Fundamentals of Prinmi (Pumi):
A Tibeto-Burman Language of Northwestern Yunnan, China

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Unless otherwise acknowledged, this thesis is based on original research into the Prinmi language.

Signature: [Signature]
Abstract

This thesis presents a fundamental description of Prinmi, a little-known Tibeto-Burman language of southwestern China. It deals with all the core aspects of the language: phonology, morphology, syntax, semantics, and pragmatics. Major issues addressed in describing the language include: vowel lowering in Chapter 2; the suprasegmental system of Prinmi, which is identified as an accentual, or word-based, system (Chapter 3); the overlap between open lexical categories — verbs, nouns, and adjectives — in Chapter 4; compounding in Chapter 5; the fluid system of grammatical functions (Chapter 6); relative clauses in Chapter 7; the subtle distinction in terms of controllability/volitionality found in perfective, modal, and evidential clitics (Chapter 8); a variety of auxiliary verbs (Chapter 9); 'clause-chaining sentences' in Chapter 10; 'Double-verb Predicate' (verb serialization) and causativity in Chapter 11; and information structure in Chapter 12.

Two linguistic theories are adopted in parts of the description: Natural Semantic Language (see e.g. Wierzbicka 1996) and Role and Reference Grammar (see e.g. Van Valin & LaPolla 1997). However, the description is not set in any theoretical framework and does not concern testing of any theories.

In the course of this study, several important linguistic concepts are clarified with explicit definitions. Working definitions are proposed for the following: accentual system, sentence, verb serialization, and topic-comment construction.
# Contents

Acknowledgement x  
Convention xii  

1. Preliminary  
   1.1 The Pumi people: a brief ethnography  
      1.1.1 Origin and history of migration 2  
      1.1.2 Religion 3  
      1.1.3 Relation with other nationalities 3  
      1.1.4 Multilingualism and language attitude 4  
   1.2 Overview of the Prinmi language 5  
      1.2.1 Previous works 5  
      1.2.2 Genetic affiliation and Varieties of the language 5  
      1.2.3 Typological characteristics 6  
   1.3 Fieldwork settings 6  
      1.3.1 The communities 6  
      1.3.2 Consultants and Data 7  
   1.4 Goal and Orientation 8  
   1.5 Presentation of examples 9  
      1.5.1 The pinyin-based orthography 10  

2. Segmental Phonology 13  
   2.1 Consonants 13  
      2.1.1 Plosives 14  
      2.1.2 Fricatives 14  
      2.1.3 Nasals, Laterals, and Rhotics 15  
      2.1.4 Complex consonants 16  
      2.1.5 Retroflexion 17  
   2.2 Glides 19  
   2.3 Vowels 20  
      2.3.1 Monophthongs 20  
         2.3.1.1 Front vowels 21  
         2.3.1.2 Central vowels 21  
         2.3.1.3 Back vowels 22  
      2.3.2 Complex vowels: diphthongs and triphthongs 23  
      2.3.3 Vowel lowering 25  
   2.4 The syllable 28  
      2.4.1 Syllable structure 29  
      2.4.2 Phonotactics 31
2.5 Segmental changes
  2.5.1 Changes on vowels
    2.5.1.1 Centralization of vowels
    2.5.1.2 Vowel desyllabification
    2.5.1.3 Nasalization
    2.5.1.4 Glide epenthesis
  2.5.2 Changes on consonants
    2.5.2.1 Voicing / Aspiration change
    2.5.2.2 Glottalling
    2.5.2.3 Change of voiceless nasals
    2.5.2.4 Trill substitution

2.6 Summary

3. The Suprasegmentals
  3.1 Surface tones on monosyllabic words
    3.1.1 Suprasegmental contrasts in citation forms
    3.1.2 The falling tone versus the high tone
      3.1.2.1 Perceptual tests
      3.1.2.2 Some acoustic properties
    3.1.3 The contrasting nature of the suprasegmentals
  3.2 Tones on polysyllabic words
    3.2.1 Disyllabic words
    3.2.2 Trisyllabic words
    3.2.3 Quadrisyllabic words
  3.3 An accentual analysis
    3.3.1 Two suprasegmental parameters
    3.3.2 Suprasegmental changes
      3.3.2.1 Major types of change
      3.3.2.2 Changes in prefixation
      3.3.2.3 Changes in reduplication
      3.3.2.4 Changes in compounding
      3.3.2.5 Changes in short phrases/clauses
      3.3.2.6 Changes in clitic groups
    3.3.3 The suprasegmental of postpositions
  3.4 Conclusion

4. Lexical Categories
  4.1 Relation between lexical categories: an overlapping approach
  4.2 Open lexical categories
    4.2.1 Verb
    4.2.2 Noun
    4.2.3 Adjective
    4.2.4 Overlap among the open lexical categories
4.3 Closed lexical categories

4.3.1 Auxiliary verb

4.3.2 Demonstrative

4.3.3 Pronoun

4.3.4 Numeral

4.3.5 Counter

4.3.6 Ideophone

4.3.7 Adverb

4.3.8 Onomatope and Interjection

4.3.9 Postposition

4.3.9.1 Locational postpositions: ku, bo, wu, lo, & jjee

4.3.9.2 Non-locational postpositions: ni, bbo, 'on, & gi

4.3.9.3 Versatile postpositions: bbee “at/to/from” & do “on/than”

4.4 Conclusion

5. Morphology

5.1 Nominal affixation

5.2 Verb morphology

5.2.1 Directional prefixes

5.2.2 Derivation with affixes

5.2.2.1 From verbs to nouns/nominals: -ddin, -mi, and -yi

5.2.2.2 From verbs to verbs: -xxao

5.2.2.3 Deriving antonyms: ma-

5.2.3 Derivation for causative Action verbs

5.2.4 Inflection for agreement

5.3 Reduplication

5.4 Compounding

5.4.1 Lexical categories of compounds

5.4.2 Modifier-modified compounds

5.4.3 Noun-adjective compounds & Verb-complement compounds

5.4.4 Co-ordinate compounds

5.4.5 Reduplicated compounds

5.4.6 Structure of compounds

5.5 Summary

6. Grammatical Functions of Noun Phrases

6.1 Semantic roles

6.1.1 The Agent-marking and Instrumental-marking

6.2 Core vs. oblique functions

6.2.1 The core functions: S, A, P, and R

6.2.2 Types of oblique function: complement and adjunct
6.3 Grammatical relations in Prinmi 155
   6.3.1 The question of 'subject' 155
   6.3.2 The system of grammatical relations 159

6.4 Pragmatic functions 163
   6.4.1 Argument-focus 163
   6.4.2 External-topic and Internal-topic 164

6.5 Summary 169

7. The Structure of Noun Phrases 170
   7.1 The Modifier 170
      7.1.1 The modificatory clitic 171
      7.1.2 The Genitive expression 172
      7.1.3 The Restrictive expression/Relative clause 177
      7.1.4 The Spatial and the Temporal expressions 184

   7.2 Nominal clitics 186
      7.2.1 Number clitics: 're and 'zzan 186
      7.2.2 Discourse clitics 188
         7.2.2.1 nee and nia 188
         7.2.2.2 non 189

   7.3 Structure of noun phrases: a layered analysis 190

8. Grammatical Categories of Verbs 196
   8.1 Negation and Interrogativity 196
      8.1.1 Negative clitics: the general ma’, perfective mee’, & desiderative dia’ 198
      8.1.2 Interrogative clitic: a’ 200

   8.2 Aspect, Modality, and Evidentiality 201
      8.2.1 Aspect 202
         8.2.1.1 Experiential ‘duu 202
         8.2.1.2 Durative ‘non 203
         8.2.1.3 Perfective ‘si/‘sian/‘sin & mee’ 206
         8.2.1.4 Perfectivity and directional prefixes 208

      8.2.2 Modality: the hortative ‘ggi, the volitive ‘gai, & the optative ‘xo 210

      8.2.3 Evidentiality 212
         8.2.3.1 Hearsay: jii / ’jia 212
         8.2.3.2 Involvementality: ‘ron/‘ru/‘rin & ‘riu 216

      8.2.4 Temporal implication from Aspect, Modality, and Evidentiality 221

   8.3 Attitudinal clitics 222
      8.3.1 The surprisive ggia 222
      8.3.2 The suggestive ma 223
      8.3.3 The speculative ba 224
      8.3.4 The assumptive ‘me’ 224

   8.4 Grammatical categories and classification of Prinmi verbs 225
9. The Copula, Existentials & Auxiliary Verbs

9.1 The copula and existentials
9.1.1 The copula zi zi
9.1.1.1 The obligational construction -yi zi zi
9.1.1.2 The focus-presupposition construction -mi zi zi
9.1.2 Existentials
9.1.2.1 The potenti ve construction -yi xi

9.2 Deontic modals
9.2.1 The admonitive ma'ha
9.2.2 The obligative ku
9.2.3 The abilitive/permissive xxi-an

9.3 Epistemic modals
9.3.1 The skillitive/assertive yon
9.3.2 The successitive ton

9.4 The doing verbs
9.4.1 Functions of bá
9.4.2 Functions of qii: a comparison with bá
9.4.3 The semelfactive di ba/di qii

9.5 Aspectual auxiliaries: the terminative dà and the inchoative qiòn

9.6 Other auxiliary verbs
9.6.1 The purposives xii & xxii
9.6.2 The desiderative hrônhrin and the venturive wàa

9.7 Summary

10. Clauses and Sentences

10.1 Clauses
10.1.1 A layered approach to clause structure
10.1.2 Dependent clauses
10.1.3 Nominal clauses
10.1.4 Verbless clauses

10.2 Sentences
10.2.1 Structure of simplex sentences
10.2.2 Juncture and nexus: the formation of complex structure
10.2.3 Sentence as the smallest information unit
10.2.4 An explicit analysis of a complex sentence

10.3 Clause-chaining sentences
10.3.1 Clause-chaining sentences with a Core juncture
10.3.2 Clause-chaining sentences with a Clausal juncture

10.4 Summary
List of Maps and Figures

Map 1: Location of Yunnan xiv
Map 2: Distribution of Pumi and the varieties of Prinmi in Ninglang County and Lanping County xv

Figure 2-1 Configuration of Prinmi syllables 29
Figure 2-2 Distribution of vowels in terms of centralness 36
Figure 3-1 A manifestation of contrast between the high and the falling tones 52
Figure 3-2 Suprasegmental contrast between the high and the falling tones 53
Figure 3-3 A less clear contrast between the high and the falling tones 53
Figure 4-1 The overlap between the Adjective, Noun, and Verb in Prinmi 97
Figure 7-1 A layered structure of the noun phrase 190
Figure 8-1 Contrast between the involvements and the non-involvements 218
Figure 9-1 Semantic features associated with Prinmi existentials 239
Figure 10-1 The structure of simplex sentences 280
Figure 10-2 Juncture and nexus between clauses 281
Figure 10-3 The junctures of a complex sentence 289
Figure 11-1 Volitionality/Controllability of the semantic roles in causative sentences 315
Figure 12-1 An outline of cognitive states of discourse referents 333
Figure 12-2 The Topic Accessibility Scale 340
Figure 12-3 The basic structure of the topic-comment Construction 351
Figure 12-4 The structure of the Double Topic Construction 353
Figure 12-5 The structure of the Chained Comment Construction 355
Figure 12-6 The structure of the Embedded Topic-Comment Construction 357
List of Tables

Table 1-1  Data collected from the main consultant  
Table 1-2  The orthography for consonants in Niuwozi Prinmi  
Table 1-3  The orthography for vowels in Niuwozi Prinmi  
Table 2-1  The inventory of consonants in Niuwozi Prinmi  
Table 2-2  Monophthongs in Niuwozi Prinmi  
Table 2-3  The collocation of vowels and glides in Niuwozi Prinmi  
Table 2-4  Combination of consonants and vowels into syllables in Niuwozi Prinmi  
Table 2-5  Index of combinational power for consonants and vowels in Niuwozi Prinmi  
Table 3-1  Characteristics of Prinmi suprasegmentals on monosyllables in isolation  
Table 3-2  Minimal pairs of words with a suprasegmental contrast in the perceptual test  
Table 3-3  Results of the first perceptual test  
Table 3-4  Results of the second perceptual test  
Table 3-5  An acoustic comparison between the minimal pair "name" and "hair"  
Table 3-6  An acoustic comparison between the minimal pair "red" and "soy bean"  
Table 3-7  The basic contrast of suprasegmentals in Prinmi  
Table 3-8  Tonal patterns of disyllabic words  
Table 3-9  Tonal patterns of trisyllabic words  
Table 3-10  Tonal patterns of quadrisyllabic words  
Table 3-11  The overall tonal patterns of polysyllabic domains in Prinmi  
Table 3-12  Compounds with irregular tones  
Table 3-13  Some compounds elicited from the matrix Table  
Table 4-1  A comparison between Prinmi adjectives and descriptive verbs  
Table 5-1  The directional prefixes  
Table 5-2  A sample of verbs with their primary directional prefixes  
Table 5-3  Verb paradigms in Niuwozi Prinmi  
Table 6-1  Major semantic roles and their morphosyntactic markings  
Table 6-2  Basic systems of grammatical relations  
Table 6-3  Marking of explicit core arguments in three Prinmi texts
Table 8-1 Attachment patterns of the interrogative and negative clitics
Table 8-2 Combination of complex clitics
Table 8-3 Temporal implications by evidentiality, aspect, and modality
Table 8-4 Verbal properties of various types of verb
Table 9-2 Functional distribution of the two doing verbs
Table 9-1 A synopsis of basic properties of auxiliary verbs
Table 10-1 Distribution of Operators in Prinmi
Table 10-2 Syntactic characteristics of Prinmi junctures
Table 10-3 Grammatical properties of clause-chaining sentences
Table 11-1 Causative expressions in Prinmi
Table 12-1 Referring expressions and their cognitive statuses
in the Cuckoo and Golden Pheasant story
Table 12-2 Correlation between referring expressions and cognitive statuses
in Prinmi
Table 12-3 Pragmatic statuses of expressions marked by the internal topic clitic ggee
Table 12-4 The focus domains in different focus structures
Table 12-5 The various focus domains expressible by major sentence types
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Four full years have elapsed. I learned a new language and a different culture. On a more personal side, I came to understand with my own experience about 'help' —

Help is giving part of yourself to somebody who comes to accept it willingly and needs it badly. So it is that we seldom help anybody. Either we don't know what part to give or maybe we don't like to give any part of ourselves. Then, more often than not, the part that is needed is not wanted. And even more often, we do not have the part that is needed.

Norman Maclean, *A River Runs Through It and other stories.*

Once again, I thank those people who have helped.
Convention

Symbols

* syntactically unacceptable or unattested expressions
?! semantically unacceptable
# pragmatically unacceptable
< changed (diachronically) or composed (morphologically) of
: additional meaning/function (morphemic boundary unavailable)
- boundary between a stem and an affix, e.g. tea-bbón “(to be) cold”
, boundary between a host and a clitic in orthography, e.g. ဃ’hbon “(is it) cold?”
+ boundary between a host and a clitic in glosses, e.g. Q+cold “(is it) cold?”
- boundary between formatives in compounds, e.g. sian_bbón “tree”
· boundary between syllables, e.g. miao-.mdl“miaow”
→ an artificially inserted pause
--- a spontaneous lengthy pause
... part of clause/sentence omitted in an example
1/2/3 first-/second-/third-person
∅ zero anaphora
eahā original elements discarded during text transcribing/editing

Abbreviations

Ac Attitudinal clitic
Asmp Assumptive clitic
' me'
Assr Assertive auxiliary verb
yon
Cpl Copula
zzii
Ctr Counter
d/pin/ex dual/plural[inclusive/exclusive
Dc Discourse clitic
bbo; nee; nia
Dur Durative clitic
'non
exist_amg Existential for within a group of animate beings
jjìàn
exist_an Existential for animate beings
xxèe
exist_in Existential for locating inside something
güèe
exist_inan Existential for stationary/inanimate
ddìòn
exist_on Existential for locating on something
dài
Expr Experiential clitic
'duu
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExT</td>
<td>External topic clitic</td>
<td></td>
</tr>
<tr>
<td>fr.sp-</td>
<td>(directional prefix) away from the speaker</td>
<td></td>
</tr>
<tr>
<td>Foc</td>
<td>Focus clitic</td>
<td>xian</td>
</tr>
<tr>
<td>Hrt</td>
<td>Hortative clitic</td>
<td>'ggi</td>
</tr>
<tr>
<td>Idph</td>
<td>Ideophone</td>
<td></td>
</tr>
<tr>
<td>Inch</td>
<td>Inchoative auxiliary verb</td>
<td>qiōn</td>
</tr>
<tr>
<td>Inct</td>
<td>Incitee postposition</td>
<td>gi</td>
</tr>
<tr>
<td>Inst</td>
<td>Instrumental marker</td>
<td>'on, ggon, ron, ni'on</td>
</tr>
<tr>
<td>InT</td>
<td>Internal topic clitic</td>
<td>ggee</td>
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<tr>
<td>Intj</td>
<td>Interjection</td>
<td></td>
</tr>
<tr>
<td>Inv</td>
<td>Involvemental clitic</td>
<td>'ron; 'ru; 'rin</td>
</tr>
<tr>
<td>M</td>
<td>Modificatory clitic</td>
<td>'a</td>
</tr>
<tr>
<td>nInv</td>
<td>non-Involvemental clitic</td>
<td>'riu</td>
</tr>
<tr>
<td>nm</td>
<td>nominalizer</td>
<td>-mi; -yi</td>
</tr>
<tr>
<td>N</td>
<td>(general) Negator</td>
<td>ma'</td>
</tr>
<tr>
<td>NC</td>
<td>Nominal Clause marker</td>
<td>di</td>
</tr>
<tr>
<td>Nds</td>
<td>Desiderative Negator</td>
<td>dia'</td>
</tr>
<tr>
<td>Npf</td>
<td>Perfective Negator</td>
<td>mee'</td>
</tr>
<tr>
<td>Ono</td>
<td>Onomatope</td>
<td></td>
</tr>
<tr>
<td>Opt</td>
<td>Optative clitic</td>
<td>'xo</td>
</tr>
<tr>
<td>Pf</td>
<td>Perfective clitic</td>
<td>'si</td>
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<td>'sian</td>
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<td>Pps</td>
<td>Purposive auxiliary verb</td>
<td>xii; xxii</td>
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<tr>
<td>Q</td>
<td>Question clitic</td>
<td>a'</td>
</tr>
<tr>
<td>s/sg</td>
<td>singular</td>
<td></td>
</tr>
<tr>
<td>sbj</td>
<td>Subjective</td>
<td></td>
</tr>
<tr>
<td>Scst</td>
<td>Successitive auxiliary verb</td>
<td>tón</td>
</tr>
<tr>
<td>Sgst</td>
<td>Suggestive clitic</td>
<td>ma</td>
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<td>Spcl</td>
<td>Speculative clitic</td>
<td>ba</td>
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<tr>
<td>Sprs</td>
<td>Surprisive clitic</td>
<td>ggia</td>
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<td>to.sp-</td>
<td>(directional prefix) towards the speaker</td>
<td>dde(a)-</td>
</tr>
<tr>
<td>Trmn</td>
<td>Terminative auxiliary verb</td>
<td>dà</td>
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<tr>
<td>Vlt</td>
<td>Volitive clitic</td>
<td>'gai</td>
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Map 1: Location of Yunnan
Some Pumi communities in Ninglang County, Lijiang District

Some Pumi villages in Hexi Administration Village in Lanping County, Nujiang Prefecture

Map 2: Distribution of Pumi and the varieties of Prinmi in Ninglang County and Lanping County
Chapter 1.
Preliminary

Language lives in people. Before proceeding to the description of Prinmi, I will present a brief ethnography about the Pumi, speakers of the language under investigation.

1.1 The Pumi people: a brief ethnography

Pumi is one of the 55 minority nationalities officially recognized by the Chinese government. The term ‘Pumi’ is based on the autonym [pi¹⁷ mi₅⁵],¹ and has been in use since the official recognition of this people in 1960. In the past the Pumi were called ‘Xīfān’ by the Chinese. Literally meaning ‘western foreigner’, the term is found in Chinese documentary literature as early as the third century (Yan & Wong 1988: 9-10).² The Pumi are traditionally known as [bo⁵⁴] by the Tibetans, the Moso, and the Naxi, the other minority nationalities of the region.

People who identify themselves officially (e.g. in census) as Pumi are found almost exclusively in Yunnan, the southwestern province of China neighboring Burma, Laos, and Vietnam, with the most diverse populations in terms of nationalities. The two areas with a larger number of Pumi population are Lanping Pumi/Bai Autonomous County in Nujiang Lisu Autonomous Prefecture and Ninglang Yi Autonomous County in the Lijiang District (see map 1). Even in Lanping County, where the Pumi are granted a co-autonomous status, their population (7.78%) is far below the Bai (47.3%) and the Lisu (34.78%) (percentages as of 1991, Chen 1996). According to the latest census in 1990, the total population of Pumi is close to 30,000. This figure does not indicate the number of speakers of the language, however.³

On the one hand, the younger population is increasingly monolingual in the Mandarin dialect of Yunnan. The use of Prinmi is undoubtedly in decline among Pumi living in bigger cities or towns, and even in a few Pumi villages. On the other hand, in southwestern Sichuan, bordering Ninglang County, there is another group of people who

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¹ The suprasegmentals are expressed with the conventional five-point scale to indicate the relative pitch of the contour at the initial and final points.

² As an extonym, ‘Xifan’ is generally agreed to have covered several (sub)groups of closely related peoples, with the Pumi being the majority. The loose term is thus not an equivalent to Pumi.

³ While literacy is included in the census data, spoken languages of the population do not seem to be included.
speak Prinmi either as a dialect or a closely related language. They were called ‘Xifan’ in the past, but have identified themselves officially as Tibetans since the establishment of Muli Tibetan Autonomous Zone (now changed to Muli Tibetan Autonomous County) in 1953. These Tibetans number about 35,000 according to the 1990 census (data from *Muli Zangzu Zizhi Xianzhi*). Moreover, Yanyuan County of Sichuan, neighboring Muli County and Ninglang County, also has a number of Prinmi speakers. Further north, speakers of Prinmi are reported in Jiulong County (adjacent to Muli County) in Ganzi Tibetan Autonomous Prefecture, Sichuan province (Lu 1983: 90; Huang et al 1992: 637).

In this study, the term ‘Pumi’ will be restricted to the official name of the nationality, while the term ‘Prinmi’ will be used to refer to the common language spoken by the Pumi in Yunnan and those ‘Tibetans’ (or Pumi Tibetans, as suggested by some Pumi) in southwestern Sichuan.4

1.1.1 Origin and history of migration

Although the precise origin of the Pumi people is obscure, it is quite certain that they are not indigenous to Yunnan (Yan & Wong 1988 and Shi 1991). According to the traditional folklore, the Pumi have originated in the north, perhaps in an area bordering the provinces of Qinghai and Gansu in modern China. Their ancestors had led a nomadic life and traveled south until they reached the present-day border region between southwestern Sichuan and northwestern Yunnan. This region can be roughly referred to as the Great Lugu Lake area.

Except for those in Lanping, the Pumi practice cremation and believe that the spirit of the elderly deceased will be brought back to their original homeland by a sheep. As part of the traditional funeral, a route recitation is performed to instruct the sheep of the correct direction. The recited routes are not complete and vary considerably, but they agree in pointing to a certain northern destination.

One theory for the distribution of Pumi further away from the Great Lugu Lake area is associated with the emergence of the Mongolian Empire in the 13th century. It is said that many Pumi were recruited by the Mongols on their route concurring Yunnan (Yan & Wong 1988: 68-69). These Pumi soldiers and officers eventually settled down in places like Lanping nowadays. This is probably one of the major migrations of the Pumi in the relatively recent history.

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4 Among the ‘Pumi Tibetans’ and Pumi, there is a general consensus that they are one people. But the separation of their official identities is to be respected. The identification is a complicated and sensitive issue involving socio-economics and politics besides cultural and historical considerations.
1.1.2 Religion

The great majority of Pumi living in the Great Lugu Lake area believe in Lamaist Buddhism, which spread from Tibet many centuries ago. Lamaism has co-existed with an older form of faith, basically a shamanism, native to the Pumi. In their language, the shaman is called *hangüi*, and the lama is called *yeamä* (spelling based on the orthography to be introduced in §1.5.1). The two are well-integrated and do not conflict with each other. When the last practicing *hangüi* passed away in Niuwozi (the Pumi village in which I stayed), lamas were invited to hold the funeral and perform religious service for the deceased shaman.

Pumi shamanism is usually passed on from father to son in the shaman’s family. Partly because of this closed fashion of training, the shamanism is particularly susceptible to disappearance during great social changes. Nowadays most shamans are elderly without a successor while many Pumi villages no longer have any shamans.

In the past young Pumi would be selected for lama-training in local temples. Some would be sent to Lhasa for more advanced study of Lamaism. With a status parallel to that in Tibet, Pumi lamas formed an elite class. In very recent years there was a sign of renaissance for Lamaism. During my fieldwork periods, the Pumi and the Moso jointly built a new temple in Ninglang, and some young lamas were sent to some larger monasteries for religious training.

The Pumi in Lanping appear to have lost both shamanism and Lamaism.

1.1.3 Relation with other nationalities

Depending on different geographic locations, the Pumi have developed close relations with certain ethnic groups. This is generally reflected with the permission and practice of intermarriage between them.

In Ninglang County the two ethnic groups most closely intertwined with the Pumi are the Moso and the Tibetan. Note that the latter refers to Tibetans from central Tibet, not to the ‘Pumi Tibetans’ across the Yunnan-Sichuan border. The connection between the Pumi and the Tibetans is far-reaching but largely a religious one. There is no sizable Tibetan settlement in Ninglang.

Although the Moso is not an official nationality — the group is subsumed under the Naxi nationality, the differentiation maintained by the Moso and the Pumi is followed here. The Pumi share Lamaism with the Moso, which has probably underlain the cultural tie between these two groups of peoples. In spite of their difference in language (both of
Tibeto-Burman, but utterly unintelligible) and family organization,\(^5\) the intermarriage between the Pumi and the Moso is said to have a long history and the two peoples regard each other as cousins.

While the Moso (7.5\%) and the Pumi (4.3\%) represent two of the largest populations in Ninglang, the Yi (another group of Tibeto-Burman speakers) makes up 58.6\% of the total population, outnumbering all others combined (percentage based on data from the 1990 census provided in *Ninglang Yizu Zizhi Xianzhi*). The Yi people started to spread to Ninglang from Liangshan in southwestern Sichuan in the early 18th century (Wu 1985: 2). Until the Chinese liberation in 1949, the Yi had practiced slavery and abducted children from other ethnic groups. Nowadays conciliation has been made between the Yi and other nationalities. The ethnic relation is basically harmonious, but intermarriage between the Pumi and the Yi is rare.

In Lanping the Pumi have a bond with the Bai, the dominant group of the county. Their relation with the Lisu, the biggest nationality in the prefecture, is perhaps not as close as the one with the Han Chinese.

### 1.1.4 Multilingualism and language attitude

Older Pumi men often speak several languages, including Prinmi, Mandarin (of Yunnan dialect), and one other language of the other larger nationality. The additional languages are acquired through social interaction with speakers of the languages. Pumi men are more likely than Pumi women to be multilingual because women tend to take charge of household duties and seldom interact socially with other peoples.

The natural multilingualism, however, is rapidly disappearing under the current social trend. Although the rights for the use and promotion of minority languages are engrossed in the Chinese constitution, Prinmi — as a spoken language for hundreds of years — does not even have the resources to maintain its continuance. All educated Pumi are now literate in Chinese, which is increasingly seen as a key to success in the society. In both Ninglang and Lanping, some families have deliberately chosen Mandarin as the first language for their children even though the parents both speak Prinmi fluently.

The situation resembles the decline of migrants' languages in the U.S. or Australia. After one or two generations bilingual in English and a non-English language, future generations simply shift to the dominant language. In the case of Pumi communities, more and more Pumi are shifting their language from Prinmi to Mandarin. The Pumi are

\(^5\) Even in recent times, matriarchy can still be found in the Moso’s society.
generally not conscious about the endangerment of their language, or simply regard it as a natural and unavoidable consequence of development.

1.2 Overview of the Prinmi language

Having presented a general background about the Pumi, we will now take an overview of their language.

1.2.1 Previous works

Lu's (1983) *Pumiyu Jianzhi (A Brief Account of the Pumi Language)* is the first and the only published monograph about Prinmi. The work represents part of the results from a general linguistic survey on minority nationalities, a project initiated by the Chinese government in the 1950’s. Like other monographs in the series, the book follows a uniform format in outlining the phonology, vocabulary, grammar, and dialects of Prinmi, based on the variety spoken in Jinghua, Lanping County, Yunnan (see map 2). Another variety dealt with in the dialectal section is Taoba Prinmi, spoken in Muli County, Liangshan Prefecture, Sichuan. The book is fairly rich in description, but sentences seem to be elicited mainly through translation from Chinese.


All the works mentioned above are in Chinese. The only source available in English is Matisoff (1997) ‘Dayang Pumi phonology and adumbrations of comparative Qiangic’, which investigates the phonology of a Prinmi dialect from Lanping.

1.2.2 Genetic affiliation and Varieties of the language

Prinmi is a Tibeto-Burman language of the Sino-Tibetan family. Sun (1982, 1988) proposes a Qiangic branch under the Tibeto-Burman group, in which Prinmi is included. Bradley (1997: 35-37) classifies Prinmi as a member of core Qiangic under the North-Eastern Tibeto-Burman group, one of the four major groups in his new scheme of classification.

Since the inhabited area of the Pumi is widespread and geographically shared with many minority nationalities speaking distinct Tibeto-Burman languages, Prinmi is not uniform in all linguistic aspects. The varieties of Prinmi appear to be dividable into two major dialectal groups — Northern Prinmi and Southern Prinmi, with a certain degree of
difficulty in intelligibility between the two (Lu 1983: 90). Under this schema, Northern Prinmi covers all the dialects spoken in Sichuan, starting from Yongning in northern Ninglang; the remainder dialects in Yunnan are regarded as Southern Prinmi.

In terms of socio-linguistic variation, there is some evidence for 'clanalect', a clan-based variety. On careful observation, minor variations can be found in speech of Pumi from the same village but with a different clan background. The variations are mainly on suprasegmentals, segmental phonology, and certain lexical items.

Niuwozi Prinmi, the variety to be described in this study, belongs to Southern Prinmi in Lu’s scheme. Geographically the community is situated on the borderline between Southern Prinmi and Northern Prinmi (see map 2). Of the several varieties of Prinmi to be mentioned in the course of this study, Paomaping (to the south) is the closest one to Niuwozi; Xichuan (to the west) is also very close. They are all in Ninglang County.

1.2.3 Typological characteristics

Prinmi is basically a monosyllabic language. It is tonal and very productive in compounding. Its morphologic typology is close to the analytic type, with grammatical function signaled by a variety of clitics and postpositions. Inflection is marginally observed in a small number of verbs.

Prinmi is a verb-final language. With a fluid grammatical system and a discourse-based orientation, the word order of core arguments varies considerably before the verb. Clitic marking, especially on dependents, is often inconsistent and omissible.

1.3 Fieldwork settings

The description of Prinmi presented in this study is based on a corpus of data collected on two field trips between August 1994–May 1995 and February 1997–March 1997. The fieldwork was carried out in various places, including Kunming, the capital city of Yunnan province, Lanping County (with a short visit to Jinghua village) and Ninglang County. Most of the fieldwork period was spent in Ninglang County.

1.3.1 The communities

Pumi communities exist exclusively in villages. While some Pumi live in bigger cities and county seats, the number is too small to form a community. The major Pumi community in which I stayed is called ‘Niúwōzi’ in Mandarin, literally a cattle den. It is a large Pumi village, with over 500 speakers of Prinmi. It belongs to the Xīngyíngpán
Administrative Village, and is the sole Pumi community under this Administrative Village. It is also the nearest Pumi community to the county seat of Ninglang.

Situated in a valley, Niuwozi is not a traditional Pumi settlement which usually sits on the middle slopes of hills. According to the elders of Niuwozi, the village was formed only in 1930 after an upheaval in which the Yi had burned the villages of Pumi and other ethnic groups in that area. Since the outset, Niuwozi has been inhabited by Pumi from different villages. The trend continues nowadays. Niuwozi is considered to be a well-off Pumi community in Ninglang, attracting Pumi women through exogamy from as far as Yanyuan County in the north across the Yunnan-Sichuan border.

Except for a few Yi, who moved to Niuwozi very recently, all villagers speak Prinmi. Most of them, including younger women, also speak Ninglang Mandarin.

1.3.2 Consultants and Data

The Pumi encountered during the field trips come from a variety of places. Prinmi data, with varying amounts, are recorded from speakers from Dayang, Jinghua, and Sanjie (all in Lanping County); in addition to Niuwozi Prinmi, varieties of Xichuan and Yongning (all in Ninglang County) are also collected. Lijiang Prinmi is elicited for the variety spoken in Shigu. As the present study focuses on Niuwozi Prinmi; most of the data from other places have not been used.

Two important consultants from Niuwozi are Lujin and Echii, both male speakers of Prinmi with fluency also in Mandarin and Nosu (the Yi language). In addition, Lujin speaks Moso, Lhasa Tibetan, Lisu, and Naxi. He has extensive travel experience in the region. He had lived and grown up in Paomaping before his family settled down in Niuwozi around 1958.

Lujin is in his late 50’s and Echii in his mid 20’s. The age difference naturally puts them into two generations. In general Lujin’s Prinmi is more conservative; he managed successfully to avoid using Mandarin words in the recorded data whenever possible. Like other young Pumi, Echii seems to be more ready to absorb linguistic elements from Chinese.

Serving as the main consultant, Lujin has contributed a great deal of Prinmi vocabulary, a few stories, some essays, proverbs, and riddles; he has also helped with a
number of translation from Chinese stories/passages/sentences. These can be roughly
tabulated as follows:6

Table 1-1: Data collected from the main consultant

<table>
<thead>
<tr>
<th>Type</th>
<th>Title/Description</th>
<th>Length (in word)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>Word lists based on semantic groupings</td>
<td>c. 1360</td>
</tr>
<tr>
<td>Folklore</td>
<td>Deluge</td>
<td>c. 2230</td>
</tr>
<tr>
<td>Folklore</td>
<td>Cuckoo &amp; Golden Pheasant</td>
<td>c. 460</td>
</tr>
<tr>
<td>Essay</td>
<td>Zzonbba Lha</td>
<td>c. 850</td>
</tr>
<tr>
<td>Essay</td>
<td>Zaggion</td>
<td>c. 400</td>
</tr>
<tr>
<td>Essay</td>
<td>Short expository texts about cultural terms</td>
<td>c. 2570</td>
</tr>
<tr>
<td>Folklore</td>
<td>Proverbs and Riddles</td>
<td>c. 370</td>
</tr>
<tr>
<td>Story</td>
<td>Stories translated from Chinese</td>
<td>c. 1400</td>
</tr>
<tr>
<td>Passage</td>
<td>Short narratives/dialogues translated from Chinese</td>
<td>c. 1200</td>
</tr>
<tr>
<td>Sentence</td>
<td>310 sentences translated from Chinese</td>
<td>c. 4300</td>
</tr>
</tbody>
</table>

Table 1-1 represents the core of recorded data used in this study. Not included are
materials gathered from working sessions and from other speakers of Niuwozi. The
largest text is the Deluge story, about 15 minutes long. Another important text is
Zzonbba Lha, pertaining to the most respected god in Pumi’s religion. The transcription
of this text underwent two revisions, providing a good opportunity for observing subtlety
in style from spoken Prinmi to written Prinmi.

1.4 Goal and Orientation

The goal of this study is to present a fundamental description of Prinmi. It is
intended as a first step towards a comprehensive reference grammar of the language. The
description covers almost all important aspects of Prinmi. With such a wide scope, a
thorough treatment of issues addressed in the description is not possible. No conclusive
analyses will be claimed for Prinmi in this study. Even though a few topics are discussed
at greater length, further investigation is necessary to arrive at a definitive analysis.

As the study is descriptively-oriented, it is not set in any theoretical framework.
Linguistic theories are only employed to elucidate complicated phenomena. The Prinmi
data have not been used to test against any theories, which is beyond the scope of this
study. Two linguistic theories adopted in some parts of the description are Wierzbicka’s

6 Numbers of words in Prinmi texts and sentences are counted by computer. As some
discourse clitics are written separately, the numbers shown in the table are higher than
the actual ones.
'Natural Semantic Metalanguage', and 'Role and Reference Grammar' developed initially by Foley and Van Valin. The former is essentially a semantic theory; the recent advance in the theory can be found in Wierzbicka (1996). Since Foley & Van Valin (1984), Role and Reference Grammar has undergone some revision and refinement in Van Valin (1993) and Van Valin & LaPolla (1997).

The description is organized as follows: the rather complicated phonology of Prinmi is described in two chapters — Chapter 2 for the segmental phonology and Chapter 3 for the suprasegmentals. Lexical categories and morphology are addressed in Chapter 4 and Chapter 5 respectively. The next two chapters concern the noun phrase: Chapter 6 deals with grammatical functions of noun phrases and Chapter 7 examines the structure of the noun phrase. Grammatical categories of verbs are discussed in Chapter 8. Chapter 9 describes the copula, existentials and auxiliary verbs. The structure of clauses and sentences are analyzed in Chapter 10. Chapter 11 examines major types of complex predicate. The pragmatic aspect of Prinmi is investigated in Chapter 12 before the description concludes with Chapter 13.

1.5 Presentation of examples

Except in the two phonology chapters, a pinyin-based orthography is used for spelling Prinmi. Phrases, clauses, and sentences are exemplified with Prinmi orthography, interlinear glosses, and English translation. For instance,

(1.1) a Eqiän dė mǐ ggee piqi ᕜa kię bō ma'qión.  
Eqian this person InT temper 1s heart under N+open  
Eqian this guy, (his) temper I don't like.

The English translation is intended only as an approximation to the meaning of a Prinmi expression. Cases where a subtle meaning or delicate structure in Prinmi can be directly and precisely reflected through translation into English are few. Although traits of information structure of the source language are maximized (often resulting in awkward English), the English translation does not provide a legitimate basis for analyzing the meaning and/or structure of a Prinmi construction. Attempts to infer some potential contrast in Prinmi based on English translation in the examples alone must be made in great caution. Furthermore, an identical Prinmi sentence may have slightly different English translations: a more idiomatic English translation may be found in one

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7 It is often dangerous to base an analysis on such indirect sources as English glosses, cf. Pawley’s (1993: 102) discussion of the artifact of English translation on Kalam, a Pupuan language. For general problems in translating Southeast Asian languages into English, see Becker (1995).
section but an awkward one is used in another when a peculiar Prinmi construction in the sentence is examined.

An example may not start with a capital letter if it is an extraction from a non-initial part of a sentence. Consequently, the English translation will also start with a small letter. Supplementary elements that are not expressed explicitly in Prinmi are placed within parentheses in English translation. Loans from Mandarin in Prinmi examples are italicized, as is the word for “temper” in (1.1). We now turn to the details of the Prinmi orthography.

1.5.1 The pinyin-based orthography

Motivation for creating an orthography goes beyond the practical consideration for ease of typesetting. The least contribution a descriptive linguist can make to the community speaking a minority language without a writing system is to devise an orthography for their language. Under the current circumstances of the Pumi, a viable Prinmi orthography must be based on the Mandarin pinyin scheme, in spite of certain defects of the pinyin. Based on Niuwozi Prinmi, the devised orthography consists of forty consonants and thirty-one vowels. These are tabulated alongside their phonemic transcription in IPA in Table 1-2 and Table 1-3 below respectively.8

| Table 1-2: The orthography for consonants in Niuwozi Prinmi |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| b   | p   | p' | bb | b   | m   | m   | hm | m   |
| d   | t   | t' | dd | d   | n   | n   | hn | n   |
| g   | k   | k' | gg | g   | h   | h   | hh | y   |
| j   | tʃ | tʃ' | jj | dʒ | x | s | xx | ʒ |
| zh  | ʈʂ | ʈʂ' | zzh | dʐ | sh | s | ssh | ʐ |
| z   | ts  | c  | ts' | zz | dz | s  | s  | ss | z |
| br  | pʰ | pr | pʰ' | bbr | bʱ | r  | ɾ | hr  | ɾ |
| gr  | k¹ | kr | k¹' | ggr | gʰ | l  | l  | lh | ɭ |

The following are some general rules for the spelling of Prinmi consonants:

a) Reduplication of a letter indicates a voiced consonant.

b) Voiceless sonorants start with an h, followed by the letter for the corresponding voiced counterpart.

8 The IPA used in the thesis conforms to the 1996 revised version.
c) A final \( r \), except in \( hr \), indicates a kind of complex consonant — retroflex plosives.

d) Identical signs between Prinmi and Mandarin consonants represent the same or very similar sound. Attention should be paid to \( j, q, \) and \( x \), which are palato-alveolars in Prinmi rather than alveo-palatals as in standard Mandarin.

Even with the addition of an umlaut, there are only six letters available for representing vowels. To solve the problem, the use of two letters for a monophthong is unavoidable. Consequently, some diphthongs are spelt with three letters if a digraph is involved.

Table 1-3: The orthography for vowels in Niuwozi Prinmi

<table>
<thead>
<tr>
<th>( i )</th>
<th>( iy )</th>
<th>( in )</th>
<th>( i)</th>
<th>( ee )</th>
<th>( e )</th>
<th>( iii )</th>
<th>( y )</th>
<th>( iun )</th>
<th>( iy )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ii )</td>
<td>( uu )</td>
<td>( u )</td>
<td>( u )</td>
<td>( o )</td>
<td>( o )</td>
<td>( on )</td>
<td>( õ )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( e )</td>
<td>( ea )</td>
<td>( æ )</td>
<td>( an )</td>
<td>( ë )</td>
<td>( aa )</td>
<td>( æ )</td>
<td>( å )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( uan )</td>
<td>( wå )</td>
<td>( uea )</td>
<td>( wə )</td>
<td>( wai )</td>
<td>( wəj )</td>
<td>( waa )</td>
<td>( wə )</td>
<td>( wə )</td>
<td></td>
</tr>
<tr>
<td>( iu )</td>
<td>( ju )</td>
<td>( iea )</td>
<td>( jə )</td>
<td>( ian )</td>
<td>( jë )</td>
<td>( ia )</td>
<td>( jə )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( iiee )</td>
<td>( uqe )</td>
<td>( üe )</td>
<td>( qe )</td>
<td>( ùan )</td>
<td>( qe )</td>
<td>( ian )</td>
<td>( qe )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( ao )</td>
<td>( ew )</td>
<td>( ai )</td>
<td>( æj )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The orthography for Prinmi vowels is much more opaque than that for consonants. Familiarity with the fifteen monophthongs on the first three rows of Table 1-3 ought to help recognize the other vowels. The biggest shortcomings of Mandarin pinyin are the spelling \( ian \) for \([jë]\) and \( ùan \) for \([që]\). Some general rules for the spelling of Prinmi vowels are:

a) Vowel letters, \( a, e, i, \) and \( u \), are duplicated to double the number of signs available. Repeated vowel letters are all oral monophthongs. (The only oral monophthong written with two different letters is \( ea \).)

b) All nasal vowels end with an \( n \).  

c) Glides are represented by \( i, u, \) and \( ü \), with an exception in the falling diphthong \( ao [ew] \).

d) The sign \( an \) stands for \([ë]\) by itself. It becomes \([ë]\) when following a front vowel letter \((i\) or \( ü)\), hence \( ian [jë]\) and \( ûan [që]\). It represents \([â]\) when following a back vowel letter, viz. \( uan [wå]\).

As in Mandarin pinyin, two special glide letters \( y \) and \( w \) are employed in Prinmi orthography for syllables without an initial consonant:
a) If no consonant precedes the front monophthongs i, in, and ee, the letter \( y \) is inserted to indicate a palatal glide.

b) For rising diphthongs starting with i, the letter is replaced by \( y \) in the absence of an initial consonant.

c) The letter \( y \) is inserted as a dummy before syllables with an initial \( ù \).

d) The letter \( w \) is inserted when no consonant precedes the monophthongs u and on.

e) For complex vowels beginning with u, the letter is changed to \( w \) in the absence of an initial consonant.

Finally, the Prinmi orthography also includes three diacritics for suprasegmental marking. The surface tone of a syllable is indicated with a diacritic placed over a vowel. Four surface tones can be distinguished as follows:

\[
\begin{array}{cccc}
\text{â} & \text{à} & \text{á} & \text{a} \\
\text{high level} & \text{high falling} & \text{rising} & \text{low level}
\end{array}
\]

The bold lines in the following show some Prinmi sentences written in the orthography.

(1.2) Rueama dâi wū siankuá dâi, mēe zzii?

Ruea_ma dâi wū sian_kuá dâi, mēe zzii?

Wooden bowls on the big road, what Cpl

Wooden bowls on the big road, what is it? (Riddle)

(1.3) Dēahni ruu qiį’xo bbo sshôn nî dia’ziān; deazi rūu qiį’xo bbo chii nî mēa’diā’zhee.

Dea_hni ruu qiį’xo bbo sshôn nî dia’ziān;

one_day well-being do+Opt ExT sheep two Nds+drag

dea_zî rūu qiį’xo bbo chii nî mēa’diā’zhee.

one_life well-being do+Opt ExT wife two Nds+look for

(If you) want one day’s well-being, don’t drag two sheep; (if you) want one life’s well-being, don’t look for two wives. (Proverb)

The general rules for punctuation and capitalization, as used in English, apply. A borrowing from the practice of French orthography is the use of apostrophe for marking clitics, as seen in (1.3). While discourse clitics are written separately from their hosts, most other clitics are indicated by the apostrophe. This punctuation helps to enhance the readability of Prinmi texts and indicates the clitic status of a morpheme. Moreover, it also helps to differentiate some otherwise indistinguishable homophonous clitics/words.
Chapter 2.

Segmental Phonology

This chapter presents a general description of the segmental phonology of Niuwozi Prinmi. The phonemic system will be built upon the dialect spoken by the main consultant. We will start with the basic segments: consonants, glides, and vowels. Then the syllable structure as well as phonotactics of the language is addressed. The chapter closes with a discussion on some segmental phonological processes.

2.1 Consonants

There are forty consonants in Niuwozi Prinmi: nine plosives, eight fricatives, four nasals, two laterals, two rhotics, and fifteen complex consonants with a double articulation. The reliance on the feature of voicing for contrast is a salient characteristic of Prinmi consonants. Except for the two fricatives /y/ and /h/, all the consonants stand in contrast with voiced versus voiceless. Furthermore, the plosives and the complex consonants show a three-way distinction in terms of voicing and aspiration. The total inventory of phonemic consonants is provided below in IPA:

<table>
<thead>
<tr>
<th>Bilabial</th>
<th>Dental</th>
<th>Post-alveolar</th>
<th>Retroflex</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plosive</td>
<td>b p p'</td>
<td>d t t'</td>
<td></td>
<td>g k k'</td>
<td></td>
</tr>
<tr>
<td>Fricative</td>
<td></td>
<td>z s</td>
<td>j</td>
<td>z $</td>
<td>y h</td>
</tr>
<tr>
<td>Nasal</td>
<td>m m</td>
<td>n n</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td>l ʃ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhotic</td>
<td>ɾ ɾ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complex</td>
<td>dz ts ts'</td>
<td>dz tʃ tʃ'</td>
<td>dz ts ts'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conson.</td>
<td>b ɾ p ɾ p'</td>
<td>g ɾ kʃ kʃ'</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Before proceeding to the details of these consonants, I would like to introduce a phonological feature that divides Prinmi consonants into two groups: Those able to occur with the unrounded palatal glide /j/ belong to the ‘J-group'; those incompatible with the unrounded palatal glide /j/ belong to the ‘J-group';

---

1 Following convention, phonemic segments are indicated by a pair of slashes while phonetic representation is placed within a pair of brackets. Phonemic representation of words is generally left unmarked.
glide are members of the ‘non-J-group’. With eighteen members, the non-J-group is smaller in number than the J-group; they are placed in containment in Table 2-1. As can be seen, voicing aside, the eighteen consonants of the non-J-group either contain an [S] sound or a retroflex. The bifurcation of the consonants into these two phonological groups is useful for the study of Prinmi vowels, as will become evident in §2.3.

2.1.1 Plosives

The plosives involve three places of articulation: bilabial, dental, and velar. An additional set of uvular plosives exist as allophones of the velar set. The uvulars are realized when the velars occur before the low back vowel /a/, as in (2.2). The three-way contrast among a set of plosives is achieved with voiced vs. voiceless unaspirated vs. voiceless aspirated (the capital letter at the upper right of a syllable indicates a surface tone: F for falling, R for rising, H for high level, and L for low level. See Chapter 3 for details):

(2.1) a  biF  to expand  piR  belly  p’iR  to slant
       bjëR  to fly  pjëR  woods  p’jëR  to flee
b  diF  to cast  tiR  to put  t’i1-uH  the faraway
   djëR  earth  tjëH  to get rich  t’jëR  to drink
   c  giF  debt  kiR  to sell  k’iF  lock
      gjëF  to cut  kjëR  to estrange  k’jëR  to give

(2.2) a  göL-gaH  to lick  [göL-gaH]
   b  k’aR  to bite  [qaR]
   c  k’’aR  bitter  [q’aR]

2.1.2 Fricatives

The eight fricatives can be grouped into four pairs. The dentals, the post-alveolars, and the retroflexes represent three natural pairs with a minimal contrast of voicing. The velar and the cavity fricatives are left to form a pair of their own. The retroflex fricatives are articulated at about the same place as the post-alveolar ones. The distinction between the two pairs rests with the gesture of the tongue during articulation. The voiced post-alveolar fricative, but not the voiceless one, is palatalized when it precedes a high front vowel or a palatal glide, as shown in (2.3)b. The cavity fricative has the allophone [ɸ] when it occurs with the high back vowel /u/, as in (2.3)d. The following exemplifies the four pairs of fricatives:

(2.3) a  göL-gaH  to lick  [göL-gaH]
   b  k’aR  to bite  [qaR]
   c  k’’aR  bitter  [q’aR]
2.1.3 Nasals, Laterals, and Rhotics

The nasals have two places of articulation: bilabial and dental. The contrast between voiced vs. voiceless aspirated is found at both positions. Below are some of the (near) minimal pairs:

(2.4) a mjuR soldier  njuR gadfly
     muR corpse  njuR to suffocate
b njuR winnowing tray  njuR sister (of male speakers)
     noF opposite  njuR difficult to understand

The dental nasals may be rendered as palatal nasals when they precede the palatal glide /j/, leading to a kind of free variation:

(2.5) a njuR leather bag  [njuR] or [njuR]
     njeH copper  [njeH] or [njeH]

(2.6) a njuR mouth  [njuR] or [njuR]
     njeF the ear of grain  [njeF] or [njeF]

The pair of laterals are articulated at the back of the upper teeth. The two differ in manners of articulation: one is ordinary lateral and the other with a certain degree of fricative-like friction, hence lateral fricative. Furthermore, they also diverge in regard to voicing. The (near) minimal pairs for them are shown in (2.7). Restrictive allophones are found with both laterals, as illustrated in (2.8) and (2.9) respectively.

(2.7) a l3R to stare  l3R decade (used in age expressions)
     ljvHljvH youngest paternal uncle  ljvHljvH a kind of shrub ('hongzi' in Mandarin)

(2.8) a t5’jaR idea  [t5’jaR] or [t5’jaR]
     p’oeHbH butterfly  [p’oeHbH] but ?[p’oeHbH]
As seen in (2.8)a, the lateral may become a retroflex lateral with the tip of the tongue slightly turned upward. As for the lateral fricative, it can change to a cavity fricative, as in (2.9)a. Based on the contrast shown in (2.8)b and (2.9)b respectively, it is certain that these variations for the laterals are not free, the conditions, if such exist, are unclear.

The pair of rhotic consonants in Niuwozi Prinmi are produced at the dental ridge with a retroflex tongue. There is a distinction between voiced and voiceless aspirated rhotics, e.g.

(2.10)a 13R sickle 13R dew
b 10R chicken 10R forehead
c 18R to get stuck 18R to laugh
d 16R stem 16R pine torch

Unlike the voiceless nasals which are found in other known Prinmi dialects of Lanping County and Sichuan Province, the voiceless rhotic has not been reported in any of these dialects. However, Niuwozi is not alone in having the voiceless rhotic. At least two other varieties of Prinmi in southern Ninglang — Xichuan and Paomaping — also have this unusual consonant. There is a rather regular correspondence between the voiceless rhotic in Niuwozi and a voiceless fricative — either post-alveolar or retroflex — in other dialects that lack it. On occasions, the main consultant produced the voiceless rhotic with a sibilant friction, virtually rendering it as a fricative allophone. For instance,

(2.11) goR-1uR-1eH to clean up by wiping [goR-1uR-1eH]

On repetition in a careful manner, however, the allophonic fricative does not arise; the consonant remains an approximant.

2.1.4 Complex consonants

A complex consonant is characterized with an additional articulatory feature. The fifteen complex consonants in Niuwozi Prinmi can be divided into two groups: three

2 The Lanping varieties include Lu’s (1983) Jinghua Prinmi, Matisoff’s (1997) Dayang Prinmi and Sanjie Prinmi (from my own fieldnotes). The Sichuan varieties include Lu’s (1983) Taoba Prinmi (Muli County, Liangshan Prefecture) and a dialect in Jiulong County (Ganzi Prefecture), as outlined in Huang et al (1992).

sets of affricates and two sets of retroflex plosives. The affricates are produced at two places: dental and post-alveolar, with a combined manner of articulation — plosive plus fricative. The retroflex plosives have their places of articulation at bilabial and velar, with a simultaneous articulatory gesture of the tongue bent backward. Parallel to the plain velar plosives, the retroflex velar plosives also have a set of uvular allophones (see Ex.(2.17)a below). All the complex consonants show a three-way contrast of voicing and aspiration within each set. Given in (2.12) are examples of the affricates, and in (2.13) examples of the retroflex plosives.

(2.12)a

<table>
<thead>
<tr>
<th>Romanized</th>
<th>Chinese</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>dzuF</td>
<td>itchY</td>
<td>son</td>
</tr>
<tr>
<td>dzjeF</td>
<td>eat (1:sg)</td>
<td>to hit (the mark)</td>
</tr>
<tr>
<td>b</td>
<td>true</td>
<td>child</td>
</tr>
<tr>
<td>d³jeH</td>
<td>(height)</td>
<td>glutinous</td>
</tr>
<tr>
<td>c</td>
<td>to become</td>
<td>privity</td>
</tr>
<tr>
<td>d³jeF</td>
<td>bastard</td>
<td>to recall</td>
</tr>
</tbody>
</table>

(2.13)a

<table>
<thead>
<tr>
<th>Romanized</th>
<th>Chinese</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>b³oF</td>
<td>personal enemy</td>
<td>hedgehog</td>
</tr>
<tr>
<td>b³o³o³R</td>
<td>roasted barley flour</td>
<td>Year of Monkey</td>
</tr>
<tr>
<td>b</td>
<td>break (3rd person)</td>
<td>to sing</td>
</tr>
<tr>
<td>g³o³R</td>
<td>star</td>
<td>gall</td>
</tr>
</tbody>
</table>

When the retroflex affricates occur before the high front vowel /i/, they are realized as retroflex plosives, e.g.

(2.14)a

<table>
<thead>
<tr>
<th>Romanized</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>m³hz³f</td>
<td>charcoal</td>
</tr>
<tr>
<td>m³ht³l</td>
<td>village</td>
</tr>
<tr>
<td>t³j³-t³f</td>
<td>to wake</td>
</tr>
</tbody>
</table>

2.1.5 Retroflexion

In a broad sense, retroflexion refers to the articulation of a consonant involving the tongue to be bent upward. Niuwozi Prinmi has a number of consonants which fall within this definition. These include retroflex plosives and retroflexes. The latter are phonetically parallel (or very close) to the retroflexes found in standard Mandarin. The articulating nature of these sounds will be an interesting topic for detailed phonetic study (cf. Ladefoged & Maddieson 1996 for work on Mandarin retroflex fricatives and Liao & Shi 1994 for work on /ɻ/ in Mandarin). Below we will only focus on the retroflex plosives.

Niuwozi Prinmi has six retroflex plosives, divisible into bilabial and velar sets. Unlike clusters such as /b1/, /p'1/, or /l1/, /k'1/ in English, the retroflex plosives in Niuwozi Prinmi have a rather weak retroflexion. The rhotic element does not behave like
an independent segment either. For example, a retroflex velar plosive is realized as its uvular allophone when the retroflex plosive precedes the vowel /a/, subject to the same condition for the ordinary velar plosives, as shown in (2.17)a. Moreover, the voicing of the rhotic element depends on that of the plosive. After a voiceless plosive, it is voiceless. As such, the rhotic in the retroflex plosives is considered as a sort of secondary articulation rather than a real segment. The following examples show a contrast with the retroflex plosives vs. the plain plosives:

\[(2.15)a\]  
\[b\bar{ö}l\] roasted barley flour  
\[b\bar{o}\] cold

\[b\pi\hat{u}\] Year of Monkey  
\[\pi\hat{e}\] belly

\[c\pi'\bar{i}\] millet beer  
\[p'i\hat{e}\] to slant

\[(2.16)a\]  
\[g\bar{u}\hat{e}\] break (3rd person)  
\[g\hat{u}\hat{e}\] tall/high

\[b\k\hat{i}\] to sing  
\[k\hat{e}\] to sell

\[c\k'\bar{a}\] to shoot  
\[k'\bar{a}\] bitter

Despite the existence of (near) minimal pairs for retroflexion, the retroflex plosives are shaky and are frequently simplified to plain plosives, especially in the speech of younger speakers:

\[(2.17)a\]  
\[k\bar{a}\] to shoot  
\[[q'\bar{a}\]]\] or \[[q'\bar{a}\]]\]

\[b\k\bar{u}\] to dig  
\[[k'\bar{u}\]]\] or \[[k'\bar{u}\]]\]

\[c\bar{b}\] root  
\[[b'\bar{b}]\] or \[[b'\bar{b}]\]

\[d\pi'\hat{m}\] Pumi  
\[[\pi'\hat{m}\]]\] or \[[\pi'\hat{m}\]]\]

\[e\k\hat{i}\] to sing  
\[[k'\hat{i}]\] but ??[ki\hat{e}]\]

Notice that /k\bar{a}\]/ “to shoot” loses its contrast to /k'\bar{a}\]/ “bitter” when the retroflex plosive is simplified. While instances like (2.17)d could suggest a ‘sloppy’ manner for the reduction of the rhotic element (note also the loss of nasality on the vowel), the simplification is not observed on certain words such as (2.17)e.

In addition to the variation between retroflex and plain consonants seen in (2.17), the velar set of retroflex plosives sometimes exhibit another kind of variation: between a rhotacized central vowel and a plain central vowel. This is feasible through a ‘transfer’ of the rhotacity from the consonant to the vowel. Consider the different realizations of the retroflex velar plosives in the following:

\[(2.18)a\]  
\[k\bar{o}\] foot  
\[[k'\bar{o}]\] or \[[k'\bar{o}]\]

\[b\bar{o}\] star  
\[[\bar{o}\bar{e}]\] or \[[\bar{o}\bar{e}]\]

It should be stressed that the variations related to retroflex plosives cannot be attributed simplistically to generation differences, for they exist in the speech of both
generations. The two diverge in terms of tendency and frequency for simplification, with younger speakers more likely to have plain plosives in lieu of the retroflex ones.

2.2 Glides

Three glides can be distinguished in Niuwozi Prinmi: the unrounded palatal /t/, the rounded palatal /ʈ/, and the rounded velar /w/. The two rounded glides are almost in complementary distribution. The palatal one /ʈ/ does not occur with back vowels; whereas the velar one /w/ tends to associate with non-front vowels. The two are considered phonemic on account of the following (near) minimal pairs of words:

(2.19) a quR tile
b kwuF to dare

c gwuF to ruin

Elsewhere no solid contrast is found between the two glides. On the contrary, a free variation between them sometimes occurs in the main consultant’s speech, e.g.

(2.20) a qeH bear
b ts’qeF to return (money)
c squR lead

The variation is probably attributed to his exposure to a variety of Prinmi. Take the word for “bear” in (2.20)a for example. The main consultant, like other speakers from Niuwozi, has the rounded palatal glide in it. He is actually aware of the difference of the word between their dialect and those of northern Ninglang such as Yongning Prinmi, which has /gwéH/. For some reason, he had changed the glide to the velar one when I returned for my second field trip about one and a half years later. It is quite certain that these two glides are historically related to each other. The palatal one /ʈ/ is most likely to have arisen from co-occurrence with front vowels (cf. Matisoff 1997 for the case of Dayang Prinmi and Lin (1993: 21) for Jiarong).

In regard to alignment in a syllable, the glide will be treated as part of the rhyme rather than an element in a complex consonant. There are two reasons for this treatment. The first one is based on economy. If we align the glides to the consonants, with the
palatal glide /j/ alone, we need to generate twenty-two complex consonants for the consonants in the J-group. The number greatly exceeds the sum of the diphthongs to be formed by the three glides. The other reason is out of consideration for the verbal inflection of Prinmi. As will be discussed in §5.2.4, verb agreement is achieved through vowel change on verb roots. The paradigm may involve a diphthong for some verbs. For a brief illustration, consider the following:

(2.21)  
<table>
<thead>
<tr>
<th>Root</th>
<th>1 singular</th>
<th>2 singular</th>
<th>1/2 plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>paF</td>
<td>to do</td>
<td>pjēF</td>
<td>puF</td>
</tr>
</tbody>
</table>

If we were to treat the palatal glide in the diphthong as part of a complex consonant, we would miss the simple generalization in terms of rhyme change for verb paradigm. In the light of these, the three glides in Niuwozi Prinmi are to be aligned with vowels.

### 2.3 Vowels

The vowel inventory is also rich in Niuwozi Prinmi, with thirty-one vowels. These include eleven oral monophthongs, four nasal monophthongs, four nasal diphthongs, eleven oral diphthongs, and one oral triphthong. In this section, we will first look at the monophthongs. Following a general description of the complex vowels, we will address a height variation found with most non-low vowels.

#### 2.3.1 Monophthongs

The fifteen monophthongs of Niuwozi Prinmi are charted in Table 2-2. The vowels are organized according to their height, frontness, roundedness, and articulatory cavity.

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Oral</td>
<td>i</td>
<td>̯</td>
<td>u</td>
</tr>
<tr>
<td>High Nasal</td>
<td>i</td>
<td>̯̯</td>
<td>u</td>
</tr>
<tr>
<td>Mid High Oral</td>
<td>e</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Mid Nasal</td>
<td></td>
<td></td>
<td>o̯</td>
</tr>
<tr>
<td>Mid</td>
<td>ə</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Low</td>
<td>ɜ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Oral</td>
<td>ɐ</td>
<td></td>
<td>a</td>
</tr>
<tr>
<td>Low Nasal</td>
<td>ɐ̯</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A five-place distinction is adopted for the vowel height in the system. The complexity of vowels in Niuwozi Prinmi rivals that of consonants. In addition to the height variation
mentioned above, a few vowels can have allophones through glide insertion/deletion. That is, they may alternate between a monophthong and a diphthong, or between a diphthong and a triphong.

23.1.1 Front vowels

The front vowels in Niuwozi Prinmi occupy only the high and mid high positions. The ordinary heights of these vowels are similar to that of /i/ and /e(j)/ in English or French. The four high vowels can be distinguished with the features of roundedness and nasality. The vowel /y/ is phonetically realized with a palatal off-glide, i.e. [yj]. It is produced with a clear lip movement from round to spread. Its nasal counterpart, however, is a true monophthong, of marginal use in the language (see §2.4.2). Some examples of the high front vowels are:

(2.22) a /i/ tʃ³i⁸ religion dɪ³ float
b /y/ tʃ⁹y⁸⁹ good dɪ⁹ cast (3rd person)
c /i/ ʃi⁸ sneeze dɪ⁹ cloud
d /y/ ʃj̯⁸ to mold tʃj̯⁹ container

The mid high vowel /e/ can be realized allophonically as the diphthong [je] when it follows consonants from the J-group (i.e. those compatible with a palatal glide). Consider the following:

(2.23) a J-group me⁹ [mje⁹] what le¹-le⁸ [lje¹-lje⁸] folk song
b J-group dʒe⁸ [dʒje⁸] tea tʃe⁸rɔ⁹ [tʃje⁸rɔ⁹] hungry
c non-J-group xe⁹ [xe⁹] to dip se⁹lwe⁸ [se⁹lwe⁸] pear

While the majority consonants from the J-group tend to occur with the diphthong allophone of /e/, as in (2.23)a, the post-alveolar ones, shown in (2.23)b, represent exceptions to this. For the five post-alveolar consonants, speakers of Niuwozi Prinmi constantly maintain the vowel as a monophthong, in contrast to the strong tendency of rendering the vowel as a diphthong with the other members of the J-group. As for consonants outside the J-group, the mid high vowel does not have any allophone, as shown in (2.23)c.

23.1.2 Central vowels

Central vowels outnumber front and back vowels in Niuwozi Prinmi. The six central vowels mainly differ in terms of height, occupying four spots: high, mid, mid low, and low. The pair of high vowels, /i/ and /u/, are distinguished by roundedness, and the pair of low vowels, /ə/ and /ø/, by nasality. The remaining two, /a/ and /ɔ/, may be paired together. The opposition in the last pair is synchronically phonemic, as shown
by the minimal pairs in (2.25). However, many vowels can be reduced to schwa in rapid speech (cf. §2.5.1.1).

(2.24)

(a) /i/  t'iR  sweet  giF  to harvest (firewood)
(b) /u/  t'uF  milk residue  guF  old

(2.25)

(a) /ø/  møF  sky  pøF  hedgehog
(b) /ɔ/  mɔF  bamboo  pɔF  antelope

(2.26)

(a) /u/  dzuF  (of thread in garment) become loose  tuR  to laugh
(b) /ø/  dzøF  damp  tuH  long

The high central vowel /i/ is remarkable in having three kinds of fricative vowels as its allophones. The fricative vowels are homorganic with the preceding fricative segment, including that found in an affricate:

(2.27)  siR  [szR]  to die  dzsiF  [dzszF]  to eat  ts'iF  [ts'szF]  goat

(2.28)  siF  [szF]  to go  zsiF  [zszF]  to come  tsiF  [tstszF]  water

(2.29)  siF  [szF]  meat  zsiF  [zszF]  the right  tsiF  [tstszF]  muntjac

The central vowel /u/ is sometimes pronounced with a low degree of roundedness in certain words, e.g.

(2.30)

(a) buH  [buczH]  (of grain) heap  b  kuH  [kucuzH]  horn

The reduction on roundedness is somewhat arbitrary. Not only is there no phonological condition for its occurrence, the same morpheme may contain a variant with a less rounded vowel in a word, but a more rounded one in another. Compare the central vowel in the pair of words below:

(2.31)

(a) gu4tøH  [gu4tuzøH]  but  ?[gu4tøH]  stone
(b) gu4tsiH  [gu4tsuziH]  but  ?[gu4tsiH]  life of stone (i.e. a lengthy period)

2.3.1.3 Back vowels

With only four members, back vowels are the smallest group in Niuwozi Prinmi. The high and the mid high back vowels are symbolized with /u/ and /o/ respectively. While their ordinary height is similar to that of /u/ and /o(w)/ in English or French, the roundedness of the Prinmi vowels is lesser. To some extent, the pair of back vowels show a free variation in which little roundedness is retained. The same applies to the nasal vowel /ø/. The low back vowel /a/, on the other hand, is always unrounded and it
is not produced as far back as the other back vowels. Representative examples of these vowels include:

(2.32) a /u/ buF insect tsuH thorn
b /o/ boF feeding trough tsoH wedge
c /œ/ boF to have tsœF wool
d /a/ baF (colloq.) child tsœH fat meat

It should also be mentioned that the mid high oral vowel /o/ is sometimes rendered as [wo], especially before a velar consonant — a free variation not found on its nasal counterpart /œ/. The optional glide, if present, enhances the roundedness of the vowel. For instance,

(2.33) a k’oF [k’woF] to extinguish b yoR [ywoR] tiger

2.3.2 Complex vowels: diphthongs and triphthongs

Treating glide as part of the rhyme in a syllable leads to a number of complex vowels: diphthongs and triphthongs. Rising diphthongs are predominant in Niuwozi Prinmi. Any of the three glides, /j/, /q/, and /w/, may function as an on-gl ide in a diphthong, but only /j/ and /w/ can serve as an off-gl ide. All rising diphthongs (oral and nasal) are listed in (2.34), and vowels with off-glides including the singleton triphthong are provided in (2.35).

(2.34) a ju, jœ, je, jë, jö
b uqe, uqe, uqe, uqe
 c wə, wə, wə, wə
(2.35) a əj, əw
b wəj

Note that some of the diphthongs in (2.34) involve elements not identified as phonemes. These are: [e], [e], and [œ]. The front nasal vowel does appear alone as an allophone after a consonant from the non-J-group, in complementary distribution to [jœ]. The allophonic diphthong is chosen for the phonemic representation because it co-occurs with more consonants than the allophonic monophthong does.

Examples of oral diphthongs with the on-gl ide /j/ are given in (2.36), and the nasal ones are shown in (2.37):

(2.36) a tjuH stomach tjœF blue sheep tjeR now
 b fjuqfeF slave fjœF east fjœH to resemble
Among these five diphthongs, only /je/ may co-occur with consonants from the non-J-group. Even then, the diphthong is phonetically realized as [e], as in (2.37)b.

It should also be noted that the palatal glide often becomes a central glide when it combines with the high back vowel. For instance:

(2.38) a tjuH [tiuH] stomach   ljuR [liuR] log   kjuR [kiuR] to carry on back
       b ijuF [jiuF] elbowspan (i.e. the distance from elbow to tip of middle finger)

Were it not for this centralization, the palatal glide could not follow the rhotic in (2.38)b, as the consonant belongs to the non-J-group.

Diphthongs starting with /q/ tend to comprise a front vowel. Combination of the rounded palatal glide with a back vowel is not attested. A height contrast between the mid and mid high positions is found exclusively in this type of diphthong, as shown in (2.39). Examples of the other diphthongs from this group are given in (2.40):

(2.39) a gqeF yeast   gqeF fox
       b tj'qeF direction   tj'qeF raw rice
(2.40) a gqeF to get hurt accidentally   gqR horse
       b tj'qH to hire   jqH to castrate

On the other hand, the rising diphthongs with /w/ tend to occur before a low vowel. The three oral diphthongs of this group are in direct contrast with one another, shown in (2.41). The nasal diphthong is exemplified in (2.42):

(2.41) a tswF to analyze   tswF to reach a mark   tswF nest
       b kwsF cattle   kwaH (of eye) to open   kwaH hoof
(2.42) swF father   kwâH a kind of bell used in religious activities

Phonetically it is possible for the velar glide to form a diphthong with a front vowel, as shown in (2.43). Such diphthongs are clearly not phonemic. They do not contrast with counterparts that start with /q/, and instances of their occurrence are few. These diphthongs can be seen as remnants of the historical development which separates and phonemicizes /q/ from /w/. Note that this diachronic change, for some reason, does not affect the rising diphthong /we/ after a dental plosive.
The two falling diphthongs and the singleton triphthong could have been regarded as formed with the low central vowel /a/. Before the palatal glide, however, the vowel is consistently raised and realized as /a/. To reflect this, the mid low vowel is used accordingly. Examples of rhymes ending with a glide are given in (2.44) and (2.45):

(2.44) a əjF flea təjF to wash
    b əwR to seal off təwH to hit

(2.45) kwəjH to cry dzəwəjF pickax

The diphthong /əw/ has an important allophone [jəw], which occurs exclusively after consonants from the J-group, as shown in (2.46)a. In contrast, the allophonic diphthong is found only with consonants from the non-J-group, (2.46)b. There is one known exception from the second-person singular form for “to stand up from lying” /məwF/, in which the diphthong is not phonetically realized as a triphthong.

(2.46) a ɡəwR [ɡjəwR] glad ʃəwF [ʃjəwF] go (2:sg)
    b ɡəwR [ɡjəwR] the part behind knee ɡəwR [ɡəwR] undress (2:sg)

2.3.3 Vowel lowering

Niuwozi Prinmi shows variation in vowel height for high and mid high vowels. Similar phenomena have been observed in other branches of Tibeto-Burman languages. For instance, Hope (1971: 63-66) discusses the [i]~[e] alternation in Lisu. Matisoff (1973: 10-13) describes the alternations [i]~[e] and [u]~[o] in Lahu in terms of raising. Besides these two Loloish languages of Southeast Asia, van Driem (1993: 50) also notices alternations such as [e]~[e] and [o]~[o] in Dumi, a Kiranti language of eastern Nepal.

Although the vowel height variation appears to be quite common in Tibeto-Burman languages, no in depth study on this topic has been undertaken. Hope’s paper on Lisu phonology is the only one with detailed discussion. As this is a complex issue involving sociolinguistic and historical factors, a full length discussion is beyond the scope of the description; the following merely provides a general picture of the variation observed in Niuwozi Prinmi.

---

5 Note the insertion of a velar glide in the second syllable, which does not occur in the dialectal form /daLdəqeR/ [daLdweR] “leftover meal” when the morphemes are switched.
Opposite directions regarding the height change have been taken by different linguists for individual languages. Roop (1970: 16-17), cited in Hope (1971), considers it as lowering in Lisu, while Matisoff speaks of raising in Lahu. The direction speculated for the case of Prinmi vowels is lowering rather than raising. The speculation is based on the observation that the main consultant tends to use the higher variant in formal settings such as recording of individual words, and that the higher variant is more likely to be found in the speech of older people.

Except for /y/, /ɨ/, and /ɪ/, all the high vowels, of monophthongs or diphthongs, may be lowered to a position very close to that of a mid high vowel. In parallel the mid high vowels can also be lowered to a mid vowel. If a ten-point scale is set up for a five-place vowel height as follows: 10 for [i]/[u], 8 for [e]/[o], 6 for [e]/[ə], and so forth, then the relative height of high and mid high oral monophthongs in Niuwozi Prinmi can be expressed numerically as follows:

\[(2.47)\quad \text{High} \quad 10 \quad /y/\]
\[10-9 \quad /i/, /ɨ/, /u/\]
\[\text{Mid high} \quad 8-7 \quad /e/, /o/\]

The height variation of these vowels is found not just in the speech of different people, but also in the utterances of a single speaker on separate occasions. The following are some instances of vowel lowering in Niuwozi Prinmi:

\[(2.48)\]
\[a \quad \text{moon} \quad [\text{i}t]h - [\text{i}t]h\quad \text{si}f \quad \text{to press} \quad [\text{sif}] - [\text{sif}]\]
\[b \quad \text{nine} \quad [\text{gi}f] - [\text{gi}f]\]
\[c \quad \text{money} \quad [\text{gu}R] - [\text{gu}R] \quad \text{lu}f \quad \text{musk deer} \quad [\text{lu}f] - [\text{lu}f]\]
\[d \quad \text{rat} \quad [\text{yu}f] - [\text{yu}f] \quad \text{mu}R \quad \text{to blow} \quad [\text{mu}R] - [\text{mu}R]\]

\[(2.49)\]
\[a \quad \text{patch} \quad [\text{p}j\text{e}R] - [\text{p}j\text{e}R] \quad \text{he}h \quad \text{god} \quad [\text{he}h] - [\text{he}h]\]
\[b \quad \text{above} \quad [\text{to}h] - [\text{to}h] \quad \text{ko}h \quad \text{air} \quad [\text{ko}h] - [\text{ko}h]\]

Just how pervasive the height variation may be is hard to estimate. When the main consultant was asked about the variation, he was at a loss and simply denied its existence. However, from the observation on some frequently used words (especially those in recorded tape), it can be certain that the height of the high and mid high vowels is

6 With regard to the vowel lowering, I was conservative in my spelling of Prinmi. I would use a high vowel with a varying height. On the second field trip, the main consultant commented on this to the effect that utterances such as /gi/ (instead of /ge/ for the internal topic marker) were only heard in speech of senile people who had lost their teeth. But the connection between teeth loss and variation of vowel height remains to be proven.
variable in Prinmi. It should be pointed out that the alternation is not a free variation. The vowels are rather stable in some words. That is, they have not been observed to be lowered in spite of the repeated occurrence of the words in daily use. For instance, /miH/ “person”, /fiR/ “to exist”, and /loH/ “work” appear in both recorded texts and unrecorded natural speech much more frequently than /hiH/ “moon”, but only /hiH/ “moon” shows the alternation of vowel lowering, contrasting to an invariable height for the vowels in the other three words. On the other hand, some words seem to have a consistent height in favor of the lowered variant, e.g. /k’uR/ “head” (when occurring alone) is realized as [k’uR] and /ko’jiR/ “crow” as [ko’jiR].

The situation of vowel variation as described above opens the question of whether a pair of mid vowels might exist in the vowel system of Niuwozi Prinmi. While phonetically there is a three-level distinction for non-low peripheral vowels, such a distinction is difficult to translate into the phonemic vowel system. There is no phonemic contrast between [i], [e], and [e] on the one hand, and [u], [o], and [o] on the other. Native speakers simply do not distinguish the mid vowels from the mid high vowels, except in the pair of diphthongs /qe/ and /qe/.

When a high vowel functions as a glide in a diphthong, it is not subject to lowering. This limits the possibility of vowel lowering in diphthongs to /ju/, /qe/, and /jo/, those with a (mid) high vowel:

\[(2.50) \]
\[
\begin{align*}
a & \quad lju^R \quad \text{craw} \quad [liu^R] \sim [liu^R] \\
b & \quad fqe^R \quad \text{night} \quad [fqe^R] \sim [fqe^R] \\
c & \quad gjöR \quad \text{grass} \quad [gjöR] \sim [gjöR] \\
\end{align*}
\]

Some diphthonged words contain a vowel that probably had a higher height originally but is now produced at a lower height, e.g.

\[(2.51) \]
\[
\begin{align*}
a & \quad kjuH \quad \text{year} \quad [kjuH] \quad \text{but} \quad ??[kjuH] \\
b & \quad iju^F \quad \text{elbowspan} \quad [iju^F] \quad \text{but} \quad ??[iju^F] \\
c & \quad juH \quad \text{to overfill} \quad [juH] \quad \text{but} \quad ??[juH] \\
\end{align*}
\]

The actually occurring diphthong [jo] could have replaced the one used in (2.51)a–b. By so doing, however, we would have a superfluous diphthong that neither contrasts with /ju/ nor occurs with other consonants in Niuwozi Prinmi. Under this phonemic consideration, the vowel in (2.51) is postulated as high, but lowered constantly.

---

7 When /k’uR/ “head” appears in a compound, its vowel tends to remain at a higher position.
Recall that both /qə/ and /qɛ/ are phonemic diphthongs; yet the former can be lowered and rendered much like the latter, as seen in (2.50)b. In spite of the potential confusion, the minimal pair of words are effectively kept apart from each other by reducing the mid vowel to a schwa in response to the pressure from the lowering of the mid high vowel:

\[(2.52)\]  
\[a\] tʃʼqə f \textit{direction} \quad \text{[tʃʼqə]} \quad \text{or} \quad \text{[tʃʼqɛ]}  
\[b\] tʃʼqɛ f \textit{raw rice} \quad \text{[tʃʼqɛ]} \quad \text{or} \quad \text{[tʃʼqə]}  

Note that the allophonic forms in (2.52) \textit{per se} do not preclude potential confusion between the pair of words. In careful articulation, the minimal pair of words contrast between the mid high vowel and the mid vowel. In ordinary speech, the other forms tend to occur, shifting the contrast to that between an \([e]\)-like vowel and a schwa.

As pointed out earlier, vowel lowering does not apply to the high front nasal vowels. It occurs, however, on the back nasal vowels. First of all, the high back nasal /ʊ/ has completely merged with /o/ in Niuwozi Prinmi. The vowel is attested when there is a nasal spreading to /u/ under nasal assimilation, as in (2.53)a. Denasalization of /o/ may also result in /u/, as in (2.53)b:

\[(2.53)\]  
\[a\] nu i-sjēH \textit{morning} \quad \text{[nu i-sē]} \quad \text{or} \quad \text{[nō i-sē]}  
\[b\] sōR [sōR] \textit{three} \quad \text{but} \quad su i-koH [su i-koH] \textit{thirty}  

The mid high nasal /o/, regardless of its original height, can be lowered to a position close to a mid vowel, exemplified in (2.54). As already seen in (2.50)c above, the lowering of the nasal vowel is also found in the diphthong /jœ/.

\[(2.54)\]  
\[a\] sōR \textit{three} \quad \text{[sōR]} \sim \text{[sōR]}  
\[b\] zōH \textit{sheep} \quad \text{[zōH]} \sim \text{[zōH]}  
\[c\] kʼōF \textit{river} \quad \text{[kʼō]} \sim \text{[kʼō]}  

2.4 The syllable

Having looked at the segments in Niuwozi Prinmi, we will now consider how the segments are organized into syllables. This section starts with a presentation of the syllable structure. A general classification of syllable types follows. Then details of phonotactics will be presented in terms of collocation between consonants and rhymes.
2.4.1 Syllable structure

It has been pointed out in §2.2 that a glide is to be affiliated to vowels rather than consonants, unless it is treated as an independent segment on its own. Thus the structure of Prinmi syllables will be analyzed as follows:

Suprasegmental

<table>
<thead>
<tr>
<th>Onset</th>
<th>Rhyme</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Consonant)</td>
<td>Nucleus</td>
</tr>
<tr>
<td>(On-gl)</td>
<td>Vowel</td>
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<tr>
<td></td>
<td>(Off-gl)</td>
</tr>
</tbody>
</table>

Figure 2-1: Configuration of Prinmi syllables

In principle the onset can be any of the 40 consonants, including the complex ones. The on-glide is limited to /j/, /q/, and /w/, while the off-glide can only be /j/ or /w/. The slot for vowels may be filled by any of the fifteen monophthongs when there is no glide in the syllable; otherwise the choice is subject to the following combinations:

Table 2-3: The collocation of vowels and glides in Niuwozi Prinmi

<table>
<thead>
<tr>
<th>On-gl</th>
<th>/e/</th>
<th>/e/</th>
<th>/3/</th>
<th>/a/</th>
<th>/u/</th>
<th>/â/</th>
<th>/a/</th>
<th>[â]</th>
<th>Off-gl</th>
</tr>
</thead>
<tbody>
<tr>
<td>/j/-</td>
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<td>√</td>
<td>√</td>
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<tr>
<td>/w/-</td>
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<td></td>
<td></td>
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<td></td>
<td>-w/</td>
</tr>
</tbody>
</table>

Leaving the suprasegmentals aside, the representation in Figure 2-1 shows that the number of segments in a syllable varies from one to four, since segments in parentheses are optional. According to this, we can identify four basic types of syllable for Niuwozi Prinmi. Recall that some vowels have allophones which differ in regard to the presence/absence of an on-glide. To be consistent, we will classify syllables containing such vowels on the basis of their phonemic status.
(I) Syllables with a single segment: Vowel

Ten instances are found for this type of syllable. Among these, only four have a single segment phonetically, as shown in (2.55). The two syllables with back vowels in (2.56)a may be expanded with an optional segment; whereas a palatal glide is obligatorily inserted before the high front vowels in (2.56)b, and the mid high vowels in (2.56)c (cf. §2.5.1.4):

(2.55) a  ýH  will (as a modal)  ʒF  I
           b  əHniI  like that  ʋ-l-maF  Mum

(2.56) a  uH [(w)uH] inside  əR [(ʔ)əR]  gale
           b  iR [jiR]  conch  ɪR [jiR]  to lend/borrow (unconsumable objects)
           c  eH [jeH]  (cattle) pen  őF [w6F]  dare (1:sg)

(II) Syllables with two segments: On-glide + Vowel

Except for /qe/ and /wə/, the other eleven rising diphthongs can all form a syllable without a consonant:

(2.57) a  juH to overfill  jəR to plow  jöH silver
           b  jəkóR cloak  jeHmuH to pay attention
           c  ʊəR to fetch  ʊəH bear
           d  ʊəF tile  ʊəF to dare
           e  wəF five  ʊəwaH hope

(II) Syllables with two segments: Consonant + Vowel

This subtype is one of the most common ones in the language, e.g.

(2.58) məF bamboo  dʒəR nail/claw  kəʔəR to shoot

(III) Syllables with three segments: Consonant + On-glide + Vowel

This subtype also represents one of the most common types of syllable found in Niuwozi Prinmi, e.g.

(2.59) lʊəH black muntjac  ɭwəF yak  djuR nephew (of paternal uncle)

(III) Syllables with three segments: Consonant + Vowel + Off-glide

The number for this subtype is relatively small, for the language has only two falling diphthongs.

(2.60) təjH big  ʐwəF appearance  k’əwəR [k’jəwəR] smoke
(III)c Syllables with three segments: On-glide + Vowel + Off-glide

This subtype is extremely rare, with only one known example:

(2.61) \textit{w3j'tf'qeH} \textit{leftside}

(IV) Syllables with four segments: Consonant + Glide + Vowel + Glide

Since there is only one triphthong in Niuwozi Prinmi, this final type of syllable is uncommon.

(2.62) \textit{fw3jH} \textit{(of food) to smell good}

2.4.2 Phonotactics

With the wealth of consonants and vowels, even without taking suprasegmentals and zero consonant into account, the number of potential distinct syllables in Niuwozi Prinmi is well over one thousand (40 consonants multiplied by 31 vowels). However, the attested syllables only amounts to 633, leaving about one half of the possible syllables nonexistent. Details of the actually occurring syllables and accidental gaps are provided in a matrix chart in Table 2-4. An attested syllable is marked by the sign “\textit{V}”. A box containing a parenthesized segment indicates that the syllable shows variation between the corresponding consonant/vowel and other segments — thus combination of syllable has no phonemic status. They are not counted for statistical purposes. The total number of consonants, including zero consonant, a vowel may combine with is summed up at the bottom of the table, and the overall instances for a consonant to co-occur with different vowels are given at the rightmost column in the table. Statistical figures for the combinational power of segments are presented in Table 2-5.

Given the possibility that some existent syllables may have eluded the conscious search for them, the information in Table 2-4 cannot be claimed to be complete. Nonetheless, great efforts have been made to ensure that it is as close as possible to exhaustion. Some of the gaps in the table can be confidently identified as not permitted by Prinmi phonotactics. These are marked off by shade. As in Dayang Prinmi (Matisoff 1997), bilabial consonants (both plosives and nasals) cannot occur with rounded glides in Niuwozi Prinmi. The set of post-alveolars (fricatives and affricates) also exhibit certain constraints. They are incompatible with the velar glide. Furthermore, they do not combine with low vowels or mid vowels, unless a palatal glide intervenes. The sets of retroflex and dental fricatives as well as affricates (all belonging to the non-J-group of consonants), on the other hand, do not allow the palatal glide /j/ to follow them. When they are combined with the diphthong /jĕ/, the palatal glide is simply deleted.
Table 2-4: Combination of consonants and vowels into syllables in Niuwozi Prinmi

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Table 2-5: Index of combinational power for consonants and vowels in Niuwozi Prinmi

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As shown in Table 2-5, the top five consonants with the highest indices in Niuwozi Prinmi are all plosives. It is remarkable that the whole set of velar plosives are among them. At the bottom of the table are eight consonants each with an index lower than 0.30. These include the two sets of retroflex plosives and the voiceless bilabial nasal. Other voiceless sonorants have a much higher degree of combinational power, with an index of 0.48. Out of forty consonants, twenty-three have their indexes over 0.50.

Turning to the table on the right, we see a similar situation — slightly over one half of the vowels have an index over 0.50, which is calculated by dividing the number of instance into 41 (with zero consonant included). Monophthongs rank almost exclusively on the upper half of the table, with /y/ and /ï/ being the only exceptions. A few diphthongs also have an index over 0.50. The top five vowels are all peripheral ones, including two nasal vowels. Based on the ranking, it seems more sensible to take [ɛ] instead of [jɛ] as the phonemic form for the vowel. This would allow the generalization that the top ten vowels are all monophthongs. However, among the 33 attested instances, [ɛ] co-occurs with only 12 consonants (all from the non-J group), with a ratio of almost 2:1 between [jɛ] and [ɛ]. Since the vowel is realized much more frequently as [jɛ], it is chosen for the phonemic form to reflect this tendency. At the other extreme, the indices of eight vowels are below 0.30. Roundedness, either on the vowel itself or on the on-glide, is the common feature shared by these marginal vowels. This feature does not predict infrequent use of a vowel, however.

2.5 Segmental changes

This section presents eight segmental changes found in Niuwozi Prinmi, four for vowels and four for consonants. These changes do not cover those leading to allophonic forms of vowels/consonants, as they have been introduced in the relevant places.

2.5.1 Changes on vowels

Vowels are more prone to modification than consonants in Niuwozi Prinmi. The most significant phonological processes on vowels are centralization and desyllabification. The other phonological processes discussed here are nasalization and glide epenthesis.

2.5.1.1 Centralization of vowels

Centralization of vowels can be construed in two senses. Phonologically it refers to the process of changing a vowel to a mid central vowel, i.e. vowel reduction. Morpholexically it refers to the vowel alternation from peripheral to central in certain environments such as compounds. If all the eleven oral monophthongs of Niuwozi Prinmi are allocated into different layers, /a/ and /æ/ will occupy the core and represent
the targets of centralization. The next layer embraces the two high central vowels, and the third contains the two low vowels. The rest of vowels are distributed in the outer layer, as depicted in Figure 2-2.

Vowel reduction is very common in the casual speech of speakers of Niuwozi Prinmi. The resulting schwa is often further reduced to zero in rapid tempo. This kind of deletion may be more of a phonetic nature, since it is correlated with the time available for articulation. The shorter time is available, the more likely it occurs. Positionally, the reduction tends to occur on the first syllable of a bisyllabic (phonological) word. But it is also observed on the second syllable of a disyllabic word (mostly compounds).

