes to increase the valency of a given predicate: the goal applicative suffix *-i* and the benefactive suffix *-ao*. Another valence increasing affix is the causative prefix *PO-*. This causative marker can be attached to a root by itself or in combination with applicative suffixes. Constructions which indicate valency-decrease include reciprocals and resultatives. Another way to decrease valence is reduplication, but this is not very productive. Reduplication changes transitive verbs into intransitive verbs, but it cannot be applied to all transitive verbs.

Tajio is a predominantly head-marking language with basic A-V-O constituent order. V and O form a constituent, and the subject can either precede or follow this complex. Thus, basic word order is S-V-O or V-O-S. Subject, as well as non-subject arguments, may be omitted when contextually specified. Verbs are marked for voice and mood, the latter of which is obligatory. The two values distinguished are realis and non-realisa.
Tajio has two aspectual markers: completive and continuative. Aspectual marking in Tajio is found in the form of enclitics which are attached to a predicate host. The aspectual markers have two functions: their primary function relates to temporal properties of events, and their secondary functions are functions other than temporal specification, for instance, to mark focus, politeness or comparative constructions.

Depending on the type of predicate involved in clause formation, three clause types can be distinguished: verbal clauses, existential clauses and non-verbal clauses. Existential clauses are distinguished from verbal clauses by the fact that the existential verb *amai* ‘exist’ does not occur with any verbal inflection. Non-verbal clauses occur without a copula; such verbless clauses consist of a nominal subject and a predicate, which can be a noun phrase (NP) or a prepositional phrase (PP).

Tajio has a small number of multi-verbal structures that appear to qualify as serial verb constructions. SVCs in Tajio always include a motion verb or a directional. The directional verb or the motion verb always comes first and can be followed by any other verb. Unlike other verbal predicates that obligatorily occur with mood marking, these directionals in SVCs never take any inflection.
2 Phonetics and phonology

This chapter is concerned with the basic phonetic and phonological features of Tajio. Apart from giving a description of the basic phoneme inventory of Tajio, it deals with aspects of Tajio phonology that require special treatment: vowel sequences, nasal-obstruent sequences, syllable structure, intonation and stress and phonological alternations (morphophonology).

2.1 Orthographic conventions

In the following sections, examples are represented phonetically, phonemically and orthographically where necessary; in the remainder of this work they are usually only written in the practical orthography introduced here. The phonetic representation makes use of IPA symbols and is given in square brackets ([ ]). Phonemic representations are given in between slashes (/ /). When contrasted with phonetic or phonemic representation, orthographic representations are specifically marked by angled brackets (< >).

The practical orthography differs from the IPA-based phonemic representation for the following sounds:

- /ŋ/ = <ng>
- /ɲ/ = <ny>
- /tʃ/ = <c>
- /dʒ/ = <j>
- /β/ = <v>
- /ʔ/ = <'>
- /j/ = <y>

2.2 Consonant phonemes

The consonant phoneme inventory of Tajio consists of the twenty consonants presented in Table 2-1. Parentheses indicate a special phonemic status, i.e., the distribution of the sounds thus marked is limited and/or only occurs in loans. The phonemes are represented by standard IPA symbols. The voiced and voiceless phonemes appear side by side, voiceless ones on the left and voiced ones on the right.

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Dental-alveolar</th>
<th>Palato-alveolar</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plosive</td>
<td>p</td>
<td>b</td>
<td>t</td>
<td>d</td>
<td>k</td>
</tr>
<tr>
<td>Affricate</td>
<td>(tʃ)</td>
<td>(dʒ)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricative</td>
<td>β</td>
<td>s</td>
<td></td>
<td></td>
<td>(h)</td>
</tr>
<tr>
<td>Nasal</td>
<td>m</td>
<td>n</td>
<td>n</td>
<td>η</td>
<td></td>
</tr>
<tr>
<td>Trill</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximant</td>
<td>(w)</td>
<td>(j)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2-1: Consonant phonemes of Tajio

In order to describe the allophonic variation of consonantal phonemes in Tajio, word-initial, word-final and intervocalic (word-medial) contexts must be distinguished. As further discussed in Section 2.5, the phonology of Tajio does not generally permit consonant clusters, except where sequences consist of a nasal followed by an obstruent (e.g. /mb/, /nd/, etc.) or where they occur at clitic boundaries.
2.2.1 Plosives

There are seven plosives in Tajio: /p/, /t/, /k/ and /ʔ/ are voiceless; /b/, /d/ and /g/ are voiced. Plosives in Tajio are generally not aspirated. The glottal stop poses a special analytic problem as phonemic and non-phonemic glottal stops must be distinguished: It is treated separately in Section 2.2.1.4.

2.2.1.1 Oral voiceless plosives

The voiceless plosives /p/, /t/ and /k/ in Tajio are unaspirated and they have two principal allophones: released and an unreleased form. The released form occurs word-initially and word-medially. In word-final position, the unreleased allophone is produced. Table 2-2 provides some examples.

<table>
<thead>
<tr>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/p/ [p]</td>
<td>&lt;pita&gt;/pitaʔ [pitaʔ]</td>
<td>&lt;taipan&gt; /taipan/ [taipan]</td>
</tr>
<tr>
<td>[p]</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>/t/ [t]</td>
<td>&lt;tonung&gt;/tonunŋ [tonunŋ]</td>
<td>&lt;utus&gt; /utus/ [ʔutus]</td>
</tr>
<tr>
<td>[ʔt]</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>/k/ [k]</td>
<td>&lt;kinde&gt;/kinde [kinde]</td>
<td>&lt;poki&gt;/poki [poki]</td>
</tr>
<tr>
<td>[ʔk]</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2-2: Distribution of oral voiceless plosives

2.2.1.2 Voiced plosives

As is the case with the voiceless plosives, their voiced counterparts /b/, /d/ and /g/ also have two principal allophones: released and unreleased. The released form occurs word-initially and word-medially. The unreleased allophone occurs word-finally, as illustrated in Table 2-3.

<table>
<thead>
<tr>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/b/ [b]</td>
<td>&lt;bosoi&gt;/bosoi [bosoi]</td>
<td>&lt;tibas&gt;/tibas [tibas]</td>
</tr>
<tr>
<td>[b]</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>/d/ [d]</td>
<td>&lt;diit&gt;/diit [diit]</td>
<td>&lt;tuda&gt;/tuda [tuda]</td>
</tr>
<tr>
<td>[d]</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>/g/ [g]</td>
<td>&lt;gipis&gt;/gipis [gipis]</td>
<td>&lt;logo&gt;/logo [logo]</td>
</tr>
<tr>
<td>[ʔg]</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2-3: Distribution of voiced plosives

2.2.1.3 Delayed release plosives

In addition to unreleased allophones, Tajio plosives—both voiced and voiceless—allow delayed release in word-final position. Delayed release sporadically occurs when speakers pronounce single words during elicitation. There is no phonemic contrast between unreleased and delayed release allophones, i.e., there is free variation between these two options.
Figure 1: Unreleased [pəliː] and delayed release [pəliːtː]

Figure 1 illustrates the difference between an unreleased realization (black) and a delayed-release realization (red) of the word /pəliː/ ‘around all’. The delayed release is distinguished by the appearance of a small wave at the end of the intensity curve for [pəliːtː]. In addition, the time shows that the delayed-release allophone needs about 0.2 seconds longer than the unreleased one.

In word elicitation, I found variants with delayed release for all plosives except for /p/. For example:

- `<pəliːt> /pəliːt/ [pəliːtː] ‘all around; surrounding’
- `<kojoʊk> /kʊdəˈʊk/ [kʊdəˈʊkː] ‘mushroom’
- `<taab> /taab/ [taːbː] ‘high tide’
- `<keked> /keked/ [kekeˈdː] ‘framboesia’
- `<buniag> /buniag/ [buniəɡː] ‘coral reef’

In order to get at least a rough idea of the frequency of the delayed release option, the following six sentences ending in a plosive were elicited from six speakers.

(1)  
sisia nongoli telatab
sisia noN-oli te=labab
1PL AV.RLS-buy NM=oil
‘They bought oil.’

(2)  
tepue eua netekoud
te=pue eua nete-koud
NM=stick DIST RES.RLS-crooked
‘That stick is crooked.’

(3)  
sisia nolayag
sisia no-layag
1PL DY.RLS-sail
‘They sailed.’

(4)  
nyaa nisaup
nyaa ni-saup
IMP.NEG UV.RLS-rub
‘Don’t rub!’

(5)  
sisia nomenek tebuut
sisia noN-penek te=buut
1PL AV.RLS-climb NM=mountain
‘They climbed the mountain.’

(6)  
toonya eua nopuduk
to=nya eua nV-puduk
person=DEF DIST ST.RLS-short
‘That person is short.’
The six speakers, four females and two males, produced these sentences once. Table 2-4 illustrates that delayed-release variants are rather infrequent overall, and that considerable variation in the production of word-final plosives exists at the level individual speakers.

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Voiced plosives</th>
<th>Voiceless plosives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>/b/</td>
<td>/d/</td>
</tr>
<tr>
<td></td>
<td>[b]</td>
<td>[d:]</td>
</tr>
<tr>
<td>1st speaker (F)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2nd speaker (F)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3rd speaker (F)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4th speaker (M)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>5th speaker (M)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>6th speaker (F)</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 2-4: Plosives in word-final position

2.2.1.4 Glottal stop

The glottal stop /ʔ/ in Tajio occurs in word-initial, word-medial and word-final position, as illustrated in Table 2-5.

<table>
<thead>
<tr>
<th>/ʔ/</th>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
</table>

Table 2-5: Distribution of the glottal stops

The phonemic glottal stop can be difficult to distinguish from a non-phonemic glottal stop which frequently occurs word-initially.

(7) <ambur> /ambur/ [ʔambur] ‘to sow (scattering the rice seeds)’
(8) <ojot> /ojot/ [ʔojot] ‘to cut’

Examples (7) and (8) show words that do not have a phonemic glottal stop in initial position. In contrast, the example /ʔaug/ in Table 2-5 has a phonemic glottal stop in initial position. However, from a phonetic perspective all the three words may be produced with a glottal stop in word-initial position, as documented in Figure 2 to Figure 4. The red arrow points to the segment in the spectrogram where a glottal stop occurs word-initially.
Figure 2: Spectrogram of the word *ambur*

Figure 3: Spectrogram of the word *oyot*

Figure 4: Spectrogram of the word *’aug*
In order to be able to clearly identify the phonemic status of the glottal stop in word-initial position, reduplication and prefixation can be used as diagnostic tests. The diagnostic test that is applied here is prefixation, in which a base whose initial phoneme is a vowel and a base whose initial phoneme is a glottal stop behave differently when interacting with vowel-final prefixes.

If a vowel-final prefix is added to a vowel-initial root, the result is a sequence of two vowels with no intervening glottal stop. If the vowels are identical, they are pronounced as a single long vowel. Consider examples (9)–(11) (see also Section 2.4 for details on vowel sequences).

(9) $nV^- + /\text{ana}/ [\text{ana}] \rightarrow /\text{naana}/ [\text{na}:\text{na}]$ ‘to be right’
(10) $n\text{-} + /\text{am}bing/ [\text{am}bing] \rightarrow /\text{niam}bing)/ [\text{niam}bing]$ ‘to carry in a sarong’
(11) $n\text{-} + /\text{in}son\jot [\text{in}son\jot] \rightarrow /\text{n\text{e}in}son\jot/ [\text{ne\text{e}in}son\jot]$ ‘to gather’

Figure 5 shows the spectrogram of the word /niambing/ ‘to carry in a sarong’, in which there is no glottal stop between the two vowels; the red arrow again highlights the relevant segment.

These examples have to be compared to a phonemic initial glottal stop as in example (12). Here the glottal stop is clearly audible and visible in the spectrogram as illustrated by Figure 6.

(12) $r\text{o\text{-}} + /\text{aug}/ [\text{ augmented}] + \text{-}i \rightarrow /\text{ro\text{a}ug}i/ [\text{ro\text{a}ug}i]$ ‘to paddle’

Figure 5: Spectrogram of the word niambing

Figure 6: Spectrogram of the word ro ‘augi’
Another prefix that can be used as a diagnostic for a phonemic glottal stop in word-initial position is the nasal prefix noN-/moN-/poN- (see Section 2.8.1 for further details on nasal assimilation). If a nasal prefix is attached to a vowel-initial root, the homorganic nasal of the prefix will appear as velar [ŋ] while the initial segment of the root (i.e., the vowel in the onset) remains unchanged, as in examples (13) and (14). However, if the prefix is attached to a root starting with a phonemic glottal stop, the glottal stop /ʔ/ in word-initial position is changed to [k], as shown by example (15).

(13) moN- /ojot/ [ʔojoŋ] → /moŋoʃot/ [moŋoʃoŋ] ‘to cut’
(14) moN- /otus/ [ʔotus] → /moŋutus/ [moŋutus] ‘to hit/beat’
(15) moN- /ʔaug/ [ʔaug] → /moŋkaug/ [moŋkaug] ‘to paddle’

Phonemic glottal stops in word-final position may be equally hard to detect in terms of auditory evidence because, like the other plosives, they are usually unreleased. Affixation can be used to distinguish vowel-final roots from roots ending in a glottal stop. If a vowel-initial suffix is attached to a glottal-final root, the glottal stop is clearly audible, as in examples (16) and (17).

(16) ni- /tubaʔ/ [tubaʔ] + -i → /nitubaʔi/ [nitubaʔi] ‘to pick (the tips of leaves)’
(17) /turuʔ/ [turuʔ] + -i → /turuʔi/ [turuʔi] ‘to imitate’

The glottal stop in root-final position in example (16), which interrupts the sequence of the two vowels /a/ and /i/, can be clearly seen from the spectrogram presented in Figure 7.

In contrast, if the root has no final glottal stop, no glottal stop will separate the vowels, as seen in examples (18) and (19).

(18) moN+ /tuda/ [tuda] + -i → /monudai/ [monudai] ‘to burn’
(19) /tudaʔ/ [tudaʔ] + -i → /tudaʔi/ [tudaʔi] ‘to order/command’

Figure 8 presents the spectrogram of the word monudai, in which there is no glottal stop interrupting the sequence of the vowels /a/ and /i/.
2.2.2 Affricates

/tʃ/ and /dʒ/ are palato-alveolar affricates that occur word-initially and word-medially, but never word-finally. Neither of them has further allophones.

<table>
<thead>
<tr>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/tʃ/</td>
<td>&lt;colo’&gt; /tʃolo’/</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>[tʃo]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘matches’; ‘to dye’</td>
<td></td>
</tr>
<tr>
<td>/dʒ/</td>
<td>&lt;jilo’&gt; /dʒilo’/</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>[dʒilɔ]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘to lick’</td>
<td></td>
</tr>
<tr>
<td>/tʃ/</td>
<td>&lt;vulu’cumi’&gt;</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>[βulu’tʃumi]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘mustache’</td>
<td></td>
</tr>
<tr>
<td>/dʒ/</td>
<td>&lt;tu’ju&gt; /tudʒu/</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>[tu’dʒu]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘to order/command’</td>
<td></td>
</tr>
</tbody>
</table>

Table 2-6: Distribution of affricates

/tʃ/ is a phoneme with limited distribution. It is mostly found in loan words, in particular in words of Indonesian origin. For example, the word cahaya ‘light’ in Indonesian has been borrowed as caya [tʃaja] and the Indonesian word merica ‘pepper’ is marica [maritʃa] in Tajio.

Affricates in Tomini-Tolitoli languages have been analyzed differently by different researchers. The differences pertain both to the place and manner of articulation. Concerning manner of articulation, the two sounds have been classified as plosives as well as affricates. With respect to place of articulation, they have been analyzed as dental, alveolar or palatal sounds.

Himmelmann (1991) considers <c> and <j> in the Tomini-Tolitoli languages as palatal stops and represents them phonetically as [c] and [j]. Quick (2007) classifies <c> and <j> in Pendau as [tʃ] (voiceless dental sibilant affricate) and [dʒ] (voiced alveolar sibilant affricate) respectively. Similar differences in analysis are also found in the literature on Indonesian. Alwi et al. (1998) classify <c> and <j> in Indonesian as palatal affricates and represent them as [tʃ] and [dʒ] while Soderberg and Olson (2008) analyze them as post-alveolar affricates and represent them as [tʃ] and [dʒ]. Given the controversial status of affricates in these languages, the following sections are concerned with a close examination of manner and place of articulation of the affricates in Tajio.

2.2.2.1 Manner of articulation of [tʃ] and [dʒ]

Spectrographic analysis supports the claim that these sounds are affricates rather than plosives. Figure 9 shows the spectrogram of the Tajio word kacang [katʃaŋ] ‘bean’ and Figure 10 the spectrogram of the word ujang [udʒaŋ] ‘rain’. These can be compared to spectrograms of palatal plosives such as [c] and [j] in the Hungarian words [ɔcɔ] and [ɔʒɔ] (Figure 11) as given in Ladefoged (2001:148).
Figure 9: Spectrogram of the word *kacang* ‘bean’

Figure 10: Spectrogram of the word *ujang* ‘rain’

Figure 11: Spectrogram of [c] and [ɟ] in Hungarian
Figure 11 shows that each of the two plosives ([c] and [ɟ]) in Hungarian has a clear-cut boundary. The arrows indicate the location of the first and the second formants as the closure is formed and released (Ladefoged 2001:140). By contrast, while there is also a clearly delimited closure in Tajio (Figure 9 and Figure 10), the closure is followed by a marked friction as indicated by the arrows. The spectrograms thus provide clear evidence for an analysis as affricates.

Note that the friction in Tajio affricates (see Figure 12 and Figure 13) is less strong than the friction found in English affricates illustrated in Figure 14 from Ladefoged (2001:59).

Figure 12: Spectrogram of [dʒ] in the word *jaang* ‘boil’

Figure 13: Spectrogram of [tʃ] in the word *colo* ‘matches’
As can be seen from Figure 12 and Figure 13, the friction of the Tajio affricates is not clearly visible up in the 10,000Hz range, in contrast to the English affricates. The spectral range of the friction in Tajio affricates would rather appear to be similar to the ones found in Nunggubuyu, a language spoken in Australia (compare Figure 15).

Due to this lesser spectral extension, Tajio affricates are represented phonetically with a raised smaller symbol denoting the fricative part: [tʃ] and [dʒ] respectively.

### 2.2.2.2 Place of articulation of [tʃ] and [dʒ]

With regard to the place of articulation, Ladefoged (1996 and 2001) illustrates the difference between palatal plosives and palato-alveolar affricates with the pictures given in Figure 16.
Ladefoged (1996:32) defines palatal sounds as being made with the front of the tongue approaching or touching the hard palate. Palato-alveolars involve the hard palate as well as the back part of the alveolar ridge (Ladefoged 2001:147).

The distinction discussed above can best be diagnosed with the help of palatography and linguography (cf. Ladefoged 2001:144).

For the analysis of the Tajio affricates, the speaker’s tongue was painted with a mixture of coconut oil and cacao powder. After the tongue had been prepared in this way, the speaker was asked to say aja. The result is shown in Figure 17.

![Figure 17: A palatogram (on the left) showing the roof of the speaker’s mouth and a linguagram (on the right) showing the tongue after producing [dʒ] between two [a] (i.e., aja) in Tajio.](image)

The palatogram shows that [dʒ] in Tajio is articulated by the blade of the tongue touching the hard palate and the back part of the alveolar ridge. The linguagram demonstrates that the part of the tongue involved is behind the tip and the blade. This points to the conclusion that [dʒ] in Tajio is a palato-alveolar affricate. Given that the only difference between [dʒ] and [tʃ] is the type of phonation (i.e., [dʒ] is voiced and [tʃ] is voiceless), it is safe to assume that [tʃ] is also palato-alveolar.

### 2.2.3 Nasals

There are four nasals in Tajio, namely the bilabial nasal /m/, the dental-alveolar nasal /n/, the palatal nasal /ɲ/ and the velar nasal /ŋ/. /m/, /n/ and /ŋ/ can occur in word-initial, word-medial and word-final position whereas /ɲ/ can only occur word-initially and word-medially. Compared to /n/ and /ŋ/, the occurrence of /m/ in final position is very limited. Among the 1,646 lexical items in my corpus, there are only six lexical items with final /m/: ancam ‘to threaten’, lolom ‘to swim’, santum ‘music instrument from bamboo’, soyom ‘ant’ and ulam ‘medicine’. Each nasal has a single allophone, given in the second column of Table 2-7.

<table>
<thead>
<tr>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/m/</td>
<td>/meluwa/</td>
<td>/sɛmpa?/</td>
</tr>
<tr>
<td>/ɛ/</td>
<td>/meлуwa/</td>
<td>/sɛmpa?/</td>
</tr>
<tr>
<td>/n/</td>
<td>/nasu/</td>
<td>/sɛmpa?/</td>
</tr>
<tr>
<td>/ŋ/</td>
<td>/nχɛ/</td>
<td>/sɛmpa?/</td>
</tr>
<tr>
<td>/ɲ/</td>
<td>/ɲau/</td>
<td>/sɛmpa?/</td>
</tr>
<tr>
<td>/ŋ/</td>
<td>/ɲau/</td>
<td>/sɛmpa?/</td>
</tr>
</tbody>
</table>

Table 2-7: Distribution of nasals

### 2.2.4 Fricatives

Three fricative phonemes found in Tajio are the voiced bilabial fricative /β/, the voiceless dental-alveolar fricative /s/, and the voiceless glottal fricative /h/.
The voiced bilabial fricative /β/ occurs in word-initial, word-medial and word-final position. It should be noted that the occurrence of /β/ in word-final position is very limited. The database records only one word with /β/ in this position: <soov> /sooβ/ [soɔβ] ‘close’.

/β/ has two allophones: [β] and [b]. The allophone [β] occurs in word-initial, word-medial and word-final position, whereas the allophone [b] occurs if /β/ occurs after the bilabial nasal [m]. In this case, /m/+/β/ becomes a cluster [mb].

In addition to the two positionally conditioned allophones, [β] has also a third allophone, [ϕ] which occurs in free variation in word-initial and word-medial position. For example, /kalaβata/ ‘causeway’ may either be pronounced [kalaβata] or [kalaϕata]; /βalaoŋ puse/ ‘belly button’ is both recorded as [βalaοŋ puse] and [ϕalaoŋ puse].

Just like /β/, /s/ has a complete distribution. It occurs in word-initial, word-medial and word-final position. /h/ on the other hand can only occur in word-initial and word-medial positions.

<table>
<thead>
<tr>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/β/ [β]</td>
<td>&lt;vosu&gt;/βosu/ [βosu] ‘to be satisfied’</td>
<td>&lt;vuvut&gt; /βuβut/ [βuβut] ‘hair of head’</td>
</tr>
<tr>
<td>[b]</td>
<td>-</td>
<td>moN- + /βafa/ → /mombaβa/ [mömbaβa] ‘to bring/carry (in the hand)’</td>
</tr>
<tr>
<td>[ϕ]</td>
<td>&lt;valaong puse&gt;/βalaon puse/ [βalaon puse] or [ϕalaon puse] ‘belly button’</td>
<td>&lt;kalavata&gt;/kalaβata/ [kalaβata] or [kalaϕata] ‘causeway’</td>
</tr>
<tr>
<td>/h/ [h]</td>
<td>&lt;hamma’&gt;/hamma’/ [hamma’] ‘Lord! (as interjection)’</td>
<td>&lt;aha’&gt;/aβa’/ [ʔaβa?] ‘Sunday’</td>
</tr>
</tbody>
</table>

Table 2-8: Distribution and allophonic variants of the fricatives

Words with voiceless glottal fricatives are rather rare in Tajio and are most loan words from Indonesian. In addition to aha’ ‘Sunday’ in Table 2-8, Tajio harapan ‘wish, hope’ (same in Indonesian) and pahang ‘understand’ are also loans from Indonesian, the later being paham in Indonesian.

In elicitation, speakers occasionally add [h] in word-final position. For example, /palati/ ‘loom (weft)’ [palati] is also pronounced [palatih]; /namanta/ ‘unripe’ [namanta] is recorded as [namantah]; /pimpi/ ‘arrow for blow gun’ [pimpi] can be articulated as [pimpih]. However, the suffixation test used to distinguish between phonemic and non-phonemic glottal stops in word-final position also shows that this [h] is non-phonemic (cp. Section 2.2.1.4). For example, the word <umbe> ‘to open/uncover’ [umbe] is also pronounced as [ʔumbeh], but when the suffix -i is attached to the root, the newly formed word is [ʔumbei] not *[ʔumbehi]. The word <lapi> ‘spouse’ may be recorded both [lapi] and [lapih], but when the suffix -nya is attached to the root, the newly formed word is [lapinya] not *[lapihna].

2.2.5 Trill and lateral

There are two liquid phonemes in Tajio: the alveolar trill /ɾ/ and the alveolar lateral /l/. Both phonemes occur word-initially, word-medially and word-finally, and they both have a single allophone.
<table>
<thead>
<tr>
<th>/r/</th>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/r/</td>
<td>[r]</td>
<td>&lt;ragab&gt;/ragab/ [ragaβ]</td>
<td>to lie prone’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;porok&gt;/porok/ [porok]</td>
<td>‘fork’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;livur&gt;/livur/ [liβur]</td>
<td>‘to pursue’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/l/</th>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/l/</td>
<td>[l]</td>
<td>&lt;ladi&gt;/ladi/ [ladi]</td>
<td>‘knife’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;balisa&gt;/balisa/ [balisa]</td>
<td>to be anxious/worry’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;adal&gt;/adal/ [adal]</td>
<td>‘to be hard’</td>
</tr>
</tbody>
</table>

Table 2-9: Distribution of liquids

2.2.6 Approximants

Approximants in Tajio have three different phonological interpretations: (a) as phonemic glides, (b) as non-phonemic glides and (c) as allophonic glides of the vowels /i/ and /u/.

2.2.6.1 Phonemic glides

There are two glide phonemes in Tajio, the bilabial approximant /w/ and the palatal approximant /j/.
Both phonemes occur in relatively few words and are limited to word-initial and word-medial positions.

<table>
<thead>
<tr>
<th>/w/</th>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/w/</td>
<td>[w]</td>
<td>&lt;wato&gt;/wato/ [wato?]</td>
<td>‘step-parents/children’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;uwere&gt;/uwere/ [uwere]</td>
<td>‘misfortune, bad luck’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;moyak&gt;/moyak/ [moyak]</td>
<td>‘to yawn’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;aja&gt;/aja/ [aja]</td>
<td>‘itch caused by dust and the like’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/j/</th>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/j/</td>
<td>[j]</td>
<td>&lt;juļu&gt;/juļu/ [juļu?]</td>
<td>‘very small (object)’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;mojak&gt;/mojak/ [mojak]</td>
<td>‘to yawn’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;aja&gt;/aja/ [aja]</td>
<td>‘itch caused by dust and the like’</td>
</tr>
</tbody>
</table>

Table 2-10: Distribution of approximants

Despite their limited distribution, it is clear that the approximants in these examples are phonemic: they cannot be omitted and there are no alternative realizations.

Their status as a phoneme can be supported by the syllabification test. Phonemic glides also occur when syllables are pronounced in isolation which provides support for analyzing them as phonemes, in particular in the case of medial glides.

(20) /wato/ ‘step-parents/children’ → /wa-to/ 
(21) /juļu/ ‘very small (object)’ → /ju-ļu/ 
(22) /aja/ ‘itch caused by dust and the like’ → /a-ja-po/

2.2.6.2 Non-phonemic glides

Unlike phonemic glides, non-phonemic glides will disappear when syllables are pronounced in isolation. Examples (23), (24) and (25) illustrate this.

(23) /vonu/ ‘house’ [بونوا] → /bo-nu-a/ 
(24) /tangkuang/ ‘to carry on shoulder by one person’ [تاڭکۋان] → /taŋ-ku-an/ 
(25) /labia/ ‘sago porridge’ [لەبیا] → /la-bi-a/ 

As seen from these examples, the non-phonemic glides [w] and [j] are found in between vowel sequences. The non-phonemic bilabial glide [w] tends to split vowel sequences (VV) where the first vowel is a back vowel, (/u/ or /o/). Compare examples (23), (24), (26) and (27).

(26) /lu-is/ ‘pillow tied to the waist’ [لۇېس] is also pronounced [luwis] 
(27) /la-no-an/ ‘bee’ [لانەىىن] is also pronounced [lanwan]

The non-phonemic palatal glide [j] tends to disrupt vowel sequences (VV) in which the first vowel is a front vowel, (/i/ or /e/). See examples (25), (28)–(30).

(28) /ra-ke-an/ ‘attic (space underneath the roof)’ [راکەن] is also pronounced [rakejan] 
(29) /ne-me-as/ ‘white’ [ئەمەس] is also pronounced [nemjas]
In this environment, non-phonemic glides also occur at morpheme boundaries, as shown by examples (31) and (32).

(31) po--ong + /aŋanaʔ/ ‘womb’ → /po-aŋanaʔ-oŋ/ [poaŋanaʔoŋ] is also pronounced [poaŋanaʔoŋ]

(32) ni- + /ambinj/ ‘to carry in a sarong’ → /ni-am-binj/ [niambinj] is also pronounced [niambinj]

2.2.6.3 Allophonic glides

In vowel sequences, the high vowels /i/ and /u/ can also be realized as glides. This is further discussed in Section 2.3.

2.3 Vowel phonemes

2.3.1 Vowel phoneme inventory

There are five vowel phonemes in Tajio: /i/, /u/, /e/, /o/ and /a/. Table 2-11 presents the vowel inventory of Tajio classified by height (high, mid and low), backness (front, central and back) and rounding (rounded and unrounded).

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unrounded</td>
<td>Unrounded</td>
<td>Rounded</td>
</tr>
<tr>
<td>High</td>
<td>i</td>
<td>u</td>
<td></td>
</tr>
<tr>
<td>Mid</td>
<td>c</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2-11: Vowel phonemes of Tajio

2.3.2 Vowel phoneme distribution

2.3.2.1 Vowel /i/

/i/ is a high front unrounded vowel and has two allophones, namely [i] and [j]. The allophone [i] occurs in word-initial, word-medial and word-final position. The allophone [j] may occur if /i/ is part of a vowel sequence.

<table>
<thead>
<tr>
<th></th>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>/i/ [i] /injka/ [injka] ‘to be ashamed’</td>
<td>/paciŋ/ /patiŋ/ [patiŋ] ‘to be clean’</td>
<td>/saliliʔ /saliliʔ [saliliʔ] ‘to carry with sarong’</td>
</tr>
</tbody>
</table>

Table 2-12: Distribution of the vowel /i/

2.3.2.2 Vowel /u/

The high back rounded vowel /u/ has two allophones, [u] and [w]. The allophone [u] occurs in word-initial, word-medial and word-final position. The allophone [w] may occur if /u/ is part of a vowel sequence.

<table>
<thead>
<tr>
<th></th>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>/u/ [u] /utuʔ /utuʔ ‘louse (head)’</td>
<td>/tumaʔ /tumaʔ /tumaʔ ‘louse (cloth)’</td>
<td>/nauʔu /naʔu /naʔu ‘to be fallen’</td>
</tr>
<tr>
<td></td>
<td>[w] /uatʔ /uatʔ or [wai] ‘vein, tendon’</td>
<td>/tuaiʔ /tuaiʔ /tuaiʔ ‘younger sibling’</td>
<td>/dampelaʔ /dampelaʔ /dampelaʔ ‘young man’</td>
</tr>
</tbody>
</table>

Table 2-13: Distribution of the vowel /u/
2.3.2.3 Vowel /e/

The vowel /e/ is a mid front unrounded vowel and has two allophones, [ɛ] and [e]. [ɛ] occurs before nasals and in closed syllables and [e] elsewhere, as illustrated by the examples given in Table 2-14 and Table 2-15, respectively.

<table>
<thead>
<tr>
<th>Position</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before nasals</td>
<td>&lt;e.mis&gt; /emis/ [ɛmis] ‘to be sweet’</td>
</tr>
<tr>
<td></td>
<td>&lt;e.nge&gt; /eŋe/ [ŋe] ‘nose’</td>
</tr>
<tr>
<td></td>
<td>&lt;le.mo&gt; /lemo/ [lmo] ‘citrus fruit’</td>
</tr>
<tr>
<td></td>
<td>&lt;ne.ngi.si&gt; /neŋi.si/ [ŋi.si] ‘to laugh’</td>
</tr>
<tr>
<td>Closed syllables with final nasal</td>
<td>&lt;tam.ben&gt; /tamben/ [tam.ben] ‘to sit by crossing legs’</td>
</tr>
<tr>
<td></td>
<td>&lt;deng.keng&gt; /dəŋkəŋ/ [dəŋkəŋ] ‘to be skinny’</td>
</tr>
<tr>
<td></td>
<td>&lt;em.bo&gt; /embo/ [rəŋo] ‘wave’</td>
</tr>
<tr>
<td></td>
<td>&lt;en.de&gt; /ende/ [ŋənde] ‘to be long’</td>
</tr>
</tbody>
</table>

Table 2-14: Distribution of the allophone [ɛ]

<table>
<thead>
<tr>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/e/ [ɛ]</td>
<td>&lt;epe&gt; /epɛ/ [epɛ] ‘to listen’</td>
<td>&lt;teke&gt; /teke/ [teke] ‘to be frozen’</td>
</tr>
</tbody>
</table>

Table 2-15: Distribution of the allophone [ɛ]

2.3.2.4 Vowel /o/

The mid back rounded vowel /o/ has two allophones, [ɔ] and [o]. [ɔ] occurs before nasal and in closed syllables and [o] elsewhere, as listed in Table 2-16 and Table 2-17, respectively.

<table>
<thead>
<tr>
<th>Position</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before nasals</td>
<td>&lt;o.nit&gt; /onit/ [ɔnit] ‘to expand (rope)’</td>
</tr>
<tr>
<td></td>
<td>&lt;o.mus&gt; /omus/ [ɔmus] ‘fist’</td>
</tr>
<tr>
<td></td>
<td>&lt;o.mok&gt;/omok/ [ɔmɔk] ‘grass’</td>
</tr>
<tr>
<td></td>
<td>&lt;mo.me.nek&gt; /mo.menek/ [ɔmɔmenek] ‘to climb’</td>
</tr>
<tr>
<td>Closed syllables with final nasal</td>
<td>&lt;to.vong&gt; /tvong/ [təŋɔŋ] ‘to cut down’</td>
</tr>
<tr>
<td></td>
<td>&lt;ong.gom&gt; /ongɔm/ [ɔŋɔm] ‘to be cold’</td>
</tr>
<tr>
<td></td>
<td>&lt;on.jo&gt; /oŋdɔ/ [oŋdɔ] ‘to sit legs straight’</td>
</tr>
<tr>
<td></td>
<td>&lt;vi.tu.ong&gt; /vıtʊŋ/ [vıtʊŋ] ‘star’</td>
</tr>
<tr>
<td>Closed syllables with other final consonants</td>
<td>&lt;te.u.to/&gt; /teuɔ/ [teuɔ] ‘brain’</td>
</tr>
<tr>
<td></td>
<td>&lt;so.kok&gt;/sɔkɔk/ [ɔkɔk] ‘to catch’</td>
</tr>
<tr>
<td></td>
<td>&lt;o.log&gt; /ɔlog/ [ɔlog] ‘to cut’</td>
</tr>
<tr>
<td></td>
<td>&lt;o.yot&gt; /ɔjɔt/ [ɔjɔt] ‘to be tight’</td>
</tr>
<tr>
<td></td>
<td>&lt;sang.gob&gt; /sɔŋgɔb/ [ɔŋgɔb] ‘forked end of blow gun’</td>
</tr>
<tr>
<td></td>
<td>&lt;ka.kas.to&gt; /kɔkatɔl/ [kakatal] ‘to be itchy’</td>
</tr>
<tr>
<td></td>
<td>&lt;pa.maj.o&gt; /paməŋɔr/ [paməŋɔr] ‘main root’</td>
</tr>
<tr>
<td></td>
<td>&lt;bo.bos&gt; /bobɔs/ [bobɔs] ‘bad smell’</td>
</tr>
</tbody>
</table>

Table 2-16: Distribution of the allophone [ɔ]
Table 2-17: Distribution of the allophone [o]

2.3.2.5 Vowel /a/

The vowel /a/, which is a low central vowel, occurs in word-initial, word-medial and word-final position. Unlike the vowels and mid vowels, /a/ does not have multiple allophones.

Table 2-18: Distribution of the vowel /a/

2.4 Vowel sequences

Given the five monophthongs /i, e, a, o, u/, there are 25 logically possible vowel sequences, as shown in Table 2-19. All of them are attested in Tajio.

Table 2-19: Logically possible vowel sequences

Table 2-20 presents examples of all these 25 vowel sequences. The vowel sequences mostly occur in word-medial and word-final position, but also occasionally occur in word-initial position. They are attested both within roots (morpheme-internally) and across morpheme boundaries.

<table>
<thead>
<tr>
<th>Position</th>
<th>/ii/</th>
<th>/ie/</th>
<th>/ia/</th>
<th>/io/</th>
<th>/iu/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word-initial</td>
<td>/lai/</td>
<td>/lua/</td>
<td>/la/</td>
<td>/lu/</td>
<td>/ia/</td>
</tr>
<tr>
<td>Word-medial</td>
<td>/diit/</td>
<td>/tietin/</td>
<td>/sambian/</td>
<td>/sino/?/</td>
<td>/niulam/</td>
</tr>
<tr>
<td>Word-final</td>
<td>/nitapii/</td>
<td>/labia/</td>
<td>/sesi/o/</td>
<td>/simiu/</td>
<td>/eu/</td>
</tr>
<tr>
<td>/ei/</td>
<td>/ee/</td>
<td>/ea/</td>
<td>/eo/</td>
<td>/au/</td>
<td></td>
</tr>
<tr>
<td>/ai/</td>
<td>/ae/</td>
<td>/aa/</td>
<td>/ao/</td>
<td>/au/</td>
<td></td>
</tr>
<tr>
<td>/o/</td>
<td>/oβo/</td>
<td>/oβo/</td>
<td>/oβo/</td>
<td>/oβo/</td>
<td></td>
</tr>
</tbody>
</table>

Table 2-20: Examples of 25 vowel sequences
Table 2-20: Sequences of two vowels in Tajio

<table>
<thead>
<tr>
<th>Sequence of three vowels</th>
<th>Sequence of four vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td>/kaio/ ‘rice porridge’</td>
<td>/noiao/ ‘why’</td>
</tr>
<tr>
<td>/leia/ ‘ginger’</td>
<td></td>
</tr>
<tr>
<td>/tuaio/ ‘younger sibling’</td>
<td></td>
</tr>
<tr>
<td>/soia/ ‘how many/much’</td>
<td></td>
</tr>
<tr>
<td>/alaio/ ‘owl’</td>
<td></td>
</tr>
<tr>
<td>/βuo/ ‘to be new’</td>
<td></td>
</tr>
<tr>
<td>/sia/ ‘she/he’</td>
<td></td>
</tr>
</tbody>
</table>

Table 2-21: Sequences of three and four vowels in Tajio

2.4.1 Sequences of identical vowels

In addition to the sequences of two vowels, sequences of three and four vowels can also be found in Tajio. However, it should be noted such sequences are extremely rare. The examples in Table 2-21 all occur morpheme-internally.

2.4.1.1 Table 2-19 above contains sequences of identical vowels /aa/, /ii/, /uu/, /ee/ and /oo/. The pronunciation of such sequences varies between a phonetically long vowel and a sequence of two short vowels. Figure 18 shows the intensity curve of the word diiti ‘to pull’ with two different pronunciations. The red line shows that the sequence /ii/ forms two small peaks. /ii/ in this case is pronounced as two vowels, with each vowel having its own peak. The black line does not show any decrease, rather an overall increase in intensity throughout the production of /ii/. That is to say, the black line shows that /ii/ in this case is pronounced as a phonetically long vowel.

Figure 18: Intensity curve of the word diiti ‘to pull’
Evidence from accent placement supports the analysis that the /ii/ sequence phonemically consists of two short vowels. Note that Tajio does not have word-level stress, but rather a phrasal accent, which is regularly placed on the penultimate syllable (see Section 2.7). Regardless of whether the /ii/ sequence in diiti is pronounced as a long vowel or a sequence of two short vowels, fundamental frequency in phrase-final examples shows the same intonational pattern. There is a rising pitch on the penultimate syllable and a falling pitch on the final syllable (see Figure 19 and Figure 20). Accent placement thus shows that the second /i/ of the /ii/ sequence or the second half of a phonetically long vowel [iː] counts as the penultimate syllable of diiti, which in turn provides evidence for an analysis of [ii] as containing two vowel phonemes.

Figure 19: F₀ contour of the word diiti ‘to pull’ in which /ii/ is pronounced as two short vowels [ii]

Figure 20: F₀ contour of the word diiti ‘to pull’ in which /ii/ is pronounced as a long vowel [iː]

A second reason for considering identical vowel sequences to phonemically be two short vowels is that Tajio readily allows vowel sequences of any kind, as illustrated in Table 2-19.

A third type of evidence is provided by reduplication. When CV reduplication is applied to the word diit ‘to pull’, the vowel in the reduplicated syllable is always short, e.g. didiitong ‘to pull each other’ (not *diiديثong). However, this is perhaps a matter of interpretation given that one could argue that the process of reduplication is generally insensitive to vowel length.
2.4.2 Sequences containing high vowels

Sequences containing the high vowels /i/ and /u/ also require further discussion because there are three potential analyses to be argued for: as vowel sequences, diphthongs or phonemic glides.

Sequences containing high vowels in Tajio are not considered diphthongs based on the following arguments. First of all, the 25 logical possibilities of vowel sequences in Table 2.19 strongly indicate vowel sequences in Tajio are not limited to strings containing [i] and [u], but cover all possible combinations.

The second argument against a diphthong analysis is provided by the fact that non-phonemic glides can be, and often are, inserted in-between sequences containing high vowels. Thus, for example, a non-phonemic bilabial glide [w] tends to disrupt vowel sequences (VV) when the first vowel is a back vowel, either /a/ or /l/. Such non-phonemic glides do not appear when words are syllabified, as illustrated by examples (33) and (34) repeated from Section 2.2.6.2:

(33) [kukua] or [kuwua] → /ku-kua/ ‘a moment ago’
(34) [lanwaa] or [lanwaa] → /la-no-an/ ‘bee’

Similarly, a non-phonemic palatal glide [j] tends to split vowel sequences (VV) when the first vowel is a front vowel /i/. Compare examples (35) and (36).

(35) [bijar] or [bijar] → /bi-ar/ ‘to look around’
(36) [sisa] or [sisia] → /si-si-a/ ‘3PL’

A third argument comes from phrase accent placement at the final boundary of an intonational phrase. This phrase accent is usually anchored at the penultimate syllable of the phrase. This also holds for vowel sequences in phrase-final position where it is always the penultimate vowel that aligns with the phrase accent, regardless of vowel quality. This evidence also implies that VV sequences actually consist of two syllables. Examples (37)–(40) illustrate this. The accented vowel is given in bold.

(37) <boi> [boi] ‘but; interjection’
(38) <puai> [puai] ‘to dry’
(39) <leia> [leia] ‘ginger’
(40) <noiaong> [noiaong] ‘why’

Evidence from reduplication further supports this analysis. In CV-reduplication, it is only the first vowel of the sequence that is copied. Compare examples (41)–(44).

(41) /peit/ → CV-RDP /pe-peit/ ‘to be very bitter’
(42) /nisaup/ → CV-RDP /nisa-sau/ ‘to rub’
(43) /tekooud/ → CV-RDP /teko-koud/ ‘crook’
(44) /liiol/ → CV-RDP /li-liol/ ‘to be silent’

In bisyllabic reduplication, high vowels as the second member of vowel sequences count as a syllable, as presented in examples (45)–(47).

(45) /nonjou/ → CV.V-RDP /nonjou-njou/ ‘to be wet’
(46) /togou/ → CV.V-RDP /toga-gou/ ‘screamer’
(47) /nonta/ → CV.V-RDP /nonta-nta/ ‘to chew’

Sequences containing high vowels are not analysed as phonemic glides because unlike phonemic glides they will disappear when syllables containing high vowel sequences are pronounced in isolation. For more discussion see Section 2.2.6.2.

2.5 Nasal-obstruent sequences

As with other languages in the area, the only sequence of consonants allowed in native Tajio words are sequences of nasals followed by a homorganic obstruent (see, for example, Himmelmann on Lauje (1991:56) and Quick on Pendau (2007:33)). The homorganic nasal-obstruent sequences found in Tajio
are /mp/, /mb/, /nt/, /nd/, /ndʒ/, /ns/ and /ŋk/ and /ŋg/. These sequences can occur word-initially and word-medially but never word-finally, as illustrated in Table 2-22.

<table>
<thead>
<tr>
<th>Nasal-obstruent</th>
<th>Word-initial</th>
<th>Word-medial</th>
<th>Word-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/mp/</td>
<td>/mpojuŋ/ ‘to whistle’</td>
<td>/sempo/ ‘to be cheap’</td>
<td>-</td>
</tr>
<tr>
<td>/mb/</td>
<td>/mberek/ ‘to remain, live, stay’</td>
<td>/teumbar/ ‘spider’</td>
<td>-</td>
</tr>
<tr>
<td>/nt/</td>
<td>/ntameme/ ‘to mumble’</td>
<td>/namanta/ ‘to be ripe’</td>
<td>-</td>
</tr>
<tr>
<td>/nd/</td>
<td>/ndulago/ ‘to sit with legs crossed’</td>
<td>/kinde/ ‘to nod’</td>
<td>-</td>
</tr>
<tr>
<td>/ndʒ/</td>
<td>/njeru/ ‘be sleepy’</td>
<td>/lindʒɔk/ ‘to run’</td>
<td>-</td>
</tr>
<tr>
<td>/ns/</td>
<td>-</td>
<td>/tensile/ ‘to go home’</td>
<td>-</td>
</tr>
<tr>
<td>/ŋk/</td>
<td>/ŋkaun-kaun/ ‘to crawl’</td>
<td>/teonŋɔŋ/ ‘arm’</td>
<td>-</td>
</tr>
<tr>
<td>/ŋg/</td>
<td>/ŋgeung/ ‘to shake’</td>
<td>/bɛŋga/ ‘buffalo’</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2-22: Nasal-obstruent sequences

Some of the initial nasal-obstruent sequences appear to be a shortened form of the prefix noN-, as seen in the following examples.

(48) noN- + jilig → nonjilig; njilig ‘to flow’
(49) noN- + gutu → nonggutu; nggutu ‘to make’
(50) noN- + olong → nongolong; ngolong ‘to carry on the back’
(51) noN- + ingking → nongingking; ngingking ‘to carry something hanging from hand’

But note that such sequences also occur in words other than dynamic verbs, such as with nouns like ndaŋg ‘branch’, or with stative verbs, e.g. ngkobol ‘to be weak (rope)’ and njau ‘to be wet’.

Initial nasal-obstruent sequences contradict the sonority sequencing generalization (SSG, see Hayes 2009:76) and hence require further discussion. Based on the time needed to produce a sound (i.e., the timing unit), the sequence of nasal+obstruent can be interpreted in two ways: as a prenasalized consonant or as a consonant cluster. As a prenasalized consonant, the nasal-obstruent sequence is treated as a single segment which needs a single timing unit. As a cluster, it is treated as two segments which need two timing units.

Evidence from timing suggests the analysis of nasal-obstruent sequences as clusters of two phoneme segments. The timing unit to produce a nasal-obstruent sequence is significantly longer than the timing unit to produce a single consonant.

Figure 21 and Figure 22 respectively show the sequence /nd/ occurring word-initially in ndaŋg ‘branch’ and medially in the word nendii ‘to take a bath’. The timing length of /nd/ in the first example is 129 ms, and in the second example it is 115 ms.
Figure 21: Timing unit to pronounce /nd/ in ndaang ‘branch’

Figure 22: Timing unit to pronounce /nd/ in ndiisi ‘to take a bath’

A single consonant, however, needs a shorter timing unit. Figure 23 shows that the length of the single consonant /n/ in the word veeni ‘to give’ is 85 ms; the consonant /d/ in the word pudei ‘to break’ in Figure 24 is 65 ms long.
Further evidence for a cluster analysis is provided by reduplication. If a nasal-obstruent sequence is analyzed as a single segment (i.e., a prenasalized consonant), it would be expected to behave like other consonants in reduplication (filling only the C position of the CV- and the CV.CV-reduplication templates). In such a case, /mp/ in mpi.dak ‘to wink’ would be predicted to fill only one C slot in the template. Thus, in bisyllabic reduplication, the expected form would be *mpi.da-mpi.dak ‘to wink’, which is not attested in Tajio. The accepted form is pi.da-mpi.dak ‘to wink’, which in turn points the cluster analysis.

Adopting a cluster analysis for the nasal-obstruent sequences in Tajio leads to the following question with regard to the phonotactic status of the nasal: Is it to be analyzed as a “simple” nasal (non-syllabic) or a syllabic nasal? This is particularly relevant for word-initial nasal-obstruent sequences.
One way to decide between these options is a test based on syllabification. In the case of word-medial clusters, evidence from syllabification clearly suggests the simple nasal analysis. A word like /sem-po/ is syllabified as (CVN-CV) where /m/ becomes the coda of the first syllable /sem/ while /p/ becomes the onset of the second syllable /po/. Initial nasal-obstruent clusters, however, are syllabified in a way that supports the assumption of a syllabic nasal. Compare the word /mberek/ “to remain, live, stay” which is syllabified as /mbe-rek/ (N-CV-CV), not /mbe-rek/ (CCV-CVC). Although this matter requires further research, for the following discussion of syllable structure it will be assumed that word-initial nasal obstruents clusters involve syllabic nasals.

2.6 Syllable structure

Possible syllable nuclei in Tajio are vowels (V) and, word-initially, syllabic nasals (N). Possible syllable structures with a vowel as syllable nucleus are: V, CV, VC and CVC. In native Tajio words, there are no consonant clusters other than NC (nasal-obstruent) clusters. However, cliticization produces consonant sequences other than sonorant-obstruent sequences (see Section 3.2.4).

V and CV syllables occur in all positions: initially, medially and finally. The VC and CVC syllable structures featuring a non-nasal consonant are restricted to word-final position. In other positions, only CVN structures are allowed as closed syllables, but note that CVN syllables in word-medial position are not frequent. Table 2-23 provides examples.

<table>
<thead>
<tr>
<th>Position</th>
<th>Syllable structure</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word-initial</td>
<td>V-CV</td>
<td>/a-bu/ ‘kitchen’</td>
</tr>
<tr>
<td></td>
<td>V-CVC</td>
<td>/o-gal/ ‘to be dry’</td>
</tr>
<tr>
<td></td>
<td>CV-V</td>
<td>/gi-o/ ‘bushes’</td>
</tr>
<tr>
<td></td>
<td>CV-CV</td>
<td>/sa-sa/ ‘palm leaf rib’</td>
</tr>
<tr>
<td></td>
<td>CV-VC</td>
<td>/ti-ol/ ‘(kind of) big bamboo’</td>
</tr>
<tr>
<td></td>
<td>CV-CVC</td>
<td>/vu-vu/ ‘hair’</td>
</tr>
<tr>
<td></td>
<td>N-CV-V</td>
<td>/n-d’o-u/ ‘to be wet’</td>
</tr>
<tr>
<td></td>
<td>N-CV-VN</td>
<td>/ng-ga-uŋ/ ‘to creep’</td>
</tr>
<tr>
<td></td>
<td>N-CV-VC</td>
<td>/n-do-u/ ‘to wash the face’</td>
</tr>
<tr>
<td></td>
<td>N-CV-CV</td>
<td>/n-ta-ma/ ‘to go inside’</td>
</tr>
<tr>
<td></td>
<td>N-CV-CVC</td>
<td>/m-be-rek/ ‘to stay’</td>
</tr>
<tr>
<td></td>
<td>VN-CV</td>
<td>/um-be/ ‘to open/uncover’</td>
</tr>
<tr>
<td></td>
<td>VN-CVC</td>
<td>/om-pa/ ‘mat’</td>
</tr>
<tr>
<td></td>
<td>CVN-CV</td>
<td>/kin-de/ ‘to nod’</td>
</tr>
<tr>
<td></td>
<td>CVN-CV-CV</td>
<td>/ten-si-le/ ‘to go home’</td>
</tr>
<tr>
<td></td>
<td>CVN-CVC</td>
<td>/lan-tap/ ‘to float’</td>
</tr>
<tr>
<td></td>
<td>CVN-CVC-CVC</td>
<td>/lan-po-ga/ ‘to lie’</td>
</tr>
<tr>
<td>Word-medial</td>
<td>CV-V-V</td>
<td>/la-i-a/ ‘ginger’</td>
</tr>
<tr>
<td></td>
<td>V-V-CV</td>
<td>/a-u-da/ ‘goat’</td>
</tr>
<tr>
<td></td>
<td>CV-CV-V</td>
<td>/le-le-a/ ‘bat’</td>
</tr>
<tr>
<td></td>
<td>CV-CV-CV</td>
<td>/su-pa-lo/ ‘lizard’</td>
</tr>
<tr>
<td></td>
<td>CV-CV-CVC</td>
<td>/ka-ra-pu/ ‘paw’</td>
</tr>
<tr>
<td></td>
<td>CV-CVN-CV-CVN</td>
<td>/ba-lim-bu-βen/ ‘galangal’</td>
</tr>
<tr>
<td></td>
<td>CV-CV-CVN-CVN</td>
<td>/ka-li-ba-m-ban/ ‘butterfly’</td>
</tr>
<tr>
<td>Word-final</td>
<td>CV-V</td>
<td>/ba-u/ ‘fish’</td>
</tr>
<tr>
<td></td>
<td>V-CV-V</td>
<td>/a-ma-i/ ‘EXIST’</td>
</tr>
<tr>
<td></td>
<td>CV-VC</td>
<td>/me-as/ ‘to be white’</td>
</tr>
<tr>
<td></td>
<td>CV-CV-VC</td>
<td>/go-ri-o/ ‘to be loud’</td>
</tr>
<tr>
<td></td>
<td>V-V-CV</td>
<td>/a-u-da/ ‘goat’</td>
</tr>
<tr>
<td></td>
<td>CV-CV</td>
<td>/ta-pi/ ‘to winnow’</td>
</tr>
<tr>
<td></td>
<td>CV-CV-CV</td>
<td>/sa-li-li/ ‘to carry at waist’</td>
</tr>
</tbody>
</table>
Table 2-23: Distribution of (C)V(C) and (C)(V)N syllables

<table>
<thead>
<tr>
<th>Word Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-CVC</td>
<td>/i-pag/ ‘sister/brother in law’</td>
</tr>
<tr>
<td>CV-CVC</td>
<td>/pu-duk/ ‘to be short’</td>
</tr>
<tr>
<td>CV-VN</td>
<td>/pe-an/ ‘fishing hook’</td>
</tr>
<tr>
<td>V-CV-VN</td>
<td>/a-ni-oŋ/ ‘food’</td>
</tr>
<tr>
<td>CV-CV-VN</td>
<td>/la-no-an/ ‘small honey bee’</td>
</tr>
<tr>
<td>V-CVN</td>
<td>/o-boŋ/ ‘nest’</td>
</tr>
<tr>
<td>CV-CVN</td>
<td>/gi-ban/ ‘a kind of lizard’</td>
</tr>
<tr>
<td>CV-CV-CVN</td>
<td>/bu-la-gon/ ‘rattan’</td>
</tr>
</tbody>
</table>

Tajio follows the maximal onset principle so that a word consisting of a sequence VCVC is typically syllabified as V.CVC not VC.CV. For example, a word like oloŋ ‘between’ will consistently be syllabified as /o-loŋ/ (V.CV syllabification), and never as */ol-ot/ (VC.CV syllabification).

Words with suffixes are regularly syllabified in such a way that VC syllables are avoided. For example, the word petaanong ‘waiting room’, which is derived from taang ‘to wait’ plus the circumfix pe--ong ‘NOM’ is syllabified as /pe-ta-a-nong/ with a CVC syllable in word-final position, not as */pe-ta-an-oŋ/ with an open VC syllable.

Most Tajio words are bi- or tri-syllabic. Monosyllabic words and words with four and five syllables are rare. Monosyllabic words are usually loans from Indonesian, for example sop /sop/ ‘soup’ and dos /dos/ ‘box’. Words with four syllables are, for example, balimbuveng /ba.lim-bu.βeŋ/ ‘galangal’ and kalibambeng /ka.li.bam.ban/ ‘butterfly’. And salaineang /sa.lai.ne.an/ ‘wasp’ is the only monomorphemic word in the data base with five syllables.

2.7 Stress and intonation

Zanten et al. (2010) who examined word-stress level in Austronesian languages observe that in 15 out of 27 languages from Sulawesi, main stress is claimed to always falls on the penultimate syllable (ibid:94). The exact position of word-level stress, however, may shift due to, for example, paragogic vowels (ibid:95) orsuffixation (ibid:99). In Betawi Malay, the vernacular of Jakarta, penultimate stress is observed only in phrase-final words (Wallace (1976), quoted in Zanten et al. 2010:100). Also quoting Walker (1975:5), Zanten et al. (ibid:100) report on Lampung, a language of Sumatra, that “the word stress is very slight and it is often skewed by the position of the word in the intonation contour”. Zanten et al. (ibid:100) also mention difficulties in determining stress position in the Central Malayo-Polynesian languages Manggarai and Wetan. Stress in Manggarai is reported to be weak and in some contexts difficult to identify. The main characteristics of accentuation in Wetan are claimed to be its weakness and its relative instability.

Based on these observations, Zanten et al. (2010) suspect that some descriptions of stress do not actually pertain to word-based stress, but rather describe a phrase-based accent. Thus, they propose that it is important to distinguish between (word) stress and (phrasal) accent. They define word stress as a word-based linguistic property: “Stressed syllables, as opposed to unstressed syllables, have certain phonetic characteristics, of which a longer duration is the most robust one. In all positions in the phrase a stressed syllable of a word is longer than an unstressed syllable” (ibid:101). In contrast, “accent is typically realized as an abrupt change in pitch, which has to occur in a specific position in the stressed syllable” (ibid:101).

The available data suggests that Tajio does not have lexical (word) stress; rather, it has a phrasal accent. Without lexical stress, the presence of the pitch accent depends on the location of the syllable within the intonational phrase. In words uttered in isolation, the penultimate syllable is regularly prominent. But, this does not mean that all words are stressed on the penultimate syllable. Rather, a phrasal accent regularly occurs on this syllable, because it is the penultimate syllable of an intonational phrase (i.e., it is auditorily prominent because a pitch rise associated with intonational phrases occurs on it).

Figure 25 shows that the location of the phrasal accent of the word jilo ‘to lick’ spoken in isolation is on the penultimate syllable (the accented syllable is given in bold).
Being determined by location means that the position of the pitch accent changes if the position of a word in an intonational phrase changes. Accordingly, the pitch accent on jilo‘ to lick’ shifts when a suffix -i is attached to become jilo‘i, as illustrated in Figure 26. The accented syllable of the newly derived word is lo which is now the penultimate syllable.

As can be seen in both preceding figures, the pitch does not drop immediately at the beginning of the last syllable but rather falls continuously over the last syllable. This can be analyzed as a final falling boundary tone following the high phrasal accent on the penultimate syllable.

Figure 27 provides another example. When vu‘u ‘bone’ is pronounced in isolation, there is again a clear rise on the penultimate syllable.
That this rise does not reflect word stress but rather a phrasal accent, is seen in Figure 28. Here *vu’u* ‘bone’ occurs as part of the noun phrase *vu’u nuusu* ‘rib bone’. If Tajio had lexical stress, each word in the noun phrase would be expected to have its own stress on the penultimate syllable. The F$_0$ extraction in Figure 28, however, shows that it is only the last word of the NP which gets highlighted by pitch. Neither syllable of *vu’u* ‘bone’ is highlighted by pitch, because now it occurs in phrase-initial position. The phrase accent has moved to the penultimate syllable of *nuusu*. Note also that the two syllables of *vu’u* have the same duration and intensity, which could also be indications of lexical stress.

It is not possible to provide a detailed analysis of intonation in Tajio within the scope of this work. As the above examples show, one very common (and possibly the default declarative) contour is characterized by a rising pitch on the penultimate syllable and a final fall, which could be analyzed as a H phrase accent followed by a low boundary tone (i.e., H-L% in autosegmental notation).
2.8 Morphophonology

Morphophonological processes in Tajio occur in affixation, compounding and cliticization. The morphophonological processes discussed in the following sections are nasal assimilation, substitution and deletion in Section 2.8.1; nasal fronting in Section 2.8.2; nasal dissimilation in Section 2.8.3; vowel chain reduction in Section 2.8.4; glottal deletion in Section 2.8.5; and vowel harmony in Section 2.8.6.

Capital N is used throughout this work to represent a homorganic nasal which is found in nasal prefixes and the nasal ligature. The term nasal prefix is used to refer to prefixes ending with N, such as, the prefixes noN- 'AV.RLS/NRLS' and poN- ‘NOM’. As a ligature, homorganic -N- can occur (1) between numeral prefixes and classifiers or measure nouns and (2) between quantifiers and classifiers or measure nouns (cp. Section 7.4.1). The morphophonological changes undergone by N are detailed in the next section.

As seen in the following sections, the homorganic N of the nasal prefixes and the nasal ligature do not necessarily change in the same way. That is they may undergo different kinds of morphophonological changes although they attach to roots with the same initial consonant. Overall, the alternations of the nasal prefixes seem to be more regular than the alternations of the nasal ligature.

2.8.1 Nasal assimilation, substitution and deletion

The nasal N of nasal prefixes assimilates to, and sometimes substitutes for, the initial segment (i.e., initial consonant) of the root. There are five possibilities: (a) assimilation without substitution; (b) assimilation with allophonic substitution; (c) assimilation and substitution (=deletion of the base-initial consonant); (d) deletion of N, and (e) substitution without (full) assimilation.

Before vowels the homorganic nasal N- is always realized as /ŋ/ as shown by examples (52)–(56).

(52) noN- + /inda/ ‘to borrow’  /noŋinda/ ‘to borrow’
(53) noN- + /unjá/ ‘to step on’  /noŋunjá/ ‘to step on’
(54) noN- + /epe/ ‘listen’  /noŋepe/ ‘to listen’
(55) noN- + /olóŋ/ ‘to cut’  /noŋolóŋ/ ‘to cut’
(56) noN- + /a/la/ ‘to take’  /noŋa/la/ ‘to take’

2.8.1.1 Nasal assimilation without substitution

This type of assimilation takes place when the nasal of the nasal prefixes or the nasal ligature undergoes assimilation without changing or substituting the first segment of the base. This process involves homorganic assimilation.

As the homorganic nasal N of the nasal prefixes and the nasal ligature may undergo different types of morphophonological change, the discussion will be divided into two parts.

The homorganic nasal N of the nasal prefixes undergoes nasal assimilation without substitution if it precedes voiced stops and the voiced affricate. It occurs as a bilabial nasal /n/ when it precedes the voiced alveolar stop /d/ and the palato-alveolar affricate /dʒ/. It occurs as the velar nasal /ŋ/ when roots to which it attaches possess an initial voiced velar stop /g/, as can be seen in the following examples.

(57) noN- + /basä/ ‘to read’  /nobasä/ ‘to read’
(58) noN- + /diit/ ‘to pull’  /nondiit/ ‘to pull’
(59) noN- + /dän/ ‘to sew’  /nondän/ ‘to sew’
(60) noN- + /gagap/ ‘to touch; feel’  /nongagap/ ‘to touch; to feel’

In contrast, the homorganic nasal N of the nasal ligature assimilates to the initial consonant of roots without substitution when it precedes both voiced and voiceless stops. It becomes the bilabial nasal /m/ when preceding the bilabial stops /b/ and /p/. It occurs as the alveolar nasal /n/ when it precedes the voiceless alveolar stop /t/, the voiced palato-alveolar affricate /dʒ/ as well as the voiceless fricative

6 As the voiceless palate-alveolar /h/ is a phoneme with limited distribution, I could not find any examples in which the nasal ligature N precedes roots starting with this sound (cp. Section 2.2.2).
/s/. It appears as the velar nasal /ŋ/ when it attaches to roots starting with velar stops /g/ and /k/. Examples are presented in (61)–(67).

(61) aa¬pa-(N) - 'four' + /bun/ 'CLF.piece' → /aapambua/ 'four pieces'
(62) pit¬u-(N) - 'seven' + /paα/ 'CLF.leg' → /pitumpaa/ 'seven bunches' (lit: 'seven legs')
(63) s¬V-(N) - 'one' + /tig/ 'CLF.string/word' → /sentigoma/ 'one string/word'
(64) s¬V-(N) - 'one' + /siʉ/ 'CLF.elbow' → /sentsiyu/ 'one elbow'
(65) s¬V-(N) - 'one' + /d'urut/ 'CLF.a pile' → /ondoŋurut/ 'one pile'
(66) ro-(N) - 'two' + /goms/ 'CLF.palm' → /roŋgoms/ 'two palms'
(67) s¬V-(N) - 'one' + /keke/ 'CLF.shoulder' → /senkeke/ 'one shoulder'

2.8.1.2 Nasal assimilation with allophonic substitution

The second type of homorganic nasal assimilation triggers allophonic substitution of the first segment of the root. This happens whenever the homorganic nasal precedes the glottal stop /ʔ/ or the voiced bilabial fricative /β/. Recall that /ʔ/ has two allophones: [ʔ] and [k], /ʔ/ is realized as [k] when it occurs after a nasal. /ʔ/ shows the same patterns: It has two allophones, [β] and [b], and /ʔ/ is realized as [b] when it occurs after a nasal. In this type of assimilation, both nasal prefixes and nasal ligature undergo the same homorganic change. Examples of assimilation with substitution in Tajio are given in (68)–(70).

(68) noN- + /talalu/ 'to cover with blanket' → /noŋkalalu/ 'to cover with blanket'
(69) noN- + /bee/ 'to give' → /noŋbee/ 'to give'
(70) tol¬u-(N) - 'three' + /beŋi/ 'night' → /tolumbenji/ 'three nights'

2.8.1.3 Nasal assimilation and substitution of the root onset

Assimilation and substitution is a combined process in which the homorganic nasal is assimilated to, and then substitutes for, the first segment of the root. Nasal prefixes undergo this process when the initial segment of the base is a voiceless stop /pl/, /l/ or /kl/, as presented by examples (71)–(73). There are no examples for the voiceless palato-alveolar /ɾl/ in the database. This sound is rare in Tajio and occurs mostly in loans as noted in Section 2.2.2.

(71) noN- + /paatu/ 'to send' → /noŋmaatu/ 'to send'
(72) noN- + /aip/ 'to slice' → /noŋaip/ 'to slice'
(73) noN- + /kaer/ 'to sweep' → /noŋjaer/ 'to sweep'

2.8.1.4 Nasal deletion

Before liquids and nasals, including nasal-obstruent clusters, the homorganic nasal is dropped. This process happens to the nasal prefixes as well as the nasal ligature, as can be seen in the following examples.

(74) noN- + /leva/ 'to call' → /noleva/ 'to call'
(75) s¬V-(N) - 'one' + /laab/ 'CLF.feet' → /soalaab/ 'one feet'
(76) noN- + /rampak/ 'to throw away' → /noŋrampak/ 'to throw away'
(77) s¬V-(N) - 'one' + /rabok/ 'CLF.palm' → /soŋrabok/ 'one palm'
(78) noN- + /monoŋ/ 'to ask for something' → /noŋmonoŋ/ 'to ask for something'
(79) s¬V-(N) - 'one' + /ndaanŋ/ 'branch of leaves' → /sandaŋ/ 'one branch of banana or coconut leaves'

2.8.1.5 Substitution without assimilation

This process occurs when the nasal prefix precedes a root whose initial segment is the voiceless alveolar fricative /s/. In this case, the homorganic nasal of the nasal prefix does not assimilate to the initial segment of the root; rather, the phoneme /s/ is replaced by the palatal nasal /ɲ/ as illustrated by some examples below.