<table>
<thead>
<tr>
<th>(2.63)</th>
<th>Careful speech</th>
<th>Casual speech</th>
</tr>
</thead>
<tbody>
<tr>
<td>a he/she/it</td>
<td>ni^H</td>
<td>na^H</td>
</tr>
<tr>
<td>b thirty</td>
<td>su^1ko^H</td>
<td>sa^2ko^H</td>
</tr>
<tr>
<td>c smile friendly</td>
<td>i^u^tsi^h^tsi^L</td>
<td>i^a^tsi^h^tsi^L</td>
</tr>
<tr>
<td>d very</td>
<td>l^a^l^j^g^R</td>
<td>l^a^l^j^g^R</td>
</tr>
<tr>
<td>e today</td>
<td>pu^h^ni^L</td>
<td>pa^h^ni^L</td>
</tr>
<tr>
<td>f this</td>
<td>ti^F</td>
<td>to^F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(2.64)</th>
<th>Careful speech</th>
<th>Casual speech</th>
</tr>
</thead>
<tbody>
<tr>
<td>a heart</td>
<td>k’u^e^F</td>
<td>k’u^a^F</td>
</tr>
<tr>
<td>b road</td>
<td>r^w^a^F</td>
<td>r^w^a^F</td>
</tr>
<tr>
<td>c scold</td>
<td>m^b^l^j^H</td>
<td>m^b^l^j^H</td>
</tr>
</tbody>
</table>

The example in (2.63)f is produced with a central high vowel only on few rare occasions. The words in (2.64) show that the reduction can also apply to vowels within diphthongs. These reduced diphthongs exist only phonetically in Niuwozi Prinmi.

Sometimes a vowel may be reduced to either of the central vowels in the core layer, as in (2.65). The variation seems dependent on performing factors rather than linguistic conditions. A useful observation is that a reduced form with [a] may not be altered to [e], but the mid low vowel can generally be further reduced to a schwa.8

---

8 The suprasegmentals in (2.65)b may be under the influence of intonation.
Morphological processes such as compounding and reduplication often involve vowel centralization. The centralization, if found, always affects the first syllable of a bisyllabic word, as illustrated by the compounds in (2.66), and the reduplicated verbs in (2.67):

Note that nasality is lost when a nasal vowel is reduced, as seen in (2.67)c–d. The morpholexical change results in two central vowels: /i/ in (2.66)a–b, and /i/ in (2.66)c–d and (2.67). The choice for the central vowels is probably lexically determined in compounds. But in reduplication that derives reciprocal verbs, the rhyme of the first syllable is generally centralized to /i/, as in (2.68)a–d:

When the rhyme of the base verb is a diphthong, (2.68)a, or a nasal vowel, (2.68)b, the centralization amounts to substitution. A slight deviance is shown in (2.68)e–f for verbs with a high vowel. In these cases, the vowel is further diphthongized to /w3/ or /i3/, depending on the frontness of the original vowel.
As in casual speech, the morpholexical centralization may also affect individual vowels in diphthongs and engender new diphthongs with no phonemic status. For instance,

\begin{equation}
\begin{array}{|c|c|}
\hline
\text{Simplex word} & \text{Compound word} \\
\hline
\text{a} & t\text{j}'q\text{e}^R \text{ pig} & t\text{j}'q\text{e}^Rnj\text{e}^H \text{ pig epidemic} \\
\text{b} & 3\text{j}e^R \text{ palm} & 3\text{j}e^Hdzj^L \text{ palmprint} \\
\hline
\end{array}
\end{equation}

\begin{equation}
\begin{array}{|c|c|}
\hline
\text{Base} & \text{Reduplication} \\
\hline
\text{a} & g\text{q}\text{e}^H \text{ tall} & g\text{q}\text{e}^Hg\text{q}\text{e}^H \text{ tall (plural)} \\
\text{b} & 3\text{j}j^F \text{ heavy} & 3\text{j}j^H3\text{j}j^H \text{ heavy (plural)} \\
\hline
\end{array}
\end{equation}

Unlike vowel reduction which occurs in casual speech, a centralized vowel in compounds or reduplications cannot be restored to a full vowel even in slow and careful speech. Its original vowel is revealed only when the relevant word appears outside the morphological environments.

\textbf{2.5.1.2 Vowel desyllabification}

In Niuwozi Prinmi vowel desyllabification may lead to diphthongization or substitution. Diphthongization is primarily observed with the modificatory clitic /e/ (cf. §7.1.1) and occasionally with the interrogative clitic /e/ (cf. §8.1.2). The two are homophonous and both desyllabificate a preceding syllable. The following illustrate desyllabifications formed with the interrogative clitic:

\begin{equation}
\begin{array}{c}
\text{out} \\
\text{eat:2s} \\
\text{out:Q-eat:2s} \\
\text{you ate?} \\
\text{out} \\
\text{eat:2s} \\
\text{out:Q-eat:2s} \\
\text{(s)he/they gave?} \\
\text{fr.sp} \\
\text{give:3} \\
\text{fr.sp:Q-give:3}
\end{array}
\end{equation}

Desyllabification with the interrogative clitic is not common. The only environment that warrants the clitic to fuse into the rhyme of a syllable is when a directional prefix precedes it, as in (2.71). The process results in a diphthong /j\text{\textbar}/ for the prefix.

Diphthongization by the modificatory clitic can yield varying results, as shown in (2.72) to (2.74). The desyllabification takes place as the clitic occupies the vowel slot of the preceding syllable and the original vowel is rendered as an on-glide. In addition to /j/ and /w/ in (2.72)a–b, the high central vowels /i/ and /u/ can also serve as an on-glide under this kind of desyllabification, as in (2.72)c–d.

If the preceding syllable has a mid high monophthong, as in (2.73), the vowel changes to the on-glide /j\text{\textbar}/ or /w\text{\textbar}/, depending on its frontness. Note that in (2.73)c, nasality disappears when the vowel shifts to the on-glide position in the syllable.
If the clitic is attached to a syllable with a (phonetic) on-glide, the clitic is raised to /ɔ/ in the diphthong. The original on-glide is retained, but other element in the rhyme of the host is removed, as exemplified in (2.74). The host word in (2.74)b has been given here in a narrow transcription to show the presence of a phonetic on-glide before the desyllabification.

Another possible result from desyllabification is for the modificatory clitic to replace the entire rhyme of a syllable without diphthongization, e.g.

(2.75) a $\text{mi}^{\text{h}}\text{i}^{\text{b}} + \text{v} + \text{mj}^{\text{e}} \rightarrow \text{mi}^{\text{h}}\text{je}^{\text{r}}$ people’s eyes  
people $\rightarrow$ people:M eye  

b $\text{t}^{\text{j}}\text{i}^{\text{l}} + \text{ju}^{\text{h}} + \text{v} + \text{ke}^{\text{h}} \rightarrow \text{t}^{\text{j}}\text{i}^{\text{l}} \text{ke}^{\text{h}}$ when (it) is said  
say $\rightarrow$ say nInv:M time

Note that the diphthong /ju/ in (2.75)b is phonetically [io].

Substitution is also found with the instrumental clitic /o/, which also marks an Agent (cf. §4.3.9.2 & §6.1.1). The desyllabification is straightforward. The clitic simply replaces the vowel of the preceding syllable, e.g.
40

(2.76) a \( m³R + qi + ō \rightarrow m³qōH \) with/by the fire

\[
\begin{array}{l}
\text{fire Inst} \\
\text{InT:Inst}
\end{array}
\]

\( qi + ō \rightarrow qᵀ₁ōH \) by us (exclusive)

\[
\begin{array}{l}
\text{InT:Inst} \\
1p_{\text{ex}}:\text{Inst}
\end{array}
\]

c \( j³bōH + ō \rightarrow j³bōH \) by the Han Chinese

\[
\begin{array}{l}
\text{Han family:Inst} \\
\text{lpex:Inst}
\end{array}
\]

The instrumental /ō/ may cause diphthongization in certain desyllabifications when it is attached directly to the second person singular pronoun, (2.77)a, or when it is fused with the dummy-like discourse clitic /ne/, (2.77)b. A third occasion for this is the desyllabification with the numeral /tiR/ “one”, as in (2.77)c:

(2.77) a \( neR + ō \rightarrow niōH \) by you (singular)

\[
\begin{array}{l}
\text{by you} \\
\text{Inst} \\
\text{2s:Inst}
\end{array}
\]

\( 3h + ne + ō \rightarrow 3h njōH \) by me

\[
\begin{array}{l}
\text{by me} \\
\text{Inst} \\
\text{1s:Inst}
\end{array}
\]

c \( gyH p³jH + tiL + ō \rightarrow gyH p³jH tjlə \) by a period of rainfall

\[
\begin{array}{l}
\text{by a period of rainfall} \\
\text{Inst} \\
\text{rainCtr one:Inst}
\end{array}
\]

The complex clitic form shown in (2.77)b must be used when the first-person singular pronoun is marked as an Agent. The diphthongization in (2.77)c is much less frequent, limited to the numeral “one”, only which may follow a counter (cf. §4.3.5).

2.5.1.3 Nasalization

Nasal consonants, both voiced and voiceless, can nasalize certain monophthongs in a syllable. There is no indication of higher frequency of nasalization in correlation to voicing of the nasals. The progressive nasal spreading is optional, and seems to affect mainly high peripheral vowels. For instance,

(2.78) a \( mᵢF \) person \([mᵢF]\) \( \sim \) \([mᵢF]\)

\[
\begin{array}{l}
\text{person} \\
\text{Inst}
\end{array}
\]

\( mᵢH \) daughter \([mᵢH]\) \( \sim \) \([mᵢH]\)

\[
\begin{array}{l}
\text{daughter} \\
\text{Inst}
\end{array}
\]

c \( nᵢR \) to hear \([nᵢR]\) \( \sim \) \([nᵢR]\)

d \( nᵢH \) day \([nᵢH]\) \( \sim \) \([nᵢH]\)

e \( mᵢF \) bamboo \([mᵢF]\) also \([mᵢF]\)

\[
\begin{array}{l}
\text{bamboo} \\
\text{Inst}
\end{array}
\]

\( mᵢF \) sky \([mᵢF]\) but \([mᵢF]\)

\[
\begin{array}{l}
\text{sky} \\
\text{Inst}
\end{array}
\]

\( mᵢeF \) eye \([mᵢeF]\) but \([mᵢeF]\)

\[
\begin{array}{l}
\text{eye} \\
\text{Inst}
\end{array}
\]

\( nᵢeR \) black \([nᵢeR]\) but \([nᵢeR]\)

\[
\begin{array}{l}
\text{black} \\
\text{Inst}
\end{array}
\]
Note that in (2.78)c, after the vowel /u/ is nasalized, it is realized as [ɔ] due to the merger of back nasal vowels in Niuwozi Prinmi. While the nasalization on high peripheral vowels is common, it is seldom observed on other vowels, particularly diphthongs. Thus, for words in (2.78)f–h, it is doubtful as to the possible nasalization on their vowels. On the other hand, nasalization features in some words with such a high frequency that a phonemic oral vowel could be analyzed as a nasal one, e.g.

(2.79)  
\[ a \text{ me}^F \text{ hair} /\text{me}^F/ \text{ or } /\text{mē}^F/ \]
\[ b \text{ ni}^H \text{ blue/green} /\text{ni}^H/ \text{ or } /\text{ni}^H/ \]
\[ c \text{ ni}^H \text{ near} /\text{ni}^H/ \text{ or } /\text{ni}^H/ \]

The true phonemic vowels of these words are revealed only on occasion when they are not affected by nasalization from the consonants, e.g. when the consultant repeats the citation form of a single word: in one instance the vowel may be nasalized but not in the other.

2.5.1.4 Glide epenthesis

Some monophthongs may occur without a consonant in Niuwozi Prinmi. For high and mid high vowels, a glide epenthesis is generally required before the vowels. The inserted glide is either /j/ or /w/. The former is used for front vowels only, and the latter exclusively for back vowels, e.g.

(2.80)  
\[ a \text{ i}^H\text{tsi}^L \text{ grandchild} \Rightarrow \text{ji}^H\text{tsi}^L \]
\[ b \text{ i}^H \text{ (of clothes) warm} \Rightarrow \text{ji}^H \]
\[ c \text{ e}^H \text{ (cattle) pen} \Rightarrow \text{je}^H \]

(2.81)  
\[ a \text{ u}^H \text{ (of rooster) to call} \Rightarrow \text{(w)u}^H \]
\[ b \text{ ö}^F \text{ dare (1:sg)} \Rightarrow \text{wo}^F \]

While the glide epenthesis is obligatory in (2.80) for the front vowels, the insertion of /w/ before /u/ in (2.81)a is optional. As for (2.81)b, the glide epenthesis is actually a reanalysis of the rhyme change in verb agreement. The inflection for the first-person singular is related to the verb root /we^F/ “to dare”. Since the diphthong [wō] does not occur after a consonant, it is reanalyzed in terms of glide epenthesis to save an extra phonemic diphthong that stands only by itself, thus (2.81)b.

---

Bradley (1985: 185-186) observes a similar phenomenon in Arakanese, where nasality spreading from nasal initial is found only on the high front vowel /i/.
2.5.2 Changes on consonants

Phonological changes on Prinmi consonants are relatively less frequent, and tend to demonstrate cross-dialectal differences rather than dialect-internal differences. Of the four to be addressed below, the alternation at syllable juncture has become morpholexically determined. Glottalling involves some extent of difference between 'clanalects', while the unstableness of voiceless nasals is mainly associated with younger speakers. As for trill substitution, it is an innovation under the influence of other Tibeto-Burman languages.

2.5.2.1 Voicing/Aspiration change

Perhaps due to the careful manner in which the main consultant speaks, optional phonological processes induced by rapid tempo are seldom observed in his speech. Consequently, the voicing or aspiration change of consonants at syllable juncture rarely occurs in my recorded texts. However, there is evidence for this sort of phonological process, e.g.

(2.82) \begin{align*}
\text{u}^\iota \text{j}^\iota H & \quad \text{t}^\iota ^\iota H \\
\text{to celebrate New Year} & \Rightarrow \text{u}^\iota \text{j}^\iota H \quad \text{t}^\iota ^\iota H \\
\text{New Year} & \quad \text{do}
\end{align*}

Another instance of consonant alternation at syllable juncture can be construed as a morpholexical change. Consider the following:

(2.83) \begin{align*}
a & \quad \text{ni}^\iota H \quad \text{day} \\
b & \quad \text{pu}^\iota \text{ni}^\iota L \quad \text{today} \\
c & \quad \text{zj}^\iota \text{v}^\iota \text{ni}^\iota L \quad \text{yesterday} \\
d & \quad \text{i}^\iota \text{g}^\iota \text{ni}^\iota L \quad \text{two days ago} \\
e & \quad \text{i}^\iota \text{g}^\iota \text{v}^\iota \text{ni}^\iota H \quad \text{three days ago} \\
f & \quad \text{i}^\iota \text{h}^\iota \text{v}^\iota \text{ni}^\iota L \quad \text{four days ago} \\
g & \quad \text{s}^\iota \text{j}^\iota \text{v}^\iota \text{ni}^\iota H \quad \text{tomorrow}
\end{align*}

The examples in (2.83) show a consonant alternation between [ŋ] and [n] at syllable juncture. While voicing assimilation can explain the change in (2.83)b–d, it fails to account for the unchanged consonant in (2.83)e–g. The main consultant rejected the words when the voicing feature of the nasals was changed to the opposite: *[zjv^iota ni^iota L] "yesterday", *[sjv^iota ni^iota H] "tomorrow" and so on. Although the voiceless nasal in (2.83) tends to appear under a high tone, the suprasegmental is not a condition for the voicing involved. We find a counterexample in (2.83)f, which has a voiceless nasal under a low tone. Additional examples of this are also available from numeral-noun compounds such as [t3^iota ni^iota L] "one day".
A similar consonant alternation is found with compounds for counting years, as shown in (2.84). The velar plosive varies between an unaspirated one in (2.84)a and an aspirated one in (2.84)g–j. The counting expressions for years are basically akin to those used for days. The complete set for the latter is juxtaposed with the former for an easy comparison:

<table>
<thead>
<tr>
<th>(2.84)</th>
<th>Young consultant</th>
<th>Main consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>kjuH year</td>
<td>nih day</td>
</tr>
<tr>
<td>b</td>
<td>puHniH this year</td>
<td>puHniL today</td>
</tr>
<tr>
<td>c</td>
<td>viHpuH last year</td>
<td>viHniL yesterday</td>
</tr>
<tr>
<td>d</td>
<td>3³⁴⁵puL two years</td>
<td>3³⁴⁵niL two days</td>
</tr>
<tr>
<td>e</td>
<td>3³⁴⁵gi³⁴⁵puH three</td>
<td>3³⁴⁵gi³⁴⁵niH three</td>
</tr>
<tr>
<td>f</td>
<td>3³⁴⁵vi³⁴⁵puL four years</td>
<td>3³⁴⁵vi³⁴⁵niH four</td>
</tr>
<tr>
<td>g</td>
<td>3³⁴⁵vi³⁴⁵k³⁵⁶wuH next year</td>
<td>sj³⁵⁶wu³⁵⁶niH tomorrow</td>
</tr>
<tr>
<td>h</td>
<td>sj³⁵⁶wu³⁵⁶k³⁵⁶wuL in two years</td>
<td>k'³⁵⁶ji³⁵⁶wu³⁵⁶ in two days</td>
</tr>
<tr>
<td>i</td>
<td>k'³⁵⁶ji³⁵⁶k³⁵⁶wuH in three years</td>
<td>k'³⁵⁶ji³⁶ in three days</td>
</tr>
<tr>
<td>j</td>
<td>k'³⁵⁶ji³⁶k³⁵⁶wuH in four years</td>
<td>k'³⁵⁶ji³⁶ in four days</td>
</tr>
</tbody>
</table>

That a consonant modification occurs at the syllable juncture for “year” is not as apparent as that for “day”. We find three forms for the temporal concept of year: the free form in (2.84)a, the bound form for non-future expressions in (2.84)b–f, and the bound form for future expressions in (2.84)g–j. While the second form may come from a separate word, the third form is likely to be related to the first one in spite of the rhyme change. If this hypothesis does not hold, Prinmi will have as many as four unrelated forms for “year”. (The form /uH/, which also means “harvest”, is used with the Duodecimal Animals for chronological years.)

This kind of juncture alternation is not common in Niuwozi Prinmi. Synchronically the phenomenon is best treated as morpholexical, although it may trace back its development from a more regular phonological change at an earlier stage of the language.

2.5.2.2 Glottalling

Glottalling which weakens a voiced velar consonant to the glottal stop is found in the main consultant’s speech. While this process is rather consistent in his dialect, it is not detected in the speech of the younger consultant of the same village but from a different clan. Compare the following:

(2.85) | Young consultant | Main consultant |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>gwaR to discuss</td>
<td>[gwaR] [ʔwaR]</td>
</tr>
<tr>
<td>b</td>
<td>yαR to be thick</td>
<td>[yαR] [ʔαR] or [ʔαR]</td>
</tr>
</tbody>
</table>
2.5.2.3 Change of voiceless nasals

Voiceless nasals in Niuwozi Prinmi are disappearing in the speech of the younger generation. The labial one either becomes voiced, as in (2.86)a; or it is changed to the nasal cavity fricative, as in (2.86)b.

(2.86) a m3H tsiH cousin O==Y m3H tsiH cousin

b mjêH medicine O==Y hjêH medicine

Similarly, the dental one is changed to the nasal cavity fricative and leaves its trace of erstwhile presence with vowel nasalization, e.g.

(2.87) niH day O==Y hjH day

Note that the lenition of a voiceless nasal correlates with vowel nasalization, if the vowel in the syllable is not a nasal one. In other words, this process always leads to a nasal vowel in the resultant syllable.

The alternation between [n] and [ŋ] also represents a dialectal variation. According to the main consultant, there is a kind of wild hemp (hóngmá in Mandarin) which he pronouns as [uL hTH], but speakers of some other dialects have [uL mH] instead.

2.5.2.4 Trill substitution

Perhaps under the influence of the Yi language (spoken by the largest nationality in Ninglang), speakers of Niuwozi Prinmi tend to substitute the vowel /u/ with a syllabic bilabial trill [β] after an unaspirated dental plosive in certain words.10 While some speakers prefer the trill substitution to such a degree that a pronunciation without the trill may be judged to be inauthentic, there is no minimal pair for /u/ vs. /β/ or /u/ vs. /β/. Some examples are:

(2.88) a duR poison ==> [dB flatt]

b tuF to thread ==> [tβ flatt]

c tuH tuL cap ==> [tβHtβL]

Note that the trill substitution has not been observed with an aspirated dental plosive. According to the main consultant, the word for “cap” in (2.88)c is actually a loan from Moso, a Tibeto-Burman language whose speakers share a close religious and cultural bond with the Pumi (cf. §1.1.3).

10 A similar but not identical phenomenon has been observed in Liangshan Yi. Fu et al (1956) and Chen et al (1985) describe a trill occurring after a dental/anterior plosive in syllables with the vowel /u/.
Unlike some other phonological changes, the trill substitution is found in the utterances of both the young and the old generations. The substitution also appears to have undergone morpholexicalization, for the phonological environment alone is not sufficient to predict its occurrence. For instance, the change does not take place in the following words:

\[(2.89)\] a du\(^H\) to strike \(\Rightarrow \) ??[d\(\beta\)\(^H\)]

b tu\(^f\) grease \(\Rightarrow \) ??[t\(\beta\)\(^f\)]

2.6 Summary

This chapter has described the basic segmental phonology in Niuwozi Prinmi. Most of the 40 consonants contrast in pairs of voicing, while a further distinction in terms of aspiration is found in eight trios. Of the three glides, /q/ and /w/ are in marginal opposition only. In a bi-partition syllable structure, the glides are considered as forming part of the rhyme rather than part of the onset. Consequently, the total number of vowels amounts to 31. There are two kinds of allophonic vowels. The first one involves alternation of monophthong/diphthong or diphthong/triphthong conditioned by the co-occurring consonant in the syllable. The other kind of vowel variation, vowel lowering, resembles some sort of vowel shift.

The syllable structure of Prinmi is rather simple, consisting of four slots: Onset, On-glide, Nucleus, and Off-glide. Except for the Nucleus, the others are optional. Various types of syllable can be identified according to the number of segments present in a syllable. The combination of segments into a syllable is rather restricted. As a result, about one half of the possible syllables are not attested.

A number of segmental changes in Niuwozi Prinmi are also discussed. Phonological processes found on vowels are more frequent and important than those found on consonants, especially vowel centralization and desyllabification.

\[11\] This is based on available observations rather than actual tests. It is not clear, for example, whether speech of female speakers will comply with this.
Chapter 3.

The Suprasegmentals

Prinmi employs suprasegmentals as an important means for achieving lexical distinction. Unlike the better known tone languages of East and Southeast Asia, Prinmi exhibits some suprasegmental features which will qualify it as a (pitch-)accent language. Its suprasegmentals contrast fundamentally through the variable placement of the high tone on a prosodic domain and the potential spreading of the high tone, which is, to some extents, similar to the kind of suprasegmental system in some Tibeto-Burman languages of Nepal (Glover 1971, Hari 1971, Mazaudon 1973, 1977; cf. also Bradley 1997: 2).

This chapter will first describe the surface tones of monosyllabic words, and then consider the suprasegmentals of polysyllabic words. An accentual analysis of the suprasegmental system will be proposed to account for the phenomenal tone changes.

3.1 Surface tones on monosyllabic words

In spite of a great number of compounds, Prinmi lexical words are predominantly monosyllabic. Monosyllabic words may bear a high tone, a falling tone, or a rising tone. These tones belong to three different tonal categories, but the first two tones are rather difficult to distinguish in isolation. This section starts with a general introduction on the three surface tones. To assure that the high tone and the falling tone are indeed in opposition, we will discuss the issue in some detail. Finally, we will address the nature of suprasegmental contrast in Prinmi, thereby explaining the elusive contrast between the high tone and the falling tone.

3.1.1 Suprasegmental contrasts in citation forms

In Niuwozi Prinmi, a three-way suprasegmental opposition is found in citation forms of monosyllabic words. The contrast can be described in terms of three different tones: a high level tone, a high falling tone, and a low rising tone. The three will simply be referred to as ‘high’ (abbreviated as H at the upper right corner of a syllable), ‘falling’ (F), and ‘rising’ (R). The following examples show a minimal contrast between these three suprasegmental categories:

\[
\begin{array}{lll}
\text{High} & \text{Falling} & \text{Rising} \\
\text{a} & \text{ji}^H \text{ hundred} & \text{ji}^F \text{ louse} & \text{ji}^R \text{ new} \\
\text{b} & \text{ne}^H \text{ red} & \text{ne}^F \text{ soy bean} & \text{ne}^R \text{ you (singular)} \\
\text{c} & \text{bö}^H \text{ power} & \text{bö}^F \text{ have} & \text{bö}^R \text{ cold}
\end{array}
\]
The suprasegmental contrast between the high tone and the falling tone is rather difficult to perceive when words occur in isolation (details in §3.1.2), as this environment is not ideal for manifesting the distinction between them. While there is no doubt about the phonemic contrast between these two, the precise parameters involved for the suprasegmentals are not totally clear. Native speakers seem to employ different means to signal the contrast when a minimal pair of words from these two categories are elicited in isolation, giving the impression that the second category may be characterized as having a high falling tone, as featuring a ‘tense’ vowel, or as ending with a glottal stop.\(^1\) The suprasegmental contrast between the pairs in (3.2) is well-attested in several Prinmi dialects (Niuwozi, Dayang, and Xichuan).\(^2\) The opposition is unambiguous when the words are followed by clitics such as the internal topic marker /ge/.

\[
\begin{array}{ccc}
(3.2) & \text{High} & \text{Falling} \\
(a) & ne\(^h\) (ge\(^h\)) & \text{red} & ne\(^f\) (ge\(^f\)) & \text{soy bean} \\
(b) & dz\(^h\) (ge\(^h\)) & \text{drum} & dz\(^f\) (ge\(^f\)) & \text{damp} \\
(c) & mb\(^h\) (ge\(^h\)) & \text{name} & mb\(^f\) (ge\(^f\)) & \text{hair} \\
\end{array}
\]

Lu (1983:11) points out that the pairs of words in (3.2) sometimes seem to contrast with each other in Jinghua Prinmi, with the second ones being suspected as having a ‘tense’ vowel. Due to the fluctuation of the elusive contrast, Lu eventually did not distinguish these pairs of words, and treated them as homophones. In his description of Jinghua Prinmi, a two-tone system is offered, but for Taoba Prinmi, a three-tone system is recognized, including a high level, a high falling, and a high rising tones (Lu 1983: 95). Given that ‘tense’ vowels are not found in Niuwozi Prinmi, this characterization of the falling tone will not be considered here. Matisoff (1997) also describes Dayang Prinmi, a dialect quite close to Jinghua linguistically and geographically, as a two-tone language. The minimal pair of words in (3.2)a are distinguishable in his transcription with the second one ending with an optional glottal stop. Only one member of the pair in (3.2)b (“drum”) appears in his paper, but the pair in (3.2)c are both transcribed as having a high tone. Matisoff’s treatment has the merit of suggesting the historical development of the

---

1 The term ‘tense vowel’ is used by linguists in China to refer to a kind of constriction on the vowel.

2 Having checked with speakers from Lanping and Ninglang, I can say with confidence that the kind of suprasegmentals in these dialects are fundamentally akin to that found in Niuwozi. Thus the description here will be relevant to a broader linguistic level. But it must be stressed that I make no claim for a suprasegmental commonality among all Prinmi dialects, the majority of which have not been studied.
falling tone through the glottal stop, but synchronically the salient feature of the category needs to be considered as fundamentally suprasegmental. Otherwise, it would become difficult to deal with the frequent tonal adjustments and changes on the phonetic level.

Before proceeding to the problem concerning the falling and the high tones, let us summarize some of the properties of the three suprasegmentals perceivable from utterances by the Xichuan consultant:

Table 3-1: Characteristics of Prinmi suprasegmentals on monosyllables in isolation

<table>
<thead>
<tr>
<th>Category</th>
<th>Basic contour</th>
<th>Relative value</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>level</td>
<td>55</td>
<td>long</td>
</tr>
<tr>
<td>Falling</td>
<td>falling</td>
<td>54</td>
<td>short</td>
</tr>
<tr>
<td>Rising</td>
<td>rising</td>
<td>13</td>
<td>longer</td>
</tr>
</tbody>
</table>

This consultant is good at demonstrating the difference between the high and the falling tones. He will lengthen the high tone carefully in a level contour; whereas for the falling tone, he simply lets the pitch drop quickly at the end of an utterance. A distinction between the two tones is thus achieved, accompanied with a different duration which is otherwise not noticed in ordinary speech. It should be pointed out that the duration of the entire syllable is not a crucial parameter for the two tonal categories, as will be revealed by the acoustic analysis in §3.1.2.2.

3.1.2 The falling tone versus the high tone

As mentioned above, the opposition between the falling tone and the high tone is asserted by several consultants from different regions in consensus. While this concord represents more than just a matter of intuition of native speakers, it will be nice to gather some evidence before acknowledging it as a linguistic fact. Two kinds of evidence are presented below. The first one is based on a perceptual test of the two tones by natives from Niuwozi, and the second one is gained from a preliminary acoustic study of these tones.

3.1.2.1 Perceptual tests

A perceptual test for the lexical contrast between the falling tone and the high tone was performed on the second field trip with a list of twenty-eight items. Except for a pair

3 The speculation of a final glottal stop giving rise to a falling tone is counter to the usual expectation. One would expect a development such as a rising tone from -ʔ or a falling tone from -h (cf. Bradley 1982). It would be interesting to trace back the tonegenesis of the falling tone in Prinmi, but this cannot be pursued here.
of short phrases, all words were in citation forms. They were extracted from two sources recorded on the first field trip, all by the main consultant. Most of the items were from a word list containing groups of words with a (nearly) minimal contrast. Also included were a few words of core vocabulary recorded at an earlier time before the suprasegmental contrast between the two tones had been ascertained and discussed with the consultant.

The perceptual test involves seven pairs of words (twenty tokens out of a list of twenty-eight items) relevant to the present discussion, tabulated in the following (the number in the parentheses indicates the total tokens of the word).

Table 3-2: Minimal pairs of words with a suprasegmental contrast in the perceptual test

<table>
<thead>
<tr>
<th>Pair</th>
<th>Segments</th>
<th>High tone</th>
<th>Falling tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>mē</td>
<td>name (2)</td>
<td>hair (3)</td>
</tr>
<tr>
<td>B</td>
<td>ne</td>
<td>red (2)</td>
<td>soy bean (2)</td>
</tr>
<tr>
<td>C</td>
<td>bjē</td>
<td>busy (1)</td>
<td>urine (2)</td>
</tr>
<tr>
<td>D</td>
<td>dzē</td>
<td>drum (1)</td>
<td>damp (1)</td>
</tr>
<tr>
<td>E</td>
<td>ji</td>
<td>hundred (1)</td>
<td>louse (1)</td>
</tr>
<tr>
<td>F</td>
<td>ʂu</td>
<td>sour (1)</td>
<td>to keep in a safe place (1)</td>
</tr>
<tr>
<td>G</td>
<td>jo</td>
<td>net (1)</td>
<td>chicken (1)</td>
</tr>
</tbody>
</table>

Each token was uttered twice as they were recorded. Five male native speakers from Niuwozi, including the main consultant himself, were asked to listen to the tape and recognize the utterances they heard. The complete list was played continuously twice, at the outset and at the end of the test. Individual items were played as many times as deemed necessary by the listeners.

To yield a quantitative result, numeral values are assigned to answers as follows: ‘2’ for a correct recognition of the intended word (homophones accepted), ‘-2’ for confusing words within a minimal pair, ‘1’ for showing a consistent partial recognition, and ‘0’ for failure without confusion between a minimal pair of words intended. Under this scheme, we can calculate the recognition rate of an individual by dividing the total numeral values of the answers into forty (20 × 2); the index for full recognition will be ‘1.00’. It is in principle possible for the index to be negative. This would arise from frequent confusion between minimally contrasting words. The quantified results of the test are provided in Table 3-3.

The table is organized as follows: The first column in the table lists the twenty items and their occurring order in the tape. Note that none of the identical words or contrastive words of a minimal pair appears next to each other. The next five columns show the
answers of the five listeners, each followed by a numeral value. Abbreviated names and ages of the listeners are indicated on the top of the table. The final column provides the accuracy index for recognizing a particular token in the test, with full accuracy being ‘1.0’. Like the recognition rate, the accuracy index may bear a negative value. The answers are presented in seven parts, corresponding to the seven pairs of words in Table 3-2. At the bottom, five recognition rates are calculated for each individual, with the average one on the right.

Table 3-3: Results of the first perceptual test

(A slash means that no answer is given, and a question mark indicates an uncertain answer.)

<table>
<thead>
<tr>
<th>Item</th>
<th>LJ (59)</th>
<th>SD (31)</th>
<th>BM (30)</th>
<th>CL (23)</th>
<th>RL (19)</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 name</td>
<td>name 2 / 0 hair -2 fire 1 soup 1</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 name†</td>
<td>name 2 dollar 2 10,000 2 fire 1 soup 1</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A 1 hair†</td>
<td>hair 2 low 2 low 2 low 2 wolf 1</td>
<td>0.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 hair</td>
<td>hair 2 low 2 low, hair 2 low 2 wolf, soup 0</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 hair†</td>
<td>hair, name 0 low 2 hair 2 low 2 soup -2</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 red</td>
<td>/ 0 you 2 you 2 you 2 mouth -2</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 19 red</td>
<td>red 2 you 2 you 2 you 2 / 0</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 bean†</td>
<td>/ 0 seven 0 you -2 tiger 0 mouth 1 -0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 bean</td>
<td>what 0 bean 2 bean 2 bean 2 rat 1</td>
<td>0.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 busy</td>
<td>busy 2 be 1 urine -2 urine -2 urine -2</td>
<td>-0.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C 17 urine</td>
<td>busy -2 be -2 urine 2 urine 2 urine 2</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 urine†</td>
<td>busy -2 be -2 urine 2 busy -2 urine 2</td>
<td>-0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D 25 drum</td>
<td>bed 1 up 1 drum 2 drum 2 bed 1</td>
<td>0.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 damp</td>
<td>bed -2 / 0 damp 2 damp 2 four 0</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E 12 hundred</td>
<td>fen 2 hundred 2 new 0 do 0 meal 0</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 house</td>
<td>house 2 go 2 house 2 go 1 go 2</td>
<td>0.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F 14 sour</td>
<td>/ 0 heel 0 sour 2 ?clothes 0 / 0</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 hide</td>
<td>?clothes 0 leg 0 hide 2 clothes 0 clothes 0</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G 16 net</td>
<td>rat -2 tiger 0 chicken -2 tiger -2 tiger -2</td>
<td>-0.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 chicken</td>
<td>rat 1 mouth 1 chicken 2 tiger 1 tiger 1</td>
<td>0.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recognition 0.25 0.43 0.55 0.40 0.13 0.35

† The item is extracted from the word list for basic vocabulary, a different source from the others.
With an average recognition rate of 0.35, the results of the test are quite poor. This is in part due to the low quality of the prepared tape, as many listeners complained. The deliberate separation of the members of a minimal pair seems to be another factor for the poor results. The highest score is 0.55 by BM, who asked for some help from his wife during the test. The high score thus represents a collective effort, while the others indicate individual performances in the test.

Given the unexpected defect of the tape, a shorter tape was produced in the field. It contained only the first four minimal pairs listed in Table 3-2, and most of the minimal pairs were next to each other. This facilitates the comparison between a minimal pair of words, an advantage taken naturally by listeners. Two pairs of homophones are included: “name” and “ten-thousand (10,000)”, and “hair” and “low”. Under the same numeral scheme, the following quantified results are obtained for the second test:

<table>
<thead>
<tr>
<th>Item</th>
<th>RL (M)</th>
<th>CL (M)</th>
<th>EC (M)</th>
<th>GU (F)</th>
<th>RR (F)</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 name</td>
<td>fire 1</td>
<td>fire 1</td>
<td>fire 1</td>
<td>hair -2</td>
<td>fire 1</td>
<td>0.2</td>
</tr>
<tr>
<td>6 10,000</td>
<td>fire 1</td>
<td>fire 1</td>
<td>/ 0</td>
<td>fire 1</td>
<td>fire 1</td>
<td>0.4</td>
</tr>
<tr>
<td>7 low</td>
<td>bamboo 1</td>
<td>low 2</td>
<td>/ 0</td>
<td>name -2</td>
<td>/ 0</td>
<td>0.1</td>
</tr>
<tr>
<td>4 hair</td>
<td>bamboo 1</td>
<td>low 2</td>
<td>bamboo 1</td>
<td>bamboo 1</td>
<td>?bamboo 1</td>
<td>0.6</td>
</tr>
<tr>
<td>2 red</td>
<td>you 2</td>
<td>you 2</td>
<td>red 2</td>
<td>you 2</td>
<td>red 2</td>
<td>1.0</td>
</tr>
<tr>
<td>1 bean</td>
<td>bean 2</td>
<td>bean 2</td>
<td>/ 0</td>
<td>bean 2</td>
<td>bean 2</td>
<td>0.8</td>
</tr>
<tr>
<td>10 busy</td>
<td>urine -2</td>
<td>busy 2</td>
<td>fly 0</td>
<td>busy 2</td>
<td>urine -2</td>
<td>0.0</td>
</tr>
<tr>
<td>3 urine</td>
<td>urine 2</td>
<td>urine 2</td>
<td>urine 2</td>
<td>urine 2</td>
<td>urine 2</td>
<td>1.0</td>
</tr>
<tr>
<td>8 drum</td>
<td>drum 2</td>
<td>drum 2</td>
<td>drum 2</td>
<td>drum 2</td>
<td>drum 2</td>
<td>1.0</td>
</tr>
<tr>
<td>9 damp</td>
<td>damp 2</td>
<td>damp 2</td>
<td>right 0</td>
<td>damp 2</td>
<td>damp 2</td>
<td>0.8</td>
</tr>
</tbody>
</table>

**Recognition** 0.60 0.90 0.40 0.50 0.55 0.59

The second perceptual test also involved five native speakers from Niuwozi, including two females. The first two speakers, RL and CL, were the only ones who had participated in the first test. Comparing their results of the two tests, we can see a great improvement from both of them. All the listeners for the tests are well-educated, but for RR, an old village woman. Like other old women in the village, she seemed not sensitive to the minimal pairs of words when they were played from the tape. It was only with the help of a young consultant who repeated the sounds (without pointing out what they may mean) in the tape and with the opinions offered by the other audience that she came to acknowledge the contrast between those words.

The results of the second test show two pairs of words whose minimal contrast is almost perfectly recognized: “red” vs. “bean” and “drum” vs. “damp”. The high tone
bearing words in these two pairs are successfully recognized by all listeners. This provides a piece of evidence for establishing the lexical contrast between these two suprasegmental categories. On the other hand, the failure in recognizing the contrast of the other pairs confirms the elusive nature of the tonal contrast under investigation. The results of the two tests show an average recognition rate of 0.35 and 0.59 respectively. They reflect the difficulty in distinguishing the high tone and the falling tone on monosyllabic words in citation forms. The problem will be accounted for in §3.1.3.

3.1.2.2 Some acoustic properties

Given the elusive contrast between the high tone and the falling tone, it may be useful to investigate their acoustic properties. Figure 3-1 presents an extraction of the fundamental frequency from a minimal pair of words. The words are articulated by the Xichuan consultant, who is rather skillful in demonstrating the suprasegmental contrast between the high tone and the falling tone:

As shown in the extraction, the high tone on the left clearly has a level contour; whereas a pitch fall, accompanied with an abrupt closure, can be observed on the right for the falling tone. Note that the pitches in both categories have shown varying degrees of rising at the onset. The rising part corresponds to the nasal consonant only. Hence, no rising is heard in actual perception. It must be pointed out that the consultant has exaggerated the contrast to the extent that it does not sound natural. People including himself do not speak in such a manner as if they were teaching Primmi to non-speakers of the language. Therefore, the acoustic description of the tones will not be based on the exaggerated utterances. Nonetheless, it helps to show the existence of a suprasegmental distinction intuitively felt by native speakers.
Elicited words from the main consultant are much closer to normal speech, and thus representative of the actual suprasegmental opposition between the two tones. Figure 3-2 illustrates an extraction of the fundamental frequency from the same minimal pair of words appearing in Figure 3-1 above. The basic contours of level vs. falling can still be observed, but the falling tone does not end abruptly.

Figure 3-2: Suprasegmental contrast between the high and the falling tones

Oftentimes, the tone contrast can become obscure. For instance, the minimal pair of words in Figure 3-3 are more difficult to distinguish:

Figure 3-3: A less clear contrast between the high and the falling tones

While we can still discern from the extraction that the contour of the high tone is more level and less falling, and that of the falling tone is more falling and less level, the contrast has become a matter of relativity. Despite that the intended contrast is not well signaled, there is no doubt that the main consultant does not pronounce them as homonyms.
Assuming that a pitch change of 5 Hz is not significant, we can define a level contour as one that does not vary for more than 5 Hz from the peak. When a steady increase of pitch occurs in a given period, we may consider the contour within the period to be rising. In parallel, for a steady decrease of pitch in a given period, we can regard it a falling contour within the period. With this understanding, we can describe the contour of a pitch in terms of three phases: rising, level, and falling. All these three are relevant in describing the pitch contours for the two minimal pairs presented in Figure 3-2 and Figure 3-3. Table 3-5 and Table 3-6 show the fundamental frequency at the start, the peak, and the end points of an utterance. The pitch difference between these points are indicated in the middle. At the bottom, the duration of each phase is measured in milliseconds. The overall duration of the utterance is provided at the bottom on the left. To divide the entire pitch into three phases, two points need to be identified after measuring the peak of a pitch. Each point must be less than 5 Hz lower than the peak, and represents the farthest possible point away from the peak in an opposite direction. The level phase lies between these two points. The preceding section is the rising phase, and the following section will be the falling phase.

Table 3-5: An acoustic comparison between the minimal pair “name” and “hair”

<table>
<thead>
<tr>
<th></th>
<th>Start point</th>
<th>Peak point</th>
<th>End point</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Frequency</td>
<td>131.6 Hz</td>
<td>151.3 Hz</td>
</tr>
<tr>
<td>mē</td>
<td>Pitch change</td>
<td>+19.7 Hz</td>
<td>-36.6 Hz</td>
</tr>
<tr>
<td>“name”</td>
<td>Duration</td>
<td>156ms</td>
<td>191ms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rising phase</td>
<td>Level phase</td>
</tr>
<tr>
<td></td>
<td>Duration</td>
<td>179ms</td>
<td>80 ms</td>
</tr>
<tr>
<td></td>
<td>Rising phase</td>
<td>Level phase</td>
<td>Falling phase</td>
</tr>
</tbody>
</table>

Table 3-6: An acoustic comparison between the minimal pair “name” and “hair”

<table>
<thead>
<tr>
<th></th>
<th>Start point</th>
<th>Peak point</th>
<th>End point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falling</td>
<td>Frequency</td>
<td>103.5 Hz</td>
<td>171.0 Hz</td>
</tr>
<tr>
<td>mē</td>
<td>Pitch change</td>
<td>+67.5 Hz</td>
<td>-88.0 Hz</td>
</tr>
<tr>
<td>“hair”</td>
<td>Duration</td>
<td>179 ms</td>
<td>80 ms</td>
</tr>
<tr>
<td></td>
<td>Rising phase</td>
<td>Level phase</td>
<td>Falling phase</td>
</tr>
</tbody>
</table>

I will not discuss here whether the assumption of treating a pitch change of 5 Hz as not significant holds for all tone languages. But this assumption is valid for Prinmi: A clitic following a high tone can be approximately 5 Hz higher than the preceding high tone, and the difference of pitch between the two high tones is unnoticeable to ears.
Table 3-5 reveals that the overall durations of the minimal pair of words are about the same. Two significant differences between the two tonal categories are: (a) the falling tone shows a much higher degree of pitch change in transiting from one phase to the other; (b) the duration of level phase for the high tone is substantially longer than that for the falling tone, with a ratio greater than 2:1. These acoustic characteristics are confirmed by the other minimal pair:

Table 3-6: An acoustic comparison between the minimal pair "red" and “soy bean”

<table>
<thead>
<tr>
<th></th>
<th>Start point</th>
<th>Peak point</th>
<th>End point</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ne</td>
<td>128.6 Hz</td>
<td>141.7 Hz</td>
<td>100.6 Hz</td>
</tr>
<tr>
<td>Pitch change</td>
<td>+13.1 Hz</td>
<td>-41.1 Hz</td>
<td></td>
</tr>
<tr>
<td>&quot;red&quot;</td>
<td>113 ms</td>
<td><strong>183 ms</strong></td>
<td>80 ms</td>
</tr>
<tr>
<td>376 ms</td>
<td>Rising phase</td>
<td>Level phase</td>
<td>Falling phase</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Start point</th>
<th>Peak point</th>
<th>End point</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Falling</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ne</td>
<td>121.6 Hz</td>
<td>163.6 Hz</td>
<td>91.9 Hz</td>
</tr>
<tr>
<td>Pitch change</td>
<td>+42.0 Hz</td>
<td>-71.7 Hz</td>
<td></td>
</tr>
<tr>
<td>&quot;soy bean&quot;</td>
<td>171 ms</td>
<td><strong>71 ms</strong></td>
<td>112 ms</td>
</tr>
<tr>
<td>354 ms</td>
<td>Rising phase</td>
<td>Level phase</td>
<td>Falling phase</td>
</tr>
</tbody>
</table>

The relative difference in duration for the level phases between the two tones is useful only when a minimal pair of words are heard one after another in succession, i.e. when a direct comparison of the two is feasible. For a word that cannot be compared to its potentially contrasting word, it is not easy to determine whether it bears a high tone or a falling tone in absolute terms. This explains in part the poorer results from the first perceptual test, since the minimal pair of words are deliberately set apart from each other, making the comparison impossible.

The preliminary acoustic analysis of the high and falling tones confirms the suprasegmental contrast which is difficult to perceive with bare ears. To solve the puzzle of the elusive contrast in the tone system of Prinmi, we need to see how the suprasegmentals behave when words appear in ordinary speech in which clitics are used commonly.
3.1.3 The contrasting nature of the suprasegmentals

When monosyllabic words appear in connected speech, the three tonal categories discussed above effectively contrast in terms of two pitches: high vs. low. The falling and rising tones are often split into a H-L and L-H sequence respectively in a bisyllabic domain. Similarly, the high tone gives rise to a H-H sequence if we analyze the level tone as comprising two components like the other tones. The tone partition is obligatory in a clitic group when a word is followed by such clitics as /ge/ (internal topic marker), /gje/ (modificatory marker), /jə/ (plural marker), /nö/ (durative marker), and /si/ (perfective marker):

\[
\begin{array}{ll}
\text{HH-partition} & \\
\text{Citation form} & \text{Connected speech} \\
\text{name} & \text{meH jəH} \\
\text{be busy} & \text{bjəH nöH} \\
\text{to mix well} & \text{t’3L-qcH siH} \\
\text{hair} & \text{məH ləL} \\
\text{urine} & \text{bjəH geL} \\
\text{to complete one’s life} & \text{t’3L-pjəH siL} \\
\text{belly} & \text{piH geH} \\
\text{deep} & \text{gewH nöH} \\
\text{to fly} & \text{gewH siH} \\
\end{array}
\]

If we regard the basic suprasegmental domain in Prinmi as monosyllabic, the phenomena above will be described in terms of spreading and transfer.

(3.4) For a (mono-)syllable-based tone system:

i A high tone spreads the high pitch to the clitic which immediately follows it, rendering a suprasegmental pattern of HH over the two syllables.

ii A falling tone conditions a low pitch for a following clitic, rendering a suprasegmental pattern of HL over the two syllables.

iii A rising tone changes to a low pitch after transferring its high pitch component to a following clitic, rendering a suprasegmental pattern of LH over the two syllables.

Alternatively, if we regard the basic suprasegmental domain in Prinmi to be bisyllabic, the tone change associated with the varying syllabicity of the prosodic domain may be construed in terms of ‘squeeze’ for the smaller domain in citation forms.

\[
\begin{array}{ll}
\text{HH-partition} & \\
\text{Citation form} & \text{Connected speech} \\
\text{name} & \text{meH jəH} \\
\text{be busy} & \text{bjəH nöH} \\
\text{to mix well} & \text{t’3L-qcH siH} \\
\text{hair} & \text{məH ləL} \\
\text{urine} & \text{bjəH geL} \\
\text{to complete one’s life} & \text{t’3L-pjəH siL} \\
\text{belly} & \text{piH geH} \\
\text{deep} & \text{gewH nöH} \\
\text{to fly} & \text{gewH siH} \\
\end{array}
\]

\[\text{When a negative or interrogative clitic is involved, the situation becomes complicated. See §3.3.2.6 for details.}\]

5 Clitics are all monosyllabic in Niuwozi Prinmi.
(3.5) For a (bisyllabic) word-based tone system:

i. The suprasegmental pattern of HH becomes a high tone when the components are realized in a monosyllabic domain.

ii. The suprasegmental pattern of HL may be rendered as a falling tone when the components are realized in a monosyllabic domain. A high tone may be resulted if the L component is not well-integrated into the smaller domain after the change.

iii. The suprasegmental pattern of LH becomes a rising tone when the components are realized in a monosyllabic domain.

Both the analyses above can account for the frequent tone change phenomena in Prinmi. They differ mainly in regard to the syllabicity of the basic prosodic domain for the suprasegmentals. From the fact that the falling tone and the high tone are difficult to distinguish from each other on monosyllables (as in citation forms) but are clearly opposed to each other in a bisyllabic domain such as one containing a clitic, it is legitimate to propose the basic prosodic domain as bisyllabic for suprasegmental contrast in Prinmi. When minimal pairs of words with a high-versus-falling contrast are situated in a bisyllabic domain, native speakers readily recognize them. For instance, when the first five minimal pairs of words from Table 3-2 are embedded in the following frame (where ‘x’ and ‘y’ represent words from a minimal pair),

(3.6)  
\[
\text{tah} \text{ n\textsuperscript{i}le\textsuperscript{h} ge\textsuperscript{h}} \text{ “x” ge t\text{i\textsuperscript{l}}} \text{ j\text{i\textsuperscript{u}}} \text{ n\text{o\textsuperscript{h}}} \text{ “y” ge t\text{i\textsuperscript{l}}} \text{ j\text{i\textsuperscript{u}}} ?
\]

Does the child say “x” or “y”?

the words are all identified correctly, in stark contrast to the performance in the perceptual tests. The frame does not provide any contextual clues for the meaning of the words with a minimal suprasegmental contrast. The crucial factor is the situation of the words in a bisyllabic domain, extended with the internal topic marker /ge/. Therefore, the three basic contrasting suprasegmental categories in Prinmi are best described in terms of two suprasegmentals (H and L) over a bisyllabic domain rather than contours of pitch on a monosyllable, as summarized below.

Table 3-7: The basic contrast of suprasegmentals in Prinmi

<table>
<thead>
<tr>
<th>Category</th>
<th>Pattern</th>
<th>On bisyllabic domain</th>
<th>On monosyllabic domain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st σ</td>
<td>2nd σ</td>
</tr>
<tr>
<td>High</td>
<td>H-H</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Falling</td>
<td>H-L</td>
<td>H</td>
<td>L</td>
</tr>
<tr>
<td>Rising</td>
<td>L-H</td>
<td>L</td>
<td>H</td>
</tr>
</tbody>
</table>
Note that the suprasegmental contrast between the high and the falling is realized on the second syllable in the prosodic domain. Now that the essential contrast between these two tones is unfolded, the failure in recognizing the minimal pairs of words with a monosyllabic domain in the perceptual tests is understandable. The citation forms of words have inevitably reduced the syllabicity of the prosodic domain to monosyllable. Lacking the second syllable to manifest the suprasegmental contrast properly, even native speakers are prone to confuse the high tone and the falling tone.\(^7\)

### 3.2 Tones on polysyllabic words

Although Prinmi morphemes are predominantly monosyllabic, a large number of polysyllabic words are regularly generated through compounding. Decomposable polysyllabic words are almost all bisyllabic. For instance,

\[(3.7)\]
\[
\begin{array}{ll}
\text{a} & \text{m}^3\text{H}^\text{e} \text{i}^\text{L} \quad \text{wind} \quad \text{d}^\text{i}^\text{L} \text{u}^\text{Q} \text{H}^\text{H} \quad \text{frost} \\
\text{b} & \text{n}^3\text{t}^\text{f}^\text{R} \quad \text{wasp} \quad \text{t}^\text{O} \text{L}^\text{u} \text{H}^\text{H} \quad \text{donkey} \\
\text{c} & \text{k}'\text{d}^\text{i} \text{fu}^\text{H} \quad \text{corn} \quad \text{t}^\text{S} \text{s}^\text{L} \text{H}^\text{R} \quad \text{oat}
\end{array}
\]

Notable exceptions are names of some animals and places, e.g.

\[(3.8)\]
\[
\begin{array}{ll}
\text{a} & \text{l}^\text{O} \text{b}^\text{u} \text{t}^\text{f}^\text{R} \text{i}^\text{L} \quad \text{elephant} \quad \text{(borrowed via Tibetan)} \\
\text{b} & \text{d}^\text{S} \text{i}^\text{L} \text{pu}^\text{H} \text{du}^\text{H} \quad \text{a kind of migrating bird} \quad \text{(named after its calling sound)} \\
\text{c} & \text{li}^\text{H} \text{jut}^\text{u} \text{tsu}^\text{L} \quad \text{a village name in Muli} \quad \text{(Sichuan province)} \\
\text{d} & \text{k}^\text{O} \text{k}^\text{a} \text{a} \text{ri}^\text{L} \quad \text{the Gónggā Mountain} \quad \text{(in Sichuan province)}
\end{array}
\]

Since the number of simplex polysyllabic words is so small in Prinmi, we will mainly deal with the suprasegmentals of compounds in the following discussion.

The falling, which, as a surface tone, has been shown to be opposed to the high tone in some minimal pairs of monosyllabic words in §3.1.2, is of no phonemic significance in polysyllabic words. There are no minimal pairs of intended suprasegmental contrasts such as H-H-H vs. H-H-L, or L-H-H vs. L-H-L. Instead, the majority of bisyllabic minimal pairs under a suprasegmental contrast have different tones on both syllables:

\[(3.9)\]
\[
\begin{array}{ll}
\text{a} & \text{gu}^\text{L} \text{I}^\text{H} \quad \text{middle} \quad \text{gu}^\text{H} \text{I}^\text{L} \quad \text{(of birth order) median} \\
\text{b} & \text{w}^\text{S} \text{mi}^\text{H} \quad \text{guest} \quad \text{w}^\text{S}^\text{H} \text{mi}^\text{L} \quad \text{cow} \\
\text{c} & \text{m}^\text{S} \text{ts}^\text{H} \quad \text{pincers} \quad \text{m}^\text{S}^\text{H} \text{ts}^\text{L} \quad \text{sparkle}
\end{array}
\]

\(^7\) The confusion does not necessarily mean to mistake a falling tone as a high tone. The general philosophy seems to be that, where a confusion exists, it is more likely to be bi-directional.
The minimal pair in (3.10) differs from the others in that the contrast is realized on the second syllable. The pair, alongside the two in (3.9)d–e, is also remarkable with a rising tone on one of the members in pairs. Note that all of them bear the rising tone on the second syllable.

As suggested by the neutralization of the falling tone, the suprasegmentals on polysyllables behave quite differently from those on monosyllables. To have a complete understanding of Prinmi suprasegmentals, it is vital to investigate the tonal patterns of longer domains. The suprasegmentals of disyllabic, trisyllabic, and quadrisyllabic words will be examined in the following.

### 3.2.1 Disyllabic words

The high, low, and rising tones may occur on either syllables of a disyllabic word. Combinations of these three surface tones constitute the fundamental tonal patterns for disyllabic words. The falling tone is sometimes found on the second syllable but its occurrence in compounds is best considered as an ‘allotone’ of the high tone, for the two do not contrast on polysyllabic domains. A clitic which immediately follows a disyllabic word ending with a high tone does not necessarily acquire a high tone, e.g.

(3.11) a  p^Hmi^Hjo^H the Pumi (plural)

b  tju^Hnj^H ge^H as for the stomach disease

c  t^f^gul^f^y^H ge^H as for the hog badger

d  ji^ltsu^H gj^l of the small conch

In other words, the low tone of a clitic is no longer exclusively signaled by the falling tone. With the loss of its significance on polysyllabic domains, the falling tone will not be indicated as a different surface tone outside monosyllabic words.

Five tonal patterns are attested for disyllabic words (the sign ' - ' separates tones of individual syllables, and compound boundary is marked by ' _ '):
Table 3-8: Tonal patterns of disyllabic words

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>H-H  mj^H_ su^H</td>
</tr>
<tr>
<td>2.</td>
<td>H-L  d3i^H_ si^L</td>
</tr>
<tr>
<td>3.</td>
<td>L-H  j3j^L_ le^H</td>
</tr>
<tr>
<td>4.</td>
<td>L-R  bu^L_ m3^R</td>
</tr>
<tr>
<td>5.</td>
<td>R-L  pi^R_ po^L</td>
</tr>
</tbody>
</table>

It should be noted that the final pattern, with an initial rising tone, is marginal. It is found chiefly in a few words ending with the morpheme po^R "lower (part)". The pattern could be altered to L-H, which, as a suggested question, is not rejected by the main consultant, but the alternation has not been observed in spontaneous speech.

When disyllabic words appear with clitics in connected speech, the final clitics tend to bear a low tone. The tonal patterns of citational words (the basic pattern) and corresponding clitic groups (the extended pattern) compare as follows:

(3.12) Basic pattern | Extended pattern |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. H-H</td>
<td>H-H- L</td>
</tr>
<tr>
<td>2. H-L</td>
<td>H-L- L</td>
</tr>
<tr>
<td>3. L-H</td>
<td>L-H- H/L</td>
</tr>
<tr>
<td>4. L-R</td>
<td>L-L- H</td>
</tr>
<tr>
<td>5. R-L</td>
<td>R-L- L</td>
</tr>
</tbody>
</table>

Note that for the third pattern, the clitic may acquire a high tone or a low tone. The alternative is available for some words, as in (3.13), but for the others only one option is feasible, like those in (3.14) (tones borne originally by the words in the compound are given in the parentheses):

(3.13)a (R + R) t^j^r_ p^L-k'u^H ge^H/ge^L as for the pig head
       b (R + H) t^j^r_ p^L-kwo^H ge^H/ge^L as for the pig hoof
       c (R + F) t^j^r_ p^L-si^H ge^L/ge^H as for the pork

(3.14)a (R + F) t^j^r_ p^L-m^b^H ge^H/*ge^L as for the pig hair
       b (F + F) j3^L-pu^H ge^L/*ge^H as for the rooster

The change of occurring environment has no significant effect on the basic tonal pattern of disyllabic words. A noticeable tone change is found on the fourth pattern, in which the original rising tone is split into a low tone plus a high tone.
3.2.2 Trisyllabic words

Trisyllabic words are prevalently formed by compounding. A great number of them are verb-ideophone compounds, exemplified in the first five patterns in Table 3-9. Note that ideophones are mandatorily reduplicated (cf. §4.3.6), hence inevitably giving rise to trisyllabic compounds. Suprasegmentally, the ideophones are dormant; their contribution to the suprasegmental of a word is no more than extending the prosodic domain. Even for the few ideophones which can be used independently as a verb, they behave suprasegmentally like other ideophones when forming a verb-ideophone compound. Nine tonal patterns have been found with trisyllabic words. These are enumerated in Table 3-9. A trisyllabic word may contain two prosodic domains, as in the last two patterns (the domain boundary is indicated by the sign ‘+’, and embedded compounds are placed within a pair of brackets):

Table 3-9: Tonal patterns of trisyllabic words

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. H-H-L</td>
<td>pīɣiʰtʃiʃtʃi舒服</td>
</tr>
<tr>
<td>2. H-L-L</td>
<td>buʃtʃiʃtʃi舒服</td>
</tr>
<tr>
<td>3. L-H-H</td>
<td>dʒiʃziɣziɣ舒服</td>
</tr>
<tr>
<td>4. L-H-L</td>
<td>nje céləødəCEL</td>
</tr>
<tr>
<td>5. L-L-H</td>
<td>tuʃtʃiʃtʃi舒服</td>
</tr>
<tr>
<td>6. L-L-R</td>
<td>tʃiʃtʃi舒服</td>
</tr>
<tr>
<td>7. R-L-L</td>
<td>[tʃiʃtʃi舒服</td>
</tr>
<tr>
<td>8. R + L-H</td>
<td>ʒiʃ[ʃi舒服</td>
</tr>
<tr>
<td>9. H + H-H</td>
<td>ʒiʃ[ʃi舒服</td>
</tr>
</tbody>
</table>

Words with more than one prosodic domain are always morphologically complex in Prinmi, i.e. involving more than one instance of morphological process such as compounding or affixation. The reverse is not necessarily true. That is, a complex word can have a single domain, as shown by the example for the seventh pattern in Table 3-9. The treatment of the final two patterns in the table as having a dual domain is based on the observation that they are found only with complex compounds. For words with two prosodic domains, the domain boundary always coincides with the unit boundary in the word structure. Take the final example in Table 3-9 as an illustration: although the pattern consists of three high tones, we cannot group the first two into one domain (H-H + H), because the first two components in the compound do not form a unit. There is no such words as *ʃi舒服, but ʒi舒服 “half a month” exists. Discounting the two combinatory patterns, the tonal patterns (over a single domain) for trisyllabic words are
seven. Additional patterns, if found, are likely to be combinatorial, containing two prosodic domains.

In actual language use, it is not unusual for a trisyllabic word to extend its prosodic domain with a clitic. The basic tonal patterns of trisyllabic words and the corresponding extended patterns are given in the following:

(3.15) Basic pattern | Extended pattern
---|---
2. H-L-L | H-L-L- L
4. L-H-L | L-H-L- L
5. L-L-H | L-L-H- H/L
6. L-L-R | L-L-L- H
7. R-L-L | R-L-L- L

The patterns in (3.15) do not include those with a dual domain, as they comprise shorter tonal patterns already dealt with above. Note that the final tone for the fifth pattern on the extended domain can either be high or low, parallel to the situation found on bisyllabic words with the pattern L-H. Another parallelism is the splitting of the rising tone in the sixth pattern into a L and H after the extension.

3.2.3 Quadrisyllabic words

All Prinmi quadrisyllabic words are generated through compounding. Quite often, these compounds are modeled after some patterns which involve the repetition of a particular component (cf. §5.4.4). However, suprasegmentals do not form part of a specific pattern; no known pattern stipulates any condition to the suprasegmentals.

Quadrisyllabic compounds are often complex in structure; their prosodic domains are also more likely to have a dual domain. In fact, dual-domain patterns outnumber those with a single domain among the known patterns from the collected data. For reason of simplicity, the examples in Table 3-10 merely indicate the major boundary in a compound, although prefixes are marked off by ‘-’.

Since the majority of quadrisyllabic words are complex compounds, it is less straightforward to determine how many domains a tonal pattern may have. A reliable and useful method is to consider whether it can be broken down into some shorter existent domains. Given the binary structure of compounding in the language (see §5.4.6), we can posit a domain boundary between the second and the third syllable of a quadrisyllabic word, thereby dividing the tonal pattern into two domains. When this is applied to the
first three tonal patterns in Table 3-10, they result in a second domain with a L-L, unattested for bisyllabic domains in Prinmi. Thus the first three patterns in Table 3-10 (and the three from 5. to 7., by the same token) must spread over a single domain.

Table 3-10: Tonal patterns of quadrisyllable words

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. H-L-L-L</td>
<td>3jĕ̂pâ_i3̂kâ</td>
</tr>
<tr>
<td>2. H-H-L-L</td>
<td>mĕ̂tŝô_i3̂kâ</td>
</tr>
<tr>
<td>3. L-H-L-L</td>
<td>jõ̂dzî_pâ-pâ</td>
</tr>
<tr>
<td>4. L-H-H-L</td>
<td>gû-3î_âtsî</td>
</tr>
<tr>
<td>5. L-L-H-L</td>
<td>dʒîtŝî_i3̂kâ</td>
</tr>
<tr>
<td>6. L-L-H-H</td>
<td>k'î-bõ̂̆_tʃîʔêbõ̂̆</td>
</tr>
<tr>
<td>7. L-L-L-L</td>
<td>ʔâtsî_i3̂kâ</td>
</tr>
<tr>
<td>8. H-H + H-L</td>
<td>mĕ̂tsî_põ̂̆põ̂̆</td>
</tr>
<tr>
<td>9. H-H + L-H</td>
<td>tŝîʔê_k'-õ̂̆k̂ê</td>
</tr>
<tr>
<td>10. H-L + H-L</td>
<td>wə̂̆mî_k'-ê̆pə̂</td>
</tr>
<tr>
<td>11. H-L + H-L</td>
<td>tŝõ̂̆tŝ̆_bĵ3̂ĵ3̂</td>
</tr>
<tr>
<td>12. H-L + H-H</td>
<td>ŝŝ̆ŝ̆_tə̂ŵ̆tə̂ŵ̆</td>
</tr>
<tr>
<td>13. L-H + H-H</td>
<td>û̆k'-û̆_k̂ô̆nî</td>
</tr>
<tr>
<td>14. L-H + H-L</td>
<td>gə̂̆-tʃê̆_3î-tʃê̆</td>
</tr>
<tr>
<td>15. L-R + L-R</td>
<td>gə̂̆-p'-î̆_3î-p'-î̆</td>
</tr>
<tr>
<td>16. L-R + H-H</td>
<td>sɔ̂̆sɔ̂̆_mjû̆mjê̆</td>
</tr>
<tr>
<td>17. L-R + L-H</td>
<td>ɡī̂̆tî̆_ɡî̆̆t̂êŵ̆</td>
</tr>
</tbody>
</table>

This method does not work well for the fourth pattern, which can be broken down to L-H and H-L, both permitted in the language. Nonetheless, it must be noted that the second H tone is a result of spreading from the preceding one. The spreading can be ascertained, for the original tones of /hatsi/ “finger” are L-R. The new tones on the word in the compound is attributed to tone spreading, which is confined to a single domain. Thus the tonal pattern in question must have a single domain.

For those dual-domain patterns, it is important to ensure that the tones on one domain are independent of those on the other. Among the ten dual-domain patterns, possible high spreading would be the eighth and thirteenth. However, there is no change of suprasegmentals after the second bisyllabic words enter into the quadrisyllabic compounds, cf. /põ̂̆põ̂̆/ “paternal uncle” and /kô̂̆nî/ “twelve”. This suggests that no spreading occurs in these compounds.
While no claim can be made for an exhaustive treatment of tonal patterns for
quadrisyllabic words, it seems that single-domain patterns, as presented from 1. to 7. in
Table 3-10, are complete. As for dual-domain patterns, there may be one or two marginal
ones not covered by the available data. In light of this, it is remarkable that the rising tone
does not occur in a quadrisyllabic domain. That is, we do not find such patterns as R-L-
L-L or L-L-L-R.

Like other polysyllabic words, a quadrisyllabic word may extend its prosodic
domain by a clitic. When this occurs, the basic tonal patterns for those over single
domains are extended in the following manner:

\[
\begin{array}{|c|c|}
\hline
\text{Basic pattern} & \text{Extended pattern} \\
\hline
2. H-L-L-L & H-L-L-L- L \\
4. L-H-L-L & L-H-L-L- L \\
7. L-L-L-H & L-L-L-H- H/L \\
\hline
\end{array}
\]

The extension of the quadrisyllabic domain does not trigger any tone changes on a word.
A following clitic simply takes on a low tone when it enters the prosodic domain. A high
tone may be possible for the seventh pattern, which is akin to the variation seen on earlier
patterns with a single H tone on the final syllable in the basic pattern.

### 3.3 An accentual analysis

The previous sections have presented a general description of the suprasegmentals in
Prinmi. From their contrasting nature outlined in §3.1.3, it is not difficult to see that
Prinmi has a system quite dissimilar to that found in tone languages like Mandarin (cf.
Matisoff 1994: 115). Strictly speaking, Prinmi ought to be treated as an accent language
vis-à-vis a tone language if the definitional characteristics of accent languages may be
proposed as follows (cf. Odden 1995: 467-468):

(I) There is only a marked tone (usually H) in opposition of a default tone
(usually L) in an indirect manner. Direct contrast of the two tones as in a
minimal pair is impossible.

(II) There are two fundamental manners for suprasegmental contrast: (a) through
the varying location of the marked tone; and/or (b) through the potential
spreading of the marked tone.
Languages whose suprasegmentals satisfy these conditions can be referred to as accent languages.

### 3.3.1 Two suprasegmental parameters

When we compare the tonal patterns of polysyllabic domains, we find two parameters at work in the suprasegmental system of Prinmi. Consider the following patterns (summarized from §3.2):

<table>
<thead>
<tr>
<th>Category</th>
<th>Parameters</th>
<th>Quadrisyllabic</th>
<th>Trisyllabic</th>
<th>Disyllabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>[3] [+spread]</td>
<td>L-R-H-H</td>
<td>L-R-H</td>
<td>R-L</td>
</tr>
<tr>
<td>G</td>
<td>[4] [spread]</td>
<td>L-R-L-H</td>
<td>L-R-L</td>
<td>R-L-L</td>
</tr>
</tbody>
</table>

Table 3-11 is crosscut into two parts. In the upper part, the patterns for the three prosodic domains on a row are consonant with each other. These patterns are generated through specification of two parameters: the location of the H tone on the prosodic domain, and whether the H tone spreads to the adjacent syllable on the right. The basic tonal pattern, as specified by the parameters, remains unchanged, although the tones on the right are subject to truncation as the domain becomes smaller. Note that the final pattern for the quadrisyllable domain has an unspecified value for the parameter [spread]. The underspecification occurs when the H tone is assigned to the final syllable of a prosodic domain. The other two patterns underlined in Table 3-11 also have the underspecification which effectively allows an optional spreading of the H tone to the right.

The two parameters for Prinmi suprasegmentals can be expressed as follows:

\[(3.17) \quad H@[n] \quad (4 \geq n \geq 1)\]

\[(\pm)\text{spread}\]

The formula in (3.17) reads, a H tone is located on the \(n\)th syllable of a prosodic domain, and its spreading to the next syllable is: necessary ([+spread]), prohibited([-spread]), or optional/uncertain ([spread]). The underspecification of the spreading parameter is used somewhat ambiguously, for the optionality of spreading has not been thoroughly checked for every potential word. There are two constraints on the parameters: (i) the spreading
affects only the immediately adjacent syllable to the right of the H tone; (ii) as indicated in the parentheses in (3.17), there are only four possible choices for the location of the H tone. The limitation on the H tone location can be attributed to the fact that Prinmi has few words longer than quadrisyllables, and even fewer for those with a single prosodic domain. Although it is true that compounds as long as eight syllables are found in Prinmi, they comprise more than one prosodic domain, each no longer than quadrisyllables, e.g. (the boundary of prosodic domains is marked off by a pair of braces.)

(3.18) Prosodic domains

<table>
<thead>
<tr>
<th>Compound</th>
<th>Prosodic domains</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. fibula</td>
<td>{H-H-L-L} + {L-H} + {H-L} {k\textsuperscript{1}t\textsuperscript{1}o\textsuperscript{1}H <em>JUH <em>J3L ka\textsuperscript{1}}</em>{lo\textsuperscript{1}t\textsuperscript{1}qe\textsuperscript{1}}</em>{i3H ka\textsuperscript{1}}</td>
</tr>
<tr>
<td>b. tibia</td>
<td>{H-H-L-L} + {H-L} + {H-L} {k\textsuperscript{1}t\textsuperscript{1}o\textsuperscript{1}H <em>JUH <em>J3L ka\textsuperscript{1}}</em>{lo\textsuperscript{1}t\textsuperscript{1}qe\textsuperscript{1}}</em>{i3H ka\textsuperscript{1}}</td>
</tr>
</tbody>
</table>

Even for quadrisyllabic compounds, a great number of them are prosodically compounded from two domains. Thus, the significant syllabicity for prosodic analysis of Prinmi can be safely restricted to quadrisyllable.

The only patterns in Table 3-11 that cannot be represented simply with the two parameters are the ones in boxes. They both have a rising tone on the initial syllable, and belong to the same exceptional category in the suprasegmental system of Prinmi. One way of analyzing such tonal patterns is to allow a defective prosodic domain that contains no H tone. The formal representation for this category will then be: [2] [spread] & [0]. Note that two interdependent prosodic domains (conjoined by ‘&’) are postulated. The defective domain is always led by an ordinary domain, and may not occur by itself. The remaining two patterns in the lower part of Table 3-11 are unusual in that the value in [n] is greater than the number of syllables in a word. That is, the H tone is specified as located outside the actual syllables of a word. Consequently, the H tone is ‘squeezed’ onto the final syllable of the word, rendering a rising tone on the final syllable.

It is obvious that when we describe a particular tonal category of Prinmi, we merely need to discuss the two parameters for the H tone. The details of the tonal pattern, or the surface tones on individual syllables are not important. They vary in accordance with the sizes of the prosodic domains. The three surface tones on monosyllabic words only represent the first three suprasegmental categories, i.e. high for category A, falling for category B, and rising for category C (with spreading unspecified). The three are the most frequently used patterns, for they are applicable from monosyllabic words to polysyllabic words. The other patterns are found on words with at least two syllables.

---

9 Since the two domains are interdependent of each other, they are regarded as forming a single (complex) domain.
For the sake of convenience, we will continue to refer to the first three suprasegmental categories as a ‘high tone’, a ‘falling tone’, and a ‘rising tone’ respectively.

Major findings of the current study of suprasegmentals can be summarized as follows:

a. Prinmi employs the H tone as the only marked tone for its suprasegmental system;

b. Prinmi monosyllabic words do not bear a low level tone in direct contrast with the high level tone, i.e. no minimal pair of H vs. L on monosyllabic words;

c. The location of the H tone and its potential spreading to the next syllable implement the suprasegmental opposition in the language.

These characteristics indicate that Prinmi is an accent language, as distinct from those tone languages which achieve suprasegmental contrasts under a different mechanism. The remainder of this section will focus on suprasegmental variations which stem from the changes of prosodic domain.

3.3.2 **Suprasegmental changes**

Suprasegmental changes are common in Prinmi. We can distinguish two kinds of changes that differ fundamentally. Surface tone changes refer to the kind of natural adjustment realized on the surface tones without any alternation on the suprasegmental parameters. In contrast, changes resulted from suprasegmental processes that reset the tonal parameters or reconstruct the prosodic domain are considered genuine phonological changes of the suprasegmentals. Within each kind of changes, a few types can be recognized for the specific effects associated with them. After a brief discussion of the major types of suprasegmental changes, we will look at changes found in particular environments, covering affixation, reduplication, compounding, phrases/clauses, and clitic attachment.

3.3.2.1 **Major types of change**

Natural adjustment on surface tones include: (a) ‘Tone partition’ (LH-partition and HL-partition), which partitions the suprasegmentals on one syllable onto two syllables when the prosodic domain is extended to the right; (b) ‘Spreading initiation’, which initiates the spreading of the H tone onto a following syllable when the prosodic domain is extended to the right; and (c) ‘Tone reassignment’, which reallocates the tones on a prosodic domain after it is extended to the left. None of these changes requires parameter resetting or domain restructure. The three natural adjustments are mutually exclusive of one another. Within a single prosodic domain, only one of them may occur. In a
complex tone change, however, a natural adjustment may take place in addition to a genuine suprasegmental process (i.e. those not belonging to natural adjustment).

Suprasegmental processes which affect the parameters of tonal categories are the following: (a) ‘H-shift’, which shifts the location of the H tone to an adjacent syllable (usually to the right); (b) ‘H-blocking’, which sets the spreading parameter to negative; (c) ‘H-spreading’, which changes the setting of the spreading parameter to positive, (d) ‘Domain merger’, which merges two prosodic domains into one; and (e) ‘Domain splitting’, which splits the prosodic domain to two. These five suprasegmental processes can be grouped into three: (i) Location Change, for H-shift, (ii) Spreading Change, for H-blocking and H-spreading, and (iii) Domain Change, for domain merger and domain splitting. It is possible for three suprasegmental processes, each from a different group, to apply to a single prosodic domain.

It should be pointed out that intonation exercises a great influence on the suprasegmentals of utterances. Due to the scope of the present description, Prinmi intonation is not explored. To the extent possible, examples cited in this chapter are drawn on those free from intonation interference.

### 3.3.2.2 Changes in prefixation

Most Prinmi verbs can be affixed with a directional prefix (see §5.2.1). Of the six directional prefixes, /t3-/ “upward” is the only one bearing a high tone, and has the potential of affecting the surface tone of the verb stem:

(3.19) Domain merger and spreading change on prefixed verbs with /t3-/

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Stem</th>
<th>Prefixed verb</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+spread]</td>
<td>kwêH (of eye) open</td>
<td>t3H-kwêH (of eye) open</td>
<td>[1] [+spread]</td>
</tr>
<tr>
<td>[1] [-spread]</td>
<td>guF dry</td>
<td>t3H-guF dry up</td>
<td>[1] [+spread]</td>
</tr>
<tr>
<td>[2] [spread]</td>
<td>kjeH (of food) pick</td>
<td>t3H-kjeH (of food) pick up</td>
<td>[1] [+spread]</td>
</tr>
<tr>
<td>[1] [+spread]</td>
<td>neH red</td>
<td>t3H-neL reddened</td>
<td>[1] [-spread]</td>
</tr>
</tbody>
</table>

As shown in (3.19), there are two possible tonal patterns. The H-H pattern can occur with verbs under any of the three surface tones, but the H-L pattern is not attested for verbs with a rising tone. Based on the wider distribution, one might assume that the former represents the primary pattern. However, there is no clear indication that the other pattern has resulted from pragmatic effects. The two patterns are not interchangeable. The choice between them seems to be determined by the verb stem. Thus both will be regarded as basic patterns. For reasons not fully understood, leftward enlargement of
prosodic domain tends to give rise to various tonal patterns (cf. other cases for clitic
groups in §3.3.2.6 below).\(^{10}\)

Suffixation entails a domain extension to the right. The surface tones of stems often
change in response to the domain enlargement. Depending on the tonal categories of the
stems, one of the two natural adjustments may take place: spreading initiation or tone
partition. For instance,

\[(3.20)\] Spreading initiation/Tone-partition upon suffixation

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Stem</th>
<th>Suffixed Verb</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+spread]</td>
<td>dzi(^{H}) eat</td>
<td>dzi(^{H})-ji(^{H}) food</td>
<td>[1] [+spread]</td>
</tr>
<tr>
<td>[1] [-spread]</td>
<td>to(^{F}) look</td>
<td>to(^{H})-ji(^{L}) things to look</td>
<td>[1] [-spread]</td>
</tr>
<tr>
<td>[2] [spread]</td>
<td>t'jē(^{R}) drink</td>
<td>t'jē(^{L})-ji(^{H}) beverage</td>
<td>[2] [spread]</td>
</tr>
</tbody>
</table>

Only a few nouns, mostly kin terms, can occur with the intimate prefix /v-/. For
some words, the prefixation does not lead to any tone change, e.g. /v\(^{L}\)-pu\(^{H}\)/
"grandfather", /v\(^{L}\)-ma\(^{R}\)/ "mother"; for others, tone reassignment takes place:

\[(3.21)\] Tone reassignment on affixed nouns

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Stem</th>
<th>Prefixed noun</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [-spread]</td>
<td>pō(^{F}) father</td>
<td>v(^{H})-pō(^{L})</td>
<td>[1] [-spread]</td>
</tr>
<tr>
<td>[2] [spread]</td>
<td>kō(^{R}) maternal uncle</td>
<td>v(^{L})-kō(^{H})</td>
<td>[2] [spread]</td>
</tr>
</tbody>
</table>

\[3.3.2.3\] Changes in reduplication

As a prosodic domain enlarges after a morphological reduplication, tone changes
often take place. A simple account for this is to regard the reduplication as segmentally-
based in which suprasegmentals are not reduplicated. Reduplication on nouns generally
involves spreading initiation or tone-partition, as shown in (3.22), but an H-shift may
occur if the noun has a rising tone, as in (3.23):

\[(3.22)\] Spreading initiation/Tone-partition on nominal reduplication

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Base form</th>
<th>Reduplicated form</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+sp]</td>
<td>tāj(^{H}) big</td>
<td>tāj(^{H})tāj(^{H}) big paternal uncle</td>
<td>[1] [+sp]</td>
</tr>
<tr>
<td>[1] [-sp]</td>
<td>ma(^{F}) mother</td>
<td>ma(^{H})ma(^{L}) maternal aunt</td>
<td>[1] [-sp]</td>
</tr>
<tr>
<td>[2] [sp]</td>
<td>pāj(^{R}) elder brother/sister</td>
<td>pāj(^{L})pāj(^{H}) elder brother</td>
<td>[2] [sp]</td>
</tr>
</tbody>
</table>

\(^{10}\) Evidence from tones of compounds (§3.3.2.4) suggests that the beginning of a
prosodic domain represents a suprasegmentally dominant position. Taking
grammaticalization into account, the various tonal patterns may be attributed to the
tonal interaction from a less grammaticalized affix or clitic exercising influence when it
occurs at the beginning of a prosodic domain, the suprasegmentally dominant position.
(3.23) H-shift on nominal reduplication

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Base form</th>
<th>Reduplicated form</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[2] [sp]</td>
<td>dzur^</td>
<td>mate</td>
<td>[3] [sp]</td>
</tr>
<tr>
<td>[3] [sp]</td>
<td>k^3e^1lpe^</td>
<td>turtledove</td>
<td>[4] [sp]</td>
</tr>
</tbody>
</table>

For nouns with a rising tone, it is not predictable as to whether the reduplication will lead to an H-shift. The degree of lexicalization seems to be a factor. For reduplications that are less or not lexicalized, an H-shift is more likely to be found.

Tone changes found on verbal reduplication are more diverse. While natural adjustments tend to occur, as shown in (3.24), there are other possibilities, e.g. (3.25).

(3.24) Spreading initiation/Tone-partition on verbal reduplication

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Base form</th>
<th>Reduplicated form</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+sp]</td>
<td>ju^</td>
<td>(of bird) call</td>
<td>[1] [+sp]</td>
</tr>
</tbody>
</table>

(3.25) H-shift on verbal reduplication

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Base form</th>
<th>Reduplicated form</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[2] [sp]</td>
<td>dzj^</td>
<td>sew</td>
<td>[3] [sp]</td>
</tr>
<tr>
<td>[2] [sp]</td>
<td>p^je^</td>
<td>stitch</td>
<td>[3] [sp]</td>
</tr>
</tbody>
</table>

If the suprasegmentals of reduplicated verbs undergo substantial changes, they often involve an H-shift and perhaps H-blocking. The need for the latter process is uncertain, for verbs with a rising tone may already have a negative value for the spreading parameter, as is the case for “to laugh”. Note that both directions are possible for H-shifts on base verbs with a rising tone. When the H tone is shifted to the left, the H tone does not spread. Reduplications quite frequently trigger a rhyme change on the first

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11 Another similar instance, but without rhyme change in the reduplication, is found from /leR/ to /leLleR/ “folk song”. The non-reduplicated form in the word does not occur alone. The suprasegmental is inferred from its use in compounds like /leLk’tue^H/ “master of folk songs”.

12 More data are needed to pinpoint factors at work regarding the direction of shifting.
sylable (cf. §2.5.1.1). To the extent discernible, there is no direct connection between the vowel centralization and the suprasegmental change.

The suprasegmentals of reduplicated verbs are generally not predictable, except for reduplications deriving reciprocal verbs. Regardless of the original suprasegmentals of the base verbs, reciprocal verbs usually assume the tonal pattern H-L:

(3.26) H-blocking and/or H-shift on reciprocal verbs

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Base form</th>
<th>Reduplicated form</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+sp]</td>
<td>tsəwʰ</td>
<td>hit</td>
<td>[1] [-sp]</td>
</tr>
<tr>
<td>[2] [sp]</td>
<td>geʰ</td>
<td>cut off (involvement)</td>
<td>[1] [-sp]</td>
</tr>
</tbody>
</table>

The final example in (3.26) shows reduplication on a bisyllabic verb. Note that only the second syllable of the word is reduplicated in the reciprocal form. If we ignore the non-reduplicated part, the tonal pattern over the reduplicated part conforms to the regular pattern found on reciprocal verbs.

3.3.2.4 Changes in compounding

Suprasegmental changes in compounding are difficult to predict due to two factors. Firstly, the nature of compounding involves at least two words which generally possess their own suprasegmentals on the input level (ideophones are noticeable exceptions to this). Tonal interaction may exist. Secondly, some compounds are lexicalized with suprasegmentals deviant from those derived through regular channels. As a rule of thumb, the first component is more likely to determine the overall suprasegmentals for a compound. This is achieved through a detonation process in which the second component loses its original suprasegmental and merges its prosodic domain with the preceding domain. For example (glosses for components are given after a compound):

(3.27) Domain merger (with the high tone of the second word detoned)

a  zɔʰ + kwaʰ  >>  zɔʰkwaʰ  sheep hoof < sheep_hoof
[1] [+sp]  [1] [+sp]  [1] [+sp]

b  tʂueʰ + kwaʰ  >>  tʂueʰkwaʰ  mule hoof < mule_hoof
[1] [-sp]  [1] [+sp]  [1] [-sp]

c  guəʰ + kwaʰ  >>  guəʰkwaʰ  horse hoof < horse_hoof
[2] [sp]  [1] [+sp]  [2] [sp]

d  dʒi³-zih + kwaʰ  >>  dʒi³-siʰkwaʰ  buffalo hoof < buffalo_hoof
[3] [sp]  [1] [+sp]  [3] [sp]
As can be seen from (3.27)-(3.29), domain merger occurs widely in Prinmi compounds, irrespective of the tones borne by the second components. The tonal patterns of the compounds are decided by the first components, leaving the second components merely as an extension of the prosodic domain.

The compounds in (3.27)-(3.29) are all of the modifier-modified type, with the first component qualifying the second one (cf. §5.4.2). They could give a false impression that perhaps the head, the modified element, in a compound is subject to detonation. This is true as far as modifier-modified compounds are concerned, but it is not necessarily valid for other kinds of compounds, especially when the modifier follows the head. For instance,
Like those in previous examples, the word that undergoes detonation in the compounds is the second component. With (3.30), it should be clear that the relation between the components is irrelevant to the suprasegmentals of compounds. Rather, the order of the components is the determining factor. Indeed, when the second components from (3.27)–(3.29) serve as the beginning element in other compounds, they, in turn, become dominant suprasegmentally, e.g.

\[(3.31)\]

\[
\begin{align*}
    a & \quad \text{kw} \text{w}^H + \text{tj} \text{e}^H & \Rightarrow & \quad \text{kw} \text{w}^H \text{tj} \text{e}^H & \quad \text{the hoof group} \,<\, \text{hoof\_group} \\
    & \quad [1][+sp] & & [1][+sp] & [1][+sp] \\
    b & \quad \text{s} \text{i}^f + \text{ty} \text{H} & \Rightarrow & \quad \text{s} \text{i}^f \text{ty}^l & \quad \text{sausage} \,<\, \text{meat\_intestine} \\
    & \quad [1][-sp] & & [1][+sp] & [1][-sp] \\
    c & \quad \text{k}'\text{u}^R + \text{nj} \text{e}^H & \Rightarrow & \quad \text{k}'\text{u}^R \text{nj} \text{e}^H & \quad \text{headache} \,<\, \text{head\_ache} \\
    & \quad [2][sp] & & [1][+sp] & [2][sp]
\end{align*}
\]

The prominent role played by the initial component in shaping the suprasegmentals of a compound is beyond doubt. However, for every environment practicable for domain merger, as illustrated above, suprasegmental changes other than the regular domain merger can also be found. Table 3-12 presents some of the ‘irregular-tone’ (i.e. not generated from the ordinary domain merger) compounds. All examples are drawn from disyllabic compounds. The tonal categories of the elements are indicated on the leftmost column for the first component and on the top of the table for the second one. Due to space limitation, the table does not provide detailed suprasegmental derivations for every compound, but the surface tones of the syllables are given throughout.

<table>
<thead>
<tr>
<th>2nd C.</th>
<th>High/[1;+sp]</th>
<th>Falling/[1;-sp]</th>
<th>Rising/[2;sp]</th>
</tr>
</thead>
<tbody>
<tr>
<td>H/[1;+sp]</td>
<td>kw3hkwal ox hoof</td>
<td>tfyhi bial large intestine</td>
<td>ugi deR old bear</td>
</tr>
<tr>
<td></td>
<td>kw3hpiH white ox</td>
<td>kw3hm iH ox hair</td>
<td>kw3m nH cow milk</td>
</tr>
<tr>
<td>F/[1;-sp]</td>
<td>dq3hmoH bastard's mother</td>
<td>ts'i nH goat milk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ts3j nhl liver disease</td>
<td>iJ3moF hen</td>
<td></td>
</tr>
<tr>
<td>R/[2;sp]</td>
<td>s3h jil March</td>
<td>k'u mibl (of head) hair</td>
<td>tfu nju black pig</td>
</tr>
<tr>
<td></td>
<td>tfu k'u k'ui pork leg</td>
<td>nje miR the Moso</td>
<td></td>
</tr>
</tbody>
</table>

All the tonal patterns of the compounds in the table can be accounted for by the suprasegmental processes presented in §3.3.2.1. For instance, a rightward H-shift in addition to the regular domain merger (which absorbs the second component) will engender the patterns in the shaded part of the table. The problem with suprasegmentals of Prinmi compounds lies in the difficulty in determining whether the regular domain
merger alone is sufficient, and if not, what conditions need to be taken into consideration for any further processes. Potential factors such as syllable weight, semantics and morphological structure of compounds do not appear to condition for the details of the suprasegmental processes that may be involved. Thus, the surface suprasegmentals of Prinmi compounds are not completely predictable.

Table 3-13: Some compounds elicited from the matrix table

<table>
<thead>
<tr>
<th>Compounds</th>
<th>[1; +sp]</th>
<th>[1; +sp]</th>
<th>[1; +sp]</th>
<th>[1; +sp]</th>
<th>[1; +sp]</th>
<th>[1; +sp]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>k'’ωH</td>
<td>k’’ωH</td>
<td>k’’ωH</td>
<td>p’’H</td>
<td>n’’H</td>
<td>n’’H</td>
</tr>
<tr>
<td></td>
<td>foot</td>
<td>heart</td>
<td>horn</td>
<td>white</td>
<td>disease</td>
<td>ear</td>
</tr>
<tr>
<td>[1; +sp]</td>
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<td></td>
</tr>
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<td>n/a</td>
<td>n/a</td>
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<td>moHp’’H</td>
<td>silver pheasant</td>
<td>19</td>
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<td>n/a</td>
</tr>
<tr>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>[2; -sp]</td>
<td>gu’R</td>
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<td>22</td>
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<tr>
<td>[3; -sp]</td>
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<td>hare</td>
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</tr>
</tbody>
</table>
The partial predictability, notwithstanding occasional exceptions on some frequently used compounds, is important to Prinmi, which heavily relies on compounding for generating new words. The great majority of compounds derive their suprasegmentals through the kind of domain merger presented in (3.27)–(3.31). This is supported by an empirical study which can only be briefly commented here.

(continued from the left)

<table>
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<tr>
<th>[1; -sp]</th>
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<th>[2; +sp]</th>
<th>[2; -sp]</th>
<th>[2; -sp]</th>
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<td>m3F</td>
<td>s1F</td>
<td>ts3F</td>
<td>m34lF</td>
<td>k'uR</td>
<td>n1d3j6H</td>
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<td>njaR</td>
<td>s3jR</td>
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</tr>
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<td>hair</td>
<td>skin</td>
<td>meat</td>
<td>son</td>
<td>tail</td>
<td>head</td>
<td>nose</td>
<td>mouth</td>
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<td>blood</td>
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</tbody>
</table>

[continued from the left]
To collect more systematic and comparable compound data, a matrix table with twenty-nine animal terms to be compounded with twenty-two nouns (mostly body-part terms) was prepared in Chinese. Due to availability constraint, a young native of Niuwozi but from a third clan was asked to produce legitimate Prinmi compounds using the animal terms as the first components. On his own request, the village chief was also invited during the recording so that help and correction would be available if needed. The data were further consulted with the main consultant later, and he made 22 corrections concerning the suprasegmentals (15 of them were due to a different suprasegmental the young consultant had on the word for *golden pheasant*). Thus the reliability and accuracy of the data can be ascertained.

A partial presentation of the matrix table is provided in Table 3-13. The compounds all start with an animal term on the left column. They are arranged here in accordance with the suprasegmental parameter settings of the components. The Arabic number indicates the order of the nouns in the original matrix table. An empty space in the table corresponds to a compound with expected suprasegmentals, including those with one variation that complies with the regular pattern. Irregular suprasegmentals are presented in bold. Those crossed through with a line represent problematic forms to be replaced by the new form from the main consultant. Compounds with a duo-domain are distinguished with the suprasegmental of the second domain rendered in italic. Nonsensical compounds were not produced and were indicated with 'n/a' in the table. Some lexicalized compounds (those need to be listed under dictionary entries) involve a different word/morpheme to generate the intended meaning. These are marked off with 'dif.'.

As Table 3-13 is intended to present a general picture about the suprasegmentals of compounds in Niuwozi Prinmi, no remarks, as interesting as some may be, will be made here. There are 131 instances where a meaningful compound cannot be formed in the matrix table. Thus a total of 507 compounds are generated. The following summarizes the situation for the suprasegmentals of these compounds:

<table>
<thead>
<tr>
<th>(3.32) Predictable</th>
<th>Unpredictable</th>
<th>With archaic word</th>
<th>Duo-domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>417 82%</td>
<td>46 9%</td>
<td>16 3%</td>
<td>28 6%</td>
</tr>
</tbody>
</table>

Note that some of the compounds based on archaic words may follow the regular pattern for deriving their suprasegmentals. Also, cases involving a duo-domain may be resulted

---

13 The main consultant also pointed out the segmental difference such as the voiceless nasal in the word for “ear” and other corrections involving the use of some archaic animal terms in certain compounds. The details will not be discussed below.
from the expressions being rendered as phrases instead of compounds.\textsuperscript{14} Even counting these putative instances as unpredictable, we still find a very high proportion (82\%) of Prinmi compounds whose suprasegmentals arise from the regular pattern of domain merger of the second component into that of the first one.

### Changes in short phrases/clauses

Domain merger can occur in a short noun phrase between a noun and an adjective. An adjacency condition is necessary (but not sufficient) in order for the domain of the adjective to merge into that of the preceding noun. For example,

(3.33) Domain merger between nouns and adjectives

\begin{align*}
a &\quad d\text{fi}^{H} + p^{i'}j^{R} = d\text{fi}^{H} p^{i'}j^{H} \quad \text{white cloud (cloud + white)} \\
&\quad [1] [+sp] [1] [+sp] [1] [+sp] \\
b &\quad g\text{gi}^{F} + j^{i}i^{R} = g\text{gi}^{H} j^{i}i^{L} \quad \text{new bed (bed + new)} \\
&\quad [1] [-sp] [2] [sp] [1] [-sp] \\
c &\quad a^{k}t^{s}i^{R} + s^{o}i^{H} = a^{k}t^{s}i^{L} s^{o}i^{H} \quad \text{clean wine (wine + clean)} \\
&\quad [3] [sp] [1] [+sp] [3] [sp]
\end{align*}

When a prefixless verb immediately follows its core argument which is a bare noun, the two words in the clause may restructure their prosodic domains so that the verb becomes situated in the domain of the preceding noun. For instance:

(3.34) Domain merger between nouns and intransitive verbs

\begin{align*}
a &\quad g\text{y}^{H} + t^{j}j^{o}i^{F} = g\text{y}^{H} t^{j}j^{o}i^{H} \quad \text{it rains (rain + appear)} \\
&\quad [1] [+sp] [1] [-sp] [1] [+sp] \\
b &\quad j^{o}i^{F} + w^{u}H = j^{o}i^{H} w^{u}l \quad \text{rooster calls (rooster + call)} \\
&\quad [1] [-sp] [1] [+sp] [1] [-sp] \\
c &\quad k^{k}w^{e}w^{k} + j^{i}i^{H} = k^{k}w^{e}w^{L} j^{i}i^{H} \quad \text{smoke abounds (smoke + many)} \\
&\quad [2] [sp] [1] [+sp] [2] [sp]
\end{align*}

(3.35) Domain merger between nouns and transitive verbs

\begin{align*}
a &\quad f^{j}j^{E} + t^{s}w^{F} = f^{j}j^{E} t^{s}w^{H} \quad \text{forge iron (iron + forge)} \\
&\quad [1] [+sp] [1] [-sp] [1] [+sp] \\
b &\quad j^{h}F + j^{o}R = j^{h}H j^{o}L \quad \text{pull a tooth out (tooth + pull out)} \\
&\quad [1] [-sp] [2] [sp] [1] [-sp]
\end{align*}

\textsuperscript{14} Although tonal interaction is also observed on some phrases, its likelihood is lower than that found in compounds. Morphosyntactically, (genuine) phrases always contain more than one free word. The words often maintain their own suprasegmentals in the phrase, given their autonomous status.
The merger leads to natural adjustments on the new domain. Spreading initiation, as in (3.34)a and (3.35)a, and tone partition, as in (3.34)b–c and (3.35)b–c, are regularly observed. Sometimes an H-shift may occur, as shown in (3.35)d. Intervening elements such as clitics and directional prefixes can obstruct the domain merger, e.g. (the sign ‘\’ marks off two autonomous prosodic domains.)

(3.36) Domains merged

\[
\begin{array}{c|c}
1; +sp & gy^H \ t^j'jö^H \\
2; sp & k'ew^L \ z^j^H \\
2; sp & t^j'q^V \ t^j'i^H \\
3; sp & tu^L \ d^jz^j^R \\
\end{array}
\]

it rains
smoke abounds
slaughter a pig
extract oil by heat

(3.36) Domains unmerged

\[
\begin{array}{c|c}
1; -sp & gy^H \ n^3^-t^j'jö^F \\
2; sp & k'ew^L \ z^j^H \\
2; sp & t^j'q^V \ g^j^a^-t^j'i^H \\
2; sp & tu^L \ g^j^H \ d^jz^j^R \\
\end{array}
\]

(3.3.2.6) Changes in clitic groups

The prosodic domain of a word is extended when it hosts a clitic. Barring clitic insertion into a prosodic domain, attachment of clitics after a host only triggers natural adjustments, if any tone changes are found on the surface. Tone partition and spreading initiation are especially frequent with monosyllabic words. The following illustrate LH-partition and spreading initiation:

(3.37) LH-partition

\[
\begin{array}{c|c|c}
\text{Parameters} & \text{Host} & \text{Clitic group} \\
[2] \text{[spread]} & t^j'e^R & t^j'e^L \ f^j{o}^H \\
[3] \text{[spread]} & n^3^-\d^jö^H & n^3^-\d^jö^H \ s^i^H \\
[3] \text{[spread]} & b^u^L-s^u^R & b^u^L-s^u^L \ j^z^j^H \\
[4] \text{[spread]} & k^w^3L-n^3L-t^j^H & k^w^3L-n^3L-t^j^H \ g^j^H \\
\end{array}
\]
to feed
will feed
turn yellow
turned yellow
peach
peaches
cicada killer wasp
' s

(3.38) Spreading initiation

\[
\begin{array}{c|c|c}
\text{Parameters} & \text{Host} & \text{Clitic group} \\
[2] \text{[+spread]} & n^3^-d^jö^H & n^3^-d^jö^H \ d^jö^H \\
[2] \text{[+spread]} & b^e^L-\d^jö^H & b^e^L-\d^jö^H \ g^e^L \ b^o^L \\
[3] \text{[+spread]} & d^jö^H-\d^jö^H-\d^jö^H & d^jö^H-\d^jö^H-\d^jö^H \ g^jö^H \\
\end{array}
\]
sit
sitting
snake
as for the snake
buffalo horn
with the buffalo horn

Note that a word may host more than one clitic, as in the second instance in (3.38). Although the prosodic domain of the word has enlarged to five syllables, the suprasegmental parameters for the word remain intact.
When clitics are attached to the beginning of a word, either natural adjustments or parameter/domain changes may take place. Prinmi allows only two kinds of functional clitics to precede their hosts: the interrogative /a/ and the negators /ma/, /me/, and /tju/ (these clitics have various attachment patterns, see §8.1 for details). These clitics may also be inserted between a prefix and a verb. Furthermore, the interrogative and the negator /ma/ can appear after the host under certain circumstances (see Ex.(3.46) below). Let us first consider the tone changes related to these clitics when the prosodic domain is extended to the left:

(3.39)  H-blocking/H-spreading and H-shift (with the interrogative clitic)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Host</th>
<th>Clitic group</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+spread]</td>
<td>gqēH</td>
<td>aH gqēL</td>
<td>[1] [-spread]</td>
</tr>
<tr>
<td>[1] [-spread]</td>
<td>3eF</td>
<td>aH 3eH</td>
<td>[1] [+spread]</td>
</tr>
<tr>
<td>[2] [spread]</td>
<td>bōR</td>
<td>aH bōH</td>
<td>[1] [+spread]</td>
</tr>
</tbody>
</table>

As shown in (3.39), when the interrogative is attached before a verb, it bears a high tone. Two tonal patterns may emerge, depending on the tonal categories of the hosts. The H-blocking applies to verbs with a high tone so that the H tone does not spread. On the contrary, verbs with a falling tone require the H-spreading to let the H tone spread. Both H-shift and H-spreading are needed for verbs with a rising tone, since the H tone must be shifted to the first syllable, and the spreading parameter cannot be left unspecified.

Two types of tone change are found upon attaching the negator /ma/ before a verb:

(3.40)  H-shift/Tone reassignment (with the general negator)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Host</th>
<th>Clitic group</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+spread]</td>
<td>3iH</td>
<td>maL 3iH</td>
<td>not many</td>
</tr>
<tr>
<td>[2] [spread]</td>
<td>k’uR</td>
<td>maL k’uR</td>
<td>not want</td>
</tr>
</tbody>
</table>

The attachment of the general negator before verbs can lead to three different tonal patterns, depending on the tonal categories of the hosts. These patterns involve an H-shift for verbs with a high tone or a rising tone, and a tone reassignment for verbs with a falling tone. A parallelism is found with the desiderative negator /tju/, i.e. H-shift for the high and rising tones, and tone reassignment for the falling tone:

(3.41)  H-shift/Tone reassignment (with the desiderative negator)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Host</th>
<th>Clitic group</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+spread]</td>
<td>kw3jH</td>
<td>tjēL kw3jH</td>
<td>don’t cry</td>
</tr>
<tr>
<td>[2] [spread]</td>
<td>t’jōR</td>
<td>tjēL t’jōR</td>
<td>don’t drink (2:sg)</td>
</tr>
</tbody>
</table>
When the perfective negator /me/ is attached to the beginning of a bare verb, a specific tonal pattern arises regardless of the suprasegmentals of the hosts. For instance:

\[(3.42) \text{H-spreading and H-shift (with the perfective negator)}\]

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Host</th>
<th>Clitic group</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+spread]</td>
<td>bu\textsuperscript{H} outrage</td>
<td>me\textsuperscript{H} bu\textsuperscript{H} haven't outraged</td>
<td>[1] [+spread]</td>
</tr>
<tr>
<td>[1] [-spread]</td>
<td>ṭu\textsuperscript{F} buy</td>
<td>me\textsuperscript{H} ṭu\textsuperscript{H} haven't bought</td>
<td>[1] [+spread]</td>
</tr>
<tr>
<td>[2] [spread]</td>
<td>k'jê\textsuperscript{R} give</td>
<td>me\textsuperscript{H} k'jê\textsuperscript{H} haven't given</td>
<td>[1] [+spread]</td>
</tr>
</tbody>
</table>

Since the tonal pattern coincides with that of the high tone, no change occurs for verbs under this tone. If the verb bears a falling tone, H-spreading is called for to generate the required pattern. In addition, a leftward H-shift also applies to verbs with a rising tone.

The interrogative and the negative clitics have different suprasegmentals when they appear between prefixes and verbs. After the interrogative clitic is fused into a directional prefix, the contraction results in desyllabification. The presence of the interrogative clitic in this environment has no direct influence to the suprasegmentals, except that the clitic often occurs in perfective expressions containing a perfective clitic:

\[(3.43)\]

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Prefixed verb</th>
<th>Clitic group</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [-spread]</td>
<td>t\textsuperscript{H}-p\textsuperscript{G}L white</td>
<td>t\textsuperscript{H}-p\textsuperscript{G}L si\textsuperscript{L} whitened?</td>
<td>[1] [-spread]</td>
</tr>
<tr>
<td>[2] [+spread]</td>
<td>t\textsuperscript{H}-n\textsuperscript{L}H sick</td>
<td>t\textsuperscript{H}-n\textsuperscript{L}H si\textsuperscript{H} been sick?</td>
<td>[2] [+spread]</td>
</tr>
<tr>
<td>[2] [-spread]</td>
<td>g\textsuperscript{L}-dz\textsuperscript{F} eaten (2:sg)</td>
<td>g\textsuperscript{L}-dz\textsuperscript{F} si\textsuperscript{L} eaten (2:sg)?</td>
<td>[2] [-spread]</td>
</tr>
<tr>
<td>[3] [spread]</td>
<td>n\textsuperscript{L}-s\textsuperscript{R} die</td>
<td>n\textsuperscript{L}-s\textsuperscript{R} si\textsuperscript{H} died?</td>
<td>[3] [spread]</td>
</tr>
</tbody>
</table>

On the other hand, an impact on the suprasegmentals can often be observed when a negative clitic occurs between a prefix and a verb: The original prosodic domain of the prefixed verb is split into two by the inserted clitic. This often leads to a rising tone on the initial domain. For instance (the sign ‘&’ marking off the two prosodic domains),

\[(3.44) \text{Domain splitting (with insertion of the perfective negator)}\]

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Prefixed verb</th>
<th>Clitic group</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+sp]</td>
<td>t\textsuperscript{H}-m\textsuperscript{L}pective make ripe</td>
<td>t\textsuperscript{H}- m\textsuperscript{L}pective hasn't made ripe</td>
<td>[1; sp] &amp; [2; sp]</td>
</tr>
<tr>
<td>[2] [+sp]</td>
<td>g\textsuperscript{L}-t\textsuperscript{H} grow big</td>
<td>g\textsuperscript{L}- t\textsuperscript{H} hasn't grown big</td>
<td>[2; sp] &amp; [2; sp]</td>
</tr>
<tr>
<td>[2] [-sp]</td>
<td>n\textsuperscript{L}-t\textsuperscript{L}f complete</td>
<td>n\textsuperscript{L}- t\textsuperscript{L} hasn't completed</td>
<td>[2; sp] &amp; [1; +sp]</td>
</tr>
<tr>
<td>[3] [sp]</td>
<td>d\textsuperscript{L}-d\textsuperscript{F}e\textsuperscript{L} dawn</td>
<td>d\textsuperscript{L}- d\textsuperscript{F}e\textsuperscript{L} hasn't dawned</td>
<td>[2; sp] &amp; [2; sp]</td>
</tr>
</tbody>
</table>

The repercussion of having a rising tone after the domain splitting is understandable. When the negative clitic is inserted after a low tone, the newly separated domain may
contain no H tone at all and becomes a defective domain. As Prinmi only tolerates a defective domain led by an ordinary one, such a domain splitting results in an illegitimate prosodic domain. To redress the illegitimacy, it is necessary to introduce a high tone to the defective domain after the splitting. For some reason, the high tone does not replace the low tone. Instead, it is allocated to the (final) syllable of the domain, rendering a rising tone on the syllable. The tone insertion does not take place if the domain already has a high tone, as in the first instance in (3.44). The other domain arisen from the splitting often has the tonal pattern L-H, except for prefixed verbs whose stems bear a falling tone. In this case, an H-H pattern is used. Sometimes the general negator /ma/ and the desiderative negator /tjn/ may also be inserted between a prefix and a verb. Their insertions also trigger a similar domain splitting, which is a common feature of clitic insertion.

When a negative clitic or the interrogative clitic is inserted into a bisyllabic verb, the prosodic domain of the host is split in the same vein as found in (3.44) above:

(3.45) Domain splitting of bisyllabic verbs

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Host</th>
<th>Clitic group</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+sp]</td>
<td>puHruH</td>
<td>burn</td>
<td>[1; sp] &amp; [2; sp]</td>
</tr>
<tr>
<td>[2] [+sp]</td>
<td>3i-ruH</td>
<td>burn</td>
<td>[2; sp] &amp; [2; sp]</td>
</tr>
<tr>
<td>[3] [-sp]</td>
<td>t’3LmbsuwH</td>
<td>know (3)</td>
<td>[2; sp] &amp; [2; sp]</td>
</tr>
</tbody>
</table>

If the clitic is inserted after a syllable that bears a low tone, the tone of the syllable changes to rising after the insertion.

The general negator and the interrogative clitic are often inserted between a verb host and a clitic such as the (non-)involvemental and modal clitics (cf. §8.1). After the insertion, the original prosodic domain undergoes a split and a complex clitic emerges. The complex clitic has a uniform tonal pattern L-H, irrespective of the tones of the host verbs:

(3.46) Domain restructure (with insertion of the general negator)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Clitic group</th>
<th>With the general negator</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+sp]</td>
<td>gjeHruH</td>
<td>not love (2:sg)</td>
<td>[1;+sp] &amp; [2;sp]</td>
</tr>
<tr>
<td>[1] [-sp]</td>
<td>t’jeHk3jH</td>
<td>won’t be sharp</td>
<td>[1;-sp] &amp; [2;sp]</td>
</tr>
<tr>
<td>[2] [sp]</td>
<td>3iHsH</td>
<td>won’t sleep</td>
<td>[2;sp] &amp; [2;sp]</td>
</tr>
<tr>
<td>[3] [sp]</td>
<td>k3LtsajHk3jH</td>
<td>won’t be small</td>
<td>[3;sp] &amp; [2;sp]</td>
</tr>
</tbody>
</table>
(3.47) Domain restructure (with insertion of the interrogative clitic)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Clitic group</th>
<th>With the interrogative clitic</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+sp]</td>
<td>zo(^H) k3j(^H) fine</td>
<td>zo(^H) a(^L) k3j(^H) will be fine?</td>
<td>[1;+sp] &amp; [2;sp]</td>
</tr>
<tr>
<td>[1] [-sp]</td>
<td>k(\nu)w(^H) f(o)(^L) steal</td>
<td>k(\nu)w(^H) a(^L) f(o)(^H) will steal?</td>
<td>[1;-sp] &amp; [2;sp]</td>
</tr>
<tr>
<td>[2] [sp]</td>
<td>ki(^L) f(o)(^H) sell</td>
<td>ki(^R) a(^L) f(o)(^H) will sell?</td>
<td>[2;sp] &amp; [2;sp]</td>
</tr>
<tr>
<td>[2] [-sp]</td>
<td>d(3)(^L)-p(3)(^H) k3j(^L) meet</td>
<td>d(3)(^L)-p(3)(^H) a(^L) k3j(^H) will meet?</td>
<td>[2;-sp] &amp; [2;sp]</td>
</tr>
</tbody>
</table>

An unusual tonal pattern arises when the interrogative clitic combines with a (non-)involvemental clitic. While the complex clitic forms part of the extended domain, it does not accept any H tone from the host — a situation reminiscent of the exceptional tonal category with an initial rising tone. The tonal pattern can be analyzed as consisting of two prosodic domains: a normal one for the host and a defective one that contains no H tone for the complex clitic. The surface tone of is unchanged, and the tonal pattern for the complex clitic is L-L:

(3.48) Domain restructure (with interrogative-(non-)involvemental clitics)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Host</th>
<th>Clitic group</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] [+sp]</td>
<td>se(^H) miss (someone)</td>
<td>se(^H) a(^L)-ju(^L) miss (someone)?</td>
<td>[1;+sp] &amp; [0]</td>
</tr>
<tr>
<td>[1] [-sp]</td>
<td>t(s)(^i)F slaughter</td>
<td>t(s)(^i)H a(^L)-ju(^L) slaughter (2:sg)?</td>
<td>[1;-sp] &amp; [0]</td>
</tr>
<tr>
<td>[2] [sp]</td>
<td>j(3)R fetch</td>
<td>j(3)R a(^L)-ju(^L) fetch?</td>
<td>[2;sp] &amp; [0]</td>
</tr>
<tr>
<td>[2] [-sp]</td>
<td>z(3)(^i)F enter</td>
<td>z(3)(^i)H a(^L) (1)(^L) enter (1/2:pl)?</td>
<td>[2;-sp] &amp; [0]</td>
</tr>
</tbody>
</table>

Without the interrogative clitic, the (non-)involvemental clitic behaves like other ordinary clitics.

### 3.3.3 The suprasegmental of postpositions

Before ending the suprasegmental description of Niuwozi Prinmi, the suprasegmentals of postpositions are worthy of some discussion. Locational postpositions are grammaticalized from spatial nouns (cf. §7.1.4). Except for the instrumental /\(\overset{\sim}{o}\)/ or its variants such as /\(\overset{\sim}{g}\)\(\overset{\sim}{o}\)/, which is well cliticized, the majority of postpositions are in transition towards clitics. This state is manifested with the unusual suprasegmental properties of postpositions undergoing cliticization:

- **Tone loss:** among those locational postpositions which can alternatively be used as a noun, it is clear that the word does not bear its original suprasegmental when functioning as a postposition;

- **Head sensitivity:** the suprasegmentals of postpositions behave more like a clitic when they appear after a personal pronoun, but not after a noun;
• Tone resistance: postpositions generally resist tone assignment from the head noun, leading to a blocking for the suprasegmental adjustment in the noun phrase.

These properties are illustrated in (3.49). Tone loss and tone resistance can be observed with /be/ “at” in (3.49)a; whereas tone loss and head sensitivity are exemplified in (3.49)b. Note that the high tone on the postposition here is a new one spreading from the personal pronoun /ne扫一扫/ “you”. Such spreading does not take place on the postposition after /lɑ̃-tsi扫一扫/ “finger” in (3.49)a, however.

(3.49) a  lɑ̃-tsi扫一扫  lɑ扫一扫 be扫一扫
finger      p:M               on the finger
Tone loss

b  ne扫一扫  be扫一扫
2s               at
    to you

While the tone loss on a postposition is quite natural and would be expected, its resistance to tone assignment from the head noun is rather unusual. This gives rise to a situation where postpositions often bear a low tone after a noun. Although the consultant considered that as optional and he would happily accept the alternative utterance when the postposition was treated like a clitic, as in (3.50)b and (3.51)b, the tone resistance shown in (3.50)a and (3.51)a is found consistently in his actual use of noun phrases with postpositions.

(3.50) a  ʃɑ̃-tsi扫一扫  be扫一扫
finger      at
on the finger

b  ʃɑ̃-tsi扫一扫  be扫一扫
finger      at
on the finger

(3.51) a  ko扫一扫-ji扫一扫 be扫一扫
crow      at
    to the Crow

b  ko扫一扫-ji扫一扫 be扫一扫
crow      at
    to the Crow

Prima facie, one might interpret the tone resistance as support for a syllable-tone analysis, regarding that postpositions were all low-tone words. Nevertheless, as pointed out in §3.1.1, Prinmi monosyllabic words never appear under a low tone when cited in isolation. This also applies to postpositions. On the second field trip, the main consultant was instructed to utter a phrase like those in (3.50) and (3.51) word by word before saying the whole phrase. In word by word utterance, the postposition was not articulated under a low tone, even though it was later changed to a low tone in reading the whole phrase.
Since the syllable-tone analysis is not a viable solution, we will need to account for the kind of suprasegmental pattern between a noun and a postposition. This can be handled without inventing additional suprasegmental rules or processes. What happens with tone resistance is basically that the suprasegmental change in a noun phrase ceases to continue after Step i) described in (3.52). Consequently, it is realized as a low tone by default. Step ii) is obligatory for postpositions following a pronoun but optional after a noun. Although the tone resistance is unusual, it does not pose any problem to the suprasegmental analysis proposed here.

(3.52) i) Domain merger — a postposition loses its tone when its prosodic domain is merged with that of the preceding word;

ii) Natural adjustment — the postposition may receive a H tone from the preceding word, depending on the suprasegmental of the word.

3.4 Conclusion

This chapter has presented a detailed description of the suprasegmental system of Niuwozi Prinmi, which is identified as an accentual system of substantial difference from a syllable-based tonal system. The accentual system operates on a prosodic domain between disyllable and quadrisyllable; it achieves suprasegmental contrasts by spreading of the H tone and varying the possible position of the H tone in the prosodic domain. This mechanism inevitably involves a frequent tone change on the surface as the prosodic domain of a word enlarges or shrinks in various environments. Realizing this fundamental mechanism of the suprasegmental system is the key to understanding the intractable tone sandhi, as well as the elusive contrast between the surface high tone and falling tone on isolated monosyllabic words. If subsumed under the broad sense of tone system, it is necessary to distinguish (Niuwozi) Prinmi as a word-based tone language, vis-à-vis a syllable-based tone language.
Chapter 4.
Lexical Categories

The cognitive nature of human language implies that words are organized in groups.¹ Significant differences may be found among languages in regard to what is being grouped together and how the groupings are related to one another. The delicate organization of lexicon is an important aspect of language. This chapter will address this issue before proceeding to the description of individual lexical categories in Prinmi.

4.1 Relation between lexical categories: an overlapping approach

The traditional concept of 'part of speech' assumes that the vocabulary of a language can be classified into a small number of non-overlapping classes, based on intuitions about the highly inflectional classical languages of Ancient Greek and Latin.² While this assumption is more or less applicable to languages with an extensive morphology, problems arise in languages such as English and Prinmi, where some words may serve for different functions without any morphological change.³ In English, for example, the word 'narrow' has the following functions:

(4.1) a The street is so narrow.
   b Narrow the topic.
   c The narrows are impassable.

While the antonym 'wide' can replace 'narrow' in (4.1)a, it cannot be used in either (4.1)b or (4.1)c. For the opposite meaning in (4.1)b, 'widen' is called for, which can replace neither (4.1)a or (4.1)c.

The kind of overlapping phenomenon exemplified with 'narrow' is well-observed, but there does not seem to be any standard approach to dealing with it. Some may simply treat the different uses of the word as resulting from three homonyms (cf. the discussion in Crystal 1967: 47-48); others (e.g. Dixon 1991: 50-52) propose some zero affixes that would derive an appropriate form (with zero marking) for each of the functions of the

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¹ This statement does not imply any universal system for word classes or parts-of-speech, cf. the observation by Anward, Moravcsik, & Stassen (1997).
² For example the Roman grammarians recognize eight partes orationis for Latin (Matthews 1967: 153).
³ Crystal (1967) provides a critical discussion of the major problems found in English when applying the traditional concept of part-of-speech to it.
word outside its basic word class.

The problem is particularly acute in Prinmi, which has no morphology for the sole purpose of changing a word from one category to another. Consequently, a number of words may be used as a noun, verb, or adjective. Although there are a few suffixes that can derive nouns from some verbs after enriching the meaning of the stem, they do not convert verbs to nouns (cf. §5.2.2.1):

\[(4.2)\]

\(\begin{align*}
\text{a} & \quad \text{tián to drink} & \quad \text{tian-yí beverage (substance for drinking)} \\
\text{b} & \quad \text{dō to look} & \quad \text{zzâa_do-ddin mirror (instrument for looking at image)}
\end{align*}\]

This kind of suffixation is comparable to those for semantic enrichment such as English -able (as in collect-able) or -est (as in pur-est), but not to those involving categorical conversion such as -ive (as in collect-ive) or -ify (as in pur-ify). To distinguish the two, the former may be called 'derivational affixes', and the latter 'conversional affixes'. The change of lexical category with a derivational affix is merely a by-product of the derived meaning. If the zero-conversion approach were to be adopted for Prinmi, the majority of words, regardless of their functions, would be marked indistinguishably with a covert affix. The homonymy approach, on the other hand, appears to avoid the problem rather than offering a solution to the problem. It is thus not considered here.

To deal with the multifunctionality in Prinmi, the concept of set overlap will be used to explore the organization of the lexicon in the language. The major lexical categories are verb \(\{V\}\), noun \(\{N\}\), and adjective \(\{A\}\), each with a range of grammatical functions and a few morphological peculiarities which will be discussed in the course of the description. These overlap extensively in every logically possible way:

\[(4.3)\]

\[
\begin{array}{c}
\{V\} \\
V \\
V/N \\
V/N/A \\
N \\
V/A \\
N/A \\
\{A\}
\end{array}
\]

A total of seven groups can be recognized in virtue of the overlapping between the three lexical categories, yielding four word groups in each category, namely:

---

\(^4\) Although few make this kind of distinction, its existence is supported by the observation that simplification or loss of morphology in Pidgins and Creoles typically affects conversional affixes — 'affixes which did not convey independent semantic', e.g. the suffix -ness as in ill-ness (Voorhoeve 1981: 26).
Verb = \{V\}: \ V, \ V/N, \ V/A, \ V/N/A \\
Noun = \{N\}: \ N, \ V/N, \ N/A, \ V/N/A \\
Adjective = \{A\}: \ A, \ V/A, \ N/A, \ V/N/A

Note that the labels for the overlapping groups are meant to be read neutrally; they do not imply any basic membership. That is, ‘V/A’ does not suggest that a word is basically a verb with an additional function of adjective.

Adopting the overlapping approach, I will not use the traditional terminology like ‘part of speech’ or ‘word class’ in fear of potential confusion. Instead I will use the terms ‘lexical category’ (signifying a complete category) and ‘word group’ (for the finer distinct groupings), connected by the relation of set overlap. Notationally names of word groups will always be referred to with the abbreviated capital letters; whereas names of lexical categories will be fully spelt or rendered as \{N\}, \{V\}, and \{A\} in shorthand.

The word groups N, V, and A, resemble ‘word classes’ in that their members exhibit morphosyntactic properties unique to a particular category. These three word groups may be regarded as representing the archetypes of the corresponding lexical categories. In contrast, members of a multifunctional word group like V/N/A have all three kinds of functions and some morphosyntactic features of the categories. These depend on the specific use of the word in a phrase/clause; the features are essentially inherent from the relevant lexical category in use. For example when a word from the V/N/A group is used as a verb, it will have properties such as hosting a negative or interrogative clitic which are common to verbs; but when the same word functions as a noun, these verbal features no longer associate with it.

It must be stressed that the major lexical categories of Prinmi to be identified below are based on morphosyntactic criteria rather than syntactic functions, following guidelines proposed in works such as Schachter (1985), Sasse (1993), and Mühlhäusler (1994). The overlapping approach motivated by multifunctionality does not imply any emphasis or bias towards functional criteria. They are considered only when a lexical category does not have any morphological property.

4.2 Open lexical categories

The open lexical categories in Prinmi include the verb, noun, and adjective. A lexical category is considered to be open if it is readily expandable and has a large number of members, irrespective of their potential multiple functions. Although the adjective

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5 The basic membership for multifunctional words is an interesting issue beyond the scope of the present study.
significantly overlaps with the verb, the category (including the members A, V/A, N/A, and V/N/A) as a whole is expandable. Thus it is qualified to be an open lexical category.

Grammatical functions are associated to lexical categories, not to word groups. It is assumed that each of the three open lexical categories has its own unique function not shared with other open categories (although it is possible for a closed lexical category to have a similar or identical function as an open lexical category does). The associations are: verbs and only verbs can function as a predicate; nouns and only nouns may serve as an argument of a verb at the word level; adjectives and only adjectives can modify nouns directly at a post-nominal position.

Under this assumption, a prototypic verb from the V group cannot qualify a noun. Its ability to modify a noun through some grammatical means is another matter. On the other hand, if a word exhibits more than one of the above functions, it follows that the word must belong to more than one lexical category. Both simplex and compound words can have multiple functions. This chapter will focus on simplex words. (For discussion of the issue on compounds, see §5.4.1).

### 4.2.1 Verb

Verbs are the only lexical category in Prinmi with a significant morphology, including prefixation of directionals, suffixation for a few derivations, inflection on a small number of verbs, and a quite productive reduplication. These will be discussed in §5.2 and §5.3. Morphological identification for this lexical category is rather straightforward. Words that can be prefixed with any of the directional prefixes nea- “downward”, dea- “upward”, tea- “away from the speaker”, ddea- “toward the speaker”, gge- “outward”, or ea- “inward”, belong to the lexical category of verb, e.g. 

- gge-jë “to speak”
- tea-kin “to give”, and 
- nea-yë “(for second-person singular) come down”.

Directional prefixes are reliable indicators of verbal membership, but they are not always found on verbs. Other useful verbal properties are abilities to host the negative clitic ma’ and the interrogative clitic a’. They are usually attached in front of the final syllable of a verb (see §8.1), e.g. 

- mën’ma’siàn “(for first-person singular) don’t know”, 
- ã’xxee “exist?”

Some secondary grammatical criteria for verbs include the abilities to occur with the intensifier lealiàn “very” and to host aspectual clitics. These are sufficient but not necessary for identifying a verb, as their use is sensitive to the meaning of the verb.

Prinmi verbs can be classified on the basis of valence — the smallest number of

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6 When a verb modifies a noun through a relative clause, to be discussed in §7.1.3, the verb still functions as a predicate within the clause. The modifying relation holds only between the relative clause and the noun, not between the verb and the noun.
arguments required by the meaning of a verb. Given that ellipsis is prevailing in Prinmi, it is necessary to distinguish cases between a covert argument and a non-existent argument. For the former type, it will be recognized as a zero anaphor, whose grammatical status is equivalent to an explicit pronoun and whose use is subject to specific pragmatic condition (cf. §12.2.2). It must be stressed that zero anaphor, as proposed here, does not include ellipsis of generic arguments.

As the range of valence falls between one to three, three groups of verbs emerge in terms of valence. Representative examples are provided in the following:

(4.5) | Monovalent | Bivalent | Trivalent |
---|---|---|---|
sū | to die | sēa | to kill | chēe | to feed |
qūi | to be good | sshāa | to carry | kiān | to give |
bbōn | to be cold | zēazao | to fight | jū | to say |

Alternatively, the three types of verb may be called intransitive, transitive, and ditransitive respectively. However, sometimes there can be a discrepancy between the valence and the transitivity of a verb, with the number of explicit arguments one less than that specified in the valence. The shaded part in (4.5) contains verbs of this kind. When the monovalent verb bbōn “to be cold” is used for the weather, the core argument is always suppressed and cannot be rendered explicit. Likewise, although zēazao “to fight”, which is derived as a reciprocal from the bivalent verb zāo “to hit”, is understood to involve two participants, syntactically it can only occur with one argument which is expressed as plural. When jū “to say” is used in the sense “to utter”, it cannot take an addressee. Unless the latter is considered as a separate homophonous verb, the arguments of the trivalent verb in this instance is restricted to two only. Note that none of these cases can be accounted for with a zero anaphor, since it is impossible to syntactically restore the missing argument. While some of them appear to be ‘ambitransitive’, there is no evidence or need for establishing this kind of verb. Contrast such as English to break (transitive) versus to break (intransitive) is distinguished formally in Prinmi, as will be seen in (4.6) (cf. §5.2.3 for more examples).

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7 Although the classification of jū “to say” as a trivalent verb is somewhat debatable, as the addressee can often be omitted, the crucial point is that the implicit addressee is recoverable. This is perhaps due to the fact that an archetypal act of saying involves a message, a speaker and an addressee, even if the latter two have an identical referent.

8 When verbs denote general activities, they may decrease the number of argument(s), as in the English sentences I teach (for a living) or I kill (for a living). Inasmuch as the decrease in transitivity does not affect the essential meaning of a verb or the grammatical relation of the argument, the semantically-conditioned discrepancy between transitivity and valence will not be used to set up special groups of verbs (cf.
Under Chafe’s (1970) scheme of verb classification, Prinmi verbs can be divided into three semantic types: Action, Process, and State. In brief, Action verbs refer to those which cannot be performed without energy input; Process verbs are events that result in a change of state, characteristically due to an internal cause; and State verbs cover those conveying a general non-gradient state. The three are exemplified below with verbs of varied valence:

<table>
<thead>
<tr>
<th>Monovalent</th>
<th>Bivalent</th>
<th>Trivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hrá</td>
<td>to laugh</td>
<td>griàn</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ggriän</td>
<td>to break (vt.)</td>
<td>---</td>
</tr>
<tr>
<td>káó</td>
<td>to fume</td>
<td></td>
</tr>
<tr>
<td><strong>State</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>niàn</td>
<td>to ache</td>
<td>mansii</td>
</tr>
<tr>
<td>geazáí</td>
<td>to be small</td>
<td>bbôn</td>
</tr>
</tbody>
</table>

While verbs of different semantic types behave dissimilarly in regard to certain syntactic properties, the semantic types have no correlation with valence. Except for the Process verb, which is invariably monovalent, the valence of a verb is not predictable from its semantic type. Likewise, there is no one-to-one correspondence between the semantic types and multi-membership of verbs (cf. §4.2.4). A generalization like State verbs all belong to the V/A is simply untenable. Those examples in bold in (4.6) can function other than a verb (as will be seen later); all of them are members of the V/N group, except for geazáí “to be small”, which belongs to the V/A.

4.2.2 Noun

Apart from two affixes (cf. §5.1) and reduplication (§5.3) found in a small number of nouns, Prinmi nouns exhibit little morphology. The most useful criterion for identifying nouns is whether a word can form a constituent with a demonstrative: Nouns and only nouns can be modified by the demonstratives dè “this” or êdè “that” in Prinmi. If a word immediately follows the modificatory clitic ggia, it must be a noun. Nouns may also precede the discourse clitic ggee. For instance, dè mì (ggee) “this person”, sianbbôn ggià gguxxin (ggee) “the middle of the tree”. Caution must be taken when the final property is used for identifying a noun, as verbs can also appear before ggee in a single-word clause, though this is less common.

Within the lexical category of nouns, it is feasible to have a further semantic subdivision. Different criteria naturally result in divergent groupings. Animacy can be used as a criterion for dividing Prinmi nouns. ANIMATE nouns include all kinds of live

beings but for plants. They generally select the ANIMATE existential \textit{xxève} in existential sentences (cf. §9.1.2).

Another way of grouping is to consider whether a noun is a PROPER noun or a COMMON noun. Four subtypes can be recognized within PROPER nouns: ETHNIC NAME, PERSON NAME, PLACE NAME, and DUODECIMAL ANIMALS. The following exemplify these subtypes:

\begin{enumerate}
  \item \textbf{ETHNIC NAME} \quad Xiéa \textit{the Han (Chinese)} \quad \textit{Gamí} \textit{the Tibetan}
  \item \textbf{PERSON NAME} \quad Eqiän \textit{(a male name)} \quad \textit{Zhumà} \textit{(a female name)}
  \item \textbf{PLACE NAME} \quad Bódo \textit{Xingyìnpán} \quad \textit{Mèle} \textit{Mùlî}
  \item \textbf{DUODECIMAL ANIMALS} \quad \textit{Lôn} \textit{the Ox} \quad \textit{Pèa} \textit{the Pig}
\end{enumerate}

While the use of a calendar system based on a set of twelve animals is widespread in Tibeto-Burman area, the Prinmi one is peculiar in that it involves many terms distinct from those referring to the actual animals. The two animals seen in (4.7)d are called \textit{guea} "ox" and \textit{qua} "pig" respectively outside the calendar system, for example. Therefore, the set of animal terms for the calendar system are separated as a group on its own. These subtypes of noun show certain grammatical features directly associated with their meanings: barring the ETHNIC NAME, the other three do not host the plural clitic 're, since their meanings cannot be expressed in plural. Within COMMON nouns, a subtype for KINSHIP terms may be recognized on a morphological ground (cf. §5.1).

If we turn from the semantics-based subgrouping of nouns to a functionally motivated one, we will find the word groups V/N, N/A, and V/N/A (the latter two will be looked at in the next subsection). Every word in the V/N belongs to both noun and verb, and can function as either a noun or a verb (but not simultaneously) in sentences. Example (4.8) provides two instances of \textit{niän} "(to ache", one as a noun and the other as a verb. More generally, the pairs of examples in (4.9) and (4.10) show the double function of \textit{hrá} "(to) laugh" and \textit{kão} "(to) fume" in different sentences:

\begin{enumerate}
  \item \textbf{niän} \textit{ache} \textit{down-hit+Pf head InT very ache+Dur} \quad I'm hit by an illness, (my) head is aching very much.
  \item \textbf{Mëa_zzhèa bbo hra ggèe xxii.} \quad A mediocre person has many laughs. (Proverb)
  \item \textbf{... ddiàddia bbee \textit{hra}'rù.} \quad \textit{... (you) are laughing at Granny.} \quad
\end{enumerate}
(4.10) a sian zzhēa bbo kao ggēe xxii.
wood bad ExT smoke InT plentiful
bad wood has a lot of smoke (when burned). (Proverb)

b De ggiá zzhēa ggee bbo dea-kāo.
this M after InT De up-fume
Afterwards, (it) fumed.

The different surface tones (if found) borne by the pairs of underscored words in the examples do not convey any grammatical contrast such as nouns versus verbs. We have seen in Chapter 3 that the accentual system of Niuwozi Prinmi is characterized by frequent tone alternation. In citation forms, the words in pairs demonstrate no tonal difference.

The dual membership of these words can be verified with the grammatical criteria introduced thus far. All the instances single-underlined in (4.8) to (4.10) can be modified by the demonstrative de “this” and the discourse clitic ggee: de niän ggēe “this illness”, de hra ggēe “this laughter”, and de kao ggēe “this smoke”. Since they serve as arguments of a verb in the examples, this further evinces that they are members of the noun category. On the other hand, the second instance (double-underlined) of the words in each pair can be identified as a verb, under the modification of verbal clitics in (4.8)-(4.9) and the directional prefix in (4.10). Therefore, these words are bifunctional, belonging to the V/N group.

Although lexicography will be needed to support the claim, Prinmi nouns with multiple functions are probably less than those prototypic ones in the N group. The overlap between nouns and other lexical categories does not imply in any way that the majority of nouns must have more than one potential functions. PROPER nouns and animal terms are prime examples of members of the N group — they can only be used as nouns (cf. the discussion in §4.2.4).

4.2.3 Adjective

Adjective is not a readily identifiable lexical category in Prinmi. This is in large part because many adjectives in the language overlap with DESCRIPTIVE verbs, a subtype of State verbs, while a small number of adjectives can also function as nouns. This situation results in four subsets of adjectives: the mono-functional adjective A, the bi-functional V/A and N/A, and the tri-functional V/N/A. Given that Prinmi adjectives are largely found in the V/A group, we will first compare grammatical properties between prototypic adjectives and DESCRIPTIVE verbs. Their similarities and differences are listed in Table

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9 The only pair of words distinguishable through their suprasegmentals are gguxxin “middle (noun)” versus gguxxin “middle (adjective)".
Table 4-1: A comparison between Prinmi adjectives and DESCRIPTIVE verbs

<table>
<thead>
<tr>
<th>Form</th>
<th>Adjectives</th>
<th>DESCRIPTIVE verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invariable</td>
<td>kre hrån “long feet”</td>
<td>kre hrån “(the) feet are long”</td>
</tr>
<tr>
<td>Position</td>
<td>Immediately after a noun. No element is allowed to intervene, e.g. kre hrån déa_pre “a pair of long feet”</td>
<td>After a noun. Intervening between the two is possible, e.g. kre déa_pre hrån “one pair of feet are long”</td>
</tr>
<tr>
<td>Host</td>
<td>Unable to host any verbal clitics, e.g. *kre ma’hrån déa_pre “a pair of not long feet”</td>
<td>Can host a variety of verbal clitics such as the negative clitic, e.g. kre déa_pre ma’hrån “one pair of feet are not long”</td>
</tr>
</tbody>
</table>

The similarities between adjectives and DESCRIPTIVE verbs lie with their invariable forms and the post-nominal position. The latter one holds only when there is no other word in the expression. In a larger constituent, an adjective is still adjacent to its head noun but a verb inevitably sits at the final position in the clause. The strict adjacency requirement often paves way to formation of a noun-adjective compound (cf. §5.4.3). The restriction that an adjective cannot host a verbal clitic is attributed to the fact that verbal clitics are all specialized for modifying a predicate; it is only naturally for them to attach themselves to verbs but not to adjectives.

The opposite meaning of an adjective is usually expressed with an antonym, e.g. kre dön déa_pre “a pair of short feet”. Those derived through the negative prefix ma-, which is used more often as a clitic for predicate negation elsewhere, need to be distinguished from clitic negation. In antonym derivation, the negative prefix cannot occur after an adjective (cf. §5.2.2.3). The negative clitic, on the other hand, can generally appear before or after (as a complex clitic) a verb host, albeit with some discourse difference. Compare the derived negative adjective in (4.11) to the negated verb in (4.12):

(4.11) a jii ma-shôn (â’ku?) b *jii shôn-ma (â’ku?)
        water not-clean (Q+want) water clean-not (Q+want)
        (Want some) unclean water (?)

(4.12) a Jii ma’shôn.
        water N+clean
        (The) water is not clean. (Contrary to what is believed)
Based on these grammatical differences, we can distinguish a Primi adjective from a verb with the intervention test. Suppose that we need to determine whether the underlined word in (4.13) is an adjective or a verb, we can insert a word such as lealiän “very” before the tested word as in (4.14). Since an adjective does not tolerate any intervention between it and its head noun, an unacceptable result will indicate that the word functions as an adjective instead of a verb.

(4.13) a   Èdē ggee ddīn prin zzii.   (functioning as an adjective)
that InT cloud white Cpl
That is a white cloud.

   b Èdē ddīn ggēe prin.   (functioning as a verb)
that cloud InT white
That cloud is white.

(4.14) Intervention test

   a *Èdē ggee ddīn lealiän prin zzii.   (as an adjective)
that InT cloud very white Cpl
That is a very white cloud.

   b Èdē ddīn ggēe lealiän prin.   (as a verb)
that cloud InT very white
That cloud is very white.

The result of the intervention test in (4.14) indicates that prin “white” cannot be a DESCRIPTIVE verb in (4.13)a, since the insertion of the intensifier has rendered the sentence ungrammatical in (4.14)a. In contrast, the verb function of the word in (4.13)b stands the test, as can be seen from (4.14)b.

Note that the test does not identify an adjective positively; rather, it reveals whether a word may be an adjective or a verb. It is useful only when the possibilities of function have been narrowed down to either verb or adjective. Generally this can be done after we are certain that the word does not belong to the other open lexical category — noun. The case for prin “white” is more complicated, as it does belong to the V/N/A. Before we can fully justify its function as an adjective in (4.13), we need to address the overlap relation between adjective and noun.

10 The triple membership of the word can be verified by prefixation as in tea-prin “to become white” for being a verb and by its occurrence after a demonstrative as in dē prin “this white” for being a noun. Its membership in adjective will be shown below.
Given that Prinmi also allows a noun to modify another noun, how do we distinguish a noun phrase (or a noun compound) of the type N + A from that of N + N? A simple solution is to determine the kind of modifying relation between the two words. For the N + A, the relation between the words is head noun and modifier, e.g. gguai hrän “long tusk (lit. tusk long)”. This is verifiable with the semantic weight of the word in bold, which expresses the basic meaning of the phrase/compound.\textsuperscript{11} In contrast, the essential meaning of an N + N compound/phrase is conveyed by the second word, suggesting a relation of modifier and head noun, e.g. gguai jiän “(of animal classification) the tusk group (lit. tusk group)”. Using this grammatical property, we can easily determine whether a word is an adjective (if it follows the head noun) or a noun (if it precedes the head noun).

The words for “middle” in Prinmi are illuminating for the distinction between these grammatical patterns. Extraordinarily, the prosodic contrast between gguxxin “(adjective) middle” and gguxxin “(noun) middle” corresponds to a categorical distinction which is otherwise unmarked in any overt manner in the language. Native speakers maintain the distinction between the two words when they occur in isolation. According to their explanation, the former (the adjective) is used for referring to the birth order of a person among siblings; whereas the latter (the noun) can be used more generally to mean the middle part of things. Given the different lexical categories of the pair, only the noun may appear after the modificatory clitic ggia: sianbbôn ggiā gguxxin “the middle of a tree”, but *sianbbôn ggiā gguxxin. On the other hand, only the adjective can follow a noun, e.g. hmi gguxxin “a daughter born in between her siblings”, bāi gguxxin “a middle brother/sister”, but not *hmi gguxxin or *bāi gguxxin. Furthermore, the word for “middle finger” in Prinmi is expressed with the modifier preceding the head noun. Consequently, the word is rendered as gguxxin lhâzii (N + N), but not *gguxxin lhâzii (A + N), i.e. it is the noun that is employed. From this, it is evident that the correlation between lexical category, word order and modifying relation as proposed above is valid and legitimate. The only caveat is that the word order associated with the modifying relation cannot be used to identify an adjective straightforwardly. Similar to the situation with the intervention test, the grammatical property relating a noun and its modifier is helpful only when the possible lexical categories of the modifier are limited to two: adjective and noun in this case.

Let us now return to the use of prin “white” in ddin prin “white cloud”. Of the three possible functions, we have shown with the intervention test in (4.14)a that the word as

\textsuperscript{11} Given an expression like English hog badger, the semantic weight can be determined easily by considering whether hog badger is a hog or badger. Since it is a kind of badger, the semantic weight of the expression is on badger.
used in (4.13)a cannot be a verb. Thus its function is either a noun or an adjective. From the meaning of the phrase, it is not difficult to see that the preceding word *ddîn* "cloud" is the head noun, which prompts the relation of N + A. From the post-nominal position taken by the modifier *prîn* "white", it ensues that the word is used as an adjective in this particular instance; otherwise it would occur before the head noun.

When members of the adjective category are scrutinized with the above procedures, some of the commonly used ones can be identified as follows:

(4.15)a A  
zung "little", pâ "half", *bbulâ* "many", *ggûxxin* "middle",  
*shiishôn* "pure"

b V/A  
*bbîn* "thick radially", *cîn* "thin radially", *ggû* "dry", *hrân* "long",  
*dâi* "big", *geazáî* "small", *qiâ* "sharp", *xî* "new"

c N/A  
*bû* "grandfather; male", *ddî* "grandmother; (of animate) old",  
mâ "mother; female", *zîu* "son; small"

d V/N/A  
*hhân* "yellow", *niâ* "black", *prîn* "white"

Those belonging to the A group with an exclusive function of adjective in (4.15)a are scanty. The monosyllabic ones tend to occur in compounds only. The V/A group in (4.15)b represents the bulk of Prinmi adjectives. Note that there is a slight semantic shift on those N/A words in (4.15)c from one function to another. Insofar as the differences are relatively small and obviously related to each other, the bifunction of the words will not be treated in terms of a pair of homonyms containing a noun and an adjective. Thus far, only color terms are found capable of three different functions in Prinmi. Hence the V/N/A group in (4.15)d all concern colors.

As noted earlier, the ability to be negated and questioned is an essential property of verbs rather than adjectives. Thus only those adjectives that can function as a verb may host a negative or interrogative clitic when they serve as verbs. Members of the A and N/A groups, those in (4.15)a and (4.15)c, cannot be negated or questioned. Antonymous meanings for them, where applicable, are expressed by lexical items or through morphological derivation.

Semantically the members of the V/A, as exemplified in (4.15)b, appear to correspond to English adjectives, but this is a pure coincidence. For instance, *qûî* "(to be) good" belongs to the V/N, while *(dea)-xiâ* "to (grow) old" and *xûî* "to be plentiful" are DESCRIPTIVE verbs only. None of them can function as an adjective.

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12 The known ones are all given in (4.15)a, but I will not claim that they represent an exhaustive list.
It is noteworthy that Prinmi adjectives, as free words, have not been observed to share a single head noun. When two adjectives modify one noun, at least one of them will be situated in a compound (cf. §7.3).

4.2.4 Overlap among the open lexical categories

The preceding discussion has pointed out that Prinmi has a significant overlap among the open lexical categories. While it will not be difficult to think of an unrelated language showing the same number of intersections between the three lexical categories as in Prinmi, it is doubtful as to the existence of a language with exactly the same members in all the seven word groups. As is well-known, what is an adjective in one language may not be an adjective in others. In the same vein, what functions as an overlapping word in one language may not behave similarly in others. Lexical organization appears to be rather language specific. This is precisely the rationale for undertaking the investigation into the relation between Prinmi lexical categories. Figure 4-1 illustrates the overall situation for the intersections with some representative examples.

Figure 4-1: The overlap between the Adjective, Noun, and Verb in Prinmi

Details of the words appearing in Figure 4-1 are provided below in the alphabetical order:

(4.16)a  bbulā  many  A
        b  geazāi  (to be) small  V/A  (for V: DESCRIPTIVE State verb)
        c  ggrīān  to break (vi.)  V  (Process verb)
        d  hhān  yellow  V/N/A  (for V: DESCRIPTIVE State verb)
        e  jū  to speak  V  (Action verb)
        f  jīn  house  N  (COMMON noun)
        g  niān  (to) ache  V/N  (for V: Process verb)
        h  qūī  (to be) good  V/N  (for V: DESCRIPTIVE State verb)
        i  Xiēa  Han  N  (PROPER noun)
        j  xxūī  to be plentiful  V  (DESCRIPTIVE State verb)
        k  zūī  little  A
        l  zūū  son; small  N/A  (for N: KINSHIP noun)

While the multiple functions of a word are not predictable on the semantic ground, it is not arbitrary, either. Verbs most likely to have additional functions are those of the
DESCRIPTIVE, a subtype of the State verbs. They can belong to the V/A, e.g. (4.16)b, to the V/N/A, e.g. (4.16)d, or to the V/N, e.g. (4.16)h, but not every DESCRIPTIVE verb has more than one function, e.g. (4.16)j. Some Process verbs may also function as a noun, e.g. (4.16)g. In terms of semantic types of noun, only some KINSHIP nouns, e.g. (4.16)l, are able to function as an adjective in compounds.

For words such as prin “white”, which can assume one of the three possible functions: noun, verb, and adjective, does it have a primary membership in one of these? The answer is plausibly positive, but there is no easy means for identifying its basic membership. Any serious inquiry into this would require some well-designed psycholinguistic experiments and/or substantial empirical studies of the actual word functions in the language or different dialects of the language. Fortunately, the issue of basic membership is relevant only to the lexical organization but not essential to the grammatical system of a language. When we encounter the word prin “white” in a sentence, we can still determine its function in the particular sentence without knowing its basic membership. Likewise the triple membership of the word enables us to use the word as a noun, a verb, or an adjective on different occasions without concerning about its basic membership. Thus this unresolved issue should not impede our understanding of Prinmi grammar in any significant way.

4.3 Closed lexical categories

A closed lexical category, as opposed to an open one, characteristically contains a small number of members and resists addition of new members from other languages. Ten closed lexical categories are recognized for Prinmi, including auxiliary verb, demonstrative, pronoun, numeral, counter, ideophone, adverb, onomatopoe, interjection, and postposition.

Conjunction is not recognized as an individual lexical category for Prinmi. While the postpositions/clitics ni “with/and” (cf. 4.3.9.2) and non “or” (cf. 7.2.2.2) can sometimes be regarded as functioning like a conjunction when they connect two words together, only the latter may conjoin two clauses in questions. For instance,

(4.17) ‘Sshê-la-ma-xiä-si’ bbo, debbô zêa a’xiä, guêa a’xia,
four-also-N-like-Pf ExT Dc red deer Q+like ox Q+like

gguän a’xia, nón bbo zzî a’xiä?
horse Q+like Dc Dc camel Q+like

The Pere David’s deer, is it like a red deer, an ox, a horse, or a camel?

In fact, conjunctions represent one of the major targets for borrowing from Mandarin to Prinmi in younger speakers’ speech. In spite of this, these conjunctions are not well integrated to the language. Most consultants avoided using them on their own initiative
when working with me. Although a few of Mandarin loans are found in the recorded materials from the main consultant, they tend to be adverbs; no Mandarin conjunctions are found. Furthermore, the use of these conjunctions strongly conforms to that in Mandarin — they do not occur clause-finally, as would be expected in a verb-final language.

4.3.1 Auxiliary verb

Fourteen auxiliary verbs are identified: the causative gêe/güê, the doing verbs (or verbs-to-do) bâ and qâi, the purposives xii and xxi, the terminative dâ, the inchoative qîôn, the desiderative hrônghrin, the venturive wâa, and a number of modals — the obligative kû, the admonitive mâ’ha, the permissive xxiân, the assertive yon and the successive tôn. Most, perhaps all, auxiliary verbs are grammaticalized from verbs. Some of them still function as an ordinary verb under a more concrete meaning, e.g. kû “to want (something)” vs. kû “need/must (do something)”.

Morphosyntactically, auxiliary verbs tend to be prefixless. Clitics hosted by auxiliary verbs are generally restricted to the negative and interrogative ones. The fundamental difference between full verbs and auxiliary verbs is that auxiliary verbs take an obligatory complement clause (expressible implicitly in few rare cases); whereas only a few verbs of cognition may take a complement clause optionally (for details, see § 11.3.2.2). Auxiliary verbs will be described at length in Chapter 9.

4.3.2 Demonstrative

Prinmi has two demonstratives: dê “this” and êdê “that”. They contrast in terms of proximity (proximal vs. distal). If we compare the demonstrative êdê “that” with other distal deictics such as êkee “then” and ejjêe “there”, it is transparent that the distal meaning is expressed with the prefix e-. In case of the demonstrative, the word structure can be analyzed as: ê-dê “that (that-this)”.

The demonstrative immediately precedes the noun it modifies:

(4.18) a  êdê  ddianbbâ
that  place
that place

b  dê  guân  geazai
this  brother  small
this young brother

c  dê  hmî  son_zîi
this  daughter  three_Ctr.PERSON
these three daughters ...

Note that the demonstrative itself does not distinguish number and can modify a plural
head noun, as shown in (4.18)c. Two additional pairs could have been included, namely ëdë’re “these” vs. ëdë’re “those” and ëdë’zzan “these two” vs. ëdë’zzan “those two”. These pairs would signal different meanings for number (plurality and duality) through the attachment of relevant number clitics to the demonstratives. However, there is evidence that a number clitic is attached to a demonstrative only when the head noun is rendered as a zero anaphor, i.e.

\[(4.19)\] a  ëdë’ aalëe’re  \[
\begin{array}{c}
\text{this child+p} \\
\text{these (children)} 
\end{array}
\]

\[
\begin{array}{c}
\rightarrow \text{dë ø’re} \\
\rightarrow \text{dë’re} 
\end{array}
\]

The following problematic expressions provide support for postulating a zero head noun between a demonstrative and a number clitic:

\[(4.19)\] b *ëdë’re aalëe

\[
\begin{array}{c}
\text{this+p child} \\
\text{these children} 
\end{array}
\]

c *ëdë’re aalëe’re

\[
\begin{array}{c}
\text{this+p child+p} \\
\text{these children} 
\end{array}
\]

If there were a separate demonstrative specifically for indicating plurality, it should be possible to use it with an overt head noun. Yet, the consultant rejected such expressions. The fact that a demonstrative may host a number clitic only when it does not modify an explicit noun suggests that this kind of clitic attachment is an epiphenomenon with a zero head noun.

The potential use of zero anaphor after a demonstrative does not imply the existence of a zero head noun whenever a demonstrative occurs by itself. As accentuated in §4.2.1, a posited zero anaphor is legitimate only if it is possible to restore an explicit form for it. The restorability condition also applies here. If it is not possible to supply an explicit word after a demonstrative, no zero anaphor should be posited, as is the case in the following:

\[(4.20)\] a ëdë  ggiá  zzhèa  ggee

\[
\begin{array}{c}
\text{this InT:M after InT} \\
\text{after this} 
\end{array}
\]

b ëdë  ggiá  ggôn

\[
\begin{array}{c}
\text{this InT:M inside} \\
\text{inside this (thing)} 
\end{array}
\]
4.3.3 Pronoun

Prinmi has two major kinds of pronouns: personal pronouns and interrogative pronouns. Functionally, pronouns resemble nouns with the ability of serving as arguments of verbs. The former can be separated from the latter under a few criteria. For instance, pronouns cannot be modified by demonstratives. The postposition *bbe* "at/to/from" behaves like a clitic suprasegmentally when it follows a personal pronoun; after nouns, it tends to bear a low tone, regardless of the suprasegmental of the noun (cf. §3.3.3).

The system of personal pronouns in Prinmi may be tabulated as follows:

<table>
<thead>
<tr>
<th></th>
<th>First-person</th>
<th>Second-person</th>
<th>Third-person</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exclusive</td>
<td>Inclusive</td>
<td></td>
</tr>
<tr>
<td>Singular</td>
<td>ëa</td>
<td>née</td>
<td>ø</td>
</tr>
<tr>
<td>Dual</td>
<td>azzän</td>
<td>neezzän</td>
<td>ø</td>
</tr>
<tr>
<td>Plural</td>
<td>arê</td>
<td>neerê</td>
<td>ø</td>
</tr>
</tbody>
</table>

Note that the plural morpheme *rê*, which is cliticized elsewhere, is compounded with the pronouns and cannot be omitted without changing the meaning to singular. While the dual forms can supply a finer specification for the plurality, they are not obligatorily used whenever a pronoun refers to a referent with two persons.

When an overt expression is needed for a third-person referent, as many as three choices are available: *deggee*, *ni*, and *zön*. In addition to the singular form, *dê're*, *nire*, and *zonre* can be used for the plural, and also the dual *nizzan* in Niuwozi Prinmi. *Deggee* is a lexicalized form consisting of *de* "this" and the discourse clitic *ggee*. Etymology for *ni* and *zön* is unavailable. Different speakers show preferred choices of their own. There seems to be a 'clanalectic' factor involved: speakers from some clans tend to use *ni*, while speakers from other clans tend to use *zön*. These expressions will be considered as quasi-pronouns. While their meanings are translatable into English third-person pronouns, their actual use in terms of frequency is not. Only three tokens of these explicit expressions are found in two stories; whereas the zero anaphor has as many as 137 tokens in the same materials (cf. Table 12-2). Thus explicit personal pronouns in Prinmi cover only those provided in (4.21), with the category for the third-person expressed implicitly.

Interrogative pronouns include *hèaggi* "where", *heaggôn* "who", *qiikêe/nônkee* "when", *qiini* "how", and *qii* "how many". The final one is bound, and occurs in compounds only. The most frequently used one is *mêe* "what". It also partakes in compounding, e.g. *mêe_zzhon* "how come (lit. what become)". Questions formed with interrogative pronouns do not contain the interrogative clitic 'a. An information seeking
question is formed simply by placing an appropriate interrogative pronoun in lieu of the relevant constituent, e.g.

(4.22) a Née hëaggi xao’sì?
2s where go:2s+Pf
Where have you been?

b Dë ggee mée zzii?
this InT what Cpl
What is this?

4.3.4 Numeral

Prinmi has thirteen basic numerals:

(4.23) df one ní two són three sshè four wèa five
chü six hnuu seven xüé eight ggii nine gèadian ten
xì hundred din thousand màn ten-thousand

All other numerals are derived through affixation and/or compounding, as exemplified in (4.24) and (4.25). The word gèadian “ten” is affixized to gëa- and -go. The prefix form is used for deriving the seven numerals from “thirteen” to “nineteen”, illustrated in (4.24)a. The other form go is employed as a prefix only with “eleven” and “twelve”, given in (4.24)b; elsewhere it serves as a suffix in the sense of English “-ty”, (4.24)c.

(4.24) a gëa-són thirteen gëa-wëa fifteen gëa-ggii nineteen
b gô-din eleven gô-nî twelve
c nea-gô twenty su-gô thirty ggii-gô ninety
(4.25) dea_xì_df one hundred and one nea_dìn two thousand

Vowel change is also observed with df “one”, ní “two”, and són “three”. In (4.24)c, the nasal vowel of són “three” becomes an oral vowel /u/ when the numeral is suffixed with -go “-ty”. In (4.25) the vowels of df “one” and ní “two” are centralized when they incorporate a following morpheme to form a larger word.

As a free word, a numeral can only follow the noun it modifies, e.g.

(4.26) Dëa_hni ruu qii’xo bbo sshôn ní dia’ziàn;
one_day well-being do+Opt ExT sheep two Nds+drag
dea_zì rūu qii’xo bbo chii ní mèa’dià’zhree.
one_life well-being do+Opt ExT wife two Nds+look for
(If you) want one day’s well-being, don’t drag two sheep; (if you) want one life’s well-being, don’t look for two wives. (Proverb)
However, in a numeral-noun compound, a numeral always precedes the head noun. The use of numeral with a noun that requires a counter in a noun phrase illustrates this characteristic nicely. In modern Prinmi, the counter *zii must be used in a noun phrase when counting human beings, as in (4.27)a. Since the numeral precedes and forms with its head a numeral-noun compound in (4.28)a, the counter is spared. The structural difference between the pair is manifested with the deletion/insertion of the counter in (4.27)b and (4.28)b.

(4.27) Noun phrase

\begin{tabular}{ll}
\text{a} & \text{baigüän} \text{ son}_zii \\
& brothers three_Ctr.PERSON \\
\text{b} & \text{*baigüän} \text{ son} \\
& brothers three \\
\end{tabular}

three brothers

(4.28) Compound

\begin{tabular}{ll}
\text{a} & \text{son}_baigüän \\
& three_brothers \\
\text{b} & \text{*son}_zii_{baigüän} \\
& three_Ctr.PERSON_brothers \\
\end{tabular}

three brothers

As compounds do not tolerate intervening elements, the insertion of a counter in (4.28)b is problematic.

4.3.5 Counter

'Counter' and 'classifier' are two related and quite similar linguistic terms. One major difference between them is that classifiers, but not counters, may appear in non-counting expressions. Consider the use of a classifier (Cls) in the Cantonese expression in (4.29) and the problematic use of a counter in the Prinmi equivalent in (4.30):

(4.29) \text{ni}^{55} \text{kA}^{55} \text{jan}^{22} \text{ but } \text{*ni}^{55} \text{jan}^{22} \\
this Cls person this person

(4.30) \text{*dê} \text{ má-zii} (ggee) \text{ or } \text{*dê-zii} \text{ má} (ggee) \\
this person_Ctr InT this_Ctr person InT

When the counter *zii is removed in (4.30), the expression \text{dê má} (ggee) "this person" is fine. This indicates that Prinmi has a lexical category of counter, but not classifier.¹³

Prinmi counters are bound words. They appear exclusively in compounds, especially in numeral-counter compounds, e.g.

¹³ This is in line with Bradley’s (1979: 31) observation that not every Tibeto-Burman language has classifiers.
The existence of a compound instead of a phrase between a numeral and a counter is displayed clearly with the vowel change on ni “two” in (4.31)a. This kind of change always takes place when the numeral forms part of a compound. Notice also that the suprasegmentals of the counters are set by the preceding numerals.

There are four subtypes of counters: (a) nominal, (b) verbal, (c) quantitative, and (d) measurement. For instance,

Nominal counters are used for counting objects, while verbal ones count the times of an act. Quantitative counters express collective units; whereas the measurement counters denote units for measuring. Except for verbal counters, the others always follow the head noun in a noun phrase, as seen in (4.31) above. Occurring in a clause, a verbal counter precedes the verb being modified, e.g.

While the numeral and the counter often appear together, it is possible for a numeral to modify a noun without a counter, e.g.

As shown in (4.34), counters are not needed in Prinmi for counting animals. Partly because of this, the inventory of counters is quite small.

A counter typically follows a numeral, but it may precede the numeral dí “one”, e.g.

14 Those counters that I was unable to elicit in isolation, their suprasegmentals are left unmarked.
The counter-plus-numeral order is not possible with other numerals. This is the preferred order when a counter, especially a nominal one, occurs with di “one”.

4.3.6 Ideophone

Prinmi has a group of words which always occur reduplicated and portraying a vivid state. This group of words will be referred to as ‘ideophones’. Prinmi ideophones are image-oriented, vis-à-vis the sound-oriented onomatopes in §4.3.8 below. The great majority of ideophones appear in compounds only; one known exception is taataa (for describing a dripping state), which can be used as a verb meaning “to drip” outside compounds.

Ideophones combine with a monosyllabic word (prevailing verbs) into a trisyllabic compound in the fashion of α_ββ (where ββ is the ideophone):

(4.36) a zzzaabLLL (of color) to be really bright < bright _IDEOPHONE
   b nia_goongon to be really dark < black _IDEOPHONE
   c bea_ddiddu to be really bare < bare _IDEOPHONE
   d ggao_xxëexxëë to show great pride < contented _IDEOPHONE
   e ssii_rëre (of object) to be really elegant < elegant _IDEOPHONE
   f ggù_ssaasaa to be really dry < dry _IDEOPHONE

As shown in (4.36), Prinmi ideophones frequently modify DESCRIPTIVE verbs. Sometimes, a verb-ideophone compound denotes an act that occurs in a specific state, e.g. (4.37). It is also possible, though infrequently, for ideophones to compound with a noun, as exemplified in (4.38).

(4.37) a ddi_yaya to drift aimlessly < drift _IDEOPHONE
   b su_ddiōnddion to breathe difficulty

(4.38) a bbīān_ssëessëë to have frequent urination < urine _IDEOPHONE
   b zzhi_reeree (of saliva) to be running down < saliva _IDEOPHONE

The instance in (4.38)b is equivocal, since zzhi “saliva; to drop saliva” is a V/N word. However, bbīān “urine” in (4.38)a only functions as a noun.

The choice for a particular ideophone is lexically determined. In spite of being bound words, Prinmi ideophones are numerous, more so than counters or adverbs. Ideophone compounds like *zzzaa_gōngən and *nia_lalla, with the ideophones exchanged...
between (4.36)a and (4.36)b, are unacceptable. A few verbs can combine with different ideophones, yielding a slight difference in meaning. Compare the following:

\[(4.39)\]
\[
a) \text{nîzhânzhan to be intensely green} < \text{green IDEOPHONE} \\
b) \text{nîlâla to be bright green} < \text{green IDEOPHONE}
\]

The two verb-ideophone compounds in (4.39) are close in meaning, both conveying a state of being green, but they are not interchangeable. The former is used for describing the greenness of a forest or a field; whereas the latter for the bright color on green clothes.

There are two reasons for not treating ideophones as clitics or suffixes. Prinmi ideophones resemble clitics in having basically lost their own suprasegmentals, but they are less grammaticalized than clitics, sensitive to the combination in matching with a head. On the other hand, a clear distinction can be observed between ideophones and suffixes. Prinmi affixes cannot be reduplicated, while the ideophone is always reduplicated. With these properties, ideophones are considered to be a lexical category consisting of mostly bound words. Even though the size of this lexical category is quite large, it is a closed one; new members are not readily permitted (cf. Matisoff 1994: 119).

### 4.3.7 Adverb

Prinmi adverbs have no formal connection with adjectives. Except for inherently reduplicated adverbs, members of this category have no morphology, including derivation. Partly because adverbs are not derivable morphologically in the language, the number is very small. Identification of this lexical category is thus restricted to the functional criterion that adverbs modify a predicate.

At least four semantic subtypes of adverb are distinguishable: **DEICTIC** adverb, **MANNER** adverb, **DEGREE** adverb, and **CONTRASTIVE** adverb.

**DEICTIC** adverbs include dìa “now”, êkee “then”; and dejjëe “here”, eijjëe “there”. The first pair is exemplified in (4.40) and the second pair in (4.41).

\[(4.40)\]
\[
a) \text{Êa dìa güànjìi yìn ma' rôn.} \\
\text{1s now words listen N+Inv:ls} \\
\text{Now I won't listen to your words.} \\
b) \text{Êkee Zzonbba Lha ggee dde-hrē, ...} \\
\text{then Zzonbba god InT to.sp-emerge} \\
\text{At that time Zzonbba Lha emerged, ...}
\]

\[(4.41)\]
\[
a) \text{dejjëe non dì nea-zzôn’sî ggià.} \\
\text{here Dc one down-sit+Pf Sprs} \\
\text{oh, one is sitting right here.}
\]
b ejjée nea-zzon.
there down-sit
sit there.

MANNER adverbs are used for expressing how an activity is carried out. With some verbs and ideophones also serving this purpose, MANNER adverbs in Prinmi are rather scanty. The most commonly found ones are didi “slowly” (more precisely, “in an easy manner, taking one’s time”) and ssōlōlo “with good care” (morphologically consisting of a DESCRiptive verb ssō “to be fine” and an ideophone). MANNER adverbs tend to precede the head verb immediately.

(4.42) a Didi xào.
slowly go
Go slowly.

b Didi zzôn.
slowly sit
Take your time for the sitting.

(4.43) a zhīn ssōlōlo nea-zào.
mortar carefully down-beat
pound the mortar with good care.

b Née bbalāi ssōlōlo niúan wu non qée ea-vīn.
2s snake carefully winnowing tray in Dc meal in-rub
Snake, you rub the meal carefully in the winnowing pan.

DEGREE adverbs are even rarer than MANNER adverbs in Prinmi. In addition to reduplication (cf. §5.3), the degree of a state can be expressed by verbs such as sshō “to be excessive”, which occur after the verb they modify. The only DEGREE adverb found thus far is lealián “very” (said to be a dialectal term mainly used in Niuwozi Prinmi). The adverb qualifies DESCRiptive verbs (but not adjectives), and it always precedes the verb being modified, e.g.

(4.44) Gawū jīi ggēe lealián ggāo, ...
beneath water InT very deep
The water below was very deep, ...

There are two CONTRASTIVE adverbs: da “only” and la “also”. Their felicitous use implicates a proposition either contrastive or parallel in meaning to the one stated in the clause. Consider the following (the successive sentence to (4.45)b is not cited for the sake of simplicity, but its English translation is given within the pair of brackets):

(4.45) a qūi da gge-jīi, ssō da gge-jīi, ...
good only out-say fine only out-say
speak only of the good (thing), the smooth (thing), ...
b Éa bbô nee bbêe da chee. [ ...... ]
ls ExT 2s at only feed

Only me feeding you. [You grudge to feed me yours.]

The use of da “only” in (4.45)a implies a contrast against “speaking of the bad (thing)”. In (4.45)b, the intended contrast is “you haven’t fed me”, as reciprocity is presupposed in sharing of food. The implied contrast is often inferable and not stated explicitly in the sentence. Sometimes it is situated in nearby sentences, as in (4.45)b, where the contrast is made clear in the next sentence. Sometimes the adverb can be used consecutively in juxtaposed clauses, as seen in (4.45)a.

A similar discourse characteristic is observed on la “also”, e.g.

(4.46) a mî ggee la xxîi, muugû sûânjiân la xxîi, ...
person InT also plentiful animals also plentiful
there were plenty of people, plenty of animals, ...

b Buddimâ ggôn la déa-giân’non hmeeggiân bbêe chee.
old woman Inst also up-pick+Dur old man at feed
The old woman also picked up (the dumplings) and feed (them) to the old man.

In (4.46)a, the two juxtaposed clauses, each containing one instance of la “also”, mutually imply the proposition found in the parallel clauses. Quite often, the implied proposition may not occur in the same sentence, e.g. (4.46)b. Apart from its basic meaning “also”, la can also be construed as “even” or “all” under some circumstances:

(4.47) a dê mî ggee déa-giêa’non, go hiêa la mee’waa.
this person InT up-fear+Dur breath release also Npf+dare
this person is so frightened that (he) daren’t even breathe.

b Son baisgûân ggee la küê jjêe, ea-konhniân bà.
three_brothers InT also angry in-indignant do
All the three brothers are angry (and) indignant.

4.3.8 Onomatope and Interjection

The onomatope and the interjection are two small lexical categories, but share considerable similarities; thus they are described together here. The two can be recognized easily by virtue of sound symbolism. The essential difference between them is that interjections always involve some human emotion; whereas onomatopes typically mimic animals’ calls or other sounds by physical objects. The meaning of an onomatope or an interjection can be so suggestive that some of them may be conjectured correctly upon hearing the word in spontaneous speech. Members of both categories are invariable in form, including prosody.
(4.48) Onomatopes
   a  kon-ton  weighted object falling into deep water
   b  miao-û  cat's crying
   c  on-ôn-û  rooster's calling
   d  xion-quân-quân  golden pheasant's calling
(4.49) Interjections
   a  Ô  expressing disagreement
   b  O-o  expressing discovery of truth
   c  Ee  expressing agreement
   d  Wi  expressing surprise
   e  Å-ya  expressing annoyance
   f  Mè ggee  expressing exclamation

Another characteristic peculiar to the two is phonotactic innovation not permitted elsewhere in the language. For instance, the syllables miao in (4.48)b and wi in (4.49)d both involve “syllable gaps” not found on other words. Note that it is also exceptional to have a low tone for both syllables of a disyllabic word, as in the onomatope in (4.48)a, and the interjection in (4.49)b. The former is justifiable for mimicking the sound of a weighted object entering into deep water, since other prosody cannot achieve the same sound effect. The latter lengthens the sound in the word, which can be regarded as having a long vowel.

The two lexical categories utilize a very limited number of lexical items. The onomatope in (4.48)d may be analyzed as xiôn “golden pheasant” plus quan-quan. The interjection in (4.49)f consists of mè “sky, heaven” and the discourse clitic ggee. Apart from these, the others are not decomposable.

Prinmi onomatopes mainly function as the complement of a sound-making verb, e.g.

(4.50) zhinzhu ggee nea-ddüi këe bbô, “kon-on” jii.
       pestle InT down-cast:3 time ExT Ono utter
       when (the young fellow) threw the pestle down, it gave out ‘kong-ton’.

The function of the interjection, on the other hand, contributes more to discourse settings than to the grammatical structure of an utterance. An interjection always occurs at the beginning of a discourse turn, as an immediate communicative response to others’ messages or to the circumstances the speaker finds himself/herself in.

4.3.9 Postposition

The status of Prinmi postpositions is intermediate between word and clitic, with one or two fully cliticized and most others able to appear as a noun (cf. the discussion of their
suprasegmental peculiarity in §3.3.3). There are eleven postpositions, dividable into three: the locational, the non-locational, and the versatile groups.

### 4.3.9.1 Locational postpositions: ku, bo, wu, lo, & jje

Prinmi has five postpositions that express only locational meanings: *ku* "on top of", *bo* "below", *wu* "in", *lo* "outside", and *jje* "at one's place". Apart from their different domains of meaning, locational postpositions also diverge from non-locational ones in other ways. For instance, no clitic can be inserted between a head noun and a locational postposition, but this is possible with a non-locational postposition. The locational postpositions are more uniform in regard to the suprasegmental: they all bear an invariable low tone. All locational postpositions can be used as nouns (cf. §7.1.4).

The postposition *ku* "on top of" appears to have originated from the noun *ku* "head". The most obvious distinction between the two lies in their different suprasegmentals. The postposition always bears a low tone, while the noun can have a surface tone of rising or high. Sometimes the two are found in juxtaposition, e.g. (4.51)a. The first instance of *ku* in (4.51) is a noun situated in a compound; whereas the second one is a postposition.

(4.51) a Hiea_ku ku bbo nee bbůu ggee ddea-sshaa.
tongue_head top Dc Dc honey InT to.sp-carry

b Hiea_bbän bo bbo bůu ggee ddea-sshaa.
tongue_root below Dc axe InT to.sp-carry

_Honey is brought to the tip of the tongue; an axe is hidden at the bottom of the tongue._ (Proverb)

The postposition *bo*, in (4.51)b, basically signifies 'a certain point in space below X', where X is the head of the noun phrase.

The postposition *wu* denotes 'a certain point in space within X', e.g.

(4.52) a jin wu house in
in the house

b ruěa wu road in

_on the road_

Its antonym is *lo* "outside":

(4.53) a giön lo door outside
outside the door

b meacón lo heel outside

outside the heel

The postposition *jje* has a similar meaning to French preposition _chez_. It usually denotes a particular location associated with the head element which is often ANIMATE, as shown in (4.54)a–b:
(4.54) a ̈a jjee ke-yī.  
1s at out-come:2s
Come to my place

b mē do’a hēe jjee
sky on+M god at
at the heavenly god's place

c meakao ggiå zzī jjee
smoke M vicinity at
near the smoke’s place

Note that in (4.54)a, the postposition jjee appears with a pronoun. While this is quite common with jjee, it is rare for a pronoun to co-occur with other locational postpositions.

4.3.9.2 Non-locational postpositions: ni, bbo, ’on, & gi

Non-locational postpositions are used to indicate a specific semantic role for a noun phrase. The Comitative, Beneficiary, Instrumental, and Incitee are signaled by the following respectively: ni “with/and”, bbo “for”, ’on “with (an instrument)”, and the Incitee marker gi.

The comitative postposition ni involves a vague spatial sense in meaning. Perhaps because of this, sometimes ni behaves suprasegmentally like a locational postposition; it may bear a low tone regardless of the tone of its preceding word, as in (4.55)a:

(4.55) a meakão ni dde-ruēahnin dde-ruēahnin’non gge-qion.
smoke with to.sp-near to.sp-near+Dur out-appear
(he) comes closer and closer with the smoke.

b Sônjjée qī ggee ni
Sakyamuni religion InT with
with Sakyamuni’s religion

However, unlike locational postpositions, ni allows the internal topic clitic ggee to intervene, as shown in (4.55)b.

Sometimes the comitative postposition may be regarded as coordinating two explicit nouns:

(4.56) a yi_zūu ni mea_lhiea ggēe
conch_son and fire_tongue InT
the small conches and the flames

b bbalāi ggēe ni hhoddee ggēe bbo
snake InT and tiger InT De
the snake and the tiger

This kind of coordination by ni is not attested with clauses, i.e. the postposition does not conjoin two clauses. When ni is employed to present a list of items, it may occur consecutively after each of the items, e.g.
(4.57) mìa ni, hnjiiön ni, nēajjō ni, kēni ni

eye and nose and ear and mouth and

eyes, nose, ears, and mouth, ...

The Beneficiary is indicated by the postposition bbo in Prinmi, e.g.

(4.58) a Ėa nee bbô zhīn zǎo ma’rôn.
1s 2s for mortar hit N+Inv:1s

I won’t pound the mortar for you.

b ea bbô lō bbo qīi kū.
1s for work De do need

(You) have to work for me.

Its occurrence in stories and fieldnotes is sporadic. On a few occasions, the consultants used bbee to mark a Beneficiary, but replaced it with bbo later in transcribing. It is not clear if this is purely coincidental or indicative of some subtle phenomenon. The beneficiary postposition is homophonous to the discourse clitic bbo (see §6.4.2). Both appear in (4.58)b.

The instrumental 'on is completely cliticized and it often appears in a complex clitic form, most frequently as ggon (combined with the internal topic clitic ggee), e.g.

(4.59) a jiajī sshē_con ggon tea-zzu
color four_kind Inst fr.sp-make

make with four kinds of colors

b guubbôn ggon ggoddō nea-grían
stone Inst walnut down-break

cracked the walnuts with the stone

As a clitic, the surface tone of ggon (and other variants) is subject to the suprasegmental setting by the host. Notice the tonal variation in (4.59). After the plural clitic 're, 'on combines with it into 'ron, e.g.

(4.60) yōn_hhān jjuēbō’rōn nea-yō yōn.
silver_gold cupboard+p:Inst down-overfill Assr
treasure will overfill the cupboard.

The incitee postposition gi is so labeled because it typically marks a voluntary causee in causative sentences (cf. §11.2.1.2), e.g.

(4.61) Nee gi ggān do zhīiga gee’xo.
2s Inct bed on jump let:subj+Opt

(I'll) let you jump on the bed.

Outside causative sentences, gi may be used to indicate a human Recipient. For instance,
Nēe ggee-yī mèdde.zzī la ea gī nea-dā bu’si.
2s help-nm all Cpl also 1s Inct down-complete do:2s+Pf
You’ve completed all (your) obligations in helping me (lit. completed all that you should help to me).

It can usually replace the general Recipient marker *bbee*, provided that it refers to a human.

**4.3.9.3 Versatile postpositions: bbee “at/to/from” & do “on/than”**

The final group of postpositions comprise only *bbee* “at/to/from” and *do* “on/than”. With versatile functions, these two postpositions exhibit some semantic and syntactic characteristics from both locational and non-locational postpositions. Their varying properties such as the possibility of having the clitic *ggee* between the postposition and its head are semantically predictable. When the postposition denotes a locational meaning, it behaves like a locational postposition, i.e. no intervening clitic is allowed and it bears a low tone invariably; but when the same postposition is used to express a grammatical function, clitic insertion is allowed and the postposition bears a high tone after a personal pronoun. Compare the order between *ggee* and *bbee* in the locational expression in (4.63)a to the non-locational expression in (4.63)b:

(4.63)  

<table>
<thead>
<tr>
<th>a</th>
<th>ssuu</th>
<th>bbee</th>
<th>ggee</th>
<th>but</th>
<th>*ssuu</th>
<th>ggee</th>
<th>bbee</th>
</tr>
</thead>
<tbody>
<tr>
<td>face</td>
<td>at</td>
<td>InT</td>
<td>on the face</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b</th>
<th>güán</th>
<th>geazai</th>
<th>ggēe</th>
<th>bbee</th>
<th>but</th>
<th>*güán</th>
<th>geazai</th>
<th>bbee</th>
<th>ggee</th>
</tr>
</thead>
<tbody>
<tr>
<td>y.brother</td>
<td>little</td>
<td>InT</td>
<td>at</td>
<td>to the little brother</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The locational meaning of *bbee* is very broad, covering the senses of “at”, “to”, and “from”. They are exemplified in (4.64), (4.65), and (4.66) respectively.

(4.64)  

<table>
<thead>
<tr>
<th>a</th>
<th>sianbbôn</th>
<th>bbee</th>
<th></th>
<th>b</th>
<th>waiqüêe</th>
<th>bbee</th>
</tr>
</thead>
<tbody>
<tr>
<td>tree</td>
<td>at</td>
<td>in the tree</td>
<td>on the left</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(4.65)  

<table>
<thead>
<tr>
<th>nizzan</th>
<th>bbee</th>
<th>téa-zhūi</th>
<th>gge-qion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3d</td>
<td>to</td>
<td>fr.sp-jump</td>
<td>out-appear</td>
</tr>
<tr>
<td>(A bear) appeared and dashed towards the two of them.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(4.66)  

<table>
<thead>
<tr>
<th>dē mū</th>
<th>ggee</th>
<th>Bâjia</th>
<th>Sian_dāi_bbôn</th>
<th>bbee</th>
<th>nea-qîôn.</th>
</tr>
</thead>
<tbody>
<tr>
<td>this person</td>
<td>InT</td>
<td>Bajia</td>
<td>wood_big_tree</td>
<td>from</td>
<td>down-appear</td>
</tr>
<tr>
<td>This guy came down from the Big ‘Bajia’ Tree.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On a few occasions *bbee* is found in temporal expressions like those in (4.67). It is omissible in (4.67)a, but not (4.67)b.
(4.67) a ré bbee 
first at
at first

b zónlhee bbee 
winter at
in the winter

On the other hand, *bbee* is frequently employed for marking a kind of core function (cf. §6.2.1). Related to the locational sense “at”, the postposition can pinpoint a specific part of a Theme upon which an act is enacted, e.g.

(4.68) a Êa ggìå krê bbee dia’ki ku.
1s M foot at Nds+grasp must
(You) mustn’t grasp my foot.

b hnjjìön ggòn dê mì ggìa ssùu bbee ea-hnùuhnùu dì ba.
nose Inst this person M face at in-smell one do
(The bear) took a smell at this person’s face with its nose.