(80) noN- + /sempak/ 'to kick' → /noŋempak/ 'to kick'
(81) noN- + /salili/ 'to carry with sarong' → /noŋsalili/ 'to carry with sarong'
(82) noN- + /sokok/ 'to catch' → /noŋokok/ 'to catch'
2.8.2 Nasal fronting

In Tajio Sienjo a root-final velar nasal is fronted to an alveolar nasal before a vowel-initial suffix. This process, however, is not found in Tajio Kasimbar. Suffixes triggering this process are -ong ‘NOM’, poN--ong ‘NOM’, -a’o ‘APPL’, ni--a’o ‘UV--APPL’ and -i ‘APPL’, as presented in examples (84)–(89).

(84) /-ôn/ + /paŋaŋ/ ‘to chew betelnut’ → /paŋanoŋ/ ‘betelnut box’
(85) /poN--ôŋ/ + /gilîŋ/ ‘mill’ → /poŋgilînoŋ/ ‘flesh mill’
(86) /-aʔo/ + /suŋ/ ‘to carry on head’ → /suumaʔo/ ‘to carry on head’
(87) /ni--aʔo/ + /sumberŋ/ ‘push’ → /nisumbanaʔo/ ‘to push’
(88) /-i/ + /ubunŋ/ ‘joint’ → /ubuni/ ‘to connect; to attach at’
(89) /-i/ + /sumberŋ/ ‘push’ → /sumberni/ ‘to push’

2.8.3 Nasal dissimilation

In contrast to Tajio Sienjo, Tajio Kasimbar only shows nasal fronting when a root ending in a velar nasal precedes a vowel-initial suffix also containing a velar nasal. Nasal fronting does not take place when a root ends in a velar nasal and precedes a vowel-initial suffix without a velar nasal such as -ao ‘APPL’ (-a’o in Sienjo) and -i ‘APPL’. Compare the examples in (90)–(96).

(90) /nV--ôn/ ‘ST--NOM’ + /joon/ ‘field’ → /nojoonôŋ/ ‘to own a field’
(91) /-ôn/ ‘NOM’ + /petaaŋ/ ‘to wait’ → /petaaŋôŋ/ ‘waiting room’
(92) /poN--ôŋ/ ‘NOM’ + /peaŋ/ ‘to fish’ → /pomeaonôŋ/ ‘fishing area’
(93) /-ao/ + /suŋŋ/ ‘to carry on head’ → /suumaŋŋ/ ‘to carry on head’
(94) /-ao/ + /eloŋ/ ‘to sing’ → /eloŋaŋ/ ‘to sing’
(95) /-i/ + /tuluŋ/ ‘to help’ → /tuloŋi/ ‘to help’
(96) /-i/ + /petaaŋ/ ‘to wait’ → /petaaŋi/ ‘to wait’

As can be seen from the above examples, nasal fronting in Tajio Kasimbar dissimilates velar nasal chains in suffixation, i.e., it avoids the occurrence of two velar nasals in one syllable. In most cases NVN syllables—e.g. the nasal prefixes moN- ‘AV.NRLS’ or noN- ‘AV.RLS’—only one of the nasals is a velar nasal. This morphophonological process is therefore analyzed as nasal dissimilation. As there are only the three vowel-initial suffixes shown in examples (84)–(96), another possible analysis is that velar nasals in root-final position are fronted to an alveolar nasal before a mid-back vowel (ŋ# → n /-/o). Yet, the dissimilation analysis appears to be more plausible, as the syllable /hVŋ/ is extremely rare in Tajio, while syllables of the form /nVŋ/ are amply attested. The only lexical item that has a /hVŋ/ syllable is pangang, pa.ngang, ‘to chew betelnut’.

2.8.4 Vowel chain reduction

Vowel chain reduction occurs when the morphophonological processes in word formation result in sequences of two or more vowels. These sequences may consist of identical vowels or different vowels. Although it does not generally occur, the vowel chain reduction may still be found in affixation, cliticization and compounding.

Sequences of two identical vowels can occur if a root that ends in a vowel is followed by a vowel-initial suffix or if a root begins with a vowel and is preceded by a vowel-final prefix. Sequences of identical vowels that result from affixation can undergo vowel reduction. The suffix -ao ‘APPL’ may lead to vowel sequences /aao/ when a root ends with the vowel /a/. This sequence, is reduced to /ao/ as illustrated by example (97).
Glottal deletion

Glottal deletion pertains to cases where a glottal stop is deleted at a morpheme boundary. The genitive enclitic =’u ‘1SG.GEN’ has two allomorphs: [=’u] and [=u].

The allomorph [=’u] occurs if it follows a root that ends in a vowel: compare (99) and (100).

(99)  /te=turai = ’u’ ‘NM=younger.sibling=1SG.GEN’ \rightarrow /te=tu’ai’u’ ‘my younger sibling’
   /te=vonua= ’u’ ‘NM=house=1SG.GEN’ \rightarrow /tево’unua’u’ ‘my house’
(100) /ni-ep’e= ’u’ ‘UV.RLS-hear=1SG.GEN’ \rightarrow /niep’e’u’ ‘I heard (something)’
   /ni-itoi= ’u’ ‘UV.RLS-know=1SG.GEN’ \rightarrow /nitoi’u’ ‘I knew (something)’

The genitive enclitic =’u undergoes glottal deletion if it follows a root that ends in a consonant, as in examples (101) and (102).

(101) /te=jjoong= ’u’ ‘NM=rice.paddy=1SG.GEN’ \rightarrow /tejoongu’u’ ‘my rice paddy’
   /te=vwut= ’u’ ‘NM=hair=1SG.GEN’ \rightarrow /tvwutu’u’ ‘my hair’
   /po-turu-ong= ’u’ ‘NOM-sleep-NOM=1SG.GEN’ \rightarrow /poturuuong/’u’ ‘my sleeping room’

The undergoer prefix ni- yields a vowel sequence /ii/ if it precedes a root starting with the vowel /i/. Although not always, this kind of vowel reduction can be found in conversational data, as shown by example (98). During elicitation speakers tend to speak more slowly, thus the sequence /ii/ resulted from affixation is always pronounced as a long vowel /iː/.

(98)  jiom=mo ni-ita=nya ini
   NEG=COMP UV.RLS-see=3SG.GEN PROX
   ‘He had not seen it yet.’

(from the dialog Campur)

Another suffix that leads to a vowel sequence is -i ‘APPL’ when it attaches to a root ending in the vowel /i/. For example, tapi ‘to winnow’ becomes nitapi when the UV marker ni-i is affixed. However, in these cases the vowel sequence /ii/ is not reduced, but is usually pronounced as a long vowel /iː/, yielding for instance [nitap].

Cliticization may also result in vowel chain reduction. For instance, the genitive prefix ni- which precedes the first person plural pronoun ita forming the genitive phrase niita, ini-ita=’1PL.EX.GEN’. In the database, in addition to niita, this genitive phrase is also recorded as niita.

Compounding hardly shows morphophonological processes in word-boundaries. The examples of vowel reduction are found in three compounds: sabulagon < sa-o-bulagon ‘large snake species’; tomogurang < too-mogurang ‘old person, parent’; and tomedei < too-medei ‘the smallest child’ (see Section 3.6 for more details on compounding).

In addition to identical vowel sequences, there is a case in which prefixation results in a sequence of three different vowels. The sequence of three vowels is then reduced into a sequence of two vowels. There is only one instance found: The three-vowel sequence /iau/ is reduced into /iau/, the The first example is shown by the undergoer prefix ni- which precedes the root uar ‘to say’, forming the undergoer voice verb niuar, ini-uar= ‘UV.RLS-say’ ‘to say’. In this example, the vowel /i/ of the UV marker ni- is reduced or deleted from the sequence. Thus, instead of saying niuar, Tajio speakers prefer to say nuar. The second example is the spatial deictic riua, tri-uai ‘LOC-DIST’ ‘over there’. This form is pronounced either as riua or riau.

2.8.5  Glottal deletion
There are seven affixes that undergo vowel-harmonic changes in Taijio: (1) the stative prefix $nV$- ‘ST.RLS’ or $mV$- ‘ST.NRLS’; (2) the numeral prefix $sV$-(N)- ‘one’; (3) the nominalizer circumfix $pV$-‘eng; (4) the verbalizer circumfix $nV$-‘ong; (5) the causative prefix $pV$-; (6) the group/collective infix -ngV-; (7) the ordinal prefix $kV$-. The first five affixes undergo the same vowel-harmonic changes while the vowel of the infix -ngV- and the prefix $kV$- are each subject to a different type of harmonic change. I will refer to the first process as vowel-harmonic change type I, and the two latter processes as types II and III, respectively.

In type I vowel harmony, the vowel of the affixes changes according to the first vowel of the base. The harmonic vowel becomes /e/ before front vowels (/e/ and /i/); /o/ before back vowels (/o/ and /u/); and /a/ before the central low vowel (/a/). As the harmonic change goes backward, type I vowel-harmony can also be called the backward type. The phonological rule for vowel-harmonic changes is illustrated with the stative realis prefix $nV$- in Table 2-24.

<table>
<thead>
<tr>
<th>Vowel-harmonic changes</th>
<th>Phonological rule</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>$nV$- before /e/ $\rightarrow$ ne-</td>
<td>$nV$- $\rightarrow$ [+front, +mid] /__(C)V<a href="C">+front</a></td>
<td>$nV$- + <em>embo</em> ‘to be wavy’ $\rightarrow$ <em>neembo</em> ‘to be wavy’</td>
</tr>
<tr>
<td>$nV$- before /i/ $\rightarrow$ ne-</td>
<td>$nV$- $\rightarrow$ [+front] /__(C)V<a href="C">+front</a></td>
<td>$nV$- + <em>sili</em> ‘to be ashamed’ $\rightarrow$ <em>nesili</em> ‘to be ashamed’</td>
</tr>
<tr>
<td>$nV$- before /u/ $\rightarrow$ no-</td>
<td>$nV$- $\rightarrow$ [+back, +high] /__(C)V<a href="C">+back</a></td>
<td>$nV$- + <em>buseg</em> ‘to be queasy’ $\rightarrow$ <em>nobuseg</em> ‘to be queasy’</td>
</tr>
<tr>
<td>$nV$- before /o/ $\rightarrow$ no-</td>
<td>$nV$- $\rightarrow$ [+back] /__(C)V<a href="C">+back</a></td>
<td>$nV$- + <em>vasu</em> ‘to be satisfied’ $\rightarrow$ <em>novasu</em> ‘to be satisfied’</td>
</tr>
<tr>
<td>$nV$- before /a/ $\rightarrow$ na-</td>
<td>$nV$- $\rightarrow$ [+central] /__(C)V<a href="C">+central</a></td>
<td>$nV$- + <em>paik</em> ‘to be thirsty’ $\rightarrow$ <em>napaik</em> ‘to be thirsty’</td>
</tr>
</tbody>
</table>

Table 2-24: Type I vowel-harmonic changes

In type II vowel harmony, the vowel of the group/collective infix -ngV- changes according to the vowel of the (prefix-)syllable preceding it. Prefixes that can precede the infix -ngV- are the stative prefix, the dynamic intransitive prefix and the actor voice prefix.

Following the stative prefix $nV$-, the vowel of the infix -ngV- changes based on the change of the stative prefix, i.e., following the phonological rules of the stative prefix. If the -ngV- infix is preceded by the dynamic intransitive prefix, i.e., $ne$- or no-, the vowel of this infix will be identical to the vowel of its dynamic intransitive prefix, i.e., either with the vowel <e> or <o>. In the case of the actor voice prefix $noN$- /moN-, the infix -ngV- is actually inserted into the prefix, i.e., directly after the vowel (CV.$ngV$.N-). Its vowel is identical to the vowel of the prefix. As the change goes forward, the second type of this vowel-harmonic change is called the forward-type. Table 2-25 illustrates the regularities for the collective infix -ngV-.
<table>
<thead>
<tr>
<th>Type of prefix</th>
<th>Prefix + root</th>
<th>Vowel-harmonic change of ngV-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stative prefix nV- ‘ST.RLS’</td>
<td>nV- + jaok ‘to be arrived’ → na-jaok ‘to be arrived’</td>
<td>na-nga-jaok ‘ST.RLS-COLL-arrived’</td>
</tr>
<tr>
<td></td>
<td>nV- + pangkat ‘to be high/tall’ → napangkat ‘to be high/tall’</td>
<td>na-nga-pangkat ‘ST.RLS-COLL-tall’</td>
</tr>
<tr>
<td></td>
<td>nV- + meas ‘to be white’ → nemeas ‘to be white’</td>
<td>ne-nge-meas ‘ST.RLS-COLL-white’</td>
</tr>
<tr>
<td></td>
<td>nV- + olog ‘to be broken’ → noo-olog ‘to be broken’</td>
<td>no-ngo-olog ‘ST.RLS-COLL-broken’</td>
</tr>
<tr>
<td></td>
<td>nV- + udut ‘to be broken (rope)’ → noo-udut ‘to be broken (rope)’</td>
<td>no-ngo-udut ‘ST.RLS-COLL-broken’</td>
</tr>
<tr>
<td>Dynamic prefix ne- /no- ‘DY.RLS’</td>
<td>ne- + guru ‘to study’ → neguru ‘to study’</td>
<td>ne-nge-guru ‘DY.RLS-COLL-study’</td>
</tr>
<tr>
<td></td>
<td>ne- + linjok ‘to run’ → nelinjok ‘to run’</td>
<td>ne-nge-linjok ‘DY.RLS-COLL-run’</td>
</tr>
<tr>
<td></td>
<td>no- + gombo ‘to talk’ → nogombo ‘to talk’</td>
<td>no-ngo-gombo ‘DY.RLS-COLL-talk’</td>
</tr>
<tr>
<td>Actor voice prefix noN- ‘AV.RLS’</td>
<td>noN- + gabu ‘to cook’ → nongabu ‘to cook’</td>
<td>no-ngo-ngabu ‘AV.RLS-COLL-cook’</td>
</tr>
<tr>
<td></td>
<td>noN- + sempak ‘to kick’ → nonyempak ‘to kick’</td>
<td>no-ngo-nyempak ‘AV.RLS-COLL-kick’</td>
</tr>
</tbody>
</table>

Table 2-25: Type II vowel-harmonic changes of the group/collective infix -ngV-

Finally, in type III vowel harmony, the realizations of vowel of the prefix kV- includes two forms only: ko- and ka-. The ordinal prefix kV- changes into ko- if the first syllable of the number to which it attaches also has an /o/ vowel, otherwise it is realized as ka-. Thus, the ordinal numbers in Tajio are, for example, kororuwa ‘second’, kaapat ‘fourth’, kalelima ‘fifth’, and kaualu ‘eighth’.
3 Word structure

This chapter deals with the formal properties of words in Tajio. Specifically, it looks at the formatives involved in word formation processes (Section 3.2), allomorphy (Section 3.3), the structure of grammatical words (Section 3.4), reduplication (Section 3.5) and compounding (Section 3.6). As a prelude to the discussion of word structures in Tajio, Section 3.1 examines the distinction between phonological and grammatical words. Word class classification is not included in this chapter because it poses specific problems in Tajio and requires particular scrutiny (see Chapter 4 for a detailed discussion).

3.1 Phonological words and grammatical words

The following discussion of the distinction between phonological words and grammatical words in Tajio is based on the criteria proposed by Dixon (2010). In line with Dixon, it is assumed here that the phonological and grammatical word are essentially independent of each other, phonological words being determined by phonological criteria, and grammatical words being defined with regard to morphosyntactic properties. Thus in principle, a phonological word may consist of more than one grammatical word and vice versa (Dixon 2010:2). In Tajio, however, we find that the boundaries of phonological and grammatical words largely coincide—with the notable exception of phonological words that involve clitics.

3.1.1 Phonological words

According to Dixon (2010:7), there are three phonological properties that prove to be vital to a definition of the phonological word: (a) prosodic features (i.e., stress (or accent) and/or tone assignment), (b) segmental features (i.e., internal syllabic and segmental structure), and (c) phonological rules (i.e., rules which only apply within a phonological word).

Property (a), is not applicable in Tajio because the language does not have word level stress. Rather, it has a phrase accent which is regularly placed on the penultimate syllable of the phrase (see Section 2.7). If we used accent assignment as a test for phonological wordhood, examples (1) and (2) below would both have to be regarded as one phonological word, because they are pronounced as single prosodic units and consequently have only one phrase accent on the penultimate syllable. The accented syllable is given in bold.

(1) terurus
   te=rurus
   NM=sibling
   ‘sibling’
   [te’rurus]

(2) terurus langkai
   te=rurus
   langkai
   NM=sibling
   ‘male sibling’
   [terurus lan’kai]

Turning to property (b), the use of syllable structure seems to yield a suitable definition of the phonological word in Tajio, with one exception.

As has been discussed in Section 2.6, the possible syllable structures in Tajio are V, CV, VC and CVC. In order to determine the number of phonological words in the noun phrase terurus langkai ‘male sibling’, for example, one could use the syllabification rule that restricts all (C)V syllables without a nasal coda to word-final position. Applying this rule, the noun phrase terurus langkai consists of two phonological words, terurus and langkai, since there is exactly one CVC syllable occurring in the string, determining that there is a word boundary after te.ru.rus.
However, the use of the syllabification test as evidence for phonological word boundaries does not work in all instances. In particular, it is problematic when clitics are involved, as illustrated by example (3).

(3) tebuangmu
   te=buang=mu
   NM=finger=2SG.GEN
   ‘your finger’

The syllable structure of the word tebuangmu ‘your finger’ is te.bu.ang.mu, CV.CV.CV.CV. VC syllables in Tajio are only found in word-final position, thus the syllable ang would be the last syllable of the word. Consequently, tebuangmu would have to consist of two phonological words. However, this is not a desirable result since =mu is a genitive pronominal clitic, which cannot be used as an independent phonological word. Rather, it requires a phonological host to which it can attach.

In cases like this, property (c) (phonological rules as indicators to phonological word boundaries) must be involved. It must be assumed that cliticization allows for a number of additional CC clusters beyond the restricted number of sonorant-obstruent sequences within phonological words, as discussed in Section 2.5.

That is, one can say that the phonological word in Tajio is definable essentially with regard to phonotactic constraints on syllable structure (property (b) above), which, however, can be partially violated by cliticization processes. The clitic status itself is evident from the inability to stand alone as a phonological word (see Section 3.2.4 for further discussion on cliticization in Tajio).

### 3.1.2 Grammatical words

Dixon (2010:12–19) proposes eight criteria for identifying a grammatical word and he considers the four listed below as the main criteria. A grammatical word:

a) has as its base one or more lexical roots that have undergone morphological processes, for example, compounding, affixation or reduplication;

b) has a conventionalized coherence and meaning (i.e., the meaning of a word is related to the meaning of its parts).

When a grammatical word involves compounding or affixation, its grammatical elements:

c) always occur together, rather than being scattered across the clause;

d) generally occur in a fixed order.

Dixon (2010:20) defines clitics as grammatical words, which cannot stand alone, but rather require a phonological host. Hence they are not phonological words.

If we apply Dixon’s criteria to our noun phrase terurus langkai ‘male sibling’ from example (2) above, it consists of three grammatical words: the noun marker clitic te= and two nominal roots: rurus ‘sibling’ and langkai ‘male’.

Other examples of grammatical words with suffixation are presented in (4)–(6). The grammatical word in example (4) is a noun that consists of a lexical root turu ‘to sleep’ and the nominalizing circumfix pV-ong. Example (5) is a transitive verb which has a prefix noN- and the root is tilang ‘split (wood)’. Example (6) illustrates a stative intransitive verb with the vowel harmonic prefix nV-, which is here attached to the root basag ‘big’.

(4) poturuong
   pV-turu-ong
   NOM-sleep-NOM
   ‘place to sleep; sleeping room’

(5) nonilang
   noN-tilang
   AV.RLS-split (wood)
   ‘to split wood’
The types of words that are discussed in the following sections are grammatical words. The discussion of word formation focuses on the grammatical elements that are involved in forming complex grammatical words.

3.2 Formatives

The term *formative* as used in this grammar refers to any minimal unit which has a morphological (or syntactic) function in word formation. The discussion of formatives includes affixes, clitics and stem-forming prefixes. Before discussing each of these in turn, the next section briefly deals with the basic components of word formation: lexical roots, stems and bases.

### 3.2.1 Lexical roots, stems and bases

With regard to word formation processes, roots in Tajio can be divided into two types: (1) roots which directly take inflectional affixes; and (2) roots which need derivational affixes before taking any inflectional affixes. *Roots* are distinguished from *stems* if a root takes both derivational and inflectional affixes. The term *stem* in such cases is used to refer to a morphological form which consists of a root plus (a) derivational affix(es) to which (an) inflectional affix(es) can be then attached. The term *base* is used in this work as a superordinate term for roots or stems, i.e., it is used whenever the difference between roots and stems is not relevant for describing a morphological formation.

From the above discussion it follows that derivational affixes are always attached before inflectional affixes. Therefore, inflectional affixes in Tajio may also be called outermost affixes. Table 3-1 gives two examples of roots and stems in Tajio.

<table>
<thead>
<tr>
<th>Root</th>
<th>Stem: root + derivational affix</th>
<th>Inflectional affix + stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>vee 'to give'</td>
<td><strong>veenao</strong> /veen-aol/ ‘give-APPL’ ‘to give (sth. to s.o.)’</td>
<td><strong>nombeenao</strong> /noN-veen-aol/ ‘AV.RLS-give-APPL’ ‘to give (sth. to s.o.)’</td>
</tr>
<tr>
<td>gabu ‘to cook’</td>
<td><strong>pogabu</strong> /po-gabu/ ‘SF-cook’ ‘to cook’</td>
<td><strong>nipogabu</strong> /ni-po-gabu/ ‘UV.RLS-SF-cook’ ‘to cook’</td>
</tr>
</tbody>
</table>

Table 3-1: Examples of stem formation and inflection

### 3.2.2 Affixes

Based on their functions, affixes in Tajio can be divided into derivational and inflectional affixes. Derivational affixes can create new words, which do not necessarily belong to the same grammatical class as the roots they attach to. They can also change the lexical meaning of the root. Furthermore, derivation can also change the morphosyntactic subclass of a root.

Inflectional affixes, on the other hand, never change the grammatical class or the basic meaning of their base. Bases in Tajio do not inflect for number, case or gender, but do so for mood (realis opposed to non-real(is). Mood is the only inflectional category in Tajio, which, however, is formally intertwined with other types of grammatical information, such as voice (with transitive verbs), dynamicity (with intransitive verbs, see Section 5.1) as well as person marking in the undergoer voice construction (see Section 6.3).

Tajio has four formal types of affixes: prefixes, one infix, suffixes and circumfixes. Grammatical elements that are classified as affixes in Tajio are listed in Table 3-2.

---

<table>
<thead>
<tr>
<th>Domain</th>
<th>Type of affix</th>
<th>Functions</th>
<th>Further details in section(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflectional affixes</td>
<td>Prefixes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>noN/-moN-</td>
<td>active voice realis/non-realis</td>
<td>2.8.1; 6.3; 8.1.2.1</td>
</tr>
<tr>
<td></td>
<td>n-/m-</td>
<td>active voice realis/non-realis</td>
<td>6.3</td>
</tr>
<tr>
<td></td>
<td>no/-ne-, mo/-me-</td>
<td>dynamic intransitive realis/non-realis</td>
<td>6.2; 8.1.1</td>
</tr>
<tr>
<td></td>
<td>nV/-mV-</td>
<td>stative realis/non-realis</td>
<td>2.8.6; 6.1; 8.1.1</td>
</tr>
<tr>
<td></td>
<td>ni/-nu-</td>
<td>undergoer voice realis/non-realis</td>
<td>6.3.2; 8.1.2.2</td>
</tr>
<tr>
<td></td>
<td>u-</td>
<td>undergoer voice non-realis for 1SG actor</td>
<td>6.3.2; 8.1.2.2</td>
</tr>
<tr>
<td></td>
<td>mu-</td>
<td>undergoer voice non-realis for 2SG actor</td>
<td>6.3; 8.1.2.2</td>
</tr>
<tr>
<td></td>
<td>si-</td>
<td>pronominal prefix for plural pronouns</td>
<td>4.3.1.1</td>
</tr>
<tr>
<td></td>
<td>ni-</td>
<td>genitive prefix for plural pronouns</td>
<td>4.3.1.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circumfixes</td>
<td>ni--i/nu--i</td>
<td>undergoer voice realis/non-realis</td>
<td>6.3; 8.1.2.2</td>
</tr>
<tr>
<td>Derivational affixes</td>
<td>Prefixes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>po-/pe-</td>
<td>stem former</td>
<td>3.2.3; 6.5.2</td>
</tr>
<tr>
<td></td>
<td>PO-</td>
<td>causative</td>
<td>6.4.1.2</td>
</tr>
<tr>
<td></td>
<td>to-po(N)-</td>
<td>agentive nominalizer</td>
<td>7.4.1</td>
</tr>
<tr>
<td></td>
<td>pei-</td>
<td>requestive causative</td>
<td>6.4.1.2.2</td>
</tr>
<tr>
<td></td>
<td>(no)si-</td>
<td>reciprocal</td>
<td>6.4.2.1</td>
</tr>
<tr>
<td></td>
<td>po(N)/pe(N)/pV-</td>
<td>nominalizer</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>(ne)te-</td>
<td>resultative</td>
<td>6.4.2.2</td>
</tr>
<tr>
<td></td>
<td>so-/sV-(N)-</td>
<td>one (numeral prefix)</td>
<td>2.8.1; 4.3.2; 7.1.3</td>
</tr>
<tr>
<td></td>
<td>ro-/ro-(N)-</td>
<td>two (numeral prefix)</td>
<td>2.8.1; 4.3.2; 7.1.3</td>
</tr>
<tr>
<td></td>
<td>see-, (ne)ro-</td>
<td>group/collective</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>kV-</td>
<td>ordinal number</td>
<td>2.8.6</td>
</tr>
<tr>
<td></td>
<td>nangi</td>
<td>repeated action</td>
<td>6.5</td>
</tr>
<tr>
<td>Infix</td>
<td>-ngV-</td>
<td>group/collective</td>
<td>2.8.6; 6.5</td>
</tr>
<tr>
<td>Suffixes</td>
<td>-iAPPL</td>
<td>applicative</td>
<td>6.4.1.1</td>
</tr>
<tr>
<td></td>
<td>-ao</td>
<td>applicative</td>
<td>6.4.1.2</td>
</tr>
<tr>
<td></td>
<td>-iREP</td>
<td>repeated action</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>-ong</td>
<td>nominalizer</td>
<td>7.4</td>
</tr>
<tr>
<td>Circumfixes</td>
<td>po(N)/pe(N)/pV-</td>
<td>nominalizer</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>nV--ong</td>
<td>verbalizer</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>no/-ne--ong</td>
<td>reciprocal</td>
<td>6.4.2.1</td>
</tr>
</tbody>
</table>

Table 3-2: Complete list of inflectional and derivational affixes in Tajio

Some affixes in Table 3-2 are written with a capital N, which represents a homorganic nasal. It is found in nasal prefixes and the nasal ligature. In order to distinguish the two functions of this nasal, the latter is written as -N-, as can be seen in the numeral prefixes sV-(N-) and ro-(N)-. The homorganic alternations of the nasal are discussed in Section 2.8.

Circumfixes are defined by the co-occurrence of a prefix and a suffix which simultaneously derive a new word or inflect a verbal base. When either affix is missing, the subsequent form is either ill-formed or has a different meaning or function, as illustrated by the examples in (7).
A grammatical element is classified as an infix if it occurs inside the base (Haspelmath, 2002:18). A well-known example is the actor voice infix -um- in Tagalog; for instance, *hanap* ‘to search’ becomes *h-um-anap* ‘AV-search’.

In Tajio, there is only one infix: -ngV-. This infix indicates group activities if the base to which it attaches is a dynamic verb (i.e., intransitive and transitive) or the state of a group if the base is stative. -ngV- can only be inserted between prefixes and roots; it never occurs between roots and suffixes. That the suffix -ngV- is an infix rather than a prefix is clear from its interaction with the nasal prefixes (CVN- prefixes). See further in Section 2.8.6.

Interaction between affixes and bases in Tajio may not always result in morphophonemic changes. There are affixes the realizations of which are lexically determined by the root to which they attach. The types of allomorphs that are found in Tajio will be discussed further in Section 3.3.

### 3.2.3 Stem-forming prefixes

In Tajio, there are roots which need a stem-forming prefix before they can undergo any further derivational or inflectional processes. The stem-forming prefixes found in Tajio are *pe-* and *po-*.

A stem-forming prefix is required in order to derive a verb from a nominal root. In verb formation, the stem-forming prefix can be identified most clearly on verbs that are marked for undergoer voice as the actor voice prefix may induce morphophonemic changes, obscuring the original form of the prefix. For example, the root *tambak* ‘to play’ takes the stem-forming prefix *po-* as clearly seen in the undergoer voice form *nipotambakao* /ni-po-tambak-aol/ ‘UV.RLS-SF-play-APPL’ ‘to turn sth. into a game’. Another example is the root *joong* ‘field’ which takes the stem-forming prefix *pe-* as seen in *nipejoong* /ni-pe-joong/ ‘UV.RLS-SF-field’ ‘to do the field’.

### 3.2.4 Clitics

As mentioned at the beginning of this chapter, a clitic is a grammatical word on its own, yet not a complete phonological word. Clitics can be attached before or after their hosts (see Section 3.1.2). It is possible to have more than one clitic attached to a host.

The number and types of clitics that may be attached to a particular host depend on its morphosyntactic class. Clitics in Tajio that can be attached to a noun are noun markers and genitive clitics indicating the possessor of the noun.

In clitic forms, noun marker clitics always occur as proclitics, i.e., they precede their nominal host. There are four noun marker clitics in Tajio: the neutral noun markers *te=*, and *nu=*, and the honorific noun markers *si=*, and *ni=* (see also Section 4.3.1 and Section 7.1.1 for more details about these noun markers).

Pronominal possessors: first, second and third person singular possessors always occur as enclitics, i.e., they always follow the noun host. In contrast, plural pronouns occur in genitive forms marked by the honorific prefix *ni-* (see Section 4.3.1.1). Consider the examples of noun markers and possessor clitics given in (8)–(10).

(8) *si=opu*=’*u* ‘NM'=grandparent=1SG.GEN’ → *siopu*’u ‘my grandparent’

(9) *te=pomberekong=* *mu* ‘NM'=place.to.stay=2SG.GEN’ → *tepomberekongmu* ‘your house’

---

8 *=mo* is an enclitic which marks completive aspect. Its secondary function is, among others, to mark politeness (in positive and negative imperatives). See Section 5.3 for details.

9 The noun marker *si=* also functions as an honorific marker. It can only attach to personal pronouns, personal names and four core kinship terms (see Section 7.3.1). Thus, *si=* is glossed as HON.
Cliticization on verbs can involve two kinds of enclitics: genitive and aspectual enclitics. Genitive enclitics are used to indicate the actor in undergoer voice constructions if the actor is a singular referent (i.e., =’u ‘1SG.GEN’, =mu ‘2SG.GEN’ and =nya ‘3SG.GEN’). Plural actors, on the other hand, are expressed by independent pronouns.

The aspectual enclitics =po ‘CONT’ or =mo ‘COMP’ can be placed directly after dynamic verbs or else follow the actor enclitics, as illustrated by examples (11)–(13) below.

(11) ne-nge-linjok=po ‘DY.RLS=COLL-to.run=CONT’ → nengelinjokpo ‘still running together’
(12) noN-odung=mo ‘AV.RLS-sit=COMP’ → nongedungmo ‘already sitting’
(13) ni-pe-valung-i=nya=mo ‘UV.RLS-SF-carry.food-APPL=3SG.GEN=COMP’ → nipevalunginyamo ‘she/he has carried the food already’

Turning to the third group of bases, stative verbs can only occur with the aspectual enclitics =mo ‘COMP’ or =po ‘CONT’, as presented in examples (14) and (15).

(14) nV-basag=mo ‘ST.RLS-big=COMP’ → nabasagmo ‘already big’
(15) nV-meas=po ‘ST.RLS-white=CONT’ → nemeaspo ‘still white’

Tajio further makes use of the proclitic to= as a relative marker. In relative clauses, this proclitic usually precedes a verbal base, i.e., an intransitive or transitive verb. For example, tonogal to=nV- ogal ‘REL=ST.RLS-dry’ ‘the one which is dry’, tonongoli to=moN-oli ‘REL=AV.RLS-buy’ ‘the one who bought’, tonituda/u to=ni-tuda=u ‘REL=UV.RLS-plant=1SG.GEN’ ‘the one which I planted’.

To sum up, all grammatical elements classified as clitics in Tajio are shown in Table 3-3.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Type of Clitic</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclitic</td>
<td>=’u ‘1SG.GEN’</td>
<td>Genitive marker</td>
</tr>
<tr>
<td></td>
<td>=mu ‘2SG.GEN’</td>
<td>Genitive marker</td>
</tr>
<tr>
<td></td>
<td>=nya ‘3SG.GEN’</td>
<td>Genitive marker</td>
</tr>
<tr>
<td></td>
<td>=mo ‘COMP’</td>
<td>Aspectual marker</td>
</tr>
<tr>
<td></td>
<td>=po ‘CONT’</td>
<td>Aspectual marker</td>
</tr>
<tr>
<td>Proclitic</td>
<td>pa= ‘SEQ’</td>
<td>Sequential marker</td>
</tr>
<tr>
<td></td>
<td>to= ‘one which/who’</td>
<td>Relative marker</td>
</tr>
<tr>
<td></td>
<td>te=</td>
<td>Noun marker</td>
</tr>
<tr>
<td></td>
<td>si=</td>
<td>Noun marker</td>
</tr>
<tr>
<td></td>
<td>nu=</td>
<td>Genitive marker</td>
</tr>
<tr>
<td></td>
<td>ni=</td>
<td>Genitive marker</td>
</tr>
</tbody>
</table>

Table 3-3: Complete list of clitics in Tajio.

There are some morphosyntactic properties which can be used to distinguish clitics from words and affixes in Tajio10. A major difference between phonological words and clitics is that clitics never stand alone, but are always attached to a host. This property is shared between clitics and affixes. However, clitics and affixes differ in other regards.

From a morphophonological point of view, affixes in Tajio may trigger morphophonological alternations of the base to which they are attached. These processes include nasal assimilation or substitution, nasal fronting, nasal dissimilation, vowel harmonic changes and vowel reduction (see Section 2.8). In contrast, morphophonological processes rarely ever occur at clitic boundaries. The only morphophonological process which does occur at a clitic boundary in Tajio pertains to the enclitic =’u ‘1SG.GEN’, which undergoes glottal deletion if its host ends with a consonant (see Section 2.8.5).

10 See Anderson (2005), Kroeger (2005) and Dixon (2010) for discussion. In what follows I will mainly draw on these sources.
Furthermore, cliticization allows consonant sequences other than sonorant-obstruent sequences, as already mentioned in Section 3.1 above. Typically, sonorant-obstruent sequences in Tajio are homorganic (i.e., /mp/, /mb/, /nt/, /nd/, /ndʒ/, /ns/, /ŋk/ and /ŋg/). In contrast, consonant sequences which occur due to cliticization are not homorganic. For example, the sequence /ŋm/ <ngm> is found in the word teompongmu ‘your belly’ /te=ompom=mu/ ‘NM=belly=2SG.GEN’, in which the last phoneme /ŋ/ of the root is followed by the phoneme /m/ of the clitic =mu. Such sequences that remain phonologically unaltered may only occur between clitics and their (noun) hosts.

Turning to morphological characteristics, affixes are selective in the base they attach to, and their position in word formation is fixed. For example, the vowel harmonic prefix nV- ‘ST.RLS’ cannot be attached to bases other than statives. Other examples are the prefixes u- ‘1SG.UV.NRLS’ and mu- ‘2SG.UV.NRLS’ which always precede transitive verbal bases. The honorific prefixes si- and ni- can only precede the bound forms of plural pronouns.

Clitics, on the other hand, are less restricted than affixes with respect to the type of bases to which they attach. Clitics in Tajio can follow a nominal base, e.g., =nya ‘3SG.GEN’ as in telapinya lte=lapi=nya/ ‘NM=spouse=3SG.GEN’ ‘his/her spouse’; or they can follow a verbal base, as in nipogutuauonya /ni-po-gutu-ao=nya/ ‘UV.RLS-SF-make-APPL=3SG.GEN’ ‘She/he made something for someone’.

Some clitics may be derived from or related to independent or full forms. The aspectual marker =po ‘CONT’ is possibly derived from ompo which means ‘still’. Example (16) shows that ompo ‘still’ can replace the aspectual marker =po ‘CONT’ in example (17), but they cannot be used at the same time, as shown by example (18).

(16) siia nonggabupo
siia noN-gabu=po
3SG AV.RLS-cook=CONT
‘She/he is still cooking.’

(17) siia nonggabu ompo
siia noN-gabu ompo
3SG AV.RLS-cook still
‘She/he is still cooking.’

(18) *siia ompo nonggabupo or *siia nonggabupo ompo

The sequential marker pa= ‘SEQ’ seems to be derived from apa ‘then’. Both are used to link events in narratives, as in examples (19) and (20).

(19) pamula upasadalia  teroong
pamula u-pasadalia te=roong
first UV.NRLS.1SG-prepare NM=leaf
paulelei
apa=u-lele-i
then=UV.NRLS.1SG-dry-UV
‘First I will prepare the (banana) leaves, and then I will dry them.’

(from the narrative Nonggutu mandura)

(20) toukmao nisari apa nipoongom sedeii apa
toukmao ni-sari apa ni-po-onggom sedeii apa
after.that UV.RLS-stir then UV.RLS-CAUS-cold a.little then
nitumbu’
ni-tumbu’
UV.RLS-grind
‘After that (I) stir (it), then I cool (it) a little, then I grind (it) […]’

(from the narrative Nonggutu mandura)
Although there is a set of properties that serves to distinguish clitics from affixes and independent morphemes, not every clitic is associated with the whole range of clitic properties. For example, the noun marker te= is classified as clitic although it is selective in choosing its base (i.e., it has to be attached to nouns). Despite this selectivity, such clitics are categorized as clitics rather than affixes because they appear to have no derivational and inflectional function.

3.3 Allomorphy

Following the terminology proposed by Kroeger (2005:289–90), Tajio possesses two types of allomorphs: morphophonemic allomorphs and suppletive allomorphs. The former occurs if the change of the morpheme form is the result of a phonological process. If the change cannot be ascribed to a phonological process, it is referred to as suppletive allomorphy.

3.3.1 Morphophonemic allomorphy

The morphophonological processes that involve allomorphy (of base and/or affix) in Tajio are nasal prefixation, vowel harmonic affixation, nasal fronting, nasal dissimilation, vowel reduction and glottal deletion. Nasal fronting and nasal dissimilation involve allomorphy of bases, other processes involve allomorphy of affixes. Details on these morphophonological processes are given in Section 2.8.

3.3.2 Suppletive allomorphy

Kroeger (2005:290–292) divides suppletion into three types: lexically conditioned suppletion, phonologically conditioned suppletion, and morphologically conditioned suppletion. Suppletion is lexically conditioned if there is no way to predict which allomorph occurs with a given lexeme. Suppletion is phonologically conditioned if the choice of allomorph depends only on the phonological environment. In this case, the difference between phonologically conditioned suppletion and morphophonemic allomorphy is that suppletion is a process of replacing one allomorph with another, while a morphophonemic allomorphy changes (but does not replace) the phonological shape of a morpheme. Finally, suppletion is morphologically conditioned if the choice of the allomorph for a particular affix depends on other affixes present in a word.

Of Kroeger’s three types of suppletion, two are found in Tajio: morphologically and lexically conditioned suppletion. The following subsections discuss these two types of suppletion identified in Tajio.

3.3.2.1 Morphologically conditioned suppletion

Suppletive allomorphy is shown by the actor voice prefix noN-/moN-, which has a suppletive allomorph no-/mo- (in its realis/non-real is realizations). The choice of these suppletive allomorphs is morphologically conditioned since it depends on the presence of other affixes in the word.

The actor voice marker noN-/moN- always becomes no-/mo- if it precedes the causative prefix PO- and the stem-forming prefix pe-/po- (see Section 6.3 for details on this alternation). Examples (21) and (22) illustrate the suppletive allomorphs of the actor voice prefix noN-.

(21) siasman nopeanganak sianugrah
sni=Asman no-PO-anganak sni=Anugrah
HON=PN AV.RLS-CAUS-child HON=PN
‘Asman adopted Anugrah.’ (lit: ‘Asman made Anugrah his child.’)

(22) siina’u nopoondak teogo
si=ina’u no-PO-ondak te=ogo
HON=mother=1SG.GEN AV.RLS-CAUS-hot NM=water
‘My mother boiled the water.’ (lit: ‘My mother made the water hot.’)

(23) sia’u nopesoogi tewaterung eua
sia’u no-pe-soog-iAPPL te=warung eua
1SG AV.RLS-SF-stop by-APPL NM=kiosk DIST
‘I stopped by at that kiosk.’
3.3.2.2 Lexically conditioned suppletion

Examples of lexically conditioned suppletion in Tajio include the dynamic intransitive marker ne-/no-, the stem-forming prefix pe-/po- and the causative prefix PO-. The choice between the variant forms cannot be described phonologically or morphologically. For example, there is no way to predict which allomorph occurs with which dynamic intransitive roots. The root sengka ‘to turn 90 degrees’ becomes nesengka ‘to turn 90 degrees’, while the segmentally almost identical sengkel ‘to ahem’ becomes nosengkel ‘to ahem’.

Although the choice of the prefix form is lexically conditioned, in most cases there is a regularity among the respective prefixes chosen by roots. If a root can take the dynamic intransitive prefix, the stem-forming prefix and the causative prefix, all prefixes tend to have an identical vowel. For example, the root linjok ‘to run’, which takes the dynamic intransitive prefix ne- to form nelinjok (nelinjok/ ‘DY.RLS-run’ ‘to run’ also takes the stem-forming prefix pe- and the causative prefix pe-, as can be seen in the UV verb nipelineljok (ini-PO-pe-linjok/ ‘UV.RLS-CAUS-SF-run’ ‘to make (sth./s.o.) run’. Another example is the root lapi ‘spouse’ which takes the dynamic intransitive prefix no- to form nolapi (no-lapil ‘DY.RLS-spouse’ ‘to marry’. Its respective prefixes also occur with the vowel /o/, the stem former is po- and the causative prefix is po-, as in nipopolapi (ini-PO-po-lapil/ ‘UV.RLS-CAUS-SF-spouse’ ‘to make someone a spouse’.

However, irregularity is also found in some cases, in which prefixes chosen by roots do not share the same form of the vowel. The root layag ‘to sail’, for instance, takes the dynamic intransitive prefix no- to form nolayag (no-layag/ ‘DY.RLS-sail’ ‘to sail’. This prefix has the same vowel with the stem-forming prefix po- which occurs in the undergoer voice verb nipolayagi (ini-po-layag-i/ ‘UV.RLS-SF-sail-APPL’ ‘to sail at’. However, the realization of the causative prefix taken by the root layag is pe-, not po-, as in nipelayagu (ini-PO-layag=au/ ‘UV.RLS-CAUS-sail=1SG.GEN’ ‘I turn sth. into a sail’. In such cases, the stem former and the causative prefix have different forms if not attached to the same base or when deriving very different meanings. In case of nipolayagi and nipelayagu, the former still derives a verbal meaning ‘to sail’ while the latter does not include the verbal meaning ‘to sail’ anymore; the newly derived meaning is ‘turning something into a sail’. This also proves that the stem-forming prefix and the causative prefix are two different prefixes. See also Section 6.1.2 on Causatives.

An example of lexically conditioned suppletion with a change of the base form is shown by the root vee ‘to give’. It becomes wenn when the vowel-initial suffixes -ao ‘APPL’ or -i ‘APPL’ are attached (i.e., evenao and veeni, respectively). This example is not analyzed as a case of morphological allomorphy because the phoneme /n/ does not regularly occur when a vowel-initial suffix is attached to bases with final /l/ (or another vowel). For example, the base bale ‘to turn’ becomes baleao (not *balaenao); lolo ‘to look for’ becomes lolao (not *lolena); kundu ‘to kiss’ becomes Kundu (not *kunduni).

Lexically conditioned allomorphy is also found with some static roots that do not take the vowel-harmonic stative prefix nV-. For example, instead of occurring as the expected form *nedoda, the stative form of doda ‘to be red’ is nedoda; suli ‘to be expensive’ becomes stative nasuli; not *nusuli; sempo ‘to be cheap’ is nasempo, not *nesempo; rowa ‘to be crowded’ becomes stative narowa, not *norowa.

Finally, the actor voice prefix noN-/moN- exceptionally appears as neN-/meN- ‘AV.RLS/NRLS’ in nenginang/menginang ‘AV.RLS/NRLS-eat’ and nenginan/menginang ‘AV.RLS/NRLS-drink’ (see also Section 6.1).

3.4 The structure of grammatical words

The morphological structure of grammatical words in Tajio depends on their morphosyntactic class. Table 3-4, Table 3-5, Table 3-6 and Table 3-7 each present the affix template of one of the three major morphosyntactic classes: nouns, stative intransitive verbs and dynamic verbs (see Chapter 4 for further details on word classes). The blank column in the table indicates that these affixes would not occur together with a particular base due to incompatible morphosyntactic properties (for instance, nouns that are derived from verbal bases cannot take causative prefixes although verbal bases formed by the
same root may do so). The ordering of morphemes shows the linear arrangement of affixes in word structure.

<table>
<thead>
<tr>
<th>Inflection</th>
<th>Derivation</th>
<th>Root</th>
<th>Derivation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST/AV/UV</td>
<td>CAUS</td>
<td></td>
<td>VBLZ/APPL</td>
<td></td>
</tr>
<tr>
<td>nV-</td>
<td>‘ST.RLS’</td>
<td>loka ‘banana’</td>
<td>-ong ‘VBLZ’</td>
<td>nolokaong ‘to own (a) banana(s)’</td>
</tr>
<tr>
<td>no-</td>
<td>‘AV.RLS’ PO-</td>
<td>langit ‘ceiling’</td>
<td></td>
<td>nopolangit ‘to turn sth. into a ceiling’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no-</td>
<td>‘AV.RLS’ PO-</td>
<td>ong ‘broom’</td>
<td>-ao ‘APPL’</td>
<td>nopekaero ‘to turn sth. into a broom’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3-4: Affix template of nouns

<table>
<thead>
<tr>
<th>Inflection</th>
<th>Derivation</th>
<th>Root</th>
<th>Derivation</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST/AV/UV</td>
<td>COLL/NOM</td>
<td>CAUS</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>nV-</td>
<td>‘ST.RLS’</td>
<td></td>
<td></td>
<td>nabasag ‘to be big’</td>
</tr>
<tr>
<td>nV-</td>
<td>‘ST.RLS’</td>
<td></td>
<td></td>
<td>nengemeas ‘(all) to be white’</td>
</tr>
<tr>
<td>no-</td>
<td>‘AV.RLS’ PO-</td>
<td></td>
<td></td>
<td>nopolasag ‘to make big’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td>nimbasagao ‘to make big’</td>
</tr>
<tr>
<td>noN-</td>
<td>‘AV.RLS’</td>
<td></td>
<td></td>
<td>nimbasa ‘to make big’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no-</td>
<td>‘AV.RLS’ PO-</td>
<td></td>
<td>-i ‘APPL’</td>
<td>nopepeturui ‘to make s.o. sleep’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no-</td>
<td>‘AV.RLS’ PO-</td>
<td></td>
<td>-i ‘APPL’</td>
<td>nopepeturui ‘to make s.o. sleep’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pV-</td>
<td>‘NOM’</td>
<td></td>
<td>-ong ‘NOM’</td>
<td>poturui ‘a place to sleep’</td>
</tr>
</tbody>
</table>

Table 3-5: Affix template of stative intransitive verbs
<table>
<thead>
<tr>
<th>Inflection</th>
<th>Derivation</th>
<th>Root</th>
<th>Derivation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td>‘to walk’</td>
<td>‘to walk’</td>
<td>walk’</td>
</tr>
<tr>
<td>no-</td>
<td>‘AV.RLS’</td>
<td>PO-</td>
<td>linjok ‘to run’</td>
<td>‘to cause s.o. to walk’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no-</td>
<td>‘AV.RLS’</td>
<td>pei-</td>
<td>linjok ‘to run’</td>
<td>‘to kidnap s.o.’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no-</td>
<td>‘AV.RLS’</td>
<td>pe-</td>
<td>linjok ‘to run’</td>
<td>‘to ask s.o. to run’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no-</td>
<td>‘AV.RLS’</td>
<td>pe-</td>
<td>ntama ‘to enter’</td>
<td>‘to enter into’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no-</td>
<td>‘AV.RLS’</td>
<td>pe-</td>
<td>linjok ‘to run’</td>
<td>‘a place to run’</td>
</tr>
<tr>
<td>ni-</td>
<td>‘UV.RLS’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>topo-</td>
<td>‘AG.NOM’</td>
<td>linjok ‘to run’</td>
<td>‘s.o. who runs’</td>
<td></td>
</tr>
</tbody>
</table>

Table 3-6: Affix template of dynamic intransitive verbs
3.5 Reduplication

There are two reduplication patterns in Tajio: CV-reduplication or monosyllabic reduplication and bisyllabic reduplication. In general, all bases (i.e., nouns, stative intransitives, dynamic verbs) can be reduplicated. In all types of reduplication patterns, the reduplicant is prefixed to the base.

In the database, there are no examples of monosyllabic reduplications in which the reduplicant consists of a vowel or a syllabic nasal only. The vowel-initial bases tend to take the bisyllabic reduplication pattern, as described in the following section. In case of syllabic nasals, Tajio allows nasal-obstruent clusters in word-initial position (as has been discussed in Section 2.5). Roots starting with nasal-obstruent clusters allow for monosyllabic and bisyllabic reduplication in which only the obstruent of the clusters is copied in the reduplicant. It seems that the syllabic nasal is ignored in the reduplication process, as it may violate the prototypical templates of reduplication, i.e., the monosyllabic template (CV) or the bisyllabic template (CV.CV). Therefore, the syllable structure of the reduplicant may consist of CV or CV.(C)V(C) combinations. For example, m.po.yung ‘to whistle’ is reduplicated into po.mpo.yung or po.yu-m.po.yung ‘to whistle repeatedly’; ng.ki.rat ‘to raise eyebrows’ into ki.ng.ki.rat.ong or kira-ng.ki.rat.ong ‘to raise eyebrows at each other’; n.ta.ul ‘to chew’ forms ta-n.ta.ul or ta.u-n.ta.ul ‘to chew intensively’; n.ji.lok ‘to lick’ is reduplicated into ji.lo-n.ji.lok ‘to lick repeatedly’; n.je.ek ‘to laugh loudly’ derives je.ek-n.je.ek ‘to laugh loudly intensively’; and ng.ku.ung ‘to crawl’ becomes ku.n-ng.ku.ung ‘to crawl intensively’. The fact that the nasal is ignored in reduplication process supports the analysis that the nasal in nasal-obstruent clusters occurring word-initially is a syllabic nasal (cp. Section 2.5).

As in other Austronesian languages, reduplication in Tajio is used as a morphological device that indicates different types of meaning, such as plurality in nouns, and repetition and intensity of dynamic or stative verbs.

### 3.5.1 CV-reduplication or monosyllabic reduplication

In monosyllabic reduplication, the reduplicant is the first syllable of the base. It copies only the first two (CV) segments. Thus, if the reduplicated syllable is closed (i.e., CVN or CVC), the reduplicant is only CV.

Monosyllabic reduplication occurs with nominal and verbal bases. Reduplicated nominals signify plurality or variety. CV-reduplication with dynamic verbal bases is employed in nominalization such as the formation of instrumental nouns or objective nouns. CV-reduplication which does not nominalize the dynamic verbal bases derives an intensive or repetitive meaning. With statives, CV-
reduplication may also derive objective nouns, or statives with intensive meaning. Examples are given in Table 3-8.

<table>
<thead>
<tr>
<th>Type of bases</th>
<th>Function</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal</td>
<td>Plurality</td>
<td>la.pis ‘layer’ → la.la.pis ‘many layers’</td>
</tr>
<tr>
<td>Dynamic verbal</td>
<td>Instrumental noun</td>
<td>ka.er ‘sweep’ → ka.ka.er ‘broom’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ka.it ‘to pick cacao with knife’ → ka.ka.it ‘a special knife to pick cacao’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>tum.buk ‘to sow (placing seed in holes)’ → tu.tum.buk ‘a stick to make holes for seeds’</td>
</tr>
<tr>
<td>Objective noun</td>
<td></td>
<td>tam.bak ‘to play’ → ta.tam.bak ‘game’</td>
</tr>
<tr>
<td>Intensive/ repetitive meaning</td>
<td></td>
<td>ja.ri.ta ‘to tell (a story)’ → ja.ja.ri.ta ‘to tell (a story) intensively’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>go.u ‘to shout’ → go.go.u ‘to shout repeatedly’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sa.up ‘to rub’ → sa.sa.up ‘to rub frequently’</td>
</tr>
<tr>
<td>Stative</td>
<td>Intensive meaning</td>
<td>li.ol ‘to be silent, quiet’ → li.li.ol ‘to be very silent’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>len.da ‘to be long’ → le.len.da ‘to be very long’</td>
</tr>
<tr>
<td>Objective noun</td>
<td></td>
<td>tu.vu ‘alive’ → tu.tu.vu ‘life’</td>
</tr>
</tbody>
</table>

Table 3-8: Examples of CV-reduplication

3.5.2 Bisyllabic reduplication

In bisyllabic reduplication, the syllable structure of the reduplicant may consist of (C)V(N).C(V) combinations depending on the syllable structure of the base. Thus, for vowel-initial bases, the possible syllable structures of the reduplicant is V(N).C(V) and for consonant-initial bases CV(N).C(V). The (N) and the (C) at coda position of the first and second syllable is placed in brackets because the base may have one or not: in the case of the nasal, the reduplicant will include one, if the base has it. In case of final C, the base may have one or not, and if it has one, it may or may not be included in the reduplicant.

Variants with or without coda do not bear any differences in meaning. Variants without coda usually occur in conversational data as well as in elicitation. Variants with coda mostly occur in elicitation. Thus, the variant without coda can be considered to be more natural than the variant with coda.

If a whole bisyllabic word is reduplicated, this type of reduplication could also be called full-base reduplication. However, it should be noted that words like ilo-ilo ‘firefly’ or nganti-nganti ‘earrings’ are not considered reduplications as these words do not exist in unreduced form.

Roots which undergo bisyllabic reduplication are nominal and verbal bases. Bisyllabic reduplication of nominal bases derives a meaning of plurality or variety. Bisyllabic reduplication of verbal bases may derive objective nouns. It may also convey intensive, frequentative, or repetitive meanings. Table 3-9 presents examples of bisyllabic reduplication without and with coda consonant.
<table>
<thead>
<tr>
<th>Type of bases</th>
<th>Function</th>
<th>Types of bisyllabic reduplication</th>
<th>Bi-RDP without coda</th>
<th>Bi-RDP with coda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal</td>
<td>Variety</td>
<td>ru.pa  ‘kind of’ → ru.pa-ru.pa  ‘many kinds of’</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dynamic verbal</td>
<td>Intensive meaning</td>
<td>se.’u  ‘to sob’ → se.’u-se.’u  ‘to sob intensively’</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pu.ras  ‘to suffer from diarrhoea’ → pu.ra-pu.ras  ‘to suffer from intensive diarrhoea’</td>
<td>pu.ras  ‘to suffer from diarrhoea’ → pu.ras-pu.ras  ‘to suffer from intensive diarrhoea’</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a.but  ‘cut grass’ → a.but-a.but  ‘to cut grass intensively’</td>
<td>a.but  ‘cut grass’ → a.but-a.but  ‘to cut grass intensively’</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Repetitive meaning</td>
<td>go.u  ‘to shout’ → go.u-go.u  ‘to shout repeatedly’</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ka.ve  ‘to call by hand’ → ka.ve-ka.ve  ‘to call by hand repeatedly’</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>u.ar  ‘to say’ → u.a-u.ar  ‘to say repeatedly’</td>
<td>u.ar  ‘to say’ → u.ar-u.ar  ‘to say repeatedly’</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Frequentative meaning</td>
<td>sa.up  ‘to rub’ → sa.u-sa.up  ‘to rub frequently’</td>
<td>sa.up  ‘to rub’ → sa.up-sa.up  ‘to rub frequently’</td>
<td>-</td>
</tr>
<tr>
<td>Objective noun</td>
<td></td>
<td>ba.lu  ‘to sell’ → ba.lu-ba.lu  ‘product to sell’</td>
<td>ba.lu  ‘to sell’ → ba.lu-ba.lu  ‘product to sell’</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>tu.da  ‘to plant’ → tu.da-tu.da  ‘plants’</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stative roots</td>
<td>Intensive meaning</td>
<td>de.i  ‘to be small’ → de.i-de.i  ‘to be very small’</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note that many bases allow for more than one reduplication pattern. It is likely that this depends on the compatibility of a base’s syllable pattern with more than one reduplication type. With regard to the meaning associated with the different reduplication types, there often does not appear to be a semantic difference between monosyllabic and bisyllabic reduplication. The nominal root *la.pis* ‘layer’, for example, can be reduplicated into *la.pis* or *la.pi-la.pis* to derive a plural meaning ‘many layers’; the dynamic verbal root *go.u* ‘to shout’ has two reduplicated forms, *go.u-go.u* and *go.u-go.u*, to derive a repetitive meaning ‘to shout repeatedly’; or the stative root *li.ol* ‘to be silent, quiet’ may become *li.oli, li.o-li.oli* or *li.oli-li.oli*, all of which convey the same intensive meaning ‘to be very silent, quiet’.

In addition to monosyllabic and bisyllabic reduplications, there are rare instances of duplicating the whole word, as can be seen in example (24) and (25). Note that in case of bisyllabic bases, duplication is formally not distinguishable from bisyllabic reduplication.

(24) bu.a ‘CLF.piece’ → so-bu.a ‘sV-piece’ ‘one piece’ → so.bu.a-so.bu.a ‘RDP–sV-piece’ ‘each get one’
(25) vo.nu.a ‘house’ → vo.nu.a-vo.nu.a ‘houses’

### 3.5.3 Interaction between affixation and reduplication

Nasal prefixes may take part in the reduplication process. Affixation occurs before reduplication, which can be seen by the fact that the nasal prefix causes the onset of the base to change into the respective homorganic nasal and the nasal is also found in the reduplicated form. Consider examples (26) and (27) where the onset of the base is changed due to the influence of the nasal prefix. The
allomorph of the base then undergoes reduplication in order to derive a repetitive/intensive reading. Note that if the prefix would attach last, we would expect forms like *topo-ngala-ala* or *no-mura-puras* where the nasal prefix only affects the reduplicated form at the their place of contact.

(26) **a.la** ‘take’ → **to.po-n ga.la** ‘AG.NOM-AV.RLS-take’ ‘one who takes’  
→**to.po-ngala-ng a.la** ‘AG.NOM-AV.RLS-DP~AV.RLS-take’ ‘someone who frequently takes (sth.)’

(27) **pu.ras** ‘diarrhoea’ → **noN-pu.ras** ‘AV.RLS-diarrhoea’ → **no.mu.ras** ‘to have diarrhoea’  
→**no.mu.ra-mu.ras** ‘AV.RLS-RDP~AV.RLS-diarrhoea’ ‘to have diarrhoea intensively/frequently’

Another prefix which also interacts with the reduplication process is the numeral prefix sV-(N)-, as illustrated in examples (28)–(30). Here, quite unlike the case of the nasal prefixes above, the numeral prefix itself is reduplicated, suggesting the following derivational order: the prefix is attached to the root first, and the whole base including the prefix then undergoes monosyllabic reduplication, actually resulting in prefix doubling.

(28) **de.i** ‘small/little’ → **se.de.i** ‘sV-little’ ‘one little’ → **se-se.de.i** ‘RDP~sV-little’ ‘little by little’
(29) **bu.a** ‘CLF.piece’ → **so-bu.a** ‘sV-piece’ ‘one piece’ → **so-so.bu.a** ‘RDP~SV-one’ ‘one by one’
(30) **e.le.o** ‘day’ → **se.e.le.o** ‘sV-day’ ‘one day’ → **se-se.e.le.o** ‘RDP~SV-day’ ‘every day’

Other prefixes, however, show no interaction with reduplication, as they do not modify the shape of the base. Compare examples (31)–(37).

(31) **a.la** ‘take’ → **a.la-a.la** → **ni-a.la-a.la=nya** ‘UV.RLS-RDP-take=3SG.GEN’ ‘He took (it) repeatedly’
(32) **san.da** ‘try’ → **sa-san.da** → **ni-sa-san.da** ‘i’ ‘UV.RLS-RDP-try-UV’ ‘to try (sth.) repeatedly’
(33) **se.’u** ‘to sob’ → **se.’u-se.’u** → **no-se.’u-se.’u** ‘DY.RLS-RDP-sob’ ‘to sob intensively’
(34) **sa.up** ‘to rub’ → **sa.u-sa.up** → **no-si-sa.u-sa.up** ‘DY.RLS-RCP-RDP-rub’ ‘to rub each other repetedly’
(35) **bu.le** ‘afraid’ → **bu.le-bu.le** → **no-pe-bu.le-bu.le** ‘AV.RLS-SF-RDP-afraid’ ‘to make (s.o.) very afraid’
(36) **li.ol** ‘silent’ → **li-li.ol** → **ne-li-li.ol** ‘ST.RLS-RDP–silent’ ‘very silent’
(37) **ba.lu** ‘sell’ → **ba.lu-ba.lu** → **to.po-ba.lu-ba.lu** ‘AG.NOM-RDP~sell’ ‘seller’

### 3.6 Compounding

Compounding is not a particularly productive process of word formation in Tajio. The structure of compound nouns in Tajio is mostly noun plus noun. In a sequence of two nouns, the first noun is the head, the second noun is the modifier noun. Morphologically, the second noun in a compound can be a simple/non-derived form (i.e., a nominal base) or a derived form (i.e., a nominalized form).

In addition to this noun-noun compounding type, some data show that there are compounds that consist of a noun plus a non-realis stative verb. In such compounds, the noun functions as the head; the non-realis stative verb functions as the modifier. Substituting the non-real is verb with a realis form results either in a noun phrase (with a clear difference in meaning) or in an ungrammatical formation. Consider the examples presented in Table 3-10.

<table>
<thead>
<tr>
<th>Head noun (N₁)</th>
<th>Modifying noun (N₂)</th>
<th>Compound</th>
</tr>
</thead>
<tbody>
<tr>
<td>manuk ‘chicken’</td>
<td>alas ‘jungle’</td>
<td>manuk alas ‘a kind of wild chicken’</td>
</tr>
<tr>
<td>lemo ‘orange’</td>
<td>gola ‘sugar’</td>
<td>lemo gola ‘sweet orange’</td>
</tr>
<tr>
<td>kakaer ‘broom’</td>
<td>sasa ‘palm leaf rib’</td>
<td>kakaer sasa ‘a broom made of palm ribs’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Head noun (N₁)</th>
<th>Modifying noun (N₂)</th>
<th>Compound</th>
</tr>
</thead>
<tbody>
<tr>
<td>vonua ‘house’</td>
<td>penginanong ‘place to eat’</td>
<td>vonua penginanong ‘restaurant’</td>
</tr>
</tbody>
</table>
The first type, **endocentric compounds**, are those in which the modifying noun specifies a particular subtype of the concept denoted by the head noun. For example, the modifying noun ‘cigarette’ can be compositionally derived from the head noun ‘tobacco’.

The second type, **exocentric compounds**, is typified by the modifying noun being transparent, meaning contributed by the head noun. For example, the modifying noun ‘yellow’ can be derived from the head noun ‘teitolu’.

Based on their meanings, compounds in Tajio can be divided into two types: endocentric and exocentric compounds. In the first type, endocentric compounds, the head noun denotes a generic concept, while the modifying nouns specifies a particular subtype of this concept. While the meaning contributed by the head noun is transparent, the meaning contributed by the modifier can be difficult to identify. Table 3-11 presents examples of endocentric noun compounds in Tajio.

### Table 3-10: The structure of compound nouns

<table>
<thead>
<tr>
<th>Head noun</th>
<th>Stative modifier</th>
<th>Compound</th>
<th>Noun phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>teitolu ‘egg’</td>
<td>melili ‘yellow’</td>
<td>teitolu melili</td>
<td>teitolu melili ‘yellow egg’</td>
</tr>
<tr>
<td>teule ‘caterpillar’</td>
<td>medoda ‘red’</td>
<td>teule medoda</td>
<td>teule nedoda ‘red caterpillar’</td>
</tr>
<tr>
<td>tabako ‘tobacco’</td>
<td>mentoos ‘rolled’</td>
<td>tabako mentoos</td>
<td>*tabako mentoos</td>
</tr>
<tr>
<td>too ‘person’</td>
<td>mogurang ‘old’</td>
<td>tomogurang</td>
<td>*tonogurang</td>
</tr>
<tr>
<td>too ‘person’</td>
<td>medei ‘young’</td>
<td>*tonedei</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Head noun (N1)</th>
<th>Modifying noun (N2)</th>
<th>Compound</th>
</tr>
</thead>
<tbody>
<tr>
<td>manuk ‘chicken’</td>
<td>pandak</td>
<td>manuk pandak ‘a kind of wild chicken’</td>
</tr>
<tr>
<td>titi ‘duck’</td>
<td>lapung</td>
<td>titi lapung ‘small wild duck’</td>
</tr>
<tr>
<td>bengga ‘buffalo’</td>
<td>bulak</td>
<td>bengga bulak ‘albino water buffalo’</td>
</tr>
<tr>
<td>saa ‘snake’</td>
<td>bulagon ‘rattan’</td>
<td>sabulagon ‘large snake species’</td>
</tr>
<tr>
<td>lemo ‘orange’</td>
<td>cui</td>
<td>lemo cui ‘Calamondin orange’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Head noun (N1)</th>
<th>Modifying noun (N2)</th>
<th>Compound</th>
</tr>
</thead>
<tbody>
<tr>
<td>vonua ‘house’</td>
<td>paranisong ‘place for sickness’</td>
<td>vonua paranisong ‘hospital’</td>
</tr>
<tr>
<td>kamar ‘room’</td>
<td>poturuong ‘place to sleep’</td>
<td>kamar poturuong ‘sleeping room’</td>
</tr>
</tbody>
</table>

### Table 3-11: Endocentric compounds in Tajio

The second type of compound is a compound in which the meaning of the whole is not directly related to the meaning of the head noun. Rather, it seems that the newly formed word presents a concept that is not compositionally derived from its component parts. I term this second type exocentric compounds but it is very rare in my corpus and more data are needed for confirmation. The available examples are listed in Table 3-12.