Although a spatial sense is involved in the use of *bbee* in (4.68), its function is to relate a noun to a verb, rather than indicating a specific location for the existence of a being or an event. Thus *bbee* does not serve as a locational postposition in (4.68). Frequently *bbee* signifies its head as a Recipient, as in (4.69); less commonly, it marks a Donor, as in (4.70):

(4.69) nià ggiå zhüän ggee ea bbee ddê-chée
2s:M M lunch InT 1s to to.sp-feed
feed me your lunch

(4.70) Xxiìni èa ni bbee jjìjìì ddea-yîn
yesterday 1s 3s from book to.sp-borrow
Yesterday I borrowed a book from him

As an antonym to *bo* “below”, *do* signifies ‘a certain point in space beyond *X*’, where *X* is the head of the noun phrase, e.g.

(4.71) a mè do 
sky on
on the sky
b ddiån do 
field on
in the field

*Do* is also used in the comparative construction (for details, see §11.3.1). For example:

(4.72) a hhó do zhea 
tíger than powerful
more powerful than a tiger
b ea dô ggüän
1s than tall
taller than me

In addition, *do* is employed to introduce an oblique argument for some ‘treating’ verbs, e.g.
4.4 Conclusion

This chapter has discussed the lexical categories in Prinmi. They are broadly divided into two groups: the open ones include the verb, noun, and adjective, while the closed ones cover the auxiliary verb, demonstrative, pronoun, numeral, counter, ideophone, adverb, onomatope, interjection and postposition. These lexical categories do not relate to each other through morphosyntactic marking; there are no minimal pairs of words that differ in a systematic way merely in respect of lexical categories. In other words, there is no mechanism for converting a Prinmi word from one category into another. This leads to a significant overlapping between the open lexical categories.

Functional overlapping is basically confined to the open lexical categories; where it seems to involve a closed lexical category, the nature is fundamentally different. For example, locational postpositions such as ku “on top of” can also be used as nouns. This dual function is attributed to the transitional stage in grammaticalization from a noun to a postposition. It thus has a diachronic connection and represents a functional shift. In contrast, the multifunctionality observed with a word like prin “white” is driven by functional need, independent of historical development.
Affixation, segmental alternation, reduplication, and compounding are four major morphological processes in Prinmi. They are mainly found with nouns and verbs. This chapter is organized along two themes: the first two sections describe nominal affixation and some verb morphology; the next two sections address reduplication and compounding in the language.

5.1 Nominal affixation

Prinmi nouns show few morphological changes such as affixation, but some monosyllabic kin terms can be prefixed with *aa-* in the vocative, e.g.

(5.1) a mà mother aa-mà Mum  
b gào (maternal) uncle aa-gào Uncle  
c bü grandfather aa-bü Grandpa  
d dđi grandmother aa-ddi Grandma  
e zzhù friend ãa-zzhu Pal

The prefix probably conveys a sense of respect. It may appear with a non-kinship term, as seen in (5.1)e,1 but it is not used with KINSHIP nouns of offspring and siblings. A special instance of the prefix is found in the word *aa-lée* “child”, a dialectal term in Niuwozi Prinmi. The prefix is not attached to other types of nouns, nor does it occur with polysyllabic nouns. A reduplicated KINSHIP noun is not prefixable with *aa-* because of its polysyllabicity.

Prinmi has an unproductive conjunctive infix which occurs between two nouns in certain expressions.2 The infix basically introduces a sense of plurality through conjoining two usually identical nouns, e.g.

---

1 It should be pointed out that the vocative form ãa-zzhu “Pal” is found in a translated story, not in daily use among Prinmi speakers.

2 The only known exception where the infix appears between words other than nouns is *lhiea-me-lhiea* “weasel”. The consultant is uncertain about the precise meaning of *lhiea* here. It is probably derived from the verb *lhiea* “to release”. With the infixation, the word refers to the kind of animal that habitually releases odious smell at danger.
The infixed forms in (5.2)a–c are reminiscent of reduplication, but they do not represent some sort of reduplication. Firstly, the conjunctive infix may connect two different nouns, as shown in (5.2)d. Further, Prinmi reduplication does not involve any conjunctive element (see §5.3 for details). The conjunctive infix is mandatory for all the examples in (5.2). While it is possible to have the form zzhейа “very bad”, the reduplicate conveys a different meaning from the infixed form zzhейа-me-zzhейа “the bad (things)” in (5.2)c. The functions of zzhейа “bad” in these two instances also differ. It is a V/A in the reduplicate, but an N with the infix.

Apart from these two affixes, Prinmi has some affix-like morphemes in compounds; they can be reanalyzed as suffixes with varying degrees of success. Consider the following:

(5.3)  
| lhaζii | finger |
| -beazii | flower |
| lhiuzii | hare |

(5.4)  
| pali | small basin |
| -gali | small cup |
| hniqiqonli | boy |

(5.5)  
| hrüubbon | varnish tree |
| -seebbon | China ash |
| -seelâobbôn | pear tree |

(5.6)  
| Xieabbâ | the Han (Chinese) |
| -Jianchü Cili bba | Jianchu Cili’s family |

If we merely consider whether a morpheme is free or bound, there is little problem in regarding zii “little” in (5.3) to be a diminutive suffix, as it no longer appears alone as a free word. An exceptional case to its suffix-like usage is found in zii_dai “size”, in which zii “little” is combined with its antonym dai “big” into a compound. The matter becomes somewhat complicated when we consider the relation between the diminutive suffix and its putative stems in the examples. Except for bеа in the sense “to bloom”, none of the examples in (5.3) can occur without the suffix or with other affixes. This suggests that the morpheme may become bound as a result of grammaticalization.

The situation with li “small” is similar. Neither of the first two examples in (5.4) can stand by itself without the underlined morpheme. Thus Prinmi speakers always refer to small cups when they talk about cups. The morpheme can be omitted in the final example with a slight change in meaning — referring to older boys. On the other hand, compounding as the vehicle for developing suffixes is apparent in (5.5) and (5.6). The individual elements in the compounds can all appear alone, although this is very restricted.
for the underlined morphemes. With a high productivity in compounding and an infrequent use outside compounds, *bbôn* "(archaic) tree"\(^3\) and *bbá* "family" can perhaps be regarded as derivational suffixes (cf. the discussion of compounding/affixation cycle in Sino-Tibetan languages, Matisoff 1991a: 483-494).

### 5.2 Verb morphology

Prinmi verbs demonstrate a considerable amount of formal variation. The great majority of verbs can be attached with a set of directional prefixes; some inflect for agreement with the macro-role called ‘Actor’ in Role and Reference Grammar.\(^4\) Furthermore, the negative prefix *ma-* and a few suffixes derive new words regularly from verbs. Below we will first describe these affixes, and then discuss segmental alternations in verb roots.

#### 5.2.1 Directional prefixes

Prinmi has three pairs of directional prefixes, each with a semantic opposition between the members:

Table 5-1: The directional prefixes

<table>
<thead>
<tr>
<th>Category</th>
<th>Prefix</th>
<th>Meaning</th>
<th>Gloss</th>
<th>Prefix</th>
<th>Meaning</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERSON</td>
<td>dde(a-)</td>
<td>toward the speaker</td>
<td>to.sp</td>
<td>tea-</td>
<td>away from the speaker</td>
<td>fr.sp</td>
</tr>
<tr>
<td>SPACE</td>
<td>gge- (ke-)</td>
<td>outward</td>
<td>out</td>
<td>ea- (hea-)</td>
<td>inward</td>
<td>in</td>
</tr>
<tr>
<td>VERTICAL</td>
<td>nea-</td>
<td>downward</td>
<td>down</td>
<td>dēa-</td>
<td>upward</td>
<td>up</td>
</tr>
</tbody>
</table>

The first pair is PERSON-oriented, indicating whether an act is conducted toward the speaker or not. The other two represent spatial deixis. The SPACE is three-dimensional, concerning “in” and “out”; whereas the VERTICAL is one-dimensional, dealing with “up” and “down”. Given the deictic nature, these prefixes denote a relative position rather than a specific location. They are used for signaling the direction of an act rather than the site of an event. Deictic projection is feasible with the pair of PERSON deixis. Compare the basic meaning of the directional prefix in (5.7)a with the projected meaning in (5.7)b:

\(^3\) The archaic meaning of *bbôn* as “tree” is attested in the proverb: *Bbôn bbêe do’non suu kâ* “Take a look at the tree before picking the fruit”.

\(^4\) Another macro-role in the theory is the ‘Undergoer’ (see Foley & Van Valin 1984: 28-30).
The sentence in (5.7)b is used for greeting visitors. Here the reference point of deixis has shifted from the speaker to the speaker's home.

Phonologically the directional prefixes are quite uniform, consisting of a plosive and a central vowel. The vowel is subject to reduction in casual speech, especially for gge- "outward" and, to a lesser extent, dde- "toward the speaker". The contrast within each pair is signaled largely by voicing. Some deviations are found within the SPACE category. The original voiceless consonant of the prefix for "inward" probably has undergone the lenition from a velar plosive to zero through: [k] > [x] > φ. In fact the zero consonant is occasionally rendered as a velar fricative. On the other hand, the original voiced consonant in the prefix for gge- "outward" sometimes changes to a voiceless aspirated one. Thus the contrast between this pair has shifted away from the voicing distinction on the consonants. With the vowel reduction in gge-, the two further diverge in forms.

The collocation between a directional prefix and a verb is quite selective. When a directional prefix does not induce any change in meaning to a verb, it is regarded to be the primary prefix of the verb. Some verbs may have two different directionals as their primary prefixes, but the prefixes are never drawn from the same category. Table 5-2 displays the primary directional prefixes for some verbs in Niuwozi Prinmi. Many verbs in the table can only occur with the particular prefix or with no prefix at all.

| Table 5-2: A sample of verbs with their primary directional prefixes |
|---------------------------------|-------------|-------------|-------------|
| PERSON  | SPACE  | VERTICAL  |
| ddea- | tea- | gge- | ea- | nea- | dēa- |
| hréa | fasten | jì | say | dō | look | zzǐn | sit | kāo | fume |
| rí | get | nú | hear | bbián | fly | jjū | rotten | yō | overfill | giēa | afraid |
| ruá | feel (by touch) | ddéé | xxéé | cease | xxǐ | lie down | déé | give birth | (of rooster) | call |
| sshā | carry | gří | sing | zzǐi | eat | wá | cook | méa | forget | rõ | thrive |
| ddúu | heap | xiüän | castrate | chií | slaughter | būrū | burn | chií | stand | sǔu | fill up |
| hrehrin | concentrate | mēazhee | look for | hruhruhùi | clean up | hnuhnuhùu | smell | yǒnyàn | (of pig) | fatten |
As can be seen from the table, the directional prefixes are used with all three major types of verb, e.g. Action verbs such as ddea-hréa “to fasten”, State verbs such as nea-zzin “to sit”, and Process verbs such as dëa-kao “to fume”. Except for the semantic subtypes like the EMOTIONAL and the DESCRIPTIVE, the great majority of verbs can appear with a directional prefix (cf. Table 8-3).

While it may be possible to set up a number of verb classes according to their primary prefixes, it appears difficult to justify the grouping on other independent criteria. Both the meanings of a verb and a directional prefix can play an important role in their co-occurrence. For instance, it is quite natural for zzin “to sit” to be affixed with nea-“downward”, but it is puzzling in the match between the same prefix and the verb chi “to stand”. The prefix certainly occurs with two posture verbs, but it is not used with others such as ea-xxi “to lie down; to sleep” and ea-ggrão “to kneel down”. Moreover, a few verbs have two interchangeable prefixes, e.g. tēa-ba “to do” and nēa-ba “to do”. The difference between the two, if any, is unclear. Different choice of directional prefixes between (sub)dialects is also a noticeable characteristic of Prinmi dialects. Given a bare verb, it is not predictable as to which may be the primary prefix of the verb. A very general hint is that verbs with negative meanings are likely to be matched with nea-“downward”. A more useful observation is that nea-“downward” is designated for verbs borrowed from Mandarin, regardless of the meaning of the loan. For instances, nea-guân “to switch off”, nea-käi “to switch on”, nea-péiyâng “to train”, and nea-kut “to lose (profit)”, etc. However, when the meaning of the final one is expressed by a native verb in Prinmi, the choice of the prefix for the verb becomes tea-“away from the speaker”, i.e. tea-ní “to lose (profit)”. This illustrates that loan verbs from Mandarin as a class are assigned with the prefix nea-“downward” in Niuwozi Prinmi. Other than this, the prefix must be regarded as lexically determined.

Verbs differ in the possibility of choosing a directional prefix, with a range varying from zero to six. The majority of Prinmi verbs fall between the two extremes. A small number of verbs such as ggiâ “to love”, sēe “to miss (someone)” and kâ “to want” do not take any directional prefix. At the other extreme, a small number of verbs may appear with any of the six directional prefixes for describing different viewpoints or directions involved in an act. For instance,

---

5 Suprasegmental changes after the prefixation is disregarded here; for details, see §3.3.2.2.
6 This unpredictability is by no means given as a conclusion. There could be some semantic principles in the selection of a directional prefix, or even regular variation in terms of choices between Prinmi dialects. Further research will reveal how accurate the impression offered here may be.
(5.8) a upward- dēa-dâ to arrive (from a lower place)
b downward- nea-dâ to arrive (from a higher place)
c toward the speaker- dea-dâ to arrive (here)
d away from speaker- tea-dâ to arrive (there)
e outward- gge-dâ to arrive
f inward- ea-dâ to arrive (inside)

The choice of a particular prefix in (5.8) is decided with the destination of arrival taken into consideration. In talking about water rising to a certain point, or people arriving from a place of lower altitude, the form in (5.8)a is used. When talking about someone reaching down the ground from a tree, or arriving from a place of higher altitude, the form in (5.8)b is employed. If the destination is about the same altitude as the speech location, one of the remaining forms in (5.8) will be appropriate. The one in (5.8)c indicates that the journey terminates at the place where the speech occurs; whereas the one in (5.8)d implies that the journey begins from the place where the speaker is. The prefix used in (5.8)e is the primary one for the verb. Taking the destination to be a place somewhere outside, the prefix does not provide additional information to the meaning of the verb. Finally, the form in (5.8)f is called for when the destination is the inside of a cave or a channel.

Directional prefixes generally do not alter the basic meaning of the verb stem significantly. One noticeable exception is the prefix tea-, which can make a substantial modification if the verb stem is a DESCRIPTIVE verb. The prefix injects a sense of excessiveness to the stative meaning of the verb, e.g.

(5.9) a dâi to be big tea-dâi to be too big
b còn to be short tea-côn to become too short

To a lesser extent, the prefixation of a directional on some verbs may also introduce a new component to their meanings with respect beyond the deictic nature of the prefix. Consider the following:

(5.10)a tea-péa to lose (something) nea-péa to give up (something)
b nea-sī to die dēa-sīi to revive
c tea-ddièa to commit a mistake ea-ddièa to commit adultery
(knowing it is wrong)
d ddēa-hmièn to ripen dēa-hmièn to make ripe by cooking
e ddēa-jjièn to dawn dēa-jjièn (of lamp) to shine

7 The Pumi people inhabit in rugged mountain areas, and the relative altitudes of surrounding places are part of the common store of knowledge.
The pair of verbs in each example above share an identical morpheme as the stem. The different meanings of the pair are realized through the varied prefixation. The semantic distinction between a pair of prefixed verbs must be stored in the lexicon, as it is not derived by any rules. Possible exceptions to this are the last two pairs in (5.10)d-e, which may have connection to the voicing alternation, to be discussed in §5.2.3.

The directional prefixes are also useful for differentiating homophonous verbs. A pair of indistinguishable homophonous verbs usually become distinct when they are prefixed, e.g.

\[(5.11)\]
\[
\begin{align*}
\text{(5.11)a} & \quad \text{chi} \quad \text{gge-chii} \quad \text{to slaughter} \quad \text{nea-chii} \quad \text{to stand} \\
\text{(5.11)b} & \quad \text{hnüëi} \quad \text{gge-hnüe} \quad \text{to be knocked over} \quad \text{nea-hnüe} \quad \text{(of water) to be muddy} \\
\text{(5.11)c} & \quad \text{kián} \quad \text{dëa-kián} \quad \text{to stand up} \quad \text{tea-kián} \quad \text{to give} \\
\text{(5.11)d} & \quad \text{gián} \quad \text{dëa-gián} \quad \text{to pick up (food)} \quad \text{nea-gián} \quad \text{to estrange} \\
\text{(5.11)e} & \quad \text{zzhea} \quad \text{dëa-zzhëa} \quad \text{(domestic animals) to run around excited} \quad \text{nea-zzhëa} \quad \text{to weaken}
\end{align*}
\]

The stems in each pair of verbs in (5.11) are homophones. However, the different primary prefixes help to distinguish them. Sometimes, a verb with a wider range of selection for directional prefixes may take a secondary prefix which is identical to the one selected by its homophonous verb. In such cases, the prefixation provides no help as to differentiate the pair of homophones. For instance, in (5.11)c it is possible to prefix kián “to give” with dëa- “upward”, rendering an identical form dëa-kián “to give upward (as in to give to the heaven)” with dëa-kián “to stand up”.

Finally, directional prefixes often provide clues for setting some Process verbs apart from DESCRIPTIVE verbs. Many DESCRIPTIVE verbs in Prinmi are polysemous (or homophonous with corresponding Process verbs); the same form can be used as a Process verb or as a DESCRIPTIVE verb. However, DESCRIPTIVE verbs characteristically occur in bare forms; they cannot be attached with affixes or clitics. When a DESCRIPTIVE verb is prefixed with a directional, it must serve as a Process verb — expressing an uncontrollable change of state rather than a qualitative state. For instance,

\[(5.12)\]
\[
\begin{align*}
\text{(5.12)a} & \quad \text{däi} \quad \text{to be big} \quad \text{gge-däi} \quad \text{to grow big} \\
\text{(5.12)b} & \quad \text{giôn} \quad \text{to be frozen} \quad \text{ea-giôn} \quad \text{to become frozen} \\
\text{(5.12)c} & \quad \text{hhän} \quad \text{to be yellow} \quad \text{nea-hhän} \quad \text{to become yellow}
\end{align*}
\]

At first sight, the function of the directional prefixes here may be regarded as one that derives a Process verb from a DESCRIPTIVE verb. However, the construal of a DESCRIPTIVE verb, or a State verb generally, as a Process verb also arises after a bare DESCRIPTIVE verb is attached with such modifiers as the perfective clitic ‘si and the
volitative clitic 'gai. In the light of this, the different sense of a DESCRIPTIVE verb associated with these verb modifiers, including the directional prefixes, may simply be an epiphenomenon to their use of modifying a Process verb. This analysis is easier to accept for the verbal clitics, since their functions are more tangible than the directional prefixes. In addition to the meaning change, a DESCRIPTIVE verb hosting the perfective or the volitative is also understood to be aspectually or modally modified. The clitics are clearly not being used in a different function for derivation. Along the same line, the function of the directional prefixes in (5.12) will not be considered as deriving a Process verb from a DESCRIPTIVE verb.

5.2.2 Derivation with affixes

Except for the negative prefix ma-, which derives an antonym, derivational affixes in Prinmi are mostly suffixes, including -ddin, -mi, -yi, and -xxao. The first three suffixes derive a noun (a nominal form) from a verb — mainly through the additional meaning introduced by the suffixes, while the final one derives a new verb from another one. After a verb is suffixed to derive a nominal form, it generally loses the ability to host verbal clitics, although a directional prefix may still be attached to it. This may be viewed as a sort of verbhood downgrading (cf. Sasse 1993: 657-660). The description of the negative prefix will follow that of the suffixes.

5.2.2.1 From verbs to nouns/nominals: -ddin, -mi, and -yi

The suffix -ddin is used to derive an implement from a verb. The etymology of the suffix is obscure; it is unlikely to be related with the word hruuzi “instrument, tool”. The suffix can be attached to both simplex or compound verbs, as shown in (5.13)a and (5.13)b respectively.

(5.13)a zăo-ddin beating implement < hit-instrumental suffix
b hnûuñuu-ddin organ for smelling < smell-instrumental suffix
c zzâ_do-ddin mirror < shade_see-instrumental suffix
d jjìëa_xxii-ddin knitting implement < texture_knit-instrumental suffix

The most frequently seen suffix is -mi, grammatcalized from mì “person”. It is suffixable to the majority of verbs. A spectrum between the lexical and grammatical meanings of the morpheme alongside some semantic features can be set up as follows:

(5.14)a “person”: [+human] [+animate] [+nominal]
 b “-er”: [-human] [+animate] [+nominal]
 c Nominalizer: [-human] [-animate] [+nominal]

From (5.14)a to (5.14)c the content of the morpheme becomes increasingly abstract along
the path of grammaticalization.

Used in its lexical sense "person" in (5.15), mi combines verbs (V or V/N or V/N/A) into nominal compounds:

(5.15) a niàn_mi  patient < ill_person  
     b zea_mí  patient with a fever < hot_person  
     c [xián_zào]_mi  blacksmith < [iron_hit]_person

The verb stem may be simplex, as in (5.15)a–b, or complex, i.e. in the form of compound, as in (5.15)c. Progressing through the channel of grammaticalization, the morpheme appears in (5.16) without making reference to 'being human' but simply 'being animate'. Its meaning is somewhat similar to English agentive suffix -er “one who Ves”, but it is not restricted to Action verbs. For example, in (5.16)b it is suffixed to an auxiliary verb.

(5.16) a ssheesshee qii-mi (slide do-er) one that slides (i.e. snake)  
     b bian yôn-mi (fly know.how-er) one that can fly

The further grammaticalized form occurs in the focus-presupposition construction (cf. §9.1.1.2 & §12.5). In this case the basic function of the suffix is to nominalize a predicate, e.g.

(5.17) xián ggôn gge-zàò-mí zzii.
       iron Inst out-hit-nm Cpl
     (The tool,) what I'm saying is, (it) is forged with iron.

The function of the suffix -yi is similar to -mi in that it is also used in certain constructions for nominalizing a complement. For instance:

(5.18) a Mèc tea-qii-yí zzii?
       what fr.sp-do-nm Cpl
       What are (we) going to do?

     b gge-zhèe ea-zhèe la zhèe-yí xi ma'riù.
       out-pull in-pull also pull-nm exist N+nInv
       no matter how hard (I) pull, (I) just can't pull (it) out.

In (5.18)a the suffix, in conjunction with the copula, denotes a kind of aspectual/modal construction — the obligatory construction (cf. §9.1.1.1). The suffix -yi is also essential to the potentiive construction, headed by the existential verb xi, in (5.18)b.

Like the suffix -mi, -yi can be affixed to a verb for deriving a new noun, e.g.

(5.19) a zzii-yí  food < eat-nm  
     b tian-yí  beverage < drink-nm
Although the derived forms in (5.19) are confined to those involving basic substance for living, they can be regarded as independent nouns. When they occur in the potentiival construction, a sort of synonymous ambiguity may arise, depending on how the function of the suffix is interpreted. Consider the following:

(5.20) Mire la zzii-yî xi tian-yî xi tea-zzhon.
people also eat-nm exist drink-nm exist fr.sp-become
A) People also came to have means for eating and drinking.
B) People also came to have food and beverage.

5.2.2.2 From verbs to verbs: -xxao

Another morpheme analyzable as a verbal suffix is -xxao. The suffix conveys the meaning “to be prone to/eager to”. In comparison with the other verbal suffixes, the productivity of -xxao is rather low. It is mainly suffixed to Action verbs. For instance,

(5.21)a hra-xxô to be prone to laugh          guài-xxô to be prone to cry
b piea-xxô to be prone to throw up          xxii-xxô to be eager to sleep

The suffix can be attached to a small number of DESCRIPTIVE verbs. However, the derivation effect is different. With DESCRIPTIVE verbs, the suffix often derives a new meaning not straightforwardly based on the composition of the morphemes. For example,

(5.22) jjîän-xxô to believe < true-prone jjêe-xxô to be anxious < angry-prone

A verb derived through the suffixation of -xxao can be negated or questioned like other verbs. Verbal clitics such as the negator ma’ and the interrogative a’ are inserted between the verb stem and the suffix. The pattern of clitic attachment shows no difference from that of disyllabic verbs.8

5.2.2.3 Deriving antonyms: ma-

A regular means to derive an antonym for a DESCRIPTIVE verb (which can often be used as an adjective) is by prefixing ma- to the verb stem:

(5.23)a ma-ggiâ to be ugly < N.pretty ma-shôn to be dirty < N.clean
b ma-zhuâ to be uncomfortable < N.comfortable

8 Alternatively xxao could be treated as a bound element in verbal compounds. Here it is regarded as a derivational suffix, along the same lines of treating bbôn “tree” and bbá “family” as derivational suffixes in §5.1.
Sometimes the negative meanings of the derivations like those in (5.23)a may be expressed by *zhēa* “to be bad”. The use of such a vague expression is found in naturally occurring data (cf. the proverb in Ex.(10.25)b). This explains partly the infrequent encounter of derived antonyms. Moreover, a number of antonyms of DESCRIPTIVE verbs are distinct in the lexicon (for pairs of such antonyms, see Ex.(5.53)).

The negative morpheme *ma* is most often used as a clitic in the language. When a verb hosts a clitic like the non-involvemental *'riu* (cf. §8.2.3.2), the precise function of *ma* is manifested. If it serves as a negative clitic, it must combine with the other clitic into a complex enclitic (cf. §8.1). This means that it cannot remain its position before the verb. On the other hand, the presence of the non-involvemental clitic has no effect on the position of the negative prefix. Compare the following:

(5.24) a  *ma-zhū* be uncomfortable  *ma-zhū'riu* (as a negative prefix)
   b  *ma'ku* not want  *ma'ku'riu* (as a negative clitic)

5.2.3 Derivation for causative Action verbs

A small number of verbs use voicing alternation of a consonant to signal a semantic contrast between an uncontrollable act versus a controllable one, e.g.9

(5.25)   
<table>
<thead>
<tr>
<th>Process verb</th>
<th>Action verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>a  <em>ggriān</em> to break (intransitive)  <em>griān</em> to break (transitive)</td>
<td></td>
</tr>
<tr>
<td>b  <em>ggī</em> to return home  <em>gī</em> to cause to return home</td>
<td></td>
</tr>
<tr>
<td>c  <em>zzēe</em> (of fruit) to fall from tree  <em>zee</em> to cut off</td>
<td></td>
</tr>
<tr>
<td>d  <em>ggō</em> to die out  <em>kō</em> to extinguish</td>
<td></td>
</tr>
<tr>
<td>e  <em>zzhēe</em> to get torn  <em>chēe</em> to tear</td>
<td></td>
</tr>
<tr>
<td>f  <em>bbēe</em> to collapse  <em>pēe</em> to destroy</td>
<td></td>
</tr>
<tr>
<td>g  <em>ggrē</em> to fall (out of pocket)  <em>krē</em> to shed</td>
<td></td>
</tr>
<tr>
<td>h  <em>ggā</em> to fall off  <em>kā</em> to remove</td>
<td></td>
</tr>
<tr>
<td>i  <em>dđīi</em> to wear out  <em>tī</em> (of person) to become useless</td>
<td></td>
</tr>
<tr>
<td>j  <em>büggā</em> to fall apart  <em>būkā</em> to cause to fall apart</td>
<td></td>
</tr>
</tbody>
</table>

On the left are inherently uncontrollable verbs, mostly involving an internal cause for the change of state. This group of verbs have a voiced consonant. When the consonant is changed to its voiceless counterpart (unaspirated or aspirated), an Action verb with a controllable external cause is derived.10 This can generally be regarded as a

9 Although all the know instances from my fieldnotes are given in (5.25), no claim will be made that they are exhaustive.

10 This kind of contrast is also found in other Tibeto-Burman languages such as Burmese
morphological means for deriving an Action verb, or the causative form of a Process verb. Note that in (5.25)j, the devoicing process occurs on the consonant of the final syllable. The pair of unanalyzable bisyllabic verbs may be lexicalized from compounds consisting of the verbs in (5.25)h. Note also that all the known instances of thus derived Action verbs contain a plosive or an affricate, i.e. those with a three-way contrast of voicing and aspiration in Prinmi. The available data seem to suggest a correlation between the suprasegmental of a Process verb and the aspiration of the consonant in the derived form. Under a falling surface tone, the derived Action verb results in an aspirated consonant rather than an unaspirated one, as in (5.25)d–i. In case of a disyllabic verb like (5.25)j, only the suprasegmental of the syllable undergoing consonant devoicing is taken into account.

Semantically, this kind of verbs tend to denote negative meanings. Perhaps it is the concern about the controllability of a negative event that renders the lexicalization of the semantic contrast of these verbs, surviving the unproductive morphological derivation in modern Prinmi. Nowadays the voicing alternation as a morphological process is extremely restricted and causation is largely expressed with a periphrastic construction (cf. §11.2.1).

When prefixed, a derived Action verb selects the same directional as its corresponding Process verb does, e.g. nea-ggriän “to break (intransitive)” vs. nea-griän “to break (transitive)”, ddea-ggi “to return home” vs. ddea-gi “to make return home”, and so forth. However, it appears that the morphological derivation was once applicable to the directional prefix ddea- and could devoice the prefix to dea-. After the process, the category of the prefix is coincidentally changed from PERSON to VERTICAL. Consider the semantic contrast in the following pairs of words:

(5.26)a  ddea-hmiän to ripen  dēa-hmiän to make ripe by cooking
b  ddea-jjüän to dawn  dēa-jjüän (of lamp) to shine

In (5.26)a, the consonant devoicing is realized on the prefix presumably because the verb stem starts with a voiceless nasal. But the reason for the devoicing on the directional prefix instead of the verb stem in (5.26)b is unclear. Perhaps the voicing contrast between the prefixes and the controllability contrast of the two forms are merely a chance of coincidence.

Of the twelve pairs of examples given in (5.25) and (5.26), the contrast in seven

(Okell 1969) and Lahu (Matisoff 1973). The derivation is similar but not identical. For example, in Burmese the consonant alternation is between unaspirated and aspirated ones.
pairs is pointed out by the consultant. The semantic contrast in these pairs is rather straightforward, e.g. (5.25)a–b and (5.26)a. The contrast in the other five — (5.25)c, (5.25)g–i and (5.26)b — is relatively less so. However, it is not too difficult to discern that one verb in each of the five pairs conveys an uncontrollable meaning. For instance, in (5.25)c, \( \text{zzéé} \) is used for expressing the falling of fruit from trees due to natural forces such as strong winds, which is certainly uncontrollable by one’s will. On the other hand, \( \text{zéé} \) has the meaning of detaching something, e.g. to cut off a finger, which is controllable. The basic semantic contrast between the pair of verbs is thus the controllability over detachment. A similar contrast can be found for those in (5.25)g–h. In (5.25)i, \( \text{tii} \) describes persons who lead a disgraceful life without any purpose. If the meaning of the verb is understood in terms of uselessness, then the verb denotes a controllable change to the state of uselessness. In this connection, \( \text{ddlí} \) “to wear out” can be taken as expressing an uncontrollable change to the state of uselessness due to prolonged use. A controllability contrast can be established between them. As for the pair in (5.26)b, the semantic contrast is found with the controllability over the emission of lights: Dawning is uncontrollable, but shining of a lamp is controllable by one’s will.

Syntactically, the derived Action verbs are almost all transitive. Labels such as ‘transitive’ or ‘causative’ are sometimes applied to this group of verbs in other Tibeto-Burman languages. These labels, particularly the latter, capture the effect of the derivation quite closely, but it appears that transitivity is not always associated with a derived Action verb in Prinmi. The derived verb \( \text{tii} \) “(of persons) to become useless” in (5.25)i exemplifies this point. The verb is used intransitively to describe the poor doing of a person. Given the less straightforward semantic contrast and the unusual syntactic property of \( \text{tii} \), one may wonder whether it is legitimate to consider the verb as being derived from \( \text{ddlí} \) “to wear out”. Should the derivational relation be mistaken, it would be due to a good chance of coincidence involving more than one factor. The two, like other pairs in the (5.25), consist of an identical tone and an identical rhyme. Further, they select the same directional prefix — \( \text{nea-} \) “downward” — when prefixed. These properties are observed (and will be expected) with derived Action verbs by means of consonant devoicing. Inasmuch as the morphonological process is to devoice a segment, it should have no bearing on the selection of directional prefixes (which are not sensitive to the semantics of controllability), nor should it affect the suprasegmental of the verb (although the suprasegmental appears to influence the aspiration of the consonant in the derived form).
Some verbs inflect through rhyme alternation for agreement with ‘Actor’ in respect to person and number. The inflection is observed on a small number of verbs, and is confined to certain aspect and mood, found mainly in the perfective and the imperative sentences. Take as illustration, consider the conjugation of țiăn “to drink” in the perfective:

<table>
<thead>
<tr>
<th></th>
<th>First person</th>
<th>Second person</th>
<th>Third person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td>1s tön</td>
<td>2s tión</td>
<td>3 tuăn</td>
</tr>
<tr>
<td>Plural</td>
<td>1/2p tín</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The agreement involves four different categories. While the singular forms distinguish the first-person, the second-person, and the third-person (1s vs. 2s vs. 3), the plural forms only contrast the non-third person with the third person (1/2p vs. 3). Number for the third person is not distinguished. As mentioned earlier, the inflectional forms are often associated with the perfective aspect. But notable exceptions are found with the copula țiii “to be” and the possessive ƅƅôn “to have”, whose inflections do not imply any perfective reading. The forms for second person singular (2s) and non-third person plural (1/2p) are also employed in the imperative. The agreement in the imperative sentences is generally more consistent and the consultant is conscious of the contrast.

This kind of conjugation seems to have undergone various degrees of simplification in different dialects (cf. Lu 1983: 103-105). While a handful of frequently used verbs maintain their inflections in Niuwozi Prinmi, many other verbs tend to be used invariably. To a lesser extent, the gradual loss of verbal inflection is also witnessed in the speech of the main consultant. The verbal inflection in his speech is rather situational, and he personally does not appreciate it. On a few occasions he expressed his confusion about the variation between such forms as jiän “to see” (the root form) and jiūn “see (for the third person)”, wondering whether the variation was due to dialectal differences or performance errors such as slip. When he was asked about the variant form of a verb heard in tapes, he would happily replace it with a presumably root form of the verb. Under these circumstances, attempts to elicit complete verbal paradigms (through sentences) become very difficult and often futile. For present-day Niuwozi Prinmi, it will be more sensible to compile a short list of verbs with full paradigms, some of which are

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11 I have the impression that the consultant would like to ‘standardize’ his native language (if he could) in such a way that variations are to be minimized, perhaps under the inspiration of the simple morphology of Chinese.
Table 5-3: Verb paradigms in Niuwozi Prinmi

<table>
<thead>
<tr>
<th>Group</th>
<th>Root</th>
<th>1s</th>
<th>2s</th>
<th>1/2p</th>
<th>3</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>masi</td>
<td>masían</td>
<td>masào</td>
<td>masin</td>
<td>masuu</td>
<td>know</td>
</tr>
<tr>
<td></td>
<td>zzii</td>
<td>zzian</td>
<td>zzao</td>
<td>zzin</td>
<td>zzüu</td>
<td>eat</td>
</tr>
<tr>
<td></td>
<td>tian</td>
<td>tón</td>
<td>tíon</td>
<td>tín</td>
<td>tüän</td>
<td>drink</td>
</tr>
<tr>
<td>II</td>
<td>kían</td>
<td>kón</td>
<td>kión</td>
<td>kián (?kín)</td>
<td>kúán</td>
<td>give</td>
</tr>
<tr>
<td></td>
<td>xii</td>
<td>xiàn</td>
<td>xào</td>
<td>xín</td>
<td>xii</td>
<td>go</td>
</tr>
<tr>
<td></td>
<td>xii</td>
<td>yìn</td>
<td>yìn</td>
<td>xxii</td>
<td>come</td>
<td></td>
</tr>
<tr>
<td></td>
<td>bà</td>
<td>biàn</td>
<td>bù</td>
<td>bin</td>
<td>bà</td>
<td>do</td>
</tr>
<tr>
<td>III</td>
<td>bbôn</td>
<td>bbôn</td>
<td>bbú</td>
<td>bbín</td>
<td>bbôn</td>
<td>have</td>
</tr>
<tr>
<td></td>
<td>zzín</td>
<td>zzín</td>
<td>zzôn</td>
<td>zzín</td>
<td>zzín</td>
<td>sit</td>
</tr>
<tr>
<td></td>
<td>chíi</td>
<td>chíi</td>
<td>chào</td>
<td>chín</td>
<td>chíi</td>
<td>stand</td>
</tr>
</tbody>
</table>

According to the numbers of different inflections, the verbs in Table 5-3 are divided into three groups. Group I has the richest inflection with five different forms. Group II show four distinct forms for the four categories of agreement, with a syncretism between the root form and the inflection for third-person. Group III exhibits a higher degree of syncretism; only two of the four categories are distinct from the root form, reducing the different inflections to three, as in the case of *bbôn* "to have". The number of forms further decreases for *zzín* "to sit", due to the coincidence between the root form and the inflection for '1/2p'. For verbs of Group III, it is uncertain as to whether the neutralizations are accidental or attributable to the ongoing leveling.

Table 5-3 contains a dubious form, i.e. *kián* the '1/2p form' of "give". The form is obtained twice from the main consultant on two occasions, one on the first field trip and the other on the second field trip. In spite of the consistence, the form appears problematic, for it does not conform to the conjugational pattern for the '1/2p form'. Furthermore, there is a verb consisting of identical segments as *kián* "give" in the root form and the '2s form', i.e. *dēa-kián* "stand up (root form)", *dēa-kiön* "stand up ('2s form')". When the verb inflects for the '1/2p form', it becomes *dēa-kin* "stand up ('1/2p form')", as expected. Returning to the problematic form *kián* "give", it is either a true exception to the observed pattern, or a consistent conflation. As for the consonant change seen on *zzii* "to be" and *xxii" "come", they are independent of the conjugation. The alternation of the consonants between *zzii* "to be" and its inflections is caused by a lenition having occurred in the root form in Niuwozi Prinmi. In other dialects such as Jinghua Prinmi, the sound change from a plosive to an affricate does not occur, and all
the forms of the copula have an identical plosive. Similarly historical sound change has resulted in the loss of the initial fricative in the inflections of "come".

Some additional verbal inflections are found in recorded materials or encountered during fieldwork sessions. Based on these sources, a partial paradigm of some additional Prinmi verbs is tabulated below:

<table>
<thead>
<tr>
<th>(5.28)</th>
<th>Meaning</th>
<th>Root</th>
<th>1s</th>
<th>2s</th>
<th>1/2p</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>listen</td>
<td>yín</td>
<td>yín</td>
<td>yón</td>
<td>yín</td>
<td>yuán</td>
<td></td>
</tr>
<tr>
<td>flee</td>
<td>?pián</td>
<td>?pián</td>
<td>pión</td>
<td>pín</td>
<td>pán</td>
<td></td>
</tr>
<tr>
<td>dare</td>
<td>wàa</td>
<td>wòn</td>
<td>wù</td>
<td>??</td>
<td>wàa</td>
<td></td>
</tr>
<tr>
<td>take shelter</td>
<td>xiá</td>
<td>?xiá</td>
<td>?xiá</td>
<td>??</td>
<td>xiá</td>
<td></td>
</tr>
<tr>
<td>bring</td>
<td>sshà</td>
<td>??</td>
<td>sshù</td>
<td>??</td>
<td>sshà</td>
<td></td>
</tr>
<tr>
<td>take off</td>
<td>shí</td>
<td>??</td>
<td>sháo</td>
<td>shín</td>
<td>shuá</td>
<td></td>
</tr>
<tr>
<td>accept (food)</td>
<td>cíí</td>
<td>??</td>
<td>cão</td>
<td>??</td>
<td>??</td>
<td></td>
</tr>
<tr>
<td>take (food)</td>
<td>gián</td>
<td>??</td>
<td>gián</td>
<td>??</td>
<td>gián</td>
<td></td>
</tr>
<tr>
<td>swallow</td>
<td>ddiàn</td>
<td>??</td>
<td>ddiàn</td>
<td>??</td>
<td>dduàn</td>
<td></td>
</tr>
<tr>
<td>wait</td>
<td>qionlíhán</td>
<td>?qionlíhán</td>
<td>qionlíhôn</td>
<td>??</td>
<td>qionlíhùân</td>
<td></td>
</tr>
<tr>
<td>think</td>
<td>sáudduu</td>
<td>sáuddoon</td>
<td>sáuddion</td>
<td>??</td>
<td>sáudduu</td>
<td></td>
</tr>
</tbody>
</table>

Inflections presently not available are indicated by a pair of question marks in the table. When a question mark precedes an inflection, it indicates that the form is either an exception to the generalization below or a conflation due to the leveling of verbal conjugation in Niuwozi Prinmi.

Certain patterns can be observed from the available verbal conjugations. These are summarized as follows:

(5.29) a Bisyllabic verbs inflect with the rhyme of the second syllable only.
   b Unless the third-person form is identical to the root form, it usually introduces the feature [+round] to the rhyme of the inflection. If the rhyme is a rising diphthong, the glide becomes rounded. For a monophthong, the feature is realized on the vowel itself.
   c The ‘1/2p form’ is usually expressed with the vowel /in/ (IPA: i).
   d With certain exceptions, the ‘2s form’ tends to contain the segment /u/ as (part of) the rhyme, usually /u/ or /ao/ (IPA: vw). If the root form is rhymed with /ii/ (IPA: i), the ‘2s form’ appears as /ao/. For other vowels, /u/ replaces the most syllabic segment in the rhyme, usually without affecting the [±nasal] of the original vowel. When the nasal feature is inherited from the root form, the nasal vowel is phonetically lowered to /on/ (cf. §2.3.3).
   e The ‘1s form’ tends to have a nasal rhyme. If the rhyme of a root form is a
nasal monophthong, syncretism may occur between the two forms. The most common nasal vowel found in the ‘1s form’ is /ian/ (IPA: jä). A root form with the vowel /ii/ usually inflects to /ian/ for the ‘1s form’. When the root form contains /ian/, the rhyme of the inflection generally becomes /on/.

Unlike those verbs in (5.28) with an incomplete paradigm, some Prinmi verbs must have a defective conjugation by nature of their semantics. For example, it is impossible for Process verbs such as bbin “(of ripe fruit) to fall off by itself from the tree” and ggò “to die out” to inflect, as their meanings allow them to co-occur with a third person argument only. Similarly DESCRIPTIVE verbs such as color terms and quantity terms are also defective in terms of agreement inflection.

5.3 Reduplication

Morphological reduplication in Prinmi does not operate with exact copying of a word. Such reduplication typically involves vowel and suprasegmental changes, as noted in §2.5.1.1 and §3.3.2.3 respectively. The results of the changes are not completely predictable, but, by and large, they fall within a few patterns described in the two subsections mentioned above. The suprasegmental change is understandable, since the reduplication always increases the syllabicity of the word. The extension of the prosodic domain then leads to re-allocation of the surface tones. A simple way to deal with this is to consider that the suprasegmentals are not reduplicated. Vowel changes on the first syllable is more common than those on the second syllable. They are not entirely predictable by phonological rules.

The morphological reduplication only targets the final syllable of a word. For a disyllabic simplex word AB, the reduplication results in ABB; forms such as *ABAB or *AAB are not attested. For instance,

\begin{align*}
(5.30)a \quad & \text{krelüé turtledove} \quad \text{krelüelüé turtledove} \\
\quad & \text{masii to know} \quad \text{masiisii to know each other}
\end{align*}

The reduplication of krelüé “turtledove” might imply a plural meaning.\(^{12}\) Morphological reduplication has not been found with words longer than two syllables.

Both nouns and verbs may be reduplicated, but reduplication on nouns is highly restricted to the extent that it can be considered as unproductive. Consider the following nominal reduplications:

\[\text{12 Such spontaneous reduplicates are found in naturally occurring speech; they are very difficult to elicit, perhaps because of the vague meaning of reduplicated nouns.}\]
As shown in (5.31), not all reduplicated nouns have a non-reduplicated form. For the
nouns in (5.31)h–m, the reduplicate represents the basic form. The others can appear in
reduplicated as well as non-reduplicated forms (though not necessarily in a
monosyllable). The essential meaning of the noun is maintained between the two forms.
There is a vague sense of plurality discernible from a few reduplicated nouns, e.g.
bônbon “paternal uncle” or rêare “furs and skins”. Under the kinship system of Prinmi,
bôn denotes both “father” and “paternal uncle”. If the reduplication introduces a plural
reading to the noun, the reduplicated form naturally does not mean “father” as one can
only have one biological father. While cases like these seem to reveal the effect of
reduplication on nouns, it is not applicable to many other reduplicated nouns, leaving the
precise function of the reduplication unclear.

The effect of reduplication on verbs can be construed as repetition of an act in some
way. Depending on the semantic content of a verb, its reduplicated form may convey
intensity, reciprocity, continuousness, or plurality. When a DESCRIPTIVE verb is
reduplicated, the resulted form has an intensified stative meaning, e.g.

\[
\begin{array}{cl}
(5.31) & \text{Reduplicated form} & \text{Non-reduplicated form} \\
\hline
a & zzhezzhú & \text{friend} & \text{zzhú} & \text{mate} \\
b & bônbon & \text{paternal uncle} & \text{bôn} & \text{father/uncle} \\
c & mâmá & \text{maternal aunt} & \text{má} & \text{mother} \\
d & baibái & \text{elder brother} & \text{bái} & \text{elder sibling (of same sex)} \\
e & ggionggiôn & \text{dumb person} & \text{ggiôn} & \text{stupid} \\
f & suasûu & \text{fruit} & \text{sûu} & \text{fruit} \\
g & rêare & \text{furs and skins} & \text{rè} & \text{skin} \\
h & ddiâddia & \text{grandmother} & \text{n/a} & \text{n/a} \\
i & mêemee & \text{elder sister-in-law} & \text{n/a} & \text{n/a} \\
j & jiîjî & \text{book} & \text{n/a} & \text{n/a} \\
k & lecée & \text{folk song} & \text{n/a} & \text{n/a} \\
l & neanéa & \text{sweet wine} & \text{n/a} & \text{n/a} \\
m & bbronbbrön & \text{roasted barley flour} & \text{n/a} & \text{n/a} \\
\end{array}
\]

Generally when a bivalent Action verb is reduplicated, the verb acquires a reciprocal
meaning, e.g.
The reciprocal meaning of these verbs arises when the repeated acts involve a change of direction (or the flow of effect) between the core arguments α and β, i.e. from α to β and then from β to α. A few reciprocal verbs are inherently reduplicated and do not have a corresponding non-reduplicated form. They denote events/activities that require mutual participation of two parties, e.g.

(5.34)a ggüeggüê to exchange
b sēasea to quarrel

Reduplication on a monovalent Action verb often signifies that an act is performed continuously. The continuousness is different from the aspectual sense of progressive. Contrasting to a single instance of an act in the simple form, the reduplicated form expresses a consecutive recurrence of the act. Thus in (5.35)a the simple form conveys one explosion, whereas the reduplicated form refers to a series of explosions. Likewise, the simple form in (5.35)b means “to move a step” and the reduplicated form renders “to move step after step”. In this case, the meaning of the reduplicated verb is actually closer to the general notion of walking. The examples in (5.36) show other similar cases in which the reduplicates denote a quite natural situation.

(5.35)a jjüée to explode jjüeajjüéê to explode continuously
b zzhän to walk zzhanzzhän to walk (continuously)

(5.36)a hrä to laugh hrēahra to laugh continuously
b hrû (of bird) to call hruēahrû (of bird) to sing
c hrûu to be pained hrueahrûu to suffer
d grî to sing griongrî to sing (continuously)
e bbiän to climb bbionbbiän to climb (continuously)

13 The pair of synonyms in (5.33)g–h have no discernible difference and are interchangeable with each other.
Notice that the reduplicates in (5.36)d–e involve another kind of rhyme change in the first syllable. The original rhyme is replaced with /ion/.

Many acts are semantically quantifiable, i.e. they can be counted easily. Some of these countable acts often occur continuously, and may be lexicalized in Prinmi. The corresponding simple forms of the reduplicates in (5.37) have been lexicalized to such an extent that the are scarcely used.

(5.37) a qoqö to rub
    b xeexée to fondle
    c hnûuhnû to smell
    d taatâa to drip

Finally verbal reduplication may also convey a plural sense of acts distributive to multiple core arguments. This is patent with monovalent verbs. For example, the reduplications of the monovalent verbs in (5.38) imply that more than one Actor engages in the same acts.

(5.38) a dde-hrín to be attentive
dde-hrín (of many) to be attentive
    b gge-hhâi ea-hhâi (a tree) to shake from side to side
    gge-hhâihhai ea-hhâihhai (trees) to shake from side to side

Note that the example in (5.38)b involves a complex reduplication. Before the verb stem is reduplicated for plural Actors, the base form for the singular is itself a co-ordinate compound generated through a kind of reduplication pattern (see §5.4.4).

The consultant was unable to supply further isolated examples for reduplicates with a distributive contrast. Two candidates found in the data for this type of reduplicate are:

(5.39) a tea-zzû to make
tea-zzûzzua (of many) to make
    b güu to dig
    guuguâ (of many) to dig

Unlike (5.38), the reduplications in (5.39) are based on bivalent verbs. From the context of the story, (5.39)a appears to imply plural Actors, referring to the team of animal servants. However, the activity in concern is to make meals, and the labor is divided to be carried out by individual servants. Thus it is also possible to construe multiple Undergoers (which are not stated explicitly). The ambiguity is borne out in (5.39)b during an explicit checking with the consultant. According to him, the short utterance predicated with the reduplicated verb may convey that one hare or several hares dug one hole or several holes. The interpretation is open to all logical possibilities.

It is noteworthy that the rhyme change in the reduplicate takes place in the second
syllable in (5.39). Some additional examples for vowel change at this position are given in (5.40) and (5.41)a.

\[(5.40)a\]
\begin{align*}
\text{a} & \quad \text{zäi} \quad \text{to wash} \\
\text{b} & \quad \text{ri} \quad \text{to shave} \\
\text{c} & \quad \text{zzhï} \quad \text{to sew}
\end{align*}
\begin{align*}
\text{zäiza} & \quad \text{to wash continuously} \\
\text{rïraa} & \quad \text{to shave continuously} \\
\text{zzhizzhïa} & \quad \text{to sew continuously}
\end{align*}

\[(5.41)a\]
\begin{align*}
\text{a} & \quad \text{sü} \quad \text{to grind (knife)} \\
\text{b} & \quad \text{zzhúu} \quad \text{to write}
\end{align*}
\begin{align*}
\text{susuë} & \quad \text{(of cat) to sharpen (claws)} \\
\text{zzhuuzzhüe} & \quad \text{to write continuously}
\end{align*}

### 5.4 Compounding

Compounding is extremely productive in Prinmi. As in many languages, however, there is no clear-cut distinction between compounds and phrases/short clauses.\(^\text{14}\) Given a particular expression, we need to take semantics, phonology, and grammatical properties between words and phrases/clauses, where applicable, into account in order to determine whether it is a compound. Rigid and useful criteria for identifying compounds are simply unavailable. This will be briefly illustrated with some examples below.

Semantically a phrase/clause conveys a compositional meaning of the words within the constituent, while a compound is more likely to denote a new meaning other than the sum of its components. Nonetheless, the idea of being pregnant can be expressed idiomatically as follows:

\[(5.42)\]
\begin{align*}
\text{ggion} & \quad \text{ma-zzhuä'riü} \\
\text{body} & \quad \text{N-comfortable+nInv}
\end{align*}
\begin{align*}
(\text{I'm/She's}) \text{pregnant (lit. the body is uncomfortable)}
\end{align*}

In spite of its non-compositional meaning, the expression in (5.42) is a short clause consisting of two words, not a compound. This is evinced by the use of the negative prefix \text{ma-} between the words. On the other hand, \text{qüashíi} “pork” is unequivocally a compound, yet with a compositional meaning of “pig” plus “meat”. Therefore semantic factor alone is not sufficient for distinguishing compounds.

Phonologically both compounds and phrases (sometimes also between a bare argument and a bare verb in a short clause) show a similar tone sandhi by virtue of

\(^\text{14}\) For example, in his momentous grammar of Mandarin Chinese, Chao (1968: 301-325) discusses the general properties of both Verb-Object compounds and Verb-Object phrases indiscriminatingly under the rubric of ‘Verb-Object constructions’. Although Chao (1968: 415) is able to distinguish Verb-Object compounds with a set of conditions, he does not separate the continuum of compound-phrase into a dichotomy.
domain merger from the right to the left (cf. §3.3.2.4 and §3.3.2.5). They differ in that compounds are more likely to merge the prosodic domain of a formative into that of the initial one and that other kinds of suprasegmental processes are also possible in compounds, but not in phrases/clauses. Generally, the pause insertion test is useful for distinguishing a phrase from a simple compound, but less useful if the compound contains an embedded compound. For instance, we can insert a pause after the argument in the clause in (5.42), but such a pause insertion between the formatives is unacceptable for the disyllabic compound *qiashii* “pork”. As for quadrisyllabic compounds, a short pause can usually be inserted between the second and the third syllables, e.g. *gguxxin_lhâzii* “middle finger”. The position corresponds to the structure boundary in complex compounds (see §5.4.6 below).

With regard to syntactic properties, clitics generally cannot do not partake in compounding. Putative exceptions are found only with formatives that are well-cliticized outside compounds, cf. Ex.(5.64)). Thus the intervention of a clitic like the negator *ma'* will help to indicate that an expression is a clause instead of a compound. When a verbal compound undergoes negation, clitics follow the compound as a whole, as in (5.43)b.

(5.43) a  xxiân_tiān  
  tobacco_drink  
  *to smoke (as a habit, i.e. have the habit of smoking)*

   b  xxiân_tiān    ma’riū  
  tobacco_drink    N+nInv  
  *not smoke (as a habit, i.e. not have the habit of smoking)*

The compound in (5.43)a conveys “to smoke” as a habit. This habitual meaning is available only when the Undergoer is combined with the verb into a compound. In order to negate the habitual meaning of the verbal compound, no clitic can be inserted in the compound. If a clitic intervenes, the habitual meaning is lost because the expression can no longer be a compound. Compare (5.43)b with (5.43)c:

(5.43) c  xxiān    ma’tiān  
  tobacco    N+drink  
  *doesn’t smoke*

With an intervening clitic, the negative expression can only refer to a specific act of smoking, not a habitual one. In addition to clitics, affixes are also excluded from compounding unless they are permitted in specific patterns (cf. Ex.(5.55) and Ex.(5.57) below).

In sum, Prinmi compounds must be identified on a case-by-case basis. Examples to be provided below are selected from better established compounds. The following
subsections will provide a brief discussion of lexical categories of compounds (§5.4.1) and a classification of Prinmi compounds, covering important types of compound in the language (§5.4.2–§5.4.5). The final subsection will examine the complex structures of trisyllabic and quadrisyllabic compounds.

5.4.1 Lexical categories of compounds

Prinmi compounds are largely nouns and verbs. Compounding in terms of lexical categories can be outlined as follows:

\[
\begin{array}{c|c|c}
\text{Input words} & \text{Compound} & \text{Input words} \\
\hline
\{N\} + \{N\} & \{N\} & \{V\} + \{V\} \\
\{N\} + \{V\} & \{V\} + \text{Idph} \\
\{N\} + \{A\} & \{N\} + \text{Idph} \\
\{V\} + \{V\} & \{V\} \\
\end{array}
\]

As can be seen from above, the components of a compound are mainly drawn from nouns and verbs. Other possibilities for the formatives include ideophones, numerals, and counters.

While numerous nouns and verbs can be derived through compounding, analyzable adjective compounds are rare in Niuwozi Prinmi. The known examples are all from the bi-functional N/A group:

\[
\begin{align*}
(5.45) a & \quad \text{xiôn}_{(rea\_bu)} \quad \text{male} < \text{golden pheasant\_[chicken\_male]} \\
& \quad \text{b} \quad \text{xiôn}_{(rea\_ma)} \quad \text{female} < \text{golden pheasant\_[chicken\_female]} \\
& \quad \text{c} \quad \text{ruëa}_{[wëa\_mi]} \quad \text{female yak} < \text{yak\_[\_ox\_\_daughter]} \\
\end{align*}
\]

The attributive function of the compounds reabû “rooster” and reamâ “hen” is undoubtedly secondary. There is also an alternative to the embedded compounding in (5.45)a–b: the word xiôn can be compounded directly with bû “(of animal) male” and mà “(of animal) female”, hence xiônbu “male” and xiônmà “female”. As for (5.45)c, it is certain that the two morphemes in the word wëami “cow” do not occur freely as *wêa “(generic) ox” and *mi “female”, but they are likely to be related to such words: wêa < guëa “(generic) ox” and mi < hmi “daughter”. Even then, the basic function of the compound would be a noun rather than an adjective. Thus it can be concluded that Prinmi does not compound for adjectives.

We have just discussed some bi-functional N/A compounds above. As in simplex words, bi-functionality is not unusual in Prinmi compounds, although compounds with more than two functions have not been attested. The following is an instance of an V/N compound:
The compound functions as a verb in (5.46)a, while it is used as a noun in (5.46)b. The overlapping is less common in compounds than in simplex words. If a compound has a multiple function, one of its components must also be multifunctional. In the example here the second component of the compound niân “ache” belongs to V/N. Nonetheless, the overlapping membership of an input word does not entail similar multimembership for a compound. As a whole, compounds with a dual function are in the minority.

5.4.2 Modifier-modified compounds

In this type of compound, the first component supplies information to delimit the other component; the relation between the two is that of modifier-and-modified. For example: (The specific use of multifunctional formatives is underlined.)

(5.47) a N + N qii_qüi Eurasia badger < dog_badger
aa-gâo_aa-bû maternal grandfather < maternal uncle_grandfather
b V + N jje_qii hound < hunt_dog
ggiâ_zzhû lover < love_friend
c V/A + N qüî_pea good news < good_message
hon_mî lunatic < crazy_person
d N/A + N zûu_jiu boy orphan < son_orphan
hmê_jiu girl orphan < daughter_orphan
e V/N/A + N Prîn_mî Pumi < white_person
Nia_mî Moso < black_person
f N + V/N Xiea_niân cholera < Han_ill\textsuperscript{15}
mea_kâo smoke < fire_smoke
g V/N + V/N zeâ_niân fever < heat_ill

\textsuperscript{15} Cholera is said to be a ‘foreign’ disease from the Han (Chinese). Thus it is rendered as a ‘Han disease’ in Niuwozi Prinmi.
h  Num + N  déa_düi  a squeeze with fingers < one_squeeze with fingers  

Chu_xxī  June < six_month

While some modifiers qualify the second component in their literal senses, e.g. (5.47)c-d, many do not. In order to understand the compounds in (5.47)a properly, some additional meaning must be supplemented: "a badger that resembles a dog" for qiितित and "a grandfather related to maternal uncles" for aa-gāo aa-bù. Similarly in (5.47)e Prīnmī refers to “people worshipping the white” and Niamī “people worshipping the black”. Note that in (5.47)h, the second component düi “squeeze with fingers” is a noun instead of a verb.

As can be seen from the examples, all the compounds in (5.47) are nouns. The modifier (the first component) can be a numeral or from any subset of the noun or the verb categories; whereas the modified head (the second component) is rather restricted. It must be a noun from either N or V/N, but not from N/A or V/N/A, as words from the latter groups always assume an adjective function, and hence a modifier, when they follow a noun.

Only a handful of verbal compounds of the modifier-modified type are found in Niuwozi Prinmi, e.g.

(5.48)a  ggon_ddי to nod < to lower the head_to cast  

b  ddion_ddи to shake < ?from side to side_to cast

The verbs in (5.48) are used to express the nodding and shaking of one’s head. The latter is also employed for dogs’ wagging tails. The modifying component in (5.48)a is also found in the verb ggon_ggāa “to lick < to lower the head_to lick”, whose meaning involves the lowering of the head to a target so that the tongue can reach it. The precise meaning of the first component in (5.48)b is not clear.

5.4.3 Noun-adjective compounds & Verb-complement compounds

Mirroring the modifying relation in the first type of compound, Prinmi compounds can also be formed with a modified head preceding a modifier. The relation between the two is such that the omission of the second part (the modifier) will not affect the essential meaning of the first part (the head). According to the lexical categories of the formatives, two subtypes can be further recognized: noun-adjective compounds and verb-complement

16 There is also a verb ea-ggrōn “to bow down one’s head (for showing respect)”, which might be the same morpheme as in the compound, but with the consonant being retroflexed.
compounds.

As suggested by its name, a noun-adjective compound consists of a noun and an adjective in that order, e.g.

(5.49) a  N + A  hmi_ggûxxin middle daughter < daughter_median
          rô_zii  chicken < chicken_little

          b  N + V/A  gan_hrän  necklace < neck_long
               jüï_bbïn  large intestine < gut_thick radially

          c  N + N/A  kii_ddï  old dog < dog_old
               ruēa_ma  big road < road_mother

          d  N + V/N/A  güë_prïn  twin sons < twin_white
               güë_nïï  twin daughters < twin_black

This kind of compound is always a noun, as shown in (5.49). The meaning of a noun-adjective compound is basically compositional, with certain extents of semantic shift on the adjective component. Sometimes, phonological clues are useful for distinguishing a compound from a phrase. In (5.49)a, hmi_ggûxxin “middle daughter” consists of hmi “daughter” and ggûxxin “median”. The suprasegmental change suggests that the prosodic domain of the noun has been merged into that of the adjective. This particular kind of domain merger, from the left to the right, is possible in compounds, but not in phrases. Hence, the expression can be ascertained to be a compound despite its compositional meaning. Note that an archaic form for “dog” is used in (5.49)c. This form survives only in compounds such as kii_nïï “black dog” and kïi_ma “bitch”; elsewhere the form qiï “dog” is employed.

Occasionally a noun-adjective compound can consist of one noun and two adjectives, as in (5.50)c:

(5.50) a  bian_dïï  forest < grove_big
          b  bian_nïa  dark forest < grove_black
          c  [bian_nïa]_dïï  virgin forest < grove_black_big

The adjectives dïï “big” and nïa “black/dark” can each form a compound with the noun biän “grove”, as shown in (5.50)a and (5.50)b respectively. The three can also be combined into a complex compound, as in (5.50)c. The order of the adjectives in the complex compound is fixed; *[biän_dïï]_nïï is unacceptable.

Verb-complement compounds comprise a head which is modified either by an ideophone, as in (5.51)a-b (see §4.3.6 for more examples), or by another verb, e.g.
The head in verb-ideophone compounds is often a DESCRIPTIVE verb, while other verb-complement compounds are typically composed of an Action verb and a DESCRIPTIVE verb.

On the surface, it is difficult to distinguish a verb-complement compound from a ‘Double-verb Predicate’ (cf. §11.1). A well-attested verb-complement compound is the one given in (5.51)d. Consider its occurrence in the following sentence:

(5.52) Nîzzan lealiän gri_qii.  
3d very sing_good  
They both are very good at singing.

Note that the intensifier lealiän “very” does not modify its target qii “to be good” directly, i.e. in an adjacent position. This is because the two verbs grí “to sing” and qii “to be good” have formed a compound. Thus the intensifier can only precede the verbal compound as a whole.

5.4.4 Co-ordinate compounds

Co-ordinate compounds consist of two formatives from the same lexical category. The semantic relation between them is often in opposition, e.g. (5.53). Even not as a pair of antonyms, the two components always belong to an identical semantic group, e.g. (5.54).

(5.53)a  A + V/A  zii_dai  size < small_big  
b  V/A + V/A  cön_hrán  length < short_long  
c  V/A + V/A  ggüän_jjüä  rank < high_low

(5.54)a  N + N  qüa_ro  farm animals < pig_chicken  
b  N + N  jjuu_râa  soul and spirit < soul_spirit  
c  N + N  muu_hnûän  siblings < female's male sibling|male's female sibling  
d  V + V  zzii_tiân  food < eat_drink  
e  Num + Num  dea_néa  a few < one_two
The order between a pair of antonyms is usually with the negative one preceding the positive one, as in (5.53)a-b, but an exception is found in (5.53)c. Note that all the co-ordinate compounds in the examples but (5.54)e are nouns, regardless of the lexical categories of the components.

Co-ordinate quadrisyllabic verbal compounds are productively derived under the pattern $\alpha$-V-$\beta$-V, where $\alpha$ and $\beta$ are opposite directional prefixes from the same deictic category, and V represents a repeated Action verb. Occasionally two different verbs can appear in this kind of compound, but they must hold a semantic opposition, e.g. (5.55)e.

(5.55) a gge-pí_ea-pí to sway < out-lean_in-lean
    b gge-zhée_ea-zhēe to pull by all means < out-pull_in-pull
    c gge-zzhān_ea-zzhān to run around < out-walk_in-walk
    d ddea-peeliā_tea-peeliā to slant < to.sp-lean_fr.sp-lean
    e ddea-xīi_tea-ggf to happen repeatedly < to.sp-go_fr.sp-return

Those with a repeated verb, as in (5.55)a-d, may also be regarded as a kind of reduplicated compounds. These compounds typically signify that an act is performed many times. The use of the directional prefixes in the compounds is obligatory and their order is unchangeable, beginning with the voiced-consonant prefix. This kind of verbal compound cannot be negated or questioned; they do not host any verbal clitics.

5.4.5 Reduplicated compounds

Reduplicated compounds are not very common in Niuwozi Prinmi. The known examples are:

(5.56) a côncon_bbiéabbiea all kinds and sorts < complete_kind
    b seaséa_hmíahmíá fights and wars < war_?soldier
    c geagea_gāagāa to entice < ?_

The reduplicated compounds are formed under the pattern AA_BB. The corresponding non-reduplicated form AB does not necessarily exist, e.g. *conbbiea and *seahmia, but the one in (5.56)c geagáa “to entice” occurs, which is either a disyllabic word or a reduplicate itself. The meaning of the second component in (5.56)b is unclear. (The main consultant speculated that hmía could be related to mía “soldier”.)

There is another type of compound that can be included as reduplicated compounds. The compounding involves the reduplication of a directional prefix under the pattern prefix-/-a_prefix-V, e.g.

(5.57) a ea-lā_ea-ddīn to become definitely blunt < in-also_in-blunt
b tea-là tea-ddāo to become definitely tired < fr.sp-also_fr.sp-tired

The function of this process is to inject some emphatic meaning to the expression. The pattern is productive, but restricted to Process verbs only.

5.4.6 Structure of compounds

Most compounds exemplified thus far are disyllabic with a simplex structure. While the smallest compound must have two syllables — two monosyllabic formatives, the maximum number of formatives or syllabicity in Prinmi compounds yet needs to be determined. The largest compound found in my fieldnotes contains eight syllables with six components:

\[(5.58) \quad [[\text{kre}_\text{rū}]_\text{reaga}]_[[\text{lo}_\text{qūēe}]_\text{reaga}] \quad \text{fibula}\]

foot stem bone out side bone

It is built on five instances of compounding, with four embedded compounds (denoted by the square brackets). The detailed structure of the compound can be represented as follows:\(^{17}\)

\[(5.59) \quad [[\text{kre}_\text{rū}]_\text{reaga}]_[[\text{lo}_\text{qūēe}]_\text{reaga}]\]

\[\text{Top}\]

\[\text{Middle}\]

\[\text{Bottom}\]

As illustrated in (5.59), the five instances of compounding take place at three levels. At the bottom level two simplex compounds are generated independently. Each of them is then combined with reagā “bone” at the middle level respectively. Finally the two are co-ordinated and compounded into one at the top level.

The example in (5.59) also exhibits two characteristics of Prinmi compounds: The process operates on a binary basis, involving exactly two components in every single compounding. If a number of formatives, say three, comprise a compound, two of them must be combined into a complex formative before the third one is compounded. The other feature is the repeated use of a formative in co-ordinate compounds. The recurrence of reagā “bone” is semantically redundant, but necessary for achieving the parallel

\(^{17}\) The expression for “fibula” is quite complex, but it is clearly a compound rather than a noun phrase. The second part of the compound is not a free word, although the first part is, i.e. \([\text{kre}_\text{rū}]_\text{reaga}\) “lower-leg bone”, but *\([\text{lo}_\text{qūēe}]_\text{reaga}\) “outside bone”.
structure of co-ordinate compounds. Under this condition, Prinmi always renders co-ordinate compounds with syllables in even numbers. They cannot be trisyllabic or quinquesyllabic.

The majority of trisyllabic verbal compounds consist of a verb and an ideophone; trisyllabic nominal compounds tend to be of the modifier-modified type. The former do not contain embedded compounds, but the latter may involve a complex structure. For instance,

(5.60)a  r̄e[hni_pa]  morning < before[day_half]
b  bbûu[biea_lion]  honey dumpling < honey[flour_ball]
c  [mià_guu]_nian  red eye < [eye_blind]_ill
d  [xxia_kre]_màn  body hair < [hand_foot]_hair

As shown in (5.60), the embedded compound may serve as either a modified head or a modifier. Some trisyllabic nominal compounds have a simplex structure if they consist of a disyllabic component, e.g. bbûu_bbronbbbron “roasted barley flour with honey < honey_roasted barley flour” and ggoddô_bbôn “walnut tree < walnut_tree”.

Quadrisyllable compounds are preponderantly created with a complex structure. They are mainly modifier-modified compounds or co-ordinate compounds. A few outside these two types are:

(5.61)a  [Wu_kû]_gônî  the Duodecimal Animals < [harvest_head]_twelve
b  jjionxxii_wêami  female buffalo < buffalo_cow
c  [hna_sealiôn]_nêe  rhinophyma < [nose_tip]_red

All the examples in (5.61) show a head-modifier relation between the two major parts of the compound. In (5.61)a, the modifier is a numeral. The compound refers to the duodenary calendar cycle comprising twelve animals. An adjective-like formative is used as the modifier in (5.61)b. The compound in (5.61)c refers to an acne-like disease characterized with a red nose.

The following quadrisyllable compounds are of the type modifier-modified:

(5.62)a  [xxia_ru]_rêaga  forearm bones < [hand_stem]_bone
b  [ddai_qûë]_mexxia  pastry made of glutinous rice < [sticky_rice]_pastry
c  [bbûu_lhi]_[sea_ba]  sunflower leaf < [sun_moon]_[wood_leaf]

The first two are structurally less complex, with a compound modifying a disyllabic head; whereas the final one consists of two embedded compounds.

Some quadrisyllable compounds are formed in co-ordination with a formative
repeated, e.g.

(5.63)a [dea_jin]_[dèa_gebra] every household < [one_house]_[one_home]

b [ruea_ggan]_[ruea_mà] (of relation) closeness < [road_up]_[road_low]

c [cha_xî]_[xxī_xî] new era < [historry_new]_[month_new]

d [gö_güee]_[sai_güee] animal < [air_exist]_[blood_exist]

e [ggin_lhf]_[ggin_xào] to lead a nomadic life < [stock_sheperd]_[stock_raise]

f [mēa_kēa]_[mēa_züan] to do people great harm < [person_push]_[person_pull]

Except for (5.63)e-f, which are verbs, all the examples in (5.63) are nouns. Notice the symmetric pattern for the recurrence of a formative in the co-ordinate compounds. If the first syllable is repeated, it reappears as the third syllable, as in (5.63)a-b. When the second syllable is repeated, it recurs as the fourth syllable, e.g. (5.63)c-d. This is in harmony with the parallel structure held between the two components of co-ordinate compounds. As can be seen, all the examples in (5.63) contain a pair of embedded compounds. Despite that they can occur alone as a disyllabic compound, more often than not, the embedded compounds appear together as a quadrisyllabic compound.

The negative morpheme ma, which is used as a clitic elsewhere, can appear in a quadrisyllabic compound under the pattern [ma_α]_[ma_β]. This kind of compound is formed with a co-ordination of two embedded modifier-modified compounds, e.g.

(5.64)a [mea_gôn]_[mēa_ron] midland < [not_highland]_[not_lowland]

b [mea_diân]_[mēa_pu] to have mediocre wealth < [not_rich]_[not_poor]

c [mea_ggîi]_[mēa_zzhiu] to be fed to satisfaction < [not_full]_[not_starve]

The function of the negative morpheme in the compounds is to introduce an opposite meaning to the formative it modifies. The formative can be a noun, as in (5.64)a, or a verb, (5.64)b-c. Note that the vowel of the negative morpheme is centralized in the compounds.

5.5 Summary

This chapter has presented the major morphological processes in Prinmi. The three kinds of processes — affixation, reduplication, and compounding — are mostly found with nouns and verbs. Prinmi verbs demonstrate a greater morphological change than nouns. Besides the frequent use of directional prefixes on verbs, there are a few derivational suffixes for deriving new words from verbs. Consonant alternation is observed in a small number of verbs, conveying the contrast between Process and Action. Agreement with the Actor through rhyme alternation is also found with some verbs.
Reduplication in Prinmi is achieved by reduplicating the final syllable of a word. This characteristic is hidden in monosyllabic words but manifested in disyllabic words. Reduplication on nouns is rather limited, often with a subtle and obscure change in meaning. Introducing a variety of meanings such as reciprocity, intensity, and reiteration, reduplication is productive with many types of verb.

Compounding is crucial for generating new words. Most compounds are bisyllabic or quadrisyllabic; trisyllabic compounds often comprise a reduplicated formative such as an ideophone. Prinmi compounds have a binary structure. Complex compounds typically involve several instances of compounding, with one embedded another.
Chapter 6.
Grammatical Functions of Noun Phrases

Following Andrews (1985: 65-66), the term ‘grammatical function’ is intended to
differentiate from ‘grammatical relation’. The former is broader in that it covers whatever
identifiable functions may be borne by a noun phrase; whereas the latter recognizes those
functions that are significant for the operation of grammatical rules in a language.
Grammatical relations such as ‘subject’ do not play an important role in the grammar of
Prinmi. Because this is a major departure of Prinmi from many better-known languages,
grammatical functions of the noun phrases are discussed here before the syntactic study
of noun phrases in Chapter 7.1

This chapter starts with a discussion of semantic roles. Core and oblique functions
are addressed next. Then the grammatical system of Prinmi is investigated to explore
grammatical relations, if any, that are significant in the language. The final section
addresses pragmatic functions of noun phrases.

6.1 Semantic roles

It is generally accepted that some semantic roles are found in the grammar of every
language (cf. Foley 1993b: 136; Palmer 1994: 22-25). The major semantic roles that
seem relevant for Prinmi grammar are tabulated alongside the morphosyntactic marking
they may receive in Table 6-1. Note that the names for semantic roles are written with a
capital letter. Some of the markers will be referred to by the same terms as their
corresponding semantic roles but without any capitalization, e.g. the comitative marker
signifies a Comitative. Most of the semantic roles listed in the table are self-explanatory,
except for Theme, which is meant to characterize ‘a participant as being in a
state/position, or changing its state/position’ (Andrews 1985: 70). These semantic roles
are classifications for convenience, and therefore, potentially indefinite in number. The
two most important semantic functions are Agent and Patient, which will be abbreviated
as A and P respectively (to be discussed in §6.2.1). For illustration of those semantic
roles signified with a marker, see §4.3.9.

1 The structure of a Prinmi noun phrase can be very complex with modifiers. However,
noun phrases to appear in this chapter are generally rather simple in structure, causing
no hindrance to the discussion of their functions.
Table 6-1: Major semantic roles and their morphosyntactic markings

<table>
<thead>
<tr>
<th>Semantic roles</th>
<th>Morphosyntactic marking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agent</td>
<td>unmarked or by 'on</td>
</tr>
<tr>
<td>2. Patient</td>
<td>no marking</td>
</tr>
<tr>
<td>3. Theme</td>
<td>no marking</td>
</tr>
<tr>
<td>4. Experiencer</td>
<td>no marking</td>
</tr>
<tr>
<td>5. Incitee</td>
<td>by gi</td>
</tr>
<tr>
<td>6. Beneficiary</td>
<td>by bbo</td>
</tr>
<tr>
<td>7. Recipient/Goal</td>
<td>mostly by bbee</td>
</tr>
<tr>
<td>8. Donor/Source</td>
<td>mostly by bbee</td>
</tr>
<tr>
<td>9. Locative</td>
<td>unmarked or by bbee and others</td>
</tr>
<tr>
<td>10. Temporal</td>
<td>unmarked or by bbee</td>
</tr>
<tr>
<td>11. Comitative</td>
<td>by ni</td>
</tr>
<tr>
<td>12. Instrumental</td>
<td>by 'on</td>
</tr>
</tbody>
</table>

The morphosyntactic markings, where applicable, for semantic roles are carried out by clitic-like postpositions. At least one of them, the instrumental 'on, is fully cliticized; it often appears in a complex form with the internal topic clitic ggee. Discourse clitics are irrelevant to the markings of semantic roles.\(^2\) A noun phrase with a semantic role indicated as 'unmarked' or 'no marking' in Table 6-1 does not necessarily appear in the bare form; it may co-occur with a discourse clitic. Indeed this is very common, for a discourse clitic generally signals a certain cognitive status in discourse (for details, see §12.2). For this reason, discourse clitics will be disregarded when we discuss the non-pragmatic functions of noun phrases.

Agent and Recipient/Goal typically receive overt markings in Prinmi. The markers for these two semantic roles are both versatile. In addition to marking a Recipient/Goal, bbee can signify a Donor/Source, a Locative, or a Temporal. The instrumental, on the other hand, is used for both Agent-marking and Instrumental-marking.\(^3\) This kind of versatile marking is observed cross-linguistically, and need not be regarded as homophony (cf. Blake 1977; Anderson 1985b), but rather a reflection of underlying semantic generalization. Due to the identical marking for Agent and Instrumental in Prinmi, a constraint is observed as to the double use of the marking for the two roles in a clause.

---

\(^2\) The only possible association between a discourse clitic and a semantic role marker is bbo, if the beneficiary postposition can be proved to be related to the external topic clitic bbo.
6.1.1 The Agent-marking and Instrumental-marking

In naturally occurring data, I find no instance of a single clause with an explicit Agent and Instrumental both marked with 'on. The Agent often appears near the beginning of a sentence, and is expressed implicitly in the clause where the Instrumental is located, e.g.

(6.1) a Bbó bái.zhēa ggon nee, “Ddo göyi, tián göyi, Dc brother_big Inst Dc damn crow damn crow
b ëa ggiā zhūän la nee bbēe chee-yī xī ggia.
1s M lunch also 2s at feed exist Sprs
c Éa là bbo gii ma’riū.” jia;
1s also Dc full N+nInv say
d xxii ggon déa_pai xian goyi ggiā liú la tea-chēe.
bow Inst one_shot Foc crow M crop also fr.sp-tear
 Then, Big Brother (said), “Goddamn Crow, is my lunch available for feeding you! Even I’m not full.” (and he) tore the Crow’s crop with (his) bow in just one shot.

The complex sentence in (6.1) is broken into four parts. The instrumental marker takes the form of ggon (fused with the internal topic clitic ggee). It is first used in (6.1)a to mark the Agent, and employed also in (6.1)d to mark the Instrumental. As illustrated by the example, the two semantic roles are not situated in a single clause.

Another way to avoid the double use of the instrumental marking is observed in (6.2), a translation from Chinese with the following literal glosses “she left hand holding child, right hand carrying torch, difficultly on muddy road progress”.

(6.2) Nî ggia wai_xxia ggōn née bbo aalēe ggēe ddea-düi,
3s M left_hand Inst Dc Dc child InT to.sp-hold
sshii_xxia ggōn née bbo meaggân ggee ddea-sshaa,
right_hand Inst Dc Dc torch InT to.sp-carry
chama ruēa wu rīnrin zzheazzhea ba’non xi’riū.
mud road in suffer walk do+Dur go+nInv
 Holding the child with her left hand and carrying the torch with (her) right hand, (she) walked difficultly on the muddy road.

In the original Chinese sentence, the Agent and the two Instrumentals are all expressed explicitly but without any role marking. The Prinmi translation in (6.2) has kept the three noun phrases explicit, but the corresponding Agent is encoded as a Possessor. Given the

3 The instrumental can mark an Agent of a transitive verb or an intransitive verb. For the latter, see Ex.(6.26) below.
presence of the Possessor, the Agent is realized covertly in the sentence. Since the encoding of an Agent as a Possessor is feasible only when the Instrumental is construable as a possessee to the Agent, this kind of treatment is not seen as frequently as the others for avoiding the different uses of 'on.

On a few occasions, a clause is found to contain both Agent and Instrumental explicitly. In such cases, only the Instrumental is marked by 'on. For instance,

(6.3) a Ji’re bbo ggüan_mân ggôn ea-chii’nôn tea-kâ yon.  
    some+p ExT horse_hair Inst in-knot+Dur fr.sp-detach Assr  
    It's certain that some will detach (the warts) with horse hair by running a knot around (them).

b Âre xxieapee ggôn née hnan qôqo’rin.  
    lpex handkerchief Inst Dc snivel wipe+Inv:lp  
    We use handkerchiefs to wipe our noses.

The plural Agents (underlined in the examples) in (6.3) would become ji’ron “some” and âr’on “we” respectively if they were marked by 'on. The direct attachment of the clitic to the Agent host would result in a variant different from that for marking the Instrumental; yet the Agent is left unmarked. This suggests that the constraint on the marking must be ascribed to 'on alone. The contribution from the internal topic clitic ggee, if any, is trivial.

On the second field trip, one sentence was successfully elicited with an Agent and an Instrumental both occurring in a single clause from the main consultant:

(6.4) Hmezha ggôn née jian ggiâ ddea-küan sî’a deazâ ggôn  
    girl Inst Dc child M to.sp-give:3 Pf+M stick Inst  
    hniqônôle do dëa ha tea-küan’si.  
    boy on one_Ctr fr.sp-give:3+Pf  
    The girl gave the boy a tap with the stick that the child gave (her).

Notice that the Instrumental in (6.4) is modified by a relative clause. (This particular example will be cited again in Ex.(7.23)a with some discussion.) When the two markings are considerably apart from each other, it is possible to have a double use of the instrumental clitic in a clause.4

---

4 In instances where the Agent and the Instrumental are juxtaposed, the consultant was reluctant to use the instrumental twice. He commented that they do not speak like that. The exception found in (6.4) can be 'normalized' if the single-clause constraint is revised as follows: The instrumental may be used to mark an Agent and an Instrumental in one sentence provided that there is a clause boundary between them. The clause-boundary condition is met in (6.4) with the relative clause.
6.2 Core vs. oblique functions

A distinction between core and oblique functions can be made in Prinmi. In spite of lacking a clear-cut drawing line, the differences in their grammatical properties are sufficient to divide them into two groups.

6.2.1 The core functions: $S, A, P,$ and $R$

Dixon (e.g. 1994) considers three kinds of arguments — $S, A,$ and $O$ — as primitives (cf. also Andrews 1985). The three represent different types of argument recurrently found in languages: $S$ (single argument) for the core argument of an intransitive verb; whereas $A$ (Agent) and $P$ (Patient, equivalent to $O$) for the core arguments of a transitive verb. Apart from these three core functions, a fourth one — $R$ (Recipient) — can be added for Prinmi. The addition is justifiable after we explore how core functions differ from oblique functions in the language. The differences are observed mainly in three respects.

It is pointed out in §4.2.1 that Prinmi has a zero anaphor on a par with explicit pronouns. The zero anaphor is used pervasively but restricted to nouns with core functions. If a noun bears an oblique function, only in exceptional circumstances can it be replaced by the zero anaphor. Oblique functions are almost constantly expressed overtly in Prinmi.

It is generally possible for core arguments to receive no morphosyntactic marking (ignoring discourse clitics). However, this property is merely a tendency. Some obliques such as Locatives and Temporals, for example, may also appear as bare nouns (ignoring discourse clitics).

As suggested by $A$ and $P$, a core function is based on a prototypic semantic role (cf. Palmer 1994: 8-10; Andrews 1985: 98-99), but extendible to other semantic roles. For instance, $A$ covers not only Agent but also Causer and Instrumental, and $P$ not only Patient but also Incitee and Theme. Likewise, $S$ can be Agent, Theme, or Experiencer. The following illustrate the one-to-many correspondence between a core function and semantic roles:

(6.5) a

\begin{align*}
A=A_{\text{Agent}} & \quad P=P_{\text{Patient}} \\
\text{“Ddiâddia } & \quad \text{mée } \quad \text{mée } \quad \text{zzii’ru?”} \\
\text{grandma } & \quad \text{2s } \quad \text{what } \quad \text{eat+Inv:2s} \\
\text{“Granny, what are you eating?”}
\end{align*}

5 The slight notational modification is adopted from Palmer (1994).
Oblique functions, on the other hand, tend to be more specific for the semantic roles they indicate.

Based on these properties, a fourth core function may be recognized for an archetypal Recipient. Like other core arguments, \( R \) can be expressed implicitly with the zero anaphor, as in (6.7)b:

(6.7) a

\[
\text{niä ggiä zhiüän ggee ea bbëe ddë-chëë, ...}
\]

\[2s:M \ M \ lunch \ InT \ 1s \ at \ to.sp-feed \]

\text{feed your lunch to me, ...}

b

\[
\text{Zhüän ø cheek’xö.}
\]

\text{lunch (you) feed+Opt}

\text{Will feed lunch (to you).}

Although \( R \) is typically and most often marked with \( bbee \), as seen in (6.7)a, it is possible to have a bare \( R \), not modified by any postposition, e.g.

(6.8) a

\[
\text{Dö qii rê ggee réaga tea-chee, tea-xxiéaxxii güe.}
\]

\[\text{Atop, (they) fed bones to the dogs (and) let (them) fight.}\]

b

\[
\text{Dé peatëami ggon küü bá — dë bbaläi ggee ggee.}
\]

\[\text{The young man showed pity — to the snake.}\]
An R not marked by bbee is rare but this is feasible in structurally complex sentences. In (6.8)b, the predicate küi bà “to show pity to” normally takes an overtly marked R. In this particular instance, the R is left unmarked when it appears as an anti-topic.

Similar to other core functions, R covers more than one semantic role, including Recipient/Goal and Donor/Source. For instance,

\[(6.9) \quad Xxiâni \text{ } ëa \text{ } nî \text{ } bbee \text{ } jji ji \text{ } ddëa-yin’non, \text{ } dô-yi \text{ } ma’xí. \]

Yesterday 1s 3s at book to.sp-lend+Dur look-nm N+exist

*Yesterday I borrowed a book from him, but haven’t read (it).*

On these grammatical grounds, R can be considered as a core function in Prinmi.

This treatment yields an advantage for dealing with the group of transitive verbs (mostly denoting feeling and emotion) which always take an A and a core argument that is morphosyntactically marked as a Recipient. For instance,

\[(6.10) \quad Nî \text{ } née \text{ } bbee \text{ } ggiâ’riû. \]

3s 2s at love+nInv

*S/he loves you.*

An account for this is that these verbs choose A-R instead of A-P for the functions of their core arguments.

### 6.2.2 Types of oblique function: complement and adjunct

Grammatical functions other than the four core ones discussed above will all be regarded as obliques. Andrews’ (1985: 89) distinction between complement and adjunct for obliques is also useful to Prinmi. The fundamental difference between the two lies with the optionality of the adjunct. An oblique complement is similar to core functions in that it is generally indispensable from a sentence structure; whereas an oblique adjunct can be added or omitted free of consideration for the basic structure of a sentence (though subject to semantic constraints).

The most important oblique complement in Prinmi is the comparative complement marked with *do* (for details, see §11.3.1):

\[(6.11) \quad Ea_bbá \text{ } seelao_bbón \text{ } ggee \text{ } nî_bbá \text{ } do \text{ } niannían, \ldots \]

1s_family pear_tree InT 3s_family than few

*My family’s pear trees are less than his family’s, ...*

A few verbs taking oblique complements (to be single-underlined) are the following ones:
(6.12) a  
Ea dô ddihee
1s on sulk_relieve
(He) vents (himself) on me

b  
Dê qii ggee êa meacon lo gge-hnûuhnuu ea-hnûuhnuu qii’riu.
this dog InT 1s heel out out-smell in-smell do+nInv
The dog is smelling around at my heels.

(6.13) a  
ji ggee niä krê bo déa-dâ ra kee bbo, ...
water InT 2s:M foot below up-arrive nInv:M time Dc
When the water reaches your feet, ...

b  
meakao ggiä zzii jee da’riû kée bbo, ...
smoke M vicinity at arrive+nInv time Dc
when (he) arrived near the smoke, ...

c  
Zzonkbbâ Lha ggee Sônjée qî ggee ni xuxû
Zzonkba god InT Sakyamuni religion InT with joint
Juuddiän wu ke-da-mî zzii.
Buddhist place in out-arrive-nm Cpl
The ‘Zzonkbbà’ god, what I’m saying is: (he) comes to the Buddhist area
together with Sakyamuni’s religion.

As can be seen from (6.13), dâ “to arrive” is a bivalent verb taking an oblique complement. The choice of the postposition for the oblique complement is semantically determined by the sentence meaning. An oblique adjunct (double-underlined) is also found in (6.13)b. Notice that the adjunct is situated farther away from the verb.

6.3 Grammatical relations in Prinmi

Having identified various core functions in Prinmi, we now address the question as to whether a grammatical relation, which will be crucial to the operation of syntactic rules, can be recognized on the basis of these core functions. As will be seen in the course of the study, the grammatical system of Prinmi turns out to be rather fluid, without the need for a grammatical relation such as ‘subject’. Below we will first discuss the notion of ‘subject’ to the extent that it is applicable to Prinmi. Then we will investigate the grammatical system of Prinmi while dispelling some superficial phenomena that seemingly suggest an agentive or ergative system for the language.

6.3.1 The question of ‘subject’

As a grammatical function stipulated at the outset of this chapter, ‘subject’ can be recognized in Prinmi, since some verbs and auxiliary verbs often show a person-number agreement with A or S, but not with P. Consider the following:
Person-number agreement with A

a  Êa  qée  gge-zzián’sian.
   1s  meal  out-eat:1s+Pfv
   *I’ve had a meal.

b  Neerê  hmiân  â’bbin?
   2p  medicine  Q+have:2p
   Do you have medicine?

c  Zûu  ggee  née  tea-jüân’si.
   son  InT  2s  fr.sp-see:3+Pf
   *The son saw you.