### Table 3-12: Exocentric compounds in Tajio

<table>
<thead>
<tr>
<th>Head noun (N1)</th>
<th>Modifying noun (N2)</th>
<th>Compounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>ubung ‘joint’</td>
<td>puse ‘belly button’</td>
<td>ubung puse/ubumpuse ‘blood sibling’</td>
</tr>
<tr>
<td>pae ‘rice’</td>
<td>pulu ‘handle of machete’</td>
<td>pae pulu ‘a traditional food made of roasted bamboo stuffed with rice’</td>
</tr>
<tr>
<td>bangge ‘female’</td>
<td>bodo</td>
<td>bangge bodo ‘pigeon’</td>
</tr>
<tr>
<td>tamp*a ‘container’</td>
<td>tolee ‘urine’</td>
<td>tamp*a tolee ‘youngest child’</td>
</tr>
</tbody>
</table>

11 The realization of the stative prefix in medoda/nedoda is a further example of lexically conditioned allomorphy as it does not follow the vowel-harmonic rules. The expected forms would be *mododa/nododa.
Compounds with stative modifiers

<table>
<thead>
<tr>
<th>Head noun</th>
<th>Stative modifier</th>
<th>Compounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>teogo 'water'</td>
<td>moondak 'hot'</td>
<td>teogo moondak 'hot spring'</td>
</tr>
<tr>
<td>teule 'caterpillar'</td>
<td>mododa 'red'</td>
<td>teule mododa 'centipede'</td>
</tr>
</tbody>
</table>

Table 3-12: Exocentric compounds in Tajio

Most compounds in Tajio consist of the simple juxtaposition of two words, with no morphophonological processes taking place at the word-boundary. However, there are few compounds in my database with a morphophonologically induced alternation at the word-internal boundary. The first example is the compound ubung puse ‘blood sibling’, which in (38) is taken from a conversation. In this example, ubung puse is realized as one phonological word ubumpuse, in which the final sound [ŋ] of the head noun ubung assimilates to the initial sound [p] of the modifying noun puse.

(38) a=ne si=ardi=nn lot=sa=si to=lu=si si=si
    if HON=PN with 3PL RDP=three 3PL
    sobumpuse u=sa
    sV-ubung-puse u=sa
    one-joint.belly.button DIST
    ‘Together with Ardin, the three of them are blood siblings.’

(from the dialog Campur)

The second examples of compounds undergoing the same morphophonological process (i.e., vowel reduction) at the word-boundary are sabulagon ‘large snake species’, tomogurang ‘old person, parent’ and tomedei ‘the smallest child’. In sabulagon, the word saa ‘snake’ is reduced to sa (see Table 3-11); in tomogurang and tomedei, the word too ‘person’ is reduced into to (see Table 3-10). In these instances, the morphophonological changes quite clearly indicate that these are single grammatical and phonological words and not syntactically formed phrases.

In the case of the other compounds which are orthographically represented here as two words the evidence is somewhat less clear.

A possible diagnostic test that can be applied to show their single word status is the insertion of the noun marker te= or the genitive marker ni=/nu= between the head noun and the modifying noun. If the new formation is acceptable, the construction is not a compound, otherwise it is considered a compound.

However, it should be noted that the diagnostic test with the noun marker te= is not applicable if the noun begins with a vowel because in that case te= is obligatory—both in compounds and in noun phrases. Compare, for example, meja teayu ‘wooden table/table made of wood’ with meja vatu ‘stone table/table made of stone’. As a compound, the noun marker te= cannot be attached to vatu, thus *meja tevatu ‘stone table’ is not acceptable. In contrast, meja teayu ‘wooden table’ is the only possible form, as bare *meja ayu ‘wooden table’ is ungrammatical.

Table 3-13 presents examples where the status of the construction is tested by applying the noun marker te= and the genitive marker ni=/nu= to the second constituent. As the results are ungrammatical, we are dealing here with compounds rather than noun phrases.

<table>
<thead>
<tr>
<th>Compounds with simple modifying nouns</th>
<th>With te= or ni=/nu=</th>
</tr>
</thead>
<tbody>
<tr>
<td>lemo cui</td>
<td>*lemo te=cui</td>
</tr>
<tr>
<td>‘Calamondin orange’</td>
<td>*lemo nu=cui</td>
</tr>
<tr>
<td>kakaer sasa</td>
<td>*kakaer te=sasa</td>
</tr>
<tr>
<td>‘a broom made of palm ribs’</td>
<td>*kakaer nu=sasa</td>
</tr>
<tr>
<td>pae pulu</td>
<td>*pae te=pulu</td>
</tr>
<tr>
<td>‘a traditional food of roasted bamboo stuffed with rice’</td>
<td>*pae nu=pulu</td>
</tr>
<tr>
<td>meniang vevine</td>
<td>*meniang te=vevine</td>
</tr>
<tr>
<td>‘mother-in-law’</td>
<td>*meniang ni=vevine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compounds with derived modifying nouns</th>
<th>With te= or ni=/nu=</th>
</tr>
</thead>
</table>

71
Another diagnostic test to prove that compounds in Tajio are single words is to add a possessor after the compound. If the compound is indeed treated as a single unit, it is to be expected that the possessor modifies this unit as a whole and not just the second constituent of the compound. Example (39) shows such a case.

(39) [tevonua penginanong] [nitagu’u]
te=vonua peN-inang-ong ni=tagu=’u
NM=house NOM-eat-NOM GEN.HON=friend=1SG.GEN
POSSESSED NOUN GEN=POSSESSOR
‘restaurant of my friend (not *’house, my friend’s place to eat’)

While noun phrases and noun compounds that use the same constituents often differ quite clearly in meaning, this is not necessarily so, as illustrated in Table 3-14. In some instances, both formations appear to provide alternative ways of rendering essentially the same meaning.

<table>
<thead>
<tr>
<th>Head noun (N1)</th>
<th>Modifying noun (N2)</th>
<th>Compounds (C) and noun phrases (NP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>jaang ‘watch’</td>
<td>lima ‘hand’</td>
<td>C jaang lima ‘hand watch’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NP jaang nu=lima ‘hand watch’</td>
</tr>
<tr>
<td>bibit ‘seedling’</td>
<td>pae ‘paddy’</td>
<td>C bibit pae ‘paddy seedling’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NP bibit nu=pae ‘paddy seedling’</td>
</tr>
<tr>
<td>karung ‘sack’</td>
<td>vea ‘rice’</td>
<td>C karung vea ‘rice sack’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NP karung nu=vea ‘rice sack’</td>
</tr>
<tr>
<td>koci ‘key’</td>
<td>kamar ‘room’</td>
<td>C koci kamar ‘room key’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NP koci nu=kamar ‘room key’</td>
</tr>
<tr>
<td>meja ‘table’</td>
<td>ayu ‘wood’</td>
<td>C meja teayu ‘wooden table’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NP meja nu=ayu ‘table for wood’</td>
</tr>
</tbody>
</table>

Table 3-14: Examples of semantically similar compounds and noun phrases
The classification of words in Tajio has to be carried out on two levels: the morphosyntactic level and the lexical level. Morphosyntactic words can be classified based on their syntactic distribution; the classification of lexical roots is based primarily on their morphological potential – if they can be used as unaffixed roots – their syntactic distribution.

Himmelmann (2008:258) states that it is necessary to make a clear-cut distinction between lexical roots and morphosyntactic words because the two classifications do not necessarily result in the same classes. For example, it is possible that a language makes a noun-verb distinction on the lexical level, but not on the morphosyntactic level. Furthermore, the classes at the lexical level do not necessarily correlate with those at the morphosyntactic level.

Morphosyntactic words in Tajio include both underived roots and morphologically complex words and can be divided into open class and closed class items. The open classes are nouns and verbs, the closed classes are pronouns, demonstratives, numerals, adverbs, quantifiers, prepositions, interjections and conjunctions. In Section 4.1, the discussion is focused on the morphological potential of lexical roots; Section 4.2 then shifts to the syntactic distribution of the open word classes; finally, Section 4.3 deals with the closed classes.

4.1 Morphological potential of lexical roots

If we regard the morphological potential of lexical roots in Tajio, we can distinguish three classes: (a) single-class roots, i.e., roots which can only take morphological markers of one root class; (b) dual-class roots, i.e., roots which can take morphological markers of two root classes; (c) multi-class roots, i.e., roots which can take morphological markers of all root classes.

I have chosen the most frequent markers to classify roots as follows: (1) The diagnostic morphological markers of nominal roots are the noun marker te= and the verbalizing circumfix nV--ong ‘to have/own …’ and/or ‘to be …’. Only roots classified as nominal can take these markers. (2) The diagnostic morphological marker of stative roots is the vowel harmonic stative prefix nV- ‘ST.RLS’. Roots which can take this prefix are stative roots. (3) The diagnostic morphological marker of verbal roots can be divided into two types based on the transitivity of the roots: the dynamic intransitive roots take the dynamic intransitive prefix ne-/no- ‘DY.RLS’ and the dynamic transitive roots take the dynamic transitive prefix, i.e., the actor voice prefix noN- ‘AV.RLS’. The morphological markers of stative, dynamic intransitive and dynamic transitive roots also indicate mood alternations, i.e., realis and non-real is. Throughout this chapter the realis marker will be used for the relevant affix sets.

4.1.1 Single-class roots

Single-class roots are roots that can be clearly classified as either nominal, stative or dynamic verbal roots. Dynamic intransitive and dynamic transitive roots are classified as a single class (i.e., verbal roots), because semantically both are dynamic and their morphological potential partially overlaps.

Table 4-1, Table 4-2, Table 4-3 and Table 4-4 present examples of nominal, stative, dynamic intransitive and dynamic transitive roots, respectively.

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12When the circumfix nV—ong occurs with a nominal root or a nominal-verbal root, it generally has the meaning ‘to have/own …’. When it occurs with nominal-stative or nominal-verbal-stative roots, it may mean either ‘to have/own …’ or ‘to be …’.
### Nominal root

<table>
<thead>
<tr>
<th>Nominal root</th>
<th>Morphological marker of nominal roots</th>
<th>Stative marker</th>
<th>Verbal marker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noun marker</td>
<td>Verbalizer nV--ong ‘to have/own…’ and/or ‘to be…’,</td>
<td>nV- ‘ST.RLS’</td>
</tr>
<tr>
<td><em>utu</em> ‘louse’</td>
<td>teutu ‘louse’</td>
<td>noutuong ‘to have a louse/lice’</td>
<td>x</td>
</tr>
<tr>
<td><em>bugis</em> ‘ichthyosis’</td>
<td>tebugis ‘ichthyosis’</td>
<td>nobugisong ‘to have ichthyosis disease’</td>
<td>x</td>
</tr>
<tr>
<td><em>tuai</em> ‘younger sibling’</td>
<td>tetuai ‘younger sibling’</td>
<td>noutuaiong ‘to have a younger sibling/younger siblings’</td>
<td>x</td>
</tr>
<tr>
<td><em>saping</em> ‘cow’</td>
<td>tesaping ‘cow’</td>
<td>nasapinong ‘to have a cow/cows’</td>
<td>x</td>
</tr>
<tr>
<td><em>loka</em> ‘banana’</td>
<td>teloka ‘banana’</td>
<td>nolokaong ‘to have a banana/bananas’</td>
<td>x</td>
</tr>
<tr>
<td><em>bau</em> ‘fish’</td>
<td>tebau ‘fish’</td>
<td>nabauong ‘to have a fish/fish’</td>
<td>x</td>
</tr>
<tr>
<td><em>mejang</em> ‘table’</td>
<td>temejang ‘table’</td>
<td>nemejanong ‘to have a table/tables’</td>
<td>x</td>
</tr>
<tr>
<td><em>tana</em> ‘earth/soil’</td>
<td>temana ‘earth/soil’</td>
<td>natanaong ‘to have earth/soil’</td>
<td>x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stative root</th>
<th>Morphological marker of nominal roots</th>
<th>Stative marker</th>
<th>Verbal marker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noun marker</td>
<td>Verbalizer nV--ong ‘to have/own…’</td>
<td>nV- ‘ST.RLS’</td>
</tr>
<tr>
<td><em>turu</em> ‘to be asleep’</td>
<td>x</td>
<td>x</td>
<td>noturu ‘to be asleep’</td>
</tr>
<tr>
<td><em>buseg</em> ‘to be queasy’</td>
<td>x</td>
<td>x</td>
<td>nobuseg ‘to be queasy’</td>
</tr>
<tr>
<td><em>peit</em> ‘to be bitter’</td>
<td>x</td>
<td>x</td>
<td>nepeit ‘to be bitter’</td>
</tr>
<tr>
<td><em>vosu</em> ‘to be satisfied (food)’</td>
<td>x</td>
<td>x</td>
<td>novosu ‘to be satisfied (food)’</td>
</tr>
<tr>
<td><em>onggom</em> ‘to be cold’</td>
<td>x</td>
<td>x</td>
<td>noonggom ‘to be cold’</td>
</tr>
<tr>
<td><em>ate</em> ‘to be dead’</td>
<td>x</td>
<td>x</td>
<td>naate ‘to be dead’</td>
</tr>
<tr>
<td><em>navu</em> ‘to fall’</td>
<td>x</td>
<td>x</td>
<td>nanavu ‘to fall’</td>
</tr>
<tr>
<td><em>jaok</em> ‘to arrive’</td>
<td>x</td>
<td>x</td>
<td>najaok ‘to arrive’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dynamic intransitive root</th>
<th>Morphological marker of nominal roots</th>
<th>Stative marker</th>
<th>Verbal marker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noun marker</td>
<td>Verbalizer nV--ong ‘to have/own…’</td>
<td>nV- ‘ST.RLS’</td>
</tr>
<tr>
<td><em>nyau</em> ‘to go down’</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><em>soog</em> ‘to stop by’</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><em>lolom</em> ‘to swim’</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><em>ndiis</em> ‘to take a bath’</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><em>lampa</em> ‘to walk’</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><em>se’u-se’u</em> ‘to cry (sobbingly)’</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
Table 4-3: Morphological potential of dynamic intransitive single-class roots

<table>
<thead>
<tr>
<th>Dynamic transitive root</th>
<th>Morphological marker of nominal roots</th>
<th>Stative marker</th>
<th>Verbal marker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noun marker te=</td>
<td>Verbalizer</td>
<td>ne-/no- ‘ST.RLS’</td>
</tr>
<tr>
<td>mberek ‘to stay’</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ngkalerang ‘to lie down’</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 4-4: Morphological potential of dynamic transitive single-class roots

4.1.2 Dual-class roots

The second type of root, the dual-class root, can occur with two different sets of morphological markers. There are three types of dual-class roots: nominal-stative, nominal-verbal, and verbal-stative roots.

a. Nominal-stative roots can take the morphological markers of nominal roots as well as the stative marker.
b. Nominal-verbal roots can take the morphological markers of nominal roots as well as at least one of the dynamic verbal markers.
c. Verbal-stative roots can take the morphological marker of dynamic verbal roots as well as the stative marker.

Table 4-5 and Table 4-6 each present examples of nominal-stative roots. The difference is whether or not they may take the circumfix *nV-ong* so that nominal-statives in Tajio fall into two subclasses: (1) nominal-stative roots which can take the noun marker *te=*, the circumfix *nV-ong* and the stative marker *nV*- as can be seen in Table 4-5; and (2) nominal-stative roots which can only occur with the noun marker *te* and the stative marker *nV*- as presented in Table 4-6. The other hypothetical combination, however, nominal-stative roots that only take the circumfix *nV-ong* and the stative marker *nV*- is not found in the database.

Table 4-5: Morphological potential of dynamic intransitive single-class roots

<table>
<thead>
<tr>
<th>Nominal-stative root</th>
<th>Morphological marker of nominal roots</th>
<th>Stative marker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noun marker <em>te=</em></td>
<td></td>
</tr>
<tr>
<td>balang ‘wound/wounded’</td>
<td>tebalang ‘wound’</td>
<td>nabalang ‘to have a wound/wounds’; ‘to be wounded’</td>
</tr>
<tr>
<td>vatu ‘stone/stony’</td>
<td>tevatu ‘stone’</td>
<td>navatu ‘to have a stone/stones’; ‘to be stony’</td>
</tr>
<tr>
<td>longu ‘grease/greasy’</td>
<td>telongu ‘grease’</td>
<td>nolongu ‘to have grease’; ‘to be greasy’</td>
</tr>
<tr>
<td>sumpi ‘sprout/sprouted’</td>
<td>tesumpi ‘sprout’</td>
<td>nosumpi ‘to have sprouts’; ‘to have sprouted’</td>
</tr>
<tr>
<td>buut ‘mountain/mountainous’</td>
<td>tebuut ‘mountain’</td>
<td>nobuut ‘to have mountains’; ‘to be mountainous’</td>
</tr>
<tr>
<td>avaat ‘wind/windy’</td>
<td>teavaat ‘wind’</td>
<td>naavaat ‘to be windy’</td>
</tr>
</tbody>
</table>
Table 4-5: Morphological potential of nominal-stative dual-class roots type 1

<table>
<thead>
<tr>
<th>Nominal-stative root</th>
<th>Morphological marker of nominal roots</th>
<th>Verbalizer (nV)-(nV)-ong ‘to have/own…’ or ‘to be…’</th>
<th>Stative marker</th>
<th>Verbalizer (nV)-‘ST.RLS’</th>
</tr>
</thead>
<tbody>
<tr>
<td>lenda ‘length/long’</td>
<td>telenda ‘length’</td>
<td>x</td>
<td>nelenda ‘long’</td>
<td></td>
</tr>
<tr>
<td>bilak ‘width/wide’</td>
<td>tebilak ‘width’</td>
<td>x</td>
<td>nebilak ‘wide’</td>
<td></td>
</tr>
<tr>
<td>rosong ‘strength/strong’</td>
<td>terosong ‘strength’</td>
<td>x</td>
<td>norosong ‘strong’</td>
<td></td>
</tr>
<tr>
<td>sanang ‘happiness/happy’</td>
<td>tesanang ‘happiness’</td>
<td>x</td>
<td>nasanang ‘happy’</td>
<td></td>
</tr>
<tr>
<td>doda ‘redness/red’</td>
<td>tedoda ‘redness’</td>
<td>x</td>
<td>nedoda ‘red’</td>
<td></td>
</tr>
<tr>
<td>kunik ‘darkness/dark’</td>
<td>tekunik ‘darkness’</td>
<td>x</td>
<td>nokunik ‘dark’</td>
<td></td>
</tr>
<tr>
<td>nasu ‘anger/angry’</td>
<td>tenasu ‘anger’</td>
<td>x</td>
<td>nanasu ‘angry’</td>
<td></td>
</tr>
<tr>
<td>bule ‘fear/afraid’</td>
<td>tebule ‘fear’</td>
<td>x</td>
<td>nobule ‘afraid’</td>
<td></td>
</tr>
</tbody>
</table>

Table 4-6: Morphological potential of nominal-stative dual-class roots type 2

Table 4-7 and Table 4-8 present examples of nominal-verbal roots. This type of roots can be divided into two subclasses as well: (a) nominal-verbal roots which can take the noun marker \(te=\), the circumfix \(nV\)-\(ong\) and the dynamic intransitive marker \(ne/-no\)-, as shown in Table 4-7; (b) nominal-verbal roots which can only take the noun marker \(te=\) and the dynamic intransitive marker \(ne/-no\)-, as presented in Table 4-8. Nominal-verbal roots which can only take the circumfix \(nV\)-\(ong\) and the dynamic intransitive marker \(ne/-no\)- are again not attested in the database.

<table>
<thead>
<tr>
<th>Nominal-verbal root</th>
<th>Morphological marker of nominal roots</th>
<th>Verbalizer (nV)-(nV)-ong ‘to have/own…’</th>
<th>Verbal marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>vonua ‘house/marry’</td>
<td>tevonua ‘house’</td>
<td>novonuaong ‘to have a house’</td>
<td>nevonua ‘to marry’/‘to have a family’</td>
</tr>
<tr>
<td>tagu ‘friend/to befriend’</td>
<td>tetagu ‘friend’</td>
<td>nataguong ‘to have a friend’</td>
<td>notagu ‘to befriend’</td>
</tr>
<tr>
<td>elong ‘song/sing’</td>
<td>teelong ‘song’</td>
<td>neelonomong ‘to have a song’</td>
<td>neelong ‘to sing’</td>
</tr>
<tr>
<td>jole ‘corn/plant corn’</td>
<td>tejole ‘corn’</td>
<td>nojoleong ‘to have corn’</td>
<td>nejole ‘to plant corn’</td>
</tr>
<tr>
<td>jarita ‘story/to tell a story’</td>
<td>tejarita ‘story’</td>
<td>najaritaong ‘to have a story’</td>
<td>nojarita ‘to tell stories’</td>
</tr>
<tr>
<td>guru ‘teacher/study’</td>
<td>teguru ‘teacher’</td>
<td>noguruong ‘to have a teacher’</td>
<td>neguru ‘to study’</td>
</tr>
<tr>
<td>sapeda ‘bike/to bike’</td>
<td>tesapeda ‘bike’</td>
<td>nasapedaong ‘to have a bike’</td>
<td>nosapeda ‘to bike’</td>
</tr>
<tr>
<td>vua ‘fruit/to bear fruits’</td>
<td>tevua ‘fruit’</td>
<td>nevuauong ‘to have a fruit’</td>
<td>nevua ‘to bear fruits’</td>
</tr>
<tr>
<td>avu ‘kitchen/to cook’</td>
<td>teavu ‘kitchen’</td>
<td>naavuuong ‘to have a kitchen’</td>
<td>noavu ‘to cook’</td>
</tr>
</tbody>
</table>

Table 4-7: Morphological potential of nominal-verbal dual-class roots type 1
Table 4-8: Morphological potential of nominal-verbal dual-class roots type 2

Table 4-9 finally, provides examples of verbal-stative roots. The dynamic verbal marker which attaches to verbal-stative roots is the actor voice marker noN-. Importantly, these roots have to be able to take this marker without any further affixations such as the stem-forming prefix or the causative marker. There are no examples of verbal-stative roots which take the dynamic intransitive prefix ne-/no-.

Table 4-9: Morphological potential of verbal-stative dual-class roots

4.1.3 Multi-class roots

The third type of root is called multi-class root because it can take the morphological markers of all root classes, and could thus be called nominal-verbal-stative roots. They can take the morphological markers of nominal roots (i.e., noun marker te= and/or the circumfix nV--ong), the verbal marker (i.e., the dynamic intransitive prefix ne-/no- ‘DY.RLS’ or the actor voice prefix noN- ‘AV.RLS’) as well as the stative marker (i.e., prefix nV- ‘ST.RLS’). The set of multi-class roots is very limited, as can be seen in Table 4-10 which lists all examples found in the database.
like a man/to act like a playgirl’ | ‘man’ | have a man’ | like a man’ | a playgirl’

| anganak ‘child/childish/to give birth’ | teanganak ‘child’ | naanganakong ‘to have a child/children’ | naanganak ‘to be childish’ | noanganak ‘to give birth’

| asu ‘dog/be like a dog/to hunt with a dog’ | teasu ‘dog’ | naasuqong ‘to have a dog’ | naasu ‘to be like a dog’ | noasu ‘to hunt with a dog’

| vivi ‘lip/to be grumbling/grumble’ | tevivi ‘lip’ | neviviong ‘to be grumbling’ | nevivi ‘to be grumbling’ | novivi ‘to grumble’

Table 4-10: Morphological potential of nominal-verbal-stative multi-class roots

I propose the term dual-class roots to refer to lexical roots which can take the morphological markers of two word classes. I believe this is necessary because the features of such roots in Tajio cannot be captured by the existing terminology I am familiar with. In the remainder of this section, I will explain the reasoning behind this proposal by examining various arguments. This will lead me to the conclusion that dual-class roots are neither (a) polysemous, nor (b) multifunctional lexical bases, nor (c) homonyms, nor (d) two different lexemes. The behavior of multi-class roots, on the other hand, seems to match the criteria proposed for precategorial roots, as discussed under point (e) below.

a) Dual-class roots are not polysemous.

Saeed (1997:64) defines a polysemous item as a lexicon entry with multiple senses where the senses are judged to be related.

This definition does not accurately capture the characteristics of dual-class roots in Tajio. The nominal-stative root vatu, for example, has two potential meanings: ‘stone’ or ‘to be stony’. The core meaning may be related, yet the meaning of the root cannot be determined before it is attached to a nominal or stative morphological marker.

Only once the root has taken the noun marker te= and become tevatu can its meaning (‘stone’) be interpreted. Similarly, it is only once the stative morphological marker nV-, ‘ST.RLS’, is affixed that the meaning of navatu (‘to be stony’) is accessible. Thus one could argue that polysemous words differ from dual-class roots in that they are associated with more than one meaning, none of which is determined by morphological processes the way meanings of dual class roots in Tajio are.

In contrast, for dual-class roots, the possibility of having more than one meaning is due to the fact that they can take morphological markers of two word-classes.

b) Dual-class roots are not multifunctional lexical bases.

Himmelmann (2005:129) defines multifunctional lexical bases as lexical bases which occur in a variety of syntactic functions without further affixation (i.e., lexical bases that are not necessarily marked for voice or person). Quoting Durie (1985:44), he gives the example of the Acehnese base jeu, which allows verbal and nominal uses. As a verb, jeu means ‘to catch with a net’ and as a noun it refers to ‘a type of net’.

Except for nominal roots, all roots in Tajio must have their own morphological markers in order to occur in their respective syntactic functions. For example verbal-stative roots can only have the syntactic distribution of verbs and statives; but they cannot have the syntactic distribution of nouns. Therefore, dual-class roots are not multifunctional lexical bases.

c) Dual-class roots are not homonyms.

Saeed (1997:63–4) defines two or more expressions as homonyms if they share the same pronunciation but have different and unrelated meanings, and are treated as different lexical entries in dictionaries.

The various realizations of a dual-class root are not homonyms because their meanings have a shared origin and are semantically related. The meanings of dual-class roots are not completely different, as is the case for words which are considered homonyms. For example, the nominal-stative root lenda has
two possible meanings based on the morphological markers it takes. It means ‘length’ when it takes the noun marker $te=$, and ‘long’ when it takes the stative marker $nV^- \text{ST.RLS}$. Plainly, ‘length’ and ‘long’ are semantically related; thus dual-class roots are not homonyms.

d) Dual-class roots are not two different lexemes.

One possible analysis of dual-class roots is their classification as different lexemes. This, however, is not a particularly parsimonious analysis because there are many such dual-class roots. This would effectively litter the lexicon with a lot of entries that are clearly related on semantic grounds. In addition, zero derivation cannot be productively applied to change the classification of dual-class roots because as previously discussed, they always have to occur with their respective morphology. To assume that dual-class roots undergo zero derivation would also be problematic as it is difficult to decide which word-class is the basis and which one is the derivation. Suppose we have a nominal-verbal root. It would be arbitrary to propose that, say, the nominal meaning is more basic than the verbal or vice versa because the meaning of a word cannot be determined before a morphological marker is assigned. The word *lapi* means ‘spouse’ if it takes the noun marker $te=$ and ‘to marry’ if it takes the verbal marker $no-$.

Furthermore, the diagnostic morphological markers which are used to classify word classes in Tajio are not derivational markers. They cannot be used productively to change the word class of roots; rather, they themselves classify the roots. If, for example, the stative marker $nV^- \text{ST.RLS}$ were a derivational prefix, one would expect any root to be able to take this prefix and derive a new stative. The same would be true for the nominal marker and the verbal marker. Yet in fact, only roots which are lexically subcategorized for the stative prefix can actually take the stative prefix, and the same holds for nominal and verbal morphology. Therefore, it is more reasonable to classify roots with regard to their morphological markers rather than to analyze them as two different lexemes and then argue, without recourse to evidence, that one of them has undergone zero derivation.

e) Multi-class roots are precategorial.

Himmelmann (2007:274) states that ‘precategorial’ has two interpretations. The first interpretation relates to the definition introduced by Verhaar (1984:2), as cited in Himmelmann (2008:274). According to this definition, *precategorial* applies to bound roots (i.e., roots that do not occur without affixation), if these roots can be assigned to different lexical or syntactic categories, for example, to both nominals and verbals, without being clear that one of the assignments is more basic than the other. In the second interpretation, it may refer to roots, though not necessarily bound ones, that are categorically indistinct with regard to grammatical features. That is, all kinds of derivations – nominal, verbal, stative, etc. – are possible from a given root (Himmelmann 2008:274), again without clear evidence for claiming that one derivation or usage of the unaffixed root is more basic than another.

The preceding two definitions of ‘pre-categoriality’ seem to prove satisfactory for an analysis of the Tajio multi-class roots. In contrast to the other two types of roots, multi-class roots form the only root type which can take the morphological markers of all root-classes, i.e., nominal, stative and verbal roots. Still, use of the term ‘precategorial’ is avoided here, as I consider the term ‘multi-class’ more suitable as it fits the terms single-class and dual-class roots.

Before moving on the next section, a short note on terminology is in order. From now on, general statements pertaining to nominal, stative and dynamic roots are meant to cover all root types. Thus, for example, if a statement is made that a given affix only occurs with stative roots, this means that it occurs with single-class stative roots as well as with dual-class nominal-statives, verbal-statives, and with multi-class nominal-verbal-stative roots.

4.2 Syntactic distribution of nouns and verbs

As mentioned in the previous section, nouns and verbs comprise the open word classes of Tajio with verbs being further divided into intransitive verbs (dynamic intransitive verbs and statives) and dynamic transitive verbs.
It will prove expedient to make explicit some of the terminology that will be used frequently throughout this grammar: ‘dynamic verbs’ will refer to intransitive verbs and transitive verbs, ‘intransitive’ will refer to dynamic intransitive and stative verbs, and dynamic transitive verbs will be referred to simply as transitives.

Predicate function, which can be used to distinguish verbs from nouns in European languages, cannot be similarly applied in Tajio because nouns can be used as predicates without a copula. In such cases their function becomes indistinguishable from intransitives. Examples (1), (2), and (3) show this.

(1) sii a
teguru
sii a
teguru= guru
3SG NM= teacher
‘She/he is a teacher.’

(2) sii a
nelinjok
sii a
ne-linjok
3SG DY.RLS-run
‘She/he ran.’

(3) sii a
noturu
sii a
nV-turu
3SG ST.RLS-sleep
‘She/he slept.’

Although the use of a noun as a predicate results in a distributional overlap between nouns and verbs, there are several restrictions on syntactic position that can be used to distinguish nouns from verbs, and, within the supra-class of verbs, intransitives from transitives. The positions which only nouns can occupy are: (a) prepositional phrases as in example (4); (b) genitive phrases as in example (5).

(4) teanganaknya
nongodung
i
kadera

= te=anganak=nya
nodi ogung
i
kadera
NM=child=3SG GEN
AV.RLS-sit
LOC
chair
‘His/her child sat on the chair.’

(5) tedoda
nukadera
sima
teraa

ten= doda
nu= kadera
sima
te= raa
NM= red
GEN= chair
same
NM= blood
‘The redness of the chair is the same as blood.’

Modifiers are typically stative verbs, but there is no syntactic restriction on the use of a dynamic intransitive as the modifier of a noun phrase. Therefore stative verbs cannot be clearly distinguished from dynamic intransitive verbs syntactically (but see Section 6.3 for the differences in morphological marking on statives and dynamic intransitive which license the distinction). Example (6) presents the stative root *basag* ‘to be big’ and example (7) presents the dynamic intransitive verb *ndiis* ‘to take a bath’, both used as modifiers in noun phrases.

(6) tevonua
nabasag
eua
tevonua=’ u

ten= vonua
nV-basag
eua
ten= vonua=’ u
NM= house
ST.RLS-big
DIST
NM= house= 1SG GEN
‘That big house is my house.’

(7) teanganak
endiis
eua
tempongnya

ten= anganak
ne-ndiis
eua
ten= ompong= nya
NM= child
DY.RLS-bath
DIST
NM= stomach= 3SG GEN

nabasag
pia
nV-basag
pia
ST.RLS-big
very
‘That child who has taken a bath, his stomach is very big.’
In addition, there are examples in which the relative marker to= is used with intransitive verbs to modify their head nouns, as seen in examples (8) and (9). However, the use of the relative marker to= for intransitive verbs is optional.

(8) tevonua [tonabasag] eua tevonua ’u
    te=vonua to=nV-basag eua te=vonua =’u
    NM=house REL=ST.RLS-big DIST NM=house=1SG.GEN
    ‘That big house is my house.’

(9) teanganak [tonendiis] eua teompongnya
    te=anganak to=ne-ndiis eua te=ompong=nya
    NM=child REL=AV.RLS-bath DIST NM=stomach=3SG.GEN
    nabasag pia
    nV-basag pia
    ST.RLS-big very
    ‘That child who has taken a bath, his stomach is very big.’

Unlike intransitives, transitive verbs need the relative marker to= in order to modify a noun in a relative clause. In this case, the relative marker to= is obligatory, as seen in example (10). Without the relative marker, the sentence is ungrammatical, as in (11).

(10) tevevine [tonongoli tebau] siina ’u
    te=vevine to=noN-oli te=bau si=ina =’u
    NM=woman REL=AV.RLS-buy NM=fish HON=mother=1SG.GEN
    ‘The woman who bought fish is my mother.’

(11) *tevevine [nongoli tebau] siina ’u
    te=vevine noN-oli te=bau si=ina =’u
    NM=woman AV.RLS-buy NM=fish HON=mother=1SG.GEN
    For: ‘The woman who bought fish is my mother.’

4.3 Closed word classes

Tajio has the following closed word classes: pronouns, numerals, adverbs, quantifiers, prepositions, conjunctions, interjections, as well as three minor classes: modality markers, verbal auxiliaries and a negator. The following sections will present each closed word class.

4.3.1 Pronouns

There are three sets of pronouns in Tajio: personal pronouns, reflexive pronouns and demonstrative pronouns. Each pronoun set is discussed below in term of its formal and functional aspects.

4.3.1.1 Personal pronouns

Tajio has singular and plural pronouns for the first, second, and third person. A further distinction is made between first-person plural inclusive (includes addressee) and first-person plural exclusive (excludes addressee). It is useful to discuss the singular pronouns apart from plural pronouns as both are formed differently. Table 4-11 gives an overview of both singular and plural forms of the personal pronoun in Tajio.

<table>
<thead>
<tr>
<th>Pronoun</th>
<th>Form</th>
<th>Genitive clitic</th>
<th>Prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td>Independent form</td>
<td>Genitive form</td>
<td>Prefix</td>
</tr>
<tr>
<td>1SG</td>
<td>sia ’u</td>
<td>= ’u</td>
<td>u-</td>
</tr>
<tr>
<td>2SG</td>
<td>sio ’o</td>
<td>=mu</td>
<td>mu-</td>
</tr>
<tr>
<td>3SG</td>
<td>siia</td>
<td>=nya</td>
<td>-</td>
</tr>
<tr>
<td>Plural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1PL.IN</td>
<td>siita</td>
<td>mitta</td>
<td>-</td>
</tr>
<tr>
<td>1PL.EX</td>
<td>siami</td>
<td>niami</td>
<td>-</td>
</tr>
<tr>
<td>2PL</td>
<td>simiu</td>
<td>nimiu</td>
<td>-</td>
</tr>
<tr>
<td>3PL</td>
<td>sisia</td>
<td>nisia</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 4-11: Personal pronouns in Tajio
Singular pronouns can be expressed by independent forms, clitics and prefixes depending on their function. The independent form of the singular pronoun is “siX”, where X is shorthand for additional phonological content. Genitive clitics function as possessors (see also Section 3.2.4), or as objects in undergoer voice constructions (see Section 8.1.2.2.1). In addition, first and second person singular pronouns can occur as prefixes if they are used in non-realis undergoer-voice constructions (see also Section 8.1.2.2.1).

The si element in the singular independent forms cannot be considered a clitic si= or a prefix si-. The reason for analyzing the singular forms as monomorphic is that there is no genitive form derived from the same base. In principle, one could still analyze the singular forms as consisting of a prefix and a bound root, but since the bound root never shows up in any other formation, such an analysis seems not very useful.

The plural forms of the personal pronoun, however, are analyzed here for the same reason as bound roots. With the singular forms, a potential form *si-a' or *si-ia would lack a corresponding genitive form *ni-a' or *ni-ia. The plural forms, on the other hand, do display this kind of correspondence as we observe a regular shift from si- to ni-.

From Table 4-11, it can be seen that the independent and the genitive forms of plural pronouns consist of identical bound forms: ‘1PL.IN’ -ita becomes siita and niiita; ‘1PL.EX’ -ami becomes siami and niam; ‘2PL’ -miu becomes simiu and nimiu. However, the bound form of the third person plural seems to change in a rather irregular manner. Instead of becoming siia and niiia, it occurs as sisia and ninia. Note that the forms *siita and *niita are not attested for the third person plural. Further, it is not possible to analyze these forms as deriving from a bound root *sia because the genitive form *nisia is not acceptable. Another analysis would be to assume that sisia and ninia derive from a bound root ia because this is the element that appears in both forms. This would then leave us with the problem of explaining a residue sis- and nin-, or si-s- and ni-n- for that matter, which also would not make much sense.

There is, however, a third analysis which I think is more convincing. Let us consider the proto forms of the third person pronoun in the Austronesian languages. According to Blust (2009:304), the proto forms of the third person pronouns are *ia ‘3SG’ and *ida ‘3PL’; the proto form of the third person marker is *si. In Tajio, we have siia for ‘3SG’ and sisia for ‘3PL’. From this perspective, it seems that Tajio shows CV reduplication for the plural form. In order to form sisia, the marker *si is reduplicated to si.sia. Then, the derived form undergoes a vowel chain reduction, i.e., the vowel sequence /ii/ is reduced to /l/, and si.sia becomes si.sia. The same analysis is applicable to the genitive form: the genitive prefix ni- precedes ia ‘3PL > ni-ia ‘3PL.GEN’; ni- is then reduplicated to ni.ni.ia and the vowel sequence again is reduced to form ni.ni.a ‘3PL.GEN’. Therefore, the attested forms for the third person plural pronoun in Tajio are sisia and ninia.

From the above discussion, it can be gathered that morphologically plural pronouns consist of bound forms which attach to either the honorific prefix si- or the genitive prefix ni-. Note that the two prefixes are formally identical to the honorific noun marker si= and the genitive marker ni= which I analyze as clitics. The different analyses are due to the fact that in case of plural pronouns there is no syntactic context where the prefixes can be omitted and just the bare roots are used (whereas with the noun marker and the genitive clitics there is a context where the only bare root appears, see Section 7.1.1). The morphological process of the third plural pronoun is more complex than in the other plural pronouns as the prefix si- or ni- seems to be reduplicated. For sake of convenience, however, the plural pronouns in this grammar will be glossed as single units. For example, the third person plural sisia and ninia will be simply glossed as ‘3PL’ and ‘3PL.GEN’, not as si-si-ia ‘RDP-HON-3SG’ or ni-ni-ia ‘RDP-GEN,HON-3SG’.

Personal pronouns in Tajio do not inflect for gender. The third person singular pronoun siia, for example, can be used to refer either to a female or to a male referent, as illustrated in example (16).

(16) siia nongala teanasa
    sisia noN-ala te=anasas
3SG   AV.RLS-take NM=wild.pandanus
      ‘She/he took wild pandanus.’
Plural pronouns also have a honorific function. Honorific pronouns are usually used by speakers to show respect to their addressee or to indicate that the relationship between speaker and addressee is not close. All plural pronouns may be used as honorific pronouns and in those cases take on a singular meaning. Siami ‘1PL.EX’ is used as a humble form of the first person singular; siita ‘1PL.IN’ and simiu ‘2PL’ both act as a honorific form for the second person singular; simiu ‘2PL’ is the standard form of the second person singular. It is more polite than sia ‘2SG’ but less polite than siita ‘1PL.IN’). And sisia ‘3PL’ is a honorific form for the third person singular. In addition to simiu ‘2PL’, tealaemu (lit. ‘yourself’) is also a standard honorific address term for the second person singular. Table 4-12 summarizes the pronominal forms and their corresponding honorific values.

<table>
<thead>
<tr>
<th>Forms</th>
<th>As pronouns</th>
<th>As honorific pronouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>siami</td>
<td>1PL.EX</td>
<td>1SG</td>
</tr>
<tr>
<td>siita</td>
<td>1PL.IN</td>
<td>2SG</td>
</tr>
<tr>
<td>sia’o</td>
<td>2SG</td>
<td>2SG</td>
</tr>
<tr>
<td>sisia</td>
<td>3PL</td>
<td>3SG</td>
</tr>
</tbody>
</table>

Table 4-12: Honorific function in Tajio

From a syntactic perspective, the independent forms of the pronouns are used as i) subjects in intransitive constructions, as shown by example (17); ii) subjects and objects in actor voice constructions, as illustrated by examples (18) and (19), respectively; and iii) subjects in undergoer voice constructions, as in (20).

(17)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Verb with DY marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>sia’u</td>
</tr>
<tr>
<td>2SG</td>
<td>sia’o</td>
</tr>
<tr>
<td>3SG</td>
<td>siia</td>
</tr>
<tr>
<td>1PL.IN</td>
<td>siita</td>
</tr>
<tr>
<td>1PL.EX</td>
<td>siami</td>
</tr>
<tr>
<td>2PL</td>
<td>simiu</td>
</tr>
<tr>
<td>3PL</td>
<td>sisia</td>
</tr>
</tbody>
</table>

‘I/you/she/he/we/they walk/walks.’

(18)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Verb with AV marker</th>
<th>Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>sia’u</td>
<td>tebau</td>
</tr>
<tr>
<td>2SG</td>
<td>sia’o</td>
<td>te=bau</td>
</tr>
<tr>
<td>3SG</td>
<td>siia</td>
<td>NM=fish</td>
</tr>
<tr>
<td>1PL.IN</td>
<td>siita</td>
<td>‘bought’</td>
</tr>
<tr>
<td>1PL.EX</td>
<td>siami</td>
<td>‘fish’</td>
</tr>
<tr>
<td>2PL</td>
<td>simiu</td>
<td></td>
</tr>
<tr>
<td>3PL</td>
<td>sisia</td>
<td></td>
</tr>
</tbody>
</table>

‘I/you/she/he/we/they bought fish.’

(19)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Verb with AV marker</th>
<th>Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>sikasim</td>
<td>nongitai</td>
<td>sia’u</td>
</tr>
<tr>
<td>HON=PN</td>
<td>noN-ita-i</td>
<td>1SG</td>
</tr>
<tr>
<td>‘Kasim’</td>
<td>AV.RLS-look-APPL</td>
<td>sio’o</td>
</tr>
<tr>
<td></td>
<td>‘look at’</td>
<td>2SG</td>
</tr>
<tr>
<td></td>
<td>AV.RLS-buy</td>
<td>siia</td>
</tr>
<tr>
<td></td>
<td>‘Kasim’</td>
<td>3SG</td>
</tr>
</tbody>
</table>

‘Kasim looked at me/you/her/him/us/them.’
Undergoer voice constructions, however, are different in this regard. In realis mode, a pronominal object in undergoer voice constructions must be realized as an enclitic (if singular) or expressed in a genitive form (if plural; see Section 8.1.2.2.1 for more information on realization of subject and object in UV construction). An example for each case is shown in (21).

<table>
<thead>
<tr>
<th>Undergoer</th>
<th>Predicate</th>
<th>Actor</th>
</tr>
</thead>
<tbody>
<tr>
<td>teasu</td>
<td>nirembas</td>
<td>= ’u</td>
</tr>
<tr>
<td>te=asu</td>
<td>ni-rembas</td>
<td>=mu</td>
</tr>
<tr>
<td>NM=dog ‘the/a dog’</td>
<td>UV.RLS-hit</td>
<td>=nya</td>
</tr>
<tr>
<td>niita</td>
<td>1PL.IN.GEN</td>
<td></td>
</tr>
<tr>
<td>niami</td>
<td>1PL.EX.GEN</td>
<td></td>
</tr>
<tr>
<td>nimiu</td>
<td>2PL.GEN</td>
<td></td>
</tr>
<tr>
<td>ninia</td>
<td>3PL.GEN</td>
<td></td>
</tr>
</tbody>
</table>

‘The dog was hit by me/you/her/him/us/them.’

In non-real is undergoer voice constructions, the first and the second person pronominal objects occur as prefixes *u*- and *mu*- as illustrated by examples (22) and (23).

(22) *pamula* upasadia teroong
    *pamula u-pasadia* te=roong
    first 1SG.UV.NRLS-prep NM=leaf

    paulelei
    *pa=u-lele-i*
    SEQ=1SG.UV.NRLS-wither-UV
    ‘Firstly I will prepare the (banana) leaves, and then I will wither them […]’
    (from the narrative *Nonggutu mandura*)

(23) *teulingka* *mupeneki*
    *te=ulingka* *mu-penek-i*
    NM=coconut 2SG.UV.NRLS-climb-UV
    ‘You will climb the coconut.’

Example (24) shows pronouns that occur as possessors in genitive constructions. The enclitic form of the singular pronoun directly follows the possessed noun, while the bound form of the plural pronoun occurs with the genitive suffix *ni*-

<table>
<thead>
<tr>
<th>Possessed noun</th>
<th>Possessor</th>
</tr>
</thead>
<tbody>
<tr>
<td>tesaping</td>
<td>= ’u</td>
</tr>
<tr>
<td></td>
<td>=mu</td>
</tr>
<tr>
<td></td>
<td>=nya</td>
</tr>
<tr>
<td></td>
<td>1SG.GEN</td>
</tr>
<tr>
<td></td>
<td>2SG.GEN</td>
</tr>
<tr>
<td></td>
<td>3SG.GEN</td>
</tr>
</tbody>
</table>
4.3.1.2 Reflexive pronouns

There are three bases that are used to form reflexive pronouns in Tajio: (i) the word alae ‘body’; (ii) the word boto ‘self’; and (iii) a combination of alae and boto.

In order to function as a reflexive pronoun, the base takes the noun marker te= as well as a possessor that has to be attached to it (or follows behind should it be plural). Table 4-13 illustrates reflexive pronoun formations with the word alae ‘body’.

<table>
<thead>
<tr>
<th>Pronoun features</th>
<th>Reflexive forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>te=alae='u &gt; tealae'u</td>
</tr>
<tr>
<td>2SG</td>
<td>te=alae=mu &gt; tealaemu</td>
</tr>
<tr>
<td>3SG</td>
<td>te=alae=nya &gt; tealaenya</td>
</tr>
<tr>
<td>1PL.IN</td>
<td>te=alae niami &gt; tealaenya</td>
</tr>
<tr>
<td>1PL.EX</td>
<td>te=alae niita &gt; tealaenita</td>
</tr>
<tr>
<td>2PL</td>
<td>te=alae nimiu &gt; tealaenimiu</td>
</tr>
<tr>
<td>3PL</td>
<td>te=alae ninia &gt; tealaeninia</td>
</tr>
</tbody>
</table>

Table 4-13: Reflexive pronoun formation with alae ‘body’

Example (25) illustrates tealaenya ‘one’s body’ and tebotonya ‘oneself’ used reflexively. The genitive clitic =nya ‘3SG.GEN’ is co-referential with the actor of the clause, siia ‘3SG’. The semantic role of tealaenya and tebotonya in both clauses is undergoer. As reflexive pronouns, tealaenya and tebotonya can substitute one another.

(25) a. siia nomacingi tealaenya
    siia noN-pacing-i te=alae=nya
    3SG AV.RLS-clean-APPL NM=body=3SG.GEN
    ‘He cleaned himself.’ (lit: ‘He cleaned his body.’)

b. siia nomacingi tebotonya
    siia noN-pacing-i te=boto=nya
    3SG AV.RLS-clean-APPL NM=sel=3SG.GEN
    ‘He cleaned himself.’

Another function of boto ‘self’ is that it can be used as an emphatic adverb meaning ‘self’ or ‘alone’. When boto is used as an adverb, it occurs without a noun marker or a possessor. As an adverb, it can be placed right before the verb or after the verb phrase, and it is always related to the subject. In this function, boto cannot be substituted by alae. Examples are given in (26)–(28).

(26) a. siia boto nelolo e
    siia boto ne-lolo e
    3SG self DY.RLS-search INJ
    ‘He searched (for the antidote) alone/by himself, huh.’
    (from the dialog Campur)

b. *siia alae nelolo e
   For: ‘He searched (for the antidote) alone/by himself, huh’

(27) a. siia notuvu boto
    siia nV-tuvu boto
    3SG ST.RLS-live alone
    ‘He lived alone.’
b. *siia notuva alae
   For: ‘He lived alone.’

(28) a. siia nongala teanganaknya boto
    3SG AV.RLS-take NM=child=3SG GEN self
   ‘She picked up her child by herself.’

b. *siia nongala teanganaknya alae
   For: ‘She picked up her child by herself.’

Example (29) illustrates the third formation type (i.e., combining boto ‘self’ and alae ‘body’). In this construction, the genitive clitic is attached to the word alae ‘body’; boto ‘self’ is placed behind it (in apposition). In contrast to the adverb function above, boto is here related to the object tealaenya, not to the subject siia.

(29) siia nongitai tealaenya boto siia noN-ita-i te=alae=nya boto
    3SG AV.RLS-see-APPL NM=body=3SG GEN self
   ‘He saw him himself.’

Reflexive binding is restricted to core arguments, which means that it can be used to distinguish core arguments from non-core arguments (see Section 8.4.2.3 for details).

4.3.1.3 Demonstratives

There are three demonstratives in Tajio, all of which may occur in a free or a bound form: eini/ini ‘this’, eitu/itu ‘that’ and eua/ua ‘that (distal)’. Eini/ini denotes proximity between the speaker and the item referred to (close to the speaker), eitu/itu is a hearer-based medial form (further away from the speaker, but close to the hearer) and eua/ua is a distal form (far from both speaker and hearer). In terms of morphology, demonstratives do not inflect for number or gender.

In terms of meaning, it seems that there are no differences indicated by the use of free or bound forms of demonstratives, i.e., those which occur with or without <e>. The main difference between both forms is morphological. In word formation, there is a constraint to use the free forms. It is only the bound forms which can attach to a base and derive new words. For example, the base sima ‘as/like’ attaches to ini or itu to form simaini ‘like this’ or simaua ‘like that’. They never occur as *simaeini or *simaeitu. The preposition ri attaches either to ini, itu or ua to form the spatial deictics riini ‘over here’, riitu ‘over there’ or riau ‘over there’, but never *riiini, *riiitu or *riauu (see also Section 4.3.5 for details on preposition functions).

Demonstratives in Tajio can function as (i) adnominal modifiers and (ii) demonstrative pronouns. As modifiers, demonstratives can occur as eini/ini, eitu/itu and eua/ua. They may either modify full noun phrases or personal pronouns. Example (30) shows the demonstrative eua ‘that’ and (31) the demonstrative ini ‘this’ as modifier in a noun phrase construction. Example (32) illustrates the demonstrative ini ‘this’ modifying the personal pronoun siami ‘1PL.EX’. In this case, the demonstrative ini gives a ‘definite’ meaning to the pronoun siami.

(30) telangkai eua nongala tekaca lame i vevine
    te=langkai eua noN-ala te=kaca lame i vevine
    NM=man DIST AV.RLS-take NM=glass from LOC woman
eua
eua
    DIST AV.RLS-take NM=woman
   ‘That man took the glass from that woman.’

(31) see tagu niama niwati eini boi
    sisee tagu ni=ama ni=Wati eini boi
    who friend GEN.HON=father GEN.HON=PN PROX INJ
   ‘Who is the friend of (this) Wati’s father, anyway?’
   (from the dialog Campur)
In addition to modifying nouns and personal pronouns, demonstrative modifiers can convey a temporal meaning (i.e., temporal usage). In their temporal functions, demonstratives occur in the forms *eini*/*ini*, *eitu*/*itu* and *eua*/*ua*. In order to indicate specific time reference, demonstratives are usually used together with adverbs of time (see also Section 4.3.5). For example, *paame ini* and *kukua ini* refer to the time at the moment of speaking or immediately thereafter. *Paame itu* or *kukua itu* and *kukua ua*, on the other hand, refer to a certain point in the past. With regard to the distance between the reference point and the moment of speaking, *paame itu*/*kukua itu* is used to refer to an immediate or very recent reference point, while *kukua ua* refers to a more remote past. Examples are given in (33)–(36).

(33)  
\[
\begin{align*}
\text{sia'\text{'u}} & \quad \text{moabutmo} & \quad \text{ini} \\
\text{sia'\text{'u}} & \quad \text{mo-abut}=\text{mo} & \quad \text{ini} \\
\text{1SG} & \quad \text{DY.NRLS-cut.grass=} \text{COMP} & \quad \text{PROX} \\
\end{align*}
\]

‘I’m about to cut the grass now.’

(from the dialog Campur)

(34)  
\[
\begin{align*}
\text{sia'\text{'u}} & \quad \text{metensile} & \quad \text{mao} & \quad \text{moleler} & \quad \text{vai} & \quad \text{paame} \\
\text{sia'\text{'u}} & \quad \text{mV-tensile} & \quad \text{mao} & \quad \text{mo-leler} & \quad \text{vai} & \quad \text{paame} \\
\text{1SG} & \quad \text{DY.RLS-go home} & \quad \text{go} & \quad \text{DY.NRLS-draw} & \quad \text{too} & \quad \text{at.the.moment} \\
\text{ini} & \quad \text{PROX} \\
\text{ini} & \quad \text{PROX} \\
\end{align*}
\]

‘I will go home, (I’ll) go to draw (logs), too, a moment later.’

(from the dialog Noasu)

(35)  
\[
\begin{align*}
\text{yami} & \quad \text{payo} & \quad \text{tealaemu} & \quad \text{kukua} & \quad \text{itu} \\
\text{yami} & \quad \text{payo} & \quad \text{te=alae}=\text{mu} & \quad \text{kukua} & \quad \text{itu} \\
\text{from} & \quad \text{where} & \quad \text{NM}=\text{body}=2\text{SG.HON} & \quad \text{at.moment} & \quad \text{MED} \\
\end{align*}
\]

‘Where did you come from just now.’

(from the dialog Campur)

(36)  
\[
\begin{align*}
\text{simenar} & \quad \text{sono} & \quad \text{sidaudik} & \quad \text{menek} & \quad \text{nongala} \\
\text{si=}\text{Menar} & \quad \text{sono} & \quad \text{si=}\text{Daudik} & \quad \text{N-penek} & \quad \text{noN-ala} \\
\text{HON=}\text{PN} & \quad \text{with} & \quad \text{HON=}\text{PN} & \quad \text{AV.RLS-go.up} & \quad \text{AV.RLS-take} \\
\text{kukua} & \quad \text{ua} \\
\text{kukua} & \quad \text{ua} \\
\text{at.the.moment} & \quad \text{DIST} \\
\end{align*}
\]

‘Menar and Daudik went up to take (the pig) at that time.’

(from the dialog Noasu)

In pronoun function, demonstratives may refer back to referents that have been introduced in the preceding discourse (i.e., an anaphoric function). Examples are given in (37) and (38). The antecedent is underlined and the anaphoric demonstrative is given in bold. The antecedent and the anaphoric demonstratives are expressed in two clauses, thus the first and the second clause in the following examples are separated by double slash (/\).
The compound forms *simaini* ‘like this’ and *simaua* ‘like that’ are used to refer to the proposition they precede or follow, respectively. *Simaini* in example (39) precedes its reference and functions cataphorically; *simaua* in example (40) follows the proposition and functions anaphorically.

(39) **nuarnya**

  ni-ular=nya **simaini** // tesando **1.SG**
  na **te=sando** **ua** levainomo

  UV.RLS-say=3SG **like.this** // **NM**=medicine.man **DIST**
  call-APPL=COMP

  metensile **nuarnya**
  ni-ular=nya **simaini** // te=sando **ua** levai

  me-tenstile **nu-ular=nya**
  sia’u nV-jolo=mo **nia**

  DY.NRLS-return **UV.RLS-say=3SG** **1.SG**
  ST.RLS-cold=COMP **very** **PROX**

  ‘That medicine man said this, “call (her) to go home. I’m very cold at the moment”.’

  (from the narrative *Sejarah Kasimbar*)

(40) **jari**

  tekekayaan **ninia**
  riama ni-sarakan

  so **NM=wealth** **3PL.GEN**
  over.there **UV.RLS-hand.over**

  mai **ranang** // **simaua**
  te=perjanjian=nya

  mai **Ranang** // **simaua**
  te=perjanjian=nya

  DIR **PN** // **like.that**
  NM=agreement=3SG

  ‘So, their wealth over there (in Mandar’s land) would be handed over to Ranang, that was the agreement.’

  (from the narrative *Tana Tajio*)

Another pronominal use is illustrated by examples (41), in subject relation, and (42) in object relation. Here demonstratives bear a situational-associative function, referring to objects that are immediately accessible/salient in a given context. In this distribution, demonstratives always occur in their full forms as *eini*, *eitu* and *eua*, never as *ini*, *itu* and *ua*.

(41) **eini**

  naayapo

  eini **nV-ayapo**

  PROX **ST.RLS-itchy**

  ‘This is itchy.’

  (In this context, the speaker used the demonstrative *eini* ‘this’ to refer to his body)

(42) **sia’u**

  neroko’ **eitu**

  sia’u ne-roko’ **eitu**

  **1.SG** **DY.RLS-smoke** **MED**

  ‘I smoked that.’

  (In this context, the speaker used the demonstrative *eitu* ‘that’ to refer to cigarettes that were placed on the table).

In (43), *eua* functions as the sole argument of an equational clause. In this kind of pronominal use, demonstratives also occur in the full forms.

(43) **eua**

  temotornya **siia**
  mombava

  **eua** **te=motor=nya** **siia**
  moN-bava

  **DIST** **NM=motorbike=3SG.GEN** **3SG**
  AV.NRLS-bring

  ‘That’s his motorbike, he will ride (it).’

  (from the dialog *Campur*)
4.3.2 Numerals

Numerals form a closed class that consists of free and prefixed forms. The free forms are used for counting while the prefixed forms appear as counting units (ten, hundred, etc.) or before classifiers and measure nouns. Morphophonologically, only the prefixed form of ‘one’ is vowel harmonic. All prefixed forms may occur with the nasal ligature (cf. Section 2.8.1). The list of basic numerals in Tajio is given in Table 4-14.

<table>
<thead>
<tr>
<th>Numeral</th>
<th>Free form</th>
<th>Prefix form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>saanit</td>
<td>$sV$-($N$)-</td>
</tr>
<tr>
<td>2</td>
<td>roruwa</td>
<td>$ro$-($N$)-</td>
</tr>
<tr>
<td>3</td>
<td>totolu</td>
<td>$tolu$-($N$)-</td>
</tr>
<tr>
<td>4</td>
<td>aapat</td>
<td>$aapa$-($N$)-</td>
</tr>
<tr>
<td>5</td>
<td>lelima</td>
<td>$lima$-($N$)-</td>
</tr>
<tr>
<td>6</td>
<td>oonong</td>
<td>$oono$-($N$)-</td>
</tr>
<tr>
<td>7</td>
<td>pepitu</td>
<td>$pitu$-($N$)-</td>
</tr>
<tr>
<td>8</td>
<td>ualu/oalu</td>
<td>$oalu$/$oalu$-($N$)-</td>
</tr>
<tr>
<td>9</td>
<td>sesio</td>
<td>$sesio$-($N$)-</td>
</tr>
</tbody>
</table>

Table 4-14: Free and prefixed numerals in Tajio

Basic counting units in Tajio are pulu for tens, gatus for hundreds, ribu for thousands and juta for millions. Counting in Tajio generally follows the pattern presented in Table 4-15.

<table>
<thead>
<tr>
<th>Numeral</th>
<th>sompulu saanit</th>
<th>21</th>
<th>rompulu saanit</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>sompulu roruwa</td>
<td>30</td>
<td>toltumpulu</td>
</tr>
<tr>
<td>12</td>
<td>sompulu totolu</td>
<td>40</td>
<td>aapampulu</td>
</tr>
<tr>
<td>13</td>
<td>sompulu aapat</td>
<td>50</td>
<td>limampulu</td>
</tr>
<tr>
<td>14</td>
<td>sompulu lelima</td>
<td>60</td>
<td>onompulu</td>
</tr>
<tr>
<td>15</td>
<td>sompulu oonong</td>
<td>70</td>
<td>pitumpulu</td>
</tr>
<tr>
<td>16</td>
<td>sompulu pepitu</td>
<td>80</td>
<td>oalumpulu</td>
</tr>
<tr>
<td>17</td>
<td>sompulu ualu/oalu</td>
<td>90</td>
<td>sesiompulu</td>
</tr>
<tr>
<td>18</td>
<td>sompulu sesio</td>
<td>100</td>
<td>sagatus</td>
</tr>
<tr>
<td>19</td>
<td>rompulu</td>
<td>1000</td>
<td>seribu</td>
</tr>
</tbody>
</table>

Table 4-15: Decimal counting in Tajio

As stated above, the prefixed forms can also occur before classifiers and measure nouns. This is illustrated in Table 4-16 below. The nasal ligature -$N$- may or may not occur between numeral prefixes and classifiers or measure nouns. If it occurs, it assimilates to the first consonant of the classifiers or the measure noun (see Section 2.8 for details on the homorganic change of the nasal ligature).

The use of the nasal ligature may vary and its occurrence is lexically related to the bases (i.e., classifiers or measure nouns) it attaches to. There are bases which the nasal ligature always occurs with; there are bases which the nasal ligature may or may not occur with; and there are also bases which the nasal ligature never occurs with. See also Sections 7.1.3 for a discussion of modifier constructions.
Another numeral formation that uses prefixes is the formation of ordinal numbers. Except *pamula* ‘first’, the formation of ordinals in *Tajio* uses the prefix *kV-*. This vowel prefix is vowel harmonic, but it follows regularities different from other vowel harmonic prefixes (see Section 2.8.6). The ordinal number system in *Tajio* is summarized in Table 4-17.

<table>
<thead>
<tr>
<th>Ordinal number</th>
<th>Ordinal numeral word</th>
<th>Ordinal number</th>
<th>Ordinal numeral word</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td><em>pamula</em></td>
<td>10th</td>
<td><em>kosompulu</em></td>
</tr>
<tr>
<td>2nd</td>
<td><em>kororuwa</em></td>
<td>11th</td>
<td><em>kosompulu saanit</em></td>
</tr>
<tr>
<td>3rd</td>
<td><em>kototolu</em></td>
<td>20th</td>
<td><em>korompulu</em></td>
</tr>
<tr>
<td>4th</td>
<td><em>kaapat</em></td>
<td>21st</td>
<td><em>korompulu saanit</em></td>
</tr>
<tr>
<td>5th</td>
<td><em>kalelima</em></td>
<td>30th</td>
<td><em>kotolumpulu</em></td>
</tr>
<tr>
<td>6th</td>
<td><em>koonong</em></td>
<td>40th</td>
<td><em>kaapampulu</em></td>
</tr>
<tr>
<td>7th</td>
<td><em>kapepitu</em></td>
<td>50th</td>
<td><em>kalmampan</em></td>
</tr>
<tr>
<td>8th</td>
<td><em>kaualu</em></td>
<td>100th</td>
<td><em>kasagatus</em></td>
</tr>
<tr>
<td>9th</td>
<td><em>kasesio</em></td>
<td>1000th</td>
<td><em>kaseribu</em></td>
</tr>
</tbody>
</table>

Table 4-17: Ordinal number system in *Tajio*

*Tajio* uses the word *kaning* ‘time(s)’ attached to numeral prefixes in order to express ‘how many time(s)’. Again, the ligature *-N* may or may not occur between the numeral prefixes and *kaning*. For example: *sangkaning* ‘*sV-N-kaning*’ ‘one time’, *rongkaning* ‘*ro-N-kaning*’ ‘two times’, but *sompulu kaning* ‘ten times’ etc.

Syntactically, numerals can be used as nominal modifiers and they are usually combined with classifiers (see Section 7.1.3).

### 4.3.3 Adverbs

*Tajio* can build adverbs from stative and dynamic intransitive verbs in a productive process of adverb formation. This can be seen in the discussion of control construction (Section 8.4.1.2) or examples of secondary predicates in Section 8.4.1.5. The types of adverbs analyzed in this section are unproductive adverbs which can be categorized as follows: i) intensifying adverbs, ii) temporal adverbs, iii) directional adverbs, iv) locational adverbs and v) limiting adverbs.

#### 4.3.3.1 Intensifying adverbs

The intensifying adverbs in *Tajio* are: *pia* ‘very, really’ and *bega* ‘too, very, really’. *Pia* can be used to modify a verb, and then directly follows behind. It can both modify stative and non-stative verbs, as can be seen in examples (44)–(47).

(44) *nagaya* *pia* *vai* *ba* *tomogurang* *eua* *naambo’*

*(nV-gaya) pia vai ba tomogurang eua nV-ambo’*

**ST.RLS-handsome very too INJ old.man DIST ST.RLS-special**

‘That old man, too, is very handsome, special.’ (from the dialog *Sejarah Kasimbar*)
In contrast, *bega* ‘too, very, really’ can only modify stative predicates, as illustrated in the following examples.

(48) **ane**  moduut  *bega*  emei  sikola  biasa
  **if**  **ST.NRLS-close**  **very**  **from**  **school**  **usually**

  nipotanyai ’u
  ni-po-tanya-i=’u
  UV.RLS-SF-APPL=1SG.GEN
  ‘If it is close to the school, I usually ask about (it).’ (from the dialog *Campur*)

(49) **novosu**  *bega*  teompong
  **ST.RLS-satisfied**  **very**  **NM=stomach=1SG.GEN**
  ‘My stomach was so full.’ (from the dialog *Campur*)

### 4.3.3.2 Temporal adverbs

Temporal adverbs may consist of a single lexeme, an adverb phrase (i.e., a phrase combining a temporal adverb and a demonstrative) or a combination of adverbs (i.e., combinations of two temporal adverbs, or a temporal adverb and another adverb). Adverbs that can be combined with temporal adverbs are, for example, *minyei* ‘next’, *simaini* ‘like this’ and *simaua* ‘like that’. The meaning of a compound adverb is related to the meaning of its component parts. In addition, there are two temporal adverbs that occur with prepositional *i* ‘at, in’: *i vengi* ‘yesterday’ and *i mondoung* ‘in the night’. Examples of temporal adverbs in Tajio are listed in Table 4-18.
### Table 4-18: Simple adverbs and complex temporal adverbs in Tajio

<table>
<thead>
<tr>
<th>Single lexemes</th>
<th>Adverb phrases</th>
<th>Adverb combinations</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>lemani</em> ‘now’</td>
<td><em>paame itu; kukua itu</em> ‘just now’ (recent past)</td>
<td><em>paame mondoung</em> ‘later to night’</td>
</tr>
<tr>
<td><em>kukua</em> ‘just now/ previously’</td>
<td><em>paame ini; kukua eiti/eiti</em> ‘at this time’</td>
<td><em>dodondong minyei</em> ‘in the next morning’</td>
</tr>
<tr>
<td><em>paame</em> ‘later’</td>
<td><em>kukua ua</em> ‘at that time’</td>
<td><em>i vengi mariulu</em>¹ ‘last day’</td>
</tr>
<tr>
<td><em>boang</em> ‘tomorrow’</td>
<td><em>mondoung eiti</em> ‘this night/tonight’</td>
<td><em>boang dodondong</em> ‘tomorrow morning’</td>
</tr>
<tr>
<td><em>dodondong</em> ‘in the morning’</td>
<td><em>paame mondoung</em> ‘later to night’</td>
<td><em>beimbengi simaini</em> ‘in the afternoon like this’</td>
</tr>
<tr>
<td><em>beimbengi</em> ‘in the afternoon’</td>
<td><em>i vengi mariulu</em>¹ ‘last day’</td>
<td><em>sompulu pariya simaua</em> ‘ten years like that’</td>
</tr>
<tr>
<td><em>mariulu; iulu</em> ‘formerly, it used to be, earlier’</td>
<td><em>i vengi</em> ‘yesterday’</td>
<td></td>
</tr>
<tr>
<td><em>sembengi</em> ‘last night, last time’</td>
<td><em>mondoung eiti</em> ‘this night/tonight’</td>
<td></td>
</tr>
<tr>
<td><em>toukmao</em> ‘after that’</td>
<td><em>i vengi</em> ‘yesterday’</td>
<td></td>
</tr>
<tr>
<td><em>paame itu; kukua itu</em> ‘just now’ (recent past)</td>
<td><em>i vengi</em> ‘yesterday’</td>
<td></td>
</tr>
<tr>
<td><em>paame ini</em>; <em>kukua eiti/ eiti</em> ‘at this time’</td>
<td><em>i vengi</em> ‘yesterday’</td>
<td></td>
</tr>
<tr>
<td><em>kukua ua</em> ‘at that time’</td>
<td><em>mondoung eiti</em> ‘this night/tonight’</td>
<td></td>
</tr>
</tbody>
</table>

Syntactically, temporal adverbs modify the whole clause. They are very mobile: they can be placed in clause-initial, in clause-final position or in clause-medial position. However, in transitive constructions adverbs cannot be placed between the verb and its object. Examples in (50) illustrate possible placement options for temporal adverbs.

(50) a. *siama’u* nonuda tepae *i vengi*

   si=ama=’u

   HON=father=1SG.GEN

   *AV.RLS-plant*

   *NM=rice*

   yesterday

   ‘My father planted rice yesterday.’

b. *i vengi* siama’u nonuda tepae

   *i vengi*

   *si=ama=’u*

   *HON=father=1SG.GEN*

   *AV.RLS-plant*

   *NM=rice*

   ‘My father planted rice yesterday.’

c. *siama’u* *i vengi* nonuda tepae

   *siama’u*

   *i vengi*

   *HON=father=1SG.GEN*

   *AV.RLS-plant*

   *NM=rice*

   ‘My father planted rice yesterday.’

### 4.3.3.3 Directional and positional adverbs

There are four expressions that can be used as directional adverbs: *minyei* ‘hither/upwards/landwards’, *minyau* ‘downwards/seawards’, *malae* ‘upwards’ and *ariong* ‘downwards’. *Minyei* and *minyau* can function as motion verbs and directional adverbs, *malae* can only function as a directional adverb, *ariong* can function as a directional adverb or a positional adverb.

Examples (51) and (52) show *minyei* and *minyau* as motion verbs, functioning as the only predicate in the clause. It should be noted that these two items are not marked by the “default” dynamic intransitive/transitive markers, i.e., *ne/-me; no/-mo-* ‘DY.RLS/NRLS’ or *noN/-moN-* ‘AV.RLS/NRLS’ when used as motion verbs. *Minyei* and *minyau* cannot be analyzed as non-real passive forms because the predicted realis forms *nin yei* and *nin yau* are not attested in Tajio. As motion verbs, *minyei* and *minyau* are glossed as ‘go here’ and ‘go there’, respectively.

(51) *sisia*  *minyei* mariul umo

   *sisia*  *minyei*

   *HON=father=1SG.GEN*

   *AV.RLS-plant*

   *at.first=COMP*

   ‘They went there first (before someone else).’

(52) *sisia*  *minyei* mariul umo

   *sisia*  *minyei*

   *HON=father=1SG.GEN*

   *AV.RLS-plant*

   *at.first=COMP*

   ‘They went there first (before someone else).’

¹ *Mariulu* might be a stative verb because it can also occur with the completive aspect =mo, *mar i ul umo.* However, there is no further evidence beside the use of =mo because the expected realis form *nariulu* is not acceptable.
Examples (53) and (54) illustrate minyei and minyau as directional adverbs. As adverbs minyei means ‘hither/upwards/landwards’ and minyau means ‘downwards/seawards’. As verbal modifiers, they mostly occur after the verb. The modified verb and the directional adverb in the examples are given in bold.

(53) nituutnya teogo minyei
ni-tuut=nya te=ogo minyei
UV.RLS-follow=3SG NM=water upwards
‘He (the Mandar) followed the river upwards.’
(from the narrative Tana Tajio)

(54) sisia ja mombava minyau
sisia ja moN-bava minyau
3PL FOC AV.RLS-bring downwards
‘They’ll bring (the cocoa) down there.’
(from the dialog Campur)

In addition, minyau and minyei can be used in multi-verb constructions (see Section 9.3.3).

Examples (55) and (56) show malae and ariong as directional adverbs. Just like the adverbs minyei and minyau, they mostly occur after the verb.

(55) noduutmo malae nipaasmo tesapatu
nV-duut=mo malae ni-paas=mo te=sapatu
ST.RLS-near=COMP upwards UV.RLS-take off=COMP NM=shoes
‘Approaching upwards, (I) took off the shoes.’
(from the narrative Nongala tebulagon)

(56) natanda’ ariong i una una jamo sentilang
nV-tanda’ ariong i Una-Una jamo sentilang
ST.RLS-arrive downwards LOC PN only half
‘(The bananas) arriving downwards at Una-Una, only half (of them) were left.’
(from the dialog Campur)

Ariong ‘downwards’ can occur with or without a preposition. Without a preposition it has a locative meaning. Thus, it can be classified as a positional adverb, as illustrated by example (57).

(57) niperoko’u vai roko’nya rombuu
ni-pe-roko’=’u vai roko’=nya ro-N-buu
UV.RLS-SF-cigarette=1SG.GEN just cigarette=3SG.GEN two-LIG-CLF

ariong ariong downwards
‘I’ve just smoked two of his cigarettes there (a place downward to his position now).’
(from the dialog Campur)

Prepositions that can precede ariong are i ‘at, to’, yami ‘from’ and ariong may also form a spatial deictic riariong ‘down there’ (see also Section 4.3.5). When it occurs with i and yami, it expresses a directional meaning, as in (58).

(58) yami ariong vonua meniang jawamu
yami ariong vonua meniang Java=mu
from downwards house mother.in.law Java=2SG.GEN
‘Are you (coming) from down (there), from your Javanese mother-in-law’s house?’
(from the dialog Campur)
4.3.3.4 Limiting adverbs

Limiting adverbs restrict the set of potential referents being talked about. The limiting adverb in Tajio is *jamo* ‘only’. *Jamo* occurs before the modified unit, but it does not always need to be adjacent to it. It can modify either nouns or pronouns. Compare examples (59)–(62).

(59)  
\[ \text{jamo uveenao tevavi sio’o paame ini} \]  
\[ \text{just 1SG.AV.NRLS.give.APPL NM=pig 2SG later PROX} \]  
*I’ll only give you a pig later this time.*

(from the dialog *Noasu*)

(60)  
\[ \text{menek minyei siami dodondong jamo} \]  
\[ \text{N-penek minyei siami dodondong jamo} \]  
\[ \text{tailikonya rua} \]  
\[ \text{tailiko=nya rua} \]  
\[ \text{shit=3SG.GEN over.there} \]  
*‘We went up here in the morning, only (the pig’s) shit was there.’*  

(from the dialog *Noasu*)

(61)  
\[ \text{jamo tevavi i lalong nuogo niular} \]  
\[ \text{jamo te=vavi i lalong nu=oigo ni-ular} \]  
\[ \text{nianton} \]  
\[ \text{ni=Anton} \]  
\[ \text{GEN.HON=PN} \]  
*‘Only the pig in the river, said Anton.’*  

(from the dialog *Noasu*)

(62)  
\[ \text{jamo sisia rotoo sikadar} \]  
\[ \text{jamo sisia ro-too si=Kadar} \]  
\[ \text{only 3PL two-CLF.person HON=PN} \]  
*‘Only they two including Kadar (he and Kadar pulled the logs).’*  

(from the dialog *Noasu*)

4.3.4 Quantifiers

Quantifiers form a closed class including words like *jojoo* ‘all’, *soia* ‘how many/much’ and *lasia* ‘some’. As they are used in modifier constructions, quantifiers are discussed in more detail in Section 7.1.3.3.

4.3.5 Prepositions

Following the types of prepositions classified by Van den Berg (1989) in Muna, prepositions in Tajio can be divided into two types: local prepositions and non-local prepositions. Local prepositions precede nouns that refer to locations or a deictic element, for instance *i* and *ri* ‘at, to’. There are at least four prepositions with the meaning ‘from’: *yami, mami, emei/mei* and *lame/lamei/lami*. These forms are said to be virtually equivalent to each other. Non-local prepositions in Tajio include *mao* ‘for’, which is used in applicative constructions, *sono* ‘with’, which is used as comitative marker or for marking instrumental nouns, and *sampe/sampai* ‘until, as long as’, which is borrowed from Indonesian *sampai* ‘until’.

Depending on the area, there are small differences between the dialects: the local prepositions *i* and *ri* are both used in Tajio Kasimbar. Tajio Sienjo, on the other hand, only makes use of the local preposition *ri*. In Tajio Sienjo, *ri* can be attached to any kind of noun as well as to deictic elements. In Tajio Kasimbar, however, *ri* can only be attached to deictic elements. Other nouns mostly occur with *i*, and only rarely with *ri*. In addition to local nouns, *i* and *yami* can also be used with nouns denoting time.

Spatial deictics can also co-occur with other prepositions. Depending on the context, they can denote the time or place of events. Table 4-19 provides examples for *i, yami, and ri* in the Kasimbar dialect.
<table>
<thead>
<tr>
<th>Functions</th>
<th>Prepositions</th>
<th>Tajio Kasimbar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denoting locations</td>
<td><em>i</em> ‘at, in’</td>
<td><em>i vonua</em> ‘in the house’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>i sakola</em> ‘at school’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>i lalong nukaranjing</em> ‘in the basket’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>i Siaga</em> ‘in Siaga’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>i Toriapes</em> ‘in Toriapes’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>i sia’u</em> ‘at me’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>i siia</em> ‘at her’/’him’</td>
</tr>
<tr>
<td></td>
<td><em>yami</em> 14 ‘from’</td>
<td><em>yami puu nu ayu</em> ‘from the tree’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>yami Makassar</em> ‘from Makassar’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>yami sisia</em> ‘from them’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>lamei pae pulu</em> ‘made of glutinous rice’</td>
</tr>
<tr>
<td>Denoting time</td>
<td><em>i</em> ‘at, in’</td>
<td><em>i vengi</em> ‘yesterday’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>i mondoung</em> ‘at night’</td>
</tr>
<tr>
<td></td>
<td><em>yami</em> ‘from’</td>
<td><em>yami tinting sesio</em> ‘from nine o’clock’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>yami Juma</em> ‘from Friday’</td>
</tr>
<tr>
<td>Deictic elements</td>
<td><em>ri</em></td>
<td><em>riini</em> ‘over here’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>riitu</em> ‘over there’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>riua/rua</em> ‘over there’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>riamai</em> ‘over there (far away)’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>riata</em> ‘up there’</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>riariong</em> ‘down there’</td>
</tr>
<tr>
<td>Preposition plus spatial deictic</td>
<td><em>yami rua</em> ‘from there; since that time’</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>yami riini</em> ‘from here’</td>
<td></td>
</tr>
</tbody>
</table>

Table 4-19: Examples of prepositional use in Tajio Kasimbar

Prepositions always precede nouns. In prepositional phrases, nouns do not take the noun marker *si=.* Examples are given in (63)–(65).

(63) `teeleo lanta-lantapi vamba nudadat euat
   te=eleo lanta-lantapi vamba nu=dagat euat
   NM=sun Bi-RDP~sink LOC surface GEN=sea DIST
   ‘The sun sank toward the surface of the sea.’
   (from the dialog Campur)

(64) `jio nuarmu yami pampang nuogo
   jio ni-uar=mu yami pampang nu=ogo
   no UV.RLS=2SG from side GEN=river
   ‘No, you said from the river side.’
   (from the dialog Campur)

(65) `sisia kan tonajaok lami puri lami salatan
   sisia kan to=nV-jaok lami puri lami salatan
   3SG.HON INJ REL=ST.RLS-arrive from last from south
   ‘Wasn’t he the last one who arrived from the south?’
   (lit. ‘He was the one who arrived from the very end, from the south.’)
   (from the dialog Sejarah Kasimbar)

Spatial deictics in Tajio can occur alone without a preposition as can be seen in (66)a. In addition, they can co-occur in apposition with other prepositional phrases referring to the same location, as illustrated in examples (66)b and c.

(66) a. `siami neende ompo riamai
   siami nV-ende ompo riamai
   1PL.EX ST.RLS-long still over.there
   ‘We stayed over there for a longer time.’
   (from the dialog Campur)

---

14 In all these cases, *yami* can be substituted by *lami* and the other variants forms mentioned above.
b. mao riata i loteng
mao riata i loteng
‘Go up there, to the attic.’ (from the dialog Campur)

c. sio’o epek nyaa mendis riua
sio’o Epek nyaa me-ndiis riua
2SG PN IMP.NEG DY.NRLS-bath over.there
i ulu
i ulu
LOC upper.course
‘You, Epek, don’t take a bath over there at the upper course.’ (from the dialog Noasu)

The preposition sampe/sampai ‘until’ precedes nouns denoting time, as illustrated in examples (67)–(69). In addition, it may have a locative reading if it co-occurs with a local preposition, as seen in (70).

(67) sampe lemani nitopeaomo kasimbar
sampe lemani ni-tope-ao=mo Kasimbar
until now UV.RLS-name-APPL=COMP PN
‘Until now, it has been called Kasimbar.’ (from the narrative Kasimbar)

(68) lima menit sampe sompulu nupetaangi
lima menit sampe so-N-pulu nu-pe-taang-i
five minute until one-LIG-ten UV.NRLS-SF-wait-APPL
amaimo tereaksinya
amai=mo te=reaksi=nya
EXIST=COMP NM=reaksi=3SG.GEN
‘There will be a reaction of the (poison) after waiting for five until ten minutes.’ (from the narrative Tesumpit)

(69) teeleo nujuma’ sampe ndoung juma’
te=eleo nu=Juma’ sampe mondoung Juma’
NM=day GEN=Friday until night Friday
‘From Friday (noon) until Friday night.’ (from the dialog Campur)

(70) nabasag pia tealova sampe i kampung
nV-basag pia te=alova sampe i kampung
ST.RLS-big very NM=flood until LOC village
niami
niami
1PL.EX.GEN
‘The flood is very big, it reached our village.’

4.3.6 Conjunctions

Conjunctions are used to connect words, phrases, or clauses. There are two types of conjunctions in Tajio: coordinating conjunctions and subordinating conjunctions. Coordinating conjunctions are used when the conjoined elements have the same rank. Subordinating conjunctions are used when the conjoined elements are assigned unequal rank, one of them acting as subordinate to the other (cf. Schachter and Shopen 2007:45--52).

There are three types of coordinating conjunctions in Tajio: (i) conjunctive coordination involves the use of the comitative marker sono ‘with’; (ii) disjunctive coordination is marked by ela ‘or’ or ataulato ‘or’ (the latter is borrowed from Indonesian atau ‘or’); (iii) adversative coordination which is marked by the conjunction boi ‘but’ or tetapi/tapi ‘but’, again a loan word from Indonesian. Coordinators in Tajio are prepositive, i.e., preceding the coordinand.
Subordinating conjunctions in Tajio include complementizers, relativizers and adverbializers. Complement clauses are not always overtly marked by conjunctions. If they are marked, the conjunction used is *ane* ‘if’. Relative clauses are marked by the use of the relative marker *to=*. Adverbial clauses are marked as follows: (i) time clauses are marked by *pas/papas* ‘when’, *sarongnya* ‘while’, *touk* or *notouk*(mo) ‘after’, *jiopo* or *jopo* ‘before’, *sementara* ‘while’ and *waktu* (which also occurs as *i waktu*) ‘as’; (ii) counterfactuality is marked by *ane* ‘if’; (iii) concession is marked by *ompo* ‘although’; (iv) purpose is marked by the subordinator *tau* ‘so that’ and *supaya* ‘so that’; and (v) causation in Tajio is marked by *apa* ‘because’ or *karna* and *lantaran* ‘because’.

A further discussion of Tajio conjunctions as well as phrase and clause coordinations and subordinations can be found in Chapter 9.

### 4.3.7 Interjections

Interjections may appear in various positions within the clause. They may express confirmation, rejection, surprise or amazement, or they may be used to form tag questions. Here is a list of interjections with their major functions:

a) confirmation: *oye* ‘yes’, *vai* ‘too/also’, *boi*, *ba*, *bei*, *ja*, *jei* ‘really’;
b) rejection: *ajio/jio* ‘no, not’;
c) surprise or amazement: *hamma*’ (originally from *Muhammad*, the Moslem prophet);
d) question tag: *po* ‘right?’;
e) response to affirm that a statement is true but also used like a question tag: *ba* or *bo* ‘really’;
f) signaling understanding: *oh* or *o* ‘oh’.

Examples (71)–(77) illustrate the use of some interjections in conversation. A, B and C indicate different speakers.

(71) A: *tetuainya amai sisanu topenya*
   *te=tuai=nya amai si=sanu tope=nya*
   \[NM-younger.sibling=3SG.GEN\] \[EXIST HON=someone name=3SG.GEN\]
   sumar
   Sumar
   PN
   ‘He has a younger sibling, his name is Sumar.’

   B: *eua sisumar oye*
   *eua si=Sumar oye*
   \[DIST HON=PN yes\]
   ‘Yes, Sumar!’

   C: *oye ontomau telio ninado po*
   *oye ontomau te=tio ni=Mado po*
   \[yes look.like NM=face GEN.HON=PN right\]
   ‘Yes, his face looks like Made, right?’ (from the dialog *Campur*)

(72) A: *siuma’ pia boi naala nolapi*
   *si=uma’ pia boi nV=ala no-lapi*
   \[HON=PN very really ST.RLS-can DY.RLS-spouse\]
   ‘Uma’ can really marry.’

   B: *oh*
   *oh*
   ‘Oh (I see)!’ (from the dialog *Campur*)

(73) A: *sia’u nita’u siama ninia*
   *sia’u ni-ita=’u si=ama ninia*
   \[1SG UV.RLS-see=1SG HON=father 3PL.GEN\]
   ‘I saw their father.’
B: ba
really
‘Really?’
(from the dialog Sejarah Kasimbar)

(74) jio gampang ba sikaka’u vai
jio gampang ba si=kaka=’u vai
NEG easy really HON=older.sibling=1SG GEN too

lapingkaka’u maua
lapi ni=kaka=’u simaua
spouse GEN HON older.sibling=1SG GEN like that

‘It is not easy, really, for my older brother too to have such a wife.’
(from the dialog Campur)

(75) nupopolapimo sono siomuk sio’o eitu jei
nu-po-po-lapi=mo sono si=Omuk sio’o eitu jei
UV RLS CAUS SF spouse=COMP with HON=PN 2SG MED really

‘You will really get married to Omuk.’
(from the dialog Campur)

(76) A: tee nuvonua niama ninorma
back GEN house GEN.HON father GEN.HON=PN

‘At the back of the house of Norma’s father?’
B: jio ruwa siansar
no over there HON=PN

‘No, over there at Ansar’s.’

oye ri tee nuvonua niama ni=norma
oye ri tee nu=vonua ni=ama ni=Norma

yes LOC back GEN house GEN.HON father GEN.HON=PN

‘Right, at the back of the house of Norma’s father.’
(from the dialog Campur)

(77) A: sia bua nijaang nipevalung
soia bua ni-jaang ni-pe-valung
how many CLF piece UV.RLS boil UV RLS SF food to carry

‘How many (bananas) were boiled and carried?’
B: tolu bua

three CLF piece
‘Three pieces’

A: hamma’ tanda’ i unauna loka tolu bua
hamma’ tanda’ i Una Una loka tolu bua
Muhammad arrive LOC PN banana three CLF piece

‘God, (only) three bananas arrived at Una Una?’
(from the dialog Campur)

4.3.8 Other closed classes

In addition to the seven closed classes described above, there are three more closed word classes in Tajio: modality markers, verbal auxiliaries and the negator. The members of these classes are very few.

Modality markers are not classified as verbs they do not take any mood markers. They are not classified as adverbs either because their position in the clause is fixed, i.e., preceding the predicate, so that they are not mobile in the way adverbs are. The modality markers in Tajio are labo ‘may be’ and kaana ‘should’. In addition, there is a verbal auxiliary which conveys a desiderative meaning
seelu ‘want’ and its counterpart is kua ‘don’t want’ (for more information see Section 5.2 on modality).

Negation is marked with the negative particle ajio or jio ‘not’, which precedes the predicate. Jio is used to negate nominal and verbal predicates as well as prepositional phrases which function as predicates, as shown by examples (78)−(82).

(78) eitu jio tevonua’u
    eitu jio te=vonua=’u
    MED NEG NM=house=1SG.GEN
    ‘That is not my house.’

(79) tevuvutnya jio neitong
    te=vuvut=nya jio nV-itong
    NM=hair=3SG.GEN NEG ST.RLS-black
    ‘Her hair is not dark.’

(80) sisia jio nelinjok i tanga nuparuja
    sisia jio ne-linjok i tanga nu=paruja
    3PL NEG DY.RLS-run LOC middle GEN=rice.field
    ‘They did not run in the rice field.’

(81) sia’u jio mobaluk te=sakolat
    sia’u jio mo-baluk te=sakolat
    1SG NEG AV.NRLS-sell NM=cacao
    ‘I will not sell cacao.’

(82) siia jio i posoleong
    siia jio i posoleong
    3SG NEG LOC beach
    ‘She/He was not at the beach.’
5 Mood, tense, modality and aspect

This chapter is concerned with the grammatical formatives in Tajio that embody the encoding of the temporal setting and the actuality of events. Along with adverbial expressions and adjunct clauses, these formatives constitute the grammatical system that serves to link event descriptions to a specific time frames. The chapter begins with mood marking on the verbs, which—in contrast to the other categories—is obligatory (Section 5.1). It then proceeds with the expression of modality in Tajio (Section 5.2), and ends with a description of the aspectual clitics =mo and =po, which like in many other Sulawesi languages fulfill a range of functions in Tajio. The first and foremost reason for presenting these categories together in one chapter is that they interact closely with each other. For instance, the combination of mood and aspect marking gives rise to specific “tense” readings, and the use of modal verbs imposes restrictions on the mood markers occurring on the complement verbs. Therefore, special attention is given to the interaction between the different components of this system.

5.1 Mood markers

Mood marking is obligatory in Tajio and there are two types of mood values that are distinguished: realis and non-realís. The imperative is the only verbal construction that does not take a mood marker, neither realis nor non-realís.

Mood markers in Tajio are typical portmanteau morphemes that may express other kinds of information alongside the realis/non-realís distinction. They not only function as mood markers but also as voice markers in transitive constructions (i.e., differentiating between actor voice and undergoer voice), and as a stative or dynamic marker in intransitive constructions. It is not possible to formally separate the mood marker from the stative/dynamic/actor voice marker. Table 5-1 summarizes the mood markers with fused functions from other grammatical categories.

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>Realis</th>
<th>Non-realís</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stative</td>
<td>nV-</td>
<td>mV-</td>
</tr>
<tr>
<td>Dynamic</td>
<td>ne/-no-</td>
<td>me/-mo-</td>
</tr>
<tr>
<td>Transitive</td>
<td>Realis</td>
<td>Non-realís</td>
</tr>
<tr>
<td>Actor voice</td>
<td>noN-; n-</td>
<td>noN-; m-</td>
</tr>
<tr>
<td>Undergoer voice</td>
<td>ni-</td>
<td>nu/-ro-15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>u-; mu-</td>
</tr>
<tr>
<td></td>
<td>ni--i</td>
<td>nu--i</td>
</tr>
<tr>
<td></td>
<td></td>
<td>u-/mu--i</td>
</tr>
</tbody>
</table>

Table 5-1: Mood markers and their functions in Tajio

The actor voice markers n-/m- are not the shortened forms of noN-/moN- (see Section 6.3.1.1). The markers noN-/moN- ‘AV.RLS/NRLS’ (i) have morphophonemic allomorphs (see Section 2.8.1), and (ii) show lexically conditioned suppletion neng/-meng- (see Section 3.3.2.2) as well as (iii) morphologically conditioned suppletion no-/mo- (see Section 3.3.1 and 6.3.2). The prefixes u- and mu- are not primary mood markers but bound object pronouns that are used in non-realís undergoer voice constructions if the actor is a first or a second person singular referent (see Section 8.1.2.2.1).

5.1.1 Mood markers as tense markers

In addition to their function as voice markers, the realis and non-realís mood markers in Tajio also imply tense distinctions. Therefore, the prefixes which are listed in Table 3-2 not only indicate the actuality of events (mood), but also serve to indicate the temporality of events (tense). A non-future reading is associated with the actual/realis mood, and a “future tense” interpretation is typically linked

15 The non-realís UV marker nu- is used in the variety spoken in Kasimbar whereas ro- is used in Sienjo.
to the non-actual/non-realis mood. Non-future events are marked as realis because the situations in the past or present are considered to be actual (they have occurred or are occurring at speech time). Future events, on the other hand, are considered non-realis because events in the future are potentially possible but their enactment is not presumed to be certain (in other words, they have not yet been ascribed actual status).

Events or situations which are considered realis are those which have taken place in the past or are taking place in the present, as presented by examples (1) and (2). The past time reading in example (1) is strengthened by the use of the temporal adverbial "i vengi 'yesterday' while the use of the temporal adverb "sarong 'still' in example (2) indicates that the action is in progress at the moment of speaking. Note that while adverbial modification serves to disambiguate the temporal reading, both sentences would be equally acceptable without this temporal specification. In such cases the context serves as an indicator as to which temporal reading (i.e., past or present time) is implied by the speaker.

(1) i vengi siami nenginang teaniong LOC yesterday 1PL.EX AV.RLS-eat NM=rice

‘Yesterday we ate rice.’

(2) siami sarong nenginang siami sarong neN-inang 1PLEX still AV.RLS-eat

‘We are (still) eating.’

Non-realis events or situations take place in the future which includes both points ranging immediately after the speech time and more remote time frames, as illustrated by examples (3) and (4). The temporal adverb "boang ‘tomorrow’ and "paame ini ‘a moment later’ indicate that the events are projected to take place at different points in the future.

(3) sia’u momenek teulingka boang sia’u moN-penek te=ulingka boang 1SG AV.NRLS-climb NM=coconut tomorrow

‘I will climb the coconut tree tomorrow.’

(4) paame ini sia’u momenek teulingka paame ini sia’u moN-penek te=ulingka later PROX 1SG AV.NRLS-climb NM=coconut

‘In a moment I will climb the coconut tree.’

The use of mood markers does not always relate to, or imply, temporal distinctions. For example, stative roots that are used to express the quality of a noun always occur in realis mood. In this case, realis mood does not convey any temporal notion (i.e., past or present time) nor does it show temporal agreement with previous predicates, as illustrated by examples (5) and (6).

(5) sio’o mongala toipayo toneendemo ela sio’o moN-alal toipai to=nV-ende=mo ela 2SG AV.NRLS-take which REL=ST.RLS-old=FOC or
tonovou
to=nV-vou

REL=ST.RLS-new

‘Which (one) will you take? The old one or the new one?’

The realis mood in "toneendemo ‘the old one’ and "tonovou ‘the new one’ in example (5) does not refer to the time frame of the intended event of taking, but rather refers to the actual quality of the noun it modifies.

(6) boang sia’u mongoli teoto neitong boang sia’u moN-ali te=oto nV-itong tomorrow 1SG AV.NRLS-buy NM=car ST.RLS-black

‘Tomorrow I will buy a black car.’
The same goes for example (6). Even though the event mongoli ‘will buy’ is predicted to take place in the future, which is further disambiguated by the temporal adverb boang ‘tomorrow’, the quality of the car is nevertheless expressed in the realis mood, neitong ‘black’, instead of being in concord with the time frame of the main predicate, i.e., the non-realis mood meitong ‘will be black’ is not acceptable in this context. The reason for this is that ‘being black’ in this case is not an event that is connected to the main event of the intended action of buying. Rather, it is a permanent property of the modified noun.

5.1.2 Interactions between mood and aspect

Realis and non-realis moods in Tajio can be further combined with the completive aspect marker =mo or with the continuative aspect marker =po. Each combination specifies how an event is unfolding in time in relation to the speech act, for example, whether the event has started or has been completed by the time of speaking.

Realis mood combined with the completive aspect =mo describes an event in the past that has reached its end point, i.e., it is considered completed. Examples are given in (7) and (8).

(7) tebau niiamumo
tebau ni-ita=mu=mo
NM=fish UV.RLS-see=2SG GEN=COMP
‘You have seen the fish already.’
(from the dialog Noasu)

(8) jiopo natandak niepenyamo tekareva
jiopo nV-tandak ni-epa=nya=mo
NEG=CONT ST.RLS-arrive UV.RLS-listen=3SG GEN=COMP
te=kareva
NM=news
naatemo ja tonipalainya
nV-ate=mo ja to=ni-palai=nya
ST.RLS-dead=COMP INJ REL=UV.RLS-leave=3SG GEN
‘Not yet having arrived, he heard the news that the thing he had left had died already.’
(from the dialog Noasu)

In contrast, the realis mood which occurs with the continuative aspect =po indicates that an event has already begun relative to the reference time and is now being reported in a way that emphasizes its progressive nature, as illustrated by examples (9) and (10). The reference time with the use of =po becomes particularly clear in (10). Here, the arrival of Wafik takes place when his mother has not yet completed the action of cooking.

(9) siami neendepo riamai neendepo
siami nV-end=po riamai nV-end=po
1PLEX ST.RLS-long=CONT over.there ST.RLS-long=CONT

minyau
minyau downward
‘We were still (longer) there, still (longer) down there.’
(from the dialog Campur)

(10) waktu siwafik najaok siina nonggabupo
waktu si=Wafik nV-jao nsi=ina noN-gabu=po
when HON=PN ST.RLS-arrive HON=mother AV RLS-cook=CONT
‘When Wafik came, mother was still cooking.’

The non-realis mood combined with the completive aspect =mo describes an event in the immediate future that is going to take place soon after the speech time, as shown by example (11).

(11) sia’u melampamo
sia’u me-lampa=mo
1SG DY.NRLS-walk=COMP
‘I am going to leave soon.’
When the non-realis mood is combined with the continuative aspect \(=po\), it describes an event in the future. There is a fine difference between non-realis events that take the completive aspect \(=mo\) and those with the continuative aspect \(=po\). In the former, the enactment of the event will take place soon after the speech time, whereas the latter is situated in a more remote time frame after the speech event (compare examples (11) and (12)). In order to differentiate the time frame of the enactment of two events, \textit{soon} is added to the translation in example (11) but not in example (12); this is intended to help convey the reading that the event will take place in the immediate future.

\begin{enumerate}
\item[(12)] \textit{sia‘u melampapo}
\textit{sia‘u me-lampa=po}
\textit{1SG DY.RLS-walk=CONT}
\textit{‘I am going to leave.’}
\end{enumerate}

If the root is stative, the combination of non-realis mood and continuative aspect \(=po\) adds an inchoative reading to the predicate semantics, highlighting the initial stage or beginning of some state. Examples are given in (13) and (14).

\begin{enumerate}
\item[(13)] \textit{meende po}
\textit{acara}
\textit{sisanu} ua
\textit{ST.NRLS-long=CONT event HON=someone DIST}
\textit{‘Is his event going to be long (take a long time)?’ (from the dialog \textit{Campur})}
\item[(14)] \textit{tebulagon eua melendapo}
\textit{te=bulagon eua mV-lenda=po}
\textit{NM=rattan DIST ST.NRLS-long=CONT}
\textit{‘That rattan becomes long.’}
\end{enumerate}

### 5.1.3 Further functions of mood markers

Apart from the obligatory use in declarative main clauses, mood markers also occur in constructions with special regularities. These are prohibitive, consecutive/purpose, as well as hypothetical and counterfactual constructions. Each of them will be discussed in the following sections.

#### 5.1.3.1 Prohibition

The use of the non-realis mood in prohibitive constructions does not signal future events. Just like the temporal future reading, the interpretation is that the event in question has not yet happened. However, unlike the temporal reading, the event of a prohibitive is not expected to take place, rather it is prohibited from taking place. Prohibitions in Tajio are marked by the use of the prohibitive marker \textit{nyaa} ‘don’t’, which indicates that the speaker bans or forbids the addressee from performing some action. This is illustrated in examples (15), (16) and (17).

\begin{enumerate}
\item[(15)] \textit{e nyaa moronde}
\textit{e nyaa mo-ronde}
\textit{INJ IMP.NEG DY.NRLS-cry}
\textit{‘Hey, don’t cry!’ (from the dialog \textit{Campur})}
\item[(16)] \textit{nyaa nusempa’ tebal eua}
\textit{nyaa nu-sempa’ te=bal eua}
\textit{IMP.NEG UV.NRLS-kick NM=ball DIST}
\textit{‘Don’t kick that ball!’}
\item[(17)] \textit{tajio nyaa jio motajio}
\textit{tajio nyaa jio mo-Tajio}
\textit{Tajio IMP.NEG NEG DY.NRLS-Tajio}
\textit{‘Don’t speak anything other than Tajio! (lit: ‘Tajio, don’t speak no Tajio!’)}
\end{enumerate}

In addition, the event in prohibitive constructions can also occur in realis mood. In contrast to non-realis, the realis mood is used when a speaker forbids an addressee from performing an action again. In this case, the addressee had performed the action before it is banned by the speaker. In order to express
the ‘not again’ reading, prohibitions with realis mood require an additional marker: the continuative aspect =po, which is placed after nyaa ‘don’t’, as shown by example (18).

(18) nyaa=po
    tonamanta
    niinang
    jei
    ua
    IMP.NEG=CONT
    REL=ST.RLS-unripe
    UV.RLS-eat
    INJ
    DIST
    ‘Don’t eat again (from) the unripe (fruit)!’ (from the dialog Campur)

5.1.3.2 Consecutive/purposive constructions

A consecutive/purposive connection of events consists of an action–(intended) result/purpose relation where an action is performed with a subsequent result in mind. The result or purposive clause is necessarily in non-realis mood, as it is conceived as following from the action event.

Compare the examples in (19), (20) and (21). Note that the first two examples employ an overt purpose marker, supaya, in addition to the combination in mood marking. This is, however, not a prerequisite, as demonstrated by example (21).

(19) sia’u
    noturu
    i
    lalong
    nu=boco’ supaya
    sia’u
    nV-turu
    i
    lalong
    nu=boco’ supaya
    1SG
    ST.RLS-sleep
    LOC
    inside
    GEN=mosquito.net
    so.that
    aijo
    nukiki
    nusisio’
    aijo
    nu-kiki
    nu=sisio’
    NEG
    UV.NRLS-bite
    GEN=mosquito
    ‘I sleep under a mosquito net so that the mosquitoes won’t bite me.’

(20) sia’u
    nombeenao
    sio’o
    te=alumbu
    supaya
    sio’o
    jio
    sia’u
    noN-vee-ao
    sio’o
    te=alumbu
    supaya
    sio’o
    jio
    1SG
    AV.RLS-give-APPL
    2SG
    NM=blanket
    so.that
    2SG
    NEG
    mojolo
    monje
    mo-jolo
    monje
    ST.NRLS-cold
    again
    ‘I give you the blanket so that you will not be cold again.’

Example (21) above shows that although both the initial action and the purpose have taken place in the past, they are expressed in two different moods. The action is expressed in the realis mood, while the purpose occurs in the non-realis mood.

Example (21) above shows that although both the initial action and the purpose have taken place in the past, they are expressed in two different moods. The action is expressed in the realis mood, while the purpose occurs in the non-realis mood.

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16 The word movegamo is an archaic word originally meaning ‘to befriend’. In this narrative the word movegamo is intended to mean ‘to marry’. This becomes clear by the fact that the speaker uses both words (i.e. movegamo and nupopolapimo) in order to emphasize that movegamo in this context has approximately the same meaning as nupopolapimo, i.e., ‘to marry’.
5.1.3.3 Hypothetical and counterfactual constructions

Hypothetical and counterfactual constructions are used to express condition–result relations that hold between two events. The conditional clause is marked in both constructions by the conjunction *ane* ‘if’. Both constructions are marked differently, however, in that the hypothetical construction triggers in non-realis mood, while the counterfactual construction is expressed by using the realis mood in both clauses.

By using the non-realis mood, the hypothetical construction emphasizes that it is not yet possible for the *result* to take place because the necessary *condition* still awaits completion. As examples (22) and (23) show, conditions may both pertain to individual situations (23) or refer to general condition–result relations that hold true regardless of which members of a certain class of referents meet the condition (22).

(22)  
*ane* meraa ompo tevevine nuarnya  
*ane* me-raa ompo te=vevine ni-uar=nya  
*if* DY.NRLS-blood still NM=woman UV.RLS-say=3SG.GEN  
jalas mopeala tebija nuarnya  
jalas mo-pe-ala te=bija ni-uar=nya  
surely AV.NRLS-SF-take NM=descendant UV.RLS-say=3SG.GEN  
‘If a woman still gets her period, he said, she would be able to have a baby, he said.’  
(lit: ‘If a woman still gets her period, she would get her descendant.’)  
(from the dialog *Campur*)

(23)  
*ane* menginangmo siia monambas telima iulu  
*ane* meN-inang=mo siia moN-tambas te=lima iulu  
*if* AV.NRLS-eat=COMP 3SG AV.NRLS-wash NM=hand first  
‘If (he) is going to eat soon, he will wash his hands first.’

A proposition is said to be counterfactual if it contradicts the truth value of a present or past situation. In Tajio a counterfactual proposition is expressed in realis mood. Examples are given in (24) and (25).

(24)  
*ane* nogombo’ jiom mo nieliaonya  
*ane* no-gombo’ jio=mo ni-eli-ao=nya  
*if* DY.RLS-talk NEG=COMP UV.RLS-remember-APPL=3SG.GEN  
sikapala sakola  
si=kapala sakola  
HON=head school  
‘If (he) had talked, he would never have remembered the head master.’  
(from the dialog *Noasu*)

(25)  
*ane* niotoi’u simaini neendemo sia’u  
*ane* ni-otoi=’u simaini nV-ende=mo sia’u  
*if* UV.RLS-know=1SG.GEN like.this ST.RLS-long=COMP 1SG  
nolapi  
no-lapi  
DY.RLS-marry  
‘If I had known (marriage is good) like this, I would have been married for a long time.’  
(from the dialog *Noasu*)

5.2 Modality

Unlike the mood markers that are obligatory and must appear on predicates (with the exception of imperatives), modality marking in Tajio is optional and realized by analytical means.

On semantic grounds, there are two types of modality that can be distinguished in Tajio: (i) epistemic modality and (ii) deontic modality. Epistemic modality relates to the speaker’s state of knowledge or belief that he possesses with regard to some event, and is expressed by using the modality marker
`labo` or `laboi` ‘may be’; deontic modality refers to obligation or permission, and is expressed by the modal `kaana` ‘should; must’.

There is a connection between the use of modality markers and mood markers. The use of the modality markers `kaana` and `labo` or `laboi` requires the non-realis mood. Therefore, verbs that follow these modals are required to take the non-realis mood and indicate that the event is non-actual or has not yet taken place, as in examples (26), (27) and (28).

(26) `siami` `kaana` `melampa` `mai` `sakola`
    `1PL.EX` `should` `DY.NRLS-walk` `DIR` `school`

    ‘We should walk to school.’

(27) `siami` `kaana` `mompongularao` `temasala` `eini`
    `1PL.EX` `must` `AV.NRLS-SF-tell.APPL` `NM=problem` `PROX`

    mao `siama`

    mao `si=ama` to HON=father

    ‘We must report this problem to father.’

(28) `sisari` `laboi` `ajio` `majaok`
    `si=Sari` `laboi` `ajio` `mV-jaok`

    HON=PN `may.be` NEG `ST.NRLS-arrive`

    ‘Sari may not come.’

Another modal which is found in Tajio is `ala` meaning ‘can’ or ‘should’. Its behaviour is a notable exception from the other modals discussed above since it resembles a stative in that it takes a mood marker: the realis vowel harmonic prefix `nV-` and its non-realis counterpart `mV-`. Thus `ala` appears in the two forms `naala` ‘ST.RL-can’ and `maala` ‘ST.NRLS-can’.

If `ala` is negated and in non-realis mood it no longer expresses ability, but rather lack of permission or undesirability. Consider example (29) in which the act of gossiping is construed as inappropriate.

(29) `beimbengi` `simaini` `jio` `maala` `monogong`
    `beimbengi` `simaini` `jio` `mV-ala` `mo-nogong`

    afternoon `like.this` NEG `ST.NRLS-can` `DY.NRLS-gossip`

    ‘On an afternoon like this, (we) should not be gossiping.’

    (from the dialog Campur)

In order to show the ability of the actor to undertake some action, the root `ala` takes the realis mood and becomes `naala`, as exemplified in (30) below. The choice of the realis mood to express abilitative modality seems to reflect the fact that the ability of the actor to undertake an action is actual in the sense that it apparently holds true for the specific time frame referred to.

(30) `sia` `naala` `nelinjok` `naavar`
    `sia` `nV-ala` `ne-linjok` `mV-avar`

    `1SG` `ST.RLS-can` `DY.RLS-run` `ST.RLS-far`

    ‘I can run far.’

In addition to epistemic and deontic modality, desideratives in Tajio are also formed with an auxiliary, i.e., `seelu` ‘want’\(^\text{17}\). Verbs that follow the auxiliary `seelu` always occur in non-realis mood, as illustrated in examples (31) and (32). In this construction, `seelu` expresses a desire that some state or event may be realized in the future.

(31) `sia` `seelu` `moturu`
    `sia` `seelu` `mV-turu`

    `1SG` `want` `ST.NRLS-sleep`

    ‘I want to sleep.’

\(^\text{17}\) Note that `seelu` ‘want’ can also function as a simplex predicate in the object-doubling construction (see Section 8.1.3)
5.3 Aspect

Aspectual marking in Tajio is found in the form of enclitics attached to a predicate host. Tajio has two aspectual distinctions: completive and continuative. Completive aspect is marked by the enclitic =mo, and continuative aspect by the enclitic =po. Completive aspect denotes that a single event has been completed at a given reference time or that a subsequent result stage has been achieved. For instance, the event of leaving in example (33) has already reached its terminal boundary, and =mo emphasizes the resultant state of him not being there any more.

(33) siia nebongkatmo
     siia ne-bongkat=mo
     3SG DY.RLS-leave=COMP
     ‘He has left (=is away now).’

In contrast, the continuative aspect marker =po indicates that the action is in progress and not yet finished (compare example (34)).

(34) siasman noturupo
    si=Asman nV-turu=po
    HON=PN ST.RLS-sleep=CONT
    ‘Asman is sleeping.’

In the following discussion, the functions of the aspect markers will be divided into two types: (i) primary functions, and (ii) secondary functions. Primary functions refer to those aspectual functions that directly affect the temporal properties of events. Thus, marking events or states as completive or continuative is regarded here as constituting the primary function of the aspectual markers. In contrast, secondary functions refer to functions other than temporal specification, for instance, focus marking, politeness or comparative constructions. Comparatives are discussed separately in Section 6.2.

Because both markers are clearly multifunctional formatives, glossing in the examples will vary according to their respective function. The aspectual functions (in the narrow sense) of =mo and =po which indicate the internal temporal characteristics of an event will be glossed as COMP (completive) and CONT (continuative), respectively. The gloss FOC is used when the aspectual marker functions as a focus particle, POL is employed when it marks politeness and it is glossed as CPR when used to mark comparative constructions.

5.3.1 Completive aspect =mo

The primary functions of the completive aspect =mo are to indicate (i) that an event has been completed, or (ii) that an event occurs subsequently to some other event. The first function was already introduced and illustrated in Section 5.1.2. Example (35) from a narrative text illustrates both functions.

(35) touk nongasa mao i avu niita’u
     touk noN-asa mao i avu ni-ita=’u
     after AV.RLS-sharpen go LOC kitchen UV.RLS-see=1SG.GEN

te'aniong nongongomo touk mao nisuyukmo
     te=aniong nV-ngongo=mo touk mao ni-suyuk=mo
     NM=rice ST.RLS-cooked=COMP after.that UV.RLS-ladle=COMP

18 Phonologically and functionally similar aspectual enclitics are found in many languages from Sulawesi and neighbouring areas on Borneo and the Philippines, and seem to date back to a common ancestor, or at least to similar grammaticalization clines of related elements. Other languages in the area that show related aspectuals include Pendau (=mo and =po), Mori Bawah (=mo and =po), dan Uma (=mi and =pi) among others (Unterladstetter, unpublished: 2010).
teaniong  
te=aniong  
NM=rice

‘After (I) sharpened (the axe), I went to the kitchen and I saw that the rice had been cooked. After that I ladled the rice out.’  
(from the narrative Nomupu tesakulat)

The two related events that are marked by the completive aspect =mo in example (35) are the cooking of the rice (nongongomo), and the ladling out of it by the actor (nisuyukmo). The two occurrences of the completive aspect =mo should be interpreted differently. With the first event, the cooking of the rice, =mo indicates completion; with the second event of ladling it out, =mo implies that the action takes place immediately after the completion of the previous event.

The second type of reading (i.e., that of immediate succession) is further illustrated by examples (36)–(38). These examples show a sequential set of activities in a procedural text, Nongala tebulagon ‘Collecting rattan’, explaining successive steps in the process of collecting rattan. Activities in the sequential set that are marked by the completive aspect =mo are given in bold.

(36) tas toniolong nituengaomo  
tas to=ni-olong ni-tueng-ao=mo  
bag REL=UV.NRLS-carry UV.RLS-hang-APPL=COMP LOC

ndaang nuayu  
daang nu=ayu  
branch GEN=wood

‘The carried bag was hung on the wood branch.’

(37) panongalamo tebulagon nagana’mo minyei  
SEQ=AV.RLS-take=COMP NM=rattan ST.RLS-enough=COMP go.down

tevaong  
te=vava-ong  
NM=bring-NOM

‘then (one) drew the rattan, as there were enough things to bring (i.e., rattan) to go down (the hill) […]’

(38) niinsongaomo  
ni-insong-ao=mo UV.RLS-collect-APPL=COMP

‘(the rattan) is gathered (in one place).’  
(from the narrative Nongala tebulagon)

The interpretation of the above examples is that the action panongalamo ‘drew (the rattan)’ is performed immediately after the event nituengaomo ‘hang (the bag)’ has been completed. Similarly, the action niinsongaomo ‘gathered (the rattan)’ takes place immediately after the previous action panongalamo ‘drew (the rattan)’ has come to an end. Note that, in addition to marking actions or events, the completive aspect =mo can also be attached to stative predicates, as shown by the predicate nagana’mo in example (37).

The completive aspect =mo can also be attached to the negative marker jio forming jiomo ‘never’ (lit. ‘not already’). Jiomo can negate predicates in realis as well as non-realis forms. When jiomo precedes realis forms, it indicates that the event denoted by the predicate never took place in the past time, as in example (39). When jiomo precedes non-realis forms, on the other hand, it implies that the event denoted by the predicate will never happen in the future, as can be seen in example (40).

(39) jiomo najari nelolom i dagat  
ji=mo nV-jari ne-lolom i dagat  
NEG=COMP ST.RLS-become DY.RLS-swim LOC sea

‘(The pig) had never swum in the sea.’  
(from the narrative Batu babi)
In contrast to its primary use, secondary functions of the completive aspect =mo do not clearly relate to temporal properties of an event. These secondary functions are (i) as a focus marker and (ii) as a politeness marker.

As a focus marker, =mo is directly attached to the focal constituent, which always occurs in sentence initial position. In this function, =mo can be attached to nouns, pronouns, question words and demonstratives, as illustrated by examples (41)–(44); or to spatial deictics, as in example (45).

The use of =mo as a politeness marker is restricted to positive and negative imperatives. In positive imperative constructions, it is attached to the verbal base, as illustrated by the pairs in (46) and (47). Negative imperatives are marked by the prohibitive marker nyaa ‘don’t’. If inserted into a negative imperative construction, =mo is attached to nyaa, as shown by example (48)a.

Imperative constructions can also occur without the completive aspect =mo. There is a pragmatic difference between imperative constructions with the completive aspect =mo and those without it. The former are considered to be more polite whereas the latter are considered to be neutral. Therefore, ‘please’ has been added to the translation of imperatives which occur with the completive aspect =mo in order to render the politeness distinction into English. Compare examples (a) and (b) in (46)–(48).

(40) ane bahasa malayu ini jimo nurekannya
    ane bahasa malayu ini jio=mo nu-rekam=nya
    if language Malay PROX NEG=COMP UV.NRLS-record=3SG.GEN

    ini
    ini
    PROX
‘If it is Malay, she will never record it.’ (from the dialog Campur)

(41) siitamo tosiopu nubahasa ua
    siita=mo to=si=opu nu=bahasa ua
    1PL.IN=FOC REL=HON=owner GEN=language DIST
‘We are the owner of that language.’ (from the dialog Campur)

(42) sapamo joo nipeutanyainya ini
    sapa=mo jojo ni-pe-utanya-i=nya ini
    what=FOC all UV.RLS-LOC-ask-APPL=3SG.GEN PROX
‘What was (it) all (about) she had asked?’ (from the dialog Campur)

(43) eitumo ja tetagumu
    ei=mo ja te=tagu=mu
    MED=FOC INJ NM=friend=2SG.
‘That is really what your friend is like.’ lit: ‘That is your friend.’ (from the dialog Campur)

(44) tudatudamo simaua jio nevua
    tuda-tuda=mo simaua jio ne-vua
    RDP~plant=FOC like.that NEG DY.RLS-fruit
‘Those plants do not bear fruits.’ (from the dialog Campur)

(45) ruamo siia
    riuu=mo siia
    over.there=FOC 3SG
‘Is she over there?’ (from the dialog Noasu)

(46) a. tuutmo sia’u
        tuut=mo sia’u
    follow=POL 1SG
‘Please follow me!’ (from the dialog Campur)

b. tuut sia’u
    tuut sia’u
    follow 1SG
‘Follow me!’

(47) a. veenaomo sia’u itu
   veen-a-o=mo sia’u itu
give-APPL=POL 1SG MED
   ‘Please give me that!’
   (from the dialog Campur)

   b. veenao sia’u itu
   veen-a o sia’u itu
give-APPL 1SG MED
   ‘Give me that!’

(48) a. nyaamo nugarnggu siami
   nya=mo nugarnggu siami
IMP.NEG=POL UV.NRLS-disturb 1PL.EX
   ‘Please don’t disturb us!’
   (from the narrative Hanyut perahu)

   b. nyaa nugarnggu siami
   nyaa nugarnggu siami
IMP.NEG UV.NRLS-disturb 1PL.EX
   ‘Don’t disturb us!’

5.3.2 Continuative aspect =po

The primary function of the continuative aspect is to denote an ongoing activity or state, and was already illustrated in Section 5.1.2. Further examples are given in (49) and (50).

(49) e nologatpo teoto niami
   e n-V-logat=po te=oto niami
eh ST.RLS-spacious=CONT NM=car 1PL.EX.GEN
   ‘Eh, our car still has enough space.’
   (from the dialog Campur)

(50) siina nonggabupo
    si=ina noN-gabu=po
HON=mother AV.RLS-cook=CONT
   ‘Mother was still cooking.’

Related to its primary function of denoting a temporally extended event, the continuative =po is used to convey the meaning ‘again’ or ‘more’. In this case, =po still indicates that there is a temporal extension of some situation albeit it attaches to a host other than a verb. Examples are given in (51) and (52). In both examples, =po indicates temporal extension of the event relative to speech time. In example (52), it becomes particularly clear that the event will extend into the future as the verb is marked by the non-realiser marker.

(51) jei sombuupo onje
    jei so-N-buu=po onje
really one-LIG-CLF.piece=CONT still
   ‘Really (I will smoke) again one piece (of cigarette).’
   (from the dialog Campur)

(52) soyambengipo siita ini momajeko
    soia-N-vengi=po siita ini moN-pajeko
how.many-LIG-night=CONT 1PL.IN PROX AV.NRLS-plow
   ‘How many more nights will we plow?’

The question word soiambengi ‘how many nights; when’ can take either the aspectual marker =po or =mo. If it occurs with the aspectual marker =po, it indicates that the time reference of the event will be extended, as has been stated above. Despite this overt marking of the temporal extension, the focused event does not always occur in non-realiser mood; it may also occur in the realiser mood. Compare example (53).

(53) soyambengipo sio’o nonggutu teasupat
    soia-N-vengi=po sio’o noN-gutu te=asupat
how.many-LIG-night=CONT 2SG AV.RLS-make NM=food.in.a.rhombus.shape
‘How long will you (continue to) make asupat?’  (from the dialog Teulingka)

In contrast, if soiambengi is modified by the aspectual marker =mo, the main verb always takes the realis mood, as illustrated in example (54).

(54) soyambengimo  sio’o  najaok
soya-N-vengi=mo  sio’o  nV-jaoK
how-many-LIG-night=COMP  2SG  ST.RLS-arrived

‘When did you arrive?’

As already mentioned in Section 5.1.3.1, in negative imperative constructions =po expresses the meaning ‘not again’ when it is attached to the prohibitive marker nyaa ‘don’t’. This is illustrated by example (18), which is repeated here for convenience as example (55). The meaning ‘not again’ indicates that the action has taken place before it is prohibited. In the present example, this is clarified by the use of realis mood with the predicate niiang ‘eat’.

(55) nyaa=po  tonamanta  niiang  jei  ua
nyaa.NEG=CONT  REL=ST.RLS-unripe  UV.RLS-eat  INJ  DIST

‘Don’t eat the unripe (fruit) again!’  (from the dialog Campur)

In contrast to =mo, which functions as a politeness marker when it is attached to the prohibitive marker nyaa ‘don’t’, =po does not have such a function. Negative imperatives which occur with =po only imply temporal repetition; no distinction in politeness is conveyed. The repeated event is prohibited from taking place again in the future (compare example (55) with examples (46)a–(48)a).

Aspectual marking also appears on the negative marker jio, forming the negation jiopo ‘not yet; before’ by adding the aspectual clitic =po. Jiopo can negate predicates (examples (56)–(58)) or can be used to mark temporal adverbial clauses, as exemplified in (59). Jiopo implies that the event has not yet taken place, although its completion may be anticipated or expected. Events or states following jiopo always take the realis marker.

(56) sia’u  jiopo  mai  nendiis
sia’u  jio=po  mai  ne-ndiis
1SG  NEG=CONT  go.to  DY.RLS-take.a.bath

‘I have not gone to take a bath yet.’  (from the dialog Campur)

(57) tecoklat  jiopo  noogal
te=coklat  jio=po  nV-ogal
NM=cacao  NEG=CONT  ST.RLS-dry

‘The cacao is not yet dry.’  (from the dialog Teutang)

(58) tetoonya  jopo  nikenal
te=too=nya  jio=po  ni-kenal
NM=person=DEF  NEG=CONT  UV.RLS-know

‘(We) did not know the person.’  (from the dialog Campur)

(59) jiopo  nitovong  niina  niani  teloka
jio=po  ni-tovong  ni=ina  ni=Ani  te=loka
NEG=CONT  UV.RLS-cut  GEN.HON=mother  GEN.HON=PN  NM=banana

ua  lasia  bua  netilang
ua  lasia  bua  nV-tilang
DIST  many  CLF  ST.RLS-cracked

‘Before (the banana tree) was cut by Ani’s mother, some of them were cracked.’  (from the dialog Campur)

The use of the continuative aspect marker =po belongs to its secondary (not clearly aspect-related) functions. This construction is discussed in Section 6.2.
6 Verbal morphology

Tajio has two voices: one actor voice (AV) and one undergoer voice (UV). Predicates in AV and UV constructions are morphologically marked for voice and mood, but do not bear any referent marking (i.e., verb agreement). This chapter mainly discusses the morphological markers of each voice type in Tajio (Section 6.3) and the morphological processes for changing the verbal valence (Section 6.4). In addition, this chapter also examines the overlapping morphology among dynamic verbs, i.e., dynamic intransitive and dynamic transitive verbs in Section 6.1. The differences between dynamic verbs and stative verbs are discussed in Section 6.2. This chapter closes with Section 6.5 which describes the morphological markers indicating plurality of actions or states.

6.1 Dynamic verbs

Dynamic intransitive verbs and dynamic transitive verbs are classified as a single class (i.e., dynamic verbs) because semantically both are dynamic and their morphology partially overlaps. Although the prefix forms and their functions do not always show a one-to-one correspondence, there are morphological markers which may be considered the “default” marker (i.e., the most often used marker) of the dynamic intransitive verbs and dynamic transitive verbs respectively. The former is the prefix ne-/no- ‘DY.RLS/NRLS’ and the latter is the nasal prefix noN-/moN- or n-/m- ‘AV.RLS/NRLS’.

There are cases where verbs seem to be morphologically transitive, as they take a dynamic transitive prefix, but syntactically behave like dynamic intransitive verbs or vice versa. For example, dynamic verbs prefixed with the nasal prefixes noN- ‘AV.RLS’ are usually transitive, i.e., they occur in both actor voice (AV) and undergoer voice (UV). However, some dynamic verbs marked with the AV marker never occur in undergoer voice. This is the case for the verbs listed in Table 6-1. There are no verbs which only occur in undergoer voice forms.

<table>
<thead>
<tr>
<th>Root</th>
<th>Dynamic verb with AV prefix noN-/</th>
</tr>
</thead>
<tbody>
<tr>
<td>pangang</td>
<td>mangang &lt; N-pangang ‘AV.RLS-chew.betel’</td>
</tr>
<tr>
<td>bulagon</td>
<td>nombulagon &lt; noN-bulagon ‘AV.RLS-rattan’</td>
</tr>
<tr>
<td>peang</td>
<td>nomeang &lt; noN-peang ‘AV.RLS-fishing.rod’</td>
</tr>
<tr>
<td>dagat</td>
<td>nondagat &lt; noN-dagat ‘AV.RLS-sea’</td>
</tr>
<tr>
<td>puras</td>
<td>nomuras &lt; noN-puras ‘AV.RLS-diarrhoea’</td>
</tr>
<tr>
<td>odung</td>
<td>nongodung &lt; noN-odung ‘AV.RLS-sit’</td>
</tr>
<tr>
<td>ontut</td>
<td>nongontut &lt; noN-ontut ‘AV.RLS-fart’</td>
</tr>
<tr>
<td>besek</td>
<td>nombesek &lt; noN-besek ‘AV.RLS-hatch’</td>
</tr>
<tr>
<td>ovo</td>
<td>nongo &lt; noN-ovo ‘AV.RLS-incubate’</td>
</tr>
</tbody>
</table>

Table 6-1: Dynamic verbs taking the AV prefix noN-/n-.

Similarly, there are roots taking the dynamic intransitive markers ne-/no- which occur in the undergoer voice. In this case, the dynamic intransitive markers ne-/no- alternate with the UV markers ni-(-i) (see Section 6.3.2.1).
Moreover, the surface forms ne-/no- may derive from prefix combinations. The first possibility is that the markers ne-/no- present two different prefixes: The first ne-/no- comprises the dynamic intransitive prefixes; the second ne-/no- derives from the nasal prefix n-/m- preceding the stem-forming prefixes pe-/po-, which mark dynamic transitive verbs (see Section 6.3.2.2 for more details and examples). The second possibility regarding the realizations of the prefixes ne-/no- is that: they may mark dynamic intransitive verbs or they are derived from the nasal prefix n- plus the causative prefix pe-/po-. See Section 6.4.1.2 for details on causative constructions.

As morphology cannot always clearly distinguish dynamic intransitive verbs from transitive ones, the distinction is principally based on the syntactic distribution. Syntactically dynamic intransitive verbs can be distinguished from transitive verbs based on their argument structures. While dynamic intransitive verbs only need a subject argument, transitive verbs require two arguments: a subject and an object. Examples (1)a and (2)a are intransitive constructions with subject arguments; examples (1)b and (2)b are transitive constructions with subject and object arguments.

(1) a. sia’u no-paruja
   sia’u no-paruja
   1SG DY.RLS-rice.paddy
   ‘I worked in the rice paddy.’ or ‘I farmed.’

   b. sia’u ne-paruja tetana eua
   sia’u n-PO-paruja te=tana eua
   1SG AV.RLS-CAUS-rice.paddy NM=soil DIST
   ‘I cultivated a rice paddy.’ (lit: ‘I make the soil a rice paddy.’)

(2) a. sia’u no-as-ing
   sia’u no-as-ing
   1SG DY.RLS-spinning.top
   ‘I played with a spinning top.’

   b. sia’u ne-as-ing teayu
   sia’u n-PO-as-ing te=ayu
   1SG AV.RLS-CAUS-spinning.top NM=wood
   ‘I turned the wood into a spinning top.’

6.2 Stative verbs vs dynamic intransitive verbs

With regard to their syntactic distribution, stative verbs cannot be clearly distinguished from dynamic intransitive verbs because both can function as predicates without copula and can also be used as modifiers of a noun phrase (see Section 4.2).

Formally, the regular (harmonic) changes of the vowels of the stative prefix and the irregular (non-harmonic) changes of the dynamic prefix provide the basis for distinguishing stative verbs from dynamic ones. The morphological markers of statives are the prefix nV-, which marks realis mood, and mV-, which marks non-real is mood (see Section 2.8.6 for details on the vowel-harmonic changes). The morphological markers of dynamic intransitive verbs are the prefixes ne-/no- and me-/mo-, which mark realis mood and non-real is mood, respectively. The realizations of the dynamic prefixes do not depend on morphophonological processes; they are purely lexically determined (see Section 3.3.2.2 about lexically conditioned suppletion).

However, it should be noted that it is not always easy to distinguish the dynamic markers ne-/no- and the harmonic stative marker nV-, which is realized as ne- before front vowels /e/ and /i/ and as no- before vowels /o/ and /u/. In such cases, a distinction must be made on the basis of semantics.

Table 6-2 compares examples of the non-harmonic changes of the dynamic prefixes ne-/no- and the harmonic changes of the statives prefix nV-.
Semantically, the two types of intransitive verbs differ in that dynamic intransitives typically refer to actions that involve a volitional agent in control of the action (see the meanings of dynamic intransitive verbs in Table 6-2). In contrast, statives denote states of affairs that do not involve an agent (Himmelmann, 2005:165–6). Possible meanings of stative verbs are listed in Table 6-3.

<table>
<thead>
<tr>
<th>nV- + root</th>
<th>Example/meaning</th>
<th>a state of having (X)/a state arising because of the existence of (X)/to be like (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>nV- + vatu</td>
<td>navatu</td>
<td>‘to stony’</td>
</tr>
<tr>
<td>nV- + longu</td>
<td>nolongu</td>
<td>‘to fat/greasy’</td>
</tr>
<tr>
<td>nV- + butu</td>
<td>nobutu</td>
<td>‘to be mountainous’</td>
</tr>
<tr>
<td></td>
<td><strong>meteorological events</strong></td>
<td></td>
</tr>
<tr>
<td>nV- + ujang</td>
<td>noujang</td>
<td>‘to be rainy’</td>
</tr>
<tr>
<td>nV- + avat</td>
<td>naavat</td>
<td>‘to be windy’</td>
</tr>
<tr>
<td>nV- + eleo</td>
<td>neeleo</td>
<td>‘to be sunny’</td>
</tr>
<tr>
<td></td>
<td><strong>the resultant state of an activity</strong></td>
<td></td>
</tr>
<tr>
<td>nV- + olog</td>
<td>noolog</td>
<td>‘to be cut’</td>
</tr>
<tr>
<td>nV- + tilang</td>
<td>netilang</td>
<td>‘to be split (wood)’</td>
</tr>
<tr>
<td>nV- + udut</td>
<td>noudut</td>
<td>‘to be broken (rope)’</td>
</tr>
<tr>
<td></td>
<td><strong>having the quality of (X)</strong></td>
<td></td>
</tr>
<tr>
<td>nV- + ogal</td>
<td>noogal</td>
<td>‘to be dry’</td>
</tr>
<tr>
<td>nV- + ranis</td>
<td>naranis</td>
<td>‘to be sick’</td>
</tr>
<tr>
<td>nV- + lusur</td>
<td>nolusur</td>
<td>‘to be lazy’</td>
</tr>
</tbody>
</table>

Further, denoting qualities or properties of nouns makes it possible for stative verbs, but not dynamic intransitive verbs, to be used in comparative constructions. In this construction the stative predicate denoting the quality being compared is marked with the clitic =po and it co-occurs with the comparative marker, apa/pa ‘than’, as can be seen in examples (3) and (4). The element apa/pa ‘than’ can be replaced by the preposition lami ‘from’. Note that the use of both =po and pa is obligatory in comparative constructions.
(3) a. tevonua’u nabasagpo pa tevonuamu
   te=vonua=’u nV-basag=po pa te=vonua=mu
   NM=house=1SG.GEN ST.RLS-big=CPR than NM=house=2SG.GEN
   ‘My house is bigger than your house.’

b. *tevonua’u nabasag pa tevonuamu
c. *tevonua’u nabasagpo tevonuamu

(4) a. teanganak niasman nedeipo lami
teqanak=ni=Asman nV-dei=po lami
   NM=child GEN.HON=PN ST.RLS-small=CPR than
   teanganakmu
   te=anganak=mu
   NM=child=2SG.GEN
   ‘Asman’s child is younger than your child.’

b. *teanganak ni asman nedei lami teanganakmu
c. *teanganak ni asman nedeipo teanganakmu

6.3 Voice morphology

This section discusses morphological markers of the voice system in Tajio. It does not discuss the syntax of AV and UV constructions, which will be treated in Section 8.1.2.1 and 8.1.2.2. Section 6.3.1 examines the actor voice and the undergoer voice markers; Section 6.3.2 discusses the alternation between actor voice and undergoer voice verb formations.

Mood differences do not influence the regularities discussed here. Consequently, for purposes of exemplification, only one of the two moods (usually the realis mood) is used for illustration.

6.3.1 Actor voice and undergoer voice markers

6.3.1.1 Actor voice markers

The default morphological markers of actor voice constructions are the nasal prefixes noN-/moN- and n-/m- ‘AV.RLS/NRLS’. It is important to differentiate these two prefixes because the latter is not the shortened form of the former one. Morphophonologically, unlike the nasal prefixes noN-/moN-, the AV markers n-/m- only occur with /p/ initial stems, i.e., preceding derivational prefixes of the shape pe-/po- becoming ne-/no- in realis forms or me-/mo- in non-real is mood.

The AV prefixes noN-/moN- show morphophonemic allomorphy (see Sections 2.8.1 and 3.3.1), morphologically conditioned suppletion (see Section 3.3.2.1 and 6.4.1.2) and lexically conditioned suppletion (see Section 3.3.2.2). In contrast, the AV prefixes n-/m- do not have any further allomorphs, they always occur as n-/m-.

The actor voice prefix noN- (and its allomorphs) is often shortened to N-. Thus actor voice verbs may look like roots beginning with a nasal-obstruent cluster. A way to distinguish verbal formations with a shortened prefix N- from roots beginning with a nasal-obstruent cluster is by looking at the corresponding undergoer voice (UV) constructions. In UV verbs, the shortened prefix N- will not appear if roots do not bear a nasal-obstruent cluster in root-initial position. Compare the AV and UV verbs in examples (5) and (6).

(5) AV: noN-jilok ‘AV.RLS-lick’ \(\rightarrow\) nonjilok \(\rightarrow\) njilok ‘to lick’
    UV: ni-jilok-i ‘UV.RLS-lick-UV’ \(\rightarrow\) nijiloki ‘to lick’
(6) AV: noN-geges ‘AV.RLS-scratch’ \(\rightarrow\) nonggeges \(\rightarrow\) nggeges ‘to scratch’
    UV: ni-geges ‘UV.RLS-scratch’ \(\rightarrow\) nigege ‘to scratch’

In contrast, roots starting with nasal-obstruent clusters maintain their nasals, in AV as well as in UV constructions, as can be seen in the following examples.
(7) AV: noN-ndiis-i ‘AV.RLS-bath-APPL’ \(\rightarrow\) nondiisi ‘to bathe someone’
UV: ni-ndiis-i ‘UV.RLS-bath-APPL’ \(\rightarrow\) nindiisi ‘to bathe someone’

(8) AV: n-PO-mbosi-ao ‘AV.RLS-CAUS-good-APPL’ \(\rightarrow\) nombosiao ‘to fix something’
UV: ni-PO-mbosi-ao ‘UV.RLS-CAUS-good-APPL’ \(\rightarrow\) nipombosiao ‘to fix something’

Further, the shortened prefix N- should be distinguished from the AV prefix n-/m-. An aspect for possibly distinguishing the two forms is that the shortened prefix N- never alternates for mood, while the realis prefix n- alternates with m- for non-realis mood.