Person-number agreement with S

a  Nî  la  Prînmî  zzii.
   3s  also  Pumi  Cpl:3
   S/he is also a Pumi.

b  Née  ggân  do  zhî  diâ’bu.
   2s  bed  on  jump  Nds+do:2s
   *Don’t you jump on the bed.

There are two problems with verb agreement in Niuwozi Prinmi. As noted in §5.2.4, the verbal conjugation is unstable. Only a small number of (auxiliary) verbs maintain some inflections, and the agreement is inconsistent. For instance,

Debbô  nee^A  bbô  zhinzhu  ggêe  ddea-sshû,
then  2s  ExT  pestle  InT  to.sp-carry:2s
   ^A  meazii  ggêe  ddea-sshâa,  ^A  reabû  ggee  ddea-sshû.
   cat  InT  to.sp-carry  cock  InT  to.sp-carry:2s
   *Then you take a pestle, a cat, and a rooster with you.

The verb sshâa “to carry” appears thrice in (6.16). The first time it agrees with the second-person singular A (as indicated in the gloss), but the agreement does not occur on the second instance (double underlined). Instead, the root/third-person form is employed. Then in the final instance, the agreement is seen again. The consultant was unable to explain the different forms. He claimed that they were the same and it would be fine to change all the three to either form. Additional examples, all taken from the Deluge story, for the unstable verb agreement include these:

Née  bbalâi  ssôlôlo  nüân  wu  non  qée  ea-yîn.
   2s  snake  carefully  winnowing  tray  in  Dc  meal  in-rub
   *You, Snake, rub the dough carefully in the winnowing tray.

b  dé  bbalâi  ggon  tea-jîân,  bêaddî  ggon  tea-jîân, ...
   this  snake  Inst  fr.sp-see  frog  Inst  fr.sp-see
   *the Snake saw this, (and) the Frog saw (it), ...
c qii_hni qii_xxiâ're qée mee'zzii, jii mee'tüian
few_day few_night+p meal Npf+eat water Npf+drink:3
for how many days and nights hasn't (he) eaten any meal (or) drunk any water

d goyi ggée sianbbôn ku'a xia, dia déa_hni “áh, áh” jii.
crow InT tree top+M rest again one_day Ono utter
The Crow rested on top of the tree, again calling “ah, ah” all the time.

While it is possible to identify ‘subject’ as a grammatical function on the morphological ground for Prinmi, the question is whether such a ‘subject’ is significant to the grammatical principles of the language to be considered a grammatical relation. To the extent that Niuwozi Prinmi is observed and understood, there is no solid evidence for defining ‘subject’ as a grammatical relation which brings A and S together in opposition to P (and/or R) for syntactic operations.

The scope of the present description does not allow a detailed discussion of the putative ‘subject’ which does not exist as a grammatical relation in Prinmi. For the benefit of those who would like to see how Prinmi handles phenomena the most relevant to subjecthood in languages with a well-established ‘subject’, word order and ‘subject’ ellipsis will be mentioned cursorily.

Andrews (1985: 108) notes that the most reliable guide to syntactic relations such as ‘subject’ is probably positional properties. The word order of core arguments in a canonical sentence (which is structurally a simple clause free of pragmatic influence) can distinguish A from P. However, as a verb-final language, the word order cannot be used to group A and S against P and/or R. Thus it is of no use to Prinmi.

Ellipsis is widespread in Prinmi, but as the omitted argument becomes a zero anaphor, it behaves like other pronouns in respect to co-reference. There is no syntactic condition in terms of grammatical functions of the arguments. The zero anaphor and its antecedent may function as P and S respectively in different clauses of a complex sentence, e.g. (6.18), where the co-referenced argument serves as P to the possessive verb but as S to the quasi-copula. It is also possible to have an A-P combination, as in (6.19). The sentence comprises a verbless quotational clause (the cliticized speaking verb serves to mark quotative here, cf. §10.1.4 and §8.2.3.1) and a short clause. The co-referenced argument functions as A to the omitted speaking verb in the first clause, but as P to the transitive verb in the second clause.

---

6 Unless one assumes the universality of ‘subject’ in languages, Prinmi is not alone in lacking a meaningful ‘subject’ (cf. Foley & Van Valin 1984, Foley 1993b, Dryer 1997, among others).
Clothes, (we) have (but) are a bit old.

Median Brother (said), “Gosh! Little Brother, you take your time sitting. I won’t be able to live any more, will be going.”, (and) now the water carried (him) away.

Further instances of free combination of core functions are provided in the following (the signification of functions is meant for the nearest predicate, with actual constituency disregarded):

A young cuckoo raised (at home) won’t become a chicken; a young wolf raised (at home) won’t become a dog. (Proverb)

Having started the flood, they are now tired.

Well, when (he) threw the cat down, (it) just called out ‘mao, mao’ (and) the water below washed (it) away.

The sentence in (6.21) is rather complex. The function of the co-referenced argument alternates between \( P \) and \( A \) in the sentence. The examples in (6.18)—(6.21) show that the functions of a core argument and its ellipsis can be \( P-S \), \( A-S \), or \( A-P \) — the combination is free of syntactic constraint, not restricted to ‘subject’.

For want of syntactic phenomena sensitive to ‘subject’ in the language, subjecthood is difficult to argue for as a grammatical relation. The morphological property of verb agreement with \( A \) and \( S \) may be stated as agreement with ‘Actor’, adopting the macro-role
proposed in Role and Reference Grammar (Foley & Van Valin 1984: 28-30). The Actor applies to a variety of semantic roles such as Agent, Causer, Experiencer, Theme, and so forth. As semantic roles found with the small number of inflectional (auxiliary) verbs all fall within the domain of Actor, this generalization is appropriate for Prinmi.

6.3.2 The system of grammatical relations

Based on whether \( S \) may behave like \( A \) and/or \( P \), Palmer (1994: 11-14) distinguishes three kinds of basic systems of grammatical relations.\(^7\) His scheme is adapted as follows:

<table>
<thead>
<tr>
<th>Grammatical system</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accusative</td>
<td>( S = A \neq P )</td>
</tr>
<tr>
<td>Ergative</td>
<td>( S = P \neq A )</td>
</tr>
<tr>
<td>Agentive</td>
<td>( S &lt; S_A = A \neq P ) &lt;br&gt;( S_P = P \neq A )</td>
</tr>
<tr>
<td>Fluid</td>
<td>( S \leftrightarrow P \leftrightarrow A )</td>
</tr>
</tbody>
</table>

Notice that the agentive system is more complicated, with a split between two types of \( S \): the \( A \)-like one \( S_A \) and the \( P \)-like one \( S_P \). A fourth one, the 'fluid' system, is included in Table 6-2, as it is attested in some languages, e.g. Yimas, a Papuan language (cf. Foley 1993b). In a fluid system the core functions behave independently, but this does not imply an absolute distinction between them.

The discussion in §6.3.1 has pointed out that \( S \) and \( A \) share little commonality for considering the two as behaving identically in Prinmi. Hence, the accusative system can be discounted. The distributional pattern of the instrumental clitic \( on \) suggests that Prinmi might have an ergative system. Further investigation, as will be shown below, would reveal that the agentive system is the closest one identifiable for Prinmi, if the language had a well-defined consistent system of grammatical relations.

Prinmi demonstrates a kind of morphological ergativity through the marking of \( A \) by the instrumental 'on. More specifically, split ergativity is discernible from the frequent use of 'on after a third-person \( A \). Consider the statistics from three major texts by the main consultant:

\(^7\) Since an additional function \( R \) is recognized for Prinmi, the possibility of \( S = R \) needs to be mentioned for the sake of completeness. This kind of alignment is not attested in the language. Thus \( R \) can be safely ignored in the following discussion.
Table 6-3: Marking of explicit core arguments in three Prinmi texts

<table>
<thead>
<tr>
<th>Followed by</th>
<th>S</th>
<th>$A^{1/2}$</th>
<th>$A^3$</th>
<th>P</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ggee</td>
<td>48</td>
<td>32%</td>
<td>0</td>
<td>0%</td>
<td>109</td>
</tr>
<tr>
<td>II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'on &amp; variants</td>
<td>4</td>
<td>3%</td>
<td>4</td>
<td>12%</td>
<td>55</td>
</tr>
<tr>
<td>III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neither</td>
<td>96</td>
<td>65%</td>
<td>30</td>
<td>88%</td>
<td>269</td>
</tr>
<tr>
<td>Total</td>
<td>148</td>
<td>34</td>
<td>70</td>
<td>181</td>
<td>433</td>
</tr>
</tbody>
</table>

Table 6-3 concerns merely explicit core arguments, as no marking can be observed with implicit ones. Four kinds of core functions are tabulated here: $S, A^{1/2}$ (an $A$ that is either first-person or second-person), $A^3$ (an $A$ that is third-person), and $P$. As can be seen from the table, there is a strong tendency for $A^3$ to be marked with 'on (or one of its variants). Such marking is impossible with $P$. The use of the clitic after other kinds of core arguments is uncommon but feasible.

While it is true that 'on predominantly marks $A^3$, there are considerable cases of inconsistency. Three types of inconsistency emerge from an ergative analysis (the shaded areas under the columns in Table 6-3). Out of the 70 instances with an explicit $A^3$ in the texts, 33% are not marked by 'on. Sentences in (6.22) exemplify $A^3$ without any functional marking; $A^3$ followed by ggee alone without 'on is shown in (6.23).

(6.22) $A^3$ without any functional marking

a  zhéa’ré jiiddin ké-lan.
soil+p flood out-submerge
the earth, the flood inundated.

b  Dea_jín déa_gea ssô ggëe bbee tea-súudduu.
one_house one_family smooth InT to fr.sp-think
Every family hopes (things go) smoothly (lit. thinks of smooth).

c  Ddíán do gógüée saigüée’re bbûu ziän ma’jián, ...
earth on animal+p sunlight N+see
All the animals on Earth see no sunlight, ...

(6.23) $A^3$ marked with ggee instead of 'on

a  Debbó dè mî ggee dë’të tea-jüän këe bbo, ...
then this person InT this+p fr.sp-see:3 time Dc
Then when this guy saw all these, ...

b  Médó’a hée ggee zhëado’a qëei pëa tea-mû kee bbo, ...
heaven+M god InT earth+M good news fr.sp-hear time Dc
When the heavenly god hears the good news from the earth, ...

Since $R$ is typically marked by bbee, it is not included for the sake of simplicity.
c Debbó xiôn ggee gibu ddea-prea nee bbo nea-gia bâ. then g. pheasant InT cuckoo to.sp-meet Dc Dc down-envy do

Then (whenever) the Golden Pheasant runs into the Cuckoo, (he) feels jealous.

The use of 'on after A\textsuperscript{1/2} is also problematic. On the one hand, there seems to be a tendency for a split ergative with A\textsuperscript{1/2} being marked differently from A\textsuperscript{3}; nonetheless, sometimes A\textsuperscript{1/2} is marked with 'on.\textsuperscript{9} The Deluge story provides some illuminating examples for the optionality of 'on in a natural setting. The consultant used sentences that are structurally identical or very similar to each other when describing a repeated event in the story. The markings on A in these sentences were not always the same. Consider the pair of sentences in (6.24) with a first-person A, and the pair in (6.25) with a third-person A:

(6.24) a \textit{Ea ni'ôn nee bbêe pêa_zzi hin'xo.} (two instances)
\begin{exe}
\item[1s] $\text{Dc+Inst}$
\item[2s] to news\_reliable tell+Opt
\end{exe}
\textit{I will tell you some reliable news.}

b \textit{Ea __ nee bbêe pêa_zzi hin'xo.} (one instance)
\begin{exe}
\item[1s] $\text{2s}$
\item[2s] to news\_reliable tell+Opt
\end{exe}
\textit{I will tell you some reliable news.}

(6.25) a jii ggôn gge-sshàa. (two instances)
\begin{exe}
\item[water] Inst out-carry
\end{exe}
\textit{the water washed (him)/(it) away.}

b jii __ gge-sshàa. (one instance)
\begin{exe}
\item[water] out-carry
\end{exe}
\textit{the water washed (him) away.}

The sentences in the pairs appear quite close to each other in the story, but not immediately after the other. The alternative seems to be motivated by stylistic consideration. From the grammatical point of view, the feasibility of sparing the marking on A in (6.24)b and (6.25)b indicates that the marking by 'on must be optional. If the interpretation of the phenomenon is correct, above the discernible ergative pattern for the distribution of 'on exist some other factors determining the use of the clitic after A.

The final kind of inconsistency arises when 'on is used to mark S. For instance:

(6.26) a De ggìa zzhêa ggee bbo ddìán wu bbùziân ggon nea-zêa.
\begin{exe}
\item[water Inst] after InT Dc field in sunlight Inst down-hot
\end{exe}
\textit{After this, the earth was overheated by the sunlight.}

\textsuperscript{9} The marking on A\textsuperscript{1/2} is more frequent in translations from Chinese sentences. The fact that they are elicited is irrelevant to the high frequency of the marking, since the sentences were translated for general purposes from a non-ergative language.
b **xiôn ggon** bián wu da dea-pan.
g. pheasant Inst grove in only up-flee:3
*The Golden Pheasant just fled to the woods.*

c Debó dêa_hni nia gi bu ggon rüän kee bbo,
then one_day Duc cuckoo Inst call off time ExT
“guês_u, guês_u” jii kee bbo, ...
Ono Ono utter time ExT
*Well when the Cuckoo calls off with “gueabu, gueabu” all the time, ...*

In (6.26), the core arguments of the intransitive verbs are all marked by the instrumental in the form of ggon. Such marking is generally regarded as a ‘split-S’ ergativity in which S is split with S_A being treated the same as A (see e.g. Dixon 1994: 71-72). Note that in (6.26)c, the semantic complement of rüän “to call off” is expressed through the help of a transitive verb in the successive clause. In regard to semantic roles, all the arguments are Agents, with the one in (6.26)a being an inanimate Agent concerning natural forces.

The identical marking of S_A and A can be seen as evidence for an agentive system, in Palmer’s terminology. The crux is that the various markings are employed inconsistently in Prinmi — the variation itself is not a problem. Consider the following (both translated from Chinese by the main consultant but on different field trips):

(6.27) a De ggiä waxxia guän ggon née nea-guâi,
this M reason y. sister Inst down-cry
hnî pa do qion ba.
day half on appear do
*For this reason, (my) younger sister cried for half a day.*

b Mee zzhon’si? Nî _ dêa_hni ggee guâi râ di.
what become+Pf 3s one_day InT cry nInv:M NC
*What’s the matter? S/he cries all the day.*

In (6.27)a, but not (6.27)b, the S_A of guâi “to cry” is marked with ggon. As with the marking on A, the optional marking on S_A implies that the grammatical system of Prinmi does not operate in a rigid consistent manner.

The inconsistency is quite natural. A few consultants pointed out that the instrumental marking is used to emphasize the Agent of an act. Inasmuch as placing an emphasis is motivated by discourse need, the Agent-marking is susceptible to great variation. There is currently no syntactic evidence suggesting a solid alignment of S (or its subtype) with any of the other core functions in the language. Therefore the grammatical system of Prinmi is considered to be fluid; core functions operate independently but with similarities between one and the other from time to time.
6.4 Pragmatic functions

Prinmi has three specialized markers for pragmatic functions: xian for the Argument-focus (§6.4.1), bbo for the External-topic, and ggee for the Internal-topic. A close relation holds between the External-topic and the Internal-topic, to be discussed in §6.4.2. This section addresses only the three common pragmatic functions; detailed study of the pragmatic aspect of Prinmi will be pursued in Chapter 12.

6.4.1 Argument-focus

The Argument-focus can co-exist with either a core function or an oblique one. This pragmatic function is typically marked by the discourse clitic xian, e.g.

(6.28) a  Ḫëli xian sűudduu ...
    Ali    Focus think

It is Ali who thinks ...

b  xxi ggon dëa_pai xian goyi ggiā liü la tea-chée.
    bow Inst one_shot Focus crow M crop also fr.sp-tear

(he) tore the Crow's crop with (his) bow in just one shot.

The Argument-focus signals a focus on an argument by contrasting it against other possible members in a closed set. In (6.28)a, Ḫëli is focused on and contrasted to his brother, as is clear in the context of the story. Similarly, the Manner dëa_pai "in one shot" in (6.28)b is intended to contrast to other possible manners such as two or three shots. The Argument-focus function of a core argument can be rendered in the Natural Semantic Metalanguage (Wierzbicka 1996) as follows:

(6.29)  x xian (where x has a core function):
   i. I want you to know:
       x does something
   ii. Maybe other people do the same
   iii. I want you to think about x
   iv. I do not want you to think about other people

The kind of contrast conveyed by xian is essentially different from that occasionally found with topic markers. Consider the noun phrases with the External-topic function in (6.30) and the Internal-topic function in (6.31):

(6.30)  ēa bbô kū do zzin xii'ron.
    1s ExT top on sit go+Inv:1s

as for me, I'll go to sit at the top.
Once upon a time, the Cuckoo had the most beautiful dress; the Golden Pheasant's dress was ugly.

These topic noun phrases are understood to be contrastive in virtue of the contrast in the comments. This differs fundamentally from the contrast between a set of members signified with the Argument-focus function. There is no specific discourse clitic for marking a contrastive topic in Prinmi.

6.4.2 External-topic and Internal-topic

The term 'External Topic' roughly corresponds to Chafe's (1976) 'scene-setting topic'. The External-topic (ExT) and Internal-topic (InT) are intimately related to each other. Their divergence in terms of functions discussed by Andrews (1985: 81-84) can be construed approximately as 'free external function' vs. 'bound external function'. It should be stressed that ExT and InT are not proposed as a pair of dichotomy. While the two represent separable concepts and are not freely interchangeable, they are clearly not in opposition to each other.

Given the explicit clitic markings, we have no problem in recognizing the ExT and the InT. However, topic as a pragmatic notion is rather complicated and confusing in Prinmi under the on-going grammaticalization. Topics that can be inferred from discourse context may not be marked explicitly; on the other hand, a speaker may encode a noun phrase as a topic morphosyntactically, even though its cognitive status in the discourse is quite low and may not be conceived as a topic by the hearer (cf. §12.2.2). In other words, an overtly marked topic need not be a pragmatic topic, and conversely, a pragmatic topic need not be always signified explicitly by a clitic. Thus, a further terminology for the variety of topics may be useful. Based on the crucial features as regards pragmatic topichood and clitic markings, 'inferable topic' and 'designated topic' are proposed as follows:

<table>
<thead>
<tr>
<th>Pragmatic topichood</th>
<th>Clitic markings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inferable topic</td>
<td>constant</td>
</tr>
<tr>
<td>Designated topic</td>
<td>contingent</td>
</tr>
</tbody>
</table>

An inferable topic is always a pragmatic topic, irrespective of the explicit topic marking. On the other hand, a designated topic is always overtly marked as either ExT or InT, whose pragmatic status as a discourse topic is not guaranteed, however. In what follows
we will concentrate on functions of the ExT and the InT as pragmatic topics, construed in terms of aboutness (cf. §12.1).

The InT typically appears on noun phrases bearing a core function $S$, $A$, $P$, or $R$. They are prevalently found with third-person quasi-pronouns or nouns; occasionally, the InT may be a clause (see §12.4.2). As a discourse topic, the InT often occupies the sentence-initial position, although sometimes other elements may precede it, e.g. (6.32)a.

\[(6.32)\quad \begin{align*}
\text{a} & \quad \text{Gawù } jī jī ggence lealián ggáo, \ldots & \text{(InT=S)} \\
& \quad \text{under water InT very deep} \\
& \quad \text{The water below is very deep, \ldots} \\
\text{b} & \quad \text{Debbó dē mī ggee dē'rē tea-jūān \ldots} & \text{(InT=A)} \\
& \quad \text{then this person InT this+sp fr.sp-see:3} \\
& \quad \text{Then this guy saw all these \ldots} \\
\text{c} & \quad \text{Dē hmi son_zii ggee tea-zhūēe xin.} & \text{(InT=P)} \\
& \quad \text{this daughter three_Ctr InT fr.sp-send Pps:2p} \\
& \quad \text{These three daughters, go and send (them) away.} \\
\text{d} & \quad \text{Debbó dēa_hni gibu ggeebbee gēa nēa-ba.} & \text{(InT=R)} \\
& \quad \text{then one_day cuckoo InT at fake down-do} \\
& \quad \text{Then one day, on the Cuckoo, (he) played a trick.} \\
\text{e} & \quad \text{De ggiá zzhēa ggee bbo bbó meazii ggée nea-ddi, \ldots} \\
& \quad \text{this M after InT Dc Dc cat InT down-cast} \\
& \quad \text{After this, (you) throw the cat down, \ldots} \\
\end{align*}\]

The encoding of the Temporal as an InT in (6.32)e is an exception, since the noun zzhēa “after” idiosyncratically selects the internal topic clitic ggee. Temporals and Locatives are often encoded explicitly as an ExT in Primi, serving as the frame for the following utterance. Barring few exceptions, these expressions generally cannot be encoded as an InT. The topic marking by bbo is freely omissible. It is not unusual for the ExT to be morphosyntactically unmarked, as shown by the instance in the first clause of (6.33)b.

\[\text{(6.33) Temporals as ExT's} \]

\[\begin{align*}
\text{a} & \quad \text{Debbó dea_hni bbo/#ggee goyi ggee gge-qion.} & \text{Then one day the Crow came over.} \\
& \quad \text{then one_day ExT/InT crow InT to.sp-appear} \\
\text{b} & \quad \text{Bbisūu dē deanēa_giù sianbbôn la neenēe’non;} \\
& \quad \text{bbisuu this few_year tree also few+Dur} \\
& \quad \text{xxiabùurē bbo/#ggee bbulā ddiôn yon.} \\
& \quad \text{past ExT/InT many exist_{nam} Assr} \\
& \quad \text{In these few years the ‘bbisuu’ trees also became few; in the past there had been many.} \\
\end{align*}\]
c  **Mandô kée bbo bbó/#ggee, reabû ggee nea-ddi, ...**

*final time ExT Dc/InT cock InT down-cast*

*Finally, (you) throw down the rooster, ...*

d  **Xxiahníán hmeggiän di xxee, züu nēa_zii bbon.**

*ancient old man one existan son two_Ctr have*

*Once upon a time, there was an old man, (and he) had two sons.*

In some cases, the ExT does not receive any marking, e.g. *bbo* cannot be used with *xxiahnián* “ancient” in (6.33)d. Despite this, the encoding of the Temporal as an ExT can be ascertained from the typical pause following the word. If a single clause contains both an ExT and an InT (which is quite common), the ExT usually precedes the InT, as in (6.33)a. The clause-initial position is preferred for the ExT.\(^{10}\)

The situation for Locatives bearing the ExT function is closely parallel to that for Temporals. They can only be encoded as an ExT, not an InT, and the marking by *bbo* is optional, e.g. the first instance in (6.34)a.

(6.34)  **Locatives as ExT’s**

a  **Mi wu qi ea-güee; ddián wu bbo/#ggee cf ea-güee.**

*person in religion in-existin field in ExT/InT salt in-existin*

*People have faith in mind, and fields have salt inside. (Proverb)*

b  **Sshii_quëe bbee bbo nee/#ggee meazii dî ea-zzhuu ...**

*right_side at ExT Dc/InT cat one in-write*

*On the right, a cat is drawn ...*

c  **Sshôn do bbo/#ggee jii ggee lai.**

*sheep on ExT/InT water InT heavy*

*On the sheep, water is heavy. (Proverb)*

d  **Seabâ ggiä dô bbo/#ggee beazii ggee gge-hün.**

*leaf M on ExT/InT flower InT out-grow*

*Above the leaves grow the flowers.*

As seen in (6.34)a–c, Locatives are typically marked with postpositions. However, locational postpositions can also be used as nouns in Prinmi. Compare the postpositional use of *do* “on” in (6.34)c with its nominal use in (6.34)d (cf. also §7.1.4).

A third usage of the ExT not shared with the InT is the encoding of a conditional clause as a topic. Structurally, a conditional ExT is always a clause, regardless of the

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\(^{10}\) Later in §10.1.1, we will see that the occurring order of the ExT and the InT is predicted in the layered structure of the clause. The former is typically situated on the Periphery, while the latter is often found on the Core layer at the Clausal level. However, at the sentence level, the InT can be detached to the sentence-initial position ahead of the clause-initial ExT (cf. §10.2.1).
number of words involved. In simple cases like (6.35), the conditional ExT contains only one word (a complex conditional clause can be found in Ex.(12.45)a).

(6.35) a “Bbó pián bbo/#ggee héaggî tea-xiî?”
Dc flee ExT/InT where fr.sp-go
“Well, where do (we) go if (we) run away?”

b Nón má’zzii qee dî ggê-di.
Dc N+Cpl meal one out-put
(If) not, put some cooked rice (there).

Note that the ExT in (6.35)b is not marked explicitly, although the clitic bbo can be supplied.

The three functions of the ExT presented above do not involve any core functions, but it is also possible for an ExT to co-exist with a core function. Consider the following:

(6.36) a E, êa bbô/#ggee niâ ggiâ zzî ma’dûu.
Intj 1s ExT/InT 2s:M M eat N+Expr
Huh, I haven’t eaten yours.

b Debbô nee bbô/#ggee zhinzhu ggee ddea-sshû, …
then 2s ExT/InT pestle InT to.sp-carry:2s
Then you take a pestle, …

c Teasân bbo/#ggee née Xíibbâ zhîn nea-cô xáô, …
grasshopper ExT/InT 2s Dragon f. mortar down-stamp Pps:2s
Grasshopper, you go and pound the mortar for the Dragon family, …

The ExT’s in (6.36) are all Agents and participants of speech act. Although the ExT in these instances resembles the InT in regard to the co-occurrence with a core function, the two kinds of topics can still be distinguished by the choice of different clitic markings: the InT marker ggee cannot substitute the ExT marker bbo. This is attributed to the fact that speech act participants are inherently high in topicality (Wierzbicka 1981). Only bbo may redundantly mark them as an ExT. The marking is optional, and not seen frequently. The division according to the speech act status of a core argument thus leads to complementary distribution between the ExT and the InT. Strictly speaking, there is no overlap between the uses of the two topics.

Oftentimes, a topic appears to be double marked by ggee and bbo together, as in (6.37). The occurrence of bbo after ggee is best construed as a ‘gap-filler’ rather than marking a topic. This is not to preclude an intermediate topic between the InT and the ExT, but the function of bbo after ggee is simply no more than gaining some extra time for discourse organization.
The ‘gap-filler’ is characterized by its easy omission. Any of the three instances of bbo in (6.37) can be deleted without any problem, but this is not true for ggee. Its omission after zzhēa “after” is unacceptable, even with bbo intact. As there is no compulsory reason to posit another type of topic marked jointly by ggee bbo in Prinmi, the serial clitic marking will be considered as a speech style instead of a special grammatical measure.¹¹

In passing, it is worth mentioning the ‘gap-filler’ function of bbo at the beginning of utterances. For instance,

(6.38) a Bbó neerē son baigūân ggee bbo pian kú’gai.
   Dč 2p three_brothers InT Dč flee need+Vlt
   Well, the three of you need to run away.

b Debbo dé züu ggee nea-jērōn’non ...
   then this son InT down-hungry+Dur
   Well, this young fellow was hungry ...

The discourse clitic either occurs by itself, as in (6.38)a, or in the form of debbó (plausibly attached to the demonstrative dé), as in (6.38)b. It can also appear in reduplication alone or after kee “time”. Such use of bbo is undoubtedly motivated by spontaneous discourse needs. Consultants see it unnecessary to transcribe them from recorded texts, and constantly discard them in editing/revision. Notice also that bbo in this usage typically bears a rising tone, which has the longest duration among the Prinmi suprasegmentals, ideal for the purpose of filling gaps.

6.5 Summary

This chapter has discussed semantic, syntactic, and pragmatic functions of noun phrases. The semantic and syntactic functions are found in every noun phrase, while the pragmatic one is used more selectively, being sensitive to discourse setting. A basic division between the syntactic functions is the core-oblique distinction. One manifestation of the divergence between them is the different choices of topics. When a pragmatic function co-exists, a core function tends to collocate with an internal topic;

¹¹ This treatment also complies well with some younger speakers’ ‘complaint’ about the main consultant’s careful and slow way of speaking, characterized by the serial clitic marking.
whereas an oblique function generally co-occurs with an external topic. Four core functions have been identified for Prinmi: $S$ (single argument), $A$ (Agent), $P$ (Patient) and $R$ (Recipient). Since strong evidence for a significant alignment of any two core functions is not detected in the language, the grammatical system of Prinmi is considered to be fluid. The traditional notion of 'subject' is recognized as a possible grammatical function, but not a vital grammatical relation in Prinmi.
Chapter 7.
The Structure of Noun Phrases

Six kinds of modifying elements may appear in a Prinmi noun phrase. According to their relative positions to the head noun, the noun phrase can be formulated as follows:

(7.1) \[ NP = \text{Modifier} + \text{Demonstrative} + \text{Noun} + \text{Head Noun} + \text{Adjective} + \text{Numeral expression} + \text{Postposition/Clitic} \]

As shown in (7.1), the first three kinds of modifiers precede the head noun they qualify, while the other three can only follow it. Their relative positions to the head noun are such that single words are closer to the head and other elements (clitics and larger constituents) occupy the two ends of the phrase. In the light of the pseudo-clitic status of Prinmi postpositions (§3.3.3), these are grouped together with clitics. The complexity of the noun phrase is mainly realized on the modificator, whose structure varies from a single word to a well-extended clause. Thus the study of noun phrases will start with a detailed description of the modificator. We will also deal with some nominal clitics in §7.2, before discussing the overall structure of the noun phrase.

7.1 The Modificator

The 'modificator' is a special kind of modifier, typically signified by the modificatory clitic 'a or its complex form variants. The term is meant to be distinguished from other more general modifiers such as lexical or compound attributes. Through the modificatory relation, the modificator is related to the head of a noun phrase in the following manner:

(7.2) \[ \text{Modifier} + (\text{Modificatory clitic}) + \text{Head Noun} \]

The clitic marking is often omissible. Expressions containing a modificator can generally be construed more specifically according to the occurring environment of the modificator. The four major types identified here are: (a) the genitive expression, (b) the restrictive expression/relative clause, (c) the spatial expression, and (d) the temporal expression. They will be addressed in some detail below. First of all, a description for the modificatory clitic.
7.1.1 The modificatory clitic

The modificatory clitic 'a tends to occur in a complex form such as ggia (fused with the internal topic clitic ggee), ra or si'a (combined with the non-involvemental 'riu and the perfective 'si respectively). After the plural clitic 're, the form becomes 'ra, homophonous with the one consisting of the non-involvemental clitic (but distinguishable with the apostrophe in spelling). Phonologically, the clitic always triggers some change on the vowel of the preceding morpheme (clitic or word) through desyllabification or substitution (cf. §2.5.1.2).

When the modifier is a bare noun, the complex form ggia is often chosen for the modificatory marking, e.g.

(7.3) bai_daž ggìa krê
brother_big M foot
\textit{Big Brother's feet}

If the noun is modified by the plural clitic 're, the modificatory clitic is simply fused with the clitic; the form ggia never occurs in this circumstance, e.g.

(7.4) jin'rá wu but *jin're ggìa wu
house+p:M inside house+p M inside
\textit{in the houses}

Likewise, ggia can only appear after singular pronouns, since plural pronouns comprise the plural morpheme re (cf. Ex.(7.11) below).

With a clausal modificator, 'a is often combined with a verbal clitic into si'a, ra, ru'a (with the involvemental 'ru), and so on. For instance,

(7.5) a Xiön ggìa diá nea-ggüì si'a zonggüì
\textit{the clothes that the Golden Pheasant wears nowadays}
golden pheasant M now down-dress Pf+M attire

b dea-daž ra kee bbo
\textit{the time when (it) rises}
up-arrive nInv:M time ExT

c niá kie̩ wu ggìa ru'a mi ggee
\textit{the person you love in your heart}
2s:M heart in love Inv:2s+M person InT

If the modifier ends with a postposition, 'a is attached to the postposition directly. Perhaps because of a semantic constraint, the modificatory clitic is found only after a locational postposition, e.g.
The following are additional instances of the use of the direct attachment of the clitic after a modificator:

(7.7) a lealián bbon'â dëa_hni b dduu guëe’ä sianbbon
very cold+M one_day poison existjn+M tree
a very cold day a poisonous tree

In spite of the variety of clitic markings available, the modifier often has the option of not being marked overtly.

7.1.2 The Genitive expression

When the modificatory clitic is attached to a personal pronoun (including the quasi-pronoun nì “s/he/it”), the semantic relation between the modificator and the head noun is construed as possessor-and-possessee. The genitive expression is not very particular as to the alienability of the possessee. The possessee may concern an alienable object, as in (7.8), a body part, as in (7.9), or a kinship, as in (7.10).1

(7.8) Genitive expressions with alienable objects

a nì ggia pêadai
3s M umbrella
his/her umbrella

b ëa ggiâ zhûân
1s M lunch
my lunch

ìa ggiâ bugâ
1s M shoe
my shoe

(7.9) Genitive expressions with body parts

a niä ggiâ zhûân ggee
2s:M M lunch InT
your lunch

(7.10) Genitive expressions with kinship

a niä zonggûî ggêe
2s:M M attire InT
your dress

---

1 Since examples of noun phrases in this chapter are rendered isolated from their discourse contexts, clitics are generally ignored in English glosses.
(7.9) Genitive expressions with body part terms

<table>
<thead>
<tr>
<th></th>
<th>Genitive expressions with body part terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>ní ggia krë</td>
</tr>
<tr>
<td></td>
<td>3s M foot</td>
</tr>
<tr>
<td></td>
<td>his/her/its foot</td>
</tr>
<tr>
<td>b</td>
<td>èa ggïä miä</td>
</tr>
<tr>
<td></td>
<td>1s M eye</td>
</tr>
<tr>
<td>c</td>
<td>niä ggïä miä</td>
</tr>
<tr>
<td></td>
<td>2s:M M eye</td>
</tr>
</tbody>
</table>

As shown in (7.8)c, (7.9)c, and (7.10)c, the modificatory clitic may occur twice after the second-person singular pronoun. The variation basically reflects the extension force of ggia. It has no synchronic bearing. The double marking can be regarded as stylistic; it is possible to leave out ggia after the second-person singular pronoun, thereby avoiding the redundancy. However, it is unacceptable to retain the complex form alone while removing the clitic from the pronoun, i.e. #nee ggïä züu “your son” (cf. (7.19) below). While ggia often appears after a singular personal pronoun, it is not used with a plural personal pronoun taking an explicit possessee. Instead, the modificatory clitic is fused with the plural morpheme re in the pronoun, e.g.

(7.11) a arâ guëa |
|   | 1pëx:M ox |
|   | our ox |
| b | earâ miä |
|   | 1pën:M eye |
|   | our eyes |
| c | neerâ küë_wu |
|   | 2p:M heart_in |
|   | in your mind |
| d | neerâ süän |
|   | 2p:M father |

Unlike with the second-person singular pronoun, a redundant ggia cannot be used after a plural pronoun. Indeed, the double modificatory marking is unique to the second-person
singular pronoun. Multiple overt markings are generally avoided, even in genitive expressions involving possession embedding. For instance,

(7.12) ēa (ggiā) ẓzhū ggia ziżī ggee
1s M friend M nephew InT
my friend's maternal nephew

To save the repetition of an identical modificatory clitic in the short interval, the first one is usually omitted, leaving the higher modificatory relation morphosyntactically unmarked (more on such omission below).

Sometimes the modificatory clitic may relate an abstract noun to a pronoun, e.g.

(7.13) hea ggiā gri Chuā
who M sing_sound
whose singing

A vague genitive interpretation is still possible for the example in (7.13). But to be precise, the pronoun should be construed as expressing the source. The genitive reading is not available when the modificator is a non-personal pronoun, irrespective of the meaning of the modified noun. The modificator is simply a modifying element in instances such as:

(7.14) a mēe ggia pēa_zzi b mēe ggia chalāa
what M news_reliable what M idea
what reliable news what idea

Apart from personal pronouns, the modificator in the genitive expression can also be nouns, mostly animate ones. The kinds of possessees involved are exactly parallel to what we saw earlier in (7.8)–(7.10) and (7.13). Consider the following:

(7.15) a gību ggia zonggüī ggēe (alienable object)
cuckoo M attire InT
the Cuckoo's dress

b goyi ggiā liú (body part)
crow M crop
the Crow's crop

c bēaddē ggia zûu (kinship)
frog M son
the young of frogs

d guān ggiā guān_jīī (abstract possessee)
brother M clause_say
the younger brother's words
Given appropriate discourse contexts, a possessee in the genitive expression can be rendered in the form of zero anaphor, e.g.

(7.16) a ní ggia ø ggee  
3s M InT
his (clothes)

b nià ggià ø
2s:M M
your (honey dumplings)

c gibu ggià ø
cuckoo M
the Cuckoo’s (dress)

The lexical category of the modificator is irrelevant to the ellipsis of the head noun, as can be seen from (7.16). The use of zero anaphor in the genitive expression, on the basis of current data, is infrequent. This is probably attributed to discourse factors governing the occurrence of the zero anaphor. Unless the speaker is confident that the cognitive status of the possessee is high enough to prevent any impediment caused by the ellipsis to the hearer’s understanding, the head noun in the genitive expression will be expressed explicitly. It should also be pointed out that the ellipsis of a head noun has been observed with modificators expressing a genitive meaning only. The ellipsis would be problematic with other kinds of modificators. It is impossible, for example, to maintain the temporal reading when the temporal noun is expressed implicitly (cf. §7.1.4 below).

The omission of the modificatory clitic is very common, virtually found in all types of expression built on the modificatory relation. Focusing on the genitive expression here, let us compare the following pair of sentences:

(7.17) a Bèaddî ggee èa ggià zzhu zzìi.  
frog InT 1s M friend Cpl
The Frog is my friend.

b Bèaddî èa zzhu zzìi.  
frog 1s friend Cpl
The Frog is my friend.

The two sentences are taken from the Deluge story. They are semantically identical, with (7.17)b being a succinct version of (7.17)a without any clitics. This also opens the possibility of reanalysis for the underscored noun phrase in (7.17)b, for the possessor èa “I” is now juxtaposed to zzhú “friend” without any modificatory marking. One could consider that the genitive meaning in the noun phrase is expressed plainly through the apposition between the possessor and the possessee. One important point to be noted is that the alternative analysis ought to be construed as derived from the modificatory-marked expression such as the one underlined in (7.17)a. Perhaps a simpler treatment to the appositive possession is to regard the modificatory relation as being zero-marked. In
this connection, the two genitive expressions in (7.17) differ merely in the detail of morphosyntactic marking. The appositive possessor thus represents a special type of modifier characteristically unmarked by any overt element.

The covert marking on the modificatory relation is not available to every instance of genitive expression, as the omission of the clitic is susceptible to certain conditions. The possessor may be left unmarked only if it has a high degree of topicality. This constraint basically confines the potential appositive possessor to first and second person pronouns, those sitting at the top rank of the Person-Topicality Hierarchy (Silverstein 1976; Wierzbicka 1981). The following list provides more specific information as to the potential appositive possessor in Prinmi:

\[(7.18)\]  
\[
\begin{align*}
\text{êa} & \quad I \\
\text{nee} & \quad your \ family < 2s \_family \\
\text{ni} & \quad his/her \ family < 3s \_family \\
\text{ea} & \quad my \ family < 1s \_family
\end{align*}
\]

Notice that the list does not include the second-person singular pronoun née, in spite of its high degree of topicality. As noted earlier, genitive expressions with a second-person singular possessor may receive a double modificatory marking. While the double marking can be reduced to one — compare (7.19)a with (7.19)b — the pronoun née is never used as an appositive possessor.

\[(7.19)\]  
\[
\begin{align*}
\text{a} & \quad \text{ni} \quad \text{ggii} \quad \text{zii} / \text{zhii} \\
& \quad 2s \_M \quad M \quad \text{son} / \text{lunch} \\
& \quad \text{your} \ son / \text{your lunch} \\
\text{b} & \quad \text{ni} \quad \text{bai} \quad \text{ggii} / \text{zii}gii \quad \text{gee} \quad \text{bbo} \\
& \quad 2s \_M \quad \text{brother} \quad \text{median} / \text{attire} \quad \text{InT} \quad \text{De} \\
& \quad \text{your Middle Brother} / \text{your clothes}
\end{align*}
\]

The constraint seems attributable to cliticizing factors. Once the modificatory clitic is fused with a preceding morpheme, it is deletable only with the entire contracted form. For this reason, the clitic in (7.19)b cannot be extracted and left out just by itself. This will also account for the firm retention of the modificatory clitic with plural pronouns, since the clitic is directly attached to, and fused with, the pronouns (see Ex.(7.11) above).

The following supply further examples for the appositive possessor:

\[(7.20)\]  
\[
\begin{align*}
\text{a} & \quad \text{êa} \quad \text{lhazii} \\
& \quad 1s \quad \text{finger} \\
& \quad my \ fingers
\end{align*}
\]
In examples like (7.20)a–b, it is not clear whether the pronoun and the noun might form a compound instead of involving a morphologically unmarked possessor. This possibility can be discounted when the head noun is modified by additional elements. In (7.20)c, the head noun is also qualified by an adjective. Unless one would like to posit that the pronominal compound *eabbä* “my family” was combined with the head noun before the adjective modifies them as a whole, it is not difficult to see that the appositive possessor, together with the possessee, is situated in a noun phrase. This is conspicuous when the head noun is modified by pre-head elements such as the demonstrative, as in (7.20)d. The intervening demonstrative illuminates that the appositive possessor and the possessee do not occur in a compound, but in a noun phrase. Note that the word *bbä* “family” can inject a high degree of topicality into a compound. Prinmi grammar does not regard the quasi-pronoun *nî “s/he/if* as particularly topical, but the pronoun can occur appositively to a possessee, as in (7.20)e, when it is compounded with *bbä*.

### 7.1.3 The Restrictive expression/Relative clause

The restrictive expression is typically, but not always, a clausal modifier. Restrictive expressions with a clausal structure may be referred to as relative clauses. The modificatory clitic, when present, is the only overt marking available for the modificatory relation between a relative clause and the head noun. Functionally, Prinmi relative clauses resemble those in languages like English. Structurally, however, the noun phrase containing a relative clause is no difference from those containing other kinds of modificators. The expression still comprises three parts: the modificator + (the modificatory clitic) + the head noun. For instance (the modificator is underlined, with the head noun in bold; RC = Relative Clause),
Relative clauses in Prinmini have a full clausal structure (cf. §10.1). The head verb in a relative clause may host a variety of clitics such as the perfective in (7.21)a–b and the non-involvemental in (7.21)c, the modificatory clitic is usually fused with the ending clitic in the relative clause. Other forms are also possible, as seen in (7.21)d. The head noun of a relative clause can function as A, P, or S in relation to the predicate of the clause, as in (7.21)a–c respectively. It is also possible for the head noun not to bear any core function or direct relation with the relative clause. In (7.21)d, the head noun lüe "ash" is semantically associated with the argument lüemealan “ash soup” only. The choice of a clitic form for the modificatory marking is irrelevant to the kind of relation held between the head noun and the embedded verb (cf. (7.25) below).

Being modified by a relative clause has no bearing on the potential syntactic function of a noun; the noun can still be used as a core argument or a peripheral argument in a sentence. The former is exemplified in (7.22), and the latter in (7.23).
respectively in the sentences. Notice that in (7.22)c, the modificatory relation is not explicitly marked by any clitics. The omission is not very frequent in the data, but it can occur freely. The consultant has no problem with it when the marking is rendered implicit.

A relative clause may also qualify a noun which functions as an oblique argument or a peripheral adjunct. In (7.23)a, the head noun occurs with an instrumental postposition. Likewise, a locational postposition appears in the noun phrase in (7.23)b. The instance in (7.23)c differs from the others in that the head noun does not occur with any postposition, and it is used as a discourse topic.

(7.23) a Hmezha ggôn nève jian ggïå ddeâ-kïän sî’a deaâzâ ggôn

girl Inst Dê child M to.sp-give:3 Pf+M stick Inst

hniqïônlêe do dêa ha tea-kïän’si.

boy on one_Ctr fr.sp-give:3+Pf

The girl gave the boy a tap with the stick that the child gave (her).

b Aabbâ dëanea nôn tea-zzzu sî’a ggân xi do
dad just Dê fr.sp-do Pf+M bed new on

gïüngûän geazai ggôn nea-zzzôn’sî.

brother little Inst down-sit+Pf

Little Brother sat on the new bed that Dad’s just made.

c Bbo de ggôn tea-chêe sî’a muugû’rê reshïï qûï zha.

Dê this Inst fr.sp-feed Pf+M livestock+p meat good utmost

The livestock that are fed with this, (their) meat is extremely good.

Notice the use of the modificatory clitic ggia after the Agent jiàn “child” in the relative clause in (7.23)a. The marking is not found in every instance with an explicit Agent in a relative clause, as witnessed with the Agent aabbâ “dad” in (7.23)b; nor is it freely omissible. The consultant rejected the sentence when the modificatory clitic ggia was left out from (7.23)a, but he accepted the change when one was added after the embedded Agent in (7.23)b. The difference signaled by the clitic marking, however, is beyond the main consultant’s conscious reflection. He offered no explanation for the use of such marking.

The puzzle is not totally unsolvable. Consider the pair of sentences translated from Chinese by the young consultant:

(7.24) a Niâ hrûu ra jji jji ggëe dë ggee zziï.

2s:M buy nInv:M book InT this InT Cpl

The book that you bought is this.
The examples in (7.24) were elicited in a single session but they were scattered in different places among twenty or so sentences. On a separate occasion, when the main consultant was asked to translate the same set of sentences into Prinmi, the same pattern of clitic marking as in (7.24) is found for the explicit Agents in the pair of sentences above. Since Chinese does not encode any such marking, the accordance must arise out of factors internal to Prinmi, when discounting the chance of mere coincidence. A hypothesis for the marking is available if we take the property ownership involved in the expression into account. It seems that the additional modificatory clitic implies a personal ownership relation between the Agent and the head noun modified by the relative clause. In (7.24)a, the person who bought a book can claim to be the owner of the book, even if the book is intended to be bought as a gift. The trade in (7.24)b may look identical to that in (7.24)a for a 'modern' society, but not in the context of Prinmi culture. The domestic animal acquired, be it a dog or a piglet, is always a family property; no one would claim to have a personal pet in the Prinmi society. The posited subtlety is also applicable to cases like (7.23)a, where the child can conceivably claim to own the stick that she gave away. As for (7.23)b, the additional marking is acceptable since the creator is entitled to claim ownership of the product. If the hypothesis is tenable (counterexamples have not been found in the collection of relative clauses), the additional modificatory clitic can be understood as signifying that the Agent is also a possessor.

The relative clause in (7.24)b is remarkable in that it contains an interrogative pronoun. The following are further examples of Prinmi relative clauses dissimilar to those in English:

(7.25) a  lò biā ggía nilhée mā'zzii.  
work_do M spring N+Cpl
(it) isn't the season for working.

2 The following are the Prinmi translations by the main consultant. While there are minor variations (those in italics), the relative clauses are rendered exactly the same, albeit with slight intonation differences.

a  Niā hrūu rā jjijjì ggeē dē dea_bede ggee zzii.  
2s+M buy nInv:M book InT this one_Ctr InT Cpl
The book that you bought is this.

b  Née heaggi tea-hruu si'a ggüan dǐ_zii ëni'a zhâ'gai di?  
2s where fr.sp-buy pf+M horse one_Ctr so+M strong+Vlt NC
The horse, from where did you buy, (it's) so stout?
These expressions, even if renderable as relative clauses in English, have a different structure. In (7.25)a–c, the head nouns are not construed as core arguments of the embedded verbs in the relative clauses (see below for discussion of the nominalizer -mi in (7.25)c). Note also that the head of the relative clause in the English translation for (7.25)b is not equivalent to that in Prinmi. There are two restrictive expressions (both underlined) in (7.25)d. The target of modification of the first one is ambiguous. The presentation in the example suggests that it shares the same head noun as the second one. If the other restrictive expression is removed, there is no impact on the remaining noun phrase, even with the first relative clause still unmarked by any clitic. But it is also possible to regard the relative clause being a modifier of the derived compound in the second restrictive expression. The interpretation of the whole noun phrase is exactly the same under either analysis.

The relative clause in Prinmi resembles only one variety of English relative clauses: the restrictive relative clause. Other varieties such as non-restrictive and headless relative clauses do not exist as relative clauses in Prinmi. Although the relative clause qualifies Xiibba hmeggiän “old man of the Dragon family” in (7.25)d, its function is still to delimit a particular individual from a group of Dragon families. As for headless relative clauses, they are simply rendered as a clausal topic in Prinmi, without any resource to the relative clause. For instance,

(7.26) a Büuni are zzin’rin ggee bbo reaga zzii.  
What we eat today is ribs.

---

3 According to Prinmi folklore, each river is governed by a different Dragon family.
b Bålêe bbee'a ea-zzuu'sî ggêe meazii dî zzii non, clothes at+M in-write+Pf InT cat one Cpl Dc
lhiuzii dî zzii? hare one Cpl
(The thing) that was drawn on the clothes, is (it) a cat or a rabbit?

Note that an embedded modifier (double underlined) is situated within the clausal topic in (7.26)b. Since the embedded modifier is not a clause, it is not relevant to the discussion concerning the relative clause and the headless relative clause.

Lambrecht (1994: 51-52) notes that restrictive relative clauses in English typically involve presupposed information. This pragmatic property also holds true for Prinmi relative clauses, or restrictive expressions generally. Consider the following:

(7.27) a Dia zuu gêazai ggon zhinzhu ggêe nea-ddüi kêe bbô, now son small Inst pestle InT down-cast:3 time ExT
  "konton" jii. Gawû jîi ggêe lealiän ggâo,
  Ono utter under water InT very deep
  jiiton wu nea-xüi'sî ggia chûa ggêe gge-qion.
  deep pond in down-go+Pf M sound InT out-appear
Now when the young fellow threw the pestle down, it gave out 'kong-tong'. The water below is very deep, it sounded like falling into a deep pond (lit. the sound of falling into a deep pond appeared).
[Pragmatic presupposition: something was thrown down.]

b Zäggiön jii râ lhuâicôn ggee bbo
dried pig saturate nInv:M spice InT Dc
cf, sée, glii, rezhûi, sshê_con zzii.
salt pepper garlic wine four_kind Cpl
The spices for seasoning the dried pig, (they) are salt, pepper, garlic, (and) wine — four kinds.
[Pragmatic presupposition: the dried pig, like other preserved food, needs to be seasoned with spices.]

c 'guea' ggee bbo nee earâ jëemëe xao râ muuguu ggêe zzii.
ox InT Dc Dc 1pIn:M home raise M livestock InT Cpl
'guea', it refers to the livestock that we raise at home.
[Pragmatic presupposition: you know the kind of livestock we raise at home.]

The examples in (7.27) are taken from various texts. The larger context for the relative clause (underlined) is included in (7.27)a. The sentence follows immediately after the one conveying that the young fellow had thrown down the pestle. When the narrator
commented that the water was very deep, the entire sentence was intended to convey that the pestle has been thrown down into very deep water, which presupposes the hearer’s knowledge about something having been thrown down. The situations for the other examples are similar, although the kind of presupposition concerns information based on a common sense.

Many Sino-Tibetan languages have been observed to employ one morpheme (or a set of variants) for marking genitive and relative clauses (cf. Matisoff 1972; DeLancey 1986b; Herring 1991, among others). Prinmi behaves like the majority in this regard but the modificatory clitic does not have a nominalizing function in Prinmi. Nominalization observed to be involved in equivalent attributive expressions in some Tibeto-Burman languages is not applicable to Prinmi.

The kind of nominalization sometimes seen in Prinmi restrictive expressions concerns the derivational suffix -mi, e.g.

(7.28)  a  lo-bia-’mi’a  baï_dai  ggee
work_do-er+M  brother_big  InT
the big brother among working people (or: the big brother who does work)

b  jiiddin-adl-’mi’a  Xii_bbå  hmeğiån  Xii_bbå  buddima’re
flood_cast-er+M  Dragon_f.  old man  Dragon_f.  old woman+p
the old man and old woman of the Dragon family, the flood-starters (or: the old man and old woman of the Dragon family who started the flood)

c  hhodii_ gge-hin-’mi’a  mi  ggee
wart  out-grow-nm+M  person  InT
the person with warts (or: the person on whom warts grow)

As noted in §5.2.2.1, -mi has originated from the word mi “person”; it is used to derive a nominal form for the agent of an act. A necessary, but not sufficient, condition for its occurrence in restrictive expressions is that the head noun must be a person (cf. (7.22)c, where the head noun zzhezzhû “friend” is modified without the suffix).4 Depending on how the function of the suffix is analyzed, the modificators in (7.28)a–b may be interpreted as restrictive expressions rather than relative clauses. Taking -mi as a derivational suffix instead of a clause nominalizer, we need to treat the modificator as a compound word, as suggested by the presentation in the examples above. This analysis is preferred for (7.28)a–b because the modificators (the entire underlined part) can appear as a word outside the noun phrase, i.e. independent of the modificatory relation. On the other hand, the modificator in (7.28)c clearly displays a clausal structure, with the

4 It is not clear whether the condition can be stated simply in terms of animacy. When -mi appears with an animal term in stories, the animal is invariably personified.
prefixation of the directional to the verb. Here -mi can only be a clause nominalizer, not a derivational suffix; otherwise, it would derive something like 'wart-grower' for the underlined expression. Cases like this suggest that Prinmi may develop, in the long run, a kind of relative clause which is nominalized by -mi for animate head nouns, much like what has happened in Newari (cf. DeLancey 1986b). Rare as this function of the suffix is, it can also be omitted when the modificatory marking is signified by the complex clitic ggia, i.e., in lieu of -mi'a in (7.28)c. Therefore nominalization is not an essential feature for relative clauses in Prinmi.

7.1.4 The Spatial and the Temporal expressions

Unlike the other expressions described above (which center on the modificator), the spatial expression refers to the entire noun phrase with a modificator. Such an expression consists of the following elements: modificator + modificatory clitic + spatial noun. For instance,

(7.29) a sex_ba ggia do bbo
    wood_leaf M on Dc
    above the leaf (lit. the above of the leaf)

    b ruea ggia wu
    road M in
    on the road

    c lhazii'ra bbèe
    on the fingers

As shown in (7.29), it is essential that the noun phrase is headed by a noun denoting a spatial meaning. This type of spatial expression, as suggested by the English translation, is semantically identical to that conveyed with a postposition. Compare the following:

(7.30) a lhazii'ra bbèe
    finger+p:M at
    on the fingers

    b lhazì bbèe
    finger at
    on the fingers

Prima facie, the noun phrase in (7.30)b differs from (7.30)a merely in the omission of the modificatory marking. The omission is a general tendency but, in case of spatial expressions, it gives rise to a reanalysis in conjunction with the cliticization of the spatial noun. Instead of treating the underlined element in (7.30)b as the head of the noun phrase, as in (7.30)a, the element is now considered as cliticized into a postposition which typically bears a low tone suprasegmentally. As a result, the head of the noun phrase in (7.30)b is shifted to what serves as the modificator in (7.30)a.

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5 See DeLancey (1997b) for discussion of a similar grammaticalization from spatial nouns (or 'relator' nouns) to postpositions in other Tibeto-Burman languages.
This kind of alternation between a spatial expression and a postposition is observed in all locational postpositions, but not all spatial expressions can be reanalyzed as containing a postposition. Those in (7.31), for example, always require an explicit modificatory marking, thereby preventing any reanalysis in terms of postpositions.

(7.31) a zhēa\_bo nea-zian ba si\_a mî ggia zzîi
soil\_below down\_lie do Pf\_M person M vicinity
*near the person who lay down on the ground on purpose*

b dē zzeabbâ ggiâ ggôn bbo
this trap M inside Dc
*inside the trap*

c xxiabudôn ggiâ 1ô
palm M outside
*the outside of the palm*

d Bâjia Sian\_da\_bbon ggia gguxxin
Bajia wood\_big\_tree M middle
*the middle of the Big Bajia Tree*

e yi\_zûu ggia bbân\_bo
conch\_son M root\_below
*the bottom of the small conches*

Note that in (7.31)a the modificator contains a relative clause (double-underlined). Such embedding is not common. Sometimes the modificator in a spatial expression may be a sole demonstrative, e.g.

(7.32) a de (ggiâ) jhee
this M place
*from here*

b de ggiâ ggôn nôn
this M inside Dc
*inside this*

The modificatory clitic used after a demonstrative is invariably ggiâ. Its omission depends on whether the spatial noun can be cliticized. Thus it may be left out from (7.32)a, but not in (7.32)b.

The modificatory relation is also used regularly in temporal expressions. Like the spatial expression, the head element of the phrase is semantically restricted; in the case of the temporal expression, it must be a temporal noun. The two most frequently found temporal nouns in modificatory expressions are zzhēa “after” and kee “time”. They are exemplified in (7.33) and (7.34), respectively.

6 This specific kind of trap is built with a rock supported by a set of wooden structure that also serves as the trigger for the rock to fall down.
(7.33) a de ggiá zzhêa ggee bbo
   this M after InT Dc
   after this

   b bbalæi ggêe ddea-si ra zzhêa ggee
   snake InT to.sp-alive nInv:M after InT
   after the snake becomes alive

(7.34) a Xii-bbâ hmeggiân ggee ni buddimâ zzú ra kee bbo
   Dragon_family old man InT with old woman eat nInv:M time ExT
   at the time when the Dragon King and Dragon Queen are eating

   b gge-xxii si’á kee bbo
   out-sleep Pf+M time ExT
   at the time when (we) sleep

In the simple instance, the modifier may be no more than a demonstrative, as seen in
(7.33)a. This is common for temporal expressions headed by zzhêa “after”, but
impossible for those headed by kee “time”. For the latter, the temporal expression always
requires a clausal modifier. In this connection, it represents a subtype of relative
clause with a temporal head noun.

7.2 Nominal clitics

Nominal clitics are mainly, but not exclusively, attached to nouns. In accordance
with their functions, two types can be distinguished: number clitics and discourse clitics.

7.2.1 Number clitics: ’re and ’zzan

Prinmi nouns are not inflected for number. One way for expressing plurality is by
means of number clitics: ’re for the plural and ’zzan for the dual. Like other nominal
clitics, the use of number clitics is optional and often omissible.

The host for the dual clitic ’zzan must be pragmatically specific, e.g.

(7.35) a bai’zzân
   brother+d
   the two elder brothers

   b zuú’zzân
   son+d
   the two sons

   c krê’zzân
   leg+d
   (the) two legs

   d bonbbâ’zzân
   vase+d
   the two vases

When used with a body part term, the parts are understood to belong to a single body.
The dual clitic cannot modify a ‘mass’ noun like méa “fire”, hence *mea’zzân.
The occurrence of 're is much more frequent than 'zzan. It can appear with all kinds of COMMON nouns, including the 'mass' nouns, as shown in (7.36):

(7.36)  a  zhēa'ré
        soil+p
        the soil

       b  jīi'ré
        water+p
        the water

(7.37)  a  bai'ré
        elder brother+p
        the elder brothers

       b  mūmū'ré
        corpse+p
        the corpses

       c  qiī_xiā'ré  qēe  mēe'zzīi
        how many_day  how many_night+p
        meal  Npf+eat
        for how many days and nights, hasn't (he) eaten a meal

While the plural clitic can modify a noun whose plurality is inferable through other linguistic means such as reduplication, it does not co-occur with a noun being qualified by an explicit quantifier such as the numeral in (7.38), or the numeral-counter compound in (7.39).

(7.38)  a  *nēa_pumo're
        two_couple+p

       b  *son_baigūan're
        three_brothers+p

(7.39)  a  *jīa'ji're
        sshe_con
        color+p
        four_kind

       b  *zūu
        wēa_zii're
        son
        five_Ctr_PERSON+p

This constraint also applies to the dual clitic, the phrase in (7.38)a remains unacceptable when 're is replaced by 'zzan. The problem is probably attributable to the principle of economy operating in the language: the number of a noun need not be conveyed overtly; if expressed, no more than one explicit indicator is allowed in a single noun phrase.

The plural clitic 're, but not the dual clitic 'zzan, can sometimes be attached to a verb host:

(7.40)  a  Wēn  ggēe  dēa_xxī  bbo,
        sōn_xxī  ea_xxī  yōn:
        bear  InT  one_sleep  Dc  three_month  in-sleep  can
        zōnlhēe_bheec_ea_xxī'ré
        nilhēe  do  gge-da  gēe  yōn.
        winter  at  in-sleep+p  spring  on  out-reach  let:sbj  can
        A bear can sleep for three months, which is sleep from winter until spring.

       b  Ea-rōnxīao'sī  φ're
        hmiān_jīn  wu  ea-zhūān,  hmiān  nēa-qiī;
        in-wound+Pf  φ+p  medicine_house  in  in-send  medicine  down-do
        nea-sii'sī  φ're
        ssō_lōolo  nea-buzzū.
        down-die+Pf  φ+p  fine_idp̣h  down-bury
        Those wounded, send (them) to hospital for medical treatment; those dead,
bury (them) well.

The clitic functions as a nominalizer in (7.40)a, but as a plural marker in (7.40)b. In the latter, the clitic is hosted by a verb because it appears in a noun phrase which consists of a short relative clause and a zero anaphor as the head.

### 7.2.2 Discourse clitics

Discourse clitics are usually attached to nouns. This subsection describes two discourse clitics used quite frequently in Niuwozi Prinmi. Other commonly found discourse clitics attaching to nouns were discussed in §6.4.

#### 7.2.2.1 nee and nia

The discourse clitic nia has an extensive range of distribution, despite its relatively low frequency in use. It appears to be a combined form from the discourse clitic nee and the modificatory clitic 'a. This is supported by the consultant’s acceptance of the change when nia is replaced by nee in a number of instances. But it is generally difficult to replace a naturally occurring nee with nia. The precise function of nee/nia is largely obscure.

The clitic nia is mostly employed as a kind of emphatic marker after a third-person quasi-pronoun ni, e.g.

(7.41) a ni nia/nee gge-zzuu.

\[3s \text{Dc out-eat:3}\]

he ate (the food) himself.

b ni nia/nee nea-ggê nea-xxii’si.

\[3s \text{Dc down-fall down-come+Pf}\]

(the fruit) fell down itself.

The clitic can also be attached to a temporal numeral-nominal compound, as in (7.42). Its omission in these sentences would result no more than a loss of emphasis.

(7.42) a Dèa_giu nia/nee Qingming ggia jî gge-tiân kee bbo, ...

\[\text{one_year Dc Qingming M water out-drink time ExT}\]

In the year, after (it) drinks the water at ‘Qingming’, ...

b Debbö gibu ggee bbo dëa_hni nia/nee qionhnüân.

\[\text{then cuckoo InT Dc one_day Dc wait:3}\]

Then the Cuckoo waits all the time.

With a noun host, the clitic usually occurs after some other discourse clitics, e.g.
This kind of indirect attachment is also observed on *nee*. The clitic often follows *ggon* or *bbo*, although sometimes it may precede *bbo*. The three can also occur together, i.e. *ggon nee bbo*. Here *nee* acts like a bridge between the other two clitics. If it is omitted, *bbo* must be left out, too. This is one of the few occasions when the omission of *nee* will have some noticeable effect. The other instance is when the clitic is combined with the instrumental ‘on into ni’on. Presence of the dummy-like *nee* is obligatory in the complex form. For instance,

(7.44)   ea ni’ôn / *’ôn*  nee bbêe pêa zzê hin’xo.
1s Dc+Inst Inst 2s at news_good tell+Opt
*I’ll tell you some good news.*

In passing, it is worth mentioning that the clitic is sometimes attached to a verb, e.g.

(7.45)   Hrân nôn côn di mâ’giêa, liân *nee* guâ.
long or short one N+afraid firm Dc alright
*It doesn’t matter whether (it’s) long or short. It will do as long as (it’s) firm.*

7.2.2.2  non

There appears to be a pair of homophonous clitics *non*: one as a discourse clitic and the other as a durative clitic (cf. §8.2.1.4). The discourse clitic *non* mainly occurs after a locational postposition, as in (7.46), or after a DEICTIC adverb, as in (7.47):

(7.46)   nüanbâ wu *non* qêe ea-yôn.
winnowing tray in Dc meal in-rub
*rub the dough in the winnowing tray.*

(7.47)   dejjêe *non* di nea-azzôn’si ggiâ.
here Dc one down-sit+Pf Sprs
*oh, one is sitting right here.*

The use of *non* immediately after a noun is rare; usually other discourse clitics intervene, e.g.

(7.48)   Nôn zzhêa ggee *non* jii_bâi wu gge-rorâ.
Dc after InT Dc water_boil in out-drench
*Afterwards cover (it) with the boiling water.*

Note that the example also contains a sentence-initial *non*, which typically occurs with a negated copula in a short clause:
We now return to the overall composition of a noun phrase which was presented at the outset of this chapter, repeated as (7.50):

\[(7.50) \quad NP = \text{Modifier} + \text{Demonstrative} + \text{Noun} + \text{Head Noun} + \text{Adjective} + \text{Numeral expression} + \text{Postposition/Clitic}\]

The order between a postposition and a clitic is determined by the kinds of postpositions and clitics involved. The general order can be presented as follows:

\[(7.51) \quad \text{Number clitic} > \text{postposition} > \text{ggee} > \text{postposition} > \text{bbo} > \text{clitic}\]

Number clitics precede all other clitics and postpositions. The internal topic clitic ggee follows a locational postposition, but precedes a non-locational one. Other discourse clitics usually ensue a postposition, with the external topic clitic bbo ahead of the others.

One way of accounting for the rigid order between the elements in a noun phrase is to analyze the structure of the noun phrase in terms of layers — situated in different layers, the elements are thus fixed. With the head noun in the Center, four layers can be recognized, as illustrated below:

![Figure 7-1: A layered structure of the noun phrase](image)

The next layer from the Center may be called the ‘Compounding layer’, as compounding tends to occur between the head noun and modifiers on this layer. The next one will be referred to as the ‘Word layer’, which contains word modifiers, and the final one as the
'Outer layer'.

Situated in the Outer layer, the modifier — regardless of its length — always precedes a demonstrative, if there is one modifying the same head noun, e.g.

(7.52) a Zzonbbâ Lha ggia dê mân ggée
  Zzonbbâ god M this name InT
  the name of the 'Zzonbbâ' god

b sianbbôn bbee’a êded mi ggee
  tree at+M that person InT
  that person in the tree

If the demonstrative is preposed to the beginning of a noun phrase, it can only be understood as modifying the embedded noun in the modifier. I do not find any instance of such modification by a demonstrative in naturally occurring Prinmi. The following example with two demonstratives in a single noun phrase is somewhat ad hoc:

(7.53) êded sianbbôn bbee’a êded mi ggee
  that tree at+M that person InT
  that person in the tree

Depending on the head noun concerned, the numeral expression in the noun phrase may be a numeral-counter compound, as in (7.54), or simply a numeral, as in (7.55):

(7.54) a nee_bbâ dê hmi son_zii ggee
  2s_family this daughter three_Ctr InT
  these three daughters of your family

(7.55) a zâggiôn sôn
  dried pig three
  three dried pigs

b qüá xüé
  pig eight
  eight pigs

Like many nouns in Prinmi, the head nouns in (7.55) are counted without a counter. Therefore the numeral expressions merely contain a numeral in these noun phrases.

The Compounding layer seldom contains a noun or an adjective as a free modifying word, at least not as straightforwardly as the modifiers on the Word layer. This is in large part ascribed to the strong tendency of the modifiers to form a compound with the head noun (see §5.4). Consider the noun modifiers in the following (with the head noun in bold):

(7.56) a gguxxin + lhâzii (gguxxin: middle, lhazû: finger)
  middle finger
b  mēa + chuaddēe  (mēa: bamboo, chuaddēe: pipe)

bamboo pipe

The expressions in (7.56) are equivocal between noun phrases and nominal compounds. Suprasegmental change, typically with the prosodic domain of the second word merged into that of the first word, is a necessary, but not sufficient, condition for forming bisyllabic or trisyllabic compounds (see §3.3.2.4). Thus it is of little use in determining the precise structure of the expression. Noun phrases with a free modifying noun are extremely rare; the following provides an instance of this:

(7.57)  
Sônjjēe    qī  ggee
Sakyamuni  religion  InT
Sakyamuni's religion

The two nouns in (7.57) are suprasegmentally independent of each other, and they convey a straightforward sense based on the composition of meanings in the expression. Since there is no indication of the two words forming a compound, they are regarded as occurring in a noun phrase.

Likewise, suprasegmental changes are often observed between a noun and an adjective, suggestive of a possible noun-adjective compound, e.g.

(7.58)  
a  yi + hhän  (yi: conch, hhän: yellow)
yellow conch

b  ezhīi + shôn  (ezhīi: liquor, shôn: clean)
clean liquor

Expressions like (7.58) are ambiguous between noun phrases and nominal compounds. The following are noun phrases with an adjective modifier:

(7.59)  
a  dē  guăn  geazai  ggēe
this  young brother  little  InT
this young brother

b  son_baigūân  dī
three_brothers  one
some three brothers

c  meakao  dī  dēa_con
smoke  one  one_kind
some kind of smoke

As the head noun guăn “young brother” and the adjective geazai “little” both have their own prosodic domains in (7.59)a, the two are considered to represent two separate words
rather than a noun-adjective compound. The treatment of the numeral *dí* as an adjective modifier in (7.59)b–c is somewhat unusual. That the numeral morpheme does not function as a numeral in these instances can be observed clearly from the occurrence of other numerals in the same phrase. In (7.59)b, the quantity in concern is three, which is expressed through the numeral component in the compound. Another instance of the numeral *dí* “one” (realized as *déa* after phonological changes) is found in the numeral-counter compound in (7.59)c. Since the morpheme immediately after the head noun is employed for the indefinite/unspecific meaning “some”, it is treated as an adjective modifier in these noun phrases.

A consequence from the tendency towards noun-adjective compounding is that Prinmi noun phrases consist of no more than one free adjective. When a head noun is qualified for various kinds of properties, the modifying words are often situated in a compound instead of a noun phrase. Consider the following:

(7.60) a [bian_niä] dãi NP = [Head noun_adj] + Adjective
grove_dark big big virgin forest

b [hhan_däi]_pali di NP = [noun _adj]_Head noun + Numeral
[gold_big]_basin one a big golden basin

c [zzhu_ddi]_[gân hrân] NP = [Head noun _adj]_[noun _adj]
[wild-goose_old]_[neck_long] long-necked old wild-goose

Prinmi nouns are seldom modified by several words, at least as reflected in the collected materials. Furthermore, the modifying words are not necessarily adjectives; they can be nouns. Although the noun phrase in (7.60)a embodies two adjectives, only the second one *dãi* “big” is arguably a free word and is treated as such here. The other adjective *niä* “dark” is difficult to consider as a free word. It apparently forms a single suprasegmental domain with the head noun. Moreover, the combined form expresses a meaning non-decomposable to the joint meanings of the two words. These point to a noun-adjective compound rather than a noun phrase. Thus the noun phrase is analyzed as comprising a head noun and an adjective, with the head noun being a noun-adjective compound. There is only one adjective in (7.60)b: *dãi* “big”. It modifies and combines with the noun *hhan* “gold”, giving rise to a complex noun modifier which, in turn, qualifies the noun *pali* “basin”. The literal meaning of the expression is thus “a basin (made) of a big (piece of) gold”. Likewise, the words in (7.60)c have a structure of multiple compoundings instead of that of a noun phrase: a co-ordinate compound comprised two noun-adjective compounds.
The head of noun phrases is remarkable in two respects. Although it is often served by a simplex noun, sometimes the head may have a complex structure, e.g.

(7.61) a m̀ ggia kre_lházii xxia_lházii
person M foot_finger hand_finger
mankind’s fingers and toes

b dé ci ni zôlô’re
this plowshare with mortar+p
the plowshare and mortar

The head nouns in (7.61) are rendered as a coordinate expression. It consists of two nominal compounds in (7.61)a and two nouns coordinated with a postposition in (7.61)b. The latter is also illuminating in that it shows that the plural clitic ’re is attached to and modifies a noun phrase rather than a noun. Although the noun phrase refers only to one plowshare and one mortar, the plurality is construable when taking them collectively.

The head noun of a noun phrase may also appear as a zero anaphor, though infrequently, e.g.

(7.62) a Qûk nêa_con xi yon:
badger two_kind exist Assr

b gk_dêa_con bbo qîa_qûî; gk_dêa_con bbo qii_qûî.
one_kind ExT pig_badger one_kind ExT dog_badger

There are two kinds of badgers: one kind is hog badgers, and the other Eurasian badgers.

The three noun phrases under discussion are underscored in (7.62). They all contain a numeral-counter compound. Unlike the first one, however, the successive two noun phrases have a zero anaphor as their head nouns. Needless to say, such omission of the head noun requires the support of special discourse context. Consequently we do not find many short noun phrases like those in (7.62)b.

Although seven elements are identified for a noun phrase, no instances have been found with all of them present in a single noun phrase. The most complex one encountered is the following:

(7.63) [miábbu dai] [jiiddîn ddî-mi’a] dé Xîi_bbô hmeggiân
eyelid big flood cast-er+M this Dragon_family old man

Xîi_bbô buddi nêa_zii
Dragon_family old woman two_Ctr

these two of the old man and old woman of the Dragon family who have big eyelids and started the flood
Except for the postposition/clitic, the complex noun phrase embodies all the elements, with two modificators (indicated with bracketing), a demonstrative, a pair of co-ordinate heads which are compounds, and a numeral expression. The noun phrase can easily be supplied with a clitic. Thus the lack of a fully-extended noun phrase in the naturally occurring data does not imply any constraint on the number of modifying elements in a single noun phrase.

The notion of noun phrase is conventionally extended to a pronominal head, prompting the inclusion of pronouns. The extension seems logical and natural inasmuch as the function of a pronoun is regarded as replacing a noun. This assumption cannot be taken for granted in Prinmi. Except for the quasi-pronoun ni “s/he/it”, Prinmi pronouns behave quite differently from nouns as regards to the selection of topic clitics and suprasegmental changes with certain postpositions. However, given the significant overlap in functional distribution between pronouns and nouns, it would still be useful to considering pronouns as representing a kind of special noun phrase.

This treatment is adopted with an emphasis on the limited properties of a noun phrase headed by a pronoun: Barring postpositions and clitics, none of the other modifiers identified in a noun phrase can form a larger constituent with a pronoun. In other words, Prinmi pronouns are not qualified by a modificator, a demonstrative, a noun, an adjective, or a numeral expression. The only superficial challenge to the validity of the constraint occurs in an expression like this:

(7.64) \text{nire} \quad \phi \quad \text{nēa_zi} \quad \text{ggee} \\
\text{3p} \quad \text{two_Ctr} \quad \text{InT} \\
\text{they two}

On the surface, the numeral-counter appears to form a single phrase with the pronoun. This is unlikely for two reasons. Under this hypothesis, the numeral-counter must be construed as modifying the head, leading to an abnormal meaning “!?two they” for the would-be modification of the pronoun by the numeral expression. The other reason against the single phrase hypothesis is its apparent violation of the incompatibility between a number clitic and a numeral expression in Prinmi. As pointed out in §7.2.1, Prinmi allows only an explicit expression for the quantity of an entity in a single phrase. Therefore (7.64) is analyzed as two appositive constituents: a pronoun and a noun phrase whose head is realized as a zero anaphor.
Chapter 8.

Grammatical Categories of Verbs

Although Prinmi has a certain amount of verb morphology, clitics and, to a lesser extent, copular auxiliary constructions are the major apparatuses for expressing a variety of grammatical categories in the language. Properties signaled by clitics are scrutinized in this chapter; the others will be addressed in Chapter 9.

According to their similarities in functions, verbal clitics are divided into three groups: the negative-interrogative group, the aspectual-modal-evidential group, and the attitudinal group. Each of these will be addressed in detail below. This chapter concludes with a discussion of the interaction between the major grammatical categories and various semantic types of verbs.

Verbal clitics impart a new meaning such as marking a question or a surprise into a clause; they are less sensitive to the structure of the clause. As far as grammaticality is concerned, the use of a verbal clitic like an interrogative clitic is 'optional' in the sense that its omission will not result in a collapse of the structure. The effect of the omission merely changes the illocutionary force of the utterance from a question to a statement. Given this significant difference in meaning, however, verbal clitics cannot be legitimately regarded as optional. This applies to all verbal clitics to be discussed below, including attitudinal clitics, whose meanings are typically subtle and the least relevant to grammaticality. The perfective meaning sometimes inferable with directional prefixes should not be taken as an instance of optional marking either (see §8.2.1.4). On the other hand, these clitics are not obligatory in the sense that the head of a clause must host at least one of them in every sentence. The use of verbal clitics is determined by discourse considerations instead of syntactic factors.

8.1 Negation and Interrogativity

Both negation and interrogativity are expressed by clitics in Prinmi. The former has a set of three specializing negators: the general negator ma', the perfective negator mee', and the desiderative negator dia'. There is only one interrogative clitic — a'. The negative and interrogative clitics are the only clitics attachable before their hosts. Some of them also have a more complex attachment pattern, which is not observed on other clitics. The overall attachment patterns of the interrogative and negative clitics are presented in Table 8-1.
Table 8-1: Attachment patterns of the interrogative and negative clitics

(C=interrogative/negative clitic, c=other verbal clitics, V=verb, Prf=directional prefix)

<table>
<thead>
<tr>
<th>Verb Host</th>
<th>Interrogative $a'$</th>
<th>General $ma'$</th>
<th>Perfective $mee'$</th>
<th>Desiderative $dia'$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bare monosyllabic</td>
<td>C+V</td>
<td>C+V</td>
<td>C+V</td>
<td>C+V</td>
</tr>
<tr>
<td>Prefixed, but no other clitics</td>
<td>Prf+C+V</td>
<td>Prf+C+V</td>
<td>Prf+C+V</td>
<td>Prf+C+V</td>
</tr>
<tr>
<td>With other verbal clitics</td>
<td>(Prf+)V+C+c</td>
<td>(Prf+)V+C+c</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

The patterns in the table are not exhaustive. For the sake of simplicity, the verb host is assumed to be monosyllabic. The generalization will be modified slightly with a bisyllabic verb. The interrogative clitic, as well as the general negator, is combined into a complex clitic when it is adjacent to a following verbal clitic. This kind of complex form is not possible for the other two negators, as indicated in the table. There is a considerable restriction on the forming of a complex clitic. The details are summarized as follows:

Table 8-2: Combination of complex clitics

<table>
<thead>
<tr>
<th></th>
<th>Interrogative $a'$</th>
<th>General negator $ma'$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiential 'duu'</td>
<td>V+a'+'duu</td>
<td>V+ma'+'duu</td>
</tr>
<tr>
<td>Durative clitic 'non'</td>
<td>V+a'+'non</td>
<td>V+ma'+'non</td>
</tr>
<tr>
<td>Perfective 'si'</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Hortative 'ggi'</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Volitive 'gai'</td>
<td>V+a'+gai</td>
<td>V+ma'+gai</td>
</tr>
<tr>
<td>Optative 'xo'</td>
<td>V+a'+xo</td>
<td>V+ma'+xo</td>
</tr>
<tr>
<td>Hearsay jii/jia</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Involvemental 'ron/ru/rin'</td>
<td>V+a'+ron/ru/rin</td>
<td>V+ma'+ron/ru/rin</td>
</tr>
<tr>
<td>Non-involvemental 'riu'</td>
<td>V+a'+riu</td>
<td>V+ma'+riu</td>
</tr>
<tr>
<td>Attitudinal clitics</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Where a complex clitic does not occur, it does not necessarily imply that the meanings involved cannot be expressed. For example, while the interrogative does not combine with the perfective clitic, it does not mean that perfective sentences cannot occur in yes-no questions. As will be shown in (8.10), a perfective-marked verb can be questioned, but with a different clitic attachment.
8.1.1 Negative clitics: the general *ma’, perfective *mee’, & desiderative *dia’

The use of the general negator *ma’ and the perfective negator *mee’ is basically determined by the aspect of verbs. The perfective negator is employed only for negation in the perfective; otherwise the general negator is used. To understand the usage of the desiderative negator *dia’, we need to take a closer look at its meaning first. A semantic analysis of the desiderative negator is provided in the Natural Semantic Metalanguage (NSM, henceforth; see Wierzbicka 1996 and references therein) as follows:

(8.1) A semantic analysis of the desiderative negator *dia’

i. Someone wants something to happen
ii. Someone else does not want this to happen

The central meaning of *dia’ involves a conflict of desires between two persons/parties. The negative imperative frequently implies a request (ranging from the strong sense of order to the weak sense of advice) from the speaker so that the addressee will change his/her mind and not do something — a potential conflict of desires. Consequently, *dia’ often occurs in the imperative. Nonetheless, as the clitic is not meant for expressing negation in the imperative, it is also used outside imperative sentences. For instance,

(8.2) a Dia *dia’chee nea-ba.
     again Nds+feed down-do
     Again, what (Middle Brother) did was to not feed (the Crow).

b *dia’yin nea-ba.
    Nd+listen down-do
    what (the Frog) did was to not listen to (them).

The contexts in which the sentences occur clearly represent a conflict situation. At the beginning of the Deluge story, after the eldest brother had refused the Crow’s request, the Crow asked Middle Brother to feed him some food, but the brother also turned him down. Reporting the failure, the consultant used the clitic *dia’ in (8.2)a. The other example appeared in similar circumstances. At the climax of the story, a negotiation was going on between the Frog (and his allies) and the Dragon family. When the Frog rejected the offer by the Dragon family, (8.2)b was employed. From these examples, it is patent that the exclusive choice of *dia’ in the imperative is attributed to the conflict of desire implied in this kind of speech act, but the desiderative negator does not limit itself to imperative sentences.

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1 Lu (1983: 51) describes *dia’ as a negator for the imperative, but its usage is found beyond imperative sentences, as we will see below.
The negative clitics are generally attached in front of the final syllable of a bare verb, thus preceding a bare monosyllabic verb, e.g.

(8.3) a Desiderative  
\textbf{dia’zzao} \textit{cf.} \textit{zzao}  
N\textsubscript{ds}+eat:2s  
\textit{Don’t (you) eat}  

b Desiderative  
\textbf{mèa’dia’zhee} \textit{cf.} \textit{mèazhee}  
N\textsubscript{ds}+look for  
\textit{don’t (you) search}  

c Perfective  
\textbf{mèe’zzián} \textit{cf.} \textit{zzián}  
N\textsubscript{pf}+eat:1s  
\textit{(I) haven’t eaten}  

\textit{cf.} \textit{zzián}  

\textit{(I) haven’t eaten}  

d General  
\textbf{ma’kú} \textit{cf.} \textit{kú}  
N+want  
\textit{(I) don’t want (any)}  

\textit{(I) want (some)}  

e General  
\textbf{mán’ma’sián} \textit{cf.} \textit{mansián}  
N+know:1s  
\textit{(I) don’t know}  

\textit{(I) know}  

To negate a verb that is attached with a directional prefix but not other verbal clitics, the negator attaches itself to the verb stem as if the prefix were absent, e.g.

(8.4) a Desiderative  
\textbf{nèa-diá’chao} \textit{cf.} \textit{nea-chào}  
down-N\textsubscript{ds}+stand:2s  
\textit{don’t be standing}  

d b Perfective  
\textbf{ddéa-mee’hmián} \textit{cf.} \textit{ddéa-hmián}  
to.sp-N\textsubscript{pf}+ripe  
\textit{hasn’t ripened}  

c General  
\textbf{tea-má’man} \textit{cf.} \textit{tea-mán}  
fr.sp-N+follow  
\textit{(they) don’t catch up}  

\textit{(they) catch up}  

Among the three negators, only the general negator \textit{ma’} may share its host with other verbal clitics such as the aspectual, the modal and the evidential. When the verb host is shared, the clitics must form a complex clitic and appear after the verb; it is impossible for \textit{ma’} to precede the host as it otherwise does. For instance,
The pre-host and the post-host attachments for *ma' are not interchangeable. The determining factor is whether the verb also hosts an aspectual/modal/evidential clitic.

To negate a perfective-marked verb, the perfective clitic must be removed when the perfective negator is attached to the host. The overt marking for perfectivity is taken over by *mee', e.g.

(8.6)  

| (8.5) | a | jiān ma’dūu | but | *ma’jiān’dūu |
|       |    | see N+Expr  |    | N+see+Expr  |
|       |    | haven't seen (it before) |    | |
| b     | gge-zzili ma’xō | but | *gge-ma’zzii’xō | out-eat N+Opt | out-N+eat+Opt | |
| c     | mansii ma’riū | but | *man’ma’sii’riū | know N+nlnv | N+know+nlnv | |
|       |       | (s/he) doesn't know | | |

The pre-host and the post-host attachments for ma’ are not interchangeable. The determining factor is whether the verb also hosts an aspectual/modal/evidential clitic.

To negate a perfective-marked verb, the perfective clitic must be removed when the perfective negator is attached to the host. The overt marking for perfectivity is taken over by *mee’, e.g.

(8.6)  

| néa-mee’sii | cf. | néa-sii’si | but | *néa-mee’sii’si |
| down-Npf+die |    | down-die+Pf |    | down-Npf+die+Pf |
| hasn’t died |    | has died |    | |

8.1.2 Interrogative clitic: a’

The interrogative clitic a’ is used for expressing a yes-no question. Its attachment patterns are very similar to those of the general negator ma’. With a bare verb or a prefixed one, it occurs before the final syllable, as shown respectively in (8.7) and (8.8).

(8.7)  

| (8.7) | a | Bômbon â’xxee? | cf. | Bômbon xxee. |
|       |    | uncle Q+exist an |    | uncle exist an |
|       |    | Is Uncle home? |    | Uncle is here. |
|       |    | 2p Q+know:2p |    | 2p know:2p |
|       |    | Do you know? |    | You know. |

(8.8)  

| tea-â’kiän? | cf. | tea-kiän |
| fr.sp-Q+give |    | fr.sp-give |
| give (away)? |    | give (away) |

---

2 As pointed out in §2.5.1.2, rhyme change occurs to the prefix when the interrogative clitic is adjacent to it. The prefix will be a diphthongized c with an inserted on-glide [j].
If the host is modified by an aspectual/modal/evidential clitic, a complex clitic is generally formed when ‘a’ appears between the verb and the other clitic, as shown in (8.9). Since the perfective clitic ‘si’ (and its variants) is incapable of forming any complex clitic, the interrogative clitic simply ignores it and appears before the verb, as in (8.10).

(8.9) a Jiân a’dûu? cf. Jiân’dûu. 
see Q+Expr
Have (you) ever seen (it)? (You) have seen (it).

b Qee zzü a’xô? cf. Qee zzü’xô. 
meal eat Q+Opt
Will (you) eat rice? (You) will eat rice.

know Q+nInv
Do (they) know? (They) know.

(8.10) Qée gge-a’zzüu’si? cf. Qée gge-zzüu’si. 
meal out-Q+eat:3+Pf
Has (s/he) eaten? (S/he) has eaten.

The interrogative clitic can also be used for tag questions which always imply pragmatic presupposition, e.g.

(8.11) a Née ddea-yî’si a? 
2s to.sp-come:2s+Pf Q
You’ve come over, haven’t you?

b Née mée’xân a? 
2s Npf+go:2s Q
You haven’t gone yet, have you?

In this function, the clitic always appears in end-position. Although complex clitics are usually formed when two clitics occur next to each other, this is not the case for the tag-question function of the interrogative clitic a (notice the omission of the apostrophe in spelling). Even though it may follow another clitic, as in (8.11)a, the two are simply juxtaposed, without combining into a complex clitic. This is evinced by an inserted glottal stop between them in spoken Prinmi. While negative clitics cannot occur in ordinary yes-no questions, they can do so in tag questions, as exemplified in (8.11)b.

8.2 Aspect, Modality, and Evidentiality

While aspect and modality are common verbal categories in languages, evidentiality is relatively less common. These three categories are grouped together not entirely out of convenience. Except for the hearsay evidential, the other clitics are alike in their tendency
to form a complex clitic with the general negator. Furthermore, they are sensitive to a subtle contrast in terms of subjectivity and objectivity, which often resembles a kind of person agreement on the surface. Based on the available data, however, it will be shown that such person agreement is only an epiphenomenon.

8.2.1 Aspect

Aspect can be expressed by various devices in Prinmi, but the main means is clitics. There are three types of aspectual clitics: the experiential, the durative, and the perfective. Since Prinmi directional prefixes show a certain amount of correlation with perfectivity, the issue will also be addressed.

8.2.1.1 Experiential 'duu

The experiential clitic 'duu has the most transparent etymology among Prinmi clitics. It is grammaticalized from the verb meaning “to thread/to pass through”, which can still be used in this sense, e.g.

\[ (8.12) \text{Bbo dea}_qie\text{i bbëe bbô bôn di tea-zzu, lhazii ggôn gge-}dûu. \]
\[ \text{Dc one\_side at Dc loop one fr.sp\_make finger Inst out\_thread} \]
\[ \text{Then at one side, make a loop and pass fingers through (it).} \]

Notice that the verb is often affixed with a directional prefix when it functions as a verb, as shown in (8.12). While the experiential clitic can combine with the interrogative clitic or the general negator, parallel to the formation of complex clitics by the (non-)involvemental and modal clitics, it lacks the morphological ability for prefixation. Furthermore, its mandatory co-occurrence with a verb suggests a dependent status of the cliticized verb. Thus the grammaticalized form is considered as a clitic rather than an aspectual auxiliary verb.

An NSM script for the experiential can be written as follows:

\[ (8.13) \text{A semantic analysis of the experiential 'duu} \]
\[ \text{i. At some time before now, someone did something} \]
\[ \text{ii. Because of this, this person knows something now} \]

Having an experience in doing something generally implies acquisition of certain knowledge, as indicated in (8.13)ii. The experiential in Prinmi is not used for marking evidentiality or completion of an act/event. It simply signifies that the Agent has engaged in a particular act/event. Its use is restricted to Action verbs. For instance,

\[ (8.14) \text{a} \text{ Eh, éa bbô nïä ggiä zzü ma'}dûu. \]
\[ \text{Intj 1s ExT 2s:M M eat N+Expr} \]
\[ \text{Huh, I haven’t eaten yours.} \]
As can be seen from (8.14), the experiential may involve an experience that has some bearing on the present situation at the moment of utterance, as in (8.14)a, or a more general experience, as in (8.14)b–c. In (8.14)a, it is the immediate experience rather than one from the past is taken as the speaker’s interest. In instances like this, the temporal location for the experience is more specific.

The experiential is used more frequently with a first-/second-person Agent, but it can also occur with a third-person Agent, e.g.

(8.15) Aabū xxiâbuu non dia dō qiôn,

grandpa last year Dec now on appear

ezhii kûbo_di tiân ma’dûu.

alcohol bottle_one drink N+Expr

Grandpa hasn’t drunk any alcohol since last year.

8.2.1.2 Durative ‘non

The NSM script for the durative clitic ‘non is propounded as follows:

(8.16) A semantic analysis of the durative ‘non

   o. Something happens
   i. This will be like this for some time
   ii. I want to say more

The extra component in (8.16)o is relevant only to non-State verbs. When the durative occurs after a State verb, it relates the state denoted by its host verb to the another situation expressed in the sentence. Consider the following:

(8.17) Durative with State verbs

a Dê ggee ea-liân’non, zhēe xxian la ma’riû.

this InT in-firm+Dur pull can also N+nInv

It is (so) firm (that I) just can’t remove (it).
In these few years the 'bbisuu' trees also became few; in the past there had been many.

The examples in (8.17) are given in complete sentences (cf. §10.2.3 for discussion of delimiting a Primni sentence). Different kinds of semantic relations between the clauses are found: state-and-effect in (8.17)a and contrast in (8.17)b. Syntactically speaking, the examples in (8.17) can be shortened to the initial clause ending with the durative clitic. Such extracted simple clauses are grammatically well-formed, but when they are placed or observed in actual contexts, a discourse unit larger than the clause itself is often identifiable. In other words, a durative-marked clause tends to partake in a larger sentence.

Given this tendency, some might regard the clitic as a kind of conjunction. This is not adopted for two reasons. Positionally, 'non is not always situated between clauses of a sentence. While the inter-clausal position is the most common for 'non, it is also possible for a durative-marked clause to form the final part of a complex sentence (as in Ex.(8.18) below). Further, 'non is typically followed by a pause long enough for signaling two unconnected clauses. Therefore the durative clitic is not analyzed as a conjunction.

Note that the script for the meaning of the durative in (8.16) does not imply a strict order between (8.16)i and (8.16)ii. Sometimes a durative-marked verb may appear at the end of a complex sentence, e.g.

(8.18) a Bonbbâ wu beazï guâa_dí dea-züee'sí — née_zzhâazzha
vase in flower Ctr_one up-set+Pf red_ideophone
— dea_cíu dí ggiå'non.
a while pretty+Dur

Putting a flower into the vase — with such a red (flower) — immediately makes (it) beautiful.

In sentences with a semantic relation of action-and-consequence between clauses, it is necessary for the Process verb to follow the other clause(s). The following provides another instance of this semantic relation:
When the durative is used with an Action verb, it focuses on the state of happening of an act in connection to the major event in the sentence, e.g.

(8.20) Durative with Action verbs

a Jii ggee día nea-jùa, nea-jùa’non da nea-xii.  
water InT now down-decline down-decline+Dur only down-go  
Now the water is simply declining and declining.

b Buddimà ggön la déa-giàn’non hmeggiän bbee chee.  
old woman Inst also up-pick+Dur old man at feed  
The old woman also, picking up (the honey dumplings), fed (them) to the old man.

c Xxiâni êa ní bbee jjiji ddéa-yin’non, dò-yi ma’xi.  
yesterday Is 3s at book to.sp-lend+Dur look-nm N+exist  
Yesterday, having borrowed a book from him, I didn’t read (it yet).

Syntactically, the occurrence of the durative after an Action verb renders the clause with a dependent status. If the example in (8.20) were to be shortened so that the durative clitic becomes the final element in a clause, the truncated clause would be unacceptable. Such clauses are problematic, for they are semantically incomplete and syntactically dependent (for further discussion, see §10.1.2).

The event modified by the durative is always understood to take place prior to the one denoted by the following verb. This logical sequence corresponds to the order of the verbs in the sentence. The durative-marked event is construed as an on-going state when the other event happens, i.e. the two events are temporally overlapped. A counterexample to this seems to occur in (8.20)c. The act of borrowing would be regarded as completed from the viewpoint of many non-Prinmi speakers. Different cultural perspectives may be involved in what is considered to be a complete situation for borrowing/lending. In Prinmi, as it turns out, loan is thought of more like a ‘transaction’ rather than a simple request. The lending/borrowing (which is not lexically distinct in the language) may not be viewed as completed until the item on loan is returned. In light of this, the use of the durative in (8.20)c is consistent with the other cases in regard to the temporal connection of the events in a sentence.
8.2.1.3  Perfective 'si'/sian'/sin & mee'

The aspectual category represented by 'si'/sian'/sin and mee' is well grammaticalized in Prinmi. The first three are used in non-negative sentences and the final one mee' is employed in the negative only. Since the perfective negator has been described in §8.1.1, the discussion below will center on the set of non-negative perfective clitics.

The general perfective meaning of 'si' may be analyzed as follows:

(8.21)  A semantic analysis of the general perfective 'si
   i.  Things were not like this before
   ii.  At some time, something happened
   iii. Because of that, things are like this now

As shown in (8.21), the perfective denotes the completion of a change of state. The proposed script is appropriate for a large number of instances, e.g. (8.22), but sometimes the clitic may be used beyond the archetypal meaning of perfectivity, as in (8.23).

(8.22)  a Sshii_quëë lhì,  wai_quëë bbùu ēa-zzzhūu'si.
        right_side  moon  left_side  sun  in-write+Pf
        A moon is drawn on the right, and a sun on the left.

   b  Åre  son_zii bbo ēwù  tea-pea'si.
      lpex  three_Ctr  ExT  there  fr.sp-abandon+Pf
      (He) abandoned the three of us over there.

(8.23)  Events with a persistent situation
   a  Xiön  ggiā  diā  nea-ggüi  sì'a  zonggüi ...
        g. pheasant  M  now  down-wear  Pf+M  attire
        The clothes that the Golden Pheasant wears nowadays ...

   b  Miåbbù  ggee  bbo  krèggjion  do  nea-zhua'si  jii'riu.
      eyelid  InT  Dc  knee  on  down-contact+Pf  say+nInv
      It is said that the eyelids touch down to the knees.

   c  Ea_bbā  jèmēë  muuguu  saiguëë  bbulā  ddēa-xao'si.
      1s_family  home  livestock  many  to.sp-raise+Pf
      My family has raised a lot of livestock at home.

   d  Ggō  ku  jjímea  tea-xxiön,  bùuni  bbo  son_hní  zzhon'si.
      hill  top  bushfire  fr.sp-burn  today  Dc  three_day  become+Pf
      The bushfire on the mountain has burned for three days.

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3 The essential meaning of the perfective is similar to those discussed in Dahl (1985); Huang (1988); and Smith (1991).
All the sentences in (8.23) convey situations that have existed for a lengthy period of time and will remain so after the time of speaking. To indicate the lasting situation, the NSM script for 'si' is revised with the additional component in (8.24)iv:

(8.24) An overall semantic analysis of the perfective 'si

i. Things were not like this before
ii. At some time, something happened
iii. Because of that, things are like this now
iv. Maybe this will be the same for some time

At the first glance, the variant form 'sian' appears to indicate an agreement with a first-person singular Actor:

(8.25) a Zzài, ea ni’ôn têa-bian’sian.
   Cpl 1s Dc+Inst fr.sp-do:1s+Pfvl
   Yes, I did (it).

b Ėa hreggînî Xxeeggâo xiân’sian.
   1s two days ago Lijiang go:1s+Pfvl
   I went to Lijiang the day before yesterday.

c Ėa réjjee bbee bbo xii’xô suuddon’sian, ...
   1s beginning at Dc go+Opt think:1s+Pfvl
   At first I thought I’d go, ...

On further scrutiny, however, it is discerned that 'sian' is not meant for signaling person-number agreement. A first-person singular Actor is found in sentences in (8.26), but 'si' is used for the perfective marking, irreplaceable with 'sian.

(8.26) a Ėa dê bbee kûi-yi qûi têa-ddee’si/*sian.
   1s this at pity-nm do fr.sp-err+Pf/Pfvl
   (It) was wrong for me to pity this.

b Bbó bûuni bbo tea-lâ tea-ddao’si/*sian bbo, ...
   Dc today ExT fr.sp-also fr.sp-tired+Pf/Pfvl ExT
   Well, (since I)’ve been so tired today, ...

The examples in (8.26) both involve involuntary situations, which makes the use of 'sian' incompatible. Note that the host verb tea-ddèe in (8.26)a has the sense of “making a mistake without knowing it”. The unconsciousness indicates that controllability and volitionality are inherently lacking in the meaning of the verb. Volitionality associated with 'sian' can be observed when we compare the situations between (8.26) and (8.25). If the host verb is controllable by the will of a first-person singular Actor, as in (8.25), 'sian' is chosen. If the host verb cannot be controlled willfully, as those in (8.26), the form 'si' must be used instead, irrespective of person-number agreement. From these, it
is apparent that the superficial person-number agreement does not account for the distinction between the two variants of the perfectives. To capture the actual difference, a semantic component for volitionality is included in (8.27)iv for 'sian, rendering its complete NSM script as follows:

(8.27)  A semantic analysis of the volitional perfective 'sian

i. Things were not like this before
ii. At some time, something happened
iii. Because of that, things are like this now
iv. This did not happen if I did not want this

As for the other variant 'sin, it occurs so marginally that no sound extrapolation can be proffered. While the consultant characterizes its use as co-occurring with a first-/second-person plural Actor, he scarcely employs it for no obvious reasons. Instead, he uses the general form 'si. As a mere speculation, the form might have a volitional meaning parallel to that of 'sian, but the meaning has become or in the process of becoming obsolete. Under this hypothesis, the disappearing of 'sin is understandable, for the form will become semantically identical to 'si. To eliminate the redundancy, the obsolete form will be discarded. It is also noteworthy that a perfective variant for the second-person singular Actor is not attested, as would be expected in the person-number system of Prinmi. It is unclear whether such a form existed before its disappearance or it never existed.

8.2.1.4  Perfectivity and directional prefixes

As noted in §5.4.4, some directional prefixes can partake in compounding under the pattern gge-V ea-V, e.g. gge-zzhän ea-zzhän “to walk about”. The extensive aspect of the Action verb zzhän “to walk” is expressed by the pair of directional prefixes in the compound. Outside this morphological pattern, directional prefixes may also, under sufficient discourse contexts, imply a perfective reading of Action verbs, e.g.

(8.28) a  Mī zzhanzzhan ra zzëa ggee tea-jüan.
      person walk nInv:M shadow InT fr.sp-see:3
      (He) saw the shadows of people walking.

  b  Née ēa zzhū ggíà zúizíi gge-ddiän,
 2s 1s friend M nephew out-swallow
      ēa nee bbō zhín zào mārōn.
      1s 2s for mortar hit N+Inv:ls

You’ve swallowed my friend’s nephew, I’m not going to pound mortar for you.
I fell down from such a high place; yet only a few bones have been broken — a life so lucky (lit. a hard life).

Note that the perfective meaning suggested by the directional prefixes is dependent on discourse context and realized through telicity. Occurring with a directional prefix, a verb can enhance its telicity (Comrie 1976: 46). Since a perfective situation is characteristically telic, the directional prefix comes to suggest perfectivity in this connection. Given the great extent of its reliance on context, it is doubtful whether directional prefixes are on the path of grammaticalization towards marking perfectivity in Prinmi.4

Directional prefixes have a strong tendency to correlate with a perfective clitic in non-negative sentences. Except for a small number of verbs such as xii “to go”, sūudduu “to think”, and the auxiliary use of bā “to do”, the attachment of a perfective clitic in non-negative sentences generally requires that the host verb is prefixed with a directional. For instance,

(8.29) a Qée gge-a’zzā’o’si? meal out-Q+eat:2s+Pf
Did (you) eat?

but

?!Qée a’zzā’o’si? meal Q+eat:2s+Pf

b Gge-zziān’sian. out-eat:1s+Pfv
(I) ate.

but

?! Zziān’sian. eat:1s+Pfv

c Mēe’zziān. Npf+eat:1s
(I) haven’t eaten.

cf.

Ggē-mēe’zziān. out-Npf+eat:1s
(I) haven’t finished eating.

In the question and affirmative sentence in (8.29)a–b, native speakers would not outright reject the utterances when the directional prefix is not used, but they will characterize such sentences as unidiomatic. Syntactically the structure is fine, and the intended meaning is well conveyed; yet they do not sound right. The subtle problem is the lack of explicit telicity contributed by the directional prefix in portraying a perfective situation. On the other hand, a directional prefix is usually not used in negative sentences, since the negation does not concern a perfective situation (as it has not happened). With a directional prefix, a negated sentence in the perfective tends to have a different meaning, as shown in (8.29)c.

4 This is also true for Lanping Prinmi, based on Lu’s (1983) description.
8.2.2 Modality: the hortative 'ggi, the volitive 'gai, & the optative 'xo

Three kinds of modal meanings are expressed by clitics in Primni, i.e. hortative, volitive, and optative. The function of the hortative clitic is rather straightforward. Its NSM script can be written as follows:

(8.30) A semantic analysis of the hortative 'ggi
i. I want to do something
ii. I think:
   maybe you want to do the same
iii. You and I will do it

The hortative clitic 'ggi is attached to the end of an Action verb to express the wish of performing an act collectively, e.g.

(8.31) a Xëe, ... earê son_baigüän ggee pian'ggi.
   go:Hrt 1pîn three_brothers InT flee+Hrt
   Let's go, ... let us, three brothers, run away.

   b Earê son_baigüän ggee kòn tea-lhî're xi a'riû dó'ggi.
   1pîn three_brothers InT life fr.sp-release+p exist Q+nlnv look+Hrt
   Let's see if we, three brothers, can run for our lives.

The utterance in (8.31)a contains a special hortative form — xeë, which is a synonym of xîi'ggi “let’s go”. The former tends to occur independently in initial position. The hortative does not share its host with other clitics. Consequently, negation and interrogativity are not found with hortative-marked verbs.

The volitive 'gai and the optative 'xo are quite close in meaning, but with a different emphasis on the realization of a situation in terms of willful control on the part of speech act participants. The volitive indicates a wish where the speaker has no control over its realization; whereas the optative signifies the intention and willingness of the speaker/addressee for carrying out an act. The semantic contrast between the two modal clitics often gives rise to a seemingly person agreement pattern, as in (8.32), with 'gai employed for a third-person Actor and 'xo for a first-/second-person Actor:

(8.32) a Āabon xxëe xxëe, earê qionhniân'gai.
   Dad existan existan 1pîn wait+Vlt
   Dad is there. (He) will wait for us.

   b ēa nee bbêe pêa_zzi hin'xo.
   1s 2s to news_good tell+Opt
   I'm going to tell you some reliable news.
What reliable news are you going to tell (me)?

This distributional pattern, in addition to their similar meanings, has led Lu (1983: 42-43) to treat them as a pair of suppletive forms for the ‘future tense’. A careful look at their actual use, however, will prove such a treatment problematic. Consider the following:

(8.33) a Eqiccēa ezhii'rē, ēa tian dâ qii ma'gāi.
    So much wine+p 1s drink complete do N+Vlt
    So much wine, I won’t be able to drink (it) all.

b Lō tea-biā là née dde-preə ma'gāi.
    work fr.sp-work also 2s to.sp-meet N+Vlt
    Even if you work, you won’t be rewarded.

(8.34) Zhazhā ggon nee ddön tea-papā bian'xō rā ni tea-ba ...
    magpie Inst Dc wing fr.sp-open fly+Opt M like fr.sp-do
    The Magpie opened his wings and was just about to fly ...

The volitive is used with a first-person Actor in (8.33)a and a second-person Actor in (8.33)b, counter to its general collocation with a third-person Actor. On the other hand, the optative occurs with a third-person Actor in (8.34). These ‘counterexamples’ to person agreement can be accounted for by the very semantics of the clitics:

(8.35) A semantic analysis of the volitive 'gai
   i. I think:
      maybe something like this will happen
   ii. This does not happen because of me/you
   iii. This still happens when I/you do not want this

(8.36) A semantic analysis of the optative 'xo
   i. Someone thinks:
      something like this will happen
   ii. This happens because of this person
   iii. This does not happen if this person does not want this

In (8.33)a, the situation that the volume of wine exceeds the speaker’s capacity of consumption is expressed as something beyond the speaker’s willful control with the volitive 'gai. If the volitive 'gai is replaced by the optative 'xo, the utterance will be grammatically fine, but it is likely, as the consultant pointed out, to invoke a quarrel or fight, since the optative would convey that the speaker deliberately chooses not to finish up the wine. Similarly inasmuch as the possibility of getting reward from work in (8.33)b cannot be assured with one’s will, the use of the optative here would be inappropriate. Notice that both the instances in (8.33) are negative sentences, which is not purely coincident. As 'gai signifies a situation unalterable by one’s wish but the
speech act participants are inherently endowed with willful control over scores of situations, for the clitic to co-occur with such Actors felicitously, the otherwise controllable situation must be coded in negation to render it uncontrollable by the speech act participants. Therefore, the use of 'gai with the speech act participants is often (but not always) found in negative sentences.

Turning to (8.34), we find that the optative 'xo modifies the Magpie’s intent of flying. Although the bird has been personified in the story, his ability to fly is maintained. In other words the action of flying is seen as controllable by the Magpie’s will. Thus the optative instead of the volitive is chosen. The occasion for people to explicitly describe somebody’s future action as determined by his/her own will is rather unusual. For this reason, instances of the use of 'xo with a non-speech act participant are scarce. The unordinary employment of the optative in (8.34) attests such a possibility. Marginal as it is, this very possibility stands against the temptation to specify the vague Actor as speech act participants in the NSM script in (8.36).

8.2.3 Evidentiality

Evidentiality, as discussed in Chafe & Nichols (1986), covers a wide range of phenomena from grammatical categories to discourse styles in academic writing. A narrower focus will be adopted in exploring evidentiality in Prinmi, which excludes debatable cases found with some attitudinal clitics such as the speculative (see §8.3).

Prinmi has two grammatical categories for evidentiality. The first one will be termed as ‘hearsay’ and the other one as ‘involvementality’. The former usually indicates an indirect source of information; whereas the latter often includes as one of its parameters a direct source of information through one’s involvement in a situation.

8.2.3.1 Hearsay: jii/'jia

The hearsay category is marked by the cliticized verb jii “to say”. Unlike its use as a verb, the cliticized jii cannot be negated nor questioned. Neither can it be affixed with a directional prefix. All these verbal properties disappear from this grammaticalized form. The hearsay jii has two variants: jia (combined with the modificatory 'a) and jii'riu (formed with the non-involvemental 'riu). It appears that the combinatory forms contribute little additional semantic substance to the meaning of jii. The form jii’riu is constrained to anchor at the end of a sentence, but the other two may also occur at the sentence-final position. The clitic jii can easily replaced by jia, but the reverse is not always possible, especially when jia occupies a sentence-medial position. Thus the forms have a significant overlap in distribution.
The hearsay clitic jii is frequently used to indicate an indirect source of information. All examples in (8.37) occur in story texts, with the exception of (8.37)a from an expository text.

(8.37) a mîre seasea qii kee, bbeaxxion ggôn bëaba qii yon jii’riu.  
people war do time sling Inst shoot do Assr say  
It's said that when people were at war, they would shoot each other with slings.

b Miâbbû ggee bbo krèggion do nea-zhua’sî jii’riu.  
eyelid InT Dc knee on down-contact+Pf say  
It is said that the eyelids touch down to the knees.

c “...; nee ni’on ea bbëe chée ma’ruâ ggiâ.” jii’sî jii’riu.  
2s Dc+Inst 1s at feed N+grudge Sprs say+Pf say  
“You grudge to feed me!” said (the Dragon Queen).

d “… Née ejjee miâ dea-do bu ma.” jii’sî jii’riu.  
2s there eye up-look do:2s Sgst say+Pf say  
“... Take a look there with your eye, won’t you?” said (the Dragon King).

The employment of the hearsay in (8.37)a is understandable from the discourse context. In explaining what a bbeaxxíon (a kind of sling) is, the consultant first introduced it as a toy that children made and played with in the past. Later he mentioned that it could also be used as a weapon. At this point, he showed an unconfirmative attitude towards the statement by rendering it as a hearsay. The attitude conveyed by jii’riu here is not meant to be a denial of truth. The speaker simply declares that the source of knowledge is indirect, not based on his/her actual experience, and therefore s/he should not be expected to be able to confirm the truth of it. The decision for employing the hearsay clitic is motivated by this unconfirmative attitude of the speaker. In making an incredible statement like (8.37)b, the narrator of a story will wisely choose to present it as a hearsay, thereby saving an argument about the truth of the statement.

When the hearsay pertains to a direct quotation, the actual function of jii can be ambiguous. The bold forms in (8.37)c–d are clearly used for report information rather than expressing "to say", thanks to the consecutive occurrence of jii: the first one for a lexical meaning, and the other for the grammatical meaning of hearsay. The two cannot switch their order. An expression like ?jii’riu jii’si is unacceptable. Outside these circumstances, the function of jii after a direct quotation is equivocal. Consider the following:

(8.38) a “... Nee bbô êa ggiâ gge-zzâo’sî.” jii’riu.  
2s ExT 1s M out-eat:2s+Pf say  
“... You've eaten mine.” said (the Dragon King).
Although the English translations for the sentences in (8.38) hint at the use of the word as a verb, there is no evidence excluding the function of jii here as simply indicating report information. On the contrary, the form occurring in (8.38)a suggests that it is a hearsay clitic, since jii usually hosts a perfective clitic when it functions as a verb, as seen in (8.37)c–d. Both the utterances in (8.38), on the other hand, can leave out the underscored expression without causing any structural problem to the sentences. This, however, offers no solid support for their meaning to be non-lexical, either. The verb jii is one of the few unusual verbs dispensable under sufficient discourse contexts. More specifically, Prinmi allows the speaking verb to undergo ellipsis in sentences with a direct quotation, giving rise to verbless quotational clauses (see §10.1.4).

One of the contextual meanings of the hearsay jii corresponds well to DeLancey’s mirativity, which is operationally defined as marking ‘both statements based on inference and statements based on direct experience for which the speaker had no psychological preparation, and in some languages hearsay data as well’ (DeLancey 1997a: 35). The following illustrate the mirative interpretation of jii:

(8.39) Mirative use of jii

a Büuxi ea xxûìme di gge-qion, last night 1s dream one out-appear
   ea han di bbêe tea-brôö’si ?(jii’riu).
   1s parrot one at fr.sp-transform+Pf say
Last night I dreamt of myself transforming into a parrot.

b Nî mëe’xî ggee la ea bbêe ddûa #(jii’riu); 3s Npf+go InT also 1s at blame say
   nî mëe’xî ggee êa mëe zzhon mansûi yon?
   3s Npf+go InT 1s how know know how
His not going is also blamed on me; how on earth should I know he wouldn’t go?

c Nî ggee guûli zziï #(jii), êa jjiân’ma’xxao.
3s InT thief Cpl say 1s N+believe
I just won’t believe that he’s a thief.

All the examples in (8.39) are drawn from a collection of elicited sentences translated from Chinese. However, they are not intended for eliciting evidentiality. As a matter of fact, the word say does not even occur in the Chinese sentences (cf. also the English translations here). The hearsay jii cannot be left out from (8.39)a, since its omission
would result in an abnormal meaning as if the dream were true. While the omission of \textit{jii} in (8.39)b--c would not lead to total unacceptability, the consultant objected to such a change rather huffily. He questioned, “So the speaker (of (8.39)b) now thinks s/he should be blamed?” This would contradict the discourse context of (8.39)b, in which the speaker is probably having an argument with someone blaming him/her, or the speaker is recounting the unfair blame on him/her to someone else. Thus, the removal of \textit{jii} from the utterance will create an infelicity. Likewise, the speaker’s attitude will have to change in (8.39)c without the use of \textit{jii} (and we will need to replace “won’t believe” with “don’t believe” in the English translation).

In the NSM script, the mirative interpretation can be expressed as follows:

(8.40) A semantic analysis of the mirative \textit{jii}

i. Someone says/sees something
ii. Maybe it is true; maybe it is not
iii. I do not think:
   it is true

The subjective attitude of the speaker in refusing to accept or confirm the truth of a statement being made is indicated in the component in (8.40)iii. Since the mirative does not exclusively concern indirect information, (8.40)i covers sources for both indirect (through hearsay) and direct (through seeing) information.

Another usage of the hearsay clitic \textit{jia} is to signal the imminent happening of an event — a function often associated with evidentiality (cf. Schlichter 1986; DeLancey 1997a), e.g.

(8.41) a sií \textit{jia} kée bbo nee, ...
   die+say time ExT Dc
   \textit{when (he) was about to die, ...}

b Diá jiiddín jīilan qion’ \textit{jia} qii’riu.
   now deluge appear+say do+nInv
   \textit{Now a deluge is about to take place.}

c ēa diá méa nea-kô’xo \textit{jia} bbo, ...
   1s now fire down-put out+Opt say ExT
   \textit{I’m just about to put out the fire now, ...}

When marking an imminent event, the clitic consistently appears in the form of \textit{jia}. It tends to attach itself immediately after the host verb. The optative is the only clitic that may intervene, as shown in (8.41)c.

To summarize, the cliticized \textit{jii} (and its variant forms) is used for marking hearsay information whose truth is not expected to be verified by the speaker. In specific
discourse contexts, the functions of the clitic may be construed as marking quotative, mirative, or imminent future.

8.2.3.2 Involvementality: 'ron/'ru/'rin & 'riu

Another set of clitics relating to evidentiality in Prinmi come to light only with the following pair of sentences:

(8.42) a Büuni ä'bbôn?
today Q+cold
*Is it cold today?*

b Büuni bbôn a'riu?
today cold Q+nInv
*Is it cold today? (Asked by someone who stays indoors.)*

Being asked about the feasibility of forming questions in the two manners above, the consultant accepted both. Then, he voluntarily pointed out that (8.42)b would be used in a situation where the speaker remains indoors and directs the question to someone who is outdoors. In other words, the presence of 'riu in (8.42)b suggests that how the weather is like is not accessible to the speaker directly. In the terminology proposed here, this will be called 'non-involvemental'. The consultant did not elaborate the context for the appropriate use of (8.42)a, which can be inferred as asked by someone who just comes outdoors. Nonetheless, this does not imply that the involvemental is signaled by a zero morpheme in the language; rather, the lack of marking in (8.42)a simply indicates a neutral stand showing no interest in evidentiality. Thus, the sentences in (8.42) only demonstrate a situational contrast. The opposition of 'riu is expressed by one of the three involvemental clitics: 'ron, 'ru, and 'rin, which also signify different person-number agreements.

Adopting Lu’s (1983: 42-43) analysis, I once erroneously regarded the set as aspectual clitics differentiating from one another solely in terms of person-number agreement, parallel to an ordinary verbal paradigm:5

(8.43)

<table>
<thead>
<tr>
<th>1s</th>
<th>2s</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>'ron</td>
<td>'ru</td>
<td>'riu</td>
</tr>
<tr>
<td>1/2p</td>
<td>'rin</td>
<td></td>
</tr>
</tbody>
</table>

5 Lu treats the set of clitics as present tense suffixes. As tense is not a grammatical category in Prinmi, I considered the set as aspectual clitics.
The precise functions of the clitics aside, the purported person-number agreement does not work out nicely either (see Ex.(8.48) below). The earlier misanalysis was in large part due to the progressive implicature often found in contexts such as:

(8.44) a Hëaggi xii’ru?
   where go+Inv:2s
   Where are (you) going?

   b Bódo xii’ron.
   Xingyingpan go+Inv:1s
   (I) am going to Xingyingpan.

   c Nire qee zzii’riû, earë kolô nôn qionlhiân’ggi.  
      3p meal eat+nInv 1p in outside Dc wait+Hrt
      They are having meals; let’s wait outside.

The examples in (8.44) all have a clear sense of progressiveness. This is ascribed to the fact that involvemantality becomes particularly relevant when an act is seen happening at the time of utterance. As this is not the essential meaning of involvementality, the progressive reading does not always arise. For instance,

(8.45) a Èa mansiän: née ea bbêe ggiâ ma’rû.  
      1s know:1s 2s 1s at love N+Inv:2s
      I know that you don’t love me.

   b büu ggee læa düdu, qiä ma’riu.  
      axe InT blunt_Ideophone sharp N+nInv
      The axe is really blunt, not sharp (at all).

   c Èa bbô ku do zzin xii’ron. Èa re dëa-xii’ron.  
      1s EXT head on sit go+Inv:1s 1s first up-go+Inv:1s
      as for me, I’ll go and sit at the top. I’ll go up first.

In (8.45)a and (8.45)b, the progressive reading is impossible, as the host verbs denote respectively a mental state and a qualitative state. While the involvemental in (8.45)c can be potentially construed as having a progressive meaning, this is ruled out on the ground that the discourse context clearly indicates that the act has not yet been initiated at the moment of utterance.

A more important association of the category with aspect is the use of the non-involvemental in generic or gnomic situations. Consider these examples:

(8.46) a Zzonbbâ Lha ggee Zzonbbâ ggia hêe jii’riu.  
      Zzonbbâ god InT Zzonbbâ M god say+nInv
      ‘Zzonbbâ Lha’ means the god of ‘Zzonbbâ’.
This old hen doesn’t lay eggs.

This child was born deaf; (he) can’t hear anything.

The extended usage of the non-involvemental in (8.46) can be attributed to the semantics of the clitic. Unlike the involvementals, ‘riu asserts that the speaker knows about some situation which is not under the control of speech act participants (cf. the semantic analysis in (8.49) below). When the controllability is downplayed, the non-involvemental comes to simply express the speaker’s knowledge about gnomic situations. Perhaps by virtue of their orientation towards speech act situations, the involvementals are not observed to have developed such usage.

Under the proposed analysis, the contrast between the set of clitics will be considered along the lines of involvemental vis-à-vis non-involvemental. The former signifies a direct volitional involvement of the speaker in a situation, entailing the consciousness on the part of the speaker and, where applicable, a possible visual, auditory or sensorial effect to the speaker (its NSM script is presented in (8.49)); the non-involvemental applies to situations with any deviation from these. The relations between these clitics can be depicted as follows:

![Figure 8-1: Contrast between the involvementals and the non-involvemental](image)

The involvemental analysis partitions the clitics into two groups, with a three-way opposition on the non-involvemental against the involvementals. In regard to person-number agreement, only the involvementals are considered to have a valid distinction in this respect. The non-involvemental makes no distinction for person-number agreement. Its frequent association with third-person arguments has its root in the nature of the involvemental system where only speech act participants are considered to be ‘involved’.
A typical context for the use of the involvemental is when visual/auditory evidence is available to the speaker. Consider the following from story texts:

(8.47) a “... ddiâddia bbee hra’rû, hra’rû.”
   granny at laugh+Inv:2s laugh+Inv:2s
   “... (you) are laughing at me.” (said by Granny)

b “Ddiâddia née mèe zzii’ru?”
   granny 2s what eat+Inv:2s
   “Granny, what are you eating?”

c “Èa shèayin soyín zzii’ron.”
   1s fried cereal eat+Inv:1s
   “I’m eating fried cereal.” (replied by Granny)

d “Debbô ma’pée ma’xxian jîi’rin bbo, dî dèa-pèe’xo.”
   then N+spew N+can say+Inv:2p ExT one up-spew+Opt
   “Well, (since you) are saying that (I) must cough (him) up, (I) will do so.”
   (said by the Dragon Queen)

In (8.47)a, the speaker can see the addressee laughing at her at the moment of utterance, whereas in (8.47)b the girls hear some noise of eating in the dark. The use of the involvemental indicates that they are exposed to the situation and are certain of the addressee’s eating something. In the reply, an involvemental also occurs in (8.47)c to signify the consciousness of the speaker about her act. The final example in (8.47)d pertains to a negotiation about a walk-out between the Dragon couple and their human-friendly servants. As a negotiator, the Dragon Queen is surely involved directly in the event. In these instances, the use of the involvementals is compulsory and considered to be the natural way to speak Prinmi by native speakers. The clitics plainly represent an evidential system inaccessible to the speakers’ conscious reflection. Unlike the hearsay jîi, the etymology of the set of clitics for involvementality is obscure. The only extrapolation is that they are most likely to be cliticized from a verb. It remains to be investigated how the opposition of involvementality has developed in Prinmi.

Below we will focus on the use of the non-involvemental with a non-third-person Actor, showing that the actual distinction between ’riu and the other forms cannot be ascribed to person-number agreement, but to involvementality. Let us start with the use of ’riu with a first-person singular Actor:

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6 Woodbury (1986) comments on a similar linguistic unconsciousness of speakers of Sherpa, a Tibeto-Burman language of Nepal.
The use of the non-involvemental in (8.48)a is rather perplexing. The utterance occurs most likely in the context after the speaker has tried to put the shoe on and found it too tight to wear. Clearly there is a sensorial evidence for the statement; yet it is rendered as if it came from an indirect source. Note that the replacement by the involvemental 'ron in (8.48)a would be unacceptable. The inappropriateness for using the involvemental 'ron here will become clear if we consider the meaning of the clitic:

(8.49) A semantic analysis of the first-person singular involvemental 'ron

i. I know:
   something happens

ii. This happens because of me

iii. This does not happen if I do not want this

iv. I see this/I hear this/I feel this

Above the direct source of information in (8.49)iv, 'ron is employed essentially for signifying the consciousness and responsibility for a situation by the speaker, as indicated in (8.49)ii, and the volitionality of the speaker, shown in (8.49)iii (cf. Lin (1993: 194-195) for a similar realization of evidentiality on first-person Actor in Jiarong; also DeLancey 1986a for the interaction between evidentiality and volitionality in Tibetan). These two components apparently go against the situation in which the speaker points out that a shoe is too tight to wear. The speaker cannot consciously exercise his/her will to enlarge the shoe or to shrink his/her foot. Therefore, the default opposite of 'ron — the non-involvemental 'riu — is used, indicating that the speaker lacks the conscious control over the situation. For similar reasons, the non-involvemental is employed when the speaker fails to repair the bicycle in (8.48)b and when the speaker believes s/he is about
to go crazy in (8.48)c. Note that a pair of parallel clauses occur near the end of (8.48)d. The choice of the non-involvemental in the first clause may be out of stylistic consideration. It could be replaced by the same involvemental 'ron in the second clause. To emphasize the consciousness and volitionality of the speaker, the clitic is used only once for the warning in the second clause.

Likewise, when a second-person singular Actor or a first-/second-person plural Actor has no control over a situation, 'riu is chosen instead of 'ru or 'rin:

(8.50) a  née ea bbèe sée a’riu?  
  2s  1s  at  miss  Q+nInv
  Do you miss me?

b Dê lô ggêe ni’ôn née zzû’má’bbêe bbo,
  this  matter  InT  2s+Inst  Dê  N+mention  ExT
  âre nea-meâ’jiâ qiii’riu.
  1pex  down-forget+say  do+nInv
  This matter, if you don’t bring it up, we’re about to forget (it).

In (8.50)a, the choice for the non-involvemental is due to the uncontrollable nature of the mental verb sêe “to miss (someone)”. If the involvemental 'ru were employed, it would suggest that the addressee could voluntarily produce the mental state of missing someone. This was an abnormality the consultant rejected. For the same reason, 'riu is chosen instead of 'ron in (8.50)b with nea-méa “to forget”, which denotes a spontaneous process.

From these examples, it is clear that the non-involvemental does not express person-number agreement; rather, it is used as a default opposite for situations in which the involvements cannot appear.

8.2.4 Temporal implication from Aspect, Modality, and Evidentiality

Aspect, modality, and tense are generally considered to be closely related to one another (cf. Bybee, Perkins, & Pagliuca 1994). Of these three categories, Prinmi has a rather elaborate system for aspect and modality while the concept for tense is realized mainly by lexical items. Although tense is not a grammatical category in the language, aspectual/modal/evidential clitics imply a certain amount of temporal information. Table 8-3 summarizes the temporal implication associated with nine clitics, in terms of Past, Recent [past], Present, Imminent [future], and Future.
Table 8-3: Temporal implications by evidentiality, aspect, and modality

<table>
<thead>
<tr>
<th>Modality</th>
<th>Past</th>
<th>Recent</th>
<th>Present</th>
<th>Imminent</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volitive 'gai</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Optative 'xo</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Hortative 'ggi</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Involvemental 'rV</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Non-involvemental 'riu</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Heresay jīi</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Perfective 'sV</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Experiental 'duu</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Durative 'non</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

Where variant forms exist through vowel alternation, the set of clitics are represented with ‘V’ in place of the variable vowels. The symbol ‘+’ in the table indicates the time reference with which a clitic is most likely associated; the symbol ‘*’ indicates a less likely time reference; and the symbol ‘−’ denotes an impossible temporal implication.

The temporal implication from the modal clitics is the most consistent. The three share a similar tendency to refer to situations in the immediate future and none of them may imply a time in the past, not even in the recent past. Thus, they can be described in temporal terms as ‘non-past’ and ‘future’. In the same vein, the evidential as a whole may be regarded as ‘non-past’ and ‘non-future’, spanning from ‘recent past’ to ‘imminent future’. It is more difficult to characterize the aspectual clitics in such temporal terms. While the perfective and the experiential strongly favor a past situation, including the recent past, the durative does not imply a particular temporal location.

8.3 Attitudinal clitics

Occurring at the end of an utterance, attitudinal clitics usually bring in some extra information about the speaker’s attitude or emotional state at the time of speaking. The kind of emotion involved is not as punctual and intense as that expressed by interjections. The four attitudinal clitics to be introduced below are used quite commonly in Niuwozi Prinmi.

8.3.1 The surprisive ggia

The ‘surprisive’ clitic ggia generally conveys a sense of surprise which may or may not lead to other feelings. Its meaning can be written in the NSM script as follows:
A semantic analysis of the surprisive *ggia*

i. Before I thought something was like this
ii. Now I know it is not like this
iii. I feel something because of this

The following examples from the *Deluge* story provide nice illustration for the use of the surprisive clitic.

(8.52) a nee ni’ôn ea bbêe chée ma’rû *ggîa.*

2s Dc+Inst 1s to feed N+nInv:2s Sprs

*You haven’t bloody fed me any.*

b dejjêe non ëf nea-zzôn’sî *ggîa.*

here Dc one down-sit+Pf Sprs

*oh, one is sitting right here.*

After the Dragon couple have started a flood in order to extinguish humans, they return home tired and hungry. They have long eyelids and have to keep their eyes closed all the time. When they are having their meal, the couple affectionately take some food and give it to each other. The only survivor of mankind has somehow come to their place. Starving as he is, he stands in between the two creatures and picks up the food they give to each other. After a while, a quarrel breaks out. The utterance in (8.52)a is made when they accuse of each other being inconsiderate. Later when the Dragon Queen opens one of her eyes and sees the young man, she utters her surprise with the attitudinal clitic, as in (8.52)b.

8.3.2 The suggestive *ma*

The ‘suggestive’ clitic *ma* is used for softening an utterance by presenting it as a suggestion. It often occurs in requests, e.g.

(8.53) Zéa tea ssho’sî. Chalaa dî têa-bu *ma.*

hot fr.sp-exceed+Pf idea one fr.sp-do:2s Sprs

*It’s too hot. Why don’t you do something about it?*

The use of *ma* in (8.53) has rendered the sentence less abrupt and the utterance more polite. An NSM script for *ma* in such use can be written as follows:

(8.54) The meaning of the suggestive *ma* in making requests

i. I want you to do something
ii. You do not do this if you do not want to
iii. I think it will be good if someone does this
iv. Maybe you think the same
The suggestive clitic can also be used as some sort of opening utterance before one proceeds to perform what is requested or volunteered, e.g.

(8.55)  Jiiddīn jīilān ggia xxiānhiaandōn ggee ddee-a-hīn dī bian ma.
       deluge M story InT to.sp-tell one do:1s Sgst

Let me tell a story about the deluge.

With the change of discourse setting, a variant NSM script is needed to portray the use of ma in (8.55). The following will be appropriate:

(8.56) The meaning of the suggestive ma in giving offers
       i. Someone wants me to do something
       ii. I think it will be good if someone does this
       iii. Maybe you think the same
       iv. I will do this

The modified script shows that what the speaker is about to do is for the benefit of the others even if s/he has volunteered it.

8.3.3 The speculative ba

The ‘speculative’ clitic ba is used for a conjectural proposition. It often appears in questions about the feeling of the addressee, e.g.

(8.57) jēeron ba?
       hungry Spcl

getting hungry, eh?

The meaning of ba can be rendered in NSM as follows:

(8.58) A semantic analysis of the speculative ba
       i. I know:
           something happened to you
       ii. If it happened to me, I would feel like this
       iii. Maybe you feel the same now

The use of ba suggests a sense of empathy, as indicated by (8.58)ii. The speaker may or may not be subject to the same experience, but the clitic signals that s/he would understand the kind of feeling the addressee may have.

8.3.4 The assumptive ’me’

Unlike other attitudinal clitics, ’me’ does not occupy at the very end of a clause. From the sporadic cases in which it occurs, the clitic appears to be used in non-
affirmative sentences only. It is attached to a host immediately after the negative or interrogative clitics, e.g.

\[(8.59)\] a Qüä xüé, dëa_xxia bo nia dea pá nea-sfi,
pig eight one_night under Dc one_half down-die

\[\text{qiia_niân ma'me'zzii.}\]
\[\text{pig_disease N+Asmp+Cpl}\]

*Eight pigs, half of them died in one night, (I hope) it won't be an epidemic.*

\[b\] Sianhńi ēa bônbon bbo xuxü Cüuxxii xii a'me'xxian?
tomorrow 1s uncle Dc together Cuiyi奇幻 go Q+Asmp+may

*May I go to Cuiyi together with Uncle tomorrow, (please)?*

The function of *me* is to signal a positive assumption taken by the speaker towards an uncertain situation. In (8.59)a, the speaker suspects of a pig epidemic, but s/he is making a positive assumption and hoping that this is not the case with the use of *'me'*.

Likewise in (8.59)b, the use of the assumptive clitic suggests the speaker's anticipation of an affirmative answer. If such construal of the assumptive clitic is correct, it is of no surprise that the clitic should be restricted to non-affirmative sentences, since an affirmative sentence cannot convey an uncertain situation. The meaning of the clitic can be expressed in NSM as follows:

\[(8.60)\] A semantic analysis of the assumptive *'me'*

i. I do not know about this
ii. I think it is good
iii. I want it to be good

8.4 Grammatical categories and classification of Prinmi verbs

Now that the major verbal categories in Prinmi have been discussed, we can substantiate the semantic classification of Prinmi verbs sketched in §4.2.1. Under Chafe's (1970) scheme, Prinmi verbs have been semantically classified into three groups: Action, Process, and State. Table 8-4 shows twelve morpho-syntactic properties in different semantic types of verb. The auxiliary verb is also included for comparison, since this lexical category is closely related to verbs. All the verbal categories but for directional are expressed with clitics discussed in §8.1 and §8.2. These are tabulated below in a descending order according to their applicability to Prinmi verbs.

The notations used in the table read as follows: 'Y' for a property definitely associated with a group; 'N' for an unattested property; 'y' for a property generally associated with a group but with some exceptions; and 'n' for a possible but not characteristic property of a group. Such precaution is necessary for two reasons. Given the general level dealt with here (e.g. further subtypes can certainly be identified under the
broad grouping of Action verbs), the information presented in Table 8-4 cannot be regarded as definitive. It is only intended as a general portrayal of the semantic interaction between Prinmi verbs and the common verbal categories. The other reason lies in the small scale on which Table 8-4 is based. Explicit elicitation and consultation is conducted only for about thirty-two verbs, although reference has been made to instances of verbs found in the collected texts. Therefore, refinement is envisioned when more verbs are under scrutiny. Whereas a ‘Y’ may turn out to be a ‘y’ or a ‘N’ to a ‘n’ in certain cases; such dramatic changes as a ‘Y’ becoming a ‘N’, or vice versa, is unlikely.

Table 8-4: Verbal properties of various types of verb
(AME=Aspectual/Modal/Evidential clitic)

<table>
<thead>
<tr>
<th>Verbal Property</th>
<th>Action</th>
<th>Process</th>
<th>State</th>
<th>Aux. verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1a] Interrogative</td>
<td>(Prefix-)a’V</td>
<td>y</td>
<td>Y</td>
<td>y</td>
</tr>
<tr>
<td>[1b] V a’AME</td>
<td>Y</td>
<td>y</td>
<td>N</td>
<td>n</td>
</tr>
<tr>
<td>[2a] General negator</td>
<td>ma’V</td>
<td>n</td>
<td>n</td>
<td>y</td>
</tr>
<tr>
<td>[2b] V ma’AME</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>n</td>
</tr>
<tr>
<td>[3] Durative</td>
<td>V’non</td>
<td>Y⁺</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>[4] Volitive</td>
<td>V’gai</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>[5] Non-Involvemental</td>
<td>V’riu</td>
<td>Y</td>
<td>y</td>
<td>N</td>
</tr>
<tr>
<td>[6] Directional prefix</td>
<td>Prefix-V</td>
<td>Y</td>
<td>Y</td>
<td>n</td>
</tr>
<tr>
<td>[7] Perfective</td>
<td>V’si</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>[8] Perfective negator</td>
<td>mee’V</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>[9] Optative</td>
<td>V’xo</td>
<td>Y</td>
<td>n</td>
<td>N</td>
</tr>
<tr>
<td>[10] Desiderative negator</td>
<td>dia’V</td>
<td>Y</td>
<td>n</td>
<td>N</td>
</tr>
<tr>
<td>[12] Hortative</td>
<td>V’ggi</td>
<td>y</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

The order of the various semantic types of verb in Table 8-4 also corresponds to their abilities to feature the properties under discussion. From the left, Action verbs are the ablest and State verbs on the right are the least so (excluding auxiliary verbs). The auxiliary verbs resemble State verbs in having a low verbhood. The two differ most notably in that most auxiliary verbs are unable to host a durative clitic, as shown in [3].

In §8.1 above, it is pointed out that the interrogative clitic a’ and the general negator ma’ can be attached either before the host verb or after the host. The order is subject to several factors. The semantic type of the verb is an indirect factor, since not all verbs can host an Aspectual/Modal/Evidential clitic. Therefore, the interrogative clitic and the general negator are each treated with two separate patterns in Table 8-4. By and large, the pre-host attachment of the interrogative is the most observed verbal property in Prinmi.
As indicated in [1a], this interrogative pattern is found in all kinds of verbs, albeit with certain exceptions. For verbs affixable with a directional prefix, some allows the pre-host interrogative only in the presence of a directional prefix, especially Action verbs. Simplex State verbs readily accommodate the pre-host interrogative, but not those comprised an ideophone (cf. §4.3.6). This morphological class of verb is unusually low in verbhood, representing the lone type of verb that is difficult to appear in interrogative or negative sentences.

The pattern for interrogativity in [1b] applies less widely, due to the prerequisite for a complex clitic. The post-host interrogative must occur in a complex form with one of the following: the volitive, the (non-)involvemental, the optative, or the experiential. Since State verbs cannot host any of these clitics (as shown in [4], [5], [9], and [11]), this pattern for attaching the interrogative is unavailable to them. Likewise, the post-host negative pattern in [2b] is also unattested for State verbs. Negation on these verbs takes place directly with the clitic attached before the verbs, i.e. the pattern in [2a]. On the other hand, non-State verbs strongly prefer the post-host pattern in [2b] to the pre-host pattern in [2a]. The direct negation on Action verbs is possible only in conditional clauses; elsewhere the post-host complex form is used to express sentence negation.

While the durative can be attached to most verbs, a noticeable syntactic difference exists between its use with Action verbs and non-Action verbs. As noted in §8.2.1.4, a durative-marked Action verb occurs in dependent clauses only. The dagger mark ‘†’ in the table is meant to indicate this syntactic feature.

As can be seen from the table, State verbs tend not to have properties listed from [4] to [12]. This tendency shows a rather clear difference between State verbs and the other types of verb. Occasionally some State verbs may be found to host a clitic for those properties indicated as ‘N’, e.g. the perfective. This is due to polysemy/homophony between some State verbs and Process verbs. In such instances, the verbs must be construed as Process verbs, not State verbs. The properties from [9] to [12] are useful for distinguishing Process verbs from Action verbs. The two groups of verbs share considerable properties but they differ in these properties.

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7 Superficially, derivation from State to Process seems to be involved. But it is not convincing to regard a property such as perfectivity expressed by a perfective clitic as a result of the clitic deriving a Process verb from a State verb (cf. a similar effect found with directional prefixes in §5.2.1).
Chapter 9.

The Copula, Existentials & Auxiliary Verbs

The copula and existentials are grammatically quite similar to auxiliary verbs. Like auxiliary verbs, they tend not to take directional prefixes, and do not host verbal clitics other than the interrogative and negative ones. The copula and existentials arguably function as auxiliary verbs in periphrastic constructions such as the obligational construction and the potentiative construction. Thus they are addressed together with auxiliary verbs in this chapter.

All Prinmi auxiliary verbs take a complement clause that does not receive any morphosyntactic marking. Auxiliary verbs differ from verbs of cognition, which can also take a morphosyntactically unmarked complement clause (see §11.3.2), in that the complement clause of auxiliary verbs is compulsory; it cannot be replaced or substituted by a noun phrase. Compare the verb of cognition in (9.1) with the causative verb in (9.2):

(9.1) a Debbó dê mí ggee dê’rê tea-jüân kēe bbo, ...
then this person InT this+p fr.sp-see:3 time Dc
Then when this guy saw all these, ...

b ejjee hniqiön dî nea-azzôn tea-jüan’si.
there boy one down-sit:2 fr.sp-see:3+Pf
(she) saw a young fellow sit there.

(9.2) bai_zheå ggee bbo sianbhôn ggiå bbånbo nea-azzin gee.
brother_big InT Dc tree M bottom down-sit let:sbj
(you) let Big Brother sit at the bottom of the tree.

The verb jiän “to see” may occur with a nominal argument, as in (9.1)a, or with a clausal complement, as in (9.1)b. Only the latter option is available to auxiliary verbs, as exemplified with the causative auxiliary in (9.2). (The variation on the vowel of.zzin “to sit” in the examples is irrelevant to the syntactic structure, see §5.2.4 for discussion of this phenomenon.)

Based on this characteristic, an interrogative test can be adopted for diagnosing auxiliary verbs. Since only the complement clause of verbs of cognition may be replaced by the interrogative pronoun mee “what”, a negative result of the test will indicate that the
complement occurs with an auxiliary verb. Applying the test to (9.1)b and (9.2), we have the following results:

(9.3) The interrogative test

a  Mée tea-jiān’si?  
   what fr.sp-see:3+Pf
   What did (she) see?

b  *bāī zhēā ggee bbo mēē gee?  
   brother_big InT Dc what let:sbj

Identified as compulsorily taking a complement clause, auxiliary verbs involve a complex syntactic structure which will be addressed in §11.3. This chapter will focus on the meanings and functions of auxiliary verbs only. It covers a variety of auxiliary verbs found in Prinmi, including the deontic modals (§9.2), the epistemic modals (§9.3), the doing verbs (§9.4), the aspectual auxiliaries (§9.5), and some minor types of auxiliary verbs (§9.6). The causative auxiliary will be discussed with the causative construction in §11.2.1. The present chapter starts with a description of the copula and existentials.

9.1 The copula and existentials

Prinmi has only one copula, but it has a set of etymologically unrelated existentials. The existentials do not convey possession. A separate verb *bbōn “to have” is used. The possessive verb behaves like other bivalent verbs; it is not included for detailed description (for its inflections, see Table 5-3). Below we will first investigate the copula and two periphrastic constructions headed by it. Then the set of existentials and the potentive construction will be examined.

9.1.1 The copula *zzii

The copula *zzii “to be” has a total of four variants, agreeing in person-number with its argument:

(9.4)

The copula does not take any directional prefix. The only clitics that can be attached to the copula are the interrogative *a’ and the general negator *ma’.

The copula is used mainly in ascriptive sentences and, to a lesser extent, in equational sentences to link a nominal predicate to the Theme, e.g.
Ascriptive sentences

a Eazzän tēa-tion zzhezzhu ḏēn.  
1dōn fr.sp-harmony friend Cpl:1p  
We two are congenial friends.

b Ḹa Prīnmā má’ddiān, Xiea ddīān.  
1s Pumi N+Cpl:1s Han Cpl:1s  
I’m not a Pumi, but a Han Chinese.

Equational sentences

a [Deajin dea_gea ggia ḥin wu’a hèe] ggee bbo  
one_house one_family M house in+M god InT Dc  
[ZZonbbā Lha] ggee zzii.  
ZZonbbā god InT Cpl:3  
The household god of every family is the ‘ZZonbbā’ god.

b [Aabū xiän kūē bbei niān qī’riu] ggee bbo  
grandpa Foc heart at sore do+nInv InT Dc  
[eńa] ggee ddīān.  
1s InT Cpl:1s  
I’m the one Grandpa cares the most at heart.

Functionally, equational sentences identify the Theme with the entity in the predicate; whereas ascriptive sentences supply additional information to a Theme whose identity is already known in the discourse. Equational sentences further differ from ascriptive sentences in the feasibility of switching the positions between the Theme and the nominal predicate. The two constituents within the pairs of brackets in (9.6)a can exchange their positions with little semantic change, but some modification on the discourse setting. Such permutation is not always possible, however. In (9.6)b, the Theme is a clausal topic and it cannot be switched with the predicate, for a clausal topic cannot function as a predicate in equational sentences. Moreover, the pronoun Ḹa “I” in the predicate is inherently identity-known. When it is placed in the Theme position at the beginning of (9.6)b, the sentence can no longer be construed as an equational sentence. Notice also that the copula in (9.6)b agrees with Ḹa “I” in the predicate. Although the Theme and the predicate are both marked as internal topics in (9.6), the double topic marking is not mandatory in an equational sentence. The topic clitic after the predicate can easily be omitted without affecting the overall meaning of the sentence (see further discussion with Ex.(12.16)).
The Prinmi copula is never used to link an adjective to an argument. Sentences like (9.7) are unacceptable.

(9.7)  *
this cloud InT white Cpl

The cloud is white.

The other function of the copula is to form tag questions:

(9.8) a Née Pêawû ddao, â’zzii?
2s Boar Cpl:2s Q+Cpl
You are a Boar (i.e. born in the year of Boar), right?

b Dé mî ggon gge-zzii’si, â’zzii?
this person Inst out-eat+Pf Q+Cpl
The man ate (it), right?

c Née dê deanea_hni non jîn xi tea-hrûü’si, mâ’zzii a?
2s this few_day Dc house new fr.sp-buy+Pf N+Cpl Q
You’ve bought a new house recently, haven’t you?

Forming a tag, the copula is formally invariable; the copula and the attached clitic(s) are intonationally separate from the rest of the sentence with a pause.

Prinmi also has a quasi-copula zzhon “to become”. In addition to linking a nominal predicate, as in (9.9), the quasi-copula must be employed when the predicate is a temporal noun, as shown in (9.10).

(9.9) Gi_zuu xao’non rô ma’zzhon;
cuckoo_son raise+Dur chicken N+become
Lêa_zuu xao’non qîi mâ’zzhon.
wolf_son raise+Dur dog N+become
A young cuckoo raised at home won’t become a chicken; and a young wolf raised at home won’t become a dog. (Proverb)

(9.10) a Dîa son_hni zzhon ra hni goyî dde-qion.
again three_day become nLnv:M day crow to.sp-appear
The Crow came over again on the third day.

b Jian ggêe qîi giü zzhon’si?
child InT how many_year become+Pf
How old is the child?

Used as a quasi-copula, zzhon tends not to occur with directional prefixes, but it can host verbal clitics, as seen in (9.10)b.
The obligational construction -yi zzii

In conjunction with the nominalizer -yi, the copula zzii "to be" constructs a periphrasis for expressing a kind of obligation. The construction will be referred to as the 'the obligational construction'. The kind of obligation involved here differs from that conveyed by the obligative modal ku (§9.2.2) in that the obligational is objective in nature. That is, the obligational can be regarded as induced directly (subject to cultural considerations) from a situation; it is not imposed by someone else.

To reveal the actual context in which the construction appears, the examples in (9.11) are supplied with an additional sentence (in braces) following the construction:

(9.11) a Mēe tea-qii-yi zzii? {Lō tea-biā’si ggee nonhnî what fr.sp-do-nm Cpl work fr.sp-work+Pf InT next day jîān-yî ma’xi tea-zzhon’riu.) see-nm N+exist fr.sp-become+nlnv

What should (we) do? (Work that has been done becomes nothing the next day.)

b Xii_bbā hmeggiān, Xii_bbā buddī bbee Dragon_family oldman Dragon_family oldwoman at qee chee-yî zzii. {Nire jēerôn, diá tea-ddāo’si.) meal feed-nm Cpl 3p hungry now fr.sp-tired+Pf

(We) should serve food to the Dragon King and the Dragon Queen. (They are now hungry and exhausted.)

The question as to what is to be done in (9.11)a is intended to be viewed in the light that efforts for farming have been wasted. Likewise, in (9.11)b the proposition that meal is to be served is pronounced with the observation that the masters (the Dragon King and the Dragon Queen) are now hungry. The non-imposed nature of the obligational can be seen clearly from the context, especially in the former.

Sometimes the obligational meaning of the construction may be rendered rather vaguely. Consider the following examples taken from another story: 2

2 Additional sentences are not included for the examples in (9.12), since they do not contain relevant information.
The obligational construction in (9.12)a concerns the Golden Pheasant’s wish to wear clothes as beautiful as the Cuckoo’s. The sense of obligation is self-induced from jealousy. The obligation in (9.12)b needs to be viewed with cultural considerations. The story makes no mention of why the Golden Pheasant must go for the wedding banquet; in fact, this is a lie by the Golden Pheasant to trick the Cuckoo. Since an invitation is not itself an obligation, the obligational meaning is due to Prinmi culture, in which the attendance of such social gatherings as a wedding banquet is taken as an indicator of mutual support.³

Perhaps it would be helpful to analyze the meaning of the obligational construction in some explicit and simple terms. The following NSM script is proposed:

(9.13) A semantic analysis of the obligational construction -yi zzii

i. Something happens

ii. Nobody says to me:

you do this

iii. I do this because I think:

it will be good if I do it

That the kind of obligation is not imposed by others, but self-induced, is expressed in (9.13)ii and (9.13)iii. This characteristic leads to an unusual property of the obligational construction — it does not appear in yes-no questions, i.e. the copula cannot host the interrogative clitic before it. While it is possible to seek information as to what to be done (cf. Ex.(9.11)a or Ex.(9.14)b), the proposition in (9.13)iii cannot be questioned. Given a natural context, the obligational is either unambiguously inferable or it does not arise. It is a clear-cut matter under the discretion of the speaker.

³ The host may refuse to attend future functions held by a guest who fails to attend the wedding without a good reason. Hence the absence may lead to a degraded relationship between the guest and the host. In this connection, an invited guest is obliged to attend the banquet.
As is clear from (9.14), the copula does not inflect in the obligational construction — indeed, person-number agreement is not found on any verbs in the construction.

(9.14) a Ẹa ni’ ön nee nî bbee kūi qii-yî mâ’zzii / *mâ’ddian.

1s Dc+Inst Dc 3s at pity do-nm N+Cpl N+Cpl:ls

_I shouldn’t pity it._

b Ẹa mée tea-qii-yî zzii / *ddian?

1s what fr.sp-do-nm Cpl Cpl:ls

_What should I do?_

The main verbal property exhibited by the copula is the ability to host the negative clitic, shown in (9.14)a. The reason for not treating the copula as a clitic is that the construction requires a mandatory nominalization. The nominalization is not difficult to explain, since the copula takes only nominal arguments. Moreover, it is possible to have an adverb before the copula, e.g.

(9.15) kusian non xii-yî da zzii.

third day Dc go-nm only Cpl

_(you) only ought to go the day after tomorrow._

The obligational construction can be analyzed in two ways: ascriptively or non-ascriptively. Outlined in (9.16) and (9.17) respectively are the two workable analyses:

(9.16) An ascriptive analysis of the obligational construction

Theme + [Predicate + yi]Nominalized + zzii

(9.17) A non-ascriptive analysis of the obligational construction (to be adopted)

[Clause + yi]Nominalized + zzii

In either analysis, the nominalizing function of the suffix -yi need not be debated. The contention is on the scope of the nominalization: whether its target is the predicate alone or the entire clause preceding it. The different scopes have a direct consequence on the function of the copula in the construction.

Under the ascriptive analysis, the copula functions exactly the same as it does in ascriptive sentences. It serves to link the nominal predicate to the Theme. The fundamental difference between the two will then be the mandatory interpretation of the Theme as identical to the Agent of the embedded verb. On the other hand, under the non-ascriptive analysis, the nominalization results in a clausal argument, with no predicate to be linked by the copula. The extension of the nominalization scope has the advantage of forgoing the need for a semantico-syntactic control between the Theme and the Agent in the other analysis. Furthermore, the analysis also predicts an invariable form for the
copula, as the sole argument in the construction is always understood as third-person. In the light of its simplicity over the coreference and explanation of the lack of inflection, the non-ascriptive analysis outlined in (9.17) will be adopted.

The structure of the obligatory construction, as proffered in (9.17), is rather simple: It is headed by the copula zzi, which takes a nominalized clausal argument. The verbal suffix -yi is the only nominalizer designated for the obligatory construction. The nominalized clausal argument tends to be structurally simple and must be headed by verbs denoting a performable act. A relatively complex predicate found in the construction is the one given in (9.18)a, with the argument consisting of two chained clauses. (The clausal arguments in the examples are placed within a pair of brackets.)

(9.18) a [Èa diá mūre wu p̃_tian, weam̃̃ qii xii-yi] zzi.  
1s now people in beer_drink guest do Pps-nm Cpl  
*Now I need to go to a wedding banquet as a guest.*

b Teasän bbo née Xii_bb̆̇ zhín nea-q̃̃ xo;  
grasshopper Dc 2s Dragon_family mortar down-pound Pps:2s  
zhín sŝ̃̃l̆̇lo nea-ẑ̃̃o, — [qee zẑ̃̃-yi] zzi.  
mortar carefully down-hit meal make-nm Cpl  
*Grasshopper, you go and pound the mortar for the Dragon family; do a good pounding — (we) need to make meals.*

It is also possible for the obligatory construction to occur as part of a clause-chaining sentence (see §10.3). In (9.18)b, the final clause in the clause-chaining sentence is an instance of the obligatory construction. Unlike that in (9.18)a, the scope of nominalization in (9.18)b does not extend to the preceding clause. This is clear from the different Agents involved between the clauses. The Agent from the first two clauses in the sentence is née “you (singular)”, referring to the Grasshopper, but the Agent for the final clause is the whole group of servants including the Grasshopper and others.

9.1.1.2 The focus-presupposition construction -mi zzi

Another periphrastic construction headed by the copula is the focus-presupposition construction. The designated nominalizer for the construction is -mi, derived from mi “person”. The construction is used to signal an emphasis on a variety of focus elements. Its effect approximates the vague English expression “what I’m saying is”. Below are some representative examples:

(9.19) a XiÄn ggōn gge-zāo-mi zzi.  
iron Inst out-hit-nm Cpl  
*(The tool,) what I’m saying is: (it) is forged from iron.*
Prima facie the focus-presupposition construction remarkably resembles the obligational construction. Both of them require nominalization and consist of an uninflectional copula, which may be negated, but does not host the interrogative clitic before it. With such similarities, it is tempting to analyze the focus-presupposition construction along the same lines as the obligational construction, i.e. regarding the scope of nominalization as covering the entire clause, shown in (9.20):

(9.20) A non-ascriptive analysis of the focus-presupposition construction
[Clause + $\text{mi}^{\text{Nominalized}} + \text{zzii}$]

(9.21) An ascriptive analysis of the focus-presupposition construction
Theme + [Predicate + $\text{mi}^{\text{Nominalized}} + \text{zzii}$]

Nonetheless, we will need to adopt the ascriptive analysis with a narrower scope, as sketched in (9.21), after considering the structural ambiguity of the focus-presupposition construction with ascriptive sentences and the pragmatic function of the construction. The latter will be dealt with at some length in §12.5. Briefly put, the Theme in the focus-presupposition construction has the pragmatic status of topic, the construction is used to highlight information about this topic. The topic need not be overt, as in (9.19)a–b above, and it need not be identical to the Agent of the embedded verb. In (9.21)c, the topical Theme is seelâo “pear”, but the Agent is $\text{ea}$ “I”. This difference is sufficient to set the structure of the focus-presupposition construction apart from that of the obligational construction.

Let us have a look at the structural ambiguity between the focus-presupposition construction and ascriptive sentences. Consider the two readings of the following sentence:

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4 Be reminded that the term ‘Theme’ in this description refers to a semantic notion (cf. §6.1), not the pragmatic notion used by some linguists as in Halliday (1985), for example.
The sentence in (9.22) explains the important role of the ‘Zzonbba’ god. Even in the context, it is equivocal; both readings differ little in logical meaning, and they are equally appropriate in the discourse context. To a large extent, the equivocal is attributed to the meaning of the morpheme mi, which is grammaticalized to a nominalizer from the lexical sense of “person” (see §5.2.2.1 for details). When the morpheme is construed in a relatively concrete sense as a derivational suffix, with pēa sshāa-mi analyzed as “messenger (lit. news carry-er),” the sentence acquires an ascriptive reading. It seems plausible that the focus-presupposition construction may derive from ascriptive sentences through reanalysis of the function of -mi as a nominalizer.

There is a tendency to bypass the nominalization on the predicate in the focus-presupposition construction. Consider the pairs of sentences translated by two different consultants from Niuwozi:

(9.23) a  hēe ggon tea-hruu-mi zzii? (by the old consultant)  
who Inst fr.sp-buy-nm Cpl  
(Such a stud), what I’m saying is: who bought (it)?

b  hea ggôn tea-hruu’si zzii? (by the young consultant)  
who Inst fr.sp-buy+Pf Cpl  
(Such a stud), what I’m saying is: who bought (it)?

(9.24) a  Qēe ea-wâ déa-mee’hmiān ggee zzïi ma’xxian-mi zzii. (old cons.)  
meal in-cook up-Npf+ripe InT eat N+can-nm Cpl  
Rice not cooked to ripeness, what I’m saying is: (it) cannot be eaten.

b Qēe déa-mee’hmiān ggee zzïi xxiān ma’rīü ^ zzii. (young cons.)  
meal up-Npf+ripe InT eat can N+nlnv Cpl  
Rice not well cooked, cannot be eaten — that’s what I’m saying.

As shown in (9.23)a and (9.24)a, the old consultant employed the suffix -mi to nominalize the predicate. The young consultant, on the other hand, simply rendered the

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5 The same is also observed in the focus-presupposition construction used by the consultant from Xichuan, whose dialect is quite close to Niuwozi Prinmi.
focus-presupposition construction by supplying the copula after a clause in (9.23)b and (9.24)b. Note that the corresponding embedded verbs in these sentences are able to retain the perfective clitic 'si and the non-involvemental clitic 'riu, since they have not undergone nominalization. Notice also that the young consultant was hesitant about the use of the focus-presupposition construction in (9.24)b. The advent of the copula was delayed by a noticeable pause. The contrast in (9.23) and (9.24) seems to suggest a variation between different generations, but the innovation concerning the nominalizer omission cannot be regarded as a case of generational variation. The omission is also found in the focus-presupposition construction used by the old consultant on quite a few occasions.

The unstable status of the nominalizer -mi in the construction is illustrated best in the following sentence:

(9.25) Zzonbbâ Lha ggee heaggî ddea-qiôn('si)-mi zzii?
ZZonbba god InT where to.sp-appear(+Pf!!)-nm Cpl

The ‘ZZonbba’ god, what I’m saying is: where did (he) come from?

When the sentence was first uttered by the old consultant during the recording, it ended with the perfective 'si in the form of a plain question. The focus-presupposition construction was not chosen until the text was transcribed and edited. For some reason, he thought he would render the sentence in the focus-presupposition construction by simply adding -mi zzii after the perfective 'si without deleting it. Given my response of surprise, he commented that many people from Niuwozi were using it in this way. On the basis of my observation, what he meant in explicit linguistic terms is probably that more and more people do not bother to nominalize the predicate of the focus-presupposition construction in casual speech nowadays. The old consultant himself was aware of the oddity of the sentence. When he read out the text to an audience of Prinmi speakers from different villages, he aptly omitted the perfective in the parentheses. Without the pressure of speaking ‘good’ Prinmi in a formal setting, the consultant considers the simplification to be acceptable.

9.1.2 Existentials

Prinmi has six existential verbs, encoding some refined information in addition to the existence of an entity. These existential verbs could be roughly classified as follows:6

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6 Some other Tibeto-Burman languages also have an elaborate set of existentials, developed independently (cf. LaPolla 1994: 75).
(9.26) Conceptual:  xi "(of abstract things) to exist"

Existentials

  ANIMATE:
  xxēe "(of animate) to exist"
  jjiān "(of animate) to exist among a group"

Concrete

INANIMATE:
  ddiōn "(of inanimate) to exist"
  gūēe "(of inanimate) to exist in something"
  dā "(of inanimate) to exist on something"

The classification in (9.26) is only an approximation. The division between the Conceptual and the Concrete does not correspond to a firm opposition as between the ANIMATE and the INANIMATE. In fact, not all existentials contrast systematically to one another as appears to be suggested by (9.26). In particular, two existentials usually used for inanimate objects can cross over the boundary of abstractness and occur with abstract things (see Ex.(9.27) & (9.28) below). The following diagram presents a more detailed picture for the use of the existentials:

Figure 9-1: Semantic features associated with Prinmi existentials

The kind of distinction sensitive to the choice of a particular existential does not lead to a general classification of Prinmi nouns, except for the notion of animacy. That is, we are unable to identify several classes of nouns on the basis of which existentials they may take. Figure 9-1 illustrates that at least two existentials can occur with more than one type of noun. They are exemplified in (9.27) and (9.28) respectively.

(9.27) a ggo’rē siangbōn mā’ddion, ...
   hill+p tree N+existn
   the mountains had no trees ...

   b bī xi yon ddiōn
   maxim exist knowledge existn
   there are adages

(9.28) Mi wu qī ea-gūēe; ddiān wu cī ea-gūēe.
   person in religion in-existn earth in salt in-existn
   There is faith inside a person; there is salt inside the earth. (Proverb)
The existential *ddiòn* in (9.27) is primarily used with inanimate objects such as houses, trees, and body parts. In (9.27)b, we find an instance of its occurrence with an abstract noun, perhaps out of stylistic consideration (as the expected existential *xi* has been used in the short expression). The existential *gùée* is similar to *ddiòn* in regard to concreteness and animacy, but it further specifies that the object exists inside something. The proverb in (9.28) employs this existential twice, first with a conceptual noun *qi* "religion", and then with a concrete one cf. "salt".

On the other hand, it is also feasible for a noun to select different existentials under various circumstances, e.g.

(9.29)  
(9.29) a  zuû ma’xi  
son  N+exist  
*have no son*  

(9.29) b  Bùuni bbo ãabon bbo dia bbô ma’xi.  
today ExT father ExT now ExT  N+exist  
*Today, right now, (we) have no father.*

Despite being an animate noun, *zuû* "son" occurs with the conceptual existential *xi* in (9.29)a, for it refers to the concept of male offspring rather than any actual individuals. Likewise in (9.29)b, the girls abandoned by their father make use of the conceptual existential in referring to him instead of the ANIMATE one *xxée*, which would only convey that the father was not there for the time being. Depending on the specific context, many nouns denoting objects may appear with one of the three INANIMATE existentials. Thus the use of a particular existential does not operate on any classification of nouns beyond animacy.

The existentials do not inflect for agreement. Some of them may take a directional prefix occasionally. All the existentials are syntactically intransitive, although they often appear with an adjunct showing where or in what context the core argument exists, e.g.

(9.30)  
(9.30) a  Debbo chaláa ma’xi; ...  
then idea N+exist  
*Well, (they) have no (other) idea; ...*  

(9.30) b  Sshôn heaggi xxée?  
sheep where existan  
*Where are the sheep?*  

(9.30) c  Mia’re bbo ea dô geazai dî mâ’jjian/mâ’xxée.  
soldier+p ExT me on small one N+exist$_{ung}$/N+exist$_{an}$  
*Among the soldiers, no one is smaller than me (lit. one smaller than me doesn’t exist).*
d Yi_züu ggia lö’a dëa_jee ggee mealhee ddiön.
conch_son M outer+M one_circle InT flame exist\_man

Outside the small conches, there are flames around them.

e Èa lhazû nea-ggâ yahá è-wu güee.
1s finger down-detach all there-in exist\_in

My fingers fell off, and all were inside there.

f Yi_züu bonbbâ ddin ddin dai.
conch_son vase pair pair exist\_on

There are a pair of small conches and a pair of vases (on the altar).

It should be pointed out that the existential jjiän is used marginally and perhaps represents an archaic word; it can be replaced by the more general one xxee, as shown in (9.30)c. It was discovered only on the second field trip when the consultant mentioned it. The other five existentials are observed in daily use with different degrees of frequency.

9.1.2.1 The potentive construction -yì xì

The existential xì is also used to head the ‘potentive construction’, which expresses the potentiality for something to happen. The nominalizer for the construction is usually -yì, but sometimes the plural clitic ‘re may also serve the purpose. The construction basically conveys that “there is means for doing X” (where X is an embedded verb). The constructional meaning can also be construed as “having the potential for X to happen” and “having the ability to do X”. These three senses are exemplified respectively from (9.31)a to (9.31)c:

(9.31) a Nizzan jìi-yì xì hra-yì xì, sūggīa qū ñâ’riu.
3d say-nm exist laugh-nm exist affection good strong+nInv

The two of them talk and laugh a lot (with each other), showing a fond affection.

b èa ggiā zhûän la nee bbèe chee-yì xì ggia.
1s M lunch also 2s at feed-nm existSprs

Is my lunch available for feeding you!

c eazzân nèa_zii ggon zhèe la zhèe-yì xì ma’riû.
1dex two_Ctr Inst pull also pull-nm exist N+nInv

The two of us pulled and pulled, but just couldn’t pull (it) out.

Sometimes the plural clitic ‘re is employed in lieu of the suffix -yì, e.g. (9.33) below. The consultant does not consider the two to be free variants, and suggests a very vague difference in terms of ‘subjective’ vs. ‘objective’ for ‘re and -yì. The semantic distinction is not well demonstrated and difficult to discern from the context in which they appear. Thus the subtlety contributed by the different nominalizers cannot be pinpointed for the time being. In regard to syntactic structure, the potentive construction can be
analyzed the same way as existential sentences. The only qualification is that the argument of the existential appears in the form of a nominalized clause. This can be formalized as follows:

\[(9.32) \text{Clause} + \begin{cases} \text{yi} \\ \text{re} \end{cases}_\text{Nominalized} + \text{xi} \]

The head verb in the clause must be attached with either the suffix \(-yi\) or the clitic \(\text{’re}\) for nominalization; it loses the ability to host the interrogative or negative clitics. Negation and interrogativity are expressed on the existential \(\text{xi}\) with appropriate clitics:

\[(9.33) \begin{align*} a \text{ Earê son\textunderscore baigüän ggej kôn tea\textunderscore lhû\textunderscore re xi a\textunderscore riû dô\textunderscore ggi.} \\
& \text{lp\textsmaller{in} three\textunderscore brothers InT life fr.sp\textunderscore release+p exist Q+nInv look+Hrt} \\
& \text{Let’s see if the three of us can run for our lives.} \\

b \text{ ea zzôn\textunderscore rê xi ma\textunderscore gâi di, xî\textunderscore yi zzhon\textunderscore gai.} \\
& \text{ls sit+p exist N+Vlt NC go-nm become+Vlt} \\
& \text{I probably won’t be able to sit any longer, and will be gone (soon).} \end{align*} \]

The nominalized clause can only be headed by Action verbs, since the potentiive construction concerns the potential for something to happen.

There seems to be a sign of formal simplification for the potentiive construction; the nominalizer may be omitted occasionally. For instance,

\[(9.34) \begin{align*} a \text{ nee gi tea\textunderscore nîn gee / gee\textunderscore yi ma\textunderscore xî.} \\
& \text{2s Inct fr.sp\textunderscore lose let:sbj let:sbj\textunderscore nm N+exist} \\
& \text{(We) won’t mistreat you.} \\

b \text{ De seelâo\textunderscore rê sian bbô la tea\textunderscore gi\textacute{\textquoteleft}re\textquoteleft) mä\textunderscore xî bbo, ...} \\
& \text{this pear+p tomorrow Dc also fr.sp\textunderscore sell(+p) N+exist ExT} \\
& \text{These pears, (if we) can’t sell (them) tomorrow either, ...} \end{align*} \]

Both the examples in (9.34) are found in translations from Chinese. The causative auxiliary \(\text{gee}\) in (9.34)a was not nominalized in the potentiive construction. When asked if it should be nominalized, the consultant replied that the suffix \(-yi\) could be added, suggesting that its use is optional. To check the optionality, the original nominalizer \(\text{’re}\) in (9.34)b was deliberately omitted; the consultant accepted the change. Thus it appears that to some extents the nominalization is dispensable in the potentiive construction, but this is much less frequent than is the case with the focus-presentation construction.
9.2 Deontic modals

There are three deontic modals in Niuwozi Prinmi: the admonitive mä'ha, the obligative ku, and the permissive xxiän. The labels for these auxiliary verbs are based on their major meanings; by no means do they imply a clear-cut meaning/function of the deontic modals, however. For instance, obligation may be expressed by deontic modals other than the one labeled obligative.

Since the deontic modality concerns happening of events, the deontic modals are not used with State verbs. Deontic modals do not co-occur with any directional prefixes or aspectual clitics. Except for the permissive xxiän, the others do not host modal/evidential clitics either.

9.2.1 The admonitive mä'ha

Together with the negative clitic, the admonitive modal mä'ha is used to express the speaker's warning or wish for something not to happen, e.g.

\[(9.35)\]

\[\begin{align*}
\text{a} & \quad \text{Nee ku nea-ggön zzhezzhan mä'ha.} \\
& \quad 2s \text{ head down-bend walk N+good} \\
& \quad \text{It is no good for you to walk with (your) head down.}
\end{align*}\]

\[\begin{align*}
\text{b} & \quad \text{neerê de ggiá guånjii si_yîn mä'ha.} \\
& \quad 2p \text{ this M words heed_listen N+good} \\
& \quad \text{it is no good for you to listen and pay attention to his words.}
\end{align*}\]

\[\begin{align*}
\text{c} & \quad \text{Bian do qîn ra kee zzhú nea-péa kon pian} \\
& \quad \text{danger on appear nInv:M time friend down-abandon life flee} \\
& \quad \text{mî ggee bbo, zzhezzhu qî mä'ha.} \\
& \quad \text{person InT Dc friend do N+good} \\
& \quad \text{It is no good to make friends with those who run away and leave their friends behind at danger.}
\end{align*}\]

The kind of deontic meaning conveyed by mä'ha is essentially subjective. It is intended merely as advice, with no control of the actual happening.

The negated form of the modal há has been chosen as the basic one, because it occurs preponderantly over the affirmative form. Having hosted the negative clitic, the admonitive modal mä'ha cannot be attached with the interrogative clitic. Thus it is not questionable, but this does not preclude its occurrence in information seeking questions, e.g.

\[(9.36)\]

\[\begin{align*}
\text{Mêedi'â waxxia nîr'a guêa_chii ggee ëa dô mä'ha?} \\
& \quad \text{what-M reason 3p+M cattle_slaughter InT 1s see N+good} \\
& \quad \text{What reason is (it that) it's no good for me to watch their cattle-slaughtering?}
\end{align*}\]
The use of the modal *hà* without the company of the negator is extremely rare. The only known instance is the following:

(9.37) Qūa_chīi ggee dō ha, guēa_chīi ggee dō má'ha.

pig_slaughter InT see good cattle_slaughter InT see N+good

De ggee mēe bēyōn zzi?  
this InT what logic Cpl

*It's fine to watch pig-slaughtering, but no good to watch cattle-slaughtering. What logic is this?*

Note that *hà* above appears in a parallel structure in which it is contrasted against the admonitive *mā'ha*. If it were not for such intended contrast, it is doubtful whether some other modal would not be employed in place of *hà* in the first clause.

Apart its modal usage, *hà* can also be used in a more concrete sense. For instance,

(9.38) a Nēe hēaggi tea-hruu si'a ggūan gēe ēni'a *hà* di?

2s where fr.sp-buy Pf+M horse InT like that+M good NC

*Where did you buy such a good horse?*

b Earē Wu_xi qū kēe, *hà* da zzi, *hà* da tian, ...

1p in year_new do time good only eat good only drink

*When we celebrate the New Year, we only eat the good, drink the good, ...*

In (9.38)a, *hà* functions as a State verb in a nominal clause (to be discussed in §10.1.3); whereas it serves as a noun in (9.38)b. Of the various functions, the modal one (in negated form) is used most frequently. Regarding the other functions, *hà* appears to be archaic, perhaps losing in competition to the synonyms *qūi* “good” and *ssō* “fine”.

### 9.2.2 The obligative *ku*

*Kú* can be used as a verb, meaning “to want (something)”. Also found frequently is its function as a modal, denoting the sense of obligation “must”. These two functions are shown in (9.39) and (4.40) respectively.

(9.39) *Kú* as a verb

a Hrän gēe son_dēe da *ku*.

long InT three_Ctr only want

*The long (ones), (I) just want three.*

b Jii_bāi à'ku?

water_boil Q+want

*Do (you) want any water?*
c Jii_bâï ma'kû.
water_boil N+want
(I) don’t want any water.

(9.40) Kû as an auxiliary modal

a Zzonbbâ Lha ggee kûë bô guëë qii kû.
Zzonba god InT heart below exist do must
The ‘Zzonba’ god has to bear (it) in mind.

b Wu_xî wu zzon_qëe zzii, nëe dde-xxî kû.
year_new in gather_meal eat 2s to.sp-come must
(Everyone) has a feast with families for the New Year, you must come.

c Guâi bbö dia’guâi kû.
cry ExT Nds+cry must
As for crying, (you) mustn’t cry (any more).

The examples in (9.39) represent the typical usage of kû as an ordinary verb. It
takes a noun phrase as the Undergoer, and can host the interrogative clitic a’, as in
(9.39)b, or the negative clitic ma’, as in (9.39)c. On the other hand, when the verb
functions as a modal, it can only take a complement clause as its argument, as shown in
(9.40). Note that the obligative modal is typically used for expressing illocutionary force
in Prinmi. It is of no coincidence that the ‘Obligator’ in (9.40) is repeatedly realized as
the addressee, except in (9.40)a.

Two kinds of obligative meanings can be further distinguished for the modal ku:
strong obligative (“must”) vs. weak obligative (“need”). The difference between the two
is manifested in negation.7 With the strong obligation, the desiderative negator dia’
is used and it negates the head verb of the complement clause rather than the modal, as
shown in (9.40)c and the following:

(9.41) Neerê rû’dia’lhee kû. but *Neerê rûlhëe dia’kû.
2p Nds+joke must 2p joke Nds+must
(You) ought not be joking.

With the weak obligative, the modal is directly negated by the general negator ma’, e.g.

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7 While these two meanings are undoubtedly very close to each other, the main consultant
maintains that they are different. He associates the negated strong obligative with bié in
Mandarin, and the negated weak obligative with büyäo. Unless the Mandarin dialect of
the region makes a distinction between these forms (which are synonyms with stylistic
difference in Standard Chinese), it would seem that the consultant tries to transfer the
Prinmi distinction to his Mandarin.
Notice that the form in (9.42)a cannot replace the similar expression in (9.40)c, because it is not appropriate for the discourse context of the utterance. The kind of illocutionary force conveyed by *ma’kü* "needn’t" is much weaker than that in (9.40)c. It is closer to advice than to an order.

Since the negators are attached to the heads of different clauses (the matrix one vs. the embedded one), the scopes of negation are not identical in the obligative sentences. Nonetheless, the semantic subtlety between the two obligative meanings is not attributable to the scope difference. A crucial indicator of the distinction is their unique selection of negators — *dia’* for the strong obligative and *ma’* for the weak obligative — which is not interchangeable.

Given that the two types of obligation by the modal *kü* manifest their syntactic difference only in negation, the actual function of the modal in affirmative sentences can be ambiguous, unless discourse context provides sufficient clues. The use of *kü* in (9.43) is identified as a weak obligative modal by virtue of its service as an entreaty in (9.43)a and advice in (9.43)b. Note also that the weak obligative modal may occur with the volitive clitic, as in (9.43)b:

(9.43) a Née më ggon nee dë’rë bbee küi bü kü.  
2p sky Inst Dc this+p at pity do:2s need  
You, the Heavenly god, have to show mercy to them.

b Neerë son_baigüän ggee bbo pian kú’gai.  
2p three_brothers InT Dc flee need+Vlt  
All the three of you need to run away.

9.2.3 The abilitive/permissive *xxián*

The permissive modal *xxián* is probably extended from the meaning “to have the ability to do something”, which is still in use in the language, e.g.

(9.44) Prinmilhee *xxián* a’riu?  
Prinmi can Q+nInv  
Do you speak Prinmi?
When *xxián* takes a noun as its complement, as in (9.44), it can be considered as an ordinary verb. Instances like this are scarce, however. The verb typically takes a clausal complement, as seen in (9.45). It may be regarded as an ‘abilitive’ modal in these cases. More often, *xxián* is used as a permissive modal:

(9.46) a Mîre zzû *xxian*, muugûu la zzû *xxian*.
   People may eat (it), and so may the livestock.

b Sianhû éa bônbon bbo xuxû Cûuxxii xîi a’mêx*xxian*?
   May I go to Cûiyi with Uncle together tomorrow, (please)?

c Kelhâzîi ni xzialhâzîi dea_zî mâ’hran ... êni’a di
dèa-pê’e’xo, *xxián* a’gâi?
   I’ll cough up one that has fingers and toes in different lengths ..., will (that) be alright?

Notice that the permissive modal occurs with the volitive clitic in (9.46)c. In such instances, *xxián* often appears in a different intonation unit. The constituent boundary between the complement clause and the auxiliary verb can be observed easily.

The modal is also used in a ‘double negation’ expression which contains two negative clitics in the form of *ma’V ma’xxián*. The expression signifies an obligation insisted by others:

(9.47) ma’pêe ma’xxián jîi’rin bbo, di pee-yî zzhôn’gai.
   Since (you’re) saying I can’t not cough (him) up, one will eventually be coughed up.
9.3 Epistemic modals

Prinmi has two epistemic modals: the assertive yòn and the successitive tón. Morphologically the epistemic modals resemble the deontic modals in not taking directional prefixes. They do not host aspectual clitics, but may host the non-involvemental clitic 'riu. Unlike the deontic modals, the epistemic modals can only function as auxiliary verbs. This is the major difference between these two kinds of modals.

9.3.1 The skillitive/assertive yòn

The assertive modal yòn is related to the meaning “to have the knowledge for doing something”. Used in this sense, yòn may be considered a ‘skillitive’ modal. The skillitive meaning of yòn is quite close to the abilitive meaning of xxián — “to have the ability to do something”, but yòn typically implies that some conscious learning process is required before one has the knowledge for doing something. Some examples for the skillitive yòn are:

(9.48) a Dê jian ggêe sshê_giu da zzhon nee bbo,  
this child InT four_year only become De De  
nê ggia màn zzhûu yòn’riu.  
3s M name write know how+nlnv
This child, just four years old, (he) knows how to write his name.

b Née grî â’yòn?  
2s sing Q+know how  
Do you know how to sing?

c Èa bbô bbo dé’rê qibiêa zzû má’yôn ...  
1s ExT De this+p always repair N+know how  
As for me, I simply don’t know how to repair them ...

As a modal, the skillitive occurs with a clausal complement, as shown in (9.48). Sometimes the complement of the modal may be rendered implicit, provided that it is shared and recoverable by interlocutors, e.g.

(9.49) a Née â’yòn?  
2s Q+know how  
Do you know how (to do it)?

b Má’yôn.  
N+know how  
(I) don’t know how (to do it).

In both the question and answer in (9.49), the focus is on the skill for doing something which is already activated in the dialogue. In discourse context like this, the complement can occasionally be expressed as a pronominal argument, i.e.
(9.50) Dë ggee la yön ma'riu.
this InT also know how N+nInv
Even this, (s/he) doesn't know how (to do it).

Other than (9.50), the occurrence of yön with a non-clausal complement is not found in the data.

The use of yön as an assertive modal is numerous in the field notes, thanks to the sizable collection of expository texts. The modal is employed when the speaker wishes to assert the truth of the statement being delivered. The statement may concern occurrence of events in the past, in the present, or in the future. For instance:

(9.51) Statements about the past
- a Xxiabûurë bbo bbûlê ddiôn yôn.
past years ExT many existn Assr
  In the past there were many. (I can tell you for sure.)

- b mûre seasea qii kee, bbeaxxion ggôn bêaba qii yôn jii'riu.
  people war do time sling Inst shoot do Assr say+nInv
  It's said that when people were at war, they would shoot each other with slings.
  (I've no doubt about that.)

(9.52) Statements about general truth
- a Qûf nêa_con xi yôn.
  badger two_kind exist Assr
  There are two kinds of badgers. (For sure.)

- b Qûf bbo zzheazzhea yôn.
  badger ExT bad Assr
  The badgers are harmful animals. (For sure.)