Example (9) shows the prefix noN- shortened into m-, nomenek becoming menek. Menek cannot be analyzed as a non-realis form (*M- + penek) as the form *nenek as the corresponding realis form does not exist.

(9) sia ’u nomenek/menek teulingka
sia ’u noN-penek/N-penek te=ulingka
1SG AV.RLS-climb NM=coconut
‘I climbed a coconut tree.’

In contrast to (9), compare examples (10) and (11) which show that the realis n- alternates with m- in non-realis mood.

(10) siina nogabu teaniong
si=ina n-po-gabu te=aniong
HON=mother AV.RLS-SF-cook NM=rice
‘Mother cooked rice.’

(11) siina mogabu teaniong
si=ina m-po-gabu te=aniong
HON=mother AV.NRLS-SF-cook NM=rice
‘Mother will cook rice.’

In addition to noN-/moN- and n-/m-, other prefixes which appear to mark AV constructions are the dynamic intransitive prefixes ne-/nu-.

6.3.1.2 Undergoer voice markers

Affixes used as the UV markers are the prefixes ni-/nu- ‘UV.RLS/NRLS’, the circumfixes ni--i/nu--i ‘UV.RLS/NRLS--UV’ and two other prefixes which only occur in non-realis mood, u- ‘UV.NRLS.1SG’ and mu- ‘UV.NRLS.2SG’ (see Section 3.2.2). Unlike the AV markers noN-/moN-, the undergoer voice markers rarely undergo morphophonemic changes. Vowel chain reduction seems to be the only morphophonological process that may occur between the undergoer prefix ni- and bases starting with vowel sequences (see Section 2.8.4). The undergoer voice markers do not have any other allomorphs, neither morphophonemic nor suppletive ones. Since their forms hardly change, UV verbs can always be used as diagnostics for determining the morphological structure of a verbal form, i.e., for determining a particular stem former or a causative prefix which is not always clearly identifiable in actor voice verb formations.

The suffix -i which constitutes part of the UV-marking circumfixes ni--i/nu--i ‘UV.RLS/NRLS--UV’ has to be distinguished from the applicative suffix -i. The main difference is that the applicative suffix -i is found in both UV and AV constructions and that it increases verb valency (see Section 6.4.1.1 on applicative constructions). In contrast, the UV suffix -i only occurs in UV constructions and it does not mark changes in valency, as can be seen in (12) and (13) below.

(12) a. siopu ’u
  si=opu’u = ’u
  HON=grandparent=1SG.GEN AV.RLS-cut NM=wood
  ‘My grandparent cut the wood.’

---

19 For the difference between voice and applicatives in Austronesian, see also Himmelmann and Riesberg (2013).
b. teayu  nio {logi}  niopuˈu
  te=ayu  ni-o-log-i  ni=opuˈ=u
NM=wood  UV.RLS-cut-UV  GEN.HON=grandparent=1SG.GEN
‘The wood was cut by my grandparent.’

(13) a. tepidi  nonjilok  tesuraya
te=pidi  noN-jilok  te=suraya
NM=cat  AV.RLS-lick  NM=plate
‘The cat licked the plate.’

b. tesuraya  nijiloki  nupidi
  te=suraya  ni-jilok-i  nu=pidi
NM=plate  UV.RLS-lick-UV  GEN=cat
‘The plate was licked by the cat.’

6.3.2 AU-UV alternation

In Section 6.1, it was discussed that the morphological markers cannot always clearly distinguish dynamic intransitive verbs from dynamic transitive verbs. Therefore, the syntactic behavior of the verbs should also be taken into account. The discussion of actor voice and undergoer voice constructions in this section covers both (1) dynamic verbs which are morphologically marked as AV verbs and (2) dynamic verbs which are morphologically marked as dynamic intransitive verbs, but behave syntactically as transitive verbs. The possibly overlapped morphological markers—the prefixes ne-/no—will be glossed according to their syntactic distribution.

Considering that AV and UV verb formations may consist of stem-forming prefixes, the discussion of AV-UV alternation will be divided into two parts: Section 6.3.2.1 deals with AV-UV verbs without stem-forming prefixes and Section 6.3.2.2 describes AV-UV verbs with stem-forming prefixes.

6.3.2.1 AV and UV marking without a stem-forming prefix

The basic morphological markers of AV and UV constructions—without stem-forming prefixes—in realis and non-realis mood are listed in Table 6-4.

<table>
<thead>
<tr>
<th>No.</th>
<th>Realis</th>
<th>Non-realis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AV</td>
<td>UV</td>
</tr>
<tr>
<td>1.</td>
<td>noN-</td>
<td>ni-</td>
</tr>
<tr>
<td></td>
<td>no-/ne-</td>
<td>ni-</td>
</tr>
<tr>
<td>2.</td>
<td>noN-</td>
<td>ni--i</td>
</tr>
<tr>
<td></td>
<td>no-/ne-</td>
<td>ni--i</td>
</tr>
</tbody>
</table>

Table 6-4: Complete list of AV and UV markers without stem-forming prefixes

Two other prefixes which mark non-realis undergoer voice constructions are the prefixes u-‘UV.NRLS.1SG’ and nu- ‘UV.NRLS.2SG’ (see Section 8.1.2.2.1). These two prefixes will not be discussed here because morphologically they have a similar function to the UV non-realis prefix nu-.

The AV prefixes noN-/-moN- may alternate with the UV prefixes ni-/nu- or circumfixes ni--i/nu--i. Which UV marker a root may take is lexically determined. Among the two possibilities, roughly speaking the database contains more /noN-/-ni- alternations than /moN-/-ni--i alternations. Table 6-5 provides examples of verbal roots, dual-class roots (i.e., stative-verbal and nominal-verbal) and multi-class roots (i.e., stative-nominal-verbal) which can take the AV marker noN- and the UV marker ni- or ni--i.

^{20} The non-realis UV marker nu- is used in Kasimbar and ro- is used in Sienjo. The non-realis UV marker which is discussed here is nu- because my field work was mainly done in Kasimbar.  

117
<table>
<thead>
<tr>
<th>Type of root</th>
<th>AV-UV alternation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Verbal</strong></td>
<td>AV marker noN-</td>
</tr>
<tr>
<td>tovong ‘to cut’</td>
<td>nonovong &lt; noN-tovong ‘to cut’</td>
</tr>
<tr>
<td>vava ‘to bring’</td>
<td>nombava &lt; noN-vava ‘to bring’</td>
</tr>
<tr>
<td>sokok ‘to catch’</td>
<td>nonyokok &lt; noN-sokok ‘to catch’</td>
</tr>
<tr>
<td>tuda ‘to plant’</td>
<td>nonuda &lt; noN-tuda ‘to plant’</td>
</tr>
<tr>
<td>inung ‘to drink’</td>
<td>nenginung &lt; neN-inung ‘to drink’</td>
</tr>
<tr>
<td><strong>Stative-Verbal</strong></td>
<td>AV marker noN-</td>
</tr>
<tr>
<td>tatar ‘to hew’</td>
<td>nonatatar &lt; noN-tatar ‘to hew’</td>
</tr>
<tr>
<td>tilang ‘to split’</td>
<td>nonilang &lt; noN-tilang ‘to split’</td>
</tr>
<tr>
<td>balik ‘to change’</td>
<td>nombalik &lt; noN-balik ‘to change’</td>
</tr>
<tr>
<td><strong>Nominal-Verbal</strong></td>
<td>AV marker noN-</td>
</tr>
<tr>
<td>ulam ‘to cure’</td>
<td>nongulam &lt; noN-ulam ‘to cure’</td>
</tr>
<tr>
<td>ovong ‘to nest’</td>
<td>nongogong &lt; noN-ovong ‘to nest’</td>
</tr>
<tr>
<td>oro ‘to stand’</td>
<td>nongoro &lt; noN-oro ‘to build’</td>
</tr>
<tr>
<td><strong>Nominal-verbal</strong></td>
<td>AV marker noN-</td>
</tr>
<tr>
<td>salo ‘to floor’</td>
<td>nonyolo &lt; noN-salo ‘to floor’</td>
</tr>
<tr>
<td>uku ‘to put tail’</td>
<td>nonuku &lt; noN-uku ‘to put tail’</td>
</tr>
<tr>
<td><strong>Stative-verbal-nominal</strong></td>
<td>AV marker noN-</td>
</tr>
<tr>
<td>sando ‘to cure’</td>
<td>nonyando &lt; noN-sando ‘to cure’</td>
</tr>
<tr>
<td>sala ‘to blame’</td>
<td>nonyala &lt; noN-sala ‘to blame’</td>
</tr>
<tr>
<td>bayas ‘to put sand’</td>
<td>nombayas &lt; noN-bayas ‘to put sand’</td>
</tr>
</tbody>
</table>

Table 6-5: Examples of roots taking the AV marker noN- and the UV marker ni-(-i)

In addition to the default AV markers noN/-moN-, the dynamic intransitive markers ne/-no- are also included as AV markers listed in Table 6-4. This is done for those roots that take the markers ne/-no- in AV and allow for UV alternations. The dynamic markers ne/-no- alternate with the UV markers ni-
Further, the dynamic verbs taking the UV marker ni- are syntactically ambi-transitive, i.e., they can function as intransitive verbs as well as transitive verbs. In such cases, the prefixes ne-/no- can either be glossed as ‘DY.RLS’ or ‘AV.RLS’. Dynamic verbs which take the UV marker ni-i, however, can only function as transitive verbs, thus the prefixes ne-/no- are glossed as ‘AV.RLS’. It should be noted that whether or not dynamic verbs can function as intransitive and transitive verbs depends largely on the semantics of the respective roots. One cannot conclude that all verbs taking parti in the ne-/no-/-ni/- alternation are ambi-transitive verbs. Table 6-6 provides examples of verbal roots and dual-class roots (i.e., nominal-verbal) which take the dynamic prefixes ne-/no- and alternate with the UV prefixes ni-(i).

<table>
<thead>
<tr>
<th>Type of root</th>
<th>AV-UV alternation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal</td>
<td></td>
</tr>
<tr>
<td>dampi ‘to light fire’</td>
<td>ne-dampi &lt; no-dampi</td>
</tr>
<tr>
<td></td>
<td>nidampi &lt; ni-dampi</td>
</tr>
<tr>
<td></td>
<td>‘to light fire’</td>
</tr>
<tr>
<td>dandang ‘to watch’</td>
<td>no-dandang &lt; no-dandang</td>
</tr>
<tr>
<td></td>
<td>nidandang &lt; ni-dandang</td>
</tr>
<tr>
<td></td>
<td>‘to watch’</td>
</tr>
<tr>
<td>bale ‘to turn’</td>
<td>no-bale &lt; no-bale</td>
</tr>
<tr>
<td></td>
<td>nibale &lt; ni-bale</td>
</tr>
<tr>
<td></td>
<td>‘to turn’</td>
</tr>
<tr>
<td>Nominal-verbal</td>
<td></td>
</tr>
<tr>
<td>karaja ‘to work’</td>
<td>no-karaja &lt; no-karaja</td>
</tr>
<tr>
<td></td>
<td>nikaraja &lt; ni-karaja</td>
</tr>
<tr>
<td></td>
<td>‘to work’</td>
</tr>
<tr>
<td>asu ‘to hunt with a</td>
<td></td>
</tr>
<tr>
<td>dog’</td>
<td>noasu &lt; no-asu</td>
</tr>
<tr>
<td></td>
<td>niasu &lt; ni-asu</td>
</tr>
<tr>
<td></td>
<td>‘to hunt with a dog’</td>
</tr>
<tr>
<td>pangki ‘to plough’</td>
<td>no-pangki &lt; no-pangki</td>
</tr>
<tr>
<td></td>
<td>nipangki &lt; ni-pangki</td>
</tr>
<tr>
<td></td>
<td>‘to plough’</td>
</tr>
<tr>
<td>sangki ‘to sickle’</td>
<td>no-sangki &lt; no-sangki</td>
</tr>
<tr>
<td></td>
<td>nisangki &lt; ni-sangki</td>
</tr>
<tr>
<td></td>
<td>‘to sickle’</td>
</tr>
<tr>
<td>kalavata ‘to make</td>
<td>no-kalavata &lt; no-kalavata</td>
</tr>
<tr>
<td>path in the rice</td>
<td>nikalavata &lt; ni-kalavata</td>
</tr>
<tr>
<td>field’</td>
<td>‘to make path in the rice field’</td>
</tr>
<tr>
<td>Verbal</td>
<td></td>
</tr>
<tr>
<td>kave ‘to call with</td>
<td>no-kave&lt; no-kave</td>
</tr>
<tr>
<td>hand’</td>
<td>nikave &lt; ni-kave-i</td>
</tr>
<tr>
<td></td>
<td>‘to call with hand’</td>
</tr>
<tr>
<td>kundu ‘to kiss’</td>
<td>no-kundu &lt; no-kundu</td>
</tr>
<tr>
<td></td>
<td>nikundu &lt; ni-kundu-i</td>
</tr>
<tr>
<td></td>
<td>‘to kiss’</td>
</tr>
<tr>
<td>Nominal-verbal</td>
<td></td>
</tr>
<tr>
<td>ulingka ‘coconut’</td>
<td>neulingka &lt; ne-ulingka</td>
</tr>
<tr>
<td></td>
<td>niulingka &lt; ni-ulingka-i</td>
</tr>
<tr>
<td></td>
<td>‘to produce coconut milk’</td>
</tr>
</tbody>
</table>

Table 6-6: Examples of roots taking the dynamic markers ne-/no- and the UV markers ni-(i)

### 6.3.2.2 AV and UV marking with a stem-forming prefix

In addition to the morphological possibilities discussed in the previous section, there are roots which, in addition to the voice morphology, take a stem-forming prefix. Table 6-7 presents AV and UV morphology with a stem-forming prefix in realis and non-realis mood.

<table>
<thead>
<tr>
<th>Realis</th>
<th>Non-realis</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV</td>
<td>AV</td>
</tr>
<tr>
<td>UV</td>
<td>UV</td>
</tr>
<tr>
<td>ni-SF</td>
<td>m-SF</td>
</tr>
<tr>
<td>(ni-pe/-po-)</td>
<td>(m-po/-pe-)</td>
</tr>
</tbody>
</table>

Table 6-7: Complete list of AV and UV markers with stem-forming prefixes

Note that the AV markers noN/-moN- may also precede the stem-forming prefixes, but they only occur in combination with other prefixes, i.e., applicative suffixes or causative markers. Therefore, this formation is further discussed in Section 6.4.1.1 on applicative constructions.

As mentioned in the previous section, prefixes resulting from the combination of n- plus stem-forming prefix pe/-po- are formally indistinguishable from the morphologically simple prefixes ne-/no-denoting dynamic intransitive verbs. One test to ascertain the function of of a given instance of ne-/no-
is to convert the *ne/-no-* construction into an undergoer voice construction (i.e., *ni- + pe/-po-*). If a verb prefixed with *ne/-no-* allows this conversion, it is the actor voice of a transitive verb. Examples are given in (14) and (15).

(14) a. sisia   nevuntu   tevea
    sisia   n-pe-nevuntu   te=vea
    3PL  AV.RLS-SF-carry:PL  NM=rice
    ‘They carried the rice.’

b. tevea   nipevuntu   ninia
    te=vea   ni-pe-vuntu   ninia
    NM=rice  UV.RLS-SF-carry:PL  3PL.GEN
    ‘The rice was carried by them.’

(15) a. siami   nogutu   tepaepulu
    siami   n-po-gutu   te=paepulu
    1PL.EX  AV.RLS-SF-make  NM=rice.stuffed.in.bamboo
    ‘We made rice-bamboo food.’

b. tepaepulu   nipogutu   niami
    te=paepulu   n-po-gutu   niami
    NM=rice.stuffed.in.bamboo  UV.RLS-SF-make  1PL.EX.GEN
    ‘Rice-bamboo food was made by us.’

The prefixes *ne/-no-*, which derive from the nasal prefix *n*- plus a stem former, should also be distinguished from *ne/-no-*, consisting of *n*- plus the causative marker *pe/-po-*. In this case, the distinction can be made on a semantic basis. If the newly derived verbs convey a causative meaning, the prefixes *pe/-po-* should be glossed as causative markers (see Section 6.4.1.2).

There is a limited set of verbal roots which requires *n-SF-* in AV and *ni-SF-* in UV constructions. Roots which can occur in this alternation are verbal roots and nominal-verbal roots. In addition to *nevuntu* ‘to carry’ and *nogutu* ‘to make’ in (14) and (15), other examples are listed in Table 6-8.

<table>
<thead>
<tr>
<th>Type of root</th>
<th>AV-UV alternation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal</td>
<td>AV verb with <em>n-pe/-po-</em></td>
</tr>
<tr>
<td>nevuntu ‘to carry’</td>
<td>n-pe-nevuntu</td>
</tr>
<tr>
<td>AV.RLS-SF-carry:PL</td>
<td>NM=rice</td>
</tr>
<tr>
<td>tevea ‘to carry’</td>
<td>te=vea</td>
</tr>
<tr>
<td>nipogutu ‘to make’</td>
<td>n-po-gutu</td>
</tr>
<tr>
<td>AV.RLS-SF-make</td>
<td>UV.RLS-SF-make</td>
</tr>
<tr>
<td>Nominal-verbal</td>
<td>AV verb with <em>n-pe/-po-</em></td>
</tr>
<tr>
<td>lapi ‘to marry’</td>
<td>n-po-lapi</td>
</tr>
<tr>
<td>AV.RLS-SF-lapi</td>
<td>NM=rice</td>
</tr>
<tr>
<td>utang ‘to cook vegetables’</td>
<td>n-pe-utang</td>
</tr>
<tr>
<td>AV.RLS-SF-utang</td>
<td>UV.RLS-SF-utang</td>
</tr>
<tr>
<td>valang ‘food to carry’</td>
<td>n-pe-valang</td>
</tr>
<tr>
<td>AV.RLS-SF-valang</td>
<td>‘to carry food’</td>
</tr>
</tbody>
</table>

Table 6-8: Examples of roots taking the AV prefix *n-SF-* and the UV markers *ni-SF-*

Syntactically, the AV verbs listed in Table 6-8 can also function as intransitive verbs, as exemplified in (16). The verb *nogabu* ‘to cook’ can function as predicate in intransitive and transitive clauses. Without or with the object *teaniong* ‘rice’, example (16) is acceptable.

(16) siina   nogabu   (teaniong)
    si=ina   n-po-gabu   te=aniong
    HON=mother  AV.RLS-SF-cook  NM=rice

120
‘Mother cooked (rice).’

However, not all AV verbs with ne-/no- ‘n-SF-’ can function as ambi-transitive verbs. Those deriving from verbal transitive verbs, such as nogutu ‘to make’ and nevuntu ‘to carry (PL)’, cannot be used intransitively.

In very few cases, a UV form marked with ni-SF- corresponds to an AV formation marked with noN-, as seen in example (17).

(17) a. siina nombaluk tebau
    
    si=ina noN-baluk te=bau
    
    HON=mother AV.RLS-sell NM=fish
    
    ‘Mother sold fish.’

b. tebau nipobaluk niina
    
    te=bau ni-po-baluk ni=ina
    
    NM=fish UV.RLS-SF-sell GEN,HON=mother
    
    ‘Fish was sold by mother.’

In this case, the AV form is not analyzed as containing a stem-forming prefix because there is no other evidence for a verbal stem-forming prefix of the shape poN-. In addition to nombaluk ‘to sell’, the AV verbs nogutu ‘to make’ and nogabu ‘to cook’ discussed above are also recorded as nonggutu and nonggabu.

### 6.4 Valency-changing operations

The discussion about valency-changing operations pertains to those morphological processes which apply to verbs in order to change their valence, i.e., to processes that either increase or reduce the number of arguments. The morphological markers applied in valence-increasing processes are described in Section 6.4.1 while Sections 6.4.2 discusses valence-decreasing processes.

Before looking at the valency-changing processes, some terms related to argument structure will be introduced. There are two types of ditransitive constructions: double-object constructions and oblique-object constructions. In double-object constructions, both objects are unmarked (i.e., they appear without prepositions). Following Kroeger (2005:61), the object that directly follows the predicate will be called the primary object (OBJ1), the second object will be called the secondary object (OBJ2). In oblique-object constructions, the object that directly follows the predicate is unmarked and will simply be called the object (OBJ); the second object is marked by a preposition and will be called the oblique-object (OBL-O). Although it is marked by a preposition, the oblique-object is still a core argument. Deleting the oblique-object results in ungrammaticality (see below and also Section 8.4.2). In distinction to oblique-objects, there are also non-core oblique arguments, which can be freely omitted. Oblique arguments are glossed as OBL. In (simple) transitive constructions, the object will be glossed as O, the subject will be glossed as S.

#### 6.4.1 Valency-increase

Morphological processes which increase valency of a predicate are applicative and causative constructions. Both increase the number of argument by one slot: intransitive predicates become transitive; transitive predicates become ditransitive. Applicative constructions and causative constructions, and their respective morphological markers are discussed in Section 6.4.1.1 and Section 6.4.1.2.

##### 6.4.1.1 Applicatives

There are two applicative suffixes in Tajio: the applicative suffix -i (applicative type I) and the applicative suffix -ao (applicative type II). Both applicative markers can co-occur with all AV markers, either with or without stem-forming prefixes. Table 6-9 summarizes the applicative paradigms in Tajio.
The formative -i which marks the applicative constructions should be distinguished from the formative which forms -i, part of the UV circumfix ni--i. In contrast to -i in ni--i ‘UV.RLS’ (see Sections 6.3.1.2 and 6.3.2.1), the applicative suffix -i changes the argument structure of the predicate to which it attaches by increasing its valence. Furthermore, it is not restricted to UV constructions. To avoid confusion between the suffix -i that forms part of the circumfix ni--i and the applicative suffix -i, the latter will be referred to as -i\text{APPL}.

6.4.1.1 Applicative type I (with suffix -i\text{APPL})

Regarding stem formations, the discussion of applicative type I will be divided into two parts: (a) applicative type I without stem-forming prefix and (b) applicative type I with stem-forming prefix.

a) Applicative type I without stem-forming prefix

Without a stem-forming prefix, the affix formations of AV applicative verbs are noN-/ne-/no--i\text{APPL} in realis forms and moN-/me-/mo--i\text{APPL} in non-real is forms. The UV counterparts of these AV applicative forms are ni--i\text{APPL} in realis and nu--i\text{APPL} in non-real is mood. The applicative marker -i\text{APPL} may attach to dynamic transitive bases and dynamic intransitive bases. Generally, it is more commonly occurs with intransitive bases rather than with transitive bases. There are no stative bases attested as taking the suffix -i\text{APPL}.

The suffix -i\text{APPL} applies an additional core argument in goal or theme function, thus this type of applicative may be called goal applicative. Semantically, the goal applicative derives a meaning ‘to conduct an activity toward someone or something’. Examples of intransitive and transitive verbal bases taking the goal applicative markers -i\text{APPL} are presented in Table 6-10.

<table>
<thead>
<tr>
<th>Types of applicable</th>
<th>In AV constructions</th>
<th>In UV constructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realis</td>
<td>Non-Realis</td>
<td>Realis</td>
</tr>
<tr>
<td>Type I (with suffix -i)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>noN--i</td>
<td>moN--i</td>
<td>ni--i</td>
</tr>
<tr>
<td>ne-/no--i</td>
<td>me-/mo--i</td>
<td></td>
</tr>
<tr>
<td>no-SF--i (no-pe/-po--i)</td>
<td>mo-SF--i (mo-pe/-po--i)</td>
<td>ni-SF--i (ni-pe/-po--i)</td>
</tr>
<tr>
<td>Type II (with suffix -ao)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>noN--ao</td>
<td>moN--ao</td>
<td>ni--ao</td>
</tr>
<tr>
<td>ne-/no--ao</td>
<td>me-/mo--ao</td>
<td></td>
</tr>
<tr>
<td>n-SF--ao (n-pe/-po--ao)</td>
<td>m-SF--ao (m-pe/-po--ao)</td>
<td>ni-SF--ao (ni-pe/-po--ao)</td>
</tr>
<tr>
<td>no-CAUS-SF--ao</td>
<td>mo-CAUS-SF--ao</td>
<td>ni-CAUS-SF--ao</td>
</tr>
</tbody>
</table>

Table 6-9: Applicative paradigms in Tajo

The formative -i which marks the applicative constructions should be distinguished from the formative which forms -i, part of the UV circumfix ni--i. In contrast to -i in ni--i ‘UV.RLS’ (see Sections 6.3.1.2 and 6.3.2.1), the applicative suffix -i changes the argument structure of the predicate to which it attaches by increasing its valence. Furthermore, it is not restricted to UV constructions. To avoid confusion between the suffix -i that forms part of the circumfix ni--i and the applicative suffix -i, the latter will be referred to as -i\text{APPL}.

6.4.1.1 Applicative type I (with suffix -i\text{APPL})

Regarding stem formations, the discussion of applicative type I will be divided into two parts: (a) applicative type I without stem-forming prefix and (b) applicative type I with stem-forming prefix.

a) Applicative type I without stem-forming prefix

Without a stem-forming prefix, the affix formations of AV applicative verbs are noN-/ne-/no--i\text{APPL} in realis forms and moN-/me-/mo--i\text{APPL} in non-real is forms. The UV counterparts of these AV applicative forms are ni--i\text{APPL} in realis and nu--i\text{APPL} in non-real is mood. The applicative marker -i\text{APPL} may attach to dynamic transitive bases and dynamic intransitive bases. Generally, it is more commonly occurs with intransitive bases rather than with transitive bases. There are no stative bases attested as taking the suffix -i\text{APPL}.

The suffix -i\text{APPL} applies an additional core argument in goal or theme function, thus this type of applicative may be called goal applicative. Semantically, the goal applicative derives a meaning ‘to conduct an activity toward someone or something’. Examples of intransitive and transitive verbal bases taking the goal applicative markers -i\text{APPL} are presented in Table 6-10.

| Type of base | Applicative type I without SF in AV/UV | |
|--------------|----------------------------------------|-
| Transitive base | AV: noN--i\text{APPL} | UV: ni--i\text{APPL} |
| namaatu < noN-paatu | ‘AV.RLS-send’ | nipaatu < ni-paatu-i |
| ‘to send’ | ‘AV.RLS-send-APPL’ | ‘UV.RLS-send-APPL’ |
| nonginda < noN-inda | ‘AV.RLS-lend’ | niinda < ni-inda-i |
| ‘to lend’ | ‘AV.RLS-lend-APPL’ | ‘UV.RLS-lend-APPL’ |
| nombie < noN-vee | ‘AV.RLS-give’ | nivee < ni-vee-i |
| ‘to give’ | ‘AV.RLS-give-APPL’ | ‘UV.RLS-give-APPL’ |
| Intransitive base | AV: no--i\text{APPL} | UV: ni--i\text{APPL} |
| ndiis < ne-ndiis | ‘DY.RLS-bath’ | ndiisi < no-ndiis-i |
| ‘to take a bath’ | ‘AV.RLS-bath-APPL’ | ‘UV.RLS-bath-APPL’ |
| ngeou < ne-gou | ‘DY.RLS-scream’ | ngou < ni-gou-i |
| ‘to scream’ | ‘AV.RLS-scream-APPL’ | ‘UV.RLS-scream-APPL’ |
The following discussion illustrates the valence-increasing process for intransitive and transitive bases, respectively. Example (18)a shows the intransitive verb *nogombo’* ‘to talk’ which has one core argument, i.e., the subject *sia’u* ‘1SG’. In (18)b the valency of *nogombo’* increases as it is marked by the applicative marker -i_APPL. In addition to the subject, the newly derived applicative predicate now needs a further core argument that functions as object, in this case *teparuja* ‘rice paddy’. Semantically, the subject argument *sia’u* maintains its role as an agent; the new undergoer *teparuja* is assigned a theme role.

<table>
<thead>
<tr>
<th>nempoyung</th>
<th>nempoyungi</th>
<th>nimpoyungi</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘DY.RLS-whistle’</td>
<td>‘AV.RLS-whistle-APPL’</td>
<td>‘UV.RLS-whistle-APPL’</td>
</tr>
<tr>
<td>to whistle</td>
<td>‘to whistle at s.o/sth’</td>
<td></td>
</tr>
<tr>
<td>nonjeek</td>
<td>ninjeek</td>
<td>nimpoyungi</td>
</tr>
<tr>
<td>‘DY.RLS-laugh’</td>
<td>‘AV.RLS-laugh-APPL’</td>
<td>‘UV.RLS-laugh-APPL’</td>
</tr>
<tr>
<td>to laugh</td>
<td>‘to laugh at s.o’</td>
<td></td>
</tr>
<tr>
<td>nogombo’</td>
<td>nogombo’i</td>
<td>nimpoyungi</td>
</tr>
<tr>
<td>‘DY.RLS-talk’</td>
<td>‘AV.RLS-talk-APPL’</td>
<td>‘UV.RLS-talk-APPL’</td>
</tr>
<tr>
<td>‘to talk’</td>
<td>‘to talk about sth.’</td>
<td>‘to talk about sth.’</td>
</tr>
</tbody>
</table>

Table 6-10: Examples applicative Type I without stem former

In the corresponding applicative UV construction, the object *teparuja* ‘rice paddy’ functions as the subject of the clause, as shown in example (18)c.

(18) a. *sia’u* nogombo’
    *sia’u* no-gombo’
    1SG DY.RLS-talk
    with HON=PN
    S
    A: Agent
    ‘I talked with Wafik.’

b. *sia’u* nogombo’i
    *sia’u* noN-gombo’-i_APPL
    1SG AV.RLS-talk-APPL
    with HON=PN
    S
    A: Agent
    ‘I discussed/talked about rice paddy with Wafik.’

(19) a. *siina* nomaatu
    *siina* noN-paatu
    HON=mother
    1SG AV.RLS-send
    with HON=father
    S
    ‘Mother sent a letter to father.’

b. *siina* nomaatu
    *siina* noN-paatu-i_APPL
    1SG
    ‘Mother sent a letter to father.’
HON=mother AV.RLS-send-APPL HON=father NM=letter
S V_{AV} OBJ_1 OBJ_2
A:Agent V_{AV} U:Goal U:Theme

‘Mother sent father a letter.’

Further, the goal primary object siama ‘father’ can function as a goal subject in the applicative UV construction, as presented by example (19)c. However, the theme direct object tesura’ ‘letter’ cannot function as the subject in applicative UV constructions, as shown by example (19)d.

c. siama nipaatui niina tesura’
siama ni-paatu-i\_APPL ni=ina te=sura’
HON=father UV.RLS-send-APPL GEN HON=mother NM=letter
S V_UV OBJ_1 OBJ_2
U:Goal V_UV A:Agent U:Theme

‘Father was sent a letter by mother.’

d. *tesura’ nipaatui niina (mao) siama

b) Applicative type I with stem-forming prefix

With a stem-forming prefix, the affix formations of AV applicative verbs are no-pe/-po--i\_APPL and mo-pe/-po--i\_APPL in reals and non-reals mood respectively. The AV markers no/-mo- are analyzed as suppletive allomorphs of the AV prefixes noN/-moN- because they only occur if noN/-moN- precede stem-forming prefixes or causative markers (see also Section 3.3.2.1). The respective UV forms of nope/-po--i\_APPL and mo-pe/-po--i\_APPL are ni-pe/-po--i\_APPL and nu-pe/-po--i\_APPL.

This applicative marker attaches to intransitive bases. Syntactically it changes a non-core oblique argument denoting location into a core-argument which functions as a locative object. Thus, this type of applicative may be called locative applicative. Semantically, locative applicative predicates denote the meaning ‘conducting an activity at a place stated by the locative object’. Examples of locative applicative derivations of intransitive bases can be seen in Table 6-11.

<table>
<thead>
<tr>
<th>Type of base</th>
<th>Intransitive base</th>
<th>AV: no-SF--i_APPL</th>
<th>UV: ni-SF--i_APPL</th>
</tr>
</thead>
<tbody>
<tr>
<td>noavu &lt; no-avu</td>
<td>‘to cook’</td>
<td>nopeavu &lt; no-pe-avu-i</td>
<td>nipoeavu &lt; ni-pe-avu-i</td>
</tr>
<tr>
<td>‘to cook’</td>
<td>‘AV.RLS-SF-cook-APPL’</td>
<td>‘UV.RLS-SF-cook-APPL’</td>
<td></td>
</tr>
<tr>
<td>nolayag &lt; no-layag</td>
<td>‘to sail’</td>
<td>nopolayagi &lt; no-po-layag-i</td>
<td>nipopolayagi &lt; ni-po-layag-i</td>
</tr>
<tr>
<td>‘to sail’</td>
<td>‘AV.RLS-SF-sail-APPL’</td>
<td>‘UV.RLS-SF-sail-APPL’</td>
<td></td>
</tr>
<tr>
<td>nomberek &lt; no-mberek</td>
<td>‘to stay’</td>
<td>nopolomberek &lt; no-po-mberek-i</td>
<td>nipopolomberek &lt; ni-po-mberek-i</td>
</tr>
<tr>
<td>‘to stay’</td>
<td>‘AV.RLS-SF-stay-APPL’</td>
<td>‘UV.RLS-SF-stay-APPL’</td>
<td></td>
</tr>
<tr>
<td>nesoog &lt; ne-soog</td>
<td>‘to stop by’</td>
<td>nopolensoogi &lt; no-po-soog-i</td>
<td>nipopolensoogi &lt; ni-po-soog-i</td>
</tr>
<tr>
<td>‘to stop by’</td>
<td>‘AV.RLS-SF-stop-by-APPL’</td>
<td>‘UV.RLS-SF-stop-by-APPL’</td>
<td></td>
</tr>
<tr>
<td>peturu &lt; pe-turu</td>
<td>‘to sleep’</td>
<td>nopoleturu &lt; no-po-turu-i</td>
<td>nipopoleturu &lt; ni-po-turu-i</td>
</tr>
<tr>
<td>‘to sleep’</td>
<td>‘AV.RLS-SF-sleep-APPL’</td>
<td>‘UV.RLS-SF-sleep-APPL’</td>
<td></td>
</tr>
</tbody>
</table>

Table 6-11: Examples applicative type I with stem former

A locative applicative construction derived from an intransitive verbal base is exemplified in (20). The intransitive verbal base in (20)a requires one core argument, i.e., a subject argument. The locative argument (the location where the activity took place) is expressed in a non-core function, prepositionally marked by i ‘at’. As it is non-core, this oblique argument is optional, thus it can be deleted from the clause. In (20)b the applicative derivation changes the non-core oblique argument i dagat ‘in the sea’ into a core argument functioning as an object. Semantically, the new object denotes a locative meaning, ‘the place where the activity takes place’. In locative applicative UV
constructions, the locative object becomes the subject of the transitive clause, as shown in example (20)c.

(20)  

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>siasman</td>
<td>noturu</td>
<td>i</td>
<td>ompas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>si=Asman</td>
<td>no-turu</td>
<td>i</td>
<td>ompas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HON=PN</td>
<td>ST.RLS-sleep</td>
<td>LOC</td>
<td>mat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>V</td>
<td>OBL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Asman slept on the mat.’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>siasman</td>
<td>nopoturui</td>
<td>teompas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>si=Asman</td>
<td>no-po-turu-i\text{\text{-APPL}}</td>
<td>te=ompas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HON=PN</td>
<td>AV.RLS-SF-sleep-APPL</td>
<td>NM=mat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>V\text{$_{AV}$}</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A: Agent</td>
<td>V\text{$_{AV}$}</td>
<td>U: Locative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Asman slept on the mat.’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>teompas</td>
<td>nipoturui</td>
<td>niasman</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>te=ompas</td>
<td>ni-po-turu-i\text{\text{-APPL}}</td>
<td>ni=Asman</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NM=mat</td>
<td>UV.RLS-SF-turu-APPL</td>
<td>GEN.HON=Asman</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>V\text{$_{UV}$}</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U: Locative</td>
<td>V\text{$_{UV}$}</td>
<td>A: Agent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Asman slept on the sea.’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.4.1.1.2 Applicative type II (with suffix -\text{\text{-ao})}

The second applicative construction is marked by the applicative suffix -\text{\text{-ao}}. This marker is suffixed to bases with the AV markers noN/-ne/-no- in realis mood and noN/-ne/-no- in non-realis mood. Their UV counterparts are ni--ao and nu--ao, respectively. In addition, -\text{\text{-ao}} can also be suffixed to AV markers with stem-forming prefixes, i.e., in realis forms n-\text{pe-}/po- and non-realis forms m-/pe-/po-. It should be born in mind that there are limited numbers of AV verbs occurring with the nasal prefix n-m- plus a stem former pe-/po- (see Section 6.3.2.2). The UV formations of these applicative AV forms are ni-\text{pe-}/po-ao and nu-\text{pe-}/po-ao (in realis and non-realis mood). The most complex but rare formations are those where the applicative marker -\text{\text{-ao}} attaches to bases consisting of a stem former and a causative marker. The suffix combination of this causative-applicative derivation is noN/-mo-CAUS-SF--ao in AV constructions and ni-/nu-CAUS-SF--ao in UV constructions.

The applicative marker -\text{\text{-ao}} can be attached to intransitive and transitive bases. The suffix -\text{\text{-ao}} occurring in combination with the AV markers noN/-ne- changes the valency of transitive bases, bivalent into trivalent. When suffixed to bases with the AV markers ne/-no-, it increases the valency of intransitive bases, which then become transitive. In case of causative-applicative derivations, it attaches to transitive bases. In contrast to the applicative marker -IAPPL, the applicative marker -\text{\text{-ao}} may also attach to static roots. In case of statives, the applicative marker -\text{\text{-ao}} is combined with the AV marker noN-, forming noN--ao. Its UV counterpart is ni--ao.

Attached to transitive bases, the suffix -\text{\text{-ao}} adds a core argument in benefactive function; it derives the meaning ‘to conduct an activity for someone’. Thus, the second type of applicative may be called benefactive applicative. Suffix to intransitive verbal bases or statives, it adds a new core argument in patient function. Semantically, if derived from intransitive verbal bases, the applicative predicates may convey one of two possible meanings: a causative meaning, i.e., ‘to make something/someone into what is stated by the root’ or ‘to conduct an activity toward someone or something’. With static roots, the applicative always derives a causative meaning. Examples of intransitive and transitive verbal bases as well as statives taking the applicative markers -\text{\text{-ao}} are given in Table 6-12.

<table>
<thead>
<tr>
<th>Type of base</th>
<th>Applicative type II in AV/UV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive base</td>
<td>AV: noN--ao</td>
</tr>
<tr>
<td>nomaatuu &lt; noN-paatuu</td>
<td>nomaatuu &lt; noN-paatuu-ao</td>
</tr>
<tr>
<td>‘AV.RLS-send’ ‘to send’</td>
<td>‘AV.RLS-send-APPL’</td>
</tr>
<tr>
<td>‘to send sth. for s.o’</td>
<td>‘to send sth. for s.o’</td>
</tr>
<tr>
<td>nongoli &lt; noN-oli</td>
<td>nongoli &lt; noN-oli-ao</td>
</tr>
<tr>
<td>Intransitive base</td>
<td>AV: ne-/no--ao</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>nenyaoang &lt; ne-nyaong</td>
<td>‘DY.RLS-meaw’</td>
</tr>
<tr>
<td>nenyu &lt; ne-nyaau</td>
<td>‘DY.RLS-go.down’</td>
</tr>
<tr>
<td>neunggus &lt; ne-unggus</td>
<td>‘DY.RLS-growl’</td>
</tr>
<tr>
<td>novivi &lt; no-vivi</td>
<td>‘DY.RLS-yell’</td>
</tr>
<tr>
<td>Intransitive base</td>
<td>AV: no--ao</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>nesonggal &lt; ne-songgal</td>
<td>‘DY.RLS-disembark’</td>
</tr>
<tr>
<td>nelolom &lt; ne-lolom</td>
<td>‘DY.RLS-swim’</td>
</tr>
<tr>
<td>negiir &lt; ne-giir</td>
<td>‘DY.RLS-move.a.side’</td>
</tr>
<tr>
<td>Stative base</td>
<td>AV: no--ao</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>naanjul &lt; nV-anjul</td>
<td>‘ST.RLS-washed.away’</td>
</tr>
<tr>
<td>nanavu &lt; nV-navu</td>
<td>‘ST.RLS-fall’</td>
</tr>
<tr>
<td>nabasag &lt; nV-basag</td>
<td>‘ST.RLS-big’</td>
</tr>
<tr>
<td>napangkat &lt; nV-pangkat</td>
<td>‘ST.RLS-high’</td>
</tr>
</tbody>
</table>
Example (21) shows a benefactive applicative construction derived from a transitive base. The bivalent verb nogutu ‘to make’ in (21)a has two core arguments: the subject siama ‘father’ and the object telamari ‘cupboard’. It also has a non-core oblique argument, the prepositional phrase mao tetuai’u ‘to my younger sibling’. The applicative derivation with -ao then promotes the non-core oblique argument mao tetuai’u to become a core argument filling the primary object function, as shown in (21)b.

(21) a. siama nogutu telamari
    si=ama n-po-gutu te=lamari
    HON=father AV.RLS-SF-make NM=cupboard
    S VAV O
    A: Agent VAV U: Theme
    mao tetuai’u
    mao te=tuai=’u
    to NM=younger.sibling=1SG.GEN
    OBL
    U: Beneficiary
    ‘Father made a cupboard for my younger brother.’

    b. siama nogutuaao tetuai’u
    si=ama n-po-gutu-ao te=tuai=’u
    HON=father AV.RLS-SF-make-APPL NM=younger.sibling=1SG.GEN
    S VAV OBJ
    A: Agent VAV U: Beneficiary
    telamari
telamari
    te=lamari
    NM=cupboard
    OBJ
    U: Theme
    ‘Father made a cupboard for my younger brother.’

Further, in applicative UV construction, only the primary object tetuai’u (i.e., the beneficiary) can function as the subject of the clause. Assigning the secondary object telamari (i.e., the theme) to subject function in the applicative UV constructions results in ungrammaticality, as seen in (21)d.

c. tetuai’u nipogutuaao niama
    te=tuai=’u ni-po-gutu-ao ni=ama
    NM=younger.sibling=1SG.GEN UV.RLS-SF-make-APPL GEN,HON=father
    S VUV OBJ
    U: Beneficiary VUV A: Agent
d. *telamari nipogutuao niama (mao) tetuai’u
   For: ‘A cupboard was made by my father for my younger brother.’

Depending on the valency of the predicate, an oblique may function as a core argument, i.e., an oblique-object, as can be seen in (22)a. It is an obligatory argument, and its omission makes the clause ungrammatical, as shown in example (22)b.

(22) a. siama noggutuao telamari
   si=ama n-po-gutu-ao te=lamari
   HON=father AV.RLS-SF-make-APPL NM=cupboard
   S V_AV OBJ
   A: Agent V_AV U: Theme

   mao tetuai’u
   mao te=tauai’ u
   for NM=younger.sibling=1SG.GEN
   OBL-O
   U: Beneficiary
   ‘Father made a cupboard for my younger sibling.’

b. *siama nogutuao telamari

In addition to altering the syntactic status of a beneficiary argument, the applicative suffix -ao can also change a non-core instrument argument into a core instrument argument. For example, in (23)a the transitive verb norembas ‘to hit’ has two core arguments: the subject siia ‘3SG’ and the object teasu ‘the dog’; and it also has an oblique argument, in a prepositional phrase sono teayu ‘with a wooden stick’. In (23)b, the applicative suffix -ao changes the oblique instrument sono teayu into a core object argument teayu ‘wood’. This change is followed by another change: The former object teasu now becomes an oblique-object, i.e., it becomes obligatory and thus cannot be deleted from the AV construction. Deleting this argument makes the clause ungrammatical, as shown by example (23)c.

(23) a. siia norembas teasu sono teayu
   siia noN-rembas te=asu sono te=ayu
   3SG AV.RLS-hit NM=dog with NM=wood
   S V_AV O OBL
   A: Agent V_AV U: Patient Instrument
   ‘He hit a dog with a wooden stick.’

b. siia norembasao teayu mao teasu
   siia noN-rembas-ao te=ayu mao te=asu
   3SG AV.RLS-hit-APPL NM=wood to NM=dog
   S V_AV OBJ OBL-O
   A: Agent V_AV U: Instrument Patient
   ‘He hit a dog with a wooden stick.’

c. *siia norembasao teayu

In UV applicative constructions, it is the object teayu, not the oblique-object mao teasu which can function as the subject of the clause, as exemplified by (23)d below.

(23) d. teayu nirembasaonya mao teasu
   te=ayu ni-rembas=ao=nya mao te=asu
   NM=wood UV.RLS-hit=APPL=3SG.GEN to NM=dog
   ‘He hit the dog with a wooden stick.’
Compared to transitive bases, deriving applicative -ao formations from intransitive verbal bases is not very common. The predicate in example (24) is the transitive verb nenyaongao ‘to meow at’ which derives from the intransitive verbal base nenyaong ‘to meow’. The newly derived applicative predicate needs two core arguments: a subject, tepidi vevine ua ‘that female cat’ and an object, telangkainya ‘her male’. In this example, the semantic role of the newly introduced argument is a patient.

(24) a. tepidi vevine ua nenyaong
te=pidi vevine ua ne-nyaong
NM=cat female DIST DY.RLS-meow
‘That female cat meowed.’

b. tepidi vevine ua nenyaongao telangkainya
te=pidi vevine ua ne-nyaong-ao te=langkai=nya
NM=cat female DIST AV.RLS-meow-APPL NM=male=3SG.GEN
S O
A: Agent U: Patient
‘That female cat meowed at her male.’

In the applicative UV construction, the patient object telangkainya ‘her male’ functions as the subject of the clause, as shown in example (24)c.

c. telangkainya ninyaongao nupidi vevine ua
te=langkai=nya ni-nyaong-ao nu=pidi vevine ua
NM=male=3SG.GEN UV.RLS-meow-APPL GEN=cat female DIST
S O
U: Patient A: Agent
‘The male (cat) was meowed at by that female cat.’
(lit: ‘Her male was meowed at by that female cat.’)

The following examples show applicative constructions are derived from stative roots. The derived applicative verb formation requires two core arguments, a subject and an object. In applicative UV constructions, the object becomes the subject of the clause.

(25) a. teulingka naanjul
te=ulingka nV-anjul
NM=coconut ST.RLS-washed.away
‘The coconut is washed away.’

b. tealovaa nonganjulao teulingka
te=alovaa noN-anjul-ao te=ulingka
NM=flood AV.RLS-wash.away-APPL NM=coconut
‘The flood washed away the coconut.’

c. teulingka nianjulao nualovaa
te=ulingka ni-anjul-ao nu=alovaa
NOM-coconut UV.RLS-wash.away-APPL GEN=flood
‘The coconut was washed away by the flood.’

(26) a. tekaca nanavu
te=kaca nV-navu
NM=glass ST.RLS-fall
‘The glass fell.’

b. siina nonavuaao tekaca
si=ina noN-navu-ao te=kaca
HON=mother AV.RLS-fall-APPL NM=kaca
‘Mother let the glass fall.’
There are two types of causative markers in Tajio: the prefix PO- and pei-. The former has two realizations: the vowel-harmonic causative marker pV- and the non-harmonic causative markers pe-/po-. The non-harmonic realizations have the same forms as the stem-forming prefixes pe-/po-. In order to distinguish the causative markers pe-/po- from the stem-forming prefixes pe-/po-, the causative marker is glossed as PO-. The vowel-harmonic pV- itself has another three realizations: pa-, pe- and po- depending on the first vowel of the base (the details on vowel-harmonic changes are discussed in Section 2.8.6). In contrast to PO-, pei- does not have any allomorphs. The complete paradigms of causative formations are listed in Table 6-13.

6.4.1.2 Basic causatives

The causative prefix PO- can attach to stative and intransitive verbal bases. There are cases in which roots need a stem-forming prefix before taking the causative marker. Stative roots take the vowel-harmonic causative marker pV-; intransitive verbal bases occur with the non-harmonic causative marker pe-/po-. Which of these two forms (pe- or po-) a base may take is lexically determined (see also Section 3.3.2.2).

The realis/non-real is AV prefixes which precede the causative marker are no-/mo- and n-/m-, forming no-/mo-PO- and n-/m-PO- or no-/mo-PO-SF- for roots which need a stem-forming prefix. Note that the form n-/m-PO-SF- does not exist. Their realis/non-real is UV counterparts are ni-/nu-PO- and ni-/nu-PO-SF- respectively. For bases occurring with the AV causative marker n-/m-PO-, the UV marker is either of ni--i or ni-PO--. The prefix forms no-/mo- are the allomorphs of the AV markers noN-/moN- when preceding the causative marker. The AV applicative marker noPO- may attach to stative and intransitive bases; the marker n-PO- attaches to intransitive bases only; the marker no-PO-SF- can occur with stative and intransitive bases. Semantically, causative verbs derived from bases with stem former have a more complex meaning than those derived from bases without stem-former. With a stem former, causative verbs convey the meaning ‘to cause someone/something to be like (X) or ‘to cause someone/something to do (X)’, where (X) is the denotation of the root. Table 6-14 provides examples.

<table>
<thead>
<tr>
<th>Type of causative</th>
<th>In AV constructions</th>
<th>In UV construction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Realis</td>
<td>Non-real</td>
</tr>
<tr>
<td>Basic causative</td>
<td>no-PO-</td>
<td>mo-PO-</td>
</tr>
<tr>
<td></td>
<td>n-PO-</td>
<td>m-PO-</td>
</tr>
<tr>
<td>Requestive causative</td>
<td>no-pei-</td>
<td>mo-pei-</td>
</tr>
</tbody>
</table>

Table 6-13: Causative paradigms in Tajio

Syntactically, causative markers increase the valency of a predicate: from intransitive to transitive verbs or bivalent transitive into trivalent transitive verbs. Semantically, causative constructions are divided into two types: basic causative and requestive causative. A causative construction is called basic if it conveys a ‘basic’ causative meaning, i.e., ‘to make something/someone into what stated by the root’. A requestive causative, derives the meaning ‘to request someone to bring about the state of affairs denoted by the root’.

6.4.1.2.1 Basic causatives

The causative prefix PO- can attach to stative and intransitive verbal bases. There are cases in which roots need a stem-forming prefix before taking the causative marker. Stative roots take the vowel-harmonic causative marker pV-; intransitive verbal bases occur with the non-harmonic causative marker pe-/po-. Which of these two forms (pe- or po-) a base may take is lexically determined (see also Section 3.3.2.2).

The realis/non-real is AV prefixes which precede the causative marker are no-/mo- and n-/m-, forming no-/mo-PO- and n-/m-PO- or no-/mo-PO-SF- for roots which need a stem-forming prefix. Note that the form n-/m-PO-SF- does not exist. Their realis/non-real is UV counterparts are ni-/nu-PO- and ni-/nu-PO-SF- respectively. For bases occurring with the AV causative marker n-/m-PO-, the UV marker is either of ni--i or ni-PO--. The prefix forms no-/mo- are the allomorphs of the AV markers noN-/moN- when preceding the causative marker. The AV applicative marker noPO- may attach to stative and intransitive bases; the marker n-PO- attaches to intransitive bases only; the marker no-PO-SF- can occur with stative and intransitive bases. Semantically, causative verbs derived from bases with stem former have a more complex meaning than those derived from bases without stem-former. With a stem former, causative verbs convey the meaning ‘to cause someone/something to be like (X) or ‘to cause someone/something to do (X)’, where (X) is the denotation of the root. Table 6-14 provides examples.

<table>
<thead>
<tr>
<th>Types of bases</th>
<th>Basic causative in AV and UV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stative base</td>
<td>AV: no-PO-</td>
</tr>
<tr>
<td>nelenda &lt; nV-lenda</td>
<td>nopelenda &lt; no-pV-lenda</td>
</tr>
<tr>
<td>‘ST.RLS-long’</td>
<td>‘AV.RLS-CAUS-long’</td>
</tr>
<tr>
<td>‘to be long’</td>
<td>‘to elongate’</td>
</tr>
<tr>
<td>noronde &lt; nV-ronde</td>
<td>noporonde &lt; no-pV-ronde</td>
</tr>
<tr>
<td>‘ST.RLS-cry’</td>
<td>‘AV.RLS-CAUS-cry’</td>
</tr>
<tr>
<td>‘to cry’</td>
<td></td>
</tr>
<tr>
<td>noogal &lt; nV-oogal</td>
<td>'to make dry'</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>ST.RLS-dry</td>
<td>'to be dry'</td>
</tr>
<tr>
<td>nooogal &lt; n-pV-oogal</td>
<td>'to make dry'</td>
</tr>
<tr>
<td>nipoogal &lt; ni-pV-oogal</td>
<td>'to make dry'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>noopuduk &lt; nV-puduk</th>
<th>'to be short'</th>
<th>noopuduk &lt; n-pV-puduk</th>
<th>'to be short'</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST.RLS-short</td>
<td>'to be short'</td>
<td>AV.RLS-CAUS-short</td>
<td>'to shorten'</td>
</tr>
<tr>
<td>noopuduk &lt; n-pV-puduk</td>
<td>'to be short'</td>
<td>AV.RLS-CAUS-short</td>
<td>'to shorten'</td>
</tr>
<tr>
<td>nipoopuduk &lt; ni-pV-puduk</td>
<td>'to be short'</td>
<td>AV.RLS-CAUS-short</td>
<td>'to shorten'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>nerempu &lt; nV-rempu</th>
<th>'to be dirty'</th>
<th>nerempu &lt; n-pV-rempu</th>
<th>'to be dirty'</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST.RLS-dirty</td>
<td>'to be dirty'</td>
<td>AV.RLS-CAUS-dirty</td>
<td>'to make dirty'</td>
</tr>
<tr>
<td>niperempu &lt; ni-pV-rempu</td>
<td>'to be dirty'</td>
<td>AV.RLS-CAUS-dirty</td>
<td>'to make dirty'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>naayag &lt; nV-ayag</th>
<th>'to be bright'</th>
<th>naayag &lt; n-pV-ayag</th>
<th>'to be bright'</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST.RLS-bright</td>
<td>'to be bright'</td>
<td>AV.RLS-CAUS-bright</td>
<td>'to brighten'</td>
</tr>
<tr>
<td>nipnaayag &lt; ni-pV-ayag</td>
<td>'to be bright'</td>
<td>AV.RLS-CAUS-bright</td>
<td>'to brighten'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>noposo &lt; nV-poso</th>
<th>'to break'</th>
<th>noposo &lt; n-pV-poso</th>
<th>'to break'</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST.RLS-broken</td>
<td>'to break'</td>
<td>AV.RLS-CAUS-broken</td>
<td>'to break'</td>
</tr>
<tr>
<td>nipposo &lt; ni-pV-poso</td>
<td>'to break'</td>
<td>AV.RLS-CAUS-broken</td>
<td>'to break'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intransitive base</th>
<th>AV: n-PO-</th>
<th>UV: n-PO-(i)</th>
</tr>
</thead>
<tbody>
<tr>
<td>noparuja &lt; no-paruja</td>
<td>'to work in the rice paddy'</td>
<td>neparuja &lt; n-pe-paruja</td>
</tr>
<tr>
<td>noelong &lt; no-elong</td>
<td>'to turn sth. into a rice paddy'</td>
<td>neelong &lt; n-pe-elong</td>
</tr>
<tr>
<td>noavu &lt; no-avu</td>
<td>'to turn sth. into a song'</td>
<td>neavu &lt; n-pe-avu</td>
</tr>
<tr>
<td>noasing &lt; no-asing</td>
<td>'to turn sth. into a spin top'</td>
<td>neasing &lt; n-pe-asing</td>
</tr>
<tr>
<td>nojoong &lt; no-joong</td>
<td>'to do the field'</td>
<td>nejoong &lt; n-pe-joong</td>
</tr>
<tr>
<td>nosalo &lt; no-salo</td>
<td>'to work on the floor'</td>
<td>nesalo &lt; n-pe-salo</td>
</tr>
<tr>
<td>nolangit &lt; no-langit</td>
<td>'to turn sth. into a ceiling'</td>
<td>nelangit &lt; n-pe-langit</td>
</tr>
<tr>
<td>novombong &lt; no-vombong</td>
<td>'to turn sth. into a wall'</td>
<td>nevombong &lt; n-pe-vombong</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Static base</th>
<th>AV: no-PO-SF</th>
<th>UV: ni-PO-SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>nesili &lt; nV-sili</td>
<td>'to be ashamed'</td>
<td>noopesi &lt; n-pV-pe-sili</td>
</tr>
<tr>
<td>ST.RLS-ashamed</td>
<td>'to be ashamed'</td>
<td>AV.RLS-CAUS-SF-ashamed</td>
</tr>
<tr>
<td>nipesesili &lt; ni-pV-pe-sili</td>
<td>'to be ashamed'</td>
<td>AV.RLS-CAUS-SF-ashamed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>nenilo &lt; nV-nilo</th>
<th>'to be clear'</th>
<th>nopepe &lt; n-pV-nilo</th>
<th>'to be clear'</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST.RLS-clear</td>
<td>'to be clear'</td>
<td>AV.RLS-CAUS-SF-clear</td>
<td>'to make sth. clear'</td>
</tr>
<tr>
<td>nipepe &lt; n-pV-nilo</td>
<td>'to be clear'</td>
<td>AV.RLS-CAUS-SF-clear</td>
<td>'to make sth. clear'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>noturu &lt; nV-turu</th>
<th>'to be asleep'</th>
<th>nipo</th>
<th>'to be asleep'</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST.RLS-sleep</td>
<td>'to be asleep'</td>
<td>AV.RLS-CAUS-SF-sleep</td>
<td>'to make s.o. sleep'</td>
</tr>
<tr>
<td>nipo</td>
<td>'to be asleep'</td>
<td>AV.RLS-CAUS-SF-sleep</td>
<td>'to make s.o. sleep'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>noronde &lt; nV-ronde</th>
<th>'to make cry'</th>
<th>nipooro</th>
<th>'to make cry'</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST.RLS-cry</td>
<td>'to make cry'</td>
<td>AV.RLS-CAUS-SF-cry</td>
<td>'to make cry'</td>
</tr>
<tr>
<td>nipooro &lt; ni-pV-po-ronde</td>
<td>'to make cry'</td>
<td>AV.RLS-CAUS-SF-cry</td>
<td>'to make cry'</td>
</tr>
</tbody>
</table>
From Table 6-14 it can be seen that AV causative verbs marked by n-PO- show a certain regularity: the AV causative verb is always marked by ne- (i.e., n-pe-), while the corresponding intransitive base is always marked by no-. However, this pattern does not hold for the no-PO-SF- formation. In this formation the respective intransitive bases may take the dynamic marker ne- or no, and the causative marker may be pe- or po-. The form of the causative prefix cannot be predicted as it is lexically determined by the root.

It was mentioned that the prefix noN- changes to no- when preceding the causative marker. However, in very few cases the prefix noN- still maintains its AV form noN-. This holds for the following verbs: nompelelayang < noN-pe-layang ‘AV.RLS-CAUS-sail’ ‘to turn sth. into a sail’; nompelelang < noN-pe-valang ‘AV.RLS-CAUS-food.to.carry’ ‘to make sth. as food to carry’; nompeleanganak < noN-pe-anganak ‘AV.RLS-CAUS-child’ ‘to adopt’ (lit. ‘make s.o. a child’). An example of a more complex form is nompongutang < noN-poN-utang ‘AV.RLS-CAUS-vegetable’ ‘to turn/cook sth. as vegetable/side dishes’. In this case, we find a further form, poN-. However, this form is not attested elsewhere in Tajo and the corresponding UV formations do not use this form of the causative prefix, either. The UV verbs of the examples just given are: nipelayang, nievalang, nipeanganak and niputang. Since there is only one example in the database, it seems safe to say that the causative marker PO- becoming poN- in nompongutang is lexically conditioned suppletion. The dynamic intransitive forms of those verbs are noleyang ‘to sail’, nievalang ‘to carry food’, noanganak ‘to give birth’ and neutang ‘to cook vegetables’. Further, nievalang and neutang can also be used transitively, see Section 6.3.2.2.

The following clauses, (27)–(30), illustrate the valence-increasing process in causative derivations. Clauses in (a) are intransitive clauses, with static or intransitive verbal predicates; they only have one core argument (the subject position). The causative marker increases the valence of the predicates, as illustrated in the examples in (b). These AV causative constructions require two core arguments, a subject and an object. In the (c) examples the former object arguments change into subjects of the UV causative constructions.

(27) a. tevonuanya
   te=vonua=nya
   NM=house=3SG.GEN
   ‘His/Her house is big.’

   nabasag
   nV-basag
   ST.RLS-big

   b. siia no-pabasag
data=poN-nya
   3SG AV.RLS-CAUS-big
   NM=house=3SG.GEN
   ‘He made his house bigger.’

   tevonuanya
tevonuanya
   te=vonua=nya
   3SG AV.RLS-CAUS-big
   NM=house=3SG.GEN
   ‘He made his house bigger.’

   c. tevonuanya
   te=vonua=nya
   NM=house=3SG.GEN
   ‘He made his house bigger.’

   nipabasagnya
   ni-pV-basag=nya
   UV.RLS-CAUS-big=3SG.GEN

<table>
<thead>
<tr>
<th>Intransitive base</th>
<th>AV: no-PO-SF</th>
<th>AV: ni-PO-SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>nelampane lampa</td>
<td>nopelelampane lampa</td>
<td>nipelelampane lampa</td>
</tr>
<tr>
<td>‘DY.RLS-walk’</td>
<td>‘AV.RLS-CAUS-SF-walk’</td>
<td>‘UV.RLS-CAUS-SF-walk’</td>
</tr>
<tr>
<td>‘to walk’</td>
<td>‘to make s.o./sth. walk’</td>
<td>‘to make s.o./sth. walk’</td>
</tr>
<tr>
<td>nelinejok ne linejok</td>
<td>nopelelinejok ne linejok</td>
<td>nipelelinejok ne linejok</td>
</tr>
<tr>
<td>‘DY.RLS-run’</td>
<td>‘AV.RLS-CAUS-SF-run’</td>
<td>‘UV.RLS-CAUS-SF-run’</td>
</tr>
<tr>
<td>‘to run’</td>
<td>‘to make s.o./sth. run’</td>
<td>‘to make s.o./sth. run’</td>
</tr>
<tr>
<td>nleleyak ne leyak</td>
<td>nopeleleyak ne leyak</td>
<td>nipeleleyak ne leyak</td>
</tr>
<tr>
<td>‘to fly’</td>
<td>‘to make s.o./sth. fly’</td>
<td>‘to make s.o./sth. fly’</td>
</tr>
<tr>
<td>nolapi &lt; no-lapi</td>
<td>nolepolapi &lt; no-po-po-lapi</td>
<td>nlepolapi &lt; no-po-po-lapi</td>
</tr>
<tr>
<td>‘to marry’</td>
<td>‘to make s.o. a spouse’</td>
<td>‘to make s.o. a spouse’</td>
</tr>
</tbody>
</table>

Table 6-14: Examples of causative verb formations.
(28) a. sia’u  
    sia’u  
    1SG  
    no-langit  
    ‘I worked on the ceiling.’

b. sia’u  
    sia’u  
    1SG  
    n-pe-langit  
    te=dopi  
    ‘I turned a plank into a ceiling.’

c. tedopi  
    nipolangiti’u  
    te=dopi  
    ni-po-langiti=u  
    NM=plank  
    UV.RLS-CAUS-ceiling-UV=1SG.GEN  
    ‘I turned a plank into a ceiling.’

(29) a. siia  
    siia  
    3SG  
    ST.RLS-ashamed  
    ‘She/He is ashamed.’

b. sia’u  
    sia’u  
    1SG  
    no-pe-pe-sili  
    ‘I made him ashamed.’

c. siia  
    nipapesili’u  
    siia  
    ni-pe-pe-sili=u  
    3SG  
    UV.RLS-CAUS.SF.SF-ashamed=1SG.GEN  
    ‘I made him ashamed.’

(30) a. sianugrah  
    nelampa  
    si=anugrah  
    ne-lampa  
    NM=PN  
    DY.RLS-walk  
    ‘Anugrah walked.’

b. siina  
    nopepelampa  
    siina  
    no-pe-pe-lampa  
    si=Anugrah  
    HON=mother  
    AV.RLS-CAUS.SF-SF-walk  
    HON=PN  
    ‘Mother made Anugrah walk.’

c. sianugrah  
    nipepelampa  
    siAnugrah  
    ni-pe-pe-lampa  
    ni=ina  
    HON=PN  
    UV.RLS-CAUS.SF-SF-walk  
    GEN.HON=mother  
    ‘Anugrah was made to walk by mother.’

6.4.1.2.2 Requestive causatives

The realis/non-realis AV markers that precede the requestive-causative marker pei- are the prefixes no-/mo-, forming no-/mo-pei-21. Their UV counterparts are ni-pei- and nu-pei- in realis and non-realis form, respectively. Requestive-causative verbs can only be derived from transitive bases. Table 6-15 provides examples.

<table>
<thead>
<tr>
<th>Types of bases</th>
<th>Requestive causative in AV and UV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive base</td>
<td>AV: no-pei-</td>
</tr>
<tr>
<td>nonyulok &lt; noN-sulok</td>
<td>nopeisulok &lt; no-pei-sulok</td>
</tr>
<tr>
<td>‘AV.RLS-burn’</td>
<td>‘AV.RLS-REQ.CAUS-burn’</td>
</tr>
<tr>
<td>‘to burn’</td>
<td>‘to ask s.o. to burn sth.’</td>
</tr>
<tr>
<td>nobarengkong &lt; no-barengkong</td>
<td>nopeibarengkong &lt; no-pei-barengkong</td>
</tr>
<tr>
<td></td>
<td>UV: ni-pei-</td>
</tr>
<tr>
<td>nipeisulok &lt; ni-pei-sulok</td>
<td>‘UV.RLS-REQ.CAUS-burn’</td>
</tr>
<tr>
<td></td>
<td>‘to ask s.o. to burn sth.’</td>
</tr>
</tbody>
</table>

21 Quick (2007:285) found the same construction with the prefix pe’i- in Pendau.
The requestive-causative construction is a double-object construction. It requires an agent\textsubscript{cause}, an undergoer and an agent\textsubscript{effect}, as can be seen in example (31). The undergoer becomes the primary object and agent\textsubscript{effect} is the secondary object. The secondary object, however, is not obligatory in this construction, as can be seen by the grammaticality of example (32). Although the agent\textsubscript{effect} is not overtly mentioned in the clause, it is understood that the meaning of the clause is ‘an agent\textsubscript{cause} asks someone to conduct the action stated by the predicate’.

In the UV construction, the former primary object (the undergoer) of the AV construction becomes the subject, as shown in examples (31)b and (32)b. The secondary object cannot function as a subject in UV requestive-causative constructions as seen in example (31)c.