(9.53) Statements about folk beliefs
- a dêa-guâa mâ'ha, dêa-guâa kee bbo xxiêmê yôn.
  up-open N+good up-open time ExT earthquake Assr
  (the eyes) must not open; when they are open, there'll be an earthquake.
  (We've no doubt about that.)

- b Zhêa do'a qûi qûi mi bbee bbo ea-pian gêe yôn;
  soil on+M good do person at Dc in-bless let:sbj Assr
  zzheà qûi mi bbee bbo ea-nân gêe yôn.
  bad do person at Dc in-harm let:sbj Assr
  (The god) will let those who behave well on Earth be blessed; and those who behave badly be harmed. (I'm sure.)

Note that in (9.51)b the speaker signals the assertion as second-hand information with the hearsay clitic jii'riu (cf. the discussion of Ex.(8.37)a). No contradiction arises even
though the assertion is made on indirect information. Despite the fact that the speaker himself has not experienced those ancient wars involving slings as weapons, the assertive modal can still be used, inasmuch as what is said about the function of slings in those days is credible by the general public.

The assertive modal is not confined to positive statements. While it does not occur in the interrogative, it can appear in negative statements, e.g.

(9.54) a  Suu ddiôn mâ'yon.
fruit exist_in N+Assr
(The tree) does not bear any fruit. (For sure.)

b  "Geadiàn lhèa" bbo jù mâ'yon, "deqā xī giū" jī yon.
ten decade ExT say N+Assr one_hundred year say Assr
(We) don't say "ten decades"; (we) use the expression "one hundred years". (It's always like that.)

9.3.2 The successive tôn

Another epistemic modal is the successive tö'n, for having the ability to carry out some task successfully. The modal is typically found in negative sentences in naturally occurring Prinmi, e.g.

(9.55) a  Mēazhēe rī mee'tôn.
look for get Npf+succeed
(He) searched (but) didn't find (any) successfully.

b  Ddiàn zhon guēa ggôn yàn mā'tôn.
field hard ox Inst plow N+succeed
The field is hard; the ox cannot plow successfully.

The modal can be negated by the perfective and the general negators, as exemplified respectively in (9.55)a and (9.55)b, but it cannot host the desiderative negator dia'.

Unlike most modals, the successive can co-occur with another modal element in a single clause. In (9.56)a it hosts the volitive clitic; whereas in (9.56)b it appears as the complement head of the assertive modal yôn. In both instances, the modal occurs in negative sentences.

(9.56) a  Dē mī ggee kūē_gāizai, lō dâi qīi ton mā'gâi.
this person InT heart_small matter big do succeed N+Vlt
This guy is coward; (he) won't be able to do big things successfully.

b  Bēa nea-ggō suu hūn ton mā'yón.
flower down-wither fruit grow succeed N+Assr
(After) the flowers wither; fruit doesn't grow successfully. (For sure.)
The successitive modal may also host a complex clitic containing the non-involvemental and the general negator.

9.4 The doing verbs

Niuwozi Prinmi has two different verbs for the meaning “to do”: one is bà and the other qìì. The latter is probably a dialectal addition. According to the Xichuan consultant, only the former is used in his home village. In Niuwozi Prinmi the two appear to be functionally divided with a low degree of overlap. Below we will first investigate the different uses of bà, and then compare them to those of qìì. Afterwards, the semelfactive construction headed by the doing verbs will be discussed.

9.4.1 Functions of bà

In addition to the basic meaning “to do”, bà has four related meanings/functions: (i) describing an event happening in the manner of X (where X is the complement, same below), (ii) signifying an ad hoc control over situation X, (iii) denoting X as a result of some event that has happened, and (iv) to place an emphasis on the occurrence of X. Morphologically, the verb maintains a complete paradigm for person-number agreement:

(9.57)

<table>
<thead>
<tr>
<th></th>
<th>1s</th>
<th>2s</th>
<th>3/root</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>biàn</td>
<td>bè</td>
<td>bà</td>
</tr>
<tr>
<td>1/2p</td>
<td>bin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following are some examples for the use of bà in its basic sense:

(9.58)

With the prototypic meaning “to do”

a Dé ggee nee’nôn tea-ðû’si zzii a?
   this InT 2s+Inst fr.sp-do:2s+Pf Cpl Q
   You did this, didn’t you?

b Gību dēa_hnî nia dē ggee leeele bà.
   cuckoo one_day Dc this InT folksong do
   The Cuckoo does a folksong of this all the time.

c ssō_lôlelo mî tea-bin.
   fine_Ideophone person fr.sp-do:2p
   Be good people.

d gēa biàn’sian.
   fake do:1s+Pfv1
   (I) cheated.
Note that the instances in (9.58)c–d are both idiomatic. The latter is reminiscent of derivation. It is not considered as a derivational suffix because the verb shows inflectional agreement which is found mainly on verbs, but not on affixes. Such derivation-like and idiom-like use of bà can further be observed from (9.59):

(9.59) a Diá ggûumi xxia hrân tea-ba, ...
now thief hand long fr.sp-do
*Now thieves carry out (activities) with their long hands, ...*

b Née mê ggon nee dère bbee kuii bu ku.
2p sky Inst De these at pity do:2s must
*You, the Heavenly god, need to show mercy to them.*

The prefixation on bà in (9.59)a provides an additional argument against treating it as a suffix.

In spite of taking a clausal complement, the syntactic status of bà is ambiguous when it introduces an adverbial manner clause. The interrogative test cannot be used successfully for diagnosing the status of the verb either. Consider the following:

(9.60) Bà heading an adverbial clause of manner (boundary of the manner clause marked off by bracketing)
a Ni ggon gion qiôn ma’riü, ea [mëe tea-bu’n] ea-xiì?
3s Inst door open N+nInv 1s what fr.sp-do+Dur in-go
A) He doesn’t open the door; how do I get in?
B) He doesn’t open the door; what do I do to get in?

b Dea_zii bbo [tea-bbiän bà] pän xii.
one_Ctr ExT fr.sp-hurry do flee Pps
*One (of them) went to flee in a hurry.*

c [Tea-ddäo bà’n] jeemëe gge-qion.
fr.sp-tired do+Dur home out-appear
*(He) returned home tired.*

Translating a Chinese sentence with the adverbial interrogative zényàng “how”, the consultant rendered (9.60)a, in which two interpretations are equally possible for the function of bà, as indicated by the English glosses. This is a nice example for illustrating the transition from the prototypic meaning “to do” to the expression of adverbial manner, but the very transitional state of the verb in this function also poses a problem as to whether the verb is an auxiliary. The adverbial manner clause headed by bà is syntactically an adjunct. Elimination of the clause has no structural impact on the sentence, but for a loss of information about how the act is performed. Note that this
kind of manner clause often contains the durative clitic 'non, as in (9.60)a and (9.60)c, but the co-occurrence is not mandatory, cf. (9.60)b.

For the following functions, bà is used as an auxiliary verb whose complement cannot be replaced by a nominal.

Quite frequently, bà is employed to signal an ad hoc control or an attempt for control of a situation. For instance:

(9.61) Bà marking an ad hoc control
   a Née ea bbēe dēa_do bu, ēa mēedī dde-yīēa’sian.
      2s 1s at one_look do:2s 1s what to.sp-fetch+Pfv
   Take a good look at me and see what I’ve brought back.
   b Née ggān do zhīī diá’bu.
      2s bed on jump Nds+do:2s
   Behave yourself and don’t jump on the bed. (Said to a child)
   c Gību bbo ddea-prea bà ra kee bbo nee: ...
      cuckoo Dc to.sp-meet do nInv:M time ExT Dc
   When (he) pretended to run into the Cuckoo: ...
   d hra_zīīī zee tea-ba, ...
      laugh_Ideophone fr.sp-do
   (He) put on a smiling face, ...

The control marking can occur with all kinds of verbs regardless of the inherent controllability of their meanings. In (9.61)a–b, the complements of bà are inherently controllable, but the complements in the other two denote spontaneous acts. To a large extent, the actual effect of the marking depends on the meaning of the modified verb and the illocutionary force of an utterance. With an inherently controllable act in imperative sentences, bà signifies an effort for carrying out the act. Note that it is possible for bà to host the desiderative negator dia’, as seen in (9.61)b. With the negative clitic, the marking is intended as restraining oneself from doing something. In (9.61)c, the complement of bà is headed with ddea-prēa "to run into someone". Inasmuch as the situation of running into someone is brought into control by planning it out, it amounts to a pretension. Likewise in (9.61)d, the ad hoc smile is understood to be pretentious, not cordial. Thus, the explicit control marking on an inherently uncontrollable verb generally gives rise to the interpretation of pretension if the sentence is not in the imperative.

For imperative sentences with inherently uncontrollable verbs, the marking signals an effort or attempt to exercise control over the situation. Consider the following:
Verbs denoting spontaneous feelings or mental processes are typically found to be modified by bà when they appear in imperative sentences. Under the control/effort marking, the addressee is asked to make an effort to control a spontaneous feeling or mental process which is often negative. Note also that the desiderative negator cannot operate directly on the verbs in (9.62)b–c, since the inherently uncontrollable nature of the verbs is in conflict with the meaning of dia’ (cf. §8.1.1). To introduce an imperative mood for these verbs, Prinmi makes resource of the control/effort marking by bà.

When bà is used to express a resultant state arising from other situations. Its verbhood is discerned mainly with the possibility of hosting the perfective clitic ‘si, as shown in (9.63)a–b. The verb is incapable of hosting other clitics, even the negative and interrogative ones.

(9.63) Bà signifying a realis resultant state (the resultant state placed in brackets)

a tea-ddào’nôn, [jí tea-zí, zhuá tea-niân bà’si].
fr.sp-tired+Dur back fr.sp-numb shoulder fr.sp-ache do+Pf (he) became tired, (as a result of overwork, his) back became numb (and his) shoulder sore.

to.sp-wake to.sp-alive do+Pf
The snake woke up and came to life, (as a result of) under the body heat of the person.

b Dē bbalâi ggêe mî ggia jûu go bo non
this snake InT person M warm air below Dc
[dde-nû dde-sîi bà’si].

Then when (they) traveled and traveled (and, as a result, they) arrived at a place far away, ...
disappears. It should be noted that the kind of resultant expressed by \( b\text{à} \) is restricted to realis situations only. It is not used for projecting what may result from an imagined situation.

Used for the emphatic function, \( b\text{à} \) can generally be left out. Its pragmatic contribution to the sentence has no bearing on the propositional meaning of an utterance. The omission of \( b\text{à} \) does not even induce a noticeable change on the surface, since the restructure of the sentence involves merely the complement clause taken as an independent clause. As can be seen from (9.64), the auxiliary verb is typically prefixed in this usage, evincing its retention of verbhood.

\[(9.64)\quad \text{\( B\text{à} \) marking emphasis}\]
\[
a. \quad \text{Dia dia'chee nêa-ba.} \quad \text{again} \quad \text{N\_ds+feed down-do}
\quad \text{Again what (he) did was to not feed (the Crow).}
\]
\[
b. \quad \text{dia'yin nêa-ba.} \quad \text{N\_ds+listen down-do}
\quad \text{what (the Frog) did was to not listen (to them).}
\]
\[
c. \quad \text{mê ni ddiian ggêe diôndî ma'wa nêa-ba, ...} \quad \text{sky with earth InT each other N+mind down-do}
\quad \text{What Heaven and Earth did was to not interfere with each other, ...}
\]

It is interesting to note that all instances of the emphatic use of \( b\text{à} \) from the texts contain a negated complement. It is not clear whether the correlation with negation may represent a condition for the emphatic use of \( b\text{à} \).

\subsection{9.4.2 Functions of \textit{qii}: a comparison with \( b\text{à} \)}

The verb \textit{qii} also means "to do" in Niuwozi Prinmi. Morphologically it differs from \( b\text{à} \) in its lack of inflections for person-number agreement. The verb can occasionally interchange with \( b\text{à} \) in some sentences with little change in meaning, e.g.

\[(9.65)\quad \text{hmîän nêa-qii / nêa-ba.} \quad \text{medicine down-do down-do}
\quad \text{to cure}\]
\[
(9.66)\quad \text{biân wu da gge-bâi ea-bâi qii / (?)bà.} \quad \text{grove in only out-hide in-hide do do}
\quad \text{(he) just hides around in the woods.}
\]

The consultant used \textit{qii} in a story from which (9.66) is taken. When asked whether the verb may be substituted with \( b\text{à} \) after transcribing the story, he had no objection to the alternate. It turns out that such ad hoc substitution for native speakers’ judgment is not of
particular help in exploring the difference between the two verbs after an extensive checking with the consultant on the second field trip. He seemed to accept the alternate too readily. Take the co-occurrence of the verb with $gge-V ea-V$ in (9.66) as an example. Five other instances with this pattern are found in materials recorded from the consultant, but every one of them involves $qii$ instead of $ba$ (this will be further discussed below with Ex.(9.71)a).

Since the doing verbs are both frequently used, their tokens in the collection are large enough (each well over a hundred) to reveal some functional differences between them. Based on the actual uses of the verbs, the functions of $qii$ are found to partially overlap with those of $ba$:

Table 9-2: Functional distribution of the two doing verbs

<table>
<thead>
<tr>
<th></th>
<th>“to do”</th>
<th>Derivation</th>
<th>Control</th>
<th>Manner Clause</th>
<th>Realis resultant</th>
<th>Emphatic marking</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ba$</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>$qii$</td>
<td>yes</td>
<td>yes</td>
<td>?no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

The available data clearly show that $qii$ is employed predominantly for the prototypic sense of “to do” and for deriving an Action verb from other semantic types. Its use for marking an ad hoc control is dubious, but it can be employed for signaling a willful act, as will be shown below in (9.72). The verb does not appear to have the other functions of $ba$. Not indicated in Table 9-2 is their use in the semelfactive construction. As we will see in §9.4.3, both $ba$ and $qii$ feature in this aspectual construction.

In meanings/functions shared by the two verbs, an interchange between them is sometimes possible. Some interchangeable cases are given in (9.67), including a pair of structurally identical sentences from the Deluge story. Un interchangeable cases are exemplified in (9.68).

(9.67) a  
gea  $qii$ / $ba$

fake  do  do
to cheat

b  
erà hüanbo do lòbià, qee_zzí, jǐ_tián, èni $qii$.
Earth on work meal_eat water_drink like that do

(they would) work, eat, and drink, doing things like that on Earth.

c  
yanyán, zònyán, dankà, èni $ba$.
plow cultivate slash like that do

(they would) plow, cultivate, and slash woods, doing things like that.
(9.68) a qee qii / *bâ
meal do do
to make meals
b Wuxi qii / *bâ
New Year do do
to celebrate New Year
c Debbô sianhî ëa mëe tea-qii-yi / *tea-ba-yi zzi?
then tomorrow Is what fr.sp-do-nm fr.sp-do-nm Cpl
Then what should I do tomorrow?

In order to explain the unsubstitutable cases in (9.68), we need to find out how qii is different from bä. Thus far, we have only approached the functions of qii with reference to those of bä. Now we will investigate the meanings of the verb in its own terms. As can be seen from (9.68)a, qii may express “to make” in the sense of processing (in contrast to the more general verb zzü “to make”). Further examples for this meaning are:

(9.69) a tea-kâ dde-yéa jëemëe qüa_qëe qii / *bâ, ...
fr.sp-detach to.sp-fetch home pig_meal do do
collect and take (them) home to make feed for livestock, ...

b ... zzhezzhu qii / *bâ mà’ha.
friend do do N+good
It is no good to make friends with (i.e. to develop friendship with) ...

As the meaning of bä is not construable in the sense of “to make”, it cannot replace qii.

Moving on to the derivational function of qii, we find a possible causative interpretation not found with bä.8 Consider the following use of qii:

(9.70) a Née ma’xî bbô, aabû xiân nee küê_ijëe qii’gai.
2s N+go ExT grandpa Foc Dc heart_angry do+Vlt
If you don’t go, Grandpa will get angry.

b Gea qii tea-ddâo qii mi ggee bbo Áli ggee zzi.
energy do fr.sp-tired do person InT Dc Ali InT Cpl
The one who spent great energy and got tired is Ali.

c ëa nee qiônlihan tea-zha’non, hon’jiâ qii’riu.
1s 2s wait fr.sp-exceed+Dur crazy+say do+nInv
I long for you so much that I’m about to go crazy.

---

8 A closely related sense to the causative is the function of bä to mark a realis resultant state. However, causation is not observed in verbs derived with bä.
The kind of causative meaning implied by *qii* in (9.70) appears to be close to the English causative *get*. The causative sense associated with *qii* here is considered to be implicational rather than essential: it is co-determined by the meaning of the other verb. In (9.70)a, the causation is understood as due to an external cause, but in (9.70)b–d, the cause is internal. In the latter cases, it is potentially possible for the causee to prevent the causation in some way without cooperation from others.

While a causative sense often arises with *qii* in deriving a State verb to a non-State one, this is not always the case, e.g.

\[(9.71)\]

a) bèaddì ggee zhēa do gge-zhīi ea-zhīi *qii*.
frog InT soil on out-leap in-leap do
frogs leap about on the ground.

b) Kiïe xxii *qii* ra kee, ...
heart many do nInv:M time
When (you) get many minds (i.e. uncommitted), ...

c) muuguurè ruēa gge-hrǎn *qii* ra kee bbo, ...
livestock+p road out-far do nInv:M time Dc
when the herds get too far away, ...

The verb compound with the pattern *gge-V ea-V* expresses a kind of reiteration in which an act recurs extensively. The compound basically denotes a state, although it is combined from an Action verb in reduplication. When this kind of State compound is used to describe a habitual situation, it is changed to an Action verb by means of *qii*, as shown in (9.71)a. The derivation does not give rise to a causative reading. Likewise, a causative interpretation does not arise in (9.71)b–c. No legitimate cause is conceivable in any of these sentences, since the Actor voluntarily enters the situation denoted by the State verb.

When *qii* modifies an Action verb, it signals that the act is performed under one’s own will. Compare the pair of sentences in the following:

\[(9.72)\]

a) Dejjëe nōn xīi mâ’zzha. Nēe dēa_do *qii* xīi a’xō?
here Dc go N+far 2s one_look do Pps Q+Opt
(The place) isn’t far away from here. Would you like to go and have a look?
As is clear from (9.72)b, the use of qii in (9.72)a is not for structural reason or derivation. Rather, it serves to signify that it is utterly up to the addressee to decide whether s/he wants to see the place or not. There is no obligation of any sort implied. When the question is asked without qii in (9.72)b, the addressee may be expected to reply with a positive answer. The decision is to be made taking the entire discourse context and perhaps cultural expectation into account.

Volitionality appears to occupy a central place in the meaning of qii. It may constitute the fundamental contrast between the two doing verbs. The consultant notes that, upon request, the difference between these two verbs lies in the use of qii among speech act participants and the use of bä with non-speech act participants. The following pair of examples from the Deluge story illustrate this generalization:

(9.73) a Née dēa-pēe qii gge-xxii má’gee bbo, ...  
2s up-spew do out-come N+let:sbj ExT  
(If) you don’t cough (him) up, ...

b Xiibbä bbuddi ggön nónóncai dēa-pēe ba gge-xxii güë.  
Dragon Queen Inst then up-spew do out-come let  
The Dragon Queen then coughed (the man) up, letting (him) come out.

The function of the doing verbs in (9.73) is to change dēa-pēe “to spew” from involuntary to voluntary. The Agent is a speech act participant in (9.73)a, but a non-participant in (9.73)b. As predicted by the consultant’s generalization, the former employs qii while the latter uses bä. The generalization, however, fails to account for the following instances found in the same story:

(9.74) a Dē mī ggee pee qīi ra kee, ...  
this person InT spew do nInv:M time  
When (the Dragon Queen) coughed the person up, ...

b “... Dē-a-pēe bu.”  
up-spew do:2s  
“... (You) cough (him) up.”

The associations between the doing verbs and the Agent’s status in speech act are reversed in the pair of sentences in (9.74). The crucial factor for the choice between qii and bä here involves the viewpoint of the speaker based on the internal willful control of qii vs. the external deliberate control of bä. Relating to the Animacy-Topicality Hierarchy (Silverstein 1976; Wierzbicka 1981), qii is often in use with speech act participants who
are inherently capable of exercising internal control by will. On the other hand, the control by non-speech act participants is necessarily rendered as external from the viewpoint of the speaker who has no access to the mental state of other people. These are the normal or unmarked situations that the consultant tried to state in his explanation. As the verbs can occasionally be employed in a different way to achieve some subtle contrast, their distribution cannot be reduced to person association or person agreement.

Returning to the cases in (9.74), the function of qi in (9.74)a is to derive a performable act from an involuntary verb. It disregards the source of influence on the controllability. Note that the event in concern is presented as old information in the sentence (being encoded as a relative clause, see §7.1.3). By contrast, while the use of bà in (9.74)b also turns an involuntary verb to a performable one, its major purpose is to signal that the control is an ad hoc one responding to the external request.

The distinction in terms of internal vs. external control for qi and bà also explains the exclusive use of qi in the obligatory construction, exemplified earlier in (9.68)c. Recall that the obligatory construction conveys a non-imposed obligation (§9.1.1.1). It is therefore incompatible with bà, which signals an ad hoc external control. The subtle contrast between the two doing verbs is not always observed (and thus there are interchangeable cases), but the viewpoint distinction is important in understanding the choice of a particular doing verb in general.

9.4.3 The semelfactive di ba/di qi

Prinmi has a semelfactive construction marked by di ba or di qi, meaning “to do once”. The two variants differ in regard to the subtle contrast between external vs. internal control over a situation. Parallel to the person association observed on the doing verbs, di qi is mainly used for non-third-person Actors, suggesting a viewpoint from inside; whereas di ba tends to occur with third-person Actors, with a viewpoint from outside. It must be borne in mind that this kind of person association is subservient to the viewpoint contrast. Because of its frequent use, we will concentrate on di ba in the discussion below.

The semelfactive construction portrays an act which is performed in a casual or non-committal manner. Consider the following examples:

(9.75) a hniijion ggôn dê mí ggia ssúu bbée ea-hnuuhnuu dî bà.  
(9.75) b Yüän ggôn nea-sûudduu di ba:...

(The bear) took a smell at this person's face with its nose.  
The bear gave it a thought: ...
Your clothes, (why don't you) lend me (for a while)?

The Deluge story, let (me) tell a bit about (it).

The example in (9.75)a is particularly interesting. The construction is used for expressing the act of making one instance of smelling from *hnûuhnûu* “to smell”, which always occurs in reduplication under the conceptualization of the iterative nature of smelling. In (9.75)b, the occurrence of the verb *sûudduu* “to think” indicates that the semelfactive construction is not confined to quantitatively measurable acts. The subsequent sentences in (9.75)c–d provide further support for this. The final two examples also show a person-number agreement of the auxiliary verb with the Actor. The employment of *bà* instead of *qîi* in (9.75)c–d for an Actor who is a speech act participant has the pragmatic effect of conveying some sense of politeness. Here the speaker deliberately takes an outsider’s standpoint by means of the choice on *bà*. The semelfactive construction is exploited to present illocutionary utterances as being made without personal imposition. Notice also the use of the suggestive clitic at the end of (9.75)d, harmonious with the pragmatic politeness of the utterance (cf. §8.3.2).

In the semelfactive construction, the auxiliary verb loses much of its verbal capabilities and always appears in a bare form. Consequently, the construction cannot be negated or questioned. The only noticeable trace of verbhood of *bà* is the inflections for person-number agreement. The overall composition of the semelfactive construction can be presented as follows:

(9.76) \[
\text{Actor} + \text{Complement clause} + \text{di} + \left\{ \begin{array}{c}
\text{qîi} \\
\text{ba/bu/bian/bin}
\end{array} \right. 
\]

The numeral *di* “one”, serving as a co-marker, cannot be changed to other numerals. The head verb can be selected from *qîi* or *bà* (including the inflections of the latter). The complement clause can only be headed by Action verbs.

The complement in the semelfactive construction has the following three grammatical properties: (a) the head verb must co-reference its Agent with the Actor of the construction; (b) the verb in the complement may be affixed with a directional prefix, but it cannot host any kind of clitics, including the negative and interrogative ones; and (c) it is possible to have embedded complement clauses inside the complement of the construction, e.g.
The example in (9.77) contains three complement clauses, one embedded within another. The outer one marked by [ ] is headed by xiaxiä “to test”, and it serves as the complement of the semelfactive construction. The next one is indicated by [ ], with hrônhrin “to want” being the head of the embedded complement. A further complement, marked by [ ], is found within the second complement. While the Actor of the construction is always co-referent with the Agent in its complement, the co-indexing does not reach further to the other embedded complements. In (9.77) xiaxiä “to test” and bu “do” share the same Actor — an implicit addressee, but hrônhrin “to want” and qii “to do” share another one — an unexpressed female.

9.5 Aspectual auxiliaries: the terminative dâ and the inchoative qiòn

The terminative dâ often appears as an auxiliary verb. Its verbhood is exhibited with the ability to take the directional prefix and the perfective clitic, e.g.

(9.78) a deasuu’re dea-prin nea-dâ’si.
   huângguô+p up-white down-Trmn+Pf
   The ‘huangguo’ (flowers) have completely whitened (the field).

b ŋà niân’re bbo jî má’da.
   1s ache+p Dc say N+Trmn
   My sufferings cannot be said to completion.

The examples in (9.78) show that the end point of reference is not determined by the completion of an act or a process; rather, it concerns the event as a whole. In (9.78)a, the terminative is used with the field considered to be the reference for completeness. Likewise in (9.78)b, the whole event is considered to be complete only when all that is to be told is actually said. Thus the sense of completeness conveyed by the terminative is quite different from that found in some instances associated with the perfective (cf. §8.2.1).

No instance where dâ takes a noun phrase instead of a complement clause has been found. Even when it does not serve as an aspectual auxiliary, as in (9.79), it still takes a clausal complement (the underlined part).

(9.79) Née ggee-yî mèdde zzî la ea gî nea-dâ bu’si.
   2s help-nm all Cpl also 1s Inct down-complete do:2s+Pf
   You’ve completed all (your) obligations in helping me (lit. completed all that you should help to me).
Another aspectual auxiliary is the inchoative *qiön*. Meaning “to appear”, *qiön* often functions as a verb taking a noun phrase as its argument, e.g.

(9.80) Teasän ggon nee la gge-qiön.
grasshopper Inst De also out-appear
The Grasshopper came out too.

There are a few instances, especially in causative sentences such as (9.81)a–b, where *qiön* expresses an inchoative meaning and takes a short complement clause. Consider the following (the complement is underlined):

(9.81) a Ẹa nee gí suudduu qiön gee ma’xô.
1s 2s Inct think Inch let:sbj N+Opt
*I don’t wish to let you worry* (lit. *start your thinking*).

b Mëalhee ggon tea-hmohmo kee bbo, bbon rëbbeee
wind Inst fr.sp-blow time De cold foremost
mïre ggüeereärëa ke-qiön gü’e’si.
people tremble out-appear let+Pf
*When the wind blew so cold, (it) had people beginning to tremble.*

c Debbó jiiddîn ke-ddûf ke-qiön râ kee bbo, kee bbo bbó,
De flood out-cast:3 out-Inch M time ExT time De De
jîi ggée niä krë bo dëa-dâ ra kee bbo, ...
water InT 2s:M foot below up-reach M time ExT
*Well, after the flood begins to start* (lit. *begins to be casted*), *then, when the water rises to your foot*, ...

As shown in (9.81)b–c, the inchoative auxiliary can be prefixed, indicating that it has not been grammaticalized to a suffix.

The inchoative function of *qiön* appears to be quite limited, since it is typically found in causative sentences. In this environment, the auxiliary does not host any clitics, including the negative and interrogative ones.

### 9.6 Other auxiliary verbs

This section describes some minor types of auxiliary verbs in Prinmi. Four auxiliary verbs are covered here. We will first look at the purposive auxiliaries *xii* and *xxii*, and then turn to the desiderative *hrónhrin* and the venturive *wàa*.

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9 When I tried to elicit an inchoative sentence with the Chinese expression *käishê* “to begin”, the consultant plainly pointed out that they did not say things like that in Prinmi and left the Chinese inchoative untranslated.
9.6.1 The purposives xii & xxii

Both motion verbs xii “to go” and xxii “to come” can function as a purposive auxiliary verb. These verbs inflect for person-number agreement (see Table 5-3). The following exemplify the purposive function of the verbs:

(9.82) Purposive denoted by xii “to go”

a Jjii wu gi xii rà kee la
market in sell Pps nInv:M time also
dè ggée puu_dài jia yon.
this InT price_big reckon Assr
When people go to sell (it) at the market, it is certainly reckoned as (worthy of) a big price.

b Teasân bbo née Xii_bbâ zhún nea-qô xâo; ...
grasshopper Dc 2s Dragon_family mortar down-pound Pps:2s
Grasshopper, you go to pound the mortar for the Dragon family; ...

(9.83) Purposive denoted by xxii “to come”

a Qee zzî jî.
meal eat Pps:2s
b Mealîn jî.
Come to eat. Come to get warmed up by fire.

Given that a change of physical location is often involved in purposive sentences, it may appear doubtful as to treating the motion verbs as auxiliary verbs. However, they are thus recognized for several reasons. Under the interrogative test proposed at the beginning of this chapter, sentences headed by a purposive verb have a negative result, indicating that the verb is an auxiliary — their complement cannot be substituted with a nominal. Semantically, the change of location still conceivable with the purposive auxiliaries is clearly secondary, purposive sentences do not answer questions seeking information on the very change of location. Morphologically, the purposive auxiliaries cannot be prefixed with any directionals. However, modal and (non-)involvemental clitics can be attached to a purposive auxiliary, e.g.

(9.84) a Êa nî meazhee xii ma’xô, ...
1s 3s look for Pps N+Opt
I won’t go to look for him, ...

b Zonggûi dáa-ggû’si; nî diá zonggûi qiân xii’riu.
clothes up-dry+Pf 3s now clothes dry by sun Pps+nInv
The clothes have already dried; now he goes to dry them by sun.

It should be noted that it is possible for a motion verb to follow a verb without taking the former as its complement. In (9.85), the motion verb is adjacent to another verb, but
it does not function as an auxiliary. The motion involved is iconic to the order of the juxtaposed verbs; that is, the motion does not take place before the other situation, contrary to the case in a purposive sentence.

(9.85) a Guéaguái xii, xii kee bbo, ...
   cry go go time ExT
   When (they) keep crying and walking, ...

   b Ggüan ggée Saaddâa_bb’ôn dëa-züan xii’si.
   horse InT Saaddaa_family+Inst up-drag go+Pf
   The horse, the Saaddaas took (it and went) away.

9.6.2 The desiderative hrônhrin and the venturive wàa

The desiderative hrônhrin, expressing a desire to do something, is the only disyllabic auxiliary verb. It appears to be a reduplicate with a vowel change in the first syllable. The auxiliary does not take any directional prefix, and always occurs with a clausal complement, e.g.

(9.86) a Ji mâre zzín hrôn’mâ’hrin, ddu zzü hrônhrin.
   some people sit N+want poison eat want
   Some people don’t want to live; (they) want to poison themselves (lit. want to eat poison).

   b Èa rëjjee bbee bbo xii’xō suuddon’sian, desiâ nee’ôn nee
   1s outset at ExT go+Opt think:1s+Pfv1 now 2s+Inst Dc
   ddea-hin kee bbo, diá bbo xii hrôn’mâ’hrin.
   to.sp-tell time ExT now ExT go N+want
   At first I thought I would go; now when you told (me this), now, I don’t want to go.

The meanings of the desiderative auxiliary and some modal clitics such as the optative are fairly close; they diverge in that the desiderative concerns a desire while the others regard an intention or volition. This difference is illustrated in (9.86)b, where a positive intention has become a negative desire after some consultation.

The final auxiliary verb introduced here is the venturive wàa. The verb has some inflectional forms (see (5.28)). Like most auxiliary verbs, the venturive auxiliary does not take any directional prefix. However, it can host the volitive and the non-involvemental clitics occasionally, e.g.

(9.87) a Bbo miä la guâa wàa ma’riü, gô la hée wàa ma’riü.
   Dc eye also open dare N+nInv air also release dare N+nInv
   Well, (they) daren’t open (their) eyes, or breathe air out.
As can be seen from (9.87), the ventrurive auxiliary often occurs in negative sentences. Its use in questions and affirmative sentences is much less frequent.

9.7 Summary

This chapter has discussed the copula, existentials, and a variety of Prinmi auxiliary verbs. The auxiliary verbs show considerable disparity in grammatical properties which stem from their meanings. Table 9-1 summarizes the important properties of all auxiliary verbs in Prinmi, including the causative auxiliary not discussed in this chapter. As variations are often found with different functions of one auxiliary verb, it is necessary to treat the functions individually. Apart from the possibility of being used as an ordinary verb, also included are the prefixation of directionals and hosting of the interrogative clitic a' and the negative clitics — the general ma', the perfective mee', and the desiderative dia. These clitics may, or may not be, attached before an auxiliary verb.

Notice that the admonitive, assumed in the negated form, is precluded from further hosting interrogative or negative clitics. The inability to host an interrogative clitic does not imply that a particular function of an auxiliary verb cannot appear in questions. The restriction applies only to yes-no questions, not information seeking questions.
Table 9-1: A synopsis of basic properties of auxiliary verbs

(keys: ‘/’ for results not applicable; ‘+’ for a positive property; ‘−’ for a negative property; ‘y’ is abbreviated from ‘yes’, and ‘n’ from ‘no’)

<table>
<thead>
<tr>
<th>As Verb</th>
<th>With Prefix</th>
<th>With a’</th>
<th>With ma’</th>
<th>With mee’</th>
<th>With dia’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Admonitive má’ha</td>
<td>y</td>
<td>−</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>2a (Strong) obligative kú</td>
<td>y</td>
<td>−</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>2b Weak obligative kú</td>
<td>y</td>
<td>−</td>
<td>+</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>3a Abilitive xxián</td>
<td>y</td>
<td>−</td>
<td>+</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>3b Permissive xxián</td>
<td>y</td>
<td>−</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>4a Skillitive yon</td>
<td>n</td>
<td>−</td>
<td>+</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>4b Assertive yon</td>
<td>n</td>
<td>−</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>5 Successitive tón</td>
<td>n</td>
<td>−</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>6a Control marking bà</td>
<td>+</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>+</td>
</tr>
<tr>
<td>6b Manner marking bà</td>
<td>+</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>6c Resultant marking bà</td>
<td>y</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>6d Emphatic marking bà</td>
<td>+</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>6e Semelfactive di ba</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>7a Derivational qii</td>
<td>+</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>7b Volitional marking qii</td>
<td>y</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>7c Semelfactive di qii</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>8 Purposive xii</td>
<td>y</td>
<td>−</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>9 Purposive xxii</td>
<td>y</td>
<td>−</td>
<td>−</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>10 Terminative dà</td>
<td>y</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>11 Inchoative qiòn</td>
<td>y</td>
<td>+</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>12 Desiderative hrōnhrin</td>
<td>n</td>
<td>−</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>13 Venturive wàa</td>
<td>n</td>
<td>−</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>14 Causative gèe/güé</td>
<td>n</td>
<td>−</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
Chapter 10.

Clauses and Sentences

This chapter analyzes the structures of clauses and sentences in Prinmi. The structure of the clause will be described in terms of a layered structure. The structure of simplex and complex sentences will be addressed in turn. The investigation also includes clause-chaining sentences, one of the most common types of complex sentences in the language.

10.1 Clauses

The layered structure of the clause proposed in Role and Reference Grammar (RRG, henceforth; for details, see Van Valin & LaPolla 1997 and references cited therein) is useful for describing clause structure in Prinmi, especially for the complex structure. This section will start with a brief introduction on the layered approach to clause structure. Then a discussion of dependent clauses follows. Nominal clauses and verbless clauses will also be addressed in turn.

10.1.1 A layered approach to clause structure

Clauses are analyzed in terms of three layers in RRG. The smallest one is the Nucleus, containing the predicate. The next layer, the Core, consists of the Nucleus and the core argument(s) of the predicate. Modifiers of the predicate such as Temporals and Locatives are situated in the Periphery. The Core and the Periphery together make up of a Clause.¹ The non-configurational relationships between a verb, its argument(s) and modifier(s) in a simple clause are thus captured with the three-layered structure.

The predicate is typically a verb in a simple clause. Clauses headed by weather verbs may contain only the Nucleus (underlined in the examples), as shown in (10.1). (The clitic after the verb is an ‘Operator’, see below.) More commonly, the structure of simple clauses includes the Core (placed within a pair of brackets), as in (10.2), and sometimes also the Periphery, as in (10.3).

¹ Technical terms all start with a capital letter. Note that the term ‘clause’ is used in two senses, distinguished as follows: for the theoretical meaning as employed in RRG, it starts with a capital letter; for the other more general meaning, the ordinary capitalization applies.
Occasionally a clause may have elements belonging directly to the Nucleus and the Periphery only, i.e. the Core contains nothing but the Nucleus, as shown in (10.4).

The examples in (10.1)–(10.4) exhibit that Prinmi, as a verb-final language, reserves the final position of a clause exclusively for the predicate. No other constituent, argument or adjunct, may occur after the head verb in a clause. To a large extent, this also holds true for simplex sentences. As will be seen later in §10.2.1, the sentence structure is more complicated than the clause structure; exceptions sometimes appear at the sentence level. Within the scope of a clause, word order is quite rigid, starting from adjunct/modifier at the Periphery, followed by core argument(s) on the Core layer and then the verb on the Nucleus. The default order between arguments is Agent-Beneficiary-Theme, as seen in (10.2)b.

In RRG, each of the three layers of the clause may contain modifying elements called ‘Operators’, which express such grammatical concepts as aspect, negation, modality, evidentiality, and so forth. The layer location for every Operator is specified in RRG.² The scope of an Operator corresponds to the layer to which it belongs. Most Operators are verbal clitics in Prinmi (cf. §8.1—§8.3), but others include directional prefixes

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² RRG also orders the relative positions of the Operators within each layer according to the tendency observed cross-linguistically. This will not be discussed here.
§5.2.1) and auxiliary verbs (cf. §9.2, §9.3, §9.5). The major inventories of Prinmi Operators on different layers are listed in the following:

Table 10-1: Distribution of Operators in Prinmi

<table>
<thead>
<tr>
<th>Nucleus</th>
<th>Core</th>
<th>Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perfective 'si/'sian'/sin</td>
<td></td>
<td>General negator ma'</td>
</tr>
<tr>
<td>Durative 'non</td>
<td></td>
<td>Desiderative negator dia'</td>
</tr>
<tr>
<td>Directionals</td>
<td>dde(a)- “towards the speaker”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tea- “away from the speaker”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>gge- “outwards”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ea- “inwards”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nea- “downwards”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dea- “upwards”</td>
<td></td>
</tr>
<tr>
<td>Negation</td>
<td>Perfective negator mee’</td>
<td>General negator ma’</td>
</tr>
<tr>
<td>Deontic modals</td>
<td>Obligative ku</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Permissive xxian</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admonitive ma’ha</td>
<td></td>
</tr>
<tr>
<td>Non-deontic modals</td>
<td>Assertive yon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Optative 'xo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Volitive 'gai</td>
<td></td>
</tr>
<tr>
<td>Evidentials</td>
<td>Hearsay 'jii/'jia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Involvemental 'ron/'ru/'rin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-involvemental 'riu</td>
<td></td>
</tr>
<tr>
<td>Interrogativity</td>
<td>Interrogative a’</td>
<td></td>
</tr>
<tr>
<td>Attitudinals</td>
<td>Surprisive ggia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suggestive ma</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Speculative ba</td>
<td></td>
</tr>
</tbody>
</table>

As shown in the table, the Operators are generally layer-specific. The few overlaps permitted in RRG are Operators for directionals and negation. Even then, the actual layer of these Operators in a specific clause is unambiguous. Directionals are considered as Core Operators only when a deictic reference is made to speech act participants. Used in an abstract sense beyond the deictic meanings glossed in the table, a directional prefix functions as a Nuclear Operator. While negation can occur in each of the three layers, two of the three negators in Prinmi are restricted to particular layers. The general negator may appear either on the Core or on the Clausal layer, depending on the scope of
negation. Taking the detailed function of Operators into consideration, all Operators are situated on specific layers of the clause. This specification of Operators is relevant and useful to the discussion of complex structure below.

When more than one clitic Operator appears in juxtaposition, their order is predicted by the layers to which they belong, i.e. a Nuclear Operator will occur the closest to the verb host, while a Clausal Operator the farthest away. For this reason, the interrogative clitic cannot be inserted between the verb and the perfective clitic, as in (10.5)a, but it can follow the perfective, as in (10.5)b:

\[(10.5) \text{a} \quad *\text{Née qée gge-.zzâo’a’si?} \]
\[ \quad 2s \text{ meal out-eat:2s+Q+Pf} \]
\[ \text{b} \quad \text{Née qée gge-.zzâo’si a?} \]
\[ 2s \text{ meal out-eat:2s+Pf Q} \]
\[ \text{You've eaten a meal?} \]

More often, the interrogative clitic is attached before the verb (cf. §8.1.2); consequently, the ordering of adjacent clitic Operators does not arise. In general, if a Prinmi verb hosts several verbal clitics, they are all likely to be Clausal Operators. Instances of clitic Operators of different layers are sporadic. Examples for this are found mainly with the evidential hearsay jii’riu, which can only follow the Nuclear Operator ’si, e.g.

\[(10.6) \quad \text{Miábbü ggee bbo kreggion do nea-zhua’si jii’riu.} \]
\[ \text{eyelid InT Dc knee on down-contact+Pf say} \]
\[ \text{It is said that the eyelids touch down to the knees.} \]

10.1.2 Dependent clauses

In principle two types of clause can be recognized in Prinmi: dependent clauses versus independent clauses, according to whether a clause has the potential to function as an independent sentence. Structurally dependent clauses are reduced to the Nuclear or Core layer. Consider the relation between the adverb diá “now” and the adjacent dependent clause (underscored) below:

\[(10.7) \quad \text{Nire dfa jiiddin ddi’non tea-ddâo’si.} \]
\[ 3p \text{ now flood cast+Dur fr.sp-tired+Pf} \]
\[ \text{Having started the flood, they became tired now.} \]

Diá must be analyzed as situated outside the dependent clause, modifying the head verb of the sentence tea-ddâo “tired”. If it were regarded as part of the dependent clause, the meaning of the sentence would become “They, now starting the flood, became tired.” The fact that the adverb cannot qualify the dependent clause in (10.7) coincides well with
the reduced structure of dependent clauses.

Serving as a scene-setting topic (cf. §6.4.2), the initial Temporal xxiâni “yesterday” in (10.8) covers both the events of borrowing and reading in the sentence.

(10.8)  
\begin{align*}
\text{Xxiâni} &\quad \text{ea} \quad \text{nî} \quad \text{bbe} \quad \text{jjiiji} \quad \text{ddêa-yin’non} \quad \text{dô-yi} \quad \text{ma’xf}. \\
\text{yesterday} &\quad \text{1s} \quad \text{3s} \quad \text{at} \quad \text{book} \quad \text{to.sp-lend+Dur} \quad \text{look-nm} \quad \text{N+exist}
\end{align*}

Yesterday, having borrowed a book from him, I didn’t read (it yet).

Despite this, the adjunct argument is not located on the Periphery layer of the dependent clause. Under the request of a specific temporal modification for the event of borrowing in a similar sentence, the consultant rendered the corresponding dependent clause in (10.8) as an independent one in (10.9):

(10.9)  
\begin{align*}
\text{Xxiâni} &\quad \text{ea} \quad \text{nî} \quad \text{bbe} \quad \text{ede} \quad \text{jjiiji} \quad \text{ggêe} \quad \text{ddêa-yin} \quad \text{bbo} \\
\text{yesterday} &\quad \text{1s} \quad \text{3s} \quad \text{from} \quad \text{that} \quad \text{book} \quad \text{InT} \quad \text{to.sp-lend} \quad \text{ExT}
\end{align*}

mêe’yêa,  
\text{Npf+fetch} \quad \text{home} \quad \text{look} \quad \text{Npf+succeed}

(Although) I borrowed that book from him yesterday, I haven’t brought (it and) haven’t been able to read (it) at home.

Note that the consultant encoded the event of borrowing as a clausal topic, which has the structure of an independent clause. The cognitive status of ‘book’ has also changed from a generic one in (10.8) to a topical one in (10.9).

If we view the relation between verb and sentence as a sort of development, we can have a developing path like: \text{verb} \rightarrow \text{Nucleus} \rightarrow \text{Core} \rightarrow \text{Periphery} \rightarrow \text{Clause} \rightarrow \text{Sentence}. The full developing path is available to independent clauses, but not to dependent clauses. The verb in a dependent clause ceases to develop when it reaches the Core layer. Consequently, the dependent clause, with a reduced structure, cannot occur as an independent sentence.

Prinmi dependent clauses are used to express adverbial meanings, especially manners. There is no specific marker for dependent clauses, but certain dependent clauses often contain the durative clitic ’non (the durative-marked clause is underlined):

\begin{align*}
\text{Xxiâni} &\quad \text{ea} \quad \text{nî} \quad \text{bbe} \quad \text{jjiiji} \quad \text{ddêa-yin} \quad \text{bbo} \\
\text{yesterday} &\quad \text{1s} \quad \text{3s} \quad \text{from} \quad \text{that} \quad \text{book} \quad \text{InT} \quad \text{to.sp-lend} \quad \text{ExT}
\end{align*}

\text{mêe’yêa, jêemêe dô mêe’ton.}
\text{Npf+fetch home look Npf+succeed}

(Although) I borrowed that book from him yesterday, I haven’t brought (it and) haven’t been able to read (it) at home.

3 A durative-marked clause is not necessarily dependent in structure; the dependency arises only when the clause is headed by an Action verb (see §8.2.1.2).
(10.10) a  
Mè  bbèe  do’non  wo  gà;  
person  at  look+Dur  mouth  open  
bbôn  bbèe  do’non  suu  kà.  

Take a look at the person (before) open (your) mouth; take a look at the tree 
(before) pick the fruit. (Proverb)

b  
Cii  goxi’non  sshôn  ggée  tu.  
goat  lead+Dur  sheep  InT  fall  off  
A sheep being led by a goat cannot but fall off the cliff. (Proverb)

c  
Jì’rè  bbo  ggùan_màn  ggon  ea-chiì’non  tea-kà  yon.  
some+p  Ext  horse_hair  Inst  in-knot+Dur  fr.sp-detach  Assr  
It’s certain that some will detach (the warts) with horse hair by running a knot 
around (them).

d  
Hea  ggée  bbá  jian’rè  ea-xxii’non  qee  zzì  kù?  
who  InT  family  child+p  in-lie+Dur  meal  eat  need  
Whose family’s children would eat while lying?

In (10.10)a–b, the dependent clauses observably extend to the layer of Core. Oftentimes, 
a verb may be the sole explicit word in a dependent clause, as in (10.10)c–d.

Seen in (10.10)d is a manner clause with the durative marking; quite often, this kind 
of adverbal clause may appear as a dependent clause without overt marking, e.g.

(10.11) a  
Yì_zùu  ni  mea_lhee  ggée  ddëa-ddiön  “nearebbù”  màn.  
conch_son  with  fire_tongue  InT  to.sp-existnam  nearebbu  name  
The small conches and the flames are collectively called ‘nearebbu’.

b  
Debbô  bûu  ddëa-sshâ,  bbiàn  ddëa-sshâ,  tea-bbiàn  bà  
then  axe  to.sp-carry  rope  to.sp-carry  fr.sp-hurry  do  
ggò  ku  dëa-xii.  

hill  top  up-go  
Then (he) took the axe, took the rope, went up to the hilltop in a hurry.

c  
son_baigüän  di  tea-xuxu’â_ bbo  ddiàn  wu  lòbiâ  xii,  ...  
three_brothers  some  fr.sp-joint+M  De  field  in  work  Pps  
Some three brothers went to work together in the field, ...

Although the manner clause in (10.11)c contains the modificatory and discourse clitics, 
they are freely omissible. The function of the modificatory clitic ‘a is probably to signify 
the manner clause to be a modifier. The verbhood of the head in these dependent clauses 
is demonstrated primarily through the prefixation of directionals, which is a reliable 
indicator of verb in Prinmi.

A relatively complex manner clause is the one in (10.11)b, consisting of the auxiliary
verb *bâ* "to do" and another verb. As verbs inherently functionable for manner modifiers are scanty, Prinmi utilizes the auxiliary to derive certain manner verbs (cf. §9.4.1). Another instance of such derivation is (10.12), with two manner clauses side by side:

(10.12) nîrë tea-xuxû'non chua dâi ba'non grongrî: ...
3p fr.sp-joint+Dur voice big do+Dur sing

*They sing aloud together: ...*

### 10.1.3 Nominal clauses

Prinmi has a kind of clause ending with the numeral *di* "one", which is syntactically the head of the expression but does not impart any meaning to the clause. This kind of clause will be called ‘nominal clause’. There is a striking functional similarity between Prinmi nominal clauses and nominal sentences in Central Alaskan Yupik Eskimo, described by Woodbury (1985). The function of Prinmi nominal clauses can be analyzed in the NSM as follows:

(10.13) A semantic analysis of Prinmi nominal clauses

i. I see/hear/feel something

ii. Because of this, I know something else

iii. I did not know it before, now I think I know it

As suggested by the script in (10.13), nominal clauses involve a sense of discovery which arises from observation on the surroundings and is highly subjective, i.e. speculative, for it is based on cursory observation. Nominal clauses are constantly found in sentences involving situations relevant to the moment of utterance. For instance (the discourse context of the utterance is supplied within brackets in the English translation),

(10.14)a "[...] èa ddiâddia yîlo ëwu xxee di, ..."
1s granny grand grandchild there existan NC

"[I smell the scent of people.] My dear little child is probably there, ..." (Said by the monstrous witch.)

b "Dë mî ggee nea-sii si'a di."
this person InT down-die Pf+M NC

"This person (is) dead." (Said by the bear after smelling on the person’s face.)

c "Hmezhalëe ggùn nee ejjëe gri si’a di."
girl InT Dc there sing Pf+M NC

"The girl's been singing there." (Said by the Magpie when finding out who's

---

4 Woodbury (1985: 72-73) observes that nominal sentences in Central Alaskan Yupik Eskimo tend to 'impart to the utterance an air of vividness and sometimes of exclamation; they are associated with statements of discovery or surprise.'
Nominal clauses always contain the marker di. That the marker does not serve as a nominalizer of the clause is well illustrated in (10.14)b–c, where the clause is related to the numeral through the modificatory clitic ‘a. The literal meaning of (10.14)b is thus “this person (is) one (who) has died”. Based on this, the structure of nominal clauses is analyzed as follows:

(10.15) 
\[ \text{[Clause]} \quad \text{di} \]

relative clause

Under the proposed analysis in (10.15), there exist two constituents in a nominal clause: a modificatory clause and a nominal head. The modificatory clause behaves structurally like a relative clause (§7.1.3), but is generally not marked by the modificatory clitic. The explicit marking is required only in the presence of the perfective clitic ‘si.

When nominal clauses occur in an interrogative or negative sentence, the relevant clitics qualify the head verb in the modificatory clause. As far as the interrogativity or negation is concerned, the marker di is irrelevant, for it is situated outside the modificatory clause. Nominal clauses are underlined in complex sentences below:

(10.16) a Née dō kee, sian bbō ggūī qiōn a’gāi di?
2s look time tomorrow ExT rain appear Q+Vlt NC
Do you think it's going to rain tomorrow?

b Dé qiī ggēe ēa meacōn lo gge-hnūuhnūu ea-hnūuhnūu
this dog InT 1s heel outside out-smell in-smell
qiī’riu; ēa māsīi mā’riū di.
do+nInv 1s know N+nInv NC
The dog is smelling at me around my heels; (it) probably does not recognize me.

Sometimes the discourse motivation for using nominal clauses is not as straightforward as those exemplified thus far. Consider the following:

(10.17) a Ėa nī bbee ēnīa sēe di.
1s 3s at like that miss NC
I miss him so much.

b #Ėa nī bbee sēe di.
1s 3s at miss NC
I miss him.
As shown in (10.17)b, the use of nominal clause becomes unacceptable when the adverb *ênia* “like that” is omitted from (10.17)a. Since the omission of the adverb cannot possibly collapse the syntactic structure of the clause and the meaning of the sentence (I miss him) is not abnormal, the unacceptability must be ascribed to pragmatic factors. That is, the encoding of the message as a nominal clause is not appropriate for this particular instance. The subtle difference contributed by *ênia* “like that” in (10.17)a implies a sense of discovery that the speaker is really fond of the person. The point of the utterance is not about the mental state of thinking about someone, but the new conscience of the feeling towards the person. When the adverb *ênia* “like that” is left out in (10.17)b, it is not possible to construe such discovery, and the use of nominal clause becomes problematic. Likewise, the lack of a discovery sense in (10.17)c leads to unacceptability of the nominal clause. While it is effortless to realize one’s own mental state, it is virtually impossible to observe through non-verbal clues that someone is thinking about yourself. Therefore, the well-accepted sentence in (10.17)a is regarded to be inconceivable when it is altered slightly to (10.17)c.

Other noteworthy instances of nominal clauses include:

(10.18)a  
Née dō kee, sian bbô ggūi qiön a'gāi di?  
2s look time tomorrow ExT rain appear Q+Vlt NC  
*Do you think it’s going to rain tomorrow?*

b  
“... Erā hūanbo do néa-rin nea-cā qiön’gāi di. ...”  
Earth on down-suffer down-disaster appear+Vlt NC  
*“... A catastrophe will probably befall the Earth. ...” (Said by the youngest brother to his brothers.)*

c  
“... meazii ggée nea-ddi, née xxólolo ea-si yôn cat InT down-cast 2s carefully in-heed listen:2s  
— qiinî zzhôn’riu di. ...”  
how become+nInv NC  
*“... Throw the cat down and listen very carefully — how it may go. ...” (Said by the Crow to the youngest brother.)*

Repeated from (10.16)a, (10.18)a is found in a short translated dialogue about a forest fire that has lasted for three days. The use of nominal clause in the utterance implies that the question-raiser is inviting some tangible reply rather than a random thought. The nominal clause in (10.18)b differs from the others in that the knowledge about the catastrophe is gained through the exchange of lunch for the Crow’s news. The discovery
sense of the nominal clause in (10.18)b appears secondary to the sense of subjectivity, that the youngest brother chooses to trust the Crow on the news. The nominal clause in (10.18)c resembles (10.18)a in that observable clues are not available at the moment of utterance, counter to the usual situation. Since the Crow is projecting a future event, whatever may be observable cannot be certain. The use of nominal clauses is to accentuate the observability of the situation and the kind of clue it may provide for the access to new knowledge.

10.1.4 Verbless clauses

Prinmi verbless clauses do not represent syntactic structures in their own rights. They arise from ordinary clauses after the head verb is omitted. In other words, they are derived from ellipsis of the head of a simple clause. Since this kind of ellipsis is rather restricted and not fully predictable, it is necessary to have a brief discussion of its occurrence, even though they do not constitute a genuine clause type. Depending on the omitted verbs, verbless clauses can be divided into two groups. Verbless ascriptive clauses are ascriptive clauses with the copula zzii “to be” omitted; whereas verbless quotational clauses are those containing a direct quotation but without the verb jii “to say”. Although Prinmi may allow some other similar verbs to be left out under some circumstances, zzii “to be” and jii “to say” are the most common and well-observed ones. Verbless clauses do not include highly reduced utterances in conversational exchange, those typically used as a short reply to a question, e.g.

(10.19)a “Née mēe_wû ddao?”
2s what_year Cpl:2s
“What are you (i.e. born in what year)?”

b “Nôn_kee dde-qîn’si?”
when to.sp-appear+Pf
“When did (you) return?”

The copula zzii “to be” is not freely omissible. The omission is found only in some ascriptive clauses. For instance (the verbless clause appears within a pair of brackets):

(10.20)a Qiif nēa_con xi yon:
b设立 two_kind exist Assr
[dēa_con bbo qūa_qūi]; [dēa_con bbo qii_qūi].
one_kind ExT pig_badger one_kind ExT dog_badger

There are two kinds of badgers: one kind (is) the hog badger, one kind the Eurasian badger.
As for hog badgers, (they are of) the same kind as pigs as far as snouts are concerned, (they) can wriggle (with their snouts);

As for Eurasian badgers, (their) mouths (are of) the same kind as dogs', (they) can't wriggle (with their mouths);

Coincidently, a text about badgers contains several verbless ascriptive clauses. As shown in (10.20), the verbless clauses are typically situated in a complex sentence. No simplex sentence formed by a verbless ascriptive clause has been attested.

The four instances of verbless clauses presented in (10.20) are known to result from verb ellipsis because it is possible to insert the copula at the end for each of them without significant change. A subtle effect discernible from the insertion of a sentence-medial copula is that the structure of the sentence becomes less compact. Such insertion is impossible for nominal clauses described earlier. The restorability of a verb provides a crucial means for distinguishing verbless clauses from nominal clauses in Prinmi.

As noted in §8.2.3.1, the verb jii “to say” has undergone considerable grammaticalization. Alongside other functions, the cliticized jii is also used for the quotative marking. The majority of verbless quotational clauses contain the cliticized form of the verb. As such, it is sometimes ambiguous as to the function of the word/clitic. Unequivocal verbless quotational clauses are those without the use of jii “to say”. For instance,

(10.21)a “Má’gièa, má’gièa má’gièa.
N+afraid N+afraid N+afraid
Má’gièa; tea-pea’sí la má’gièa. Xxiamî má’gièa,
N+afraid fr.sp-abandon+Pf also N+afraid tonight N+afraid
eá jjee nea-xxín, nea-xxín, má’gièa.”
1s at down-sleep:2p down-sleep:2p N+afraid
“(It) doesn’t matter, doesn’t matter, doesn’t matter. (It) doesn’t matter; even though you’re abandoned, doesn’t matter. Tonight doesn’t matter, (you) sleep at my place, sleep at my place, doesn’t matter.”
Then, the Cuckoo (said), "Yap, that's fine. We two are congenial friends. This is true."

A verbless quotational sentence like (10.21)a, consisting of merely a quoted speech, is quite common in literature style cross-linguistically. When the narrator is confident that the hearer/reader will be able to figure out who utters the quoted speech, the speaking verb is left out together with the speaker. Such instances are probably not noteworthy. It is included here, as it falls within the definition of verbless clauses. The other example in (10.21)b is more interesting. While ellipsis takes place, only the speaking verb is omitted, rendering the sentence with the speaker (which retains the ordinary morphosyntactic marking) and the quoted speech. Instances like this justify the recognition of verbless quotational clause as a kind of verbless clause in Prinmi. Like other verbless clauses, the omitted speaking verb can be restored in the sentences without any difficulty.

10.2 Sentences

The description of syntactic structure above has concerned primarily simple clauses. Prinmi clauses are frequently compounded into complex sentences. The major topics of this section are complex structures. After a general discussion of the structure of simplex sentences, the notions of 'juncture' and 'nexus' employed in RRG will be introduced and applied to Prinmi sentences. With the concept of sentence defined, a representative complex sentence will be analyzed explicitly.

10.2.1 Structure of simplex sentences

Although a simple clause alone may constitute a simplex sentence, Prinmi simplex sentences often comprise additional constituents outside a clause. Therefore a sentence structure need be distinguished from a clause structure, even for simplex sentences. Relevant to the sentence structure of Prinmi are two extra-clausal positions: Left-detached position and Right-detached position, as termed in RRG. These are located outside a clause. The former is particularly crucial to the information structure of Prinmi (see §12.4). The basic structure of a simple Prinmi sentence can be outlined as in Figure 10-1. With varying degrees of likelihood, all the constituents in the sentence structure are subject to ellipsis, including the predicate. When a predicate is left out, the sentence contains a verbless clause.
Arguments are canonically situated in the Core layer of the clause, but they can also appear outside the clause when they serve as sentential topics. Note that the extra-clusual positions are reserved for those functioning as pragmatic topics. Topics may occur before or after the clause, but not simultaneously at both ends. The right-detached topic, exemplified in (10.22)a, is marginal, in contrast to the pervasive left-detached topic in (10.22)b (bracketing indicates layers within a clause; boundaries of inner layers are denoted by the capital letter N and C at the upper corners for Nucleus and Core respectively):

(10.22) a Debbô, C[^{[dêa-giêa’non]}] son _baigüân_ ggee.  
well up-fear+Dur three_brothers InT
Well, (they) get frightened, the three brothers.

b ..., née [re bbêe C[^{zhinzhu ggêe N[nea-ddi nea-xii gêe]}]].
2s first at pestle InT down-cast down-go let:sbj
... , you throw the pestle down first.

The presence of the temporal modifier re bbêe “first” in (10.22)b is particularly helpful for recognizing a left-detached argument. For the core argument née “you” to precede the modifier in the Periphery, it must be situated at the Left-detached position outside the clause. Otherwise, it could only follow the adverbial modifier and occur within the Core layer.

While the Right-detached position is restricted to a simple noun phrase and is not recursive, it is not uncommon to have as many as three Left-detached positions in a sentence, often engendering a complex sentence. The sentence from which (10.22)b is extracted contains two additional Left-detached elements, both temporal clauses:

(10.23) Debbô jiiddîn ke-ddûf ke-qîön râ kee bbo, kee bbo bbô,  
Dc flood out-cast:3 out-Inch M time ExT time Dc Dc
jî ggêe niä krê bo dêa-dâ ra kee bbo, née ...
water InT 2s:M foot below up-reach M time ExT 2s
Well, after the flood begins to start, then, when the water rises to your foot, you
[throw the pestle down first.].
The simplex sentence below also comprises more than one Left-detached position:

(10.24) Née, ëa ziižìi gée née [büuni bbo C[N[gge-ddiân’si]]].
2s 1s nephew InT 2s today ExT out-swallow+Pf
You, my nephew, you’ve swallowed today.

The initial argument née “you” is most likely a false start, but the arguments of the verb are certainly detached from the Core layer, both occurring before the Temporal büuni “today”.

The exact location of the topical argument in a sentence like (10.25)a is ambiguous because the Core layer is not sensitive to the pragmatic status of an argument, and topic is not syntactically restricted to the detached positions only. In sentences with a more complex information structure, pragmatic topics can be found outside (single-underlined in the examples) and inside (double-underlined) the clause, as shown in (10.25)b (whose information structure is discussed in §12.4.5).

(10.25) a C[Beazìi ggée N[prin]]. or Beazìi ggée C[N[prin]].
flower InT white flower InT white
(Its) flowers are white.

b Yonzzìi baba C[ssuu ggée N[zzhea’non]] C[zho ggée N[zzi]].
bat face InT bad+Dur organ InT wonderful
The bat, (its) face is ugly; (yet its) organs are perfect. (Proverb)

Since the vagueness of the sentence structure of (10.25)a cannot be disambiguated, both analyses will be accepted.

10.2.2 Juncture and nexus: the formation of complex structure

RRG distinguishes three types of juncture for predicate combination and three types of nexus for the relation between combined units. These can be portrayed as follows:

<table>
<thead>
<tr>
<th>Juncture</th>
<th>Nexus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nuclear</strong></td>
<td><strong>Coordinate</strong></td>
</tr>
<tr>
<td>Nucleus + Nucleus</td>
<td>Unit 1</td>
</tr>
<tr>
<td><strong>Core</strong></td>
<td><strong>Subordinate</strong></td>
</tr>
<tr>
<td>Core + Core</td>
<td>Unit 1</td>
</tr>
<tr>
<td><strong>Clause</strong></td>
<td><strong>Cosubordinate</strong></td>
</tr>
<tr>
<td>Clause + Clause</td>
<td>Unit 1</td>
</tr>
</tbody>
</table>

Figure 10-2: Juncture and nexus between clauses

As shown in Figure 10-2, the major types of juncture are all formed between homogeneous layers. In regard to syntactic relation between the joined elements, ‘Cosubordination’ is introduced as intermediate between the traditional concepts of
Coordination and Subordination. Cosubordination shares with Coordination that no embedding is involved in the juncture. It resembles Subordination in that one of the joined element is syntactically dependent on the other element. More specifically, at least one Operator is obligatorily shared by the combined units under Cosubordination at the level of juncture.

According to the types of juncture and nexus involved, a total of nine patterns are possible between any two combined units. Prinmi appears to exhaust all the possibilities. The examples from (10.26)–(10.28) illustrate all these juncture-nexus combinations. Each example contains one juncture, underscored with a single line; head verbs of the units are rendered in bold.

(10.26) Different nexus for Nuclear junctures

a  Hēe  ggon  ggu  ddê-gûân  gge-zzuû’si? (Cosubordinate)
who  Inst  middle  to.sp-pick:3  out-eat:3+Pf
Who picked (and) ate (them) at the middle?

b  déasuu’re  déa-prin  nea-dâ’si.
huàngguô+p  up-white  down-complete+Pf
The ‘huangguo’ (flowers) have completely whitened (the field).

c  Kú  do  dea-xao  nea-zzôn.
  top  on  up-go:2s  down-sit:2s
(You) go up and sit at the top.

Nuclear Cosubordination is much more common than the other two types of Nuclear juncture. Behaving like a single predicate, the verbs under the Nuclear juncture in (10.26)a share the same arguments (one explicit and the other implicit), adjunct, and Operator — the perfective ’si. Nuclear Subordination is typically found with juncture involving modification from the second verb to the first one, as in (10.26)b. Other than expressing aspect such as the terminative, the second verb in Nuclear Subordination may signify degree or intensity. Nuclear Coordination is marginal and somewhat dubious in Prinmi. Instances of this kind of juncture-nexus combination are often equivocal between Coordination and Cosubordination. The Nuclear juncture in (10.26)c appears to be Coordinate, since the only Nuclear Operators present are the directional prefixes. However, the independent use of directional prefixes as Nuclear Operators does not necessarily indicate Nuclear Coordination. As can be seen from (10.26)a–b, it is also observed in other types of Nuclear juncture.

Core junctures take place frequently in Prinmi, with Core Coordination being the most common type at this level. As specified in RRG, the Cores in a juncture must share at least one core argument. This condition also applies to Prinmi, but as a necessary one,
not a sufficient one (see §10.3.1). A common argument of a Core juncture is double-underlined in (10.27). That the juncture takes place at the level of Core can be observed easily in (10.27)a and (10.27)c, where each of the conjoined Cores contains an additional argument. In (10.27)b, only the second unit has an additional argument. Since juncture typically has homogeneous layers, the juncture in (10.27)b is considered to form at the Core level. Note that the first two units are directly Subordinate to the matrix Core.

(10.27) Different nexus for Core junctures

a  Meägeä qii  mire  jin  wu'a  nusían  muunán  
household_do  people  house  in+M  morning  evening  
geadeamâlâ  qii,  ddeereé  déadôn  kee,  qüî  da  gge-ji.  
chat  do  converse  time  good  only  out-say  
ssô  da  gge-ji,  zzhón  da  gge-ji  ku,  
fine  only  out-say  success  only  out-say  must  
yêggâo  la  qüî  têa-qi  ku.  (Cosubordinate)  
behavior  also  good  fr.sp-do  must

Housekeepers, when (they) chat and talk in the house in the morning and 
evening, (they) must speak of the good only, of the fine (things) only, of the 
success only, (they) must also behave well.

b  nîre  tea-xuxû’non  chua  dâi  ba’non  grongri:  ...  (Subordinate)  
3p  fr.sp-joint+Dur  voice  big  do+Dur  sing  
they  sing  aloud  together:  ...

Where the number of combined units is normally limited to two for Nuclear 
junctures, it is not unusual to have three units joined together as a Core juncture, as 
shown throughout (10.27). A juncture comprising more than three Cores is not attested, 
however. The Core junctures in (10.27)a and (10.27)c provide good evidence for such a 
restriction. The final constituent (also a Core) in (10.27)a could have been combined into 
the previous ones, but, instead, it is left behind by itself. Consequently, the Core 
Operator kū “must” is used twice. The three conjoined Cores share one, and the final 
Core is modified by another one. Similarly, the juncture in (10.27)c could contain four 
Coordinate Cores if the two coordinate arguments on the final Core were expressed 
separately in two Cores. The restriction on the number of combinable Cores may not be 
imposed by syntactic factors; yet, its existence in Prinmi can be ascertained.
Clausal juncture provides another important means for forming complex sentences. Clauses conjoined at this level usually share an adjunct (marked by a dotted line underneath). Note that the shared element supplied in the English translation for (10.28)b does not actually appear in the entire Prinmi sentence; it is expressed by a zero anaphor. The Clausal juncture in (10.28)c consists of four combined units, each containing the assertive modal yon, a Clausal Operator.

(10.28) Different nexus for Clausal junctures

a Xxiânhniân mè ggee dde-hrē. ddîan gûēe dde-mû
ancient sky InT to.sp-create earth InT to.sp-compact

râ kēe, ...

nînv:M time

When the sky was created (and) the earth was compacted in the ancient, ...

b sîan bbô ca-yân'sî ggee
tomorrow ExT in-plow+Pf InT

kusîan bbô ddîán dde-a-mû. (Subordinate)
third day ExT field fr.sp-compact

(they) plow tomorrow but the field becomes compact the day after.

c Jin wu'a. bbô mû ggee dêa-rô yon.
house in+M ExT person InT up-thrive Assr

zzî-tiân tea-mâ'mân yon. gguai-yî jee-yî

eat_drink fr.sp-N+expend Assr dress-nm wear-nm

bbûuzzhuu yon. dêa-dîân dêa-rô yon. (Coordinate)
affluent Assr up-rich up-thrive Assr

In the household, certainly, people thrive, sustenance not expended, clothing abundant, (all) prosperous.

Indications of the junctures at the Clausal level can be found in all the examples in (10.28). In (10.28)a and (10.28)c, the shared constituent is a Temporal and a Locative respectively, failing for the necessary condition of sharing a core argument for lower level junctures; whereas in (10.28)b, both clauses contain an initial Temporal in the Periphery, suggesting that the structure of each unit reaches the Clausal level.

An important characteristic about Prinmi junctures is that no morphosyntactic means, overt markings or conjunctions, are required for a juncture at any levels. Sometimes this can pose a problem in deciding the level of a juncture when other clues are not available. The general guideline for determining the level of juncture is to proceed from the lowest to the highest one. A juncture that can be analyzed as occurring at the Nuclear will not be regarded as a Core juncture; the identification of a Clausal juncture implies that the juncture cannot take place at a lower level.
Major grammatical properties associated with the three kinds of junctures can be summarized as follows:

Table 10-2: Syntactic characteristics of Prinmi junctures

<table>
<thead>
<tr>
<th>Juncture level</th>
<th>Nucleus</th>
<th>Core</th>
<th>Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units in juncture</td>
<td>usu. 2</td>
<td>2 or 3</td>
<td>2 or more</td>
</tr>
<tr>
<td>Type of shared element</td>
<td>core argument</td>
<td>core argument</td>
<td>usu. adjunct</td>
</tr>
<tr>
<td>Number of shared element</td>
<td>maximal sharing</td>
<td>usu. 1</td>
<td>varying (0~2)</td>
</tr>
<tr>
<td>Location of shared element</td>
<td>unrestrictive</td>
<td>within Core</td>
<td>outside Core</td>
</tr>
<tr>
<td>Typical nexus</td>
<td>Cosubordinate</td>
<td>Coordinate</td>
<td>Coord./Subord.</td>
</tr>
</tbody>
</table>

Most of the characteristics shown in the table are tendencies only. Definitive conditions are underlined. For both the Nuclear and Core junctures, what is shared between the predicates in the juncture must be core argument(s). The Clausal juncture typically involves a shared adjunct. If a core argument is co-referent in a Clausal juncture, it is always located outside the Core layer. It is possible to have an implicit shared argument which is not expressed anywhere in a sentence, although instances like this are not common. The association between juncture levels and nexus types is mainly based on impression; verification is needed when more resources are available.

The level difference of the junctures also leads to the impression that the Nuclear juncture is the strictest and the Clausal juncture the loosest in terms of conditions for combination. Intermediate between these two, the Core juncture has similarities with both of them. The Coordinate Core juncture and Coordinate Clausal juncture are so alike that they may be grouped together as ‘clause-chaining sentences’, vis-à-vis the ‘Double-verb Predicate Construction’ represented by the Cosubordinate Nuclear juncture. The latter will be examined in §11.1, while the former will be discussed in §10.3 below.

10.2.3 Sentence as the smallest information unit

While clauses are identifiable on the syntactic basis, the recognition of Prinmi sentences is not always easy and straightforward. It is a known fact that the kind of structural relation from clause to sentence, as observed in written English, does not necessarily apply well to other languages (cf. Lehmann 1993; Heeschen 1994).5 To make the concept of sentence usable for Prinmi, a definition is in order. Only with an explicitly defined notion of sentence can we proceed to meaningful analysis of complex

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5 More generally, the disparity also holds between the spoken form and written form of a single language. For example, Miller (1995) argues that spoken English does not have sentences.
sentences in Prinmi. Otherwise, for those favoring simplicity, a complex sentence could be broken down into smaller units called ‘sentences’; on the other hand, for those favoring complexity, a cluster of sentences might be lumped into one huge unit also called ‘sentence’. Without taking the boundary of sentence for granted, it is debatable how many sentences there are in the following passage:

(10.29)

1) Debbó, dë ziu ggee nea-jéerôn’non — qiihnì well this son InT down-hungry+Dur how-many-day qiixìa’re qée mee’zzìi, jìi mee’tìan — how-many-night+p meal Npf+eat, water Npf+drink:3s zhanôñ, jéerôn, tea-zhânzhanzhan’non da gge-qion. thirsty hungry fr.sp-walk+Dur only out-appear

2) “Mi di tea-meazhee, mèagée a’diôn? Jin’rà person one fr.sp-find, household Q+see house+p:M wu ea-xìi, zziì-yì di tea-meazhee, tian-yì dì in in-go, eat-nm one fr.sp-find, drink-nm one dde-prèa a’gärì?” da suudduu. to.sp-meet Q+Vlt?” only think

3) Zhânzhanzhan’rë ma’ton, dea-bài dea-bài gge-xìi walk+p N+able, up-cripple up-cripple out-go kee bbo, mì ma’jiàn, jìn mà’dìon. time ExT, person N+see, house N+see

4) Ddinbbee ke-lan’si rà mòmò’re ea-jjìì’non, sand out-cover+Pf M body+p in-rotten+Dur goyì’ròn zziì’rì dì tea-jùan, ggùéjjùe’ron zziì’riu. crow+p:Inst eat+nlnv NC fr.sp-see bird+p:Inst eat+nlnv

Well, this fellow is hungry — for how many days and nights hasn’t he eaten any meal, drunk any water — he’s thirsty, hungry, just walks and walks.

“Finding someone, will I see a household? Entering a house to find some food, will I get something to drink?” he just thinks.

While hardly able to walk, he moves like a cripple, he sees no person, no house.

He sees that bodies covered with sand are rotten, being eaten by crows, by some birds.

According to the definition of sentence (to be proposed below), the passage contains four complex sentences, as enumerated in (10.29). Many clauses in the passage refer to the entity introduced by the noun phrase dë ziu ggee “this son” near the beginning of the text. Nevertheless, the successive referrings all use a zero anaphor in Prinmi. (The referring expressions are rendered in italics for the English translation.) Given this shared constituent, some might wonder if it is not possible to have all kinds of junctures combining the entire passage into one complex, overwhelmingly complex, sentence. On the other hand, some could question and argue that the first sentence identified here should be treated as three sentences — “Well, this son is hungry. How many days and nights he hasn’t eaten, hasn’t drunk. He’s hungry, thirsty, just walks and walks.” In other words, the recognition of Prinmi sentences would be rather arbitrary if we simply
applied a non-defined traditional sense of sentence to the language.\textsuperscript{6}

Since Prinmi lacks explicit measures for clause linkage, it is difficult, if not impossible, to define a Prinmi sentence on purely syntactic grounds. If we construe a sentence in terms of an information unit which is taken as the amount of information deemed to be complete by the speaker in a given context, we may be able to recognize a Prinmi sentence more systematically. From the communicative point of view, a sentence necessarily constitutes the smallest complete information unit. The size of the information unit is contextually determined by discourse use. In casual speech and conversation, its occurrence as a phrase is not unusual. More commonly it may include several clauses for expressing more sophisticated information through a more complex structure. This flexible size of information unit allows us to identify simplex as well as complex Prinmi sentences. Since the notion of sentence is not to be equated with that of utterance, which is purely discourse-oriented, a pragmatically-based definition for sentence may be proffered as follows:

A sentence corresponds to the smallest complete information unit as intended by the speaker. The syntactic structure of sentence must be larger than a phrase.

Although there is no formal linguistic marking for a complete information unit, pragmatic clues such as intonation are often available. Notice that the second component in the definition explicitly makes reference to the syntactic structure of an utterance. Without this, sentence would be indistinguishable from utterance which covers information units as small as a single interjection.\textsuperscript{7} As a pragmatically-based definition, sentence must be identified with its discourse context; otherwise, there would be no basis for the completeness of information units.

\textsuperscript{6} Facing the difficulty of sentence boundary, some may resort to intuition of native speakers, assuming that the speakers would know where a sentence begins and where it ends. From my observation of written work by high school students, speaking Cantonese as their native language, they have little problem with sentence units in English, but many of them have little idea as to where a Chinese sentence should end. These students have no problem about constituent boundary in Chinese — they know where to put a pause, if needed, but they do not care to organize the smaller units into sentences. This shows that, at least in some languages, sentence as an organized unit is a learned linguistic aspect much like the written form of language, which is not necessarily part of native speakers' linguistic competence.
This observation is corroborated by Wackernagel-Jolles’ (1971) empirical study of native speakers’ intuitions about the sentence boundary in spoken German, cited in Miller (1995: 122-123).

\textsuperscript{7} When discussing syntactic structure, it is desirable to keep a smaller unit such as a phrase distinct from the larger unit of sentence. This is exactly the motivation for trying to define sentence.
In most cases what constitutes a Prinmi sentence can generally be recognized with the pragmatically-defined sentence. A minor problem remains with some quotational sentences. Sometimes a sentence with a lengthy direct quotation may contain larger information units within the quotations (cf. the second sentence in (10.29)). It is problematic to identify the entire quotational sentence in terms of the smallest complete information unit. Under such circumstances, the fact that these units, in spite of their features of ordinary sentences, constitute complementation to the quotational sentence must be taken into account. With this consideration, it is then clear that what is intended as complete for a quotational sentence cannot be the smaller unit(s) within the quotation.

With the working definition for sentence, we can justify the identification of the first sentence in the Prinmi passage in (10.29) as one complex sentence rather than three shorter sentences. The sentence is repeated below and presented in three parts:

(10.30)a Debbó, dé zùu ggee nea-jéerôn’non —
well this son InT down-hungry+Dur

b qii_hnì qii_xià’re qée mee’zzìi, jìi mee’tiian
few_day few_night+p meal NpT+eat water NpT+drink:3

c — zzhanôn, jéerôn, tea-zzhânzhan’non da gge-qion.
thirsty hungry fr.sp-walk+Dur only out-appear

Well, this fellow is hungry — for how many days and nights hasn’t (he) eaten any meal or drunk any water — (he’s) thirsty, hungry, just walks and walks.

The discourse motivation for the insertion of (10.30)b is apparently to explain why the fellow is hungry. As hunger is correlated to thirst in (10.30)b, (10.30)c continues with this line of information and supplies the new one about the movement. The essence of the information unit is: the fellow is walking while he is hungry and thirsty. Regardless of how many clauses employed to express this information, they constitute a single smallest complete information unit as intended in the context. Hence, (10.30)a is a complex sentence. Similarly, the information unit for the second sentence in the passage would not be complete if the quoted speech were not treated as part of the quotational sentence. The next two sentences pertain to the physical surroundings of the young fellow. They could arguably be regarded as one larger sentence, given the common theme. However, since the two are not well-integrated, a complete information unit for each of them is more appropriate. On the other hand, that the cited passage in (10.29) contains four sentences instead of one is obvious with the four identified smallest complete information units. The pragmatically-defined sentence enables us to cope with Prinmi sentences on principle.
10.2.4 An explicit analysis of a complex sentence

Now that we have a means for identifying complex Primi sentences, we can turn to complex structures of some long sentences. With a total of seven predicates, the complexity of the sentence in (10.30) is built on one Nuclear juncture, three Core junctures and one Clausal juncture. These junctures can be sketched as follows (Co.=Coordinate, Sub.=Subordinate, Co(sub)=Coordinate/Cosubordinate, Nuc=Nucleus):

```
<table>
<thead>
<tr>
<th>Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co. Clause</td>
</tr>
<tr>
<td>Clause</td>
</tr>
<tr>
<td>Clause</td>
</tr>
<tr>
<td>Clause</td>
</tr>
<tr>
<td>Co. Core</td>
</tr>
<tr>
<td>Core</td>
</tr>
<tr>
<td>Core</td>
</tr>
<tr>
<td>Co. Core</td>
</tr>
<tr>
<td>Core</td>
</tr>
<tr>
<td>Core</td>
</tr>
<tr>
<td>Co(sub) Nuc</td>
</tr>
<tr>
<td>1.Nuc</td>
</tr>
<tr>
<td>2.Nuc</td>
</tr>
<tr>
<td>3.Nuc</td>
</tr>
<tr>
<td>4.Nuc</td>
</tr>
<tr>
<td>5.Nuc</td>
</tr>
<tr>
<td>6.Nuc</td>
</tr>
<tr>
<td>7.Nuc</td>
</tr>
<tr>
<td>jéerôn</td>
</tr>
<tr>
<td>hungry</td>
</tr>
<tr>
<td>eat</td>
</tr>
<tr>
<td>drink</td>
</tr>
<tr>
<td>thirsty</td>
</tr>
<tr>
<td>hungry</td>
</tr>
<tr>
<td>walk</td>
</tr>
<tr>
<td>appear</td>
</tr>
</tbody>
</table>
```

Well, this fellow is hungry — for how many days and nights hasn't (he) eaten any meal or drunk any water — (he's) thirsty, hungry, just walks and walks.

Figure 10-3: The junctures of a complex sentence

In order to render a complete presentation containing all the junctures, Figure 10-3 reduces (10.30) to the Nuclear elements in the sentence only, i.e. seven bare verbs. The branching lines / indicates that some preceding elements have been omitted from the level in the presentation. Omissions of clitics and directional prefixes are not indicated. The partition of the complex sentence into three Clauses corresponds well to the division between information units. The presence of the temporal modifier how many days and nights after the first Nucleus precludes any juncture lower than a Clausal one between the first two (or three) Nuclei. It is also due to this modifier that the boundary of the second Clause in the sentence is patently demarcated. Of the five junctures, the Nuclear one is vague in regard to the syntactic relation between the two joined Nuclei. It can be either Coordinate or Cosubordinate. The second and the third Nuclei cannot combine at the Nuclear level, as they each have their own arguments on the Core layer. Neither can the sixth and the seventh Nuclei, since they are modified individually by directionals of Core
level. Note also that the Coordinate Core juncture in the third clause consists of a Subordinate Core juncture.

10.3 Clause-chaining sentences

As suggested by the term, clause chaining involves a number of clauses forming a complex sentence when they occur one after another. More specifically, a clause-chaining sentence constitutes either Coordinate Core juncture(s) or Coordinate Clausal juncture(s). In an extremely complex sentence, these particular kinds of junctures must represent the primary means for building up the structure if the sentence is to be regarded as clause chaining. Complex sentences produced by the main consultant seem to limit the maximum number of junctures to five. It is reasonable to consider this as the approaching maximal number of junctures in a clause-chaining sentence.8

It must be stressed that the label 'clause chaining' has no theoretical bearing in this study. It is used to enable a convenient collective reference to sentences with a Coordinate Core/Clausal juncture. The frequent occurrence of these juncture types in Prinmi deserves a descriptive term to facilitate reference to the phenomenon, but this does not imply in any way that these two types of juncture are to be merged undistinguished. On the contrary, the differences between them, outlined earlier in Table 10-2, will be addressed in some detail below. The grouping of the Coordinate Core and Clausal junctures together is intended as opposed to Nuclear juncture rather than being based on extensive similarities between the two. There is no contradiction in grouping the two types of juncture under one label and then proceeding to contrast the dissimilarities between them.

A syntactic characteristic of clause-chaining sentences is that the dissolution of a juncture has little effect on the basic structure of the sentence. By virtue of Coordination and lack of formal marking, a non-initial conjoined unit can easily be removed from the chain without affecting the structure of other unit(s), albeit with an inevitable loss of information. This is observed in clause-chaining sentences irrespective of the levels of juncture. For instance, the entire non-initial clause(s) (those in braces) in (10.31) may be deleted without leading to a collapse of the sentences. For (10.31)a, the deletion will result in a simplex sentence; whereas it is possible to have a clause-chaining sentence in (10.31)b if only one unit is removed.

8 Sentences with seemingly endless clauses are observed when a speaker tries to bypass sentence with paragraph as the basic information unit. In such discourse fashion, Clausal Subordination is frequently used to keep the 'sentence' growing. While this is usually tolerated in casual speech, speakers of Prinmi show no hesitation in re-organizing the enormous 'sentence' into paragraph when consulted.
(10.31)a  Lhialhia ggêe bbo zû dêa_con zziî,  
    hôngzi InT Dê prick one_kind Cpl  
    {mîre do aliâ di ggüän yôn}.  
people than little one tall Assr  

'Hongzi' is a kind of prickly (shrub), a little bit taller than a man.

b  ..., dêa_hni bbo dê zûu gêazai ggon zhînzhu ggêe ddea-sshua,  
    one_day ExT this son little Inst pestle InT to.sp-carry:3  
    {meazii ggêe ddea-sshua}, {reabû ggee ddea-sshua}.  
    cat InT to.sp-carry:3 cock InT to.sp-carry:3  
..., one day the young fellow took a pestle, a cat, (and) a rooster with him.

Shared elements are underlined in the examples. While it is ambiguous whether the argument in (10.31)a is situated on the Core or at the Left-detached position (cf. Ex.(10.33) below), the common argument (single-underlined) in (10.31)b certainly appears on the Core layer after the Temporal (double-underlined). Thus this clause-chaining sentence is undoubtedly built on a Coordinate Core juncture.

10.3.1 Clause-chaining sentences with a Core juncture

A significant difference between the Core juncture and the Clausal juncture is the location of the shared element in the sentence. The Core juncture always shares a core argument on the Core layer; whereas the common element of the Clausal juncture, a core argument or an adjunct modifier, is situated outside the Core layer. This is correlated with the different levels of junctures involved. Based on this divergence, a Core juncture in clause-chaining sentences can be distinguished systematically from a Clausal juncture as followed:

A clause-chaining sentence contains a juncture at the Core level, not at the Clausal level, if and only if the shared core argument is situated within the Core layer.

Note that a Core juncture may have other common element outside the Core in addition to the one shared on the Core layer, but a Clausal juncture does not share any element on the Core. The clause-chaining sentence in (10.32) thus contains a Clausal juncture rather than a Core juncture. The two constituents, a core argument (single-underlined) and a Locative (double-underlined), at the beginning of the sentence are shared by the juncture outside the Core layer.

(10.32)  Mé ggon nee mé do bbûu êa-ddüi, lhî êa-ddüi.  
    sky Inst DÊ sky on sun in-cast:3 moon in-cast:3  
The heavenly god places a sun and a moon in the sky.
Even taking the location of a shared argument into account, it is not always possible to determine whether a juncture is a Core one or a Clausal one. The clause-chaining sentence in (10.33)\(^9\) starts with a discourse element which has no bearing to the syntactic structure of the sentence. The sole constituent shared in the clause chaining is a core argument. Since its precise location in the sentence is vague — it can be on the Core or outside the Core layer (recall the discussion of Ex.(10.25)), the juncture level cannot be pinpointed. In these circumstances, the lower juncture will be chosen. Thus (10.33) is analyzed as containing a Core juncture.

It is not a coincidence that the shared arguments in (10.32) and (10.33) are both Agents. Prinmi generally requires a shared constituent to occur at or as near to the beginning of a sentence as possible. Since the Agent argument always occurs before the other arguments on the Core (cf. §10.1.1), measures need to be taken to satisfy the sentence-initial requirement when a non-Agent argument is shared by a juncture. Either the Agent, usually a generic one, is suppressed so as to render the non-Agent argument at the sentence initial position, or the non-Agent argument is placed at the Left-detached position. The suppression of the generic Agent in (10.34) has successfully rendered a shared Recipient at the beginning of the sentence. The level of juncture, however, must be lowered to Nucleus, since the Coordinate verbs can combine together at this level. In (10.35), the shared Theme is detached as a pragmatic topic from the Core layer.

\[\begin{align*}
\text{(10.34)} & \quad \text{Zzonbba Lha bbee qeeddeepä, sshon_lâi, hro_zâo.} \\
& \quad \text{Zzonbba god at sacrifice blessing_invite forehead_hit} \\
& \quad \text{To the 'Zzonba' god, (people) sacrifice with food, ask for blessing, kowtow.}
\end{align*}\]

\[\begin{align*}
\text{(10.35)} & \quad \text{..., dê [bbalâi ggon N[tea-jîn]], bêaddi ggon tea-jîn,} \\
& \quad \text{this snake Inst fr.sp-see frog Inst fr.sp-see} \\
& \quad \text{teasân ggon tea-jîn; ...} \\
& \quad \text{grasshopper Inst fr.sp-see} \\
& \quad \text{... this, the Snake saw (it), the Frog saw (it), the Grasshopper saw (it); ...}
\end{align*}\]

Such dislocation, however, violates the condition for the location of a shared argument on the Core juncture. As a result, the dislocation treatment always leads to a change of

\[\begin{align*}
\text{\quad \text{\textsuperscript{9} The variations of the verb in the example are retained as they occur in the story. They can be safely ignored, being irrelevant to the present discussion.}}
\end{align*}\]
juncture level. The juncture in (10.35) is raised to the Clausal level, since no argument is shared at the Core. This explains, in a negative manner, the frequent correspondence between the semantic role of Agent and the shared argument of a Core juncture in Prinmi.