(31) 
\begin{itemize}
  \item a. sia’u \textit{nopeisulok} \textit{tejoong} siwafik  
        \textit{sia’u no-pe-i-sulok} \textit{te=joong} \textit{si=Wafik}  
        \textit{1SG AV.RLS-REQ.CAUS-burn} \textit{NM=field} \textit{HON=Wafik}  
        \textit{OBJ\textsubscript{1} OBJ\textsubscript{2}}  
        ‘I asked Wafik to burn the field.’
  \item b. \textit{tejoong} \textit{nipeisuloku} \textit{siwafik}  
        \textit{te=joong ni-pe-i-sulok=\textit{u}} \textit{si=Wafik}  
        \textit{NM=field UV.RLS-REQ.CAUS-burn=1SG.GEN} \textit{HON=Wafik}  
        ‘I asked Wafik to burn the field.’
  \item c. \textit{siwafik nipeisuloku tejoong}  
        For: ‘I asked Wafik to burn the field.’
\end{itemize}

(32) 
\begin{itemize}
  \item a. sia’u \textit{nopeisulok} \textit{tejoong}  
        \textit{sia’u no-pe-i-sulok} \textit{te=joong}  
        \textit{1SG AV.RLS-REQ.CAUS-burn} \textit{NM=field}  
        ‘I asked (someone) to burn the field.’
  \item b. \textit{tejoong} \textit{nipeisuloku}  
        \textit{te=joong ni-pe-i-sulok=\textit{u}}  
        \textit{NM=field UV.RLS-REQ.CAUS-burn=1SG.GEN}  
        ‘I asked (someone) to burn the field.’
\end{itemize}

Table 6-15: Examples of requestive causative verb formations

<table>
<thead>
<tr>
<th>Subject</th>
<th>Object</th>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘to throw’</td>
<td>‘to ask s.o. to throw sth.’</td>
<td>‘AV.RLS-REQ.CAUS-throw’</td>
<td>UV.RLS-REQ.CAUS-throw</td>
</tr>
<tr>
<td>‘to pursue’</td>
<td>‘to ask s.o. to pursue sth.’</td>
<td>‘AV.RLS-REQ.CAUS-pursue’</td>
<td>UV.RLS-REQ.CAUS-pursue</td>
</tr>
<tr>
<td>‘AV.RLS-plant’</td>
<td>‘to ask s.o. to plant sth.’</td>
<td>‘AV.RLS-REQ.CAUS-plant’</td>
<td>UV.RLS-REQ.CAUS-plant</td>
</tr>
<tr>
<td>‘to sickle’</td>
<td>‘to ask s.o. to sickle sth.’</td>
<td>‘AV.RLS-REQ.CAUS-sickle’</td>
<td>UV.RLS-REQ.CAUS-sickle</td>
</tr>
<tr>
<td>‘to hoe’</td>
<td>‘to ask s.o. to hoe sth.’</td>
<td>‘AV.RLS-REQ.CAUS-hoe’</td>
<td>UV.RLS-REQ.CAUS-hoe</td>
</tr>
<tr>
<td>‘to plough’</td>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘AV.RLS-REQ.CAUS-plough’</td>
<td>UV.RLS-REQ.CAUS-plough</td>
</tr>
<tr>
<td>‘to catch’</td>
<td>‘to ask s.o. to catch sth.’</td>
<td>‘AV.RLS-REQ.CAUS-catch’</td>
<td>UV.RLS-REQ.CAUS-catch</td>
</tr>
<tr>
<td>‘to pursue’</td>
<td>‘to ask s.o. to pursue sth.’</td>
<td>‘AV.RLS-REQ.CAUS-sokok’</td>
<td>UV.RLS-REQ.CAUS-catch</td>
</tr>
<tr>
<td>‘to throw’</td>
<td>‘to ask s.o. to throw sth.’</td>
<td>‘AV.RLS-REQ.CAUS-uda’</td>
<td>UV.RLS-REQ.CAUS-uda</td>
</tr>
<tr>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘nipeisulok’</td>
<td>UV.RLS-REQ.CAUS-uda</td>
</tr>
<tr>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘nipeisulok’</td>
<td>UV.RLS-REQ.CAUS-uda</td>
</tr>
<tr>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘nipeisulok’</td>
<td>UV.RLS-REQ.CAUS-uda</td>
</tr>
<tr>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘nipeisulok’</td>
<td>UV.RLS-REQ.CAUS-uda</td>
</tr>
<tr>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘to ask s.o. to plough sth.’</td>
<td>‘nipeisulok’</td>
<td>UV.RLS-REQ.CAUS-uda</td>
</tr>
</tbody>
</table>

\[\text{\textit{1SG AV.RLS-REQ.CAUS-burn}} \text{\textit{NM=field HON=Wafik OBJ\textsubscript{1} OBJ\textsubscript{2}}}\]
6.4.2 Valency-decrease

In Tajio, derivational processes which decrease the valency of a predicate are reciprocals, resultatives and reduplications. All processes reduce the valency of transitive verbs by one place, deriving an intransitive from a transitive verb. The following three sections will discuss these three constructions in turn.

6.4.2.1 Reciprocals

Following the terminology used by Quick (2007:312), there are two types of reciprocals in Tajio: mutual action and alternating reciprocals. Quick writes for Pendau that “both reciprocals imply that two or more participants conduct the same activity. The difference is that in mutual action the activity is usually either an exchange between participants or an action directed from one participant to another; in alternating reciprocals the exchange takes place in an alternating sequence, that is, first one then the other.” The same can be observed to hold in Tajio.

There are two reciprocal affixes in Tajio: the prefix nosi-/mosi- ‘RCP.RLS/NRLS’ and the suffix -ong. The reciprocal prefix nosi- usually indicates mutual action, while the reciprocal suffix -ong often indicates alternating reciprocals (but see below for exceptions). Although many roots can take both types of reciprocal affixation, the prefix nosi- tends to attach to transitive bases while the suffix -ong tends to attach to intransitive bases.

Example (33) illustrates a mutual reciprocal with the non-realis prefix mosi-; example (34) is an alternating reciprocal.

(33) nyaa mosiuri’
nyaa mosi-uri’
IMP.NEG RCP.NRLS-massage
‘Don’t massage each other!’

(34) sisia kikindeong
sisia ki-kiinde-ong
3PL CV.RDP-nod-RCP
‘They nod to each other.’

In reciprocal constructions with the suffix -ong, the roots are reduplicated and sometimes prefixed with ne-/no-. There is no readily discernible semantic difference between reciprocals with the prefix ne-/no- and those without the prefix ne-/no-. Prefixes ne-/no- in reciprocal constructions are glossed as ‘DY.RLS’ because syntactically the predicates in reciprocal constructions are monovalent.

Table 6-16 provides examples of alternating reciprocals and mutual actions derived from intransitive and transitive bases.

<table>
<thead>
<tr>
<th>Types of bases</th>
<th>Types of reciprocals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intransitive base</td>
<td>Alternating reciprocal</td>
</tr>
<tr>
<td>kinde ‘to nod’</td>
<td>ki-kinde-ong ‘to nod at each other’</td>
</tr>
<tr>
<td>ngkirat ‘to raise eyebrows’</td>
<td>ki-ngkirat-ong, kira-ngkirat-ong ‘to raise eyebrows at each other’</td>
</tr>
<tr>
<td>mbeling ‘to shake head’</td>
<td>be-mbelin-ong, beli-mbelin-ong ‘to shake heads at each other’</td>
</tr>
<tr>
<td>sandeg ‘to lean’</td>
<td>sa-sandeg-ong ‘to lean toward each other’</td>
</tr>
<tr>
<td>gapit ‘to adhere/stick’</td>
<td>ga-gapit-ong ‘to stick to each other’</td>
</tr>
<tr>
<td>Transitive base</td>
<td>Mutual action</td>
</tr>
<tr>
<td>gapit ‘to adhere/stick’</td>
<td>nosi-gapit ‘to stick to each other’</td>
</tr>
<tr>
<td>sandeg ‘to lean’</td>
<td>nosi-sandeg ‘to lean toward each other’</td>
</tr>
</tbody>
</table>

22 The roots mbeling ‘shake head’, gayang ‘stab’ and barengkong ‘throw’ undergo nasal fronting because these roots end on a velar nasal /ŋ/ and they precede a CVN suffix which also ends on a velar nasal (see Section 2.8.2).
Both types of reciprocals have to occur with plural participants. The plurality of the participant can be expressed by using plural pronouns (as in (34) above) or two noun phrases linked by the comitative conjunction sono ‘with’, as in example (35).

<table>
<thead>
<tr>
<th>Transitive base</th>
<th>Mutual actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>tapak ‘to hit’</td>
<td>ta-tapak-ong ‘to hit each other’</td>
</tr>
<tr>
<td>guayang ‘to stab’</td>
<td>ga-gayan-ong ‘to stab each other’</td>
</tr>
<tr>
<td>simbat ‘to reply’</td>
<td>si-simbat-ong ‘to reply to each other’</td>
</tr>
<tr>
<td>pate ‘to kill’</td>
<td>pa-pate-ong ‘to kill each other’</td>
</tr>
<tr>
<td>sempa ‘to kick’</td>
<td>no-se-sempa-ong ‘to kick each other’</td>
</tr>
<tr>
<td>sundur ‘to touch’</td>
<td>no-su-sundur-ong ‘to touch each other’</td>
</tr>
<tr>
<td>gonggol ‘to hug’</td>
<td>ne-go-gonggol-ong ‘to hug each other’</td>
</tr>
<tr>
<td>barengkong ‘to throw’</td>
<td>no-ba-barengkon-ong ‘to throw (sth.) at each other’</td>
</tr>
<tr>
<td>tuut ‘to follow’</td>
<td>ne-tu-tuat-ong ‘to follow each other’</td>
</tr>
<tr>
<td>suju ‘to shake hands’</td>
<td>ne-su-suju-ong ‘to shake each other hands’</td>
</tr>
<tr>
<td>seelu ‘to like/love’</td>
<td>no-se-selu-ong ‘to love/like each other’</td>
</tr>
<tr>
<td><strong>ro’o</strong> ‘to grin’</td>
<td>nosi-ro’o ‘to grin at each other’</td>
</tr>
<tr>
<td><strong>sokak</strong> ‘to catch’</td>
<td>nosi-sokak ‘to catch each other’</td>
</tr>
<tr>
<td><strong>sundur</strong> ‘to touch’</td>
<td>nosi-sundur ‘to touch each other’</td>
</tr>
<tr>
<td><strong>saup</strong> ‘to rub’</td>
<td>nosi-saup; nosi-sa-saup ‘to rub each other’</td>
</tr>
<tr>
<td><strong>sembé</strong> ‘to fight (used of roosters)’</td>
<td>nosi-simbe ‘to fight each other (used of roosters)’</td>
</tr>
<tr>
<td>vovot ‘to fight’</td>
<td>nosi-vovot ‘to fight each other’</td>
</tr>
<tr>
<td>uri ‘to massage’</td>
<td>nosi-uri ‘to massage each other’</td>
</tr>
<tr>
<td>gonggol ‘to hug’</td>
<td>nosi-gonggol ‘to hug each other’</td>
</tr>
<tr>
<td>tandas ‘to accuse’</td>
<td>nosi-tandas ‘to accuse each other’</td>
</tr>
<tr>
<td>rayo ‘to threaten’</td>
<td>nosi-rayo ‘to threaten each other’</td>
</tr>
</tbody>
</table>

Table 6-16: Examples of alternating reciprocals and mutual actions

A nominal expression that is not overtly marked as plural will be automatically interpreted as such when it occurs as the subject of a reciprocal construction; see the examples in (36).

(35) **tepidi**

<table>
<thead>
<tr>
<th>NM=cat with NM=dog</th>
<th>RCP.RLS-grin</th>
</tr>
</thead>
<tbody>
<tr>
<td>te=tepidi</td>
<td>sono te=asu</td>
</tr>
<tr>
<td>NM=banana DIST</td>
<td>RDP-twin-RCP</td>
</tr>
<tr>
<td>‘The bananas adhered/stuck to each other.’</td>
<td></td>
</tr>
</tbody>
</table>

(36) a. **teloka**

<table>
<thead>
<tr>
<th>NM=banana DIST</th>
<th>RDP-twin</th>
</tr>
</thead>
<tbody>
<tr>
<td>te=teloka</td>
<td>eua gagapitong</td>
</tr>
<tr>
<td>‘The bananas adhered/stuck to each other.’</td>
<td></td>
</tr>
</tbody>
</table>

b. **teloka**

<table>
<thead>
<tr>
<th>NM=banana DIST</th>
<th>RLS.RCP-twin</th>
</tr>
</thead>
<tbody>
<tr>
<td>te=teloka</td>
<td>eua nosigapit</td>
</tr>
<tr>
<td>‘The bananas adhered/stuck to each other.’</td>
<td></td>
</tr>
</tbody>
</table>

The examples in (36) also show that the semantic distinction between an alternating reciprocal with the suffix -ong and a mutual reciprocal with the prefix nosi- is not always clear, i.e., it is not always easy to determine whether the meaning expresses an exchange between participants or an alternating sequence of actions.

The valency decrease in reciprocal constructions is illustrated by example (37). Example (37)a shows that the transitive AV predicate nonyempa ‘to kick’ takes two arguments: the actor subject si Wafik and the undergoer object si Ulin. In example (37)b the reciprocal prefix nosi- decreases the valency of the predicate from transitive to intransitive. With the reciprocal verb nosisempa ‘to kick each other’, the subject and the object of the transitive verb are combined to form the plural subject si Wafik sono si Ulin ‘Wafik and Ulin’.
6.4.2.2 Resultatives and involuntary actions

Resultative constructions are marked by the prefix nete-, which is often shortened to te-. Semantically, the resultative construction in Tajio can be classified as a type of UV construction because the subject of a resultative is always an undergoer. In contrast to reciprocal constructions, which can occur in realis and non-realiser mood, the resultative construction is only found in the realis mood. Data with the predicted non-realis form *mete are not attested.

Resultatives can be contrasted with statives, the former being derived from transitive verbs, the latter being derived from stative roots. Statives indicate the state or the quality of a noun, as illustrated by example (38). Statives do not imply actions or actors that bring about the state.

\[(38)\] teasu \quad eua \quad nabasag
\[te=asu \quad eua \quad nV-basag\]
NM=dog \quad DIST \quad ST.RLS-big

‘That dog is big.’

Resultatives, however, denote states of affairs which result from an action. Example (39)b illustrates a resultative construction which is derived from the transitive verb nonyangki ‘to plough’ in (39)a. The resultative predicate netesan gki denotes the state of the field after it has been ploughed. This type of state cannot be expressed with a stative construction, as shown by the ungrammaticality of example (39)c.

\[(39)\] a. siama \quad nonyangki \quad tejoong
\[si=ama \quad noN-sangki \quad te=joong\]
HON=father \quad AV.RLS-plough \quad NM=field
‘Father ploughed the field.’

b. tejoong \quad netesan gki
\[te=joong \quad nete-sangki\]
NM=field \quad RLS.RES-plough
‘The field has been ploughed.’

c. *tejoong \quad nasangki
\[te=joong \quad nV-sangki\]
NM=field \quad ST.RLS-plough
For: ‘The field has been ploughed.’

Another example of a resultative construction is presented in (40). Example (40)a shows that the transitive AV predicate nombaluk ‘to sell’ takes two arguments: the actor subject siia ‘3SG’ and the undergoer object temotornya ‘his motorbike’. With the resultative predicate netebaluk ‘be sold’, the theme object of the transitive verb becomes the theme subject of the resultative construction. Pragmatically, the resultative form netebaluk ‘be sold’ can only be used after the action of nombaluk ‘to sell’ took place. In this case, a theoretically possible stative form *nabaluk ‘be in a sold state’ does not exist in Tajio.
In addition to being used in resultative constructions, the prefix *nete-* is also used to express involuntary actions, as illustrated by examples (41)−(43). In these examples, the states of ‘being clamped’, ‘being brought’ or ‘to being drunk’ have occurred without having been intended by the actor (who is not mentioned in this construction). Like resultative constructions, involuntary predicates are also intransitive and only take an undergoer subject.

(41) telimanya netegipis iamba
| te=lima=nya | nete-gipis iamba |
| NM=hand=3SG.GEN | RLS.RES-clamp LOC door |
‘His hand was clamped in the door involuntarily.’

(42) tekanikir niwafik netevava
| te=kanikir ni=Wafik nete-vava |
| NM=marble GEN.HON=PN RLS.RES-bring |
‘Wafik’s marbles were brought unintendedly (by someone).’

(43) terasun neteinung
| te=rasun nete-inung |
| NM=poison RLS.RES-drink |
‘The poison was drunk involuntarily (by someone).’

### 6.4.2.3 Reduplication

Compared to the two other valency-decreasing processes, reduplication is not very productive. Examples are rare in the corpus—two are listed in examples (44) and (45) below. Reduplication changes transitive verbs into intransitive verbs, but it cannot be applied to all transitive verbs. In (44)a and (45)a, the predicates need two core arguments, a subject and an object. The reduplicated verbs in the clauses in (b), however, only need one core argument, which functions as subject.

(44) a. siia nombaluk tebau
| siia noN-baluk te=bau |
| 3SG AV.RLS-sell NM=fish |
‘She/He sold fish.’

b. siia nombalu-baluk
| siia noN-balu-baluk |
| 3SG AV.RLS-Bi-RDP-sell |
‘She/He went around to sell (products).’

(45) a. topejoong nongabut tepangale
| tope-joong noN-abut te=pangale |
| AG.NOM-field AV.RLS-clear.grass NM=jungle |
‘The farmer cleared (the grass) in the jungle.’

b. topejoong nongabu-abut
tope-joong noN-abu-abut
| AG.NOM-field AV.RLS-Bi-RDP-clear.grass |
‘The farmer went around to clear the grass.’
Compare examples (46) and (47) in which the predicates are also reduplicated. However, unlike in the examples above, the reduplication process in these instances does not change the transitivity of the predicate. Both predicates in clauses (a) and (b) require two arguments: a subject and an object.

(46) a. siina nonjano tebau
   si=ina noN-jano te=bau
   HON=mother AV.RLS-fry NM=fish
   ‘Mother fried fish.’

   b. siina nonjano-jano tebau
   si=ina noN-jano-jano te=bau
   HON=mother AV.RLS-Bi-RDP-fry NM=fish
   ‘Mother repeatedly fried (fish).’

(47) a. siama nongasa tesinangge
   si=ama noN-as a te=sinangge
   HON=father AV.RLS-sharpen NM=machete
   ‘Father sharpened the machete.’

   b. siama nongasa-ngasa (tesinangge)
   si=ama noN-as a-N-as a te=sinangge
   HON=father AV.RLS-Bi-RDP-sharpen NM=machete
   ‘Father repeatedly sharpened (the machete).’

In order to find out when reduplication decreases the valency of a predicate, one has to determine it on the semantic basis. Reduplication in examples (46) and (47) derives the meaning ‘do what is stated by the base intensively/repeatedly’. In contrast, instead of adding an ‘intensive or repeated’ meaning to the base, reduplication as a valency-changing process derives a new lexeme, a lexeme which has a different meaning from its base. In example (44), the base nombaluk means ‘to sell’, but nombalubaluk means ‘to go around to sell products’. It is different from the former in the sense that the core meaning in which the object is implicit in the act of selling something is excluded in the base form nombaluk. Example (45) also shows the same phenomenon: the base form conveys the meaning of a repeated action, but the reduplicated predicate means ‘to go around to clear the grass’.

6.5 Verbal plurality

Tajio has three morphological markers indicating verbal plurality, i.e., collective or group action or state. These markers are the prefixes see- and ro- and the vowel-harmonic infix -ngV- (see Section 2.8.6 for details on vowel-harmonic changes). The prefix ro- is always preceded by the dynamic marker ne-/me- (in realis/non-realxis mood). The infix -ngV- is either inserted within the AV marker noN/noN- or after the dynamic intransitive markers ne-/me-/no-), or the stative marker nV/mV-. In contrast, see- does not co-occur with AV or dynamic markers. It directly precedes the base and it does not inflect for realis or non-realxis mood. Semantically, see- means ‘together/all’. All collective markers can attach to stative, intransitive and transitive verbal bases. Examples are given in Table 6-17.

<table>
<thead>
<tr>
<th>Types of bases</th>
<th>Verbal plurality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stative base</strong></td>
<td><strong>ne-ro-</strong></td>
</tr>
<tr>
<td>nangpakangat &lt;nV-pangkat ‘ST.RLS-high’ ‘be high’</td>
<td>nangpakangat &lt;nV-pangkat ‘DY.RLS-COLL-high’ ‘all are high’</td>
</tr>
<tr>
<td>nongasa &lt;nV-oolog ‘ST.RLS-broken’ ‘be broken’</td>
<td>nongasa &lt;nV-oolog ‘DY.RLS-COLL-broken’ ‘all are broken’</td>
</tr>
<tr>
<td>nongasa-ngasa &lt;nV-oolog ‘ST.RLS-broken’ ‘be broken’</td>
<td>nongasa-ngasa &lt;nV-oolog ‘DY.RLS-COLL-broken’ ‘all are broken’</td>
</tr>
</tbody>
</table>

Table 6-17
Table 6-17: Examples of verbal plurality

Indicating collective activity or states, collective predicates require plural subjects. Plural subjects may be plural pronouns, NPs modified by a stative modifier (e.g. nabari ‘many’) or a quantifier jojoo ‘all’, or more than one NP conjoined by the comitative conjunction sono ‘with’. See examples (48)–(52) below.

(48) siani nengelinjok nilivur nupolisi
siani ne-ne-linjok ni-livur nu=polisi
1PL.EX DY.RLS-COLL-run UV-catch GEN=police
We all ran when the police tried to catch us.’

(49) sisia nongonggabu
sisia no-ngo-ng-gabu
3PL AV.RLS-COLL-cook
‘They all cooked.’ or ‘They cooked together.’

(50) nabari tepuu nangapangkat
nV-bari tepuu nV-ngV-pangkat
ST.RLS-many NM=tree ST.RLS-COLL-high
‘Many trees are high.’

(51) tetoonya jojoo nengesave temotor
tete=too=nya jojoo ne-ngV-save te=motor
NM=person=DEF all AV.RLS-COLL-ride NM=motorbike

\[^{23}\] The clitic =nya to mark definiteness seems to be an Indonesian loan.
‘All people rode motorbikes.’

(52)  
<table>
<thead>
<tr>
<th>Basal form</th>
<th>Transformation</th>
<th>Resulting form</th>
</tr>
</thead>
<tbody>
<tr>
<td>te=paa</td>
<td>ng-</td>
<td>nang-</td>
</tr>
<tr>
<td>NM=leg</td>
<td>te=lima=nya</td>
<td>nang-Col-B.kr</td>
</tr>
</tbody>
</table>

In order to come to a general conclusion on this substitution.

Another kind of verbal plurality is shown by the suffix -i and the prefix nangi-. They indicate that the action stated by the predicate is done repeatedly. The repetitive suffix -i is marked as -iREP in order to distinguish it from the undergoer suffix -i or the applicative suffix -i. This suffix co-occurs with AV or UV prefixes. The repetitive suffix -i is not marked as an applicative marker here because crosslinguistically the applicative derivations in western Austronesian languages are not always valency increasing but convey a broader range of sometimes quite elusive meaning, including intensity and iterativity (Himmelmann 2005:170).

In Tajio the repetitive suffix -i more commonly attaches to transitive bases rather than to intransitive bases. In contrast to the collective affixes discussed above, predicates which are marked by -iREP do not necessarily need plural subjects. It is possible that the repeated actions are done by a singular subject. Examples are presented in Table 6-18.

<table>
<thead>
<tr>
<th>Types of bases</th>
<th>Repetitive actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV: no-iREP</td>
<td>UV: ni-iREP</td>
</tr>
<tr>
<td>no-lumpat</td>
<td>nilumpat &lt; no-lumpat-i</td>
</tr>
<tr>
<td>‘DY.RLS-jump’</td>
<td>‘AV.RLS-jump-REP’</td>
</tr>
<tr>
<td>‘to jump’</td>
<td>‘to jump repeatedly’</td>
</tr>
<tr>
<td>no-mombaia</td>
<td>nibombaia &lt; no-mombaia-i</td>
</tr>
<tr>
<td>‘AV.RLS-throw’</td>
<td>‘AV.RLS-throw-REP’</td>
</tr>
<tr>
<td>‘to throw’</td>
<td>‘to throw repeatedly’</td>
</tr>
<tr>
<td>no-kundu</td>
<td>nikundu &lt; no-kundu-i</td>
</tr>
<tr>
<td>‘AV.RLS-kiss’</td>
<td>‘AV.RLS-kiss-REP’</td>
</tr>
<tr>
<td>‘to kiss’</td>
<td>‘to kiss repeatedly’</td>
</tr>
<tr>
<td>no-rembas</td>
<td>nirembas &lt; no-rembas-i</td>
</tr>
<tr>
<td>‘AV.RLS-hit’</td>
<td>‘AV.RLS-hit-REP’</td>
</tr>
<tr>
<td>‘to hit’</td>
<td>‘to hit repeatedly’</td>
</tr>
<tr>
<td>no-leva</td>
<td>nileva &lt; no-leva-i</td>
</tr>
<tr>
<td>‘AV.RLS-call’</td>
<td>‘AV.RLS-call-REP’</td>
</tr>
<tr>
<td>‘to call’</td>
<td>‘to call repeatedly’</td>
</tr>
</tbody>
</table>

Table 6-18: Examples of repetitive actions marked by the suffix -iREP

The prefix nangi- is not productive and it can only attach to intransitive bases. Examples found in the corpus are nangilumpat ‘to jump repeatedly’ and nangiragab ‘to lie prone repeatedly’. The prefix n- in nangi cannot be interpreted as the shortened N-marker (i.e., nangi < *n-pangi) because nangi- does not have any UV alternant. Moreover, the following example shows that the prefix nangi- can be substituted by suffix -iREP, compare examples (53) and (54). However, further investigation is needed in order to come to a general conclusion on this substitution.

(53)  
<table>
<thead>
<tr>
<th>Basal form</th>
<th>Transformation</th>
<th>Resulting form</th>
</tr>
</thead>
<tbody>
<tr>
<td>sia ‘u</td>
<td>nangilumpat i</td>
<td>tondok</td>
</tr>
<tr>
<td>sia ‘u</td>
<td>nangi-lumpat i</td>
<td>tondok</td>
</tr>
<tr>
<td>1SG</td>
<td>DY.RLS-jump-REP</td>
<td>LOC fence</td>
</tr>
<tr>
<td>‘I repeatedly jumped over the fence.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(54)  
<table>
<thead>
<tr>
<th>Basal form</th>
<th>Transformation</th>
<th>Resulting form</th>
</tr>
</thead>
<tbody>
<tr>
<td>sia ‘u</td>
<td>nolumpati te</td>
<td>tondok</td>
</tr>
<tr>
<td>sia ‘u</td>
<td>no-lumpat-i te</td>
<td>tondok</td>
</tr>
<tr>
<td>1SG</td>
<td>AV.RLS-jump-REP</td>
<td>NM=fence</td>
</tr>
<tr>
<td>‘I repeatedly jumped over the fence.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A noun phrase in Tajio minimally consists of a noun. A non-minimal NP contains a head noun and its modifier(s). Modifiers can both precede or follow the head noun. Modifiers which precede the head noun are called pre-head modifiers; ones that follow the head noun are called post-head modifiers.

Of the two possible structures, [head noun modifier] and [modifier head noun], the basic Tajio NP structure (i.e., the one that represents an unmarked information structure) is [head noun modifier]. This analysis is supported by the fact that quantitatively Tajio has more post-head modifiers than pre-head modifiers. In addition, modifiers which function as pre-head modifiers can also be used as post-head modifiers, while not all post-head modifiers can appear as pre-head modifiers.

The discussion about noun phrases in Tajio will be based on the NP classification made by Dryer (2007:51): (1) simple NPs, (2) complex NPs and (3) NPs without head nouns. All types will be presented in turns in Section 7.1, 7.2 and 7.3. At the end of this chapter, Section 7.4 describes nominalization processes and types of nominalization in Tajio.

### 7.1 Simple noun phrases

In simple noun phrases, a head noun may consist of a pronoun, a common noun, a personal name or a noun. Pronouns generally occur without modifiers or they may be post-headedly modified by demonstratives. Common nouns are usually pre-headedly modified by the noun marker te=; the personal names are pre-headedly modified by the honorific noun marker si=. Nouns can take both pre-head modifiers and post-head modifiers. They are pre-headedly modified by the neutral noun marker te= and; may be post-modified by verbal modifiers, demonstratives or by other nouns. They may also be pre- or post-modified by classifiers which co-occur with numerals, quantifiers or measure nouns. Each type of modifier will be discussed below.

#### 7.1.1 Noun markers

Noun markers that can only function as pre-head modifiers are the neutral noun marker te= and the honorific noun marker si=. Phonologically, both markers cannot stand alone, they must be attached to nominal bases. For the discussion of the noun markers three issues are of interest here: the basic distribution of si= and te=; restrictions on the use of si=; and restrictions on the use of te=.

##### 7.1.1.1 Distribution of si= and te=

Syntactically, si= and te= have different distributions. They are sensitive to the animacy of their hosts. 24 Si= precedes personal names and four kinship terms. Other kinship terms and human nouns can occur with either si= or te=. For most kinship terms and human nouns for which there is a choice in the use of the markers, the proclitic si= is used as a politeness marker while te= conveys a neutral reading. Being used as a politeness marker, the proclitic si= can be considered an honorific marker. Animates and inanimate nouns, for instance teauda ‘goat’ or teparuja ‘rice paddy’ are restricted to taking the noun marker te=.

Figure 29 visualizes the connection between the choice of the proclitics si= and te= and the overall animacy hierarchy of the head nouns.

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24 The animacy hierarchy which is applied here is adopted from Corbett (2000:56):

1>2>3>human>animate>inanimate
The four core kinship terms which can only take the proclitic \textit{si}= are \textit{siina} ‘mother’, \textit{siama} ‘father’, \textit{siopu} ‘grandparent’ and \textit{sikakang} ‘older sibling’. Two possible reasons for this phenomenon are: 1) these four terms are the most important kinship terms in Tajio, or 2) they are considered lexical items. The first assumption is confirmed by my language consultant who pointed out that parents and grandparents occupy the most important roles in the family. In addition, older siblings are accorded great respect because they can take over the parents’ roles. The second assumption, on the other hand, must be rejected because \textit{si}= does not appear in genitive constructions. If \textit{siama} were fully lexicalized, one would expect to have a hypothetical genitive form \textit{nis}iama\text intox. However, this form is judged to be ungrammatical, as can be seen in (1)b. Therefore, \textit{siama} is not analyzed as a lexicalized item here but treated as morphologically transparent.

\begin{enumerate}
  \item (1) a. \textit{teoto niama’u}
  \begin{align*}
    te &= oto  \\
    ni &= ama = ’u \\
    N&M &= car  \\
    GEN.HON &= father=1SG.GEN  \\
    ‘my father’s car’
  \end{align*}

  \item (1) b. *\textit{teoto nisiama’u}
  \begin{align*}
    te &= oto  \\
    ni &= si=ama = ’u \\
    N&M &= car  \\
    GEN.HON &= HON=father=1SG.GEN  \\
    For: ‘my father’s car’
  \end{align*}
\end{enumerate}

The noun marker \textit{te=} cannot be analyzed as a definite or an indefinite article because it allows for both definite and indefinite interpretations. \textit{Teguru} in example (2) can be rendered as ‘a teacher’ or ‘the teacher’ with the interpretation of definiteness being controlled by the discourse context.

\begin{enumerate}
  \item (2) \textit{siia teguru}
  \begin{align*}
    si &= oto  \\
    te &= guru  \\
    3SG &= NM=teacher  \\
    ‘She is a/the teacher.’
  \end{align*}

  \item (3) \textit{siia siguru}
  \begin{align*}
    si &= oto  \\
    si &= guru  \\
    3SG &= HON=teacher  \\
    ‘She is the teacher.’
  \end{align*}
\end{enumerate}

In this example, \textit{si}= may be used as well. \textit{Si}= is employed when a speaker has a specific person in mind and assumes that the hearer knows who is being referred to. Hence this is typically interpreted as definite, as in example (3).

In order to overtly mark definiteness, Tajio makes use of demonstratives, as illustrated in examples (4) and (5). Here, the \textit{si}= and \textit{te}= marked nouns additionally co-occur with demonstratives.

\begin{enumerate}
  \item (4) \textit{noumbur bega nibobakinya si=lapinya}
  \begin{align*}
    nV &= umbur  \\
    bega &= ni-bobak -i=nya  \\
    UV &= RLS-hit-UV=3SG.GEN  \\
    si &= lapinya  \\
    HON &= spouse=3SG.GEN  \\
    ‘He, hit his wife, his (other person) sister-in-law, very often.’ \quad \text{from the dialog \textit{Noasu}}
  \end{align*}

  \item (5) \textit{siipaginya =itu}
  \begin{align*}
    si &= i=nya  \\
    HON &= sister-in-law=3SG.GEN  \\
    ‘He, hit his wife, his (other person) sister-in-law, very often.’ \quad \text{from the dialog \textit{Noasu}}
  \end{align*}
\end{enumerate}
"Longki gave two cars to the medicine man from Siaga village." (from the dialog Campur)

Indefinite semantics may be overtly expressed by the use of the noun modifier (i.e., numeral-classifier) sambaang ‘one tail’ or sotoo ‘one person’, as shown by example (6) and (7). Here, both nouns are marked by the noun marker te=. In this context, the use of the noun marker si= is ungrammatical since it is typically interpreted definitely, as illustrated by example (7)b.

(6) nivavanyamo
tetumpang sambaang
ni-vava=nya=mo
te=tumpang sV-N-baang
UV.RLS-bring=3SG.GEN=COMP NM=frog one-LIG-CLF.tail
‘He brought a frog.’ (from the Frog Story)

(7) a. sia’u nongitai sotoo te=vevine i jalang
sia’u noN-ita-i sV-too te=vevine i jalang
1SG AV.RLS-see-APPL one-person NM=woman LOC street
‘I saw a woman on the street.’

b. *sia’u nongitai sotoo sivevine i jalang
sia’u noN-ita-i sV-too si=vevine i jalang
1SG AV.RLS-see-APPL one-person HON=woman LOC street
For: ‘I saw a woman on the street.’

7.1.1.2 Restrictions on the use of si=

Except in the case of human nouns and most kinship terms where it alternates with te=, si= obligatorily occurs:

a) with the four kinship terms mentioned in Section 7.1.1.1;
b) with personal names.

With regard to syntactic functions, proclitic si= is restricted from occurring:

c) in genitive phrases. Instead, there is a special form of the honorific marker for genitive phrases, i.e., ni=, which is discussed in Section 4.3.1.1;

d) in address terms;

e) after prepositions.

Example (8) illustrates the restrictions of si= stated in (c) and (d) above. When being used as address terms, the kinship terms siama ‘father’ and siina ‘mother’ do not take the proclitic si=. In this context, the speaker addresses himself as (a)ma ni Iling ‘Iling’s father’ and he addresses his wife as (i)na ni Iling ‘Iling’s mother’. In genitive phrases, instead of si=, the marker used is ni=, as in ma ni Iling and na ni Iling.

(8) amai tabakonya ma niilng riitu na
amai tabako=nya ama ni=Iling riitu ina
EXIST tobacco=3SG.GEN father GEN.HON=PN over.there mother
niilng
ni=Iling
GEN.HON=PN
‘Is any (Iling’s father’s) tobacco over there, Iling’s mother?’ (from the dialog Campur)

An example of the restriction (e) is given in (9) where the proclitic si= does not occur after a preposition.
‘Ali sent a letter to his older sibling.’

7.1.1.3 Restrictions of the use of \textit{te}=

The syntactic distribution of phrases marked with \textit{te}= clearly differs from those marked by \textit{si=}.

- a) in genitive phrases. As is the case with \textit{si=}, a special form of the noun marker is employed for
  genitive phrases, i.e., \textit{nu=} which is discussed in Section 7.2;
- b) before nouns which function as compound modifiers (see Section 3.6.);
- c) after prepositions.

Examples (10) and (11) show restrictions of the use of \textit{te}= in genitive phrases and after prepositions.

Instead of being marked by \textit{te}=, genitive phrases are marked by \textit{nu=} as in \textit{tee nuwani} ‘back of the wasp (nest)’ and \textit{puu nuayu} ‘tree’. Further, the noun phrases \textit{tee nuwani} and \textit{puu nuayu} can be placed after prepositions. In this position, they are not marked by \textit{te=}.

(10) \textit{teasunya nomenek i tee nuwani} \hfill \text{from the Frog Story}

\begin{tabular}{llllllllll}
\textit{te}=asu & \textit{noN-} & \textit{penek} & i & \textit{te}=wani & \textit{nu}=wani \\
NM=dog & GEN & back & GEN & wasp \\
\end{tabular}

‘His dog climbed on the back of the wasp (nest).’

(11) \textit{teasu nonavuao tewani yami puu nuayu} \hfill \text{from the Frog Story}

\begin{tabular}{llllllllll}
\textit{te}=asu & \textit{noN-} & \textit{navu-ao} & \textit{te}=wani & \textit{yami} & \textit{puu} & \textit{nu}=ayu \\
NM=dog & NM & GEN & wood & from & tree \\
\end{tabular}

‘The dog caused the wasp (nest) to fell down from the tree.’

The ban of \textit{te=} from occurring before nouns functioning as compound modifiers is exemplified in (12).

(12) a. \textit{vonua paranisong} \hfill \text{lit: ‘sickness house’}

\begin{tabular}{llllllllll}
\textit{vonua} & PV- & \textit{ranis-ong} & \textit{house} & NOM & sick-
NOM \\
\end{tabular}

‘hospital’

b. *\textit{vonua te paranisong} \hfill \text{For: ‘hospital’}

\begin{tabular}{llllllllll}
\textit{vonua} & \textit{te}=PV- & \textit{ranis-ong} & \textit{house} & \textit{NM}=NOM & sick-
NOM \\
\end{tabular}

Morphophonologically, the use of \textit{te=} is obligatory for vowel-initial bases and it is optional for
c consonant-initial bases. This morphologically determined difference holds in each of the following
three syntactic contexts:

- a) as subjects;
- b) as object in actor voice constructions;
- c) as nominal predicate in equative clauses.

Examples (13)–(16) illustrate the optional use of \textit{te=} with consonant-initial nouns for each of the
contexts defined in (a)–(c) above. Note that in such instances there is no reported difference in
meaning between nouns with or without the proclitic \textit{te=}.
(13) (te)jaran eitu nepees
   (te=)jaran eitu nV-pees
   NM=jaran MED ST.RLS-sore
   S
   ‘That horse is sore.’

(14) (te)ruriang i sevi nujunjung niologaonya
    (te=)ruriang i sevi n=ujunjung ni-o-log-ao=nya
   NM=durian LOC side GEN=hut UV.RLS-broke-APPL=3SG.GEN
   S
   ‘He cut durian at the side of the hut.’

(15) (te)saping nenginang (te)gugus
    (te=)saping neN-inang (te=)gugus
   NM=cow AV.RLS-eat NM=grass
   S  O
   ‘Cows feed on grass.’

(16) siama’u (te)guru
    si=ama=’u (te=)guru
   HON=father=1SG.GEN NM=teacher
   P
   ‘My father is a teacher.’

Examples (17)–(20) show that the noun marker te= is obligatory in the same contexts before vowel-initial bases.

(17) a. teauda niwafik naate
     te=auda ni=Wafik nV-ate
    NM=goat GEN.HON=PN ST.RLS-dead
    S
   ‘Wafik’s goat is dead.’

b. *auda niwafik naate

(18) a. teulingka nioli’u
     te=ulingka ni=oli=’u
    NM=coconut UV.RLS-buy=1SG.GEN
    S
   ‘I bought a coconut.’

b. *ulingka nioli’u

(19) a. teipagu nongolog teayu
     te=ipag=’u noN-olog te=ayu
    NM=brother-in-law=1SG.GEN AV.RLS-cut NM=wood
    S  O
   ‘My brother-in-law cut wood.’

b. *ipagu nongolog teayu

(20) a. eu a teoto’u
    eu te=o=to=’u
   DIST NM=car=1SG.GEN
   P
   ‘That is my car.’

b. *eu a oto’u

The noun marker te= poses analytical difficulties in that it shows characteristics of both an article and a case marker. It has article-like properties because (i) it is in complementary distribution with si=, and (ii) because it is not obligatory in expressions with common nouns. However, unlike an article, it does
not mark definiteness or indefiniteness, but rather conveys a reading of specificity or acts like a case marker. Similar to canonical case markers, \textit{te} is in complementary distribution with the genitive marker \textit{nu}, i.e., \textit{te} seems to mark nominative expressions while \textit{nu} marks genitive case. In addition, \textit{te} is unacceptable after prepositions, just like \textit{nu} is. On the other hand, analyzing \textit{te} as a nominative-case marker is apparently problematic since it seems to have no specific function with regard to the marking of noun phrases. It does not reflect any clear marking of syntactic function of a given nominal expression, rather it only provides the necessary counterpart for the opposition in politeness discussed above. Thus, in light of the non-prototypical behaviour of \textit{te}, it seems more appropriate to apply the more neutral term, noun marker instead. Here, the term noun marker refers to a formative which attaches to nouns without necessarily denoting any information on case or definiteness.

From a formal perspective, the above mentioned characteristics of \textit{te} that are reminiscent of articles/case markers suggest a clitic analysis. The noun marker properties, on the other hand, make \textit{te} look more like a prefix because it is not attached to modifiers in compounds (although it does attach to nouns after classifiers, see examples (21) and (22)). Since evidence on this matter is less straightforward, I call \textit{te} a noun marker and analyze it as a clitic for the time being.

(21) a. \textit{kakaer} \textit{sasa}
\textit{kakaer} \textit{sasa}
broom palm.rib
‘palm-rib broom’

b. \textit{*kakaer tesasa}

(22) a. \textit{sobua} temotor
\textit{sV-bua} \textit{te=motor}
one-CLF.piece NM=motorbike
‘one motorbike’

b. \textit{*sobua motor}

7.1.2 Verbal modifiers

Stative and dynamic intransitive roots in Tajio belong to the same morphosyntactic class. The primary reason motivating such an analysis is that they can both be used as modifiers without any further marking, i.e., without taking the relative marker \textit{te} (see Section 4.2). In contrast, not all transitive verbs can function as modifiers without a relative marking. Here only realis UV verb formations can be used as modifiers without relative marker. Transitive AV verb formations, however, always require the relative marker \textit{te} in order to function as modifiers (see Section 7.3).

When being used as modifiers, statives express a property of the referent denoted by the head noun and they have to occur in the realis mood. In this case, the realis marking does not convey a temporal notion like past. This is illustrated in example (23), in which the main predicate is marked as non-real is and indicates a future reading of the event, whereas the stative modifier \textit{nemeas} ‘to be white’ retains the realis marking and thus shows no temporal boundedness. This indicates that the realis marking with \textit{nemeas} instead codes a permanent property of the head noun which holds true or is actual before and beyond the time frame of the purchase (see also Section 5.1.1 for further details on the use of mood markers).

(23) \textit{boang} siia mongoli [te=baju \textit{nemeas}]
\textit{boang} siia moN-oli \textit{te=baju} nV-meas
\textit{tomorrow} 3SG AV,NRLS-buy NM=shirt ST.RLS-white
‘Tomorrow she/he will buy a white shirt.’

The restriction on mood marking also applies to statives in post-head position, as in examples (24) and (25).
(24) [tevevine nagaya eitu] nupopolapi
te=vevine nV-gaya eitu nu-po-po-lapi
NM=woman ST.RLS-beautiful MED UV.NRLS-CAUS-SF-spouse
nikaka’u
ni=kaka’u
GEN.HON=older.sibling=1SG.GEN
‘That beautiful woman will be married by my older brother.’

(25) [teogo nooge eitu] topenya bomban
te=ogo nV-oge eitu tope=nya Bomban
NM=river ST.RLS-large MED name=3SG.GEN PN
‘That large river, its name is Bomban’

As stated above, statives which are used to modify head nouns never occur in non-real is mood. They do, however, occur in the non-realis when they are incorporated into a compound noun. In this case they do not express a property of the head noun, rather the compound noun has some new meaning, not entirely determined by its component (see Section 3.6 for more details on compounding).

Similarly, dynamic intransitive verbs, when used as post-head modifiers, have to occur in the realis mood, as illustrated by examples (26) and (27).

(26) [tetoonya nelinjok eua] mao monyokok
te=too=nya ne-linjok eua mao monyokok
NM=person=DEF DY.RLS-run DIST go AV.NRLS-catch
topomanao
topo-manao
AG.NOM-steal
‘That running man is going to catch the thief.’

(27) [teanganak nendiis eua] teompongnya
te=anganak ne-ndiis eua te=ompong=nya
NM=child DY.RLS-bath DIST NM=belly=3SG.GEN
nabasag pia
nV-basag pia
ST.RLS-big very
‘The bathing child, his belly is very big.’

As modifiers, statives and dynamic intransitive verbs always follow their head nouns, but as predicates, they may precede or follow the subject. This fact yields a diagnostic to distinguish between the modifying and predicative functions of the stative or dynamic intransitive verb. Examples (28) and (30) show noun phrases with stative/dynamic intransitive modifiers; the modifiers cannot precede their head nouns. Examples (29) and (31), on the other hand, show intransitive clauses with intransitive verbal predicates, which may either precede or follow their subjects.

(28) a. teogo nooge eitu
te=ogo nV-oge eitu
NM=river ST.RLS-large MED
‘that large river’

b. *nooge teogo eitu
For: ‘that large river’

(29) a. teogo eitu nooge
te=ogo eitu nV-oge
NM=river MED ST.RLS-large
‘That river is large.’

b. nooge teogo eitu
‘That river is large.’

148
(30) a. tetoonya nelampa eua
   te=too=nya ne-lampa eua
   NM=person=DEF DY.RLS-walk DIST
   ‘that walking man’

b. *nelampa tetoonya eua
   For: ‘that walking man’

(31) a. tetoonya eua nelampa
tetoonya eua nelampa
   te=too=nya eua ne lampa
   NM=person=DEF DIST DY.RLS-walk
   ‘That man walks/walked.’

b. nelampa tetoonya eua
   ‘That man walks/walked.’

Without any further marking, transitive verbs can occur as verbal post-head modifiers if they are marked by the realis UV marker ni- ‘UV.RLS’. Marking transitive verbal modifiers with the non-real is nu- is ungrammatical in this case. Here, too, the UV transitive verbal modifier never precedes the head noun. As modifiers, transitive UV constructions never occur with actor arguments. Examples are given in (32) and (33).

(32) a. sia’u nenginang [teulingka niparu’]
sia’u neN-inang te=ulingka ni-paru’
1SG AV.RLS-eat NM=coconut UV.RLS-grate
   ‘I ate grated coconut.’

b. *sia’u nenginang [teulingka nuparu’]

c. *sia’u nenginang [niparu’ teulingka]

(33) a. sia’u seelu’u [tabako nitoyos]
sia’u seelu’u tabako ni-toyos
1SG like=1SG.GEN tobacco UV.RLS-roll
   ‘I liked rolled tobacco.’

b. *sia’u seelu’u [tabako nutoyos]

c. *sia’u seelu’u [nitoys tabako]

In contrast, using an AV verb as a modifier will require the use of an additional marker, i.e., the relative marker to=. Noun phrases with relative marker are discussed in Section 7.3.

7.1.3 Numerals, quantifiers, classifiers and measure nouns

Numerals and quantifiers (except jojoo ‘all’) alone often cannot function as modifiers. They usually co-occur either with classifiers or measure nouns. Numerals that can be used in modifier constructions are the prefixed forms (see Section 4.3.2 for details about numerals). Quantifiers too are prefixed to classifiers or measure nouns. The nasal ligature -N- may occur between numerals and classifiers or measure nouns or between quantifiers and classifiers or measure nouns. The occurrence of the nasal ligature depends on the base (i.e., classifiers or measure nouns) it attaches to. For example, it may or may not occur when the numeral prefix sV-(N)- co-occurs with the classifier bua: both sambua and sbuabua ‘one piece’ are acceptable. In other cases it is obligatory, or its is completely banned. For example, the measure noun gopo’ becomes songgopo’ ‘one bunch of paddy’, but never *sogopo’; the measure noun gaat, on the other hand, always becomes sagaat ‘half’, not *sanggaat although both gopo’ and gaat begin with the same consonant.

7.1.3.1 Modifier construction: numeral-classifier

Within noun phrase formations, classifiers are placed between the numeral prefix (for which it acts as a host) and the head noun. This type of modifier construction may occur as pre- or post-head modifier.
In the following examples, noun phrases are presented in square brackets and the modifiers are in bold typed.

Examples (34) and (35) present numeral-classifier constructions which directly precede the head nouns.

(34) \[ro kan \text{ro} N-bua te=puka'nya \text{ua}\]
\[\text{Two INJ two-LIG-CLF.piece NM=dragnet=DEF DIST}\]
‘Two, isn’t it those two dragnets.’
(from the dialog Campur)

(35) \[nokosong [sobua temotor]\]
\[\text{ST.RLS-empty one-CLF.piece NM=motorbike}\]
‘One motorbike is empty.’
(from the dialog Campur)

Examples (36) and (37) illustrate post-head modifiers which are also constructed from numerals and classifiers.

(36) \[tanda' i \text{unauna [loka tolu-bua]}\]
\[\text{arrive LOC PN banana three-CLF.piece}\]
‘Three bananas arrived at Una-Una.’
(from the dialog Campur)

(37) \[tesando i siaga ua niveeni nilonki\]
\[\text{NM=medicine.man LOC PN DIST UV.RLS-give-APPL GEN.HON=PN}\]
\[\text{[teoto robua]}\]
\[\text{NM=car two-CLF.piece}\]
‘That medicine man from Siaga was given two cars by Longki.’
(from the dialog Campur)

Example (38) below shows that the classifier construction does not have to directly precede its head noun; rather, it may occur separated from it. This is possible due to a narrow focus construction which highlights the number of cigarettes. In this case, the number denoting constituent, ultimately being a member of the noun phrase, is moved to pre-verbal position and the focus marker =mo is attached to it (see also Section 5.3.1 for the discussion of =mo as a focus particle).

(38) \[rombuumo niontipu teroko'nya\]
\[\text{two-LIG-piece=COMP UV.RLS-smoke=1SG.GEN NM=cigarette=3SG.GEN}\]
\[eitu eitu MED\]
‘It was two of her cigarettes that I smoked.’
(lit: ‘I have smoked two pieces of her cigarettes.’)
(from the dialog Campur)

In addition to modifying common nouns, numeral-classifier constructions can also modify plural pronouns in head noun position, see example (39). In this context, the numeral can occur without classifiers, as in example (40). Here the numeral indicates a grouping of a particular number (of people), analogous to English ‘a pair’, ‘a trio’, etc. Apart from pronouns, a noun and numeral modifier can not carry this sense of grouping, as shown by example (41). Here the numeral indicates the number of things denoted by the head noun, i.e., there are three children, rather than a trio of children.

(39) \[jamo [sisia rotoo] sikadar\]
\[\text{only 3PL two-CLF.person HON=PN}\]
‘Only that pair including Kadar (pulled the logs).’
(from the dialog Noasu)
(40) [sisia totolu] siulin mai Palu
    sisia totolu si=Ulin mai Palu
3PL three HON=PN DIR Palu

‘That Ulin trio (Ulin and two other people) went to Palu.’

(41) kebetulan amai [teanganak totolu] nonyeliur
    kebetulan amai te=anganak totolu nonyeliur
accidentally EXIST NM=child three AV.RLS-pass.by

‘Accidentally, there were three children that passed by.’

From the examples just given, it can be seen that there are two possible structures for NPs with regard to the placement of the head noun: [numeral-classifier head noun] or [head noun numeral-classifier]. These placement options appear to be related to differences in information structure. If the speaker wants to highlight the quantity, the [numeral-classifier head noun] structure will be used. If the [head noun numeral-classifier] structure is used, it does not necessarily mean that the head noun is more important than the quantity. As stated in the introductory section, the [head noun modifier] structure is considered to be more basic than the [modifier head noun] structure.

A complete list of classifiers in Tajio is given in Table 7-1. They are presented with their literal meaning, the types of nouns they classify, and examples illustrating their use with the numeral prefix sV-(N)- ‘one’.

The most common classifier, which also functions as a default classifier, is bua ‘piece’. In this use, bua is the most neutral classifier and can be followed by any type of noun except animate nouns. Semantically, most classifiers are common nouns that have their own lexical meaning when used as a noun.

Classifiers that no longer show an independent meaning are indicated by a hyphen (-) in the column ‘Literal meaning’.

<table>
<thead>
<tr>
<th>No.</th>
<th>Classifier</th>
<th>Literal meaning</th>
<th>Types of nouns</th>
<th>Examples with prefix sV-(N)- ‘one’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>too</td>
<td>‘person’</td>
<td>kinship nouns</td>
<td>so-too telapi ‘one spouse’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>human nouns</td>
<td>so-too temuri ‘one student’</td>
</tr>
<tr>
<td>2.</td>
<td>kolo</td>
<td>‘plum’</td>
<td>transporters</td>
<td>so-nga-kolo teoto ‘one car’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>so-nga-kolo tepayangan ‘one boat’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>so-nga-kolo temotor ‘one motorbike’</td>
</tr>
<tr>
<td>3.</td>
<td>vuu</td>
<td>‘seed; bone’</td>
<td>small round fruits</td>
<td>so-m-buu terambutan ‘one rambutan’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>small round objects</td>
<td>so-m-buu teitolu ‘one egg’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>small fish</td>
<td>so-m-buu tebau ‘one fish’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>cigar-like shapes</td>
<td>so-m-buu teroko ‘one cigarette’</td>
</tr>
<tr>
<td>4.</td>
<td>puung</td>
<td>‘tree’</td>
<td>tree</td>
<td>so-m-puung tepu nuayu ‘one tree’</td>
</tr>
<tr>
<td>5.</td>
<td>ndaang</td>
<td>‘branch’</td>
<td>leaves</td>
<td>sa-ndaang teroong nuloka ‘one banana leaf’</td>
</tr>
<tr>
<td>6.</td>
<td>baang</td>
<td>‘tail’</td>
<td>two-legged/four-legged animals</td>
<td>sa-m-baang temanuk ‘one chicken’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>big mammal fish</td>
<td>sa-m-baang tesaping ‘one cow’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sa-m-baang teduyung ‘one dugong’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sa-m-baang tebau ‘one fish’</td>
</tr>
<tr>
<td>7.</td>
<td>lae</td>
<td>‘sheet’</td>
<td>thin and flat objects</td>
<td>sa-lae garatas ‘one sheet of paper’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sa-lae tevuvut ‘one hair’</td>
</tr>
<tr>
<td>8.</td>
<td>peka</td>
<td>‘plank’</td>
<td>flat and hard objects</td>
<td>se-m-peka tedopi ‘one plank of wood’</td>
</tr>
<tr>
<td>9.</td>
<td>bua</td>
<td>‘piece’</td>
<td>Default: round objects</td>
<td>so-m-bua teitolu ‘one egg’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>large objects</td>
<td>so-m-bua teulingka ‘one coconut’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>other objects</td>
<td>so-m-bua tevona ‘one house’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>so-m-bua teoto ‘one car’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>so-m-bua temejang ‘one table’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>so-m-bua teloka ‘one banana’</td>
</tr>
</tbody>
</table>

Table 7-1: Classifiers in Tajio
7.1.3.2 Modifier constructions: numeral-measure nouns

In contrast to classifiers (prefixed with numerals) which can only function as modifiers, measure nouns can be noun phrases by themselves. Examples (42) and (43) show measure nouns which are used as head nouns in adjunct NPs.

(42) see nonyulok tegasang rombengimo ua sio'o
sisee noN-sulok te=gasang ro-N-vengi=mo ua sio'o
who AV.RLS-burn NM=banana two-LIG-night=COM DIST 2SG
‘Who burned the bamboos the last two nights? You? (from the dialog Campur)

(43) sangkaning nitovoknya boi
sV-N-kaning ni-tovok=nya boi
one-LIG-time UV.RLS-shoot=3SG.GEN INJ
‘He just shot (it) once.’ (from the dialog Noasu)

In modifier constructions, measure nouns with numeral prefix can be used as pre- and post-head modifiers, as exemplified in (44) and (45) respectively.

(44) siia nombaluk [limampulu karung teuli
siia noN-baluk lima-N-pulu karung te=uli
3SG AV.RLS-sell five-LIG-tens sack NM=skin
nupala] nu=pala] GEN=nutmeg]
‘She/He sold fifty sacks of nutmeg peel.’

(45) sisia sipua’eli ini jo teraja sebenarnya
sisia si=Pua’ Eli ini jio te=raja sebenarnya
3SG.HON HON=PN PROX NEG NM=king real
[temandar sa-bata] sono [tependau sabata]
te=Mandar sV-bata sono te=Pendau sV-bata
NM=PN one-one.of.a.pair with NM=Pendau one-of.a.pair
‘He, this Pua’ Eli, is not the real king, (he is) half Mandar and half Pendau.’

(from the dialog Sejarah Kasimbar)

In case of the NP in example (44), limampulu karung in [limampulu karung teuli nupala] is considered a pre-head modifier because it is impossible for two NPs to occur next to each other, unless they constitute a compound. Therefore, it seems reasonable to claim that limampulu karung ‘fifty sacks’ is the modifier of the second noun (which is then analyzed as the head noun), teuli nupala ‘nutmeg peel’.

Further evidence for this analysis comes from the fact that it does not seem to be possible to change the modifier into a possessee in a genitive construction, as illustrated by example (46)b.

(46) a. limampulu karung teuli nupala
lima-N-pulu karung te=uli nu=pala
five-LIG-tens sack NM=skin GEN=nutmeg
‘fifty sacks of nutmeg peel’

b. *limampulu karung nu=uli nupala
lima-N-pulu karung nu=uli nu=pala
five-LIG-tens sack GEN=nutmeg GEN=nutmeg
Intended: ‘fifty sacks of nutmeg peel’

Measure nouns in Tajio are listed in Table 7-2. They are grouped into semantic categories and are illustrated with an example each, again including the vowel harmonic numeral prefix sV-(N)- ‘one’.

152
<table>
<thead>
<tr>
<th>Semantic group</th>
<th>Measure noun</th>
<th>Meaning</th>
<th>Example with prefix sV-(N)- ‘one’</th>
</tr>
</thead>
<tbody>
<tr>
<td>length</td>
<td>lotuk</td>
<td>‘width of finger joint’</td>
<td>sa-lotuk ‘one width of finger joint’</td>
</tr>
<tr>
<td></td>
<td>jangan</td>
<td>‘hand span’</td>
<td>sa-n-jangan ‘one hand span’</td>
</tr>
<tr>
<td></td>
<td>siu</td>
<td>‘finger to elbow’</td>
<td>se-n-siu ‘one length from finger to elbow’</td>
</tr>
<tr>
<td></td>
<td>keke</td>
<td>‘finger to shoulder’</td>
<td>se-ng-keke ‘one length from finger to shoulder’</td>
</tr>
<tr>
<td></td>
<td>lapa</td>
<td>‘between fingertips of two hands’</td>
<td>sa-lapa ‘one length between fingertips of two hands’</td>
</tr>
<tr>
<td></td>
<td>lempang</td>
<td>‘step’</td>
<td>sa-lempang ‘one step’</td>
</tr>
<tr>
<td></td>
<td>iaab</td>
<td>‘foot’</td>
<td>sa-iaab ‘one foot’</td>
</tr>
<tr>
<td>volume/mass</td>
<td>rabo’</td>
<td>‘handful’</td>
<td>sa-rabo’ ‘one handful’</td>
</tr>
<tr>
<td></td>
<td>gomus</td>
<td>‘fistful’</td>
<td>sa-ng-gomus ‘one fistful’</td>
</tr>
<tr>
<td></td>
<td>punjuk</td>
<td>‘a pinch with thumb and index finger’</td>
<td>so-punjuk ‘one pinch with thumb and index finger’</td>
</tr>
<tr>
<td></td>
<td>seru’</td>
<td>‘a spoonful’</td>
<td>se-n-seru ‘one spoonful’</td>
</tr>
<tr>
<td></td>
<td>belingka</td>
<td>‘a shell full (coconut)’</td>
<td>se-belingka ‘one shell full (coconut)’</td>
</tr>
<tr>
<td></td>
<td>bele’</td>
<td>‘a tin-can full’</td>
<td>se-bele ‘one tin-can full’</td>
</tr>
<tr>
<td></td>
<td>vees</td>
<td>‘a bundle’</td>
<td>se-vees ‘one bundle’</td>
</tr>
<tr>
<td></td>
<td>‘alu’</td>
<td>‘a package’</td>
<td>sa-ng-alu ‘one package’</td>
</tr>
<tr>
<td></td>
<td>tigo</td>
<td>‘a string/cord (of fish)’</td>
<td>se-n-tigo ‘one string/cord (of fish)’</td>
</tr>
<tr>
<td></td>
<td>jurut</td>
<td>‘a pile/a heap’</td>
<td>so-n-jurut ‘one pile/one heap’</td>
</tr>
<tr>
<td></td>
<td>paa</td>
<td>‘a branch (of coconut)’</td>
<td>sa-n-paa ‘one branch (of coconut)’</td>
</tr>
<tr>
<td></td>
<td>buli</td>
<td>‘branch (of banana)’</td>
<td>so-n-buli ‘one branch (of banana)’</td>
</tr>
<tr>
<td></td>
<td>iting</td>
<td>‘a half of bananas’</td>
<td>se-iting ‘one hand of bananas’</td>
</tr>
<tr>
<td></td>
<td>lepi</td>
<td>‘a half of a hand of bananas’</td>
<td>se-lepi ‘one half of a hand of bananas’</td>
</tr>
<tr>
<td></td>
<td>gopo’</td>
<td>‘a bunch (of paddy)’</td>
<td>se-ng-gopo ‘one bunch (of paddy)’</td>
</tr>
<tr>
<td></td>
<td>karung (Iw: Ind)</td>
<td>‘a sack full’</td>
<td>sa-karung ‘one sack full’</td>
</tr>
<tr>
<td>landmark distance</td>
<td>leko</td>
<td>‘next bend of river’</td>
<td>se-leko ‘one bend of river’</td>
</tr>
<tr>
<td>part/section</td>
<td>bata</td>
<td>‘one of a pair’</td>
<td>sa-bata ‘half’</td>
</tr>
<tr>
<td></td>
<td>tilang</td>
<td>‘half’</td>
<td>se-n-tilang ‘half’</td>
</tr>
<tr>
<td></td>
<td>gaat</td>
<td>‘half’</td>
<td>sa-gaat ‘half’</td>
</tr>
<tr>
<td></td>
<td>tanga</td>
<td>‘half’</td>
<td>sa-tanga ‘half’</td>
</tr>
<tr>
<td>time</td>
<td>eleo</td>
<td>‘day’</td>
<td>se-eleo ‘one day’</td>
</tr>
<tr>
<td></td>
<td>vengi</td>
<td>‘night’</td>
<td>se-m-bengi ‘one night’</td>
</tr>
<tr>
<td></td>
<td>minggu (Iw: Ind)</td>
<td>‘week’</td>
<td>se-minggu ‘one week’</td>
</tr>
<tr>
<td></td>
<td>vulang</td>
<td>‘month’</td>
<td>so-m-vulang ‘one month’</td>
</tr>
<tr>
<td></td>
<td>pariama</td>
<td>‘year’</td>
<td>sa-pariama ‘one year’</td>
</tr>
<tr>
<td></td>
<td>jaang</td>
<td>‘hour’</td>
<td>sa-jaang ‘one hour’</td>
</tr>
<tr>
<td>metric</td>
<td>kilo (Iw: Ind)</td>
<td>‘kilogram’</td>
<td>se-kilo ‘one kilogram’</td>
</tr>
<tr>
<td></td>
<td>liter (Iw: Ind)</td>
<td>‘liter’</td>
<td>se-liter ‘one liter’</td>
</tr>
</tbody>
</table>

Table 7-2: Measure nouns in Tajio grouped into semantic classes

7.1.3.3 Modifier construction: quantifiers

There are two types of quantifiers that can function as modifiers: there is one jojoo ‘all’ which can occur without classifiers or measure nouns, and two, soia ‘how many/much’ and lasia ‘some’ which are prefixed to classifiers or measure nouns.
The quantifier jojoo ‘all’ can be directly placed either before or after the head noun with no obvious difference in meaning, as shown in examples (47) and (48).

(47) \[jojoo\] topejoong] nonuda tepae  
\[jojoo\] to=pe-joong noN-tuda te=pae  
\[all\] REL=SF-field AV.RLS-plant NM=rice  
‘All farmers planted rice.’

(48) \[topejoong] jojoo\] nonuda tepae  
to=pe-joong jojoo noN-tuda te=pae  
REL=SF-field \[all\] AV.RLS-plant NM=rice  
‘All farmers planted rice.’

It can also be used to modify plural pronouns as pre- or post-head modifiers, as exemplified in (49) and (50).

(49) sipato’ nagaya [jojoo sisia] nengemeas  
sipato’ nV-gaya jojoo sisia nV-ngV-meas  
n.o.wonder ST.RLS-good.looking all 3PL ST.RLS-COLL-white  
‘No wonder they are all good looking, (they are all) white skinned.’  
(from the dialog Sejarah Kasimbar)

(50) …paniala teompas moturumo [stiami]  
pa=ni-al a te=ompas mo-turu=mo stiami  
then=UV.RLS-take NM=mat DY.NRLS-sleep=COMP 1PL.EX  
jojoo jojoo  
all  
‘…then we take the mat and we all will sleep.’  
(from the narrative Nonggutu Teompas)

In addition to its functioning as a modifier which directly precedes or follows its head noun, jojoo can syntactically be “floated” to clause-final position. It is then understood to modify the subject, as shown by example (51). See Chapter 8.4.1.5 for more details on quantifier floating.

(51) jio niepemu teasu nivava nikadek  
jio ni-epe=mu te=asu ni-vava ni=Kadek  
NEG UV.RLS-hear=2SG.GEN NM=dog UV.RLS-bring GEN.HON=PN  
jojoo jojoo  
all  
‘Didn’t you hear, all the dogs were brought by Kadek?’  
(from the dialog Noasu)

The quantifier soia is a question word which is used to ask for quantities. If functioning as a modifier, it co-occurs with a classifier or a measure noun. Together they occur as pre-head modifiers, as shown by examples (52) and (53).

(52) [soiambaang tesaping] nisambalemu  
soia-N-baang te=saping ni-sambale=mu  
how.many-LIG-CLF.tail NM=cow UV.RLS-slaughter=2SG.GEN  
‘How many cows were slaughtered by you?’

(53) [soiameter tepangkat nuulingka]  
soia-meter te=pangkat nu=ulingka  
how.many-meter NM=height GEN=coconut  
‘How high is the coconut tree?’  
(from the dialog Teulingka)

Further, when placed in sentence-initial position, NPs with modifiers consisting of a quantifier and a classifier are often marked by the aspectual marker =mo, as can be seen in examples (54) and (55). In
this case, =mo functions as a focus particle (see also Section 5.3.1 for details on the completive aspect =mo).

(54) soiatoomo \hspace{1em} teanggotamu \hspace{1em} itu
soia-too=mo \hspace{1em} te=anggota=mu \hspace{1em} itu
how\text{-}many\text{-}CLF\text{-}person\text{-}FOC \hspace{1em} NM\text{-}member\text{-}2SG\text{.GEN} \hspace{1em} MED
‘How many children do you (already) have?’ (lit: ‘How many members of yours?’)
(from the dialog \textit{Campur})

(55) lasiambuumo \hspace{1em} teroko'nya
lasia-N-vuu=mo \hspace{1em} te=roko'\text{=}nya
some\text{-}LIG\text{-}CLF\text{-}bone\text{-}FOC \hspace{1em} NM\text{-}cigarette\text{-}3SG\text{.GEN}
niontipu
ni-ontip='u
UV\text{-}RLS\text{-}smoke\text{-}1SG\text{.GEN}
‘Some of her cigarettes have (already) been smoked by me.’

In conversational data, the heads of quantified noun phrases are often deleted because they are understood from the context. Examples are given in (56)–(58).

(56) [soia \hspace{1em} bua] \hspace{1em} nijaang \hspace{1em} nipevalung
soia \hspace{1em} bua \hspace{1em} ni-jaang \hspace{1em} ni-pe-valung
how\text{-}many \hspace{1em} CLF\text{-}piece \hspace{1em} UV\text{-}RLS\text{-}boil \hspace{1em} UV\text{-}RLS\text{-}SF\text{-}food.to\text{.carry}
‘How many pieces (of banana) have been cooked and carried (along)?’
(from the dialog \textit{Campur})

(57) [soia \hspace{1em} karung] \hspace{1em} eini
soia \hspace{1em} karung \hspace{1em} eini
how\text{-}many \hspace{1em} sack \hspace{1em} PROX
‘How many sacks (of nutmeg peel) are here?’
(from the dialog \textit{Campur})

(58) [lasiambuumo] \hspace{1em} niperoko'u
lasia-N-vuu=mo \hspace{1em} ni-pe-roko='u
some\text{-}LIG\text{-}CLF\text{-}bone\text{-}COMP \hspace{1em} UV\text{-}RLS\text{-}SF\text{-}cigarette\text{-}1SG\text{.GEN}
‘Some (of the cigarettes) have been smoked by me.’
(from the dialog \textit{Campur})

7.1.4 Demonstratives

There are three demonstratives: the proximal demonstrative eini/ini ‘this’, the medial demonstrative eitu/itu ‘that’ and the distal demonstrative eua/ua ‘that’. As has been discussed in Section 4.3.1.3, they can be used as (1) modifiers or (2) head noun subjects or objects. This section only discusses demonstratives which function as modifiers. As modifiers, demonstratives always occur at the very end of the noun phrase. Nouns which are modified by a demonstrative only allow for a definite interpretation.

Examples (59) and (60) show personal pronouns which are modified by demonstratives.

(59) [siia \hspace{1em} ini] \hspace{1em} temahasiswa \hspace{1em} yami \hspace{1em} jerman eini
siia \hspace{1em} ini \hspace{1em} te=mahasiswa \hspace{1em} yami \hspace{1em} jerman eini
3SG \hspace{1em} PROX \hspace{1em} NM\text{-}student \hspace{1em} from \hspace{1em} Germany \hspace{1em} PROX
‘She is a student from Germany.’
(from the dialog \textit{Campur})

(60) jumai \hspace{1em} noroko'ong \hspace{1em} [siia' u \hspace{1em} ini]
jiu \hspace{1em} amai \hspace{1em} nV-roko'\text{=}ong \hspace{1em} sia'\text{'} u \hspace{1em} ini
NEG \hspace{1em} EXIST \hspace{1em} ST\text{-}RLS\text{-}cigarette\text{-}VBLZ \hspace{1em} 1SG \hspace{1em} PROX
‘I do not have cigarettes.’
(from the dialog \textit{Campur})
Proper names can also be modified by demonstratives, as illustrated by examples (61) and (62).

(61) pa pa ja mapada [tetajio ini] boi
pa pa ja mV-pada te=Tajio ini boi
then then INJ ST.NRLS-disappear NM=Tajio PROX INJ
‘And then surely this Tajio will disappear, too.’
(from the dialog *Campur*)

(62) tiaong ja bulan tiga [siubang eini] vai
tiaong ja bulan tiga25 si=Ubang eini vai
why INJ month three HON=PN PROX too
‘Will this Ubang really marry in March, too?’
(from the dialog *Campur*)

Examples of demonstratives which modify nouns are given in (63)–(65). Nouns which are modified by demonstratives can also be marked by the noun marker te=, as shown by example (65).

(63) seelu'u [tabako mentoos] eua
seelu='u tabako me-ntoos eua
like=1SG.GEN tobacco ST.RLS-rolled DIST
‘I liked that cigarette.’
(from the dialog *Campur*)

(64) see [tagu niama niwati eini] boi
sisee tagu ni=ama ni=Wati eini boi
who friend GEN.HON=father GEN.HON=PN PROX INJ
‘Who is this friend of Wati’s father?’
(from the dialog *Campur*)

(65) [teuli'u eini] nagabung boi
te=uli='u eini nV-gabung boi
NM=skin=1SG.GEN DEM ST.RLS-dust INJ
‘My skin here is dusty.’
(from the dialog *Campur*)

7.1.5 Nominal modifiers
A nominal construction which consists of a head noun directly modified by another noun is called a ‘compound’ (Dryer 2007:175). In Tajio, the sequence of nouns in a compound is that the first noun is the head noun; the second noun is the modifier noun. More details about forms and meanings of compound nouns are presented in Section 3.6.

7.2 Complex noun phrases
A complex noun phrase in Tajio consist of a head noun modified by a complex modifier, such as a genitive modifier, or a relative clause. Thus, in a complex noun phrase, the head noun (or the possessed noun) occurs with (an)other noun phrase(s) denoting the possessor. Each type of complex modifier will be discussed below.

7.2.1 Genitive noun phrases
A genitive noun phrase always has one noun which functions as the head noun (i.e., a possessee) which can be modified by one or more possessors. The possessee in Tajio always precedes the possessor. In genitive constructions, it is the possessor which is marked by the genitive marker. Regarding the possible numbers of possessors in a genitive construction, I will call a genitive construction with one possessor a single genitive construction. The term multiple genitive construction is used to refer to genitive constructions with more than one possessor. These two constructions are discussed in Section 7.2.1.1 and 7.2.1.2 respectively.

Furthermore, the possessee and the possessor can also show different degrees of complexity. Both can be found in the form of a simple noun, a derived noun or a compound noun as illustrated in examples (66)a, b and c. The possessee are in bold type.

---

25 *Bulan tiga* ‘the third month; March’ is borrowed from Indonesian.
(66) a. tevonua 'u
tevonua = 'u
NM=house = 1SG.GEN
‘my house’

b. topombaluk nubau
topoN-baluk nu=bau
AG.NOM-sell GEN=fish
‘fish seller’

c. tevonua paranisongu
tevonua pV-ranis-ong = 'u
NM=house NOM-sick-NOM = 1SG.GEN
‘my hospital’ (lit: my house of sickness’)

Examples (67)a, b and c show possessors in the form of a simple noun, a derived noun and a compound noun. The possessors are bold typed.

(67) a. tepuu nuulingka
tepuu nu=ulingka
NM=tree GEN=coconut
‘coconut tree’ (lit: ‘tree of the coconut’)

b. tevonua nutopomeang
tevonua nu=topoN-peang
NM=house GEN=AG.NOM-fish
‘house of the fisherman’

c. tedokter nuvonu paranisong
tedokter nu=vonua pV-ranis-ong
NM=doctor GEN=house NOM-sick-NOM
‘hospital doctor’

Genitive constructions can be post-head modified by demonstratives and relative clauses. In the following examples, the NPs are in square brackets; the genitive construction and its additional modifier (i.e., demonstrative or relative clause) are in bold.

(68) sia’u neita [tetoonya tonomate]
    sia’u n-pe-iia te=too=nya to=noN-pate
1SG AV.RLS-SF-see NM=person=DEF REL=AV.RLS-kill
tesapingmu eitu
    te=saping=mu eitu
NM=cow=2SG.GEN MED
‘I saw the one who killed your cow.’

(69) [teumur niina nikarmin eu] sekitar
    te=umur ni=ina ni=Karmin eu sekitar
    NM=age GEN.HON=mother GEN.HON=Karmin DIST around
    tujuh belas tahun
    tujuh belas tahun
    seven teen year
‘The mother of Karmin was around seventeen years old.’

    (from the narrative Kasimbar)

(70) [tepuu nukopi tonituda’u] pariama
    te=puuu n=kopi to=ni-tuda=’u pariama
    NM=tree GEN=coffee REL=UV.RLS-plant=1SG.GEN year
natampus  jio=po  nabasag
nV-tampus  jio=po  nV-basag
ST.RLS-ago  not=CONT  ST.RLS-big

‘The coffee tree that I planted a year ago has not yet grown up.’

\[(71)\begin{array}{lll}
telinda'\ u & \ tonipoturui\ mu & \ ei\ tu \\
to=li\nda='u & to=ni-po-turu-i=mu & ei\ tu \\
NM=mat=1SG.GEN & REL=UV.RLS-SF-sleep-APPL=2G.GEN & MED \\
\end{array}\]

nerempu
nV-rempu
ST.RLS-dirty
‘My mat that you slept on was dirty.’

7.2.1.1 Single genitive constructions

Within single genitive constructions, there are two types of possessors that need to be distinguished: (1) possessors without a genitive marker, and (2) possessors with a genitive marker. Possessors that do not need any genitive marker to be well-formed are singular possessive pronouns. Possessors that need genitive markers are plural pronouns and noun phrases.

Singular pronouns functioning as possessors in genitive noun phrases are expressed by enclitic pronouns. The enclitics of the first, second and third person singular pronouns, ='u, =mu and =nya respectively, are attached directly to the noun host, as illustrated in examples (72)–(74). Only the first person singular enclitic pronoun ='u undergoes a morphophonological process (see Section 2.8.5 for details on glottal deletion).

\[(72)\begin{array}{lll}
si=\text{lapi}=u & \ jio & \ mongulam \\
HON=spouse=1SG.GEN & \ jio & \ moN-ulam \\
\text{NEG} & \ AV.NRLS-cure \\
\end{array}\]

‘My spouse will not cure (or act as a doctor to someone else).’

(from the dialog Campur)

\[(73)\begin{array}{lll}
vava & \text{minyei} & \text{ba} \\
\text{bring} & \text{hither} & \text{INJ} \\
\text{NM=cigarette=2SG.GEN} & \text{MED} \\
\end{array}\]

‘Give me your cigarettes, please!’

(from the dialog Campur)

\[(74)\begin{array}{lll}
tetuainya & \text{amai} & \text{sisanu} \\
\text{NM=younger.sibling=3SG.GEN} & \text{EXIST} & \text{HON=someone} \\
\end{array}\]

‘He has a younger sibling.’ (lit: ‘His younger sibling exists.’). His name is Sumar.’

(from the dialog Campur)

The genitive markers marking possessors in genitive phrases are the prefix ni- and the clitics ni= and nu=. Phonologically, neither of the genitive markers can stand alone; they have to be attached to pronominal bound roots or nominal bases. The genitive prefix ni- can only attach to the pronominal bound roots of plural pronouns (see Section 4.3.1.1) and the genitive proclitic ni= precedes the four kinship terms and personal names (see Section 7.1.1.1 and 7.1.1.2), while nu= precedes other nouns.

While ni- and ni= do not have any alternate forms, nu= may optionally be realized as nu=, n= or u=. The genitive marker nu= may occur as u= when the possessed noun ends in a velar nasal (cf. example (75)); or it may occur as n= when the possessed noun ends in a vowel, as in example (76). However, as shown in example (77), these realizations are optional.

\[(75)\begin{array}{ll}
\text{tebuang } \text{nu=} & \text{lima} \quad \text{NM=finger } \text{GEN=hand} \quad \text{‘finger of hand’} \\
\text{lolosunong } \text{nu=} & \text{lima} \quad \text{joint } \text{GEN=hand} \quad \text{‘wrist of hand/hand wrist’} \\
\end{array}\]

158
7.2.1.2 Multiple genitive constructions

Possessors in multiple genitive constructions may consist of two or more possessors which are marked by a genitive marker, as in examples (78) and (79); or of a possessive pronoun and one or more possessors which are marked by genitive markers. The second type, however, can only occur with singular possessive pronouns. In such a case, the possessive pronoun always occurs at the very end, compare examples (80)–(82). The possessors in the examples are in bold type.

(78) \[ \text{te} = \text{vonua} \quad \text{ni} = \text{ama} \quad \text{ni} = \text{Norma} \]
\[ \text{back} \quad \text{GEN=house} \quad \text{GEN.HON=father} \quad \text{GEN.HON=Norma} \]
‘back of the house of the father of Norma’

(79) \[ \text{te} = \text{puu} \quad \text{nu} = \text{ulingka} \quad \text{ni} = \text{Yani} \]
\[ \text{NM=tree} \quad \text{GEN=coconut} \quad \text{GEN.HON=Yani} \]
‘Yani’s coconut tree’ (lit: ‘tree of coconut of Yani’)

(80) \[ \text{te} = \text{vonua} \quad \text{ni} = \text{mangge='u} \]
\[ \text{NM=house} \quad \text{GEN.HON=uncle=1SG.GEN} \]
‘my uncle’s house’

(81) \[ \text{te} = \text{joong} \quad \text{ni} = \text{ama=mu} \]
\[ \text{NM=field} \quad \text{GEN.HON=father=2SG.GEN} \]
‘your father’s field’

(82) \[ \text{te} = \text{lapi} \quad \text{nu} = \text{tagu} \quad \text{ni} = \text{ina=nya} \]
\[ \text{NM=spouse} \quad \text{GEN=friend} \quad \text{GEN.HON=mother=3SG.GEN} \]
‘spouse of his/her mother’s friend’

7.3 NPs without head nouns

This section discusses relative clauses functioning as modifiers and relative clauses in headless NP constructions. The syntax of relative clauses will be discussed in Section 8.4.1.1. Relative clauses in Tajio are marked with the proclitic \( \text{to=} \). This relative marker can be attached to bases with a stem-forming prefix or to verbal bases without a stem-forming prefix. Preceding bases with a stem-forming prefix, \( \text{to=} \) functions as a nominalizer (see Section 7.4.1). Being attached directly to verbal bases, \( \text{to=} \) forms relative clauses which function as modifiers. As modifiers, relative clauses always follow the head nouns. Verbal bases which occur with the relative marker \( \text{to=} \) are stative bases, dynamic intransitive and transitive verbal bases.

As mentioned in Section 4.2 intransitive verbs can also be used as modifiers without the relative marker \( \text{to=} \). Semantically, the use of the relative marker conveys a difference meaning. Occurring with the relative marker, the intransitive verbal modifier has a specific reading. Without the relative marker, it conveys a general reading, i.e., it tends to be interpreted indefinitely. Compare examples (83) and (84).
(83) siia seelunya [tevevine nelenda tevuvutnya]
siia seelu=nya te=vevine nV-lenda te=vuvut=nya
3SG like=3SG.GEN NM=woman ST.RLS-long NM=hair=3SG.GEN
‘He likes long-haired woman.’

(84) siia seelunya [tevevine tonelenda tevuvutnya]
siia seelu=nya te=vevine to=nV-lenda te=vuvut=nya
3SG like=3SG.GEN NM=woman REL=ST.RLS-long NM=hair=3SG.GEN
‘He likes the/a woman with long hair.’

Transitive verbal bases preceded by the relative marker to= can be in the form of actor voice as well as undergoer voice verbs.

(85) pepitu [teboneka tonongawal teperahu]
pepitu te=boneka to=noN-kawal te=perahu
seven NM=doll REL=AV.RLS-guard NM=ship
‘There were seven dolls guarding the ship.’

(86) sia’u nongolog [sagara]
sia’u noN-olong sagara
1SG AV.RLS-carry.with.sarong object

toniolong i naus)
to=ni-olong i naus
REL=UV.RLS-carry.with.sarong LOC cloth
‘I carried the object which was wrapped in a piece of cloth.’
(from the dialog Sejarah Kasimbar)

In order to interpret the NPs as definite, relative clauses can be post-head modified by demonstratives.

(87) [tevevine tonongoli tebau eitu] siina’u
te=vevine to=noN-oli te=bau eitu si=ina=’u
NM=woman REL=AV.RLS-buy NM=fish MED HON=mother=1SG.GEN
‘That woman who bought the fish is my mother.’

(88) [tevevine tonagaya eini] tope=nya
te=vevine to=nV-gaya eini tope=nya
NM=woman REL=ST.RLS-beautiful PROX name=3SG.GEN

siranang
si=Runang
HON=PN
‘This beautiful woman named Ranang.’

In NP constructions, relative clauses do not always occur with head nouns. In conversational or narrative data, relative clauses often occur without head nouns. In these cases, the head nouns of the headless relative clauses can be understood from the context. Examples are given in (89)–(92).

(89) jadi nagana’ toniiinangnya
jadi nV-gana’ to=ni-inang=nya
so ST.RLS-enough REL=UV.RLS-eat=3SG.GEN
‘So, he had enough (food) to eat.’ (from the narrative Hanyut perahu)

(90) jumai toniboncengnya
jio amai to=ni-bonceng=nya
NEG EXIST REL=UV.RLS-ride.at.back=3SG.GEN
‘He did not ride (someone).’ (from the dialog Campur)

(91) amai tonondorong siia
amai to=noN-dorong siia
EXIST REL=AV.RLS-push 3SG
7.4 Nominalization

Morphological processes involved in nominalization are affixation, reduplication and compounding. Affixation and reduplication tend to be more productive than compounding. Compounding will not further be discussed here, but see Section 3.6 for details. Regarding the types of the derived nouns, nominalizations can be classified into: agentive, action/state, instrumental, locative and objective nominalizations. Each nominalization type and the morphological process involved are discussed in the following subsections.

7.4.1 Agentive nominalization

Agentive nominalization in Tajio is marked by the prefix topo(N)- or by the relative marker to= preceding the stem former pe-, forming tope-. The nominalizer prefix topo(N)- can be attached to intransitive and transitive verbal bases. It appears as topoN- (i.e., with nasal) when it precedes transitive verbal bases. Thus, the prefix form topoN- is related to transitive verbs taking the actor voice prefix noN-. It occurs as topo- (i.e., without nasal) if it attaches to dynamic intransitive verbal bases. The agentive nominalizer tope- only occurs with roots that need a stem-forming prefix (see Section 3.3.2 for discussion on stem-forming prefixes). Table 7-3 presents examples of agentive nouns using the agentive nominalizer topo(N)- and tope-.

<table>
<thead>
<tr>
<th>Nominalizer</th>
<th>Type of bases</th>
<th>Agitative nouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>topoN-</td>
<td>Transitive base</td>
<td></td>
</tr>
<tr>
<td>nongala</td>
<td>noN-ala ‘AV.RLS-take’ ‘to take’</td>
<td>topongala &lt; topoN-ala ‘AG.NOM-take’ ‘someone who took (sth.)’</td>
</tr>
<tr>
<td>nomenek</td>
<td>noN-penek ‘AV.RLS-climb’ ‘to climb’</td>
<td>topomenek &lt; topoN-penek ‘AG.NOM-climb’ ‘someone who climbed’</td>
</tr>
<tr>
<td>nombava</td>
<td>noN-vava ‘AV.RLS-carry’ ‘to carry’</td>
<td>topombava &lt; topoN-vava ‘AG.NOM-carry’ ‘someone who carried (sth.)’</td>
</tr>
<tr>
<td>nomuai</td>
<td>noN-puai ‘AV.RLS-to.dry’ ‘to dry’</td>
<td>topomuai &lt; topoN-puai ‘AG.NOM-dry’ ‘someone who dried (sth.)’</td>
</tr>
<tr>
<td>nonyokok</td>
<td>noN-sokok ‘AV.RLS-catch’ ‘to catch’</td>
<td>toponyokok &lt; topoN-sokok ‘AG.NOM-catch’ ‘someone who caught (s.o./sth.)’</td>
</tr>
<tr>
<td>nomanao</td>
<td>noN-manao ‘AV.RLS-steal’ ‘to steal’</td>
<td>topomanao &lt; topoN-manao ‘AG.NOM-steal’ ‘someone who stole sth./thief’</td>
</tr>
<tr>
<td>nonjut</td>
<td>noN-jut ‘AV.RLS-push’ ‘to push’</td>
<td>toponjut &lt; topoN-jut ‘AG.NOM-push’ ‘someone who pushed’</td>
</tr>
<tr>
<td>topo-</td>
<td>Intransitive base</td>
<td>Agitative nouns</td>
</tr>
<tr>
<td>nelinjok</td>
<td>‘DY.RLS-run’ ‘to run’</td>
<td>topolinjok &lt; topo-linjok ‘AG.NOM-run’ ‘someone who ran/runner’</td>
</tr>
<tr>
<td>nomberek</td>
<td>‘DY.RLS-stay’ ‘to stay’</td>
<td>topomberek &lt; topo-mberek ‘AG.NOM-stay’ ‘someone who stayed/occupant’</td>
</tr>
<tr>
<td>nololom</td>
<td>‘DY.RLS-swim’ ‘to swim’</td>
<td>topololom &lt; topo-lolom ‘AG.NOM-swim’ ‘someone who swam/swimmer’</td>
</tr>
<tr>
<td>notambak</td>
<td>‘DY.RLS-play’ ‘to play’</td>
<td>topotambak &lt; topo-tambak ‘AG.NOM-play’ ‘someone who played/player’</td>
</tr>
<tr>
<td>neleyak</td>
<td>‘DY.RLS-fly’ ‘to fly’</td>
<td>topoleyak &lt; topo-leyak ‘AG.NOM-fly’ ‘someone who flew’</td>
</tr>
<tr>
<td>tope-</td>
<td>Intransitive bases</td>
<td>Agitative nouns</td>
</tr>
<tr>
<td>nejoong</td>
<td>‘DY.RLS-field’</td>
<td>topojoong &lt; topo-joong ‘AG.NOM-field’ ‘someone who did the field’</td>
</tr>
</tbody>
</table>
7.4.2 Action/state nominalization

The morphological markers which mark action/state nominalization are the circumfix \textit{po(N)--ong} and \textit{pV--ong}. Nominalizations taking the circumfix \textit{po(N)--ong}, derive nouns from dynamic verbal bases, and are called action nominalization here. As the morphological markers of the dynamic intransitive and transitive verbs may overlap, the choice of action nominalizers also shows the same tendency. Thus, the nasal in \textit{po(N)--ong} is placed in the brackets. Nominalizations which occur with \textit{pV--ong} derive nouns from stative verbs and are called state nominalizations. In addition, there are often intransitive verbal roots which only need a stem-forming prefix \textit{pe-} to derive action nouns. The harmonic \textit{pV--ong} only occurs with stative bases. Examples are provided in Table 7-4.

<table>
<thead>
<tr>
<th>Nominalizer</th>
<th>Type of bases</th>
<th>Action/state noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{po(N)--ong}</td>
<td>Intransitive base</td>
<td>Action noun</td>
</tr>
<tr>
<td>\textit{nenyaong &lt; ne-nyaong} ‘DY.RLS-meow’ ‘to meow’</td>
<td>\textit{penyaong &lt; pe-nyaong} ‘NOM-meow’ ‘act of meowing’</td>
<td></td>
</tr>
<tr>
<td>\textit{nemoyak &lt; ne-moyak} ‘DY.RLS-yawn’ ‘to yawn’</td>
<td>\textit{pemoyak &lt; pe-moyak} ‘NOM-yawn’ ‘act of yawning’</td>
<td></td>
</tr>
<tr>
<td>\textit{nendii &lt; ne-ndiis} ‘DY.RLS-bath’ ‘to take a bath’</td>
<td>\textit{pendii &lt; pe-ndiis} ‘NOM-bath’ ‘act of taking a bath’</td>
<td></td>
</tr>
<tr>
<td>\textit{po(N)--ong}</td>
<td>Transitive base</td>
<td>Action noun</td>
</tr>
<tr>
<td>\textit{nombaung &lt; noN-baung} ‘AV.RLS-build’ ‘to build’</td>
<td>\textit{pombaunong &lt; poN-baung-ong} ‘NOM-build-NOM’ ‘act of building’</td>
<td></td>
</tr>
<tr>
<td>\textit{nogutu &lt; no-gutu} ‘AV.RLS-make’ ‘to make’</td>
<td>\textit{pogutuong &lt; po-gutu-ong} ‘NOM-make-NOM’ ‘act of making’</td>
<td></td>
</tr>
<tr>
<td>\textit{pV--ong}</td>
<td>Stative base</td>
<td>State noun</td>
</tr>
<tr>
<td>\textit{nesili &lt; nV-sili} ‘ST.RLS-shy’ ‘to be ashamed, shy’</td>
<td>\textit{pesiliong &lt; pV-sili-ong} ‘NOM-shy-NOM’ ‘easily feels shy’</td>
<td></td>
</tr>
<tr>
<td>\textit{negirang &lt; nV-girang} ‘ST.RLS-jealous’ ‘to be jealous’</td>
<td>\textit{pegirangong &lt; pV-girang-ong} ‘NOM-jealous-NOM’ ‘easily feels jealous’</td>
<td></td>
</tr>
<tr>
<td>\textit{nobule &lt; nV-bule} ‘ST.RLS-afraid’ ‘to be afraid’</td>
<td>\textit{pobuleong &lt; pV-bule-ong} ‘NOM-afraid-NOM’ ‘easily feels afraid’</td>
<td></td>
</tr>
<tr>
<td>\textit{nansu &lt; nV-nasu} ‘ST.RLS-angry’ ‘to be angry’</td>
<td>\textit{pansuung &lt; pV-nasu-ong} ‘NOM-angry-NOM’ ‘easily feels angry’</td>
<td></td>
</tr>
<tr>
<td>\textit{nabalisa &lt; nV-balisa} ‘ST.RLS-worry’ ‘to be worry’</td>
<td>\textit{pabalisaong &lt; pV-balisa-ong} ‘NOM-worry-NOM’ ‘easily feels worried’</td>
<td></td>
</tr>
</tbody>
</table>

Table 7-4: Examples of action/state nominalization

7.4.3 Instrumental nominalization

Processes which derive instrumental nouns from verbal bases are affixation and reduplication. Affixes which mark instrumental nouns are the prefix \textit{poN-}, the circumfix \textit{SF--ong} and the circumfix \textit{poN--ong}. The prefix \textit{poN-} derives instrumental nouns from applicative verbal bases which convey a causative meaning, i.e., bases are derived from stative roots. The circumfix \textit{poN--ong} derives instrumental nouns from transitive verbal bases. The circumfix \textit{SF--ong} is required by roots which need the stem-forming prefix \textit{pe-}. In addition, the reduplication process deriving instrumental nouns is
CV-reduplication. Bases which can undergo this process are transitive verbal bases. Examples are provided in Table 7-5.

<table>
<thead>
<tr>
<th>Nominalizer</th>
<th>Type of bases</th>
<th>Instrumental noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>poN-</td>
<td>Transitive base</td>
<td></td>
</tr>
<tr>
<td>nondodao &lt; noN-doda-ao ‘AV.RLS-red-APPL’ ‘to make red’</td>
<td>pondoda &lt; poN-doda ‘NOM-red’ ‘instrument to make sth. red (e.g. lipstick)’</td>
<td></td>
</tr>
<tr>
<td>nombasagao &lt; nom-basag-ao ‘AV.RLS-big-APPL’ ‘to make big’</td>
<td>pompbasag &lt; poN-basag ‘NOM-big’ ‘instrument to make sth. big’</td>
<td></td>
</tr>
<tr>
<td>nondolongao &lt; noN-dolong-ao ‘AV.RLS-straight-APPL’ ‘to make straight’</td>
<td>pondolong &lt; poN-dolong ‘NOM-straight’ ‘instrument to make sth. straight’</td>
<td></td>
</tr>
<tr>
<td>nomacingao &lt; noN-pacing-ao ‘AV.RLS-clean-APPL’ ‘to make clean’</td>
<td>pomacing &lt; poN-pacing ‘NOM-clean’ ‘cleaning tool, cleaner’</td>
<td></td>
</tr>
<tr>
<td>poN--ong</td>
<td>Transitive base</td>
<td></td>
</tr>
<tr>
<td>nongingking &lt; noN-ingking ‘AV.RLS-carry.hanging.from.hand’ ‘to carry hanging from the hand’</td>
<td>pongoingkingon &lt; poN-ingking-ong NOM-carry-NOM’ ‘container to carry sth. hanging from the hand’</td>
<td></td>
</tr>
<tr>
<td>nonyimbu &lt; noN-simbu ‘AV.RLS-carry.on.shoulder’ ‘to carry on shoulder’</td>
<td>ponyimbuon &lt; poN-simbu-ong ‘NOM-carry-NOM’ ‘container to carry sth. on the shoulder’</td>
<td></td>
</tr>
<tr>
<td>nombava &lt; noN-vava ‘AV.RLS-bring’ ‘to bring’</td>
<td>pombavaon &lt; poN-vava-ong ‘NOM-bring-NOM’ ‘container to bring sth.’</td>
<td></td>
</tr>
<tr>
<td>nonggipis &lt; noN-gipis ‘AV.RLS-pinch’ ‘to pinch’</td>
<td>ponggipison &lt; poN-gipis-ong ‘NOM-pinch-NOM’ ‘tool to pinch sth.’</td>
<td></td>
</tr>
<tr>
<td>SF--ong</td>
<td>Intransitive base</td>
<td></td>
</tr>
<tr>
<td>nesave &lt; ne-save ‘DY.RLS-ride’ ‘to ride’</td>
<td>pesaveon26 &lt; pe-save-ong ‘SF-ride-NOM’ ‘vehicle’</td>
<td></td>
</tr>
<tr>
<td>nevalung &lt; ne-valung ‘DY.RLS-carry.food’ ‘to carry food’</td>
<td>pevalungon &lt; pe-valung-ong ‘SF-carry.food-NOM’ ‘container to carry sth.’</td>
<td></td>
</tr>
<tr>
<td>nemeluwa &lt; ne-meluwa ‘DY.RLS-vomit’ ‘to vomit’</td>
<td>pemeluwaon &lt; pe-meluwa-ong ‘SF-vomit-NOM’ ‘vomit bag/container’</td>
<td></td>
</tr>
<tr>
<td>CV-Red</td>
<td>Transitive base</td>
<td></td>
</tr>
<tr>
<td>kait ‘to pick cacao with a knife’</td>
<td>kakaik &lt; ka.kait ‘RDP–pick’ ‘a special knife to pick cacao’</td>
<td></td>
</tr>
<tr>
<td>tambu ‘to fetch water’</td>
<td>tatambu &lt; ta.tambu ‘RDP–fetch.water’ ‘bucket’</td>
<td></td>
</tr>
<tr>
<td>kaer ‘to sweep’</td>
<td>kakaer &lt; ka.kaer ‘RDP–sweep’ ‘broom’</td>
<td></td>
</tr>
<tr>
<td>paat ‘to chisel’</td>
<td>papaat &lt; pa.paat ‘RDP–chisel’ ‘chisel’</td>
<td></td>
</tr>
<tr>
<td>tumbuk ‘toibble’</td>
<td>tutumbuk &lt; tu.tumbuk ‘RDP–tibble’ ‘tibble’</td>
<td></td>
</tr>
<tr>
<td>baula ‘to throw’</td>
<td>babaula &lt; ba.baula ‘RDP–throw’ ‘an instrument to throw sth.’</td>
<td></td>
</tr>
</tbody>
</table>

Table 7-5: Examples of instrumental nominalization

7.4.4 Locative nominalization

Locative nouns are always marked by the circumfix poN--ong or pV--ong. In addition, there are roots which take the stem-forming prefix pe-/po- before taking the suffix -ong, forming the circumfix pe-/po--ong. All affix combinations derive locative nouns from verbal bases. The circumfix SF--ong attaches to intransitive verbal bases; poN--ong is taken by transitive verbal bases; pV--ong only occurs with stative bases, as exemplified in the following table.

26 There are no examples in the database with the stem former po-. 

163
<table>
<thead>
<tr>
<th>Nominalizer</th>
<th>Type of bases</th>
<th>Locative noun</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SF--ong</strong></td>
<td>Intransitive base</td>
<td><strong>Locative noun</strong></td>
</tr>
<tr>
<td>nelinjok &lt; ne-linjok ‘DY.RLS-run’ ‘to run’</td>
<td>pelinjokong &lt; pe-linjok-ong ‘SF-stay-NOM’ ‘place to run/escape’</td>
<td></td>
</tr>
<tr>
<td>nenyaau &lt; ne-nyaau ‘DY.RLS-go.down’ ‘to go down’</td>
<td>penyauong &lt; pe-nyaau-ong ‘SF-stay-NOM’ ‘place to go down’</td>
<td></td>
</tr>
<tr>
<td>netaang &lt; ne-taang ‘DY.RLS-wait’ ‘to wait’</td>
<td>petaaong &lt; pe-taang-ong ‘SF-stay-NOM’ ‘place to wait’</td>
<td></td>
</tr>
<tr>
<td>nokaraja &lt; no-karaja ‘DY.RLS-work’ ‘to work’</td>
<td>pokarajaong &lt; po-karaja-ong ‘SF-stay-NOM’ ‘place to work’</td>
<td></td>
</tr>
<tr>
<td>nomberek &lt; no-mberek ‘DY.RLS-stay’ ‘to stay’</td>
<td>pomberkong &lt; po-mberek-ong ‘SF-stay-NOM’ ‘a place to stay’</td>
<td></td>
</tr>
<tr>
<td><strong>poN--ong</strong></td>
<td>Transitive base</td>
<td><strong>Locative noun</strong></td>
</tr>
<tr>
<td>nonyokok &lt; noN-sokok ‘AV.RLS-catch’ ‘to catch’</td>
<td>ponyokokong &lt; poN-sokok-ong ‘NOM-catch-NOM’ ‘place to catch’</td>
<td></td>
</tr>
<tr>
<td>nomuai &lt; noN-puai ‘AV.RLS-dry’ ‘to dry’</td>
<td>pomuaaong &lt; poN-puai-ong ‘NOM-dry-NOM’ ‘place to dry’</td>
<td></td>
</tr>
<tr>
<td>nongilok &lt; noN-ilok ‘AV.RLS-peek’ ‘to peek’</td>
<td>pongilokong &lt; poN-ilok-ong ‘NOM-peek-NOM’ ‘place to peek’</td>
<td></td>
</tr>
<tr>
<td>nonggabu &lt; noN-gabu ‘AV.RLS-cook’ ‘to cook’</td>
<td>ponggabuong &lt; poN-gabu-ong ‘NOM-cook-NOM’ ‘place to cook’</td>
<td></td>
</tr>
<tr>
<td>nenginang &lt; neN-inang ‘AV.RLS-eat’ ‘to eat’</td>
<td>penginangong &lt; peN-inang-ong ‘NOM-eat-NOM’ ‘place to eat’</td>
<td></td>
</tr>
<tr>
<td><strong>pV--ong</strong></td>
<td>Stative base</td>
<td><strong>Locative noun</strong></td>
</tr>
<tr>
<td>noturu &lt; nV-turu ‘ST.RLS-sleep’ ‘to be asleep’</td>
<td>poturuung &lt; pV-turu-ong ‘NOM-sleep-NOM’ ‘place to sleep’</td>
<td></td>
</tr>
<tr>
<td>nanavu &lt; nV-navu ‘ST.RLS-fall’ ‘to be fallen’</td>
<td>panavuung &lt; pV-navu-ong ‘NOM-fall-NOM’ ‘place to fall’</td>
<td></td>
</tr>
<tr>
<td>nolodong &lt; nV-lodong ‘ST.RLS-drown’ ‘to be drowned’</td>
<td>polononong &lt; pV-lodong-ong ‘NOM-drown-NOM’ ‘place to drown’</td>
<td></td>
</tr>
</tbody>
</table>

Table 7-6: Examples of locative nominalization

### 7.4.5 Objective nominalization

Objective nouns refer to the object that results from an action (Comrie 2007:356). The nominalizing affixes which derive objective nouns are the suffix -<ong>, the prefix poN- and the stem-forming prefix pe-. The suffix -<ong> can attach to intransitive and transitive verbal bases; the prefix poN- precedes transitive verbal bases; the stem-forming prefix pe- may attach to intransitive or transitive verbal roots. Bases which take the suffix -<ong> are also found in CV-reduplicated forms. In addition to affixation, CV-reduplication and bisyllabic reduplication can derive objective nouns from verbal bases as well, as presented in Table 7-7.

<table>
<thead>
<tr>
<th>Nominalizer</th>
<th>Type of bases</th>
<th>Objective noun</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>-ong</strong></td>
<td>Intransitive base</td>
<td><strong>Objective noun</strong></td>
</tr>
<tr>
<td>nelulang &lt; ne-lulang ‘DY.RLS-load’ ‘to load’</td>
<td>lulanong &lt; lulang-ong ‘load-NOM’ ‘sth. which is being loaded’</td>
<td></td>
</tr>
<tr>
<td>neovong &lt; ne-ovong ‘DY.RLS-incubate’ ‘to incubate’</td>
<td>ovonong &lt; ovong-ong ‘incubate-NOM’ ‘sth. which is incubated’</td>
<td></td>
</tr>
<tr>
<td>CV.RDP--ong</td>
<td>Transitive base</td>
<td>Objective noun</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>nombymbu &lt; noN-simbu ‘AV.RLS-carry.on.shoulder’ ‘to carry on shoulder’</td>
<td>sisimbuong &lt; si.simbu-ong ‘RDP–carry.on.shoulder-NOM’ ‘sth. which is carried on shoulder’</td>
<td></td>
</tr>
<tr>
<td>nonyuung &lt; noN-suung ‘AV.RLS-carry.on.head’ ‘to carry on the head’</td>
<td>susuunong &lt; su.suung-ong ‘RDP–carry.on.head-NOM’ ‘sth. which is carried on the head’</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>poN-</th>
<th>Transitive base</th>
<th>Objective noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>nombee &lt; noN-vee ‘AV.RLS-give’ ‘to give’</td>
<td>pombee &lt; poN-vee ‘NOM-give’ ‘gift’</td>
<td></td>
</tr>
<tr>
<td>nonaangggu &lt; noN-tagunggu ‘AV.RLS-bark’ ‘to bark’</td>
<td>ponanggunggu &lt; poN-tangunggu ‘NOM-bark’ ‘the barking’</td>
<td></td>
</tr>
<tr>
<td>nolevo &lt; no-leva ‘AV.RLS-call’ ‘to call’</td>
<td>poleva &lt; po-leva ‘NOM-call’ ‘the call’</td>
<td></td>
</tr>
<tr>
<td>noninsik &lt; noN-pinsik ‘AV.RLS-massage’ ‘to massage’</td>
<td>pominsik &lt; poN-pinsik ‘NOM-massage’ ‘massage’</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SF-</th>
<th>Transitive/Intransitive base</th>
<th>Objective noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>nonandonas &lt; noN-tandas ‘AV.RLS-acuse’ ‘to accuse’</td>
<td>petandas &lt; pe-tandas ‘SF-acuse’ ‘accusation’</td>
<td></td>
</tr>
<tr>
<td>nokundu &lt; no-kundu ‘DY.RLS-kiss’ ‘to kiss’</td>
<td>pekundu &lt; pe-kundu ‘SF-kiss’ ‘the kiss’</td>
<td></td>
</tr>
<tr>
<td>nekambang &lt; ne-kambang ‘DY.RLS-swell’ ‘to swell’</td>
<td>pekambang &lt; pe-kambang ‘SF-swell’ ‘swelling’</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CV-Red</th>
<th>Transitive/Intransitive base</th>
<th>Objective noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>notambak &lt; no-tambak ‘DY.RLS-play’ ‘to play’</td>
<td>tatambak &lt; ta.tambak ‘RDP–play’ ‘game’</td>
<td></td>
</tr>
<tr>
<td>norayo &lt; noN-rayo ‘AV.RLS-threaten’ ‘to threaten’</td>
<td>rarayo &lt; ra.rayo ‘RDP–threaten’ ‘threat’</td>
<td></td>
</tr>
<tr>
<td>nonyempak &lt; noN-sempak ‘AV.RLS-kick’ ‘to kick’</td>
<td>sesempak &lt; se.sempak ‘RDP–kick’ ‘the kick’</td>
<td></td>
</tr>
<tr>
<td>nomaaate &lt; noN-paate ‘AV.RLS-kill’</td>
<td>papaate &lt; pa.paate ‘RDP–kill’ ‘death’</td>
<td></td>
</tr>
<tr>
<td>Bi-Red</td>
<td>Transitive base</td>
<td>Objective noun</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>netuu &lt; N-pe-tu</td>
<td>tu</td>
<td>‘to kill’</td>
</tr>
<tr>
<td>netuu &lt; N-pe-tu</td>
<td>‘to grow’</td>
<td>Tutuu &lt; tu.tu</td>
</tr>
<tr>
<td>nombalu &lt; N-balu</td>
<td>balu</td>
<td>‘to sell’</td>
</tr>
<tr>
<td>nombalu &lt; N-balu</td>
<td>‘to sell’</td>
<td>Balu-balu &lt; ba.lu</td>
</tr>
<tr>
<td>nonuda &lt; N-tuda</td>
<td>tuda</td>
<td>‘to plant’</td>
</tr>
<tr>
<td>nonuda &lt; N-tuda</td>
<td>‘to plant’</td>
<td>Tuda-tuda &lt; tu.da</td>
</tr>
</tbody>
</table>

Table 7-7: Examples of objective nominalization
Basic clause structures

This chapter deals with the structure of basic clauses in Tajio. According to the types of predicate involved in clause formation, three clause types may be distinguished: verbal, existential and non-verbal. A verbal clause is a clause in which the predicate is a verb (Section 8.1). An existential clause is formed with the existential verb *amai* ‘exist’ (Section 8.2). Existential clauses are distinguished from verbal clauses by the fact that the existential verb *amai* ‘exist’ does not occur with any verbal inflection. A non-verbal clause has its predicate function filled with a noun phrase (NP) or a prepositional phrase (PP) (Section 8.3). Non-verbal clauses in Tajio do not employ a copula.

8.1 Verbal clauses

Verbal clauses in Tajio are further sub-divided according to the transitivity of the main verb. Intransitive clauses need only one core argument; transitive clauses have two slots for core arguments and require voice specification, i.e., transitive clauses may be expressed as an actor voice (AV) construction or in an undergoer voice (UV) construction.

In the following, subjects are labeled as S and objects are labeled as O. The terms subject and object are used throughout the discussion as there is sound evidence that these functions are definable and play an important role in the grammatical system of Tajio (see Section 8.4). Occasionally, the semantic terms Actor and Undergoer will also be used in the discussion of the semantic roles of the syntactic arguments.

With regard to case differentiations, the subject in intransitive clauses is generally unmarked, and the same holds true for the subject and object in AV constructions. In UV constructions on the other hand, the non-subject core argument is marked by a genitive marker (if not expressed by prefixes or enclitics, see Section 8.1.2.2.1).

The respective clause type is determined by verbal morphology. Intransitive verbs are marked with a stative or dynamic marker; transitive verbs are generally marked for voice. In both cases, there is an obligatory distinction between realis and non-realis mood (see Section 5.1).

8.1.1 Intransitive clauses

Intransitive clauses in Tajio are formed with stative or dynamic verbs. Statives are marked by the vowel-harmonic prefix *nV*-/*mV*- ‘ST.RLS/NRLS’ (see also Section 2.8.6 for details on vowel-harmonic affixes); dynamic verbs are marked by the prefix *ne-/mo-‘DY.RLS’ or *me-/mo-‘DY.NRLS’ (see also Section 3.3.2.2 for discussion on lexically conditioned suppletion).

In intransitive clauses, the single core argument functions as subject of the clause. It can be realized either as a full noun phrase or as a personal pronoun. Singular or plural subjects in intransitive clauses occur with the same form of the predicate, as shown by examples (1) and (2).

(1) a. *siia* nepees
    *siia* nV-pees
    3SG ST.RLS-sick
    ‘She/he is sick.’
  b. *sisia* nepees
    *sisia* nV-pees
    3PL ST.RLS-sick
    ‘They are sick.’

(2) a. *siama* *niwafik* nelampamo
    *si=ama* *ni=Wafik* ne-lampa=mo
    HON=father GEN.HON=PN DY.RLS-walk=COMP
    ‘Wafik’s father has gone.’

167
b. siwafik
  sono
  siama=nya
  nelampamo
si=Wafik
  sono
  si=ama=nya
  ne-lampa=mo
HON=PN
  with
  HON=father=3SG.GEN
DY.RLS-walk=COMP
‘Wafik and his father have gone.’

The subject may either precede or follow the verb. Both constructions are found in elicited data as well as in spontaneous speech. Differences in subject placement are used to convey differences in information structure. If the speaker wants to focus on the action/event, the V-S order is more common. However, if the S-V order is used, it does not necessarily mean that the subject is more important or more prominent than the action. Rather, the S-V order can be considered the basic declarative pattern, representing unmarked information structure. Example (3) illustrates these placement options. While (3)a shows the unmarked information structure typically found with topic-comment utterances, (3)b has V-S order, where the verb phrase *ndiis* is in focus (it is the part of the utterance that does not match the pragmatic presuppositions that the speaker assumes the hearer shares).

(3)  
a. sia’u  ndiis
    sia’u  ne-ndiis
    1SG    DY.RLS-bath
    ‘I took a bath.’  

b. *ndiis  sia’u
    ne-ndiis  sia’u
    DY.RLS-bath  1SG
    ‘I took a bath.’ (I didn’t swim.)

Both S-V and V-S word order occur in declarative and interrogative sentence; the differences in order do not necessarily pertain to parameters of illocutionary force. Examples (4) and (5) are quoted from a dialog in which two speakers use S-V word order. In the former it occurs in an interrogative sentence while in the latter it occurs in a declarative one. The conversation took place after speaker A and B had attended a feast in the village. Speaker A intended to know whether he or B left the feast earlier.

(4)  
A: simiu  ma  ilu  ato  siami
    simiu  mao  iulu  ato  siami
    2SG.HON  go  earlier  or  IPL.EX
    ‘Did you go earlier or we?’  

(5)  
B: simiu  ma  iulu
    simiu  mao  iulu
    2SG.HON  go  earlier
    ‘You went earlier.’  

As with the S-V order, the V-S order can be used both to make a statement, as in example (6), and to ask a question, as in example (7).

(6) nelampamo
    siia
    ne-lampa=mo
    siia
    DY.RLS-walk=COMP
    3SG
    ‘He walked already.’  

(7) netindang
    simiu
    ne-tindang
    simiu
    DY.RLS-leave
    2SG
    ‘Are you leaving now?’  

The differences between declarative and interrogative sentences and between the S-V or V-S order are probably marked by intonation, but this needs further research.

Syntactically, both orders (S-V and V-S) may be followed by prepositional phrases. Example (8) shows a V-S-PP structure, example (9) shows a S-V-PP structure.
On formal grounds, there is no difference between the single core argument of stative and dynamic intransitive verbs. However, the arguments of stative and dynamic intransitives exhibit different semantic roles. The single argument of a stative intransitive has an undergoer-like role (i.e., it is an undergoer-subject), as illustrated in example (10); the single argument of a dynamic intransitive has an actor-like role, i.e., it is the performer of the action (actor-subject), as in example (11). Following this line of reasoning, one could consider the possibility that Tajio is a split-intransitive language (in a broader sense than typically used in discussions on argument alignment and case marking), because intransitive arguments are differentiated into two semantic roles (undergoer vs. actor) by means of two distinct types of intransitive predicates (i.e., stative vs. dynamic marking). In spite of this split in the class of intransitive verbs, however, it does not follow that Tajio is a split-S language in the strict sense. Such an analysis fails, because the stative and dynamic markers of the intransitive verbs bear no relationship to the marking of arguments of transitive verbs. That is, there is no argument alignment between the S argument of intransitive, and the A and O arguments of the transitive verb.

Undergoer-subject

(10) sia'\text{u} nolusur
sia'\text{u} nV-lusur
1SG ST.RLS-lazy
'I'm lazy.'

Actor-subject

(11) sisia sarong nogombo'
sisia sarong no-gombo'
3PL still DY.RLS-talk
'They are still talking.'

8.1.2 Transitive clauses

Both actor voice and undergoer voice constructions require two core arguments: a subject argument and an object argument. Predicates are marked for voice (AV vs. UV) and mood (realis vs. non-realis).

In an AV construction, the subject argument is an actor, the object argument is an undergoer. In UV constructions, the mapping is inverted: the subject is the undergoer and the object is the performer of the action. The voice marker of the verb thus specifies the mapping between the semantic roles of the verb and the grammatical relations of the clause. Figure 30 shows the alignment options for the two arguments in AV and UV constructions.

<table>
<thead>
<tr>
<th>Actor voice construction</th>
<th>Undergoer voice construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Object</td>
</tr>
<tr>
<td>Actor</td>
<td>Undergoer</td>
</tr>
</tbody>
</table>

Figure 30: Alignment between grammatical relations and semantic roles in AV and UV constructions
The actor voice construction is marked by the prefix \( n-/m- \) or \( \text{noN-} \) ‘AV.RLS/NRLS’\(^{27}\). The undergoer voice construction is either marked by the voice marking prefixes \( \text{ni-} \text{nu}-/\text{ro-} \) ‘UV.RLS/NRLS’ or it is marked by the pronominal prefixes \( u- \) ‘1SG’ and \( mu- \) ‘2SG’ (see Section 6.3.1 for more details on morphological markers of AV and UV constructions). In addition, there is one transitive construction that is not marked for voice (see Section 8.1.3 for details).

Non-subject arguments appear in both AV and UV constructions. They can be omitted if they are understood from the context or if they are unspecified. Examples are given in (12) and (13). Example (12) is taken from a narrative in which a speaker explained the procedure how to make a pandanus mat. In this example, the AV construction \( \text{sia’u nonginsong} \) is expressed without a non-subject argument (i.e., an object) because it can be understood from the context: the preceding clause makes it clear that the thing being collected is \( \text{tetaraas} \) ‘wild pandanus’.

(12) \( \text{nitaras} \quad \text{nuanaku} \quad \text{tetaraas} \quad \text{sia’u} \)
\( \text{ni-taras} \quad \text{nu=anak=\text{u}} \quad \text{te=taraas} \quad \text{sia’u} \)
\( \text{UV.RLS-cut} \quad \text{GEN=child=1SG.GEN} \quad \text{NM=\text{wild.pandanus}} \quad \text{1SG} \)
\( \text{nonginsong} \quad \text{noN-insong} \)
\( \text{AV.RLS-collect} \)

‘My child cut the wild, I collected (it).’

(from the narrative Tebalase)

Example (13) is taken from a dialog in which a speaker answers a question about how to dry coconuts. In this example, the speaker does not mention the non-subject argument (i.e., the actor) because this activity can be performed by anybody or the actor is regarded as unspecified.

(13) \( \text{teulingka} \quad \text{ua} \quad \text{nipeneki} \)
\( \text{te=ulingka} \quad \text{ua} \quad \text{ni-penek-i} \)
\( \text{NM=coconut} \quad \text{DIST} \quad \text{UV.RLS-climb-UV} \)

‘that coconut is climbed’

\( \text{nibayi} \quad \text{niulisi} \quad \text{nisunggi} \)
\( \text{ni-bayi} \quad \text{ni-ulisi-i} \quad \text{ni-sunggi} \)
\( \text{UV.RLS-peel} \quad \text{UV.RLS-skin-UV} \quad \text{UV.RLS-to.skin.with.a.tool} \)
\( \text{teulinya} \quad \text{te=uli=nya} \)
\( \text{NM=skin=3SG.GEN} \)

‘the (coconut) skin is peeled, skinned, skinned with a tool.’

(from the dialog Teulingka)

The following discussion of AV and UV constructions is divided into two subsections: (i) the realization of subjects and non-subject arguments in each construction and (ii) the word order in each construction.

### 8.1.2.1 Actor voice constructions

**8.1.2.1.1 Realization of subject and object in AV constructions**

Subjects and objects in actor voice constructions are unmarked for case and can be expressed by pronouns or by full noun phrases. In subject or object function in AV constructions, pronouns are expressed by the independent forms. Using clitic forms or prefixes instead renders the construction ungrammatical as demonstrated by examples (14)b-d and (15)b-d.

(14) a. \( \text{sia’u} \quad \text{nolevai} \quad \text{sia’u} \)
\( \text{sia’u} \quad \text{noN-leva-i\text{APPL}} \quad \text{sia’u} \)
\( \text{1SG} \quad \text{AV.RLS-call-APPL} \quad \text{3SG} \)
\( \text{S} \quad \text{O} \)

\(^{27}\) There are also a few instances where the AV verb is marked by a prefix that is formally identical to the dynamic prefix \( \text{ne-/no-} \) (cp. Section 6.1).
‘I called her/him.’

b. *sia’u nolevainya
   sia’u noN-leva-i=nya
   1SG AV.RLS-call-APPL=3SG.GEN
For: ‘I called her/him.’

c. *unolevai siia
   u=noN-leva-i siia
   1SG=AV.RLS-call-APPL 3SG
For: ‘I called her/him.’

d. *unolevainya
   u=noN-leva-i=nya
   1SG=AV.RLS-call-APPL=3SG.GEN
For: ‘I called her/him.’

(15) a. siami nonagor sisia
    siami noN-tagor sisia
    1PL.EX AV.RLS-greet 3PL
S O
‘We greeted them.’

b. *siami nonagor ninia
   siami noN-tagor ninia
   1PL.EX AV.RLS-greet 3PL.GEN
For: ‘We greeted them.’

c. *niami nonagor sisia
   niami noN-tagor sisia
   1PL.EX.GEN AV.RLS-greet 3PL
For: ‘We greeted them.’

d. *niami nonagor ninia
   niami noN-tagor ninia
   1PL.EX.GEN AV.RLS-greet 3PL.GEN
For: ‘We greeted them.’

Nouns and noun phrases in subject and object function are presented by examples (16) and (17).

(16) a. tesaping nenginang tegugus
e=t=saping neN-inang te=gugus
NM=cow AV.RLS-eat NM=grass
S O
‘The cow ate grass.’

b. saping nenginang gugus
   saping neN-inang gugus
   cow AV.RLS-eat grass
S O
The cow ate grass.’

(17) a. siwafik nondisi teaudanya
   si=Wafik noN-ndiis-i te=auda=nya
   HON=PN AV.RLS-bath-APPL NM=goat=3SG.GEN
S O
‘Wafik bathed his goat.’

b. wafik nondisi teaudanya
   Wafik noN-ndiis-i te=auda=nya
   Wafik AV.RLS- bath-APPL NM=goat=3SG.GEN
S O
Neither te= nor si= mark grammatical relations. Rather, they can be attached to arguments occurring as subjects or objects without conveying additional information on their grammatical status. Te= is the neutral noun marker and si= is the honorific noun marker, see Section 7.1.1 for further discussion.

### 8.1.2.1.2 Word order in AV constructions

The basic word order of AV constructions in Tajio is V_{AV-O}, with the subject being placed either before or after the V_{AV-O} structure. This is shown in Table 8-1.

<table>
<thead>
<tr>
<th>AV word order</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>[V_{AV-O}] S-[V_{AV-O}]</td>
<td>(18) sisia [nongoli teruriang] sisia noN-oli te=ruriang 3PL AV.RLS-buy NM=durian</td>
</tr>
<tr>
<td></td>
<td>‘They bought durian.’</td>
</tr>
<tr>
<td>[V_{AV-O}] S</td>
<td>(19) [nongoli teruriang] sisia noN-oli te=ruriang sisia AV.RLS-buy NM=durian 3PL</td>
</tr>
<tr>
<td></td>
<td>‘They bought durian.’</td>
</tr>
</tbody>
</table>

Table 8-1: Word order options in AV constructions

The meanings of examples (18) and (19) are judged to be identical: ‘They bought durian’. In terms of information structure, sentence (19) is used when the verb phrase is the focus of the sentence. Sentence (18), on the other hand, represents unmarked information structure.

In addition to the AV constituent orders presented in Table 8-1, a marked V_{AV-S-O} structure is occasionally found in elicitation data.

<table>
<thead>
<tr>
<th>AV word order</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>V_{AV-S-O}</td>
<td>(20) nongoli sisia teruriang noN-oli sisia te=ruriang AV.RLS-buy 3PL NM=durian</td>
</tr>
<tr>
<td></td>
<td>‘They bought durian.’</td>
</tr>
</tbody>
</table>

Table 8-2: A highly marked word order option in AV

The V_{AV-S-O} placement option is used when the speaker wants to stress the action. Example (20) is not only used to convey the basic meaning ‘They bought durian’, but also to emphasize the verb nongoli ‘buy’ in the sense that they bought durian and did not, for example, sell it.

The difference between the V_{AV-O-S} and V_{AV-S-O} structure is that the former is used to focus the verb phrase (i.e., the verb and its object), whereas the latter is used to put narrow focus on the verb in order to emphasize a particular action or to correct a presupposition of the hearer. If the constructions are used for utterances with interrogative force, the complete answer to the former construction either involves V-O or S-V-O. In contrast, the latter only requires a verb as an answer, as illustrated by examples (21) and (22). This finding is, however, preliminary and the matter requires further research, especially because the V_{AV-S-O} construction so far has only been found in elicitation.

(21) Q: nongoli teruriang sisia noN-oli te=ruriang sisia AV.RLS-buy NM=durian 3PL V O S

‘Did they buy durian?’


‘(They) didn’t buy durian. They sold durian.’
(22) Q: nongoli sisia teruriang
noN-oli sisia te=ruiang
AV.RLS-buy 3PL NM=durian
V S O
‘Did they buy durian?’
A: jio nongoli nombaluk
jio noN-oli noN-baluk
NEG AV.RLS-buy AV.RLS-sell
V V
‘They did not buy it, but sold it.’ (lit: ‘Not buying, but selling.’)

8.1.2.2 Undergoer voice constructions

8.1.2.2.1 Realization of subject and object in UV construction

As with actor voice constructions, subjects and objects in undergoer voice constructions can be expressed by pronouns or full noun phrases. Whereas neither the subject nor the object are marked in an AV construction, in the UV construction the object takes genitive marking.

Table 8-3 summarizes the different possible UV constructions and the respective realization of the objects (i.e., the actor arguments).

<table>
<thead>
<tr>
<th>UV construction</th>
<th>Object (i.e., actor argument)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S V_{UV}=O</td>
<td>1st, 2nd, 3rd SG</td>
</tr>
<tr>
<td>O-V_{UV}S</td>
<td>1st, 2nd in UV,NRLS</td>
</tr>
<tr>
<td>S V_{UV} ni-O</td>
<td>1st, 2nd, 3rd PL</td>
</tr>
<tr>
<td>S V_{UV} ni=O</td>
<td>personal name; the four core kinship terms; human</td>
</tr>
<tr>
<td>S V_{UV} nu=O</td>
<td>other kinship terms; animate; human; inanimate</td>
</tr>
</tbody>
</table>

Table 8-3: Possible UV constructions and the realization of the objects

Singular pronouns in object function are presented as enclitics or prefixes while plural pronouns are marked with the genitive marker ni- according to the following rules:

a) First and second person singular pronouns occur as enclitics ='u and =mu if the verb is in realis mood. In this case, UV is overtly marked on the verb with ni-;

b) First and second person singular pronouns occur as prefixes u- and mu- in non-realis UV constructions. In these cases, no overt UV marker is found on the verb;

c) The third person singular clitic =nya always occurs as an enclitic regardless of the mood marking on the verb;

d) Plural pronouns occur with the genitive marker ni-, regardless of the mood marking on the verb.

Realizing the object with the independent form of the first person singular pronoun renders the UV construction ungrammatical (cf. example (23)b). Example (24)b shows that violation of rule (d) also results in an ungrammatical utterance.

(23) a. siia nileva'i'u
    siia ni-leva-i='u
    3SG UV.RLS-call-UV=1SG
    S O
    ‘I called her/him.’

b. *siia nileva
   siia ni-leva-i
   3SG UV.RLS-call-UV
   S O
For: ‘I called her/him.’

(24) a. siia nilevai ninia
    siia ni-leva-i ninia
    3SG UV.RLS-call-UV 3PL GEN
    S O
    ‘They called her/him.’

b. *siia nilevai sisia
    siia ni-leva-i sisia
    3SG UV.RLS-call-UV 3PL
    S O
    For: ‘They called her/him.’

Noun phrases that occur as subjects in UV constructions are unmarked. In contrast, noun phrases that occur as objects in UV constructions are marked by the genitive marker ni= or nu=, as illustrated by examples (25) and (26). Genitive marking in UV constructions is obligatory: without a genitive marker the UV construction becomes ungrammatical as in (25)b and (26)b. The genitive marker ni= is used when the object is expressed by a personal name, the four core kinship terms or a human noun; other kinship terms, human nouns, animate or inanimate nouns require the genitive marker nu= (see further Section 7.2.1 for a discussion of genitive phrases).

(25) a. tesalo nikaerit nitai’u
    te=salo ni-kaer-i ni=tua’i=’u
    NM=floor UV.RLS-sweep-UV GEN.HON=younger.sibling=1SG GEN
    S O
    ‘My younger sibling swept the floor.’

b. *tesalo nikaeri tuai’u
    te=salo ni-kaer-i tuai=’u
    NM=floor UV.RLS-sweep-UV younger.sibling=1SG GEN
    S O
    For: ‘My younger sibling swept the floor.’

(26) a. tesakulat nikait nutopejoong
    te=sakulat ni-kait nu=to=pe-joong
    NM=cacao UV.RLS-pick GEN=REL=SF field
    S O
    ‘The farmer picked the cacao.’

b. *tesakulat nikait topejoong
    te=sakulat ni-kait to=pejoong
    NM=cacao UV.RLS-pick REL=SF field
    S O
    For: ‘The farmer picked the cacao.’

8.1.2.2.2  Word order in UV constructions

The basic word order of UV constructions in Tajio is VUV-O, with the subject being placed before or after the VUV-O structure, as illustrated in Table 8-4.
### UV word order

<table>
<thead>
<tr>
<th>UV word order</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>[V_UV-O] S [V_UV-O]</td>
<td>(27) <strong>teulingka</strong> [nipeneki niwafik] ( te=ulingka ) ( ni\text{-penek}-i ) ( ni=\text{Wafik} ) ( \text{NM=coconut} ) UV.RLS-climb-UV GEN.HON=PN ‘Wafik climbed a coconut tree.’</td>
</tr>
<tr>
<td>[V_UV-O] S</td>
<td>(28) [nipeneki niwafik] <strong>teulingka</strong> ( ni\text{-penek}-i ) ( ni=\text{Wafik} ) ( \text{NM=coconut} ) UV.RLS-climb-UV GEN.HON=PN ‘Wafik climbed a coconut tree.’</td>
</tr>
</tbody>
</table>

Table 8-4: Word orders in UV constructions

The meanings of examples (27) and (28) are reported to be identical: Example (27) represents unmarked information structure, while sentence (28) is used when the action is considered to be more important than the subject.

#### 8.1.3 The object-doubling construction

Transitive constructions with the desiderative verbs *seelu* ‘want’ and *kua* ‘not want’ do not exhibit AV or UV marking (i.e., they do not carry a marker of voice or mood), but they do take a set of pronoun markers that are otherwise used to mark objects in UV constructions. This suggests that the underlying alignment for these verbs is a fixed UV alignment. The object (aligned with the actor argument) of these verbs is expressed by: (i) an optional full NP in pre-verbal (preferred) or post-verbal position and (ii) an obligatory bound object pronoun which is either expressed as an enclitic or attached to a genitive marker. The full NP and the bound pronoun must be co-referential. In unmarked constructions, the subject which is aligned to the undergoer argument is placed after the verb and its object markers (cf. (29)b and (30)a). I refer to this phenomenon as **object-doubling**.

The pre-verbal/post-verbal full NP can be omitted, as shown by examples (29)b and (30)b. In contrast, the omission of the bound pronoun is ungrammatical (see examples (29)c and (30)c).

(29) a. **sia’u** **seelu’u** **vai** tabako mentoos eua
   \( \text{1SG want=1SG INJ} \) tobacco DY.NRLS-rolled DIST
   \( \text{O}_i \) S
   ‘I really wanted that cigarette.’
   (from the dialog *Campur*)

b. **seelu’u** tabako mentoos eua
   O S
   ‘I wanted that cigarette.’
   (from the dialog *Campur*)

c. *\( \text{sia’u} \) seelu tabako mentoos eua
   O S
   For: ‘I wanted that cigarette.’

(30) a. **seelu’u** sia’u **tesanu** teasunya ua
    \( \text{want=1SG NM=something} \) \( \text{NM=dog=3SG.GEN} \) DIST
    \( \text{O}_i \) O_i S
    ‘I want (that thing) his dog.’
    (from the dialog *Noasu*)

b. **seelu’u** tesanu teasunya ua
   O S
   ‘I want (that thing) his dog.’

c. *\( \text{seelu} \) sia’u tesanunya teasunya ua
   O S
   For: ‘I want (that thing) his dog.’
In examples (29) and (30), *seelu* takes two nominal arguments: in the former example, the pronominal object *sia’u* together with its bound form = ‘u and the noun subject *tabako mentoos eua*; in the latter, the pronominal object *sia’u* together with its bound form = ‘u and the subject *tesanu teasunya ua*. In the following examples, however, *seelu* is followed by verb phrases. To maintain the analysis, we would have to assume that the verb phrases in examples (31) and (32) fulfil the same function syntactically as the nominal subject in example (29) and (30). In this case, instead of taking a nominal subject, the predicate *seelu* takes a complement clause as subject.

(31)  
*siia*  
*seelu*  
*nunya*  
*[nenginang  
 tebau  
sono  
teutang]*  

O_i  
O_i  
S  

‘He wanted to eat fish with vegetables.’  
(lit. ‘Eating fish with vegetables is wanted by him.’)

(32)  
*siia*  
*seelu*  
*nunya*  
*[nomberek  
riini]*  

O_i  
O_i  
S  

‘He wanted to stay here.’  
(lit. ‘Staying here is wanted by him.’)

The other desiderative verb *kua* ‘not want’ shows the same syntactic behavior. The bound pronoun is obligatory, while the full NP is optional, as in example (33) and (34).

(33)  
*tapi*  
*sia’u*  
*kua’u*  
*[mao  
vai]*  

O_i  
O_i  
S  

‘But I did not want to go either.’  
(from the dialog *Campur*)

(34)  
*kua=mu*  
*pia  
ja*  
*[nipopolapi]*  

O  
S  

‘You really did not want to get married’  
(from the dialog *Campur*)

Examples (35) and (36) show an unmarked and a marked construction respectively. In the unmarked construction, the word order in the object-doubling construction is [(O) V=O S]. In this particular example, a complement clause consisting of a VP (V-O) functions as the subject. Example (36) is a marked construction which shows contrastive focus. In this construction, the two elements that are contrasted are placed pre-verbally. In this case, the objects of the complement clauses, *tepaku* and *tegola*, are fronted to sentence-initial position. This marked construction is used by the speaker to emphasize that he wanted to take the nail, but not the sugar.

(35)  
*seelu’u*  
*[mombava  
tepaku]*  
*boi  
kua’u*  

O  
S  

‘I wanted to take the nail, but I didn’t want to take the sugar.’

(36)  
*tepaku*  
*seelu’u*  
*[mombava***]*  
*boi*  

O  
S  

‘I wanted to take the nail, but I didn’t want to take the sugar.’
I wanted to take the nail, not the sugar.

Perception and cognition predicates, such as otoi ‘know’, epe ‘listen/hear’ and ita ‘see’, can also occur in object-doubling constructions. In contrast to the desiderative verbs, perception and cognition predicates are overtly marked for voice and mood. Object-doubling, however, only takes place in UV constructions as would be expected with pronoun markers which are restricted to UV marking. Example (37) shows an ordinary AV construction and the respective (UV) object-doubling construction.

(37) a. sisia nootoi telapi niasman
sisia no-otoi te=lapi ni=Asman
3PL AV.RLS-know NM=spouse GEN.HON=PN
‘They knew Asman’s wife.’
b. sisia niotoi ninia telapi
sisia ni-o-toi ninia te=lapi
3PL UV.RLS-know 3PL.GEN NM=spouse
niasman ni=Asman GEN.HON=PN
‘They knew Asman’s wife.’

8.2 Existential and possessive clause

An existential clause in Tajio is a clause that uses the existential predicates amai ‘exist’ or jio amai ‘not exist’, (that is often shortened to jumai). This predicate differs from intransitives or transitive verbs in that it occurs without any verbal affixation.

The major function of existential clauses is to indicate availability. The existential verb amai ‘exist’ can be immediately followed by its complements, as seen in examples (38) and (39), or it can be preceded by its complement, as shown by examples (40) and (41).

(38) amai tealaiong i ndaang nuayu
amai te=alaiong i ndaang nu=ayu
EXIST NM=owl LOC branch GEN=wood
‘There is an owl on the branch of the tree.’ (from the Frog Story)

(39) jumai teistilah teraja nentama teemandar
jio amai te=istilah te=raja ne-n-tama te=mandar
NEG EXIST NM=term NM=king DY.RLS-enter NM=PN
paniotoi teraja
pa=ni-o-toi te=raja
then=UV.RLS-know NM=king
‘There was no term for king; when the Mandar came then the term king was known.’
(from the dialog Sejarah Kasimbar)

(40) tetuainya amai
te=tauia=nya amai
NM=younger.sibling=3SG.GEN EXIST
‘He has a younger brother.’ (lit: ‘His younger sibling exists.’)
(from the dialog Campur)

(41) tebugisnya amai
te=Buginesen=nya amai
NM=Buginese=3SG.GEN EXIST
‘There are Buginese people.’
(from the dialog Campur)
Further, adverbs may be placed between the existential verb *amai* and the complement, as illustrated by examples (42).

(42) amai  ompo  tiol  bulaan  i  puncak  eua
    amai  om-po  tiol  bulaan  i  puncak  eua
    EXIST  still  bamboo  gold  LOC  top  DIST
    ‘There was still golden bamboo at that (mountain) summit.’

(from the dialog *Sejarah Kasimbar*)

The existential verbs *amai* ‘exist’ and *jumai* ‘not exist’ can be followed by verbs marked for mood. This shows that in Tajio the existential construction does not distinguish nouns (cf. examples (38)–(41)) from verbs (see examples (43)–(45)).

(43) amai  vai  nakasar
    amai  vai  nV-kasar
    EXIST  also  ST.RLS-coarse
    ‘There is also a low variant (level).’

(from the dialog *Campur*)

(44) jumai  metensile
    jio  amai  me-tensile
    NEG  EXIST  DY.NRLS-go.home
    ‘There is no one who will go home.’

(from the dialog *Campur*)

(45) jumai  nipele-pele
    jio  amai  ni-pele-pele
    NEG  EXIST  UV.RLS-Bi-RDP-part
    ‘There is no separator.’ (lit: ‘it is not separated.’)

(from the dialog *Campur*)

Existential verbs can also be constructed with relative clauses, as illustrated in examples (46) and (47). Again, adverbs may also be placed in between the existential and the relative clause, as can be seen in (48).

(46) jumai  toniboncengnya
    jio  amai  to=ni-bonceng=nya
    NEG  EXIST  REL=UV.RLS-ride.with.someone=3SG.GEN
    ‘There was nobody riding with him.’

(from the dialog *Campur*)

(47) ane  amai  tonondorong  siia
    ane  amai  to=noN-dorong  siia
    if  EXIST  REL=AV.RLS-push  3SG
    ‘Was it like someone was pushing him?’

(from the dialog *Campur*)

(48) amai  vai  tonaalus  tebasanya
    amai  vai  to=nV-alus  te=ba-sa=nya
    EXIST  also  REL=ST.RLS-fine  NM=language=3SG.GEN
    ‘There is also the high variant (level) language.’

(from the dialog *Campur*)

Existential predicates may also involve numerals or quantifiers to express quantity as in examples (49) and (50).

(49) tepangkat  nuulingka  biasa  amai  ampat
    te=pangkat  nu=ulingka  biasa  amai  am-pat
    NM=high  GEN=coconut  regular  EXIST  four
    meter  amai  lima
    meter  amai  lima
    meter  EXIST  five
    ‘The height of a regular coconut tree, it is four or five meters.’

(from the dialog *Teulingka*)
In addition to indicating non-availability, *jumai* ‘not exist’ is used to form negative questions or negative declaratives, as illustrated by examples (51)–(53).

(51) **jumai**  

<table>
<thead>
<tr>
<th>jio</th>
<th>amai</th>
<th>nonuda</th>
<th>terisa</th>
<th>tealaemu</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEG</td>
<td>EXIST</td>
<td>AV.RLS-plant</td>
<td>NM=chili</td>
<td>NM=body=2SG.GEN</td>
</tr>
</tbody>
</table>

‘Don’t you plant chilies?’

(from the dialog Campur)

(52) **jumai**  

<table>
<thead>
<tr>
<th>jio</th>
<th>amai</th>
<th>sia’u</th>
<th>nentama</th>
<th>novosu</th>
<th>bega</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEG</td>
<td>EXIST</td>
<td>1SG.DY.RLS-enter</td>
<td>ST.RLS-satisfied</td>
<td>very</td>
<td></td>
</tr>
</tbody>
</table>

`teompong`  

| te=ompong = ’u |

NM=stomach=1SG.GEN  

‘I didn’t come in, my stomach was very full.’

(lit. ‘Didn’t I come in? my stomach was very full.’)

(from the dialog Campur)

(53) **jumai**  

<table>
<thead>
<tr>
<th>jio</th>
<th>amai</th>
<th>nipanjara</th>
<th>siia</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEG</td>
<td>EXIST</td>
<td>UV.RLS-jail</td>
<td>3SG</td>
</tr>
</tbody>
</table>

‘Wasn’t he jailed?’

(from the dialog Noasu)

Finally, a major function of the existential predicate in Tajio is to indicate possession in possessive clause constructions. There are two types of possessive clauses that use the existential verb *amai*:

a) possessive clauses in which the possessor appears as a topic and is placed at the beginning of the clause, and the possessee follows the existential verb functioning as a complement, as in example (54);

b) possessive clauses in which the possessee is expressed in a genitive phrase or as a genitive clitic, as in example (55) and (56).

(54) **sia’u**  

<table>
<thead>
<tr>
<th>sia’u</th>
<th>amai</th>
<th>teroko’</th>
<th>eini</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>EXIST</td>
<td>NM=cigarette</td>
<td>PROX</td>
</tr>
</tbody>
</table>

‘I have/own this cigarette.’

(from the dialog Campur)

(55) **siamai**  

<table>
<thead>
<tr>
<th>siami</th>
<th>amai</th>
<th>teauda</th>
<th>niami</th>
</tr>
</thead>
<tbody>
<tr>
<td>1PL.EX</td>
<td>EXIST</td>
<td>NM=goat</td>
<td>1PL.EX.GEN</td>
</tr>
</tbody>
</table>

‘We have goats.’

(56) **amai**  

<table>
<thead>
<tr>
<th>amai</th>
<th>teroko’u</th>
<th>eini</th>
<th>ah</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>te=roko’=u</td>
<td>eini</td>
<td>ah</td>
</tr>
</tbody>
</table>

EXIST  

| NM=cigarette=1SG.GEN | PROX | INJ |

‘I have this cigarette.’

(from the dialog Campur)

### 8.3 Non-verbal clauses

Non-verbal clauses occur without verbal predicates and without any copula. Such verbless clauses consist of a nominal subject and a predicate, which can be a noun phrase (NP) or a prepositional phrase (PP). The following sections discuss each type in turn.

---

28 *Tealaemu* (lit: your body) is an honorific term to address the second person singular.
8.3.1 Equational clauses

Equational clauses identify the noun phrase functioning as the predicate with the noun phrase functioning as the subject. The basic word order in equational clauses is subject–predicate though it can be reversed into predicate–subject. Given this flexibility in constituent order, it is not easy to determine in each case which NP is the subject and which NP the predicate.

Negation provides evidence to disentangle this ambiguity. If a clause consists of a subject and a predicate, the syntactic element that can be negated is the predicate. Payne (1997:284) states that “negative particles are normally associated with the main verb of the clause”. Thus, in equational clauses, the negated noun can be considered the predicate.

The negated element in example (57) is teguru ‘teacher’; hence the word order of this clause is subject–predicate (S-P). The negated unit in example (58) is topotoo Rai ‘Rai person’; thus the word order of this equational clause is P-S.

(57) siia jio teguru
   3SG NEG NM=teacher
   S P
   ‘She is not a teacher.’

(58) ajio topotoo rai eua
    NEG AG.NOM-person PN DIST
    P S
    ‘That is not a Rai person.’ (lit: ‘Not a Rai person is that.’) (from the dialog Campur)

8.3.2 Locational clauses

Locational clauses identify the location of the entity denoted by the subject NP. In the basic word order of this clause type, the NP realizing the subject precedes the prepositional phrases. Prepositions used here are i or ri ‘at/in’, yami ‘from’ and the non-local preposition sono ‘with’ (see Section 4.3.5 for details on prepositions). Examples (59) and (60) illustrate the use of the local preposition.

(59) sia'u i vonua
   1SG LOC house
   S P
   ‘I am at home.’

(60) teoto i tolo nuvonua
    NM=car LOC front GEN=house
    S P
    ‘The/a car is (parked) in front of the house.’

Locative predicates in the form of prepositional phrases may precede or follow the subject NP; thus there are two possible word orders: (S-PP and PP-S). The first element in the construction is considered topical; the second element gives additional information about the topic and thus forms the comment part in terms of information structure. Examples are given in (61) and (62).

(61) riitü silampayang
    riitü Silampayang
    over.there PN
    ‘Over there is Silampayang’ (from the dialog Campur)

(62) teeleo sapa me<...> siia ruwa
    te=eleo sapa ... siia ruwa
    NM=day what ... 3SG over.there
    ‘On what day is she over there?’ (from the dialog Campur)
The negator *ajio* or *jio* ‘no/not’ is also used to negate the locative predicate, as illustrated by example (63).

(63) siia ajio yami posoleong

siia ajio yami posoleong

3SG NEG from beach

‘He is not from the beach.’

8.4 Grammatical relations

Throughout this work, the terms ‘subject’ and ‘object’ are used. Up to now this has received no justification. This section will examine the differences in syntactic behavior between the two core arguments in transitive constructions. These differences provide evidence that the grammatical relations of ‘subject’ and ‘object’ exist in Tajio. Syntactic tests to determine the behavior of subjects will be applied in Section 8.4.1. Section 8.4.2 provides syntactic tests for the non-subject arguments (i.e., objects and obliques) as well as for adjuncts.

8.4.1 Subject

A transitive construction, either in AV or UV, needs two arguments that semantically function as actor (A) and undergoer (U). In Tajio, both arguments in AV constructions are unmarked (see Section 8.1.2.1.1). In UV constructions the undergoer is unmarked as well, but the actor argument is morphologically marked (see Section 8.1.2.2.1).

In this section syntactic tests will be applied to show that the argument whose role is specified by the voice morphology functions as the grammatical subject of the clause.

The following constructions provide evidence for grammatical relations in Tajio: relativization, control, raising constructions, control into an adverbial clause, secondary predicates and quantifier floating. Each of these constructions will be discussed in turn.

8.4.1.1 Relativization

Relativization is a reliable test for subjecthood in Tajio because the range of arguments that may be relativized is restricted to actor arguments with AV and undergoer arguments with UV predicates. This strongly suggests that relativization is linked to a syntactic function that we could call subject.

In example (64), there are two head nouns that could be modified by a relative clause: the actor-subject *tevevine* and the undergoer-object *tebau*. The head noun *tevevine* in (64)b becomes the subject of an AV relative clause, while the head-noun *tebau* becomes the subject of an UV relative clause. Reversing the voice morphology of the relative clauses and relativizing the objects will result in ungrammaticality, compare example (64)c. The modifying clauses are given in square brackets, the blank part shows the syntactic position of the head noun that has been relativized.

(64) a. tevevine nongoli tebau

*tevevine* noN-oli *tebau*

NM=woman AV.RLS-buy NM=fish

‘The woman bought the fish.’

b. tevevine [__ tonomake tebaju nedoda]

tevine noN-pake tebaju ne*doda*

NM=woman REL=AV.RLS-wear NM=baju ST.RLS-red

S V O

‘The woman who wore a red shirt bought the fish that we fried.’

nongoli tebau [__ tonijano niami]

noN-oli tebaju [__ to=ni-jano niami]

AV.RLS-buy NM=fish REL=UV.RLS-fry 1PL.EXGEN

S V O

‘The woman who wore a red shirt bought the fish that we fried.’
c. *tevevine  [tonipake tebaju nedoda ___]
tevevine  to=ni-pake te=baju ne-doda ___
NM=woman REL=UV.RLS-wear NM=baju ST.RLS-red ___
V O S
t=vevine
toni
-tebaju
nedoda

nongoli  tebau  [tononjano siami ___]
oN-oli  te=bau  to=noN-jano siami ___
AV.RLS-buy NM=fish REL=AV.RLS-fry 1PL.EX ___
V S O
t=vevine
toni
-tebaju
nedoda

For: ‘The woman who wore a red shirt bought the fish that we fried.’

8.4.1.2 Control

A control construction involves two clauses: a matrix clause and an embedded clause. One argument of the embedded clause is omitted and interpreted as being co-referential with one argument of the matrix clause (Kroeger 2004:104).

Depending on the transitivity and the voice morphology of the matrix verb, control constructions in Tajio may exhibit subject or object control. Intransitive matrix clauses always exhibit subject-control whereas transitive matrix clauses may exhibit subject- or object-control. Importantly, only the subject of the embedded clause can be omitted and controlled by the subject or the object of the matrix clause. Omission of the non-subject argument of the embedded clause results in ungrammaticality.

Examples (65) and (66) illustrate subject-control with an intransitive matrix clause. The argument that is omitted in (65) is the actor-subject of the embedded clause, in (66) the omitted argument is the undergoer-subject. In both cases, the missing arguments are controlled by the subject of matrix verb nabasa ‘to be bored’.

(65) sia’u  nabasa  [___ nopenasui]
sia’u  nV-basa  ___ no-pe-nasu-iAPPL
1SG  ST.RLS-bored  ___ AV.RLS-SF-angry-APPL
tetuai’u

NM=younger.sibling=1SG.GEN
‘I was bored of blaming my younger brother.’

(66) sia’u  nabasa  [___ nipenasui]
sia’u  nV-basa  ___ ni-pe-nasu-iAPPL
1SG  ST.RLS-bored  ___ UV.RLS-SF-angry-APPL

nituai’u

GEN.HON=younger.sibling=1SG.GEN
‘I was bored that my younger sibling blamed me.’

A transitive verb allowing for a control construction is, for example, the verb tuju ‘ask, order’. In examples (67) and (68), the matrix verb tuju ‘ask, order’ is marked by the AV and UV morphology, respectively. Example (67)a shows object control: the object of the matrix clause, sia’u ‘1SG’, controls the omitted subject of the embedded clause. In contrast, example (68)a shows subject-control: the subject of the matrix clause controls the omitted subject of the embedded clause. In both examples the missing arguments in embedded clauses are the actor-subjects. Omitting or controlling the undergoer-object of the embedded clause results in ungrammaticality, as illustrated in examples (67)b and (68)b.
8.4.1.3 Raising

In raising constructions, an argument of the embedded clause is deleted and raised to function as an argument of the matrix clause. Just like the controlled element in control constructions, the raised element must likewise be the subject in Tajio. Raising a non-subject argument would result in an ungrammatical construction.

So far, only transitive raising verbs have been found in Tajio. Both raising-to-subject and raising-to-object depend on the voice morphology of the matrix clause. Raising-to-subject can be applied if the matrix clause is an UV construction whereas raising-to-object requires an AV matrix clause. Regarding its semantic role, the raised argument is always assigned an undergoer role.

Ranuan, ‘hope, expect’, is an example of a verb which exhibits raising-to-object properties. The matrix verbs in examples (69)a and (70)a bear AV marking, and hence the subject of the embedded clause can be raised to become the object of the matrix clause. Raising the object of the embedded clause, however, results in ungrammaticality, as can be seen in examples (69)b and (70)b.

(69) a. sia’u noranuan tagu’u
    sia’u noN-ranuan tagu=’u
    1SG AV.RLS-hope friend=1SG.GEN

    [___ nenginang tegade’u]
    ___ neN-inang te=gade=’u
    ___ AV.RLS-eat NM=cake=1SG.GEN

    ‘I expected my friend to eat my cake.’
b. *sia’u noranuan tegade’u
   sia’u noN-ranuan te=gade=’u
   1SG AV.RLS-hope NM=cake=1SG.GEN
   [tagu’u nenginang _____]
   tagu=’u neN-inang _____
   friend=1SG.GEN AV.RLS-eat _____
   For: ‘I expected my cake my friend to eat.’

(70) a. sia’u noranuan tegade’u
   sia’u noN-ranuan te=gade=’u
   1SG AV.RLS-hope NM=cake=1SG.GEN
   [_____ niinang nitagu’u]
   _____ ni-inang ni=tagu=’u
   _____ UV.RLS-eat GEN.HON=friend=1SG.GEN
   ‘I expected my cake to be eaten by my friend.’

b. *sia’u noranuan tagu’u
   sia’u noN-ranuan tagu=’u
   1SG AV.RLS-hope friend=1SG.GEN
   [tegade’u niinang _____]
   te=gade=’u ni-ranuan=’u _____
   ni=tagu=’u
   NM=cake=1SG.GEN UV.RLS-eat _____
   For: ‘I expected that my friend would eat my cake.’

Examples (71)a and (72)a illustrate a raising-to-subject construction with an UV matrix clause, again with the verb ranuan ‘hope, expect’. Again, it is the subject argument of the embedded clause which can be raised to become subject of the UV matrix clause. In contrast, raising the object of the embedded clause into the subject position results in ungrammaticality, compare examples (71)b and (72)b.

(71) a. tegade’u niranuanu [/_____ niinang
   te=gade=’u ni-ranuan=’u _____
   ni=tagu=’u
   NM=cake=1SG.GEN UV.RLS-hope=1SG.GEN _____
   AV.RLS-eat]
   GEN.HON=friend=1SG.GEN
   ‘I expected that my friend would eat my cake.’

   b. *tegade’u niranuanu [itetagu’u
   te=gade=’u ni-ranuan=’u te=tagu=’u
   NM=cake=1SG.GEN UV.RLS-hope=1SG NM=friend=1SG.GEN
   nenginang _____]
   neN-inang _____
   AV.RLS-eat _____
   For: ‘I expected my cake my friend to eat.’

(72) a. tetagu’u niranuanu [/_____ nenginang
   te=tagu=’u ni=ranuan=’u _____
   n=tagu=’u
   NM=friend=1SG.GEN UV.RLS-hope=1SG.GEN _____
   AV.RLS-eat
tegade’u]
   te=gade=’u
   NM=cake=1SG.GEN
   ‘I expected that my friend would eat my cake.’
8.4.1.4 Control in adverbial clauses

Another syntactic test which can be applied to determine the existence of the grammatical relation of subject in Tajio is control in adverbial clauses. The understood subject of the adverbial clause must refer to the matrix subject, not to the object, i.e., only the subject of the matrix clause can be the controller. In AV constructions, the controller is the actor-subject; in UV constructions, the controller is the undergoer-subject, as illustrated by examples (73) and (74), respectively.

(73) i waktu nendiis siwafik nolevai
  i waktu ne-ndiis si=Wafik no-leva-iAPPL
LOC  time  DY.RLS-bath  HON=PN  AV.RLS-call-APPL

siinanya
si=ina=nya
HON=mother=3SG.GEN
‘When PRO$_{av}$, *j bathing, Wafik, called his mother$_{r}$.’

(74) i waktu nendiis siina
  i waktu ne-ndiis si=ina
LOC  time  DY.RLS-bath  HON=mother

nilevai niwafik
ni-leva-iAPPL ni=Wafik
UV.RLS-call-APPL  GEN.HON=PN
‘When PRO$_{uv}$, *j bathing, Wafik, called mother$_{r}$.’

The understood subject of the adverbial clause in example (73) is si Wafik. Likewise, the understood subject of the adverbial clause in example (74) is siina ‘the mother’. Another interpretation is that the one who (X) is taking a bath is neither Wafik or siina. Thus, the interpretation for examples (73) and (74) can also be ‘When X is bathing, Wafik called his mother’.

8.4.1.5 Secondary predicates and quantifier floating

Secondary predicates and floating quantifiers are often used in the literature on Austronesian languages to determine grammatical relations (cf. for example Kroeger 1993 for Tagalog, Wechsler and Arka 1998, and Arka 2003 for Balinese). In Tagalog, they can be used to determine the subject argument, while in Balinese they can only be used to distinguish core arguments from non-core arguments. For Tajio, however, it seems that secondary predicates and quantifier floating do not provide clear evidence that can be used to distinguish the subject argument from non-subject arguments. As in Balinese, it seems that they can only be used to distinguish core arguments from non-core arguments (see Section 8.4.2.1).

Secondary predicates and quantifier floating cannot be used to determine the subject argument because Tajio speakers often give ambiguous interpretations between a reading in which the secondary predicate or the floated quantifier modifies the subject and a reading where it modifies the object. This is especially the case in AV construction, as seen in the (a) examples of the following pairs of examples.

In UV constructions, however, speakers more confidently assert that secondary predicates and floated quantifiers modify subjects. The following examples illustrate secondary predicates (75) and floating quantifiers (76) in AV as well as in UV constructions.
They hit a dog (=and they died).’
‘They hit a dog (=and it died).’

‘They hit a dog (=and it died).’

‘They all bought the cake.’

‘They bought all the cake.’

‘Didn’t you hear that all the dogs were brought by Kadek?’ (from the dialog Noasu)

The preference for an interpretation in which the floated quantifier modifies the subject in UV constructions is also supported by conversational data. The quantifier *jojoo* ‘all’, which is floated to the end of the construction, is understood to modify the subject, as shown by example (77).

All of us will sleep.’ (from the narrative Teompas)

‘All of my children are obedient actually.’ (from the dialog Campur)

‘so, all kinds of sicknesses, light sickness and heavy sickness.’ (from the narrative Hanyut perahu)


(81) sapamo joo nipeutanyainya ini
  sapa=mo jojo ni-pe-utanya-i=nya ini
what=FOC all UV.RLS-SF-ask-APPL=3SG.GEN PROX

‘What was (it) all (about) she had asked?’
(from the dialog Campur)

8.4.2 Object, obliques and adjuncts

The previous section presented syntactic tests that can be applied to determine subject arguments. This section focuses on grammatical relations other than the subjects (i.e., objects, obliques, and adjuncts). Objects in AV constructions are expressed by bare noun phrases. NP objects in UV constructions are marked by the genitive marker ni’=nu=. Object pronouns are either prefixed with the genitive marker ni’-, or they can be expressed as genitive prefixes, or they occur as genitive clitics (see Section 8.1.2.2.1). Obliques, on the other hand, are marked by prepositions.

There are two kinds of obliques distinguished in this work: prepositional phrase obliques (oblique PP) and oblique-objects. Oblique-objects are objects in ditransitive constructions that are expressed as prepositional phrases. They are core arguments required by the predicate and deleting such an oblique-object results in ungrammaticality. Oblique PPs, on the other hand, are arguments which are more core-like than adjuncts, but a less prototypical core argument than an object or an oblique-object. Adjuncts are never obligatory, while oblique PPs – like oblique-objects – are obligatory prepositional phrase (PP) arguments (Kroeger 2005:58). The difference between these two oblique arguments is that the oblique-object forms a unit with the verb and cannot be separated from it, while this is not the case for oblique PPs.

The syntactic tests which will be applied here to distinguish objects from obliques are: (i) the behavior of secondary predicates and floated quantifiers; (ii) word order restrictions; (iii) reflexive binding; and finally (iv) adjunct fronting and deletion, which is used to distinguish adjuncts from obliques.

8.4.2.1 Secondary predicates and floated quantifiers

The use of syntactic tests using secondary predicates or floated quantifiers as discussed in Section 8.4.1.5 has shown that in actor voice constructions there is an ambiguous interpretation between a reading in which the secondary predicate or the floated quantifier modifies the subject and a reading where it modifies the object. However, as will be shown in this section, only core arguments (i.e., subject and object) can be modified by secondary predicates or the floated quantifiers. Example (82) illustrates that the floated quantifier jojoo ‘all’ can be used to modify the subject sisia ‘3PL’ and the object tebayas ‘sand’, but not the oblique-PP yami ogo ‘from the river’.

(82) sisia nongala tebayas yami ogo jojoo
  sisia noN-ala te=bayas yami ogo jojoo
3PL AV.RLS-take NM=sand from river all

‘All of them took the sand from the river.’
‘They took all the sand from the river.’
‘*They took sand from all the rivers.’

In some applicative constructions, animate obliques are marked by the preposition mao ‘to’ and in this case they are considered to be oblique-objects, i.e., core arguments (see Section 6.4.1.1). Being a core argument, this kind of oblique-object can be modified by the floated quantifier jojoo ‘all’, as illustrated by example (83), where the reading ‘They sent the letter to all teachers’ is also acceptable.

(83) sisia namaatuao tesura’ mao teguru jojoo
  sisia noN-paatu-ao te=sura’ mao te=guru jojoo
3PL AV.RLS-send-APPL NM=letter to NM=teacher all

‘All of them sent a letter to the teacher.’
‘They sent all the letters to the teacher.’
‘They sent the letter to all the teachers.’

Example (84) illustrates that the secondary predicate naate ‘dead’ can be used to modify the subject sisia ‘3PL’ and the object teasu ‘dog’, but not the oblique-PP ri ariong Pak Ma’es ‘downward at Mr. Ma’es’.

187
(84) sisia norumpak teasu ri ariong pak ma’es  
sisia noN-rumpak te=asu ri ariong Pak Ma’es  
3PL AV.RLS-hit NM=dog LOC down.ward PN

naate  

nV-ate  

ST RLS dead  

‘They hit a dog downward at Mr. Ma’es (=and they) died.’  
‘They hit a dog downward at Mr. Ma’es (=and it) died.’  
*‘They hit a dog downward at Mr. Ma’es (=and Mr. Ma’es) died.’

8.4.2.2 Word order

With respect to word order, the main characteristic of AV constructions is that the verb is followed by  
the object (i.e., V_{AV}-O) and the subject can be placed before or after the verb phrase, yielding S-V_{AV}-O  
or V_{AV}-O-S. Likewise in UV constructions, the verb and the object are treated as a unit with the object  
following the verb (V_{UV}-O).

These AV and UV word order patterns are useful for distinguishing objects from obliques. The object  
is always placed adjacent to the verb and no argument can be inserted between V-O (but see below for  
one exception in AV). In contrast, obliques are not particularly closely attached to their verbs and they  
do not have to immediately precede or follow them. They can either be placed before or after the V-O  
unit.

Example (85) illustrates the different behavior of objects and obliques in an AV construction. As a  
unit, the verb *nombeta* ‘to put’ and the object *tetangkoyak* ‘cacao beans’ cannot be separated. In  
contrast, the oblique-PP *i karung* ‘in the sack’ can be placed before or after the V-O unit, but cannot be  
inserted between the V-O structure, as in (85)d.

(85) a. sia’u [nombeta tetangkoyak] i karung  
sia’u noN-mbeta te=tangkoyak i karung  
1SG AV.RLS-put NM=cacao.beans LOC sack  
‘I put the cacao beans in the sack.’

b. i karung sia’u [nombeta tetangkoyak]  
i karung sia’u noN-mbeta te=tangkoyak  
LOC sack 1SG AV.RLS-put NM=cacao.beans  
‘I put the cacao beans in the sack.’

c. [nombeta tetangkoyak] sia’u i karung  
nobeta te=tangkoyak sia’u i karung  
AV.RLS-put NM=cacao.beans 1SG LOC sack  
‘I put the cacao beans in the sack.’

d. *sia’u nombeta i karung tetangkoyak  
sia’u noN-mbeta i karung te=tangkoyak  
1SG AV.RLS-put LOC sack NM=cacao.beans  
For: ‘I put the cacao beans in the sack.’

Example (86) illustrates that the same restrictions apply to UV constructions. Although the object  
*Manding* is marked by the genitive marker *ni=*, it cannot be split apart from the UV verb *nimbeta* ‘to  
put’. The oblique-PP *i karung* ‘in the sack’, however, can be placed before or after the V-O unit, but is  
not permitted to intervene between the constituents of the V-O unit, as in (86)d.

(86) a. tetangkoyak [nimbeta nimanding] i karung  
te=tangkoyak ni-mbeta ni=MANDING i karung  
NM=cacao.beans UV.RLS-put GEN.HON=PN LOC sack  
‘The cacao beans were put in the sack by Manding.’

b. i karung tetangkoyak [nimbeta nimanding]  
i karung te=tangkoyak ni-mbeta ni=MANDING  
LOC sack NM=cacao.beans UV.RLS-put GEN.HON=PN
‘The cacao beans were put in the sack by Manding.’

c. [nimbeta nimanding] tetangkoyak i karung
  ni-mbeta ni=Manding te=tangkoyak i karung
  UV.RLS-put GEN.HON=PN NM=cacao.beans LOC sack
  ‘The cacao beans were put in the sack by Manding.’

d. *tetangkoyak nimbeta i karung nimanding
te=tangkoyak ni-mbeta i karung ni=Manding
  NM=cacao beans UV.RLS-put LOC sack GEN.HON=PN
  For: ‘The cacao beans were put in the sack by Manding.’

8.4.2.3 Reflexive binding

Reflexive binding can be used to distinguish core arguments from non-core arguments. One of the reflexive pronouns in Tajio is tealae ‘body’. In its reflexive use, it is normally accompanied by a possessive pronoun which agrees in person and number with its antecedent. The behavior of reflexives in Tajio seems to be determined by semantic roles rather than grammatical relations in that the reflexive pronoun must not outrank its antecedent on the semantic hierarchy. The semantic role hierarchy presented below is quoted from Bresnan and Kanerva (1992).

agent > beneficiary > recipient/experiencer > instrument > theme/patient > locative

Example (87)a illustrates that the actor-subject can bind the reflexive undergoer-object. In contrast, the reflexive actor-object in (87)b cannot be bound by the undergoer object.

(87) a. siwada neita tealaenya i lilinduan
  si=Wada N-pe-ita te=alae=nya i lilinduan
  HON=PN AV.RLS-SF-see NM=body=3SG.GEN LOC mirror
  ‘Wada saw herself in the mirror.’

b. *tealaenya neita siwada i
  te=alae=nya N-pe-ita si=Wada i
  NM=body=3SG.GEN AV.RLS-SF-see HON=PN LOC
  lilinduan
  lilinduan mirror
  For: ‘Wada saw herself in the mirror.’

In an UV construction as in (88)a, it is the actor-object which binds the reflexive undergoer-subject. This clearly shows that it is not grammatical relations but semantic roles that determine the binding relations here. In contrast, the reflexive actor-object in (88)b cannot be bound by the undergoer-subject.

(88) a. tealaenya niita niwada i lilinduan
  te=alae=nya ni-ita ni=Wada i lilinduan
  NM=body=3SG.GEN UV.RLS-see GEN.HON=PN LOC mirror
  ‘Herself was seen by Wada in the mirror.’

b. *siwada niita nialaenya i lilinduan
  si=Wada ni-ita ni=alae=nya i lilinduan
  HON=PN UV.RLS-see GEN.HON=body=3SG.GEN LOC mirror
  For: ‘Wada was seen by herself in the mirror.’

Reflexive binding is restricted to core arguments. Example (89)a shows that the subject-actor si Asman binds the object-patient tealaenya ‘himself’. The oblique-beneficiary siinanya ‘his mother’, however, cannot bind the object-patient tealaenya ‘herself’ although beneficiary is higher than patient in the semantic role hierarchy, as in (89)b.

(89) a. si Asman nomacingi tealaenya untuk
  si=Asman noN-pacing=i te=alae=nya untuk
  HON=PN AV.RLS-clean=APPL NM=body=3SG.GEN for
siinanya
si=ina=nya
HON=mother=3SG.GEN
‘Asman, cleaned himself, for his mother.’

b. siwada
si=Wada
nomacingi
sari
n=scopy
untuk
HON=PN
AV.RLS-copy=APPL
NM=body=3SG.GEN
for

siinanya
si=ina=nya
HON=mother=3SG.GEN
For: *‘Wada cleaned herself for his mother.’

8.4.2.4 Adjunct fronting and deletion

A final test that can be applied in order to distinguish core arguments from non-core arguments involves adjunct fronting and deletion. Core arguments are required by their predicates; thus they have a close semantic relationship to the verb and without them the clause is incomplete (Kroeger 2005:58). In contrast, adjuncts are not obligatory and can always be omitted. There is a fundamental difference between omitting a core argument and omitting an adjunct. As stated in Kroeger, omitting adjuncts does not create any sense of incompleteness, but omitting core arguments does, as illustrated by examples (90)b and (90)c. In the former, without the adjunct sono testensor ‘with the cutting machine’ the clause is still grammatical and there is no need to assume that a specific cutting instrument is implicitly specified by the context. On the other hand, in (90)c, the undergoer must be contextually given in order for this to be a grammatical construction.

Core arguments and predicates have certain word order patterns, for example, constituting a fixed V-O unit. Changing the V-O order or inserting other elements between the verb and object results in ungrammaticality (see Section 8.4.2.2). In contrast, non-core arguments and predicates do not necessarily have a fixed order. As adjuncts and verbs do not constitute a fixed unit, adjuncts which canonically occur at the very end of a clause with an unmarked information structure can be fronted to clause-initial position, as shown by example (90)d.

(90) a. siami
siami
siami
siami
1PL.EX
molog
molog
molog
molog
with
testensor
tesensor
tesensor
NM=cutting.machine
‘We will cut the tree with a cutting machine.’

b. siami
siami
siami
1PL.EX
molog
molog
molog
molog
NM=tree
‘We will cut the tree.’

c. siami
siami
siami
1PL.EX
molog
molog
molog
molog
‘We will cut (i.e., wood/thing cut specified by context)’

d. sono
tesensor
siano
siano
with
NM=cutting.machine
1PL.EX
molog
molog
molog
molog
molog
‘We will cut the tree with a cutting machine.’

The distinction between core and non-core argument is theoretically more complex than this. See among others Dalrymple (2001), Musgrave (2002) and Van Valin (2005).
‘It is with a cutting machine that we will cut the tree.’

In addition to distinguishing core arguments from adjuncts, it is also useful to distinguish adjuncts from obliques (i.e., oblique-object and oblique-PP). Both adjuncts and obliques are marked by prepositions and they are not required to occur adjacent to the predicate. In example (91), the main difference is a semantic one: omitting the oblique creates a semantically incomplete utterance. Therefore, similar to core arguments, obliques can be less easily omitted than adjuncts.

(91) a. siami nomberek i kasimbar
   siami no-nmberek i Kasimbar
   1PL.EX DY.RLS-stay LOC PN
   ‘We stayed in Kasimbar’

b. ?siami nomberek
   siami no-nmberek
   1PL.EX DY.RLS-stay
   ‘We stayed.’

8.5 Symmetry in Tajio

The last section of this chapter deals with symmetry in voice marking systems and argues that Tajio has a symmetrical voice system, i.e., that it has two basic transitive constructions, the actor voice (AV) and the undergoer voice (UV) construction.

Symmetrical and asymmetrical voice systems can be contrasted, for example, in terms of transitivity or in terms of the behavior of the non-subject argument in each voice system. In asymmetrical voice systems, active and passive voice differ in transitivity. Active voice is typically expressed as a transitive construction while passive voice is intransitive. The non-subject argument in the active and passive voice constructions also functions differently: it is a core object argument in the active voice, but functions as an oblique in the passive voice.

In contrast to asymmetrical voice systems, the actor voice and the undergoer voice in symmetrical voice systems are equally transitive. Thus, the subject and the non-subject arguments are both core arguments in AV and UV constructions.

Riesberg (2014:10) proposes three defining properties of a symmetrical voice language:

a. it has more than one basic transitive construction,
b. the corresponding arguments behave equally in all voices, and
c. the verb is equally morphologically marked in all voices.

Tajio is not fully symmetric, as it only complies with two out of these three requirements. It has two basic transitive constructions: AV and UV (property (i)). Morphologically, AV and UV constructions are equally marked, i.e., the AV construction is marked by active voice morphology (e.g. prefix noN-/moN- ‘AV.RLS/NRLS’) and the UV construction is marked by undergoer voice morphology (prefix ni-/nu- ‘UV.RLS/NRLS’) (property (iii)).

As to property (ii), the arguments of AV and UV are not equally marked in both voices. Neither subjects nor objects are marked in AV constructions. In UV constructions, however, subjects are unmarked while objects are marked, either by prefixation or clitization.

Evidence from relativization, control and raising constructions supports the analysis that AV and UV are in fact transitive, with subject arguments and object arguments behaving alike in both voices. Only the subject can be relativized, controlled, raised or function as the implicit subject of subjectless adverbial clauses. In contrast, the objects of AV and UV constructions do not exhibit these features.

Further, word order also provides evidence that AV and UV are structured in the same way. Basic word order in AV and UV constructions is V-O, which as a unit can be preceded or followed by the
subject. Thus, basic word order in both AV and UV is S-V-O or V-O-S. Subject as well as non-subject arguments may be omitted when contextually specified.

Despite the evidence for the symmetry of the voices in Tajio, evidence for asymmetry also exists. In an AV construction, either the subject or the object can be modified by the secondary predicate or the floated quantifier. In this case, the object can only be modified if it is directly followed by a modifier. In UV constructions, however, the secondary predicates or floated quantifiers can only be interpreted as modifying the subjects. Hence, objects in AV and UV constructions do not have the same properties. Thus, one could argue that the object (i.e., actor) in UV constructions is less core-like than the object argument in an AV construction. However, given that most facts support the conclusion that Tajio is indeed a symmetrical voice language, the most fitting analysis remains one emphasizing this symmetry. As Riesberg (2014:11) states, “symmetrical voice languages do not necessarily show all these properties in the same manner, i.e., languages might differ to the degree in which they are symmetric. (…) it is often the case that some of the characteristics can only partly be found in a given language. Nevertheless, these languages still differ crucially from languages with asymmetrical voice systems”.

Complex constituent structure

Complex constituent structures as discussed in this chapter involve coordination on phrase and clause levels as well as subordination on the clause level. These two types of constituent combinations are discussed in Section 9.1 and 9.2, respectively. The discussion on coordination covers three types of coordination found in Tajio: conjunctive coordination, disjunctive coordination, and adversative coordination. The types of subordination described here are complement clauses and adverbial clauses. Relative clauses have been already dealt with in Section 7.3. In addition to coordination and subordination, serial verb constructions are discussed in Section 9.3.

9.1 Coordination

A structure is defined as a coordination structure if two units that belong to the same category are combined to form a larger unit of that category (Kroeger, 2005:218).

 Conjunctive coordination involves the use of the comitative marker *sono* ‘with’. This marker is not only used to mark phrasal coordination, but it can also be used to mark prepositional phrases. In phrasal coordination, *sono* is mostly used to coordinate noun phrases: *sono* conjoins two NPs which are placed adjacent to each other. Syntactically, the conjoined NPs have the same syntactic function, i.e., subject or object, as can be seen in examples (1) and (2). The conjoined noun phrases are put in square brackets.

(1) [siardin] *sono* [siaida] nomberek i kasimbar
   HON=PN with HON=PN AV.RLS=stay LOC PN
   ‘Ardin and Aida stay in Kasimbar.’ (from the dialog Campur)

(2) siwafik nomiara [teasu] *sono* [tetumpang]
   HON=PN AV.RLS=look.after NM=dog with NM=frog
   ‘Wafik looked after a dog and a frog.’ (from the Frog Story)

*Sono* can also be used to conjoin prepositional phrases as exemplified in (3).

(3) tahun lapan pulu noturun tepomerinta [mami Jakarta]
   tahun lapan pulu no-turun te=pomerinta mami Jakarta
   year eight ten DY.RLS=go down NM=government from Jakarta

   *sono* [i provinsi]
   *sono* i provinsi
   with LOC province
   ‘…in the 1980s, government officials came from Jakarta and from the province.’
   (from the narrative Sejarah Kasimbar)

The fact that *sono* can be used to coordinate prepositional phrases and clauses (as illustrated below) shows that in these uses it is best analysed not as a preposition but as a coordinator. Still, with regard to NPs prepositional and coordinating uses overlap and are difficult to distinguish, as shown by example (4) which illustrates a clearly prepositional use. Here the two NPs perform the action denoted by the predicate together are not conjoined to form a new complex NP and they do not occur in the same function. The first NP *si Hasan* functions as the subject which precedes the predicate at clause-initial position while the second NP *si Sari* which accompanies the first NP performing the action takes the adverbial function at clause-final position (see also Section 4.3.5 where uses of *sono* to mark instrument is discussed).

(4) [sihasan] mao i posoleong *sono* [sisari]
   si=Hasan mao i posoleong *sono* si=Sari
   HON=PN go LOC beach with HON=PN
   ‘Hasan went to the beach with Sari.’
In clausal coordination, it is a common practice to omit co-referent arguments. As stated by Haspelmath (2007:38), such ellipsis is due to reasons of parsimony, avoiding the repetition of identical material. The omitted argument does not necessarily have to be the subject, it is generally possible to omit all kinds of constituent, as illustrated by the following examples.

Example (5) illustrates the coordination of two intransitive clauses: (i) Tevuvut nisari nelenda. ‘Sari’s hair is long’ and (ii) Tevuvut nisari neitong. ‘Sari’s hair is black’. In this case, the subject argument is omitted and the coordinator sono conjoins the predicates of the two independent clauses. The two predicates take the same mood marker, i.e., the realis mood.

(5) tevuvut nisari nelenda sono neitong  
NM=hair GEN.HON=Sari ST.RLS-long with ST.RLS-black  
‘Sari’s hair is long and dark.’

The omission of the subject argument can also be seen in example (6) where the locative phrase is additionally omitted from the first clause.

(6) siwada nomberek sono nokaraja i kasimbar  
si=Wada no-mberek sono no-karaja i Kasimbar  
HON=Wada DY.RLS-live with DY.RLS-work LOC Kasimbar  
‘Wada lives and works in Kasimbar.’

Example (7) shows the omission of subject argument in transitive AV clause coordination. It derives from two AV clauses: (i) Sisia nopombosi teato’. ‘They fixed the roof.’ and (ii) Sisia nopapacing tevombong. ‘They cleaned the door.’

(7) sisia nopombosi teato’ sono nopapacing  
sisia no-PO-mbosi te=ato’ sono no-PO-pacing  
3PL AV.RLS-CAUS-good NM=roof with AV.RLS-CAUS-clean  
tevombong  
te=vombong  
NM=door  
‘They fixed the roof and cleaned the door.’

The deletion of both subject and object arguments in AV clause coordination can be seen in example (8). This example consists of two AV clauses: (i) Si Manding nomuai tesakulat. ‘Manding dried the cacao.’ and (ii) Si Manding nombaluk tesakulat. ‘Manding sold the cacao.’ The first and the second AV clauses share the same subject (i.e., si Manding) and the same object (i.e., tesakulat). When both clauses are coordinated, the first clause omits its object argument while the second clause omits its subject argument.

(8) simanding nomuai sono nombaluk tesakulat  
si=Manding no-N-puai sono no-N-baluk te=sakulat  
HON=Manding AV.RLS-dry with AV.RLS-sell NM=cacao  
‘Manding dried and sold the cacao.’

A parallel example of UV clause coordination is presented in example (9). This example consists of the two clauses: (i) Teanasa nitovong niami. ‘We cut pandanus leaves.’ and (ii) Teanasa niveesi niami. ‘We tied pandanus leaves.’ The first UV clause deletes its object argument niami, while the second UV clause deletes its subject argument, teanasa.

(9) teanasa nitovong sono niveesi niami  
te=anasa ni-tovong sono ni-vees-i niami  
NM=pandanus UV.RLS-cut with UV.RLS-tie-UV GEN.3PL  
‘We cut and tied the pandanus leaves.’

As mentioned above, it is also possible to omit other constituents, if they are repeated in both conjoint clauses. In the following example, not only the subject si Sari but also the auxiliary verb seelunya is omitted. Thus, example (10) originates from: (a) Si Sari seelunya nonggabu. ‘Sari likes to cook.’ and (b) Si Sari seelunya nejoong. ‘Sari likes to do the field’.

194
'Sari likes to cook and do the field.'

Furthermore, *sono* may also conjoin two clauses which do not necessarily show the same transitivity or have the same clause structure. Compare examples (11) and (12). In example (11) *sono* conjoins an intransitive verbal clause and a non-verbal clause; in (12) it coordinates an intransitive verbal clause and a transitive verbal clause.

(11) *[siwafik nangimpado i vamba nuvatang] sono
dy.rlse.rep.climb.to.sit loc above gen=log with

[teasu vai i vamba nuvatang] sono
NM=dog also loc above gen=log

‘Wafik climbed to sit on the log and the dog was also on top of the log.’

(from the Frog Story)

Disjunctive coordination is marked by the conjunctions *ela/la* and *atau/ato*. Despite their differing origins—*atau/ato* are Indonesian loan words—there are no syntactic or semantic differences between *ela/la* and *atau/ato*. They can be used in either phrasal or clausal coordination. In phrasal coordination, they conjoin noun phrases and prepositional phrases. Examples (13)–(15) illustrate it.

(13) A: *to’ainu toseelumu*
to’ainu to=seelu=mu
which rel=like=2sg.gen

‘Which (meat) do you like?’

[teisi numanu’] ela [te=isi nusaping]
te=isi nu=manu’ ela te=isi nu=saping
NM=meat gen=chicken or NM=meat gen=cow

‘Chicken or beef?’

(14) *ane noondak teeleo [roeleo] ato [tolueleo]*
anv=two-day or three-day

‘If the sun shines brightly, (it takes) two or three days (to dry the coconut)’

(from the dialog Teulingka)

(15) *peiolimo sisanu paame [siama]*
peio-li=mo si=sanu paame si=ama
REQ.CAUS-buy=COM HON=someone later HON=father

*nigus* | *atau* [siunus]
ni=Gus atau si=Unus
GEN.HON=PN or HON=PN

‘Ask (someone) Gus’s father or Unus to buy (the cacao) later.’
These conjunctions can also be used to conjoin prepositional phrases as exemplified in (16). Meanwhile, example (17) shows noun phrase coordination within a prepositional phrase. In this case, two genitive NPs are conjoined and the head noun of the second NP may be deleted.

(16) panisiao‘u
   pa=ni-is-ao=’u
   then=UV.RLS-fill-APPL=1SG GEN
   i lalong nukarung
   i lalong nu=karung
   LOC inside GEN=sack
   atau i
   atau i
   karanjing /
   karanjing
   basket
   ‘.I then put (it) in a sack or in a basket.’
   (from the narrative Nomupu Tesakulat)

(17) nimbeto‘u
   ni-mbe=ta=’u
   UV.RLS-put-APPL=1SG GEN
   i lalong nukaranjing
   i lalong nu=karanjing
   LOC inside GEN=basket
   ato nu=karung
   or GEN=sack
   ‘I put (it) in the basket or in the sack.’
   (from the narrative Nomupu tesakulat)

The disjunctive conjunction can also conjoin verbal phrases, as illustrated in (18). The conjoined verbal phrases take the same voice and mood marker.

(18) ane telangkai nombava
   ane te=langkai noN-vava
   if NM=man AV.RLS-bring
   [niingking=nya] ato [nisangkiling]
   ni-ingking=nya ato ni-sangkiling
   UV.RLS-carry.hanging.on.the.hand=3SG GEN or UV.RLS-hang.on.shoulder
   ‘If a man carried (it), he carried it hanging on the hand or hanging it on the shoulder.’
   (from the narrative Nonggutu tebalase)

Examples (19) and (20) present alternative conjoined clauses with the conjunction ela/la.

(19) [mogombo‘i]
   mo-gombo=’i
   AV.RLS-talk-APPL
   te=joong
   la
   NM=field or
   [mogombo‘i]
   te=paruja
   AV.RLS-talk-APPL
   ‘Talking about the field or talking about the rice field.’

(20) jio niotoi‘u
   jio ni=otoi=’u
   NEG UV.RLS-know=1SG GEN
   [majaok]
   ma-jaok
   siia
   or ST.NRLS-come
   ela [ajo]
   ela aijo
   ‘I don’t know whether she will come or not.’

In addition to the two types of conjunctions discussed so far, the adversative conjunctions boi and tetapi/tapi (borrowed from Indonesian) can also be used to conjoin phrases and clauses. The conjoined constituents in adversative conjunction are in opposition.

In example (21), the opposition of two constituents is achieved by negating the verb of the first constituent, i.e., ajo nelenda ‘not long’ which is then opposed to another verb nopuduk ‘short’. In example (22) the opposed constituents are two clauses which involve opposing verbal auxiliaries, i.e. seelu ‘want’ and kua ‘not want’.

(21) tevuvutu ajio [nelenda] tapi [nopuduk]
   te=vuvut=’u ajio nV-lenda tapi nV-puduk
   NM=hair=1SG GEN NEG ST.RLS-long but ST.RLS-short
   ‘My hair is not long but short.’

(22) [tepaku seelu‘u]
   te=paku seeulu=’u
   NM=nail want=1SG GEN AV.NRLS-bring but
   mombava
   moN-vava boi [tegola
   ‘boi te=gola
   NM=sugar
Opposed constituents are not restricted to verbal phrases, it is also possible to contrast noun phrases which function as subject arguments, as non-subject arguments or as predicates. In example (23), the subject NP ajio tetuainya ‘not his younger sibling’ is contrasted with sikakanya ‘his older sibling’, and in example (24) the subject NP ajio tepae ‘not rice’ is opposed to tecanggoreng ‘peanuts’.

(23)  ajio  tetuainya  noborowa  boi
ajio  te=tuai=nya  no-borowa  boi
NEG  NM=younger.sibling=3SG.GEN  ST.RLS-parsimonious  but

sikakanya
si=kaka=nya
HON=older.sibling=3SG.GEN
‘It is not his younger sibling who is parsimonious, but his older sibling.’

(24)  ajio  tepae  tonitudanya  boi  tecanggoreng
ajio  tepae  tonitudanya  boi  te=canggoreng
NEG  NM=rice  REL=UV.RLS-plant=3SG.GEN  but  NM=peanut
‘He did not plant rice, but (he planted) peanut.’

Contrasted non-subject arguments are exemplified in examples (25) and (26). In the former, the nominal adverb telangkai ‘male’ is contrasted with tevevine ‘female’ and in the latter, the PP adverb i Palu ‘in Palu’ is contrasted with i Kasimbar ‘in Kasimbar’.

(25)  sisia  ajio  nongoli  teruriang  boi  terambutan
sisia  ajio  noN-oli  te=ruriang  boi  te=rambutan
3PL  NEG  AV.RLS-buy  NM=durian  but  NM=rambutan
‘They did not buy durian, but rambutan.’

(26)  kasim  jio  nokaraja  i  palu  boi  i  kasimbar
Kasim  jio  no-karaja  i  Palu  boi  i  Kasimbar
Kasim  NEG  DY.RLS-work  LOC  Palu  but  LOC  Kasimbar
‘Kasim did not work in Palu, but in Kasimbar.’

Example (27) shows the adversative conjunction boi opposing two NPs functioning as predicate: the first NP is negated, while the second NP is not negated.

(27)  teayu  eua  ajio  teayu  jati  boi  teayu
te=ayu  eua  ajio  te=ayu  jati  boi  te=ayu
NM=wood  DIST  NEG  NM=wood  teakwood  but  NM=wood

ulin
ulin
ironwood
‘That wood is not teakwood, but ironwood.’

9.2 Subordination

In subordination structures, a clause functions as a noun phrase, a noun modifier, or a modifier of verb phrases or entire propositions. There are three basic types of subordinate clauses in Tajio: complement clauses, adverbial clauses and relative clauses. In this section, I will only discuss complement and adverbial clauses. Relative clauses functioning as modifiers are discussed in detail in Section 7.3.
9.2.1 Complement clauses

Complement clauses are clauses that function as sentential expansions of subject or object slots. Adverbial clauses function as modifiers of verbs and propositions and relative clauses function as modifiers of a noun phrase (cf. Kroeger 2005:219 and Longacre 2007:374).

Complementation in Tajio does not always occur with an overt marker, as illustrated by examples (28)a and (29). These examples are considered complement clauses because syntactically, the second clause functions as the subject of the first clause. If the second clause is omitted from the sentence, the example is not grammatical, as seen in (28)b, unless it is understood from context.

(28) a. niularaonya  ri  sia’u  tesapingnya
   ni-ular-ao=nya  ri  sia’u  te=saping=nya
   UV.RLS-tell=3SG GEN  LOC 1SG  NM=cow=3SG GEN
   nepeesong
   nV-pees-ong
   ST.RLS-sickness-VBLZ
   ‘He told me that his cow was sick.’

b. *niularaonya  ri  sia’u
   ni-ular-ao=nya  ri  sia’u
   UV.RLS-tell=3SG GEN  LOC 1SG
   ‘He told me’

Tajio does not have a specialized complement marking subordinator. Subordinating conjunction ane ‘if’ in example (30) or question words such as i payo ‘where’ in example (31) can introduce complement clauses.

(30) jio  niepemu  ja  teasu  nivava
       jio  ni-epe=mu  ja  te=asu  ni-vava
   NEG  UV.RLS-hear=2SG GEN  FOC  NM=dog  UV.RLS-bring
   nikadek  jojo
   ni=Kadek  jojoo
   GEN.HON=PN  all
   ‘Don’t you hear that all the dogs were brought by Kadek?’

(31) siia  jio  niotoinya
       siia  jio  ni-otoi=nya
   3SG  NEG  UV.RLS-know=3SG GEN  LOC  where  NM=house=1SG GEN
   i  payo  tevonua’u
   i  payo  te=vonua=’u
   ‘He does not know where my house is.’

Examples (28)–(31) all illustrate complement clause constructions in which the first clause is the matrix clause and the second one is the complement clause. Syntactically, the complement clause functions as subject of the matrix UV predicate. In my corpus, there are no examples of complement clauses functioning as the subject of a matrix AV predicate.

In the preceding examples, both subject and object of the complement clauses are overtly expressed, showing that these are complete clauses.

Complement clauses functioning as the object of a matrix UV predicate or as the object of an AV matrix clause have only been found in reduced complement clause constructions, i.e., involving
control or raising constructions. Unlike in full clause complementation, the subject of the embedded clause in control or raising constructions is not overtly expressed. As one of the arguments of the matrix clause is co-referential with the subject of the embedded clause, the subject of the embedded clause is omitted. Further discussion on control and raising constructions can be found in Sections 8.4.1.2 and 8.4.1.3.

9.2.2 Adverbial clauses

In contrast to complement clauses which are required by the predicate to fulfil the subject or object function, adverbial clauses provide optional information about time, place, manner, purpose, reason, etc. (cf. Kroeger 2005:227).

9.2.2.1 Time

Conjunctions which mark subordinate clauses as temporal clauses are pas/papas ‘when’, sarongnya ‘while’, and touk or notouk ‘after’ (which is often combined with the completive aspect marker =mo). Other conjunctions are borrowed from Indonesian, for example, sementara ‘while’ and waktu (which also occurs as i waktu) ‘as’. Examples are given in (32)–(35), the temporal clauses are in bold.

(32) e notouk nombobak tesapa ua
e noN-bobak te=sapa ua
ch after AV.RLS-hit NM=what
teanganaku ja i ariong i vonua
te=anganak=’u ja i ariong i vonua
NM=child=1SG.GEN really LOC down.there LOCAL house
‘After hitting that thing (the pig), my child was down there, at home.’
(from the dialog Noasu)

(33) nosondokmo teeleo sia’u nendiis apa
nV-sondok=mo te=eleo sia’u ne-ndiis apa
ST.RLS-sunset=COMP NM=sun 1SG DY.RLS-bath then
nenginang neN-inang
AV.RLS-eat
‘As the sun went down, I took a bath and then had supper.’
(from the narrative Tana Tajio)

(34) sementara siia nerai nijaok nnuvuta
sementara siia ne-rai ni-jaok nu=nuvuta
while 3SG DY.RLS-wash.hair UV.RLS-meet GEN=guest
‘While she washed her hair, she was found by the guest.’
(from the narrative Tana Tajio)

(35) papas temandar najaok nesimbar teeleo
papas te=Mandar nV-jaok nV-simbar te=eleo
as NM=PN ST.RLS-arrive ST.RLS-shine NM=sun
‘As the Mandar came, the sun was shining.’
(from the narrative Sejarah Kasimbar)

‘Before’ is conceptually “negative” in Tajio, in the sense that the event in the ‘before’-clause has not taken place by the time of the event denoted in the main clause. ‘Before’ is marked by the negative marker jio and the continuative aspect marker =po, (i.e., jiopo or jopo). Examples are given in (36) and (37). In addition, jio is also used to negate predicates meaning ‘not yet’ (see Section 5.3.2).

(36) jiopo sia’u nilulesinya
jio=po sia’u ni-lules-i=nya
NEG=CONT 1SG UV.RLS-bite-UV=3SG.GEN
niita ’umo telinganya
ni-ita=’u=mo telinga=nya
UV.RLS-see=1SG=COMP ear=3SG.POSS
‘Before it (the pig) bit me, I saw his ears’
(from the dialog Noasu)
‘Before (he) arrived (at home), he heard that the thing that he had left (the pig) was already dead.’

(from the dialog Noasu)

9.2.2.2 Purposive clauses

Purposive clauses are marked by the subordinator tau ‘so that’ and supaya ‘so that’, the latter being a loan word from Indonesian. Purposive connections of events show an action–(intended) result/purpose relation in which the action is either in the process of being done at the time of speaking or has been done in the past (with the verb being marked with realis mood) while the result will take place at some point in the future (in non-realis mood). The purposive constructions are further discussed in Section 5.1.3.2.

9.2.2.3 Conditional clauses

Conditional clauses in Tajio are used to express condition–result relations. Clauses indicating the condition are marked by the conjunction ane ‘if’. There are two kinds of conditional clauses in Tajio, hypothetical and counterfactual clauses. Details on the distinction between the two clauses are given in Section 5.1.3.3.

9.2.2.4 Causation

Causation or causal clauses express cause–effect relation. Causal markers in Tajio are apa30 ‘because’ or karna and lantaran ‘because’, the latter two being loan words from Indonesian. The effect is presented in the matrix clause whereas the cause occurs in the subordinate clause. The subordinate clause can precede or follow the matrix clause. Examples of causal clauses are given in (38) and (39).

(38) lantaran jio noujang roeleo tetana noogal
lantaran jio nV-uajang ro-eleo te=tana nV-ogal
because NEG ST.RLS-rainy two-day NM=soil ST.RLS-dry

‘Because it was not raining for two days, the soil is dry.’

(39) topobaluk ajio nobaluk terisa
topo-baluk ajio N-po-baluk te=risa
AG.NOM-sell NEG AV.RLS-SF-sell NM=chili
apa teolinya nasuli’ pia
apa te=oli=nya nV-suli’ pia
because NM=price=3SG.GEN ST.RLS-expensive very

‘Many sellers do not sell chili, because its price is very expensive.’

9.2.2.5 Concessive clauses

The concessive marker in Tajio is ompo ‘although’. In concessive clause structures, the embedded clause which is marked by ompo may be a complete clause, as shown by example (40), or an elliptical clause, where one argument is omitted. This is illustrated by example (41).

(40) |ompo| siamanya | nope|tuju | siia | momupu | tekopi]
|ompo| si=ama=nya | no-pe-tuju | siia | moN-pupu | tekopi|
|although| NM=father=3SG.GEN | AV.RLS-SF-order | 3SG | AV.NRLS-harvest |
|tekopi| | siia | kuanya | momupu | tekopi |
|te=|kopio | siia | kua=nya | moN-pupu | te=kopi |
|NM=coffee | 3SG | don’t want=3SG.GEN | AV.NRLS-harvest | NM=coffee |

30 Note that the conjunction apa is also used in sequential events. In this context, apa means ‘then’.
‘Although his father told him to do so, he won’t pick coffee.

Although (I) took a bath, my skin is still dusty.’

(41) teuli’u
eini [ompo nendiis] nagabung
te=uli=’u
eini ompo ne-nendiis nV=gabung
NM=skin=1SG GEN PROX although DY.RLS-bath ST.RLS-dusty

boi
boi
INJ

9.3 Serial verb constructions

Serial verb constructions (SVC) are constructions in which two or more verbs occur in juxtaposition without any sign of overt co- or subordination. They appear to be monoclausal, may share core and non-core arguments and each verb of an SVC must be able to occur in isolation (cf. Aikhenvald (2006), Kroeger (2004)).

An example of a SVC in Tajio can be seen in example (43). The two verbs are not linked by any overt marker of conjunction or subordination. Each verb may occur in isolation, i.e., it is able to function as a simplex predicate as well, as can be seen from examples (42)a, b. In the following, the first verb in a SVC will be label V_1 and the second as V_2, in order to more conveniently refer to the two verbal elements.

(42) a. sia’u mai joong
    sia’u mai joong
    1SG go.to field
    ‘I went to the field.’

b. sia’u nendiis
    sia’u ne-nendiis
    1SG DY.RLS-bath
    ‘I took a bath.’

(43) sia’u jio=po [mai nendiis]
    V_1   V_2
    sia’u jio=po mai ne-nendiis
    1SG NEG=CONT go.to DY.RLS-bath
    ‘I have not gone for a bath yet.’

In example (43), the two verbs also are part of the same prosodic unit, as illustrated in Figure 9-1.
SVCs in Tajio always include a directional. The directional verb or the motion verb always comes first and they can be followed by any other verb.

The number of verbs that may occur in $V_1$ position is rather limited to the following four verbs: $mao$ ‘go’, $mai$ ‘go to’, $minyei$ ‘go here’ or $minyau$ ‘go there’. $Minyei$ and $minyau$ can also function as non-verbal directionals, in certain contexts meaning ‘hither/upwards/landwards’ and ‘downwards/seawards’, respectively. Unlike other verbal predicates that obligatorily occur with a mood marker, these directionals never take any inflection. The forms $mao$, $mai$, $minyei$ and $minyau$ cannot be considered non-realiser forms, because the hypothetical realiser forms $nao$, $nai$, $ninyei$ and $ninyau$ do not exist in Tajio. Although they do not take any inflection, these directionals can occur in a predicate function, as shown by examples (44)–(46).

(44) $sia'$u $mao$ $i$ $joong$
    $sia'$u $mao$ $i$ $joong$
3SG go LOC field
    ‘I went to the field.’

(45) $sisia$ $minyei$ $mariulumo$
    $sisia$ $minyei$ $mariulu=mo$
3PL go.here at.first=COMP
    ‘They went there first (before someone else).’

(from the dialog Campur)

(46) $simiu$ $minyau$ $sono$ $sikapala$
    $simiu$ $minyau$ $sono$ $si=kapala$
2SG.HON go.there with HON=head.of.village
    ‘You went there with the head of the village?’

(from the dialog Campur)

9.3.1 $mao$-V2

Examples of SVCs with the directional $mao$ are given in (47) and (48). The verb which follows the directional $mao$ always takes the non-realiser marker. Marking $V_2$ as realiser in this kind of SVC is ungrammatical, as shown by examples (47)b and (48)b.

As is typical for serial verb constructions, the sequence of [mao-V2] cannot be altered. Trying to change the sequence results in ungrammaticality, as illustrated by examples (47)c and (48)c. If negated, the negation scope covers both verbs, as can be seen in example (47)d.
(47) a. *sia’u [mao moleler] paame ini
   1SG go AV.NRLS-draw at.the.moment PROX
   ‘I will go to draw (rattan) a moment later.’

b. *sia’u [mao moleler] paame ini

c. *sia’u [moleler mao] paame ini

d. *sia’u jio [mao moleler] paame ini
   1SG NEG go AV.NRLS-draw at.the.moment PROX
   ‘I will not go to draw (rattan) a moment later.’

(48) a. *panivava [mao melolo] teanes
   then=UV.RLS-take go AV.NRLS-SF-search NM=bird
   ‘…then having taken (the spear), (we) will go hunting birds.’
   (from the narrative Tesumpit)

b. *panivava [mao nelolo] teanes

c. *panivava [melolo mao] teanes

9.3.2 mai-V2

Unlike SVCs with mao, verbs which follow mai always appear in realis mood. An example of a SVC with the directional mai was given above as example (43), which is repeated here for convenience as example (49).

(49) *sia’u jio=po [mai ndeiis] V1 V2
sia’u jio=po mai ne=ndiis
1SG NEG=CONT go DY.RLS-bath
‘I have not gone to take a bath yet.’
   (from the dialog Campur)

Note that mai also occur after another verb in a construction, which at first glance, may look like another SVC constructions, as in (50)–(52).

(50) siina nobalanja mai pasar
   si=ina no-balanja mai pasar
   HON=mother DY.RLS-shop DIR pasar
   ‘Mother went to the market shopping.’

(51) teanganaku nomenek mai kadera
   te=anganak=’u noN-peneK mai kadera
   NM=child=1SG.POSS AV.RLS-climb DIR chair
   ‘My child climbed up the chair.’

(52) *siia netensile mai mandar
   *siia ne-tensile mai Mandar
   3SG DY.RLS-return DIR PN
   ‘He returned to Mandar.’

In this construction, however, mai has a different function. It does not belong to the verbal part of the predication but marks a goal. In addition, nouns which follow mai in this case do not retain the noun marker te=. This is also the case if nouns follow local prepositions, such as i ‘at, in’ or yami ‘from’. Therefore, mai in this case is better considered a preposition and grouped together with the subsequent NP. In line with this analysis, mai is glossed as DIR(ectional) here.
9.3.3  minyei/minyau-V2

SVCs with minyau or minyei indicate purposive semantics (cf. Quick 2007:331). Verbs which follow the directional minyei ‘go here’ and minyau ‘go there’ can either appear in realis or non-realis mood. Examples are given in (53) – (55). In (54), for example, the speaker describes daily activities of fishermen. Because the event ‘go fishing’ takes place every day, it is expressed in realis mood. In contrast, the event in (55) will take place after the time of speaking, thus it takes non-realis mood.

(53) see minyei nonpongularao
     V1       V2
see minyei noN-po-uar-ao
who go.here AV.RLS-SF-tell-APPL
‘Who came here to talk about (it)?’  (from the dialog Noasu)

(54) dodondong nongalivomo
     V1       V2
minyau noN-peang
early morning AV.RLS-depart=COMP go.there AV.RLS-fish
‘Early in the morning (I) leave (the house) to go fishing.’  (from the narrative Nomeang)

(55) tanga ndoung
     V1       V2
middle night go.here DY.RLS-sneak
minyei mo-sisip
‘In the middle of the night (I) will come here to sneak around.’  (from the dialog Campur)

Just like mai which may also occur after another verb, minyei and minyau are also found in post-verbal position. When occurring after the verb, minyei and minyau function as verbal modifiers, as illustrated by examples (56) and (57). In this function, minyei and minyau are glossed as directionals.

(56) vava minyei ba iulu tabakomu
     V1       V2
vava minyei ba iulu tabako=mu
bring hither please earlier tobacco=2SG.GEN
‘Give me first your tobacco, please.’  (from the dialog Campur)

(57) paniaug minyau i avarong
     V1       V2
pa=ni-aug minyau i avar-ong
then=UV.RLS-paddle downwards LOC far-NOM
‘Then, (the ship) was paddled away into the distance.’  (from the narrative Nomeang)

9.3.4  No SVCs with ‘come’

All examples of SVCs are presented so far involve motion away from the speaker. The question naturally arises whether there are not also similar constructions denoting motion towards the speaker (‘come’). And in fact, the verb jaok ‘come’ occurs before other verbs in constructions which at first look like SVCs because the first and the second verb can be marked for the same mood, as illustrated by examples (58) and (59). In addition, both examples share the same subject argument, sia’u and siia, respectively.

(58) sia’u jo [majaok mongulam]
     V1       V2
sia’u jio mV-jaok mon-ulum
1SG NEG ST.NRLS-come AV.NRLS-cure
‘I will not come to cure (you).’
The following examples, however, provide evidence that \textit{jaok-}V\textsubscript{2} is not a SVC. First, the verb \textit{jaok} and the following verbs do not necessarily take the same mood marker. Second, the negator \textit{jio} can intervene in between \textit{jaok} and the following verb. Examples are given in (60) and (61).

(60) \textit{sia’u najaok mongintai} teanganakmu
\textit{sia’u nV-jaok moN-intai} te=anganak=mu
1SG ST.RLS-come AV.NRLS-visit NM=child=2SG.GEN
‘I came to visit your child.’

(61) \textit{sia’u najaok jio mongintai} sio’o
\textit{sia’u nV-jaok jio moN-intai} sio’o
1SG ST.RLS-come NEG AV.RLS-visit 2SG
‘I came not to visit you.’
References