A necessary, but not sufficient, condition for first order Coordinate Core junctures (i.e. those not building on another Core juncture) is the consistent semantic role of the shared argument in relation to each predicate in the juncture. Consider the common arguments of the Core junctures (single-underlined) in the following clause-chaining sentences:

(10.36) a Ddían do gôgüee sa火炬e’re bbûuziän ma’jiän,
earth on animal+ p ray N+see
mè ma’jiän, ddián ma’jiän, ...
sky N+see earth N+see

All the animals on Earth see no ray, see no sky, see no earth, ...

b Gibu ggon zonggüi nea-shúa bbo nee,
cuckoo Inst attire down-undress:3 ExT Dc
xiôn bbee tea-küan.
g. pheasant to fr.sp-give:3

The Cuckoo took (his) clothes off (and) gave (them) to the Golden Pheasant.

With the shared argument(s) situated on the Core layer, the sentences in (10.36) are built on a Core juncture. The shared arguments all bear a constant semantic role throughout the juncture, showing a functional consistency. This is particularly illuminating in (10.36)b. For both of the verbs in the juncture, gibu “cuckoo” is the Agent and zonggüi “attire” the Theme. The shared arguments do not take a double semantic role.

10.3.2 Clause-chaining sentences with a Clausal juncture

A similar functional consistency is sometimes observed on the Clausal juncture, as in (10.32)a above, where the Agent situated at the Left-detached position maintains its semantic role throughout the juncture. Nevertheless, this is not prerequisite for Coordinate Clausal junctures. Unlike Core junctures, the target of sharing in Clausal junctures is not confined to core arguments.10 Even when a core argument is shared in the Clausal juncture, it may bear a different grammatical function with different predicates in the juncture. For instance (EPR=Experiencer, AGT=Agent, LCT=Locative, ...

10 To be more precise, what may be involved in Clausal junctures is not argument sharing, but co-reference of arguments across clauses (Van Valin 1993). This theoretical distinction is not strictly followed, as issues sensitive to the distinction are not dealt with here.
The example in (10.37) is extracted from (10.30). The pair of brackets in (10.37)b indicates a Core juncture and the pair of braces marks a Nuclear juncture in (10.37)c. Within each of the two junctures, the shared argument holds consistent semantic roles to the predicates involved — Agent and Experiencer respectively. However, from the first clause in (10.37)a to the third clause in (10.37)c the co-referent argument changes from Experiencer to Agent and then to Experiencer again. In (10.38), both Clausal junctures embody an existential predicate. The shared constituent is realized as a Locative to the existential but as a Theme and Patient respectively to the other predicate in (10.38)a and (10.38)b. The functional consistency is not observed in these clause-chaining sentences.

The clause-chaining sentences exemplified above all contain a shared constituent which functions as a core argument at least once. This is not an essential property, however. In some clause-chaining sentences, the common element may be an oblique noun phrase such as a Temporal or Locative, as in (10.39); or there are simply no sharing at all, as in (10.40). Since no core argument is shared in these sentences, the junctures involved must take place at the Clausal level.

Once upon a time on the Earth, people were plentiful; animals were also plentiful.
plentiful; live beings were abundant.

(10.40) a  

| (10.40) a | HRÅNDI MEE’ZZHON NIA, MÈÅLHEE TEA-QION, ADÂI TÈA-QION,  
| N£R?+BECOME DC WIND FR.SP-APPEAR GALE FR.SP-APPEAR  
| MEDDIÀN TÈA-QION, XXÎGGÜÎ TÈA-QION.  
| EARTHQUAKE FR.SP-APPEAR DOWNPOUR FR.SP-APPEAR  
| (1T) HÀDN'T TAKEN LONG (BEFORE) THE WIND BLEW, THE GALE STORMED, THE EARTH QUAKED, THE RAIN POURED.  

(10.40) b  

| HIEA_KÙ KU BBO NEE BBÛU GGEE DDEA-SSHA;  
| TONGUE_HEAD TOP EXT DC HONEY INT TO.SP-CARRY  
| HIEA_BBÂN BO BBO BÛU GGEE DDEA-SSHA.  
| TONGUE_ROOT BELOW EXT AXE INT TO.SP-CARRY  
| HONEY IS BROUGHT TO THE TIP OF THE TONGUE; BUT AN AXE IS HIDDEN AT THE BOTTOM OF THE TONGUE. (PROVERB)  

(10.40) c  

| QÜI QÜI MI BBO IL ZÌ_LÀI BBO WU_ZÌ ÊKE-QION,  
| GOOD DO PERSON EXT SEED_SOW EXT HARVEST_GOOD OUT-APPEAR  
| SHEAYIN JJÀN’RÔN NEA-YÔ; ...  
| WHEAT BARN+P:INST DOWN-OVERFLOw  
| PERSONS WHO BEHAVE WELL, FOR CULTIVATION, A GOOD HARVEST WILL CERTAINLY COME, (RESULTING IN) WHEAT OVERLOADED IN THE BARN; ...

Functionally, the initial expression in (10.40)a contributes a temporal modification to the sentence, similar to that by the Temporal in (10.39). Syntactically, it is a clause but not subordinate to any noun phrase in the Periphery. Thus the temporal clause is analyzed as directly subordinate to the Coordinate Clausal juncture formed by the other clauses. The clause-chaining sentence in (10.40)b represents a rhetoric style common in Prinmi proverbs. The proverb constitutes two contrastive clauses which are chained together without any co-reference or sharing. Such clause-chaining sentences, however, are undoubtedly complex sentences. Forming a smallest complete information unit, the pair of contrastive clauses are pragmatically interdependent on each other. The example in (10.40)c has a complex information structure similar to that of Ex.(12.32), to be discussed in Chapter 12. The extracted part can be divided into a topic (before the symbol ‘Il’) and two clausal comments. In spite of lack of any shared element, the two clausal comments are legitimately chained together by virtue of the information structure (see §12.4.4 for details).

A clause-chaining sentence becomes very complicated when more than one noun phrase is shared and the co-reference switches between the chained clauses. For instance,
In the first three clauses, occupying (10.41)a–b, the co-references of the two underlined elements are consistent and not problematic. The complication arises with a switch in reference in the final two clauses in (10.41)c. The fourth clause has selected the Locative ddián do “on the earth”, used as a location modifier by the earlier clauses, to be the argument of its predicate. Then the fifth clause resumes the earlier core function of gögüee saigüee’re “animals”. Thus an abrupt shift of reference occurs in the sentence without any overt indication. While the shift of the intended referent and the change of grammatical functions are necessarily subject to semantico-pragmatic factors, they do not seem to be constrained by syntactic rules as far as the structure of the sentence is concerned. Indeed they are not predictable by syntactic conditions or rules, but occur naturally to the discourse need. (The well-formness of the clause-chaining sentence in (10.41) can be assured; it stands several revisions of the text in which it appears.)

According to the different levels of juncture, the major grammatical properties of clause-chaining sentences can be summarized as follows:

Table 10-3: Grammatical properties of clause-chaining sentences

<table>
<thead>
<tr>
<th>Levels of Coordinate juncture</th>
<th>Core</th>
<th>Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Adjunct-sharing</td>
<td>Possible</td>
<td>Possible</td>
</tr>
<tr>
<td>b) Argument-sharing</td>
<td>Mandatory</td>
<td>Optional</td>
</tr>
<tr>
<td>c) Location of shared element</td>
<td>Within the Core</td>
<td>Outside the Core</td>
</tr>
<tr>
<td>d) Grammatical function of shared argument</td>
<td>Consistent</td>
<td>Free</td>
</tr>
<tr>
<td>e) Units in juncture</td>
<td>2 to 3</td>
<td>2 to 4</td>
</tr>
</tbody>
</table>

The three properties listed from a) to c) in the table are also applicable to non-coordinate junctures at the corresponding levels. The remainders are restricted to the Coordinate junctures. As can be seen from the comparison, grammatical properties associated with the Coordinate Clausal juncture tend to be less restrictive. Junctures at this level are the most accommodating, combining units that cannot be conjoined at the lower levels.
10.4 Summary

Adopting the layered structure of the clause in RRG, this chapter has analyzed simple clauses in terms of three layers. Not every clause has the potential to contain all the layers. For example, a dependent clause cannot be fully expanded; it may comprise maximally the Core as its outermost layer. Nominal clauses also have an unusual structure: they are essentially constructed on a relative clause modifying the semantically vacuous numeral *dí*.

Prinmi sentences have additional positions for expressing pragmatic information. Thus a simplex sentence is not structurally identical to a simple clause. Predicates are frequently combined into juncture in forming complex structures. Possibilities of the nine juncture-nexus combinations are all attested in the language. Clause-chaining sentences which contain either a Core Coordinate juncture or a Clausal Coordinate juncture occur commonly in Prinmi. They are linked together without any overt marking or conjunction. Because of this, it is often difficult to determine the boundary of a sentence. A pragmatically-based definition of sentence is proposed to cope with the problem. Under this approach, the maximum number of junctures found in a complex sentence turns out not to exceed five.
Chapter 11.
Complex Predicates

This chapter examines the structures of three types of complex predicates in Prinmi, starting with a kind of verb concatenation which will be called ‘Double-verb Predicate’. Two important issues — causativity and complementation — are then addressed separately at some length. Other major complex structures were discussed in various other chapters. An analysis of relative clauses was presented in §7.1.3. Temporal adverbial clauses were described in §7.1.4. Manner clauses with a dependent structure were examined in §10.1.2, and clause-chaining sentences in §10.3. A complex structure may also arise when a topic constituent contains a conditional clause (see §12.4.2; also §12.4.5.2).

11.1 The Double-verb Predicate

In describing Nuclear junctures in §10.2.2, we saw that Prinmi verbs can appear side by side to form one larger predicate. This is generally referred to as a ‘serial verb construction’ or ‘verb serialization’ in the literature. Inasmuch as the labels ‘serial verb construction’/‘verb serialization’ cannot be defined rigidly (cf. Wilawan 1993; Durie 1997, and further references therein), a descriptive, but definable, term ‘Double-verb Predicate’ will be proposed as follows for the phenomenon concerning concatenated verbs in Prinmi:

(11.1) A Double-verb Predicate is a kind of Nuclear juncture comprising two adjacent units which are usually verbs but can also be Nuclear junctures; the two units share every argument to the full potential of the valence of the head verb in each unit in a uniform grammatical function.

1 There are some generally accepted grammatical properties about ‘serial verb constructions’ such as their containing a single predicate and being a monoclause (cf. Matisoff 1973, 1991b; Durie 1997; Aikhenvald 1997, inter alia). But these properties, if found, usually represent necessary but not sufficient conditions. They are of limited use in defining the construction. Indeed, Durie (1997: 291) notes that the term ‘verb serialization’ may be used to cover different phenomena by different authors. It should also be stressed that the proposed ‘Double-verb Predicate’ is intended to cope with the verb concatenation in Prinmi, not as a replacement for all kinds of ‘serial verb constructions’ discussed in other languages. As will be seen in §11.1.3, characteristics of the Double-verb Predicate are consonant with many observations noted in the literature for ‘verb serialization’. The advantage of the alternative approach is that it allows an identification of the compact predicate in a more systematic way.
The Double-verb Predicate represents a specific kind of Nuclear juncture. It typically has the Cosubordinate nexus — a typological tendency noted for Nuclear juncture in RRG — but cannot be equated with any juncture-nexus type. As stipulated in (11.1), it requires that a shared argument bear an identical grammatical function to both head verbs of the units in the juncture. This is illuminated by the minimal pair of sentences below:

(11.2) a Zonggüü ggee gge-yéa nì bbee tea-kian xìi a'riu?
    attire InT out-fetch 3s to fr.sp-give Pps Q+nInv
    Will (the Golden Pheasant) go bring the clothes and give (them) back to him?

b Zonggüü ggee nì bbee gge-yéa tea-kian xìi a'riu?
    attire InT 3s to out-fetch fr.sp-give Pps Q+nInv
    Will (the Golden Pheasant) go bring and give the clothes back to him?

Under the present analysis, (11.2)a contains a Core juncture, which cannot be a Double-verb Predicate by the proposed definition; whereas (11.2)b has a Double-verb Predicate. This structural difference is manifested in the position and (non-)sharing of the Recipient nì bbee “to him” in the sentences. Occurring between two verbs in (11.2)a, the argument is not shared or co-referent with the first verb. In order for the verbs under the Core juncture in (11.2)a to share all their arguments, it is necessary to lower the juncture level to Nucleus, as in (11.2)b. The lowering of the juncture level cannot take place unless the verbs involved are adjacent to each other. Therefore, the Recipient is preposed from the interverbal position in (11.2)a to the pre-verbal one in (11.2)b. With all the arguments ‘pooled’ to the compact predicate in uniform grammatical functions, the Nuclear juncture can be analyzed as a Double-verb Predicate.

There is additional evidence of the structural difference between (11.2)a and (11.2)b. Givón (1991) observes that the probability of pause placement is consistently and significantly low between components of ‘serial verbs’. Based on the findings of his empirical study, we may use a pause-insertion test to distinguish a Double-verb Predicate from clause-chaining expressions in Prinmi. Given that pause placement between ‘serial verbs’ is less likely to occur, an artificially inserted pause between the verbs is more likely to induce grammatical problems, provided that the verbs form a single constituent. On the other hand, an inserted pause between two adjacent verbs conjoined less

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2 Although the sentences each contain three verbs. For the time being, we will ignore the purposive auxiliary verb xì. Its relation to the other verbs will be addressed later, see Ex.(11.11). The structural difference between the pair of sentences also exists in other Tibeto-Burman languages, although not necessarily within a single language. For example, Wheatley (1985: 407) discusses a similar phenomenon in two groups of Loloish languages. The Prinmi sentence in (11.2)a parallels her examples from the non-Yi group, and the one in (11.2)b resembles those from the Yi group.
compactly by a Core juncture should not pose any grammatical problem, since the
insertion will coincide with the boundary between the Nuclei.

Returning to the sentences in (11.2), we could easily insert a pause or even a ‘gap-
filler’ discourse clitic like, bbo after yéa “to fetch”, for (11.2)a; however, the insertion of
such an element after the same verb is unacceptable in (11.2)b. The insertion would
imply that the preposed Recipient nì bbee “to him” in (11.2)b belonged to the bivalent
verb yéa “to fetch”, which does not take any Recipient argument. The contrasting results
arising from the insertion of a pausal element between the verbs reveal that the two
sentences are structurally different from each other. The former is a clause-chaining
sentence with two predicates situated in a Coordinate Core juncture; whereas the complex
predicate of the latter represents a Cosubordinate Nuclear juncture, forming a Double-
verb Predicate.

It ought to be noted that the term ‘Double-verb Predicate’ does not imply a restriction
on the number of verbs in concatenation; rather, it is intended for the constraint of the
number of units which can combine into a Double-verb Predicate. The specification will
be discussed in §11.1.2. Since the Double-verb Predicate is usually a Cosubordinate
Nuclear juncture, it often exhibits syntactic properties typical of that particular type of
juncture. For instance, a Nuclear Operator such as the perfective 'si and the negator 'ma
will have its scope over the entire predicate, although it is attached to the final verb only.
These will not be discussed in detail below. (But examples are available, see
Ex.(11.3)b–d and Ex.(11.15).) In §11.1.1, a general classification of Double-verb
Predicates will be presented. Two semantic characteristics of the Double-verb Predicate
will also be examined in §11.1.3.

### 11.1.1 Types of Double-verb Predicate

One way of classifying Double-verb Predicates is by valences of the verbs. Four
kinds of combinations are found from the available data: bivalent-plus-trivalent, bivalent-
plus-bivalent, bivalent-plus-monovalent, and monovalent-plus-monovalent, each
exemplified respectively in (11.3)a–d. Double-verb Predicates comprising two bivalent
verbs are the most common.

(11.3) a Bivalent-plus- Trivalent

| Zonggùi .ggêe nì bbee gge-yéa tea- kian xiì a’riiu? |
| attire InT 3s to out-fetch fr.sp-give Pps Q+nInv |

Will (the Golden Pheasant) go bring and give the clothes back to him?
b Bivalent-plus-Bivalent

kii_prin ggôn kii_nia ggee ea-gá nea-sea’si.
dog_white Inst dog_black InT in-bite down-kill+Pf
the white dog bit (and) killed the black dog.

c Bivalent-plus-Monovalent

..., mezzü tea-jjüu gge-xxii’si.
all fr.sp-hatch out-come+Pf
..., all (the chicks) were hatched (and) came out.

d Monovalent-plus-Monovalent

dè Zzonbbá Lha hee ggee ktüwu non dëa-küân gge-xxii’si.
this Zzonbbá god god InT sea in Dc up-rise out-come+Pf
The ‘Zzonbbá’ god arose out of the sea.

The condition for a uniform grammatical function, as stated in the definition in
(11.1), becomes relevant and important when the verbs in a Double-verb Predicate are
both polyvalent. The condition is based on the contrast between arguments of transitive
verbs — A and P. It prohibits combinations such as A-P or P-A on the shared argument
of the Double-verb Predicate. Thus in (11.3)a, the Actor must be the ‘fetcher’ as well as
the ‘giver’, and the Undergoer must be the ‘fetched’ as well as the ‘given’. Likewise in
(11.3)b, the white dog is understood as both the ‘biter’ and the ‘killer’, and the black dog
is construed as both the ‘bitten’ and the ‘killed’. Cross grammatical functions are
precluded. Consisting of a bivalent verb and a monovalent verb, the Double-verb
Predicate in (11.3)c is not subject to the same syntactic principles for interpreting their
shared argument. The argument of the monovalent verb can be construed as either of
A or P (but not both) in relation to the bivalent verb. It is not predictable by rules; rather,
semantic factors play a central role in such instances. In (11.3)c, the shared argument
functions as P for the bivalent verb and as S for the monovalent verb. However, in
(11.4), the shared argument bears an A function to the bivalent verb:

(11.4) Èa qée gge-zzii ddëa-ggüi’si.
1s meal out-eat to.sp-full+Pf
I’ve eaten so much that I am full.

From the small number of Double-verb Predicates with an intransitive verb, it
appears that this kind of compact predicate typically expresses a resultative meaning
through the intransitive verb at the second position. Thus it may be identified as
‘Resultative Double-verb Predicate’. In addition to (11.3)c–d and (11.4), the following
provide further examples for Resultative Double-verb Predicates:
The waistcloth was caught by the thorn and torn.

I've drunk so much wine that I am full.

The intransitive verb *zzhée* "to become torn" in (11.5)a is a Process verb (cf. §5.2.3). The parallel between (11.5)a and (11.3)c is obvious. The argument of the intransitive verb is construed as *P* with the transitive verb *grâ* "to catch (as with a hook)" in the Double-verb Predicate. On the other hand, the shared argument in (11.5)b bears the functions of *AS*, parallel to those in (11.4).

It should also be pointed out that the kind of resultative meaning conveyed by the Resultative Double-verb Predicate implies a weak causation only. The causation is not yielded deliberately by a volitional causer, nor is the resultant state controllable, as it typically ensues logically from the event denoted by the first verb. On the other hand, when a Double-verb Predicate conveys an intended causation, the verb denoting the resultant state is accompanied by a causative verb, forming a 'Causative Double-verb Predicate'. Consider the following:

(11.6) a  
\[ \text{ni ggonATR eaUDG nea-zao nea-sea sli gee.} \]
\[ \text{he (was going to) beat (and) kill me (and) make (me) die.} \]

(11.6) b  
\[ \text{neeATR re bbée zhinzhu ggeeUDG nea-ddi nea-xii gee.} \]
\[ \text{first, you throw the pestle down (and) let (it) go down.} \]

Comprising more than two verbs, the Causative Double-verb Predicates in (11.6) are structurally more complex than the previous examples. For the time being, let us focus on the semantic effect on the predicate with this additional causative verb. The use of the causative in (11.6) is essential; otherwise, the resultant state expressed by the adjacent verb would be understood as a sort of natural outcome independent of a willful causer. That is, the death would be attributed to causes such as disease in (11.6)a, and the downward motion would be taken as volitionally performed by the pestle in (11.6)b. If the causative verb must be excluded from the predicate at all cost, it must be removed together with the adjacent verb.³ Note that the causative verb renders the embedded
juncture a transitive unit. Consequently, the condition of uniform grammatical function in
argument sharing must be satisfied. The Actor in (11.6)a is thus the ‘hitter’, the ‘killer’
and the Causer; whereas the Undergoer is the ‘hit’, the ‘killed’ and the Affectee. An
exact parallel is seen in (11.6)b, with the Actor being the ‘caster’ and the Causer, and the
Undergoer as the ‘casted’ and the Affectee.

From the examples in (11.6), it is apparent that the Double-verb Predicate may
contain more than two verbs. Nonetheless, unlike junctures of higher levels, Prinmi
generally restricts the number of verbs to two for a simplex Nuclear juncture. An extra
verb introduced to a Nuclear juncture is usually combined under an additional juncture.
The four concatenated verbs in (11.6)a involve three instances of Nuclear juncture. Similarly, the three verbs in (11.6)b are combined together as a Double-verb Predicate
through two instances of Nuclear juncture. The juncture structures for them are depicted
in (11.7). As the causative meaning covers the immediately adjacent verb only, the
Nuclear juncture headed by the causative does not extend to the other verb(s) in the
predicate.

(11.7) a

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Double-verb Predicate
```

```
<table>
<thead>
<tr>
<th>Verb</th>
<th>Verb</th>
<th>Verb</th>
<th>Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>nea-zâo</td>
<td>nea-sea</td>
<td>sîî</td>
<td>gêê</td>
</tr>
<tr>
<td>down-hit</td>
<td>down-kill</td>
<td>die</td>
<td>let:sbj</td>
</tr>
</tbody>
</table>
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b

```
Double-verb Predicate
```

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<table>
<thead>
<tr>
<th>Verb</th>
<th>Verb</th>
<th>Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>nea-ddi</td>
<td>nea-xxî</td>
<td>gêê</td>
</tr>
<tr>
<td>down-cast</td>
<td>down-go</td>
<td>let:sbj</td>
</tr>
</tbody>
</table>
```

Whether an embedded juncture within a unit of the Double-verb Predicate can itself be
treated as a Double-verb Predicate is not relevant to the analysis of the whole predicate as
forming a Double-verb Predicate. In principle, recurrence is possible. Nonetheless, a
complex Double-verb Predicate may or may not contain another Double-verb Predicate inside it. Thus an embedded Double-verb Predicate, if found, has little bearing to the overall predicate other than the predicate containing a complex unit.

The juncture structure presented in (11.7)a is just one of the possible analyses for the Causative Double-verb Predicate in (11.6)a. Solid evidence for intermediate juncture between the first two verbs is not available. It appears also possible to analyze the predicate in (11.6)a as comprising three units under one Nuclear juncture. Even if such could be proved to be the case, one might assume that it would merely represent an exception to the restriction on the maximum number of units in the Double-verb Predicate.4

11.1.2 Constraint on the number of units

The number of units for the Double-verb Predicate has been specified as two. The observation-based restriction, other than the data being deficient, can be explained on functional grounds. Recall that the Double-verb Predicate requires a delicate condition for the juncture. While it is not so difficult to have two head verbs sharing all their arguments under uniform grammatical functions, the degree of complexity involved is probably too great to be viable for cases with three or more head verbs.

The following sentences have perhaps the highest potential of generating a ‘triple-head predicate’ in Prinmi:

(11.8) büu xi nēa_ba tēa-hruu bbo ddea-yūé ddea-qion.
axe new two_Ctr fr.sp-buy Dc to.sp-fetch:3 to.sp-appear
(he) bought two new axes and brought (them) home with him.

(11.9) a Gibu ggia ggee nī ggon nea-gguāi dde-sshāa xīi.
cuckoo M InT 3s Inst down-dress to.sp-carry go
The Cuckoo’s (clothes), he dresses and takes (them) with him and (then) goes.

The exception is meant for the unusual use of the expression, regardless of its structure. Causative Double-verb Predicates are sporadic in naturally occurring data. The four-verb predicate neazăo neasea sīī gēe “to beat and kill and make die” in (11.6)a is rendered for the Chinese resultative compound dāsī “to beat to death < beat + die”. It was found only on the second field trip. The same Chinese compound, however, had been translated with a two-verb Double-verb Predicate — neazăo neasēa “to beat and kill” — when elicited on the first field trip from two consultants of different villages and clans. The occurrence of the verb to die after to kill in (11.6)a could be motivated for a ‘closer’ translation of the Chinese expression. Perhaps a more idiomatic Prinmi expression would simply be neazăo neasēa “to beat and kill”.

4 The exception is meant for the unusual use of the expression, regardless of its structure.
Having dressed [(and) carried] the Cuckoo's clothes, the Golden Pheasant just hides in the wood.

(11.10) a

"... Née ggieani téa-ka dde-yéa tea-chee." jii.

(Mom) said, "... You pluck and bring some grass back and feed (the hare)."

b

Sister plucked and brought many back, and fed (the hare).

The presence of the discourse clitic bbo after the first verb in (11.8) provides an important clue to the structure of these verbs. It helps to signal the unit boundary between hruu "to buy" and the juncture composed of yüé "fetch" and qion "to appear".5

On the other hand, the three concatenated verbs in (11.9)a are produced quite closely one after another; no discourse clitic occurs between them. Notwithstanding the physical vicinity, the intonation over the predicate suggests the existence of two constituents, with the first two verbs forming one and the final verb forming another. That the sentence in (11.9)a does not contain a triple-unit juncture is further supported by the 'pivot discourse style', which characteristically starts a new information unit with repetition of the main constituent(s) of the immediate preceding sentence.6 The successive sentence to (11.9)a in the story is given in (11.9)b, which is predicated by the first two verbs from (11.9)a only. The additional verb juxtaposed to the Double-verb Predicate is not repeated. This would be exceptional if the three verbs in question formed a smallest constituent.

Even tighter concatenated verbs are found in (11.10)a. The constituency concerning the three verbs in this instance is virtually indiscernible, giving the impression that they form a simplex juncture. Fortunately, the same structure is employed twice in the text. Successive to the advice in (11.10)a, the sentence in (11.10)b reports that the act is

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5 I checked with the consultant on the second field trip whether the discourse clitic bbo could be left out from (11.8). His answer was affirmative, for discourse clitics are generally omissible. He then went on to suggest the removal of the third verb, reducing the putative triple heads in the predicate to two, i.e. biu xi néaba téa-hruu ddea-yüé'si "(he) bought (and) brought two new axes with him".

6 The pivot discourse style is used so frequently in Lisu (a Tibeto-Burman language) that Hope (1974) regards it a means for expressing adverbial meanings such as 'afterwards'. The style is prevalent in Prinmi folk songs. Its use in other discourse settings is subject to individual preference. Song (1996: 28-29) also mentions such discourse style employed by speakers of other languages, e.g. Alamblak, a Papuan language.
performed. In this instance, when the three verbs in question once again appear one after
another, a noticeable pause (showing the speaker’s hesitation) occurs between the second
and the third verbs. Incidentally, this indicates the constituent boundary between them.
It should be stressed that these verbs do form a juncture, a complex one. The issue is
whether the juncture is formed directly from all three of them. This at first seems
possible in (11.10)a, but must be rejected with the evidence from (11.10)b, where it is
shown that the first two verbs represent a Double-verb Predicate which is later joined by
the third verb through another juncture.

Recall that the example in (11.2)b also contains three verbs in a series, repeated
below as (11.11):

(11.11) [Zonggūi ggêe nì bbee gge-yéa tea-kian] xìì a’riu?
attire InT 3s to out-fetch to.sp-give Pps Q+nInv
Will (the Golden Pheasant) go bring and give the clothes back to him?

Like those discussed in (11.8)–(11.10), the three juxtaposed verbs do not form a simplex
juncture. The first two verbs (underscored with double lines in the example) constitute a
Double-verb Predicate which heads a complement clause (marked with a pair of brackets)
to the purposive auxiliary xìì.

11.1.3 Semantic characteristics of the Double-verb Predicate

Although the Double-verb Predicate is identified on a strictly syntactic basis, it has
two notable semantic properties that are worth examining. An important semantic
characteristic of the Double-verb Predicate is the logical sequence of situations expressed
by the head verbs (cf. Durie 1997). Although the compact predicate typically refers to
situations that can be viewed as a wholesale event, the occurring order of the verbs in the
predicate corresponds to the discernible sequence of situations they denote. This is
observed in all Double-verb Predicates, irrespective of valence-combination and/or
semantic types of the predicate. The temporal iconicity, which may occur with or without
a cause-effect relation, means that the positions of the head verbs in the Double-verb
Predicate are not freely interchangeable. The order between the head verbs are not
predictable by the meanings of the individual verbs either. For instance, the verb yiéalýüé
“to fetch” may serve as the first head (cf. (11.11)) or the second head (cf. the reduced
predicate for (11.8) in Fn. 5) in the Double-verb Predicate.

The semantic interaction between the two verbs/units determines their order in the
Double-verb Predicate, which is based on the emergence and realization of connected
situations in the cognitive world. When the order is altered, a different meaning is
unavoidable and may result in a structural change. Compare the pair of sentences below:
(11.12)a  Kú  do  dea-xao  nea-zzôn.
top  on  up-go:2s  down-sit:2s
(You) go up and sit at the top.

(11.12)b  Kú  do  nea-zzôn  —  xào.
top  on  down-sit:2s  go:2s
(You) sit at the top — go (read: do it).

Although the meaning of the imperative sentences in (11.12) is essentially the same, the pair of sentences are structurally different from each other. A Double-verb Predicate is used for (11.12)a, while an apposition structure is found in (11.12)b. The structural difference can be confirmed by the pause-insertion test. The compact structure of the Double-verb Predicate in (11.12)a is intolerant of any pause placement, but in (11.12)b a pause can easily be inserted between the two verbs in apposition. The structural discrepancy arises mainly from the switch of position between the two juxtaposed verbs in (11.12). A difference in iconicity is also observable. In (11.12)a, the order between the two verbs iconically corresponds to the logical sequence of the situations, thus: (i) go up to the top and (ii) then sit down there. The temporal iconicity is lost in (11.12)b, whose intended meaning cannot be construed as: (i) sit down at the top and (ii) then go (up).

With regard to the semantic types of verb observed in the Double-verb Predicate, the following combinations are found: Action-Action, Action-Process, Action-Motion, and Motion-Action. While the short list by no means exhausts all possibilities, it reveals that the Double-verb Predicate is confined to controllable events. A Double-verb Predicate with merely State verbs or Process verbs is not attested. Instead, juncture at a higher level is realized when a pair of such verbs conjoin with each other. For instance,

(11.13)  büu  ggee  lëa_dëdu,  qiâ  mā’riū.
axe  InT  blunt_Ideophone  sharp  N+nInv
The axe is really blunt, not sharp (at all).

(11.14)  Bbisùu_ggiggi  ggee  gge-dâi,  ddéa-mee’hmiân  ra  kie, ...
bbisuu_grain  InT  out-big  to.sp-Npf+ripe  M  time
When the ‘bbisuu’ fruits have not grown to ripeness, ...
(lit. become big but not ripe, ...)
scope of the negator hosted by the final verb in the Causative Double-verb Predicate below:

(11.15) Née dēa-pēe qii gge-xxī má’gee bbo, ...

2s up-spew do out-come N+let:sbj ExT

If you don’t cough (him) out, ... (lit. cough up (and) don’t let come out)

The exclusion of a Double-verb Predicate with two non-Action verbs can be easily explained by the concept of *event*. As is often pointed out in the literature (e.g. Zwicky & Joseph 1990; Durie 1997, among others), ‘serial verbs’ as a whole represent a single *event*. Portraying of an event, vis-à-vis a state, is a necessary (but not sufficient) condition for the Double-verb Predicate. This event condition explains the lack of Double-verb Predicates which would express a state or a natural process. Since Double-verb Predicates always concern events, it is necessary to have at least one Action verb to signify an event.

### 11.2 Causatives

Like many languages, Prinmi exploits a variety of devices for expressing causation. Examining the causative expressions with the new typology of causatives proposed by Song (1996), one finds that Prinmi not only covers all three typological types but also some subtypes within them. Table 11-1 presents a variety of Prinmi causative expressions in terms of Song’s typological scheme (labels for the subtypes are my own):

<table>
<thead>
<tr>
<th>COMPACT</th>
<th>AND</th>
<th>PURP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) lexical: e.g. zhiān “to send” (vis-à-vis xii “to go”)&lt;br&gt;2) morphological: e.g. pēe “to demolish” (vis-à-vis bbē “to collapse”)&lt;br&gt;3) free-element: e.g. kūējjēe qii “to make angry (lit. angry do)”</td>
<td>Nī ggon ea bbēe sūusūan; āa gi Prinmihee jii’ron.&lt;br&gt;3s Inst 1s at teach 1s Inct Prinmi say+Inv:1s&lt;br&gt;He teaches me to speak Prinmi.</td>
<td>1) modal-marked: see Ex.(11.16)a&lt;br&gt;2) periphrastic gee/gūe : see Ex.(11.16)b</td>
</tr>
</tbody>
</table>

Very roughly, the three typological types for the causatives can be distinguished by the clausal structure of the expression. The fundamental structure for the COMPACT type is one-sentence-one-clause, i.e. a simplex sentence. The structure for the other two types is bi-clausal. The clauses are coordinate in the AND type and they occur iconically in the order of cause-and-effect, as illustrated by the example in the table above. For the PURP
type, the causative sentence embeds a complement clause (placed within a pair of brackets), e.g.

(11.16a) Desiâ [ea gi gri ku] jii, ...
   [Modal-marked]
   at present 1s Inc sing must say
   *Now (you) have me sing (it), *

   b bâi zhēa ggee bbo [sianbôôn ggiâ bbânbo nea-zzin] gee.
   brother_big InT Dc tree M bottom down-sit let:sbj
   (you) let Big Brother sit at the bottom of the tree.
   [Periphrastic]

The modal-marked PURP causative requires that the obligatory modal kú head a complement clause to the speaking verb jü “to say”. On the other hand, the periphrastic causative headed by gee/güe simply takes a complement clause unmarked morphosyntactically. Notice that in (11.16)a, the suprasegmentals on the obligatory modal kú does not spread onto the following verb jü “to say”. (The change on the latter’s suprasegmental is due to clause/sentence intonation.) The two do not form a single suprasegmental domain, consonant with the constituent boundary between them.

The ‘periphrastic’ causative is the most prevalent in Prinmi. It will be examined in the next subsection. The modal-marked causative is found only in a few instances, even fewer for the AND type. The structures of these minor types will be addressed in §11.2.2. The three subtypes within the COMPACT type are syntactically rather simple, and will not be elaborated in this chapter. But it is worth mentioning that the verbs are conjoined as a Nuclear juncture in the free-element subtype. For additional instantiations of the morphological subtype, see §5.2.3; further examples for the free-element subtype can be found in §9.4.2 under the derivational and resultative functions of the doing verbs.

11.2.1 The causative construction headed by gee/güe

The major periphrastic causative construction in Prinmi consists of the following elements:

(11.17)  Causer + {Affectee | Causee} + Goal Incitee + Complement clause + gee/güe

The most remarkable feature of this causative construction is the various choices available for encoding the causee. This will be discussed in §11.2.1.2 after an investigation of the difference between the two variants of the causative verb. The overall structure of the construction will be addressed when we examine the complement clause of the causative in §11.2.1.3.
11.2.1.1 The causative auxiliary verb

Like other auxiliary verbs, the causative gèe/güè does not take any directional prefixes. However, it can host all kinds of negative clitics:

(11.18) a Zéa dîa’gee.
hot N\textsubscript{dc}+let:sbj
Don’t let (it) be hot.

b nîr’on ëa ca-xii mëe’güê.
3p+Inst 1s in-go N\textsubscript{p}f+let
they didn’t let me in.

c hmiän hrüu xii gee’riu, hraqi xii gee ma’rôn.
medicine buy Pps let:sbj+n\textsubscript{lnv} play Pps let:sbj N+Inv:1s
(I) let (you) go to buy medicine, not to go to play.

As pointed out in §8.1.1, the perfective negator mee’ and the desiderative negator dia’ are unable to form a complex clitic with other clitics. This constraint is particularly helpful in demonstrating the verbhood of the causative. The causative may also host a perfective clitic or a modal clitic, e.g.

(11.19) a Ea ni’on nèe nî gi ea-konhmiän gèe’ sian.
1s Dc+Inst Dc 3s Inc t in-angry let:sbj+Pf\textsubscript{v1}
I’ve made him angry.

b De meakäo ggon dea-kåo, ëa miabbai nea-xxii güe’sì.
this smoke Inst up-fume 1s tear down-come let+Pf
The smoke is so fuming that (it)’s made my tears run down.

c Nee gí ggän do zhïiga gee’ xo.
2s Inc t bed on jump let:sbj+Opt
(I’ll) let you jump on the bed.

As seen in (11.18) and (11.19), the causative verb has two variants: gèe and güè. According to the consultant from Xichuan, güè is used with a third-person Causer.\footnote{While some dialectal variations exist between Xichuan Prinmi and Niuwozi Prinmi (which my consultants are aware of), the usage of the two causative variants appears to be the same in these two dialects.} For a first-/second-person Causer, gèe is chosen instead. The difference in terms of person agreement/association appears to be supported by the rhyme alternation between the two forms, whose segments are phonetically [k\textsubscript{j}e] vs. [k\textsubscript{q}e]. As noted in §5.2.4, one pattern of verbal inflection for person-number agreement in Prinmi involves rhyme alternation between a high unrounded (semi-)vowel and a high rounded (semi-)vowel, with the
rounded variant specified for the third person. Based on the rhyme alternation, gùè would be designated for a third person Causer and gèe for a non-third person Causer, concurring with the intuition of native speakers.

While the majority of instances of causative verb by the main consultant show a considerable degree of confirmation to the person agreement suggested above, there are noticeable exceptions. Consider the following:

(11.20) Qëe chòn biän ea-wá gge-xxii güe'xo, ...
meat quick do:ls in-cook out-come let+Opt
(I) will get the meal cooked and ready soon, ...

(11.21)a Me ggiá gëazhee earë gi mansîsii da gëe,
heaven M blessing 1p in Inct know only let:subj
mëedi’a waxxia shëggë ma’gëe?
what+M reason affection N+let
Heaven’s blessing only gets us to know each other; why does (it) not let (us) be in love?

b zzhea_qii mâ bbee bbo ea-nân gëe yon.
good_do_person at Dc in-harm let:subj Assr
(The god) will definitely let those who behave badly be harmed.

c Qi_qii mir’on nee ggüidôn gge-lhee gëe ma’yôn; ...
religion_do people+Inst Dc fireplace out-fuel let:subj N+Assr
Religious people won’t let (this kind of wood) burn in the (holy) fireplace; ...

Of the approximately 40 instances of gùè in the data, (11.20) is the only one used with a non-third person Causer. The selection of the optative 'xo instead of the volitive 'gai, however, conforms to the general person association of the modal clitics (see §8.2.2). Indeed, it is the presence of 'xo, as the consultant pointed out, that signifies that the Causer is the speaker. Without it, the Causer must be construed as an implicit third person. One cannot ascribe the choice of gùè to the presence of 'xo, as both variants of the causative can host the modal clitic (cf. (11.19)c above). Thus, the example represents a problematic case.

Exceptions in the use of gèe are quite numerous, reaching a total of 19 out of 60 instances. To account for these ‘irregularities’, or rather, to accommodate them in the person agreement analysis, one would have to resort to the idea that the leveling of Prinmi verbal inflection has led to the more frequent use of gèe at the expense of gùè. This is not an implausible hypothesis, but it does not explain why the variant gèe is chosen for sentences like (11.21). A closer look at these exceptions reveals that a certain semantic factor appears to be at work. Notice that the Causer involved in (11.21) has a high degree of control over the causation. It tends to be animate or divine. Moreover, when
$gëe$ is employed with a third-person Causer, the causative sentence often contains the assertive modal $yôn$, as in (11.21)b–c.

Based on these observations, the variant $gëe$ may be considered to be a 'subjective causative', whose meaning in the NSM script will be:

(11.22) A semantic analysis of the causative $gëe$
   i. Something happens to $x$
   ii. Because someone does something to $x$
   iii. I think:
       this does not happen if this person does not want it

Notice that the script in (11.22)iii expresses a subjective speculation about a high controllability/volitionality. With such semantic contents, $gëe$ will normally occur with a non-third person Causer, as they enjoy a higher place in the Animacy-Topicality Hierarchy (Silverstein 1976; Wierzbicka 1981). This general association with a non-third person Causer is not absolute, however. It is not part of the meaning/function of the auxiliary. With a powerful Causer, as in (11.21), $gëe$ is used despite the fact that the Causer is a third person. The component in (11.22)iii also explains the frequent correlation of the assertive $yôn$ in such sentences. As the modal introduces an essentially subjective assertion to the sentence, it is harmonious with the subjective causative.

Under the new analysis, the functional contrast between $gëe$ and $gûë$ lies in the presence/absence of the component in (11.22)iii. The other variant, the 'objective causative' $gûë$, is semantically less rich:

(11.23) A semantic analysis of the causative $gûë$
   i. Something happens to $x$
   ii. This happens because of someone/something

In comparing $gûë$ with $gëe$, it is unnecessary to consider the former as lacking controllability. It will be more appropriate to take a neutral stand in this respect for $gûë$, since it has been found to be used with events uncontrollable by the Causer (cf. (11.18)b above). As for the use of $gûë$ in (11.20), the caused event of getting the meal ready is contingent on the cooking, a time-consuming process that cannot be completed instantly by volitionality. The causation is thus viewed as uncontrollable, precluding the use of $gëe$.

Although the proposed semantic difference between the two variants does not eliminate all the 'exceptions', the number is significantly reduced. With only one or two residual cases, the contrast between $gëe$ and $gûë$ may be considered generally as one between subjectivity and objectivity.
11.2.1.2 The core arguments

The causative verb requires two core arguments: a ‘causer’ and a ‘causee’. The former will be recognized as a semantic role, i.e. Causer; whereas the latter will be used merely as a general term, since it can be encoded as an Affectee, a Goal, or an Incitee. The choice for the encoding is influenced (but not determined alone) by semantic considerations. Within the variation permitted by a situation, the encodings of the causee may differ in sentences with a similar meaning. Consider the following (relevant discourse context is supplied in brackets in the glosses):

(11.24)a Éa nee gî ggó bo nea-xii gée, ... (Incitee)
  1s  2s Inct hill below down-go lets:sbj
  I let you go down the mountain, [so that you can buy some medicine]

b nir’on  ea ea-xii mée’güê. (Affectee)
  3p+Inst 1s in-go Npf+let
  [I wanted to go in;] they wouldn’t let me in.

(11.25)a Xiôn ggon ..., gîbu bbee nea-gguâi gee. (Goal)
  g. pheasant Inst cuckoo at down-dress lets:sbj
  The Golden Pheasant ..., lets the Cuckoo put (the clothes) on.

b Hmî ggee tea-bbon’nôn, ggüegiêagiea’riu;
  daughter InT fr.sp-cold+Dur shiver+nlnv
  clothes more one_Ctr 3s dress lets:sbj Sgst
  The daughter is cold, shivering; dress her with some more clothes.

(11.26)a Éa niän ggee jian’rê gi masii mée’gée. (Incitee)
  1s ill InT child+p Inct know Npf+let:sbj
  My illness, (I) haven’t let the children know.

b Née ea bbêe masii mée’gée pêazzì ggee ... (Goal)
  2s 1s at know Npf+let:sbj news InT
  The news that you haven’t let me know, ...

The pair of causative sentences in (11.24) both involve the motion verb xî “go” in a discourse setting where the causee has a lower status in the social relationship. The volition of the causee’s going is presumed in (11.24)a, and thus the argument appears as an Incitee. The desire of the causee’s entering in (11.24)b, on the other hand, is rejected by an implicit Causer. In this circumstance, the powerless status of the causee prompts the encoding of the argument as an Affectee, who lacks the ability to change the situation. A parallel differentiation can be observed from the pair in (11.25). The Golden Pheasant has talked the Cuckoo into lending him his clothes. When the Golden Pheasant gives his clothes to the Cuckoo, the Cuckoo puts them on willingly. As a co-operative causee in
(11.25)a, the Cuckoo is thus rendered as a Goal. As for (11.25)b, the discourse situation is most likely to involve a sleeping child. Her father notices that she is shivering and utters the sentence in (11.25)b. As the child, still in sleep, will not be able to put on the clothes herself, the causee is encoded as an Affectee, not in control of the event. A similar but less clear contrast is discernible in (11.26). In (11.26)a, the causee jian’rê gi “children” bears the role of an Incitee under the assumption that the children will be willing to know about the disease. The social relation between the Causer and the causee is not revealed in (11.26)b. The speaker chooses a more general encoding for the causee, and expresses it as a Goal.

The pairs of examples above also show that the valence of the complement verb is irrelevant to the choice of encoding for the causee in the construction. The Affectee occurs with an intransitive complement verb in (11.24)b, and with a transitive one in (11.25)b. Likewise, the encoding of Incitee is observed with complement verbs of various valences: monovalent in (11.24)a and bivalent in (11.26)a. The only correlation found between causee-encoding and valence of complement verbs is that the Goal cannot be chosen for intransitive verbs. As noted in §6.2.1, some bivalent verbs take an R (marked by bbee) as one of the core arguments. When this kind of verb heads the complement in the causative construction, as in (11.27)b and (11.28)b, the bbee-marking on the argument is retained. Consequently, a neutralization may take place, with the causee under the marking for a Goal, as in (11.28)b, in spite of a high degree of affectedness.

(11.27)a Née ca_bbêe kûê_ijêe diâ’bu.
2s 1s at heart_angry N_ds+do:2s
Don’t you get angry at me.

b Nee’ôn nee <nî gi>causee ca_bbêe kûê_ijêe qîi gee.
2s+Inst Dc 3s Inct 1s at heart_angry do let:sbj
You have him get angry with me.

(11.28)a Ezhii ggêe tîñón tea-xxî kêe bbo,
alcohol InT drink:2s fr.sp-many time Dc
ggînômniân bbee nân yon; ...
body at harm Assr
When (you) drink too much alcohol, (it) certainly will harm the body; ...

b Zhêa do’a qîi qîi <mî bbee bbo>causee ea-pian ggê yôn;
earth on+M good do person at Dc in-bless let:sbj Assr
zzhêa qîi <mî bbee bbo>causee ea-nân gee yon.
bad do person at Dc in-harm let:sbj Assr
(The god) will certainly let those who behave well on Earth be blessed; and those who behave badly be harmed.
When the postposition bbee after the causees in (11.28)b were attempted to be replaced by ggee, which would encode the causees as an Affectee, the meaning of the sentence was significantly altered. The consultant could no longer construe the arguments as the causees.

Corresponding Causer and Affectee to Actor and Undergoer respectively, we can present the four semantic roles found in the causative construction as follows:

<table>
<thead>
<tr>
<th>Causer</th>
<th>Incitee</th>
<th>Goal</th>
<th>Affectee</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ggon/ggee/xian)</td>
<td>gi</td>
<td>bbee</td>
<td>(ggee)</td>
</tr>
<tr>
<td>Actor</td>
<td>Volitional</td>
<td>Undergoer</td>
<td>Controlless</td>
</tr>
</tbody>
</table>

Figure 11-1: Volitionality/Controllability of the semantic roles in causative sentences

As illustrated in Figure 11-1, the different encodings of the causee (the shaded area) correlate to varying degrees of volition and control. The Incitee is the most volitional; whereas the Affectee has the least control over the causation and is susceptible to manipulation or being affected materially. While the Affectee is insensitive to animacy, both the Goal and the Incitee require an animate argument. Furthermore, the Incitee must be human. With regard to morphosyntactic marking, the two intermediate roles between Causer and Affectee are marked constantly, but the polar ones resemble general core arguments in that accompanying clitics are omissible.

Like other core arguments, the Causer and causee may appear as a zero anaphor. In (11.29) an implicit but expressable Causer is used. When a causee is in a zero form, the actual encoding of its semantic role is often obscure, as in (11.30)b.

(11.29) Nee gi ggân do zhûga gee’xo. Guäi bbo dia’guâi kû.
2s Inct bed on jump let:sbj+Opt cry ExT N_d+cry must
(I’ll) let you jump on the bed. As for crying, (you) mustn’t cry (any more).

(11.30) a Qî_qii mir’on nee ggûidôn ø gge-lhee gêe ma’yôn, ...
religion_do people+Inst Dc fireplace out-fuel let:sbj N+Assr
Religious people certainly won’t burn (it) at the (sacred) fireplace, ...

b Da bbô mea_dâi mêachee, ø mêalîn güe.
now Dc fire_big make fire warm by fire let
Now (she) made a big fire and let (them) warm up.

While it can be quite sure that the implicit causee (a kind of wood) in (11.30)a will be encoded as an Affectee if expressed explicitly, the one in (11.30)b can be either an Incitee or a Goal. Both interpretations are possible and equally acceptable.
11.2.1.3 The causative complement

The causative construction in Prinmi is productive and open to all kinds of verbs, including certain auxiliaries such as the purposive; they all can serve as the head of the complement clause. Support for analyzing the complement as a clause is available from the following cases, illustrated from (11.31) to (11.33). (The boundary of a complement will be indicated by a pair of brackets in the examples below.)

(11.31) Complements containing an element on the Peripheral layer

a  hmi gaizai ggée bbo [re_qée ea-xxii] giie.
  daughter small InT Dc front_side in-sleep let
  (she) let the youngest girl sleep at the front.

b  Ea ni’nôn née nū gi [dea-zī ggée] nee bbē
  1s Dc+Inst Dc 3s Inct one_life InT 2s at
  liēajuu qii] gee’xo.
  dislike do let:sbj+Opt
  I’ll let him hate you for the (rest of his) life.

The complements of both causative sentences in (11.31) embody an adjunct (double-underlined) on the Periphery. The causee in (11.31)a is encoded as an Affectee, while the one in (11.31)b is realized as an Incitee. The marking of the causee in (11.31)a by the internal topic clitic ggée seems to suggest a detached argument from the Core layer. Such analysis would be acceptable if the causee could be rendered under a similar discourse setting within the Core layer, i.e. after the adjunct Locative. Nonetheless, a reverse order between these constituents sounds extremely awkward, as if one were trying to topicalize the Locative for discourse contrast. Thus, even if a suitable context can be found for the

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8 Ditransitive verbs are probably exceptions to this. Attempts to elicit from the main consultant an exemplary causative sentence with four explicit arguments and a complement headed by a ditransitive verb alone were not successful, partially because it is difficult to produce such a sentence in Chinese (which typically relies on some grammaticalized verbs to help with the explicit arguments). It seems that the main consultant does not favor such causative sentences, perhaps due to NP density control (cf. Song 1996: 174-181). But an instance of a ditransitive verb forming part of the complement head juncture in the causative construction was obtained, see (11.33)a. On the other hand, the young consultant did produce a four-argument causative sentence, albeit with a considerable struggle, from a Chinese sentence that literally reads “mother let sister feed hare eat grass” (the sign ‘...’ denotes an unusually long pause):

Mā xian güan ggēe bbeē de hiuzii ggēe bbeē ... ggion cheē guē.
  mom Foc sister InT at this hare InT at grass feed let
  Mother let Little Sister feed grass to the hare.

The same sentence from a short text was rendered dramatically different, both in content and structure, by the main consultant.
permutation, it must be interpreted as the promotion of the adjunct, not the relocation of the causee inside the complement clause. The clausal structure of the complement in (11.31)b is transparent. In addition to the Peripheral adjunct, the Core layer of the complement also contains a core argument \textit{R, nee bbée "(to) you".}

Sporadic in the data, a few auxiliary verbs — the purposive \textit{xii} and the doing verbs \textit{qii} and \textit{ba} — are observed to be able to head the complement of the causative construction. For instance,

(11.32) Complements headed by Auxiliary verbs

a \textit{Ea bbée [ea-dō di qii] gee ba.}  
\textit{Let me have a look (at it).}

b \textit{Hmezha ggōn nēe Jiibamā ggee [bōnbon_bba wu}  
girl Inst Đe witch InT uncle_family in  
ci_nia dī nī zhinzhu dī ddea-yin xii] gūē’si.  
plowshare_black one with pestle one to.sp-lend Pps let+Pf  
\textit{The girl got the monstrous witch to go to borrow a new plowshare and a pestle from Uncle’s family.}

The causative sentences in (11.32) are rather complex, with a double embedding of complement clause. Less frequently, the complement of the causative construction may contain a juncture, e.g.

(11.33) Complements comprising Juncture

a \textit{Aamā xian baibāi gi}  
mother foc brother Inct  
[jjiiji nea-zzhū, aabbā bbée tea-kian] gūē’si.  
letter down-write father at fr.sp-give let+Pf  
\textit{Mother let Brother write a letter to Father.}

b \textit{Aagāo bèaddī ggon ..., eare mezzō’re}  
uncle frog Inst 1p in all+p  
[gge-tēe gge-sshoe] gūē’si.  
out-clever out-smart let+Pf  
\textit{Uncle Frog ..., let us all become clever and smart.}

A Core juncture occurs within the complement clause in (11.33)a, while a Nuclear juncture functions as the head of the complement in (11.33)b. Since each individual verb in the juncture receives a causative meaning, it is evident that the complement comprises a juncture.
The level of juncture in (11.33)b is not as obvious as that in (11.33)a. The posited Nucleus juncture for (11.33)b is based on the fact that the Causative verb can conjoin with its complement at this level, as seen in the analysis of Causative Double-verb Predicates (cf. the diagrams in (11.7)). The following illustration of the juncture relations in the Causative Double-verb Predicate *nea-zâo nea-zzân güe* “to get wet through (by rain)” should refresh the memory:

(11.34) **Double-verb Predicate**

Note that the juncture structure of the verbs in (11.33)b is different from the one presented in (11.34). The causative verb only takes the adjacent verb as its complement in (11.34) (for the situation refers to the rain’s hitting and making wet); whereas in (11.33)b, the causative verb takes the Nuclear juncture composed of both preceding verbs as its complement, as indicating by the bracketing. What they have in common is that three verbs have been combined into a complex Nuclear juncture through two instances of juncture.

In regard to the relation between the complement and the causative, the two constitute a cosubordinate juncture which has been observed to occur on various levels, e.g. at the Nucleus in (11.33)b, at the Core in (11.33)a, and at the Clause in (11.32)b. Thus in a general formulation for the causative construction, the Clausal juncture will be chosen for the linkage between the complement head and the causative. But when analysing a particular instance, we will decide the level of juncture on the lowest possible one, following the practice of identifying juncture level as discussed in §10.2.2.

Of the two arguments of the causative — Causer and causee, the latter is closely associated with the complement. Irrespective of how it is encoded in the construction, the causee is always shared between the causative verb and the complement head. A seeming exception is found in the following translation (braces denoting constituency and brackets indicating the causative complement clause):
(11.35)a Ggüi_däi ggon nee  hniqionlēe ggee  dea_ggiônhmian ggee causee
rain_big Inst Dc boy InT one_body InT
[nea-zzân] güe’si.
down-wet let+Pf

The heavy rain has made the boy soaked through his body (lit. boy whole body wet).

In (11.35)a, the causee embraces two appositive nouns intended as a single constituent. If the sentence were analyzed such as to place the second noun (double-underlined) within the scope of the complement clause, leaving the first noun alone as the causee, the causee would not need to be shared by the verb in the complement clause. Although such analysis appears viable, it ignores the causee noun phrase as an integral constituent. An interesting translation of the same sentence is rendered by the Xichuan consultant. Compare the following with (11.35)a (the italicized word is a loan from local dialect of Mandarin):

(11.35)b Mëa_gëa peateami ggee  ggüi_däi ggee nee
person_family youth InT rain_big InT Dc
dea_ggiôn ggiônhmian yahā nea-zâo [nea-zzân] güe’si.
one_body body all down-hit down-wet let+Pf

The youth of others, the heavy rain has hit (on him) and made (him) soaked through his body.

At the first glance, the sentence in (11.35)b seems to support the alternative analysis of (11.35)a, which forgoes the sharing of the causee between the causative verb and the complement head. Notwithstanding the pair of Prinmi sentences being elicited with the same Chinese sentence, different speakers convey an essentially identical meaning through varying structures. The Xichuan consultant has employed a much more complex structure for the translation. Strictly speaking, (11.35)b does not represent a causative sentence; rather, it is an instance of Causative Double-verb Predicate. As illustrated in (11.34) above, the causative verb forms a Cosubordinate Nuclear juncture with the immediately preceding verb. The two, then, conjoin with the remaining verb into a Double-verb Predicate. The double-underlined constituent, corresponding to the second noun of the causee constituent in (11.35)a, serves as a sharing argument between the verbs in the juncture. The counterpart of the other noun (single-underlined) in (11.35)a functions as a discourse topic in (11.35)b, whose information structure represents a topic-comment construction (cf. §12.4). Incidentally, Prinmi does not allow the causee of gêê/giêê to be a pragmatic topic in topic-comment constructions. Such information structure is not compatible with the causative construction, which generally assumes a neutral position as regards topicality of the causee. Thus, when the causee is followed by the internal topic clitic ggee, the marking is largely vacuous pragmatically (cf. §12.2.2).
11.2.2 Other causative constructions

Were it not identified as a typological type in Song’s (1996) scheme, the highly iconic AND type of causative construction would probably be overlooked in Prinmi. Unlike other bi-clausal causative constructions, this type of causative is not signified by specializing markers (although sometimes the incitee postposition may appear after the causee); a pair of clauses are linked together much like other clause-chaining sentences. The causation is essentially implied by the occurring order of the clauses, iconic to cause-and-effect. It represents an indirect causation. This is well illustrated by (11.36)a. While learning to speak in a non-native language requires the help of a teacher, the teaching itself does not necessarily make one speak the language. In this sense, the causation discernible from the sentence is remote and indirect.

(11.36)a Ni ggon ea bbee sůusůian;  ēa ĝi Prínmlheee jii’ron. 
3s Inst 1s at teach 1s Inct Prinmi say+Inv:1s 
He teaches me to speak Prinmi.

b Agão bêaddî ggon eare bbee jiirî wu’a jii shôn ggêe 
uncle frog Inst lpin at spring in+M water clean InT 
gge-tiân güê, eare mezzo’re gge-têe gge-ssho güê’sî. 
out-drink let 1pin all+p out-clever out-smart let+Pf 
Uncle Frog lets us drink the clean water from the spring, lets us all become 
clever and smart.

Another example for causative of the AND type is supplied in (11.36)b. Note that the pair of coordinate clauses in the sentence are each headed by the causative verb güê. Three instances of causation are involved in this sentence: the first one, Uncle Frog’s letting us drink the clean water; the second one, Uncle Frog’s letting us become clever, and the third one, Uncle Frog’s letting us become clever by letting us drink the clean water. The first two causations are expressed by the causative verb, but the third one is construed with the first clause conveying the cause and the second one the effect, i.e. through interpreting the sentence as a whole in terms of causative of the AND type.

Causative of the PURP type expressed by the speaking verb jii “to say” and the obligatory modal kú “must” is not a productive construction in Prinmi. Consider the following instance from a story text:
(11.37) a  Bêaddi  ggon nee  dêa-goxüi'nôn,  frog  Inst  Æc  up-lead+Dur

b  [êbo  bbalâi’ê  gi  la  ea-ggiêaggee  ea-xxîi  ku;  there  snake+p  Inct  also  in-help  in-come  must

c  eahâ  teasân’ê  gi  la  ea-guâgu  ea-xxîi  ku]  jii.  intj  grasshopper+p  Inct  also  in-help  in-come  must  say

The Frog, leading the way, gets the snakes there to come to help; aha, gets also the grasshoppers to come to help.

The kind of causation discerned in (11.37) is so indirect that the causative expression can be easily overlooked as a regular means for encoding causation. Recognized as a causative construction, this subtype seems to be rather complex, involving two embeddings: one subordinate to the obligative modal which, in turn, subordinates to the speaking verb. The structure of (11.37) is particularly complex, with a total of seven junctures.9

11.3 Complementation

In terms of types of constituent and morphosyntactic marking, the major complements in Prinmi can be classified as follows:

<table>
<thead>
<tr>
<th>Morphosyntactically marked</th>
<th>Morphosyntactically unmarked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phrase</td>
<td>Comparative complement <em>do</em></td>
</tr>
<tr>
<td>Clause</td>
<td>Nominalized complement <em>-mi</em>, <em>-yi</em></td>
</tr>
</tbody>
</table>

Phrasal complements exist marginally and are morphosyntactically marked by the postposition *do* as an obligatory oblique complement in the comparative construction, to be discussed in §11.3.1. Morphosyntactically unmarked phrasal complements have not been detected and probably do not exist in Prinmi. Clausal complements are much more common than phrasal ones and will be addressed in §11.3.2.

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9 The pair of clauses headed by the modals each take a Double-verb Predicate as their complements. These clauses are joined together, forming a complex complement clause to the speaking verb (placed within a pair of brackets). Although the number of junctures exceeds the posited approaching maximum, the fact that this kind of causative minimally consists of two junctures should be taken into account. Without the inherently complex structure of the causative, the junctures in the sentence would not outnumber the posited maximum.
11.3.1 The comparative complement & the comparative construction

As noted in §4.2.3, Prinmi adjectives do not inflect for comparative or superlative. Comparison is expressed by means of a comparative construction, e.g.

(11.38) a Sshii_xxia ggêe wai_xxiá do zhê mà'yon;
   right_hand InT left_hand than big N+Assr

b wai_xxia ggêe shii_xxiá do geazâi ma'gâi.
   left_hand InT right_hand than small N+Vlt

The right hand can't be bigger than the left hand; the left hand won't be smaller than the right hand.

The comparative construction, strictly speaking, lacks morphosyntactic marking. The intended comparison is achieved only when the postposition do “than (lit. on)” is construed as a sort of complementizer among its other functions. Introducing a comparative complement, do is obligatory and essential to the construction. The noun phrase as a whole represents a kind of oblique complement (a subtype of oblique, cf. §6.2.2), denoting an entity/situation as the reference point for comparison. It is always expressed explicitly. In contrast, the Theme, the constituent under comparison, can undergo ellipsis, as do other core arguments, e.g.

(11.39) Lhialhia ggêe bbo zu dêa_con zzii,
   hôngzi InT thorn one_kind Cpl
   mûre do aliâ di ggûän yôn.
   people than little one tall Assr

‘Hongzi’ is a kind of thorny (shrub), a little bit taller than man.

The Theme is shared through in the clause-chaining sentence above, and not repeated in the second clause, which constitutes a comparative construction.

The structure of the comparative construction can be presented as follows:

(11.40) Theme + \{ Noun phrase \} do + Verb

The comparative complement is syntactically rather simple. It may contain a noun, a pronoun, or occasionally a verb. A short noun phrase consisting of a demonstrative is also observed in the comparative complement, but it is doubtful for a fully expanded noun phrase to appear in the complement. The simplicity is perhaps attributed to discourse factors. Given the sole purpose of the complement is to render a comparison viable, there is no justifiable motivation to enlarge the noun phrase. (If additional information is needed, it can be expressed separately outside the comparative construction.)
The following exemplify the various kinds of possible elements in the comparative complement: a demonstrative in (11.41)a, a pronoun in (11.41)b, and a verb in (11.41)c. In complex sentences, the comparative construction is underlined.

(11.41) a De do zhēa di bbo xī mā'yon.
this than big one ExT exist N+Assr
One that is bigger than this does not exist.

b Nī ggia ggüän zzāi ea dō la bbo zzai gīi sshó.
3s M horse_ride 1s than also Dc ride_skillful good
His horseback riding is even more skillful than mine.

c mēedi kian ma'giēa; tea-kiān ggēe mēe'kiān do ssho zha.
what give N+fear fr.sp-give InT Npf+give than good Ac
it doesn't matter what (you) give; to give is much better than not to give.

Note that the comparative construction occurs as a relative clause in (11.41)a. The Theme under comparison and the exact reference for the comparison are both expressed implicitly (to be further discussed below). In (11.41)b a comparison is made on the abstract notion of skill for horseback riding. The single-word pronoun in the complement is probably reduced from an underlying noun phrase like ēa ggia ggüän zzāi "my horse-riding". Since the comparison in (11.41)c is made on a situation, it is necessary to employ a verb as the comparative complement. Nonetheless, the complement is unlikely to expand from a verb to a full clause. As is the case with noun phrase enlargement, the preference for brevity curtails the size of the comparative complement.

Taking information structure into consideration, the comparative complement may appear at the beginning of a sentence, forming a topic-comment construction (cf. §12.4.2). For instance,

(11.42) Hhú do bbo ssa ggēe zhea.
tiger than ExT ssa InT strong
More than the tiger, the 'ssa' is stronger. (Proverb)

If the word order in the proverb is changed to comply with the basic one shown in (11.40) (the external topic marking after do would need to be removed), the pragmatic presupposition of the tiger as a powerful animal will disappear, although the propositional meaning of the comparative sentence remains intact.

10 'Ssaa' is said to be a tiny animal capable of chewing its way out from the stomach of a tiger after it is swallowed down.
A problem arises when the comparison regards an adjunct expression. Consider the following:

(11.43) Desia jian’re dëa_hni do dëa_hni gge-tée, ...

at present child+p one_day than one_day out-clever

Children of these days are getting cleverer every day (lit. one day than another), ...

Notice that the Theme of the predicate (single-underlined) in (11.43) does not coincide with the Theme for comparison (double-underlined). In a syntax-oriented language, the only possible way to parse the sentence is to compare jian’rê “children” to the complement dëa_hni do “than one day”. Such sentence is logically unsound, but it is acceptable in Chinese and Prinmi. These semantico-pragmatics-oriented languages are more accommodating (cf. LaPolla 1993). They allow flexible construal of certain structures that otherwise make no sense. In a comparative sentence like (11.43), the Theme-predicate is construed as a proposition setting out the context for a comparison rather than signifying a Theme in a comparison. In other words, the comparison between one day and the other is set in the context of children being clever. The Theme of the predicate must occur at the beginning of the sentence, a typical position for discourse-setting elements. Unlike (11.42), the comparative sentence in (11.43) cannot promote its complement to the sentence-initial position. However, it can precede the intended Theme for comparison, as presented here, rendering the Prinmi expression strikingly similar to that in Chinese.¹¹

Arguments of transitive verbs can also be compared by means of the comparative construction. For instance,

(11.44)a Azhi xian nee m la bbo bai ggée do honhēa df
Foc De 3s also ExT brother InT than more one
nea-zha, ... suudduu, ...
down-chop think

As for Azhi, he also thinks (he’d) chop more than his elder brother, ...

¹¹ The example is translated from a Chinese sentence with the expression yi tiān bǐ yi tiān “lit. one day compare one day”. While the possibility of Chinese influence is quite likely in this case, it seems that, even as a borrowing from Mandarin, the Prinmi expression must have been well-integrated in the language.
The comparative construction in these sentences is underlined. As can be seen from the above, comparison of arguments of transitive verbs is more complex, as regards both syntax and pragmatics. The comparative construction is embedded as a relative clause modifying the core argument \( P \) of the transitive verb. That the construction does not function directly as a sort of complement clause but a relative clause is manifested in (11.44)b, where the modificatory clitic 'a appears after the embedded clause. In (11.44)a, a resumptive pronoun is used after the initial noun. The pronoun is in apposition with its antecedent. It is not part of the embedded clause; it can still be employed when the comparative construction is removed. Although the pronominal use of \( di \) "one" is essential to this kind of comparative construction, the word is neither a complementizer nor a nominalizer. One would be prompted into analyzing the embedded comparative construction as replacing a core argument of \( nea\-zha \) "to chop down" in (11.44)a if it were a complementizer, or regarding the embedded clause as a nominalized argument of the transitive verb if it were a nominalizer.

As noted in §7.1.3, relative clauses often correlate with presupposed information. A direct comparison (as opposed to a contrastive one saying ‘this is big; that is small’) usually presupposes that the comparative complement, serving as a reference point, represents a typical quality for the property/situation under comparison. Such presupposition facilitates the encoding of the comparative construction as a relative clause. Notice also that the Theme of the construction does not occur in the embedded clause. When the comparative construction is embedded as a relative clause, it is typically short. This characteristic is intrinsic of a delicate discourse setting required for making this kind of comparison.

11.3.2 Clausal complements

Nominalized complement clauses occur mainly in a few constructions headed by the copula or the existential \( xí \) such as the obligatory construction and the potentiative construction (cf. §9.1.1 and §9.1.2.1). Except in these constructions, clausal complements are unmarked by any mechanism in Prinmi. Auxiliary verbs represent the most common type of head for a complement clause. Some verbs of cognition may also take a complement clause. Thus there are basically two types of complement clauses, differentiated by their head verbs. These will be discussed in turn below.
Complement clauses to auxiliary verbs

As noted in Chapter 9, all auxiliary verbs take a complement clause without any overt morphosyntactic marking. This gives rise to a concatenation between the head verb of the complement clause and the auxiliary verb. For example (each complement clause is underlined together with its head in bold),

(11.45)  
\begin{align*} \text{Tián} & \quad \text{mā’da} \quad \text{la} \quad \text{gge-tián} \quad \text{ku.} \\
\text{drink} & \quad \text{N+complete also} \quad \text{out-drink} \quad \text{must} \\
\text{Neé} & \quad \text{tián} \quad \text{nea-ma’dā}, \quad \text{xū} \quad \text{má’ha}. \\
2s & \quad \text{drink} \quad \text{down-N+complete} \quad \text{go} \quad \text{N+good} \end{align*}

Even (if you) can’t drink to completion, (you) must drink. (If) you don’t drink to completion, it’s no good (for you) to go.

As Prinmi verb morphology provides little evidence for the complement clause analysis for auxiliary verbs, some may wonder whether it will be possible to treat sentences headed by auxiliary verbs as some sort of ‘serial verb construction’. A negative answer to this question has been given tacitly. The issue will be addressed explicitly here.

Since the serial verb phenomenon has been construed in terms of the Double-verb Predicate (§11.1) and clause-chaining sentences (§10.3), accordingly, the question would be phrased as follows: when a sentence is headed by one auxiliary verb, can it be analyzed as a Double-verb Predicate or a clause-chaining sentence?

By definition, clause-chaining sentences are built on Coordinate junctures, which differ substantially from Subordinate junctures typically found in sentences headed by an auxiliary verb. Their structures are quite dissimilar, in spite of the superficial juxtaposition. The analysis as a Double-verb Predicate would seem to be more likely, since, at least, the causative verb does partake in certain Double-verb Predicates (cf. Ex.(11.7) above). This kind of Double-verb Predicate, however, is always complex, i.e. consisting of more than two verbs in the compact predicate. The only auxiliary verb that could arguably partake in a Double-verb Predicate is the terminative auxiliary da, occurring also in (11.45). While this auxiliary could be analyzed as forming a resultative Double-verb Predicate with the Action verb, such analysis runs into difficulty when the juxtaposed verb is a non-Action one. For instance,

(11.46)  
\begin{align*} \text{dēasu’une} & \quad \text{dēa-prin} \quad \text{nea-dā’si.} \\
\text{huàngguò+p} & \quad \text{up-white} \quad \text{down-complete+Pf} \end{align*}

The ‘huángguo’ (flowers) have completely made (the field) white.

In (11.46), the initial noun cannot be construed as a shared argument between the two verbs. In this case, the situation of whitening must be analyzed as the complement of the
auxiliary verb. In favor of a unified treatment, I will consider the possible alternative analysis of *da* in (11.45) as exceptional.

Recall that the Double-verb Predicate is defined as a kind of Nuclear juncture in §11.1. A severe problem in attempting to analyze an auxiliary verb as forming a Double-verb Predicate with its complement verb is that the juncture involved typically takes place at a level higher than the Nucleus — thus it cannot be Nuclear juncture. This has been demonstrated above in the discussion of several constructions such as the periphrastic causative construction and the semelfactive construction (cf. §11.2.1 and §9.4.3). Similar evidence does not come by easily for each individual auxiliary verb, but sporadic ones can still be observed from time to time. Consider the following (bracketing indicates boundary of the complement clause of an auxiliary):

(11.47)a [ëa ggiâ krê bbee dia'ki] ku.
1s M foot at Nds+grasp must
Don't grasp my foot.

b [sian bbô xî] ma'kû; kusian nôn xî-yî da zzii.
tomorrow ExT go N+need third day Dc go-nm only Cpl
(you) don't need to go tomorrow; (you) just ought to go the day after tomorrow.

c Dê niân ggêe [tea-niân] bbô mà'wen.
this disease InT fr.sp-pain Dc N+Assr
For sure, this disease isn't painful.

As pointed out in §9.2.2, the strong obligative modal cannot host any negator. Consequently, the negation must be expressed within the complement clause, as in (11.47)a. Such attachment of negator is impossible for the Double-verb Predicate, which designates the final verb exclusively as the host for the entire predicate (cf. Ex.(11.15) above). This restriction does not apply to the weak obligative modal, so the negator is attached to the auxiliary in (11.47)b. A hint at the existence of a complement clause is provided by the temporal modifier whose intended scope covers only the embedded clause. Comparing with the following clause, it is not difficult to see that the entire sentence presupposes a need to go, with tomorrow's going contrasted to that of the day after. A more illuminating example is (11.47)c. Notice that the discourse clitic *bbo* intervenes between the single-word complement clause and the assertive modal. It clearly shows the otherwise indiscernible constituent boundary between the verbs. Instances like this are not elicitable; they can only be observed when occurring naturally. Imitation of the clitic insertion artificially simply meets with native speakers' rejection.

Structural complexity exhibited by the complement clause of auxiliary verbs also points to the fact that the juncture involved cannot take place at the Nuclear level.
Sometimes, the complement clause of an auxiliary verb may contain a complex structure such as the semelfactive construction and the periphrastic causative construction. These constructions themselves are headed by auxiliary verbs, leading to a recursive complementation in the sentence. In the following examples, the complement of the highest auxiliary is placed within brackets, and the embedded complement clause is indicated by a single line underneath.

(11.48) a  Neezzân [ea bbô ea-gû dî qii] ku.  
   2d 1s for in-help one do must
   The two of you must give me a hand.

   b  Sshôn ggôn nee [nea-sii-mî ggiâ jiuu ggée dea-goxî] sheep
      Inst Dc down-die-person M spirit InT up-lead
      earâ beabu ddian ggée dêa-dâ gee] yon.
      1pîn:M origin place InT up-reach let:sbj Assr
   The sheep will certainly lead the spirit of the deceased and let it reach the land
   of our origin.

c  Earê gge-xii’a bbo [gri-mî hêa ggee zzii ea-dô]
      1pîn out-go+M Dc sing-er who InT Cpl in-look
      di qii] xii.
      one do Pps
   We’ll go, go for a look at who the singer is.

Note that the use of the semelfactive construction with the purposive auxiliary in (11.48)c involves multiple complement-embedding. The double-underlined clause represents the innermost complement, taken by the verb dô “to look”.

The collective evidence thus shows that in Prinmi the auxiliary verb as a whole takes complement clauses, which cannot be analyzed as a clause-chaining sentence or a Double-verb Predicate.

11.3.2.2 Complement clauses to verbs of cognition

Verbs of cognition include those denoting speaking, thinking, perceiving, and so forth. This group of verbs may occur with a complement clause without any complementizer or overt marking. For instance (the complement clause is underscored):

(11.49) A: Mê jii’riu?  
   what say+nInv

B: Ma’kü jii’riu.
   N+want say+nInv
   A: What did (he) say?
   B: (He) said (he) didn’t want (any).
Lack of formal clues, compounded with frequent ellipsis of arguments, results in a dearth of unambiguous instances of indirect quotation in Prinmi. Furthermore, direct speech rather than indirect one is a feature of story texts. These factors contribute to an impression that Prinmi prefers direct quotations to indirect ones.12

Two parameters are useful for distinguishing a direct and an indirect quotation. In terms of viewpoint, a direct quotation is uttered from the viewpoint of the original speaker; whereas an indirect quotation is not (cf. Maynard 1984). Syntactically, a direct quotation is much more complex; it may involve a structure with more than one independent sentence, built on some sort of 'sentential juncture' (cf. Van Valin & LaPolla 1997: 469). The following sentences contain direct quotations:

(11.50) a Beaddi ggon “Ma'gäi. Xxia_kré ea-liön gëe ku.” jii.
frog Inst N+fine hand_foot in-suffice let:sbj must say
The Frog says, “No good. (You) must let the limbs stay intact.”

b “Aya! ēa là dëa_hni bbo ēni’a zonggüi dëa_zii
Intj 1s also one_day Dc like that+M attire one_Ctr
nea-gguai-yi zzi ba.” suuddu kee bbo, ...
down-dress-nm Cpl Spcl think time ExT
When (the Golden Pheasant) thinks, "My goodness, one day I should also wear a dress like this." ...

Given the parameter differences, it would be better to differentiate the kind of complementation found in sentences like (11.50) from complement clauses found in sentences with an indirect quotation. The discussion below will focus on complement clauses.

Other verbs of cognition observed from story texts to be able to take a complement clause include:

(11.51) a reabù ggee nea-ddi, qini zzhôn riän’riù ssôlôlo ea-si yôn.
cock InT down-cast how become ring+nInv careful in-heed listen
(you) throw the rooster down, heed and listen carefully how (it) sounds.

b ejjée hniqiön dî nea-zzôn tea-jüan’si.
there boy one down-sit fr.sp-see:3+Pf
(she) saw a young fellow sitting there.

12 In a survey of 40 languages, De Roeck (1994) reports a similar situation found in some languages. While the preference of direct quotations can be a fact about Prinmi discourse, it must be confirmed (or disproved) with an empirical study of discourse strategies in the language.
Apart from the pre-verb position, a complement clause can alternatively appear after verbs of cognition. This is illustrated by the pair of sentences predicated with inflections of the verb masi "to know" in (11.52), translated from Chinese by the main consultant. Although the difference between the placements of the complement is too vague to discern, they are not freely interchangeable. In general, the pre-head one can easily be relocated to the post-head position, but not vice-versa.

(11.52) a Jianlèe’ère, neerè bûuliu ggee mëe zzii má’a’sǐn?
child+p 2p tadpole InT what Cpl Q+know:2p
Kids, do you know what a tadpole is?

b Êa masiān: née ea bbēe ggiā ma’rū.
1s know:1s 2s 1s at love N+Inv:2s
I know that you don’t love me.

Sentences with a post-head complement differ syntactically from those with a pre-head one, although they are all complex sentences. With the pre-head complement, the structure of the sentence is complex in having an embedded clause. On the other hand, sentences with a post-head complement involve clause chaining at the Clausal level, i.e. the complement clause is related to the verb of cognition through a non-subordinate juncture. Argument sharing in this kind of clause-chaining sentence is typically absent.

The following are further examples for post-head complements, all from translations:

(11.53) a Neerè jiān’dū: bêaddi ggee zhēa do gge-zhūi ea-zhūi qii.
2p see+Expr frog InT earth on out-jump in-jump do
You’ve seen that frogs jump around on the earth.

b Êa bbō jjiānxxāo zha:
1s Dc believe Ac
niā ggiā zūu ggee dēa_ruea zzhōn ton’gāi.
2s:M M son InT one_road smooth succeed+Vlt
I believe firmly that your son will succeed in every thing.

Although most sentences with a post-head complement are found in translations from Chinese, influence from the source language is unlikely. Otherwise, all of them would have a post-head complement. Moreover, there is not a single instance of rendering a post-verbal argument when the consultants translate Chinese sentences into Prinmi. Therefore, the word order difference between the two languages need not be regarded as a potential factor.
11.4 Summary

This chapter has discussed the complex predicates found in the Double-verb Predicate, certain periphrastic causative constructions and complementation realized as complement clauses. The Double-verb Predicate is a special kind of Nuclear juncture. It has a binary structure, but may contain more than two verbs, provided that they are under the two combined units.

The most productive and commonly used causative construction is the one headed by gèe/gùè. It comprises a causative verb, a Causer, a causee, and a complement clause. The variants of the causative are chosen in accordance with the speaker’s perspective on the Causer’s controllability over the causation. The causee can be encoded as an Incitee, a Goal, or an Affectee, depending on the causee’s volition and/or controllability over the caused event. The causee is always shared between the complement head and the causative verb.

Complement clauses that require nominalization are few. The majority of them do not receive any morphosyntactic marking; they are simply juxtaposed to the successive head verb. Sometimes a complement clause to verbs of cognition may follow the head verb and form a different kind of complex sentence — clause chaining instead of subordination. This alternative is not available for complement clauses to auxiliary verbs. Because of the clausal structure discernible in the complement, these juxtaposed verbs are not analyzed as Double-verb Predicates.

Another major complementation dealt with in this chapter is the comparative complement. It is a noun phrase with an oblique function. The comparative construction involves a complex structure when the core argument of a transitive verb is under comparison. In this case, the comparative construction is embedded as a relative clause inside the argument $P$. 
Chapter 12.

Information Structure

The investigation of the information structure of Prinmi is mainly based on two recent works on pragmatic study: Gundel, Hedberg, & Zacharski (1993) and Lambrecht (1994). These works provide and clarify many fundamental concepts central to the present study. This chapter will start with a succinct introduction to Lambrecht’s approach to information structure. The findings of Gundel et al will be briefly summarized before a discussion on the referring expressions in Prinmi. A general description of focus structure will then be presented in §12.3. The next section scrutinizes the topic-comment construction, while the final section examines the functions of the focus-presupposition construction -mi zzii.

12.1 Background: Lambrecht’s theory of information structure

Lambrecht’s study of pragmatics, as presented in Lambrecht (1994), concerns how pieces of propositional information in a given discourse context are expressed through the formal structure of sentences in natural languages. His theory offers an account of the relationship between pragmatics and syntax, rather than an exclusive pursuit of discourse analysis. The fundamentals of Lambrecht’s theory of information structure involve: (i) propositional information, (ii) mental representations of discourse referents, (iii) the pragmatic relation of topic, and (iv) the pragmatic relation of focus.

Propositional information is understood in terms of ‘pragmatic presupposition’ and ‘pragmatic assertion’, which are defined as:

Pragmatic presupposition: The set of propositions lexicogrammatically evoked in a sentence which the speaker assumes the hearer already knows or is ready to take for granted at the time the sentence is uttered.

Pragmatic assertion: The proposition expressed by a sentence which the hearer is expected to know or take for granted as a result of hearing the sentence uttered. (Lambrecht 1994: 52)

Lambrecht recognizes in terms of ‘identifiability’ and ‘activation’ seven cognitive states for discourse referents. The mental representations of discourse referents can be sketched as follows (adapted from LaPolla 1995: 303). The underlined terminals in the diagram represent the five possible cognitive statuses for a discourse referent. No distinction is discerned in regard to cognitive status for the further specifications under ‘accessible’.
Topic and focus are the two essential pragmatic relations in Lambrecht’s theory of information structure. Noticing that the term topic is ambiguous, Lambrecht differentiates the pragmatic category ‘topic’ and the grammatical category ‘topic expression’ as follows:

**Topic**: A referent is interpreted as the topic of a proposition if in a given situation the proposition is construed as being about this referent, i.e. as expressing information which is relevant to and which increases the addressee’s knowledge of this referent.

**Topic Expression**: A constituent is a topic expression if the proposition expressed by the clause with which it is associated is pragmatically construed as being about the referent of this constituent. (Lambrecht 1994: 131)

With the conceptual and terminological distinction above, a topic expression always designates a topic, but a referent which is topical in discourse is not necessarily coded as a topic expression through linguistic means. Lambrecht attributes this asymmetry to the fact that a discourse referent as an entity exists independently of its linguistic manifestation.

Lambrecht (1994: 213) provides the following definition for the semantico-pragmatic category of ‘focus’:

**Focus**: The semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition.

Lambrecht emphasizes that the pragmatic relation of focus must be kept distinct from the grammatical realization of focus in a sentence. One of our major concerns in this chapter is to find out how focus is expressed in the grammatical system of Prinmi.

### 12.2 Cognitive status of discourse referents

A crucial parameter for discourse study is the cognitive status of discourse referents. Although Lambrecht incorporates this parameter in one of his four categories, he has not explored further the relationships between the different cognitive states of discourse referents. Gundel, Hedberg, & Zacharski (1993) provide an empirical and cross-linguistic investigation of this subject and propose a hierarchical relationship, the
Givenness Hierarchy, for six cognitive statuses they distinguish in discourse analysis of referring expressions. The Givenness Hierarchy consists of, from the highest to the lowest, the following six cognitive statuses:

\[
\text{in-focus} > \text{activated} > \text{familiar} > \text{uniquely-identifiable} > \text{referential} > \text{type-identifiable}
\]

The cognitive statuses are implicationally related such that a specific status in the hierarchy entails all the lower statuses, those to its right. Thus, for a referent with a (highest) status of 'familiar', it ensues that the referent is also 'uniquely-identifiable', 'referential', and 'type-identifiable'. With the empirical support from cross-linguistic study, the Givenness Hierarchy will be adopted in lieu of the category for mental representations of referents employed by Lambrecht.¹

### 12.2.1 The Givenness Hierarchy

As an approximation, the basic pragmatic information associated with the six cognitive statuses of the Givenness Hierarchy is presented as follows:²

<table>
<thead>
<tr>
<th>Status</th>
<th>Speaker's Assumption about Addressee's Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foc</strong> (in-focus)</td>
<td>Able to interpret the referent as the current center of attention, being the most activated entity.</td>
</tr>
<tr>
<td><strong>Ac</strong> (activated)</td>
<td>Able to uniquely identify the referent based on the current state of memory, which may result from the immediate linguistic or extralinguistic context, or may be evoked from long-term memory.</td>
</tr>
<tr>
<td><strong>Fm</strong> (familiar)</td>
<td>Able to uniquely identify the referent on the sole basis of memory, either long-term or short-term memory.</td>
</tr>
<tr>
<td><strong>Uq</strong> (uniquely-identifiable)</td>
<td>Able to identify the referent based on the nominal itself. Identifiability may be based on an already existing representation in the addressee's memory, or may be derived from sufficient descriptive content in the nominal. The status is a necessary condition for all definite reference.</td>
</tr>
<tr>
<td><strong>Rf</strong> (referential)</td>
<td>Accessible to an appropriate type-representation, plus ability either to retrieve an existing representation of the referent or to construct a new one with additional information from the current and subsequent sentence(s).</td>
</tr>
<tr>
<td><strong>Tp</strong> (type-identifiable)</td>
<td>Accessible to a representation of the class of objects described by the expression.</td>
</tr>
</tbody>
</table>

¹ The replacement is motivated by the relatively more advanced stage of the study with the Givenness Hierarchy. While the two approaches differ in minor details, they are certainly not incompatible.

² For detailed discussion of the statuses, see Gundel, Hedberg, & Zacharski (1993).
The following passage extracted from the *Deluge* story provides a good illustration for five of the six cognitive statuses in Prinmi:

(12.1) a  "Ea_bbå züu ggüxxin, niä ggiä zhüän gged ea bbêe (Crow) 1s_family son middle 2s:M M lunch InT 1s to

type-identifiable

b ddê-chee ku; ea ni'ön nee bbêe pêa_zzi hin’xo.” jii’a.
to.sp-feed must 1s Dc+Inst 2s at news_good tell+Opt say

activated
type-identifiable

c Diá guän ggôn⁵ “Èa là zziyî ma’liôn.
now y. brother Inst 1s also food N+suffice

Nee bbêe chee-yî ma’gâi.” jii’a.
2s at feed-nm N+fine say

in-focus activated
type-identifiable

familiar

d Dia ôk¹ ôi ôi dia’chee nêa-ba.
again (brother) (Crow) (lunch) Nds+feed down-do
(The Crow says,) “Middle son of my family, (you) must feed me your lunch. I’ll tell you some good news.” Now the young brother (says,) “Food isn’t even enough for me. It’s no good to feed you.” Again, (the brother) doesn’t feed (him) (his lunch).

The passage is taken from the early part of the story after the Crow has asked for food from the eldest brother. The brother rudely refuses to exchange his lunch for the Crow’s news. Now the Crow comes to the second brother. Since the Crow is already mentioned in the immediate sentence before the extracted passage in (12.1), it is referred to by means of the zero anaphor. The zero anaphor has the status of ‘in-focus’. Another instance for this status is found in (12.1)d on another zero anaphor which has a different referent, as indicated by the index.

The vocative in (12.1)a has a cognitive status of ‘activated’. Another expression with such status is seen in (12.1)c. The two happen to refer to the same entity in the passage. The coincidence should not be assumed to mean that a cognitive status is maintained in a text once the status is identified. That this is not the case can be observed from the change of status of the zero anaphor indexed with the letter ‘i’ in (12.1)a and (12.1)d. While it is possible for a referring expression to maintain its status between adjacent sentences, the cognitive status is fleeting and needs to be assessed every time a referring expression appears, irrespective of its vicinity from the last occurrence.

The third referring expression in (12.1)a is considered to have the status of ‘uniquely-identifiable’ by virtue of the attributive expression preceding it. No other
referring expression in (12.1) bears this status. Following Gundel, Hedberg, & Zacharski (1993), pronouns for speech act participants are excluded from the analysis of cognitive status, since they are characteristically ‘in-focus’ or ‘activated’ by their semantic nature. Therefore the first-person pronoun in (12.1)b is ignored.

The single referring expression found in (12.1)b has the cognitive status of ‘type-identifiable’. It refers to a newly introduced entity, and thus has the lowest possible cognitive status. Similarly, the expression *zzìyì* “food” in (12.1)c represents a new entity introduced to the discourse. It can only bear the status of ‘type-identifiable’. Note that the noun is construed as referring to food in general, rather than referring to the lunch.

The final sentence in (12.1)d contains three zero anaphors, each with a different cognitive status. Identifying the first one as ‘in-focus’ is straightforward. Since the brother’s speech has just been quoted in (12.1)c, the mental representation of the referent is already high in cognitive status. When it immediately occurs again in (12.1)d as a zero anaphor, the cognitive status of the referring expression escalates to ‘in-focus’. In spite of a clearly traceable referent for the other two zero anaphors, they cannot have the same status as ‘in-focus’, for only one discourse referent may enjoy the status of being the most activated in a sentence. Thus the second one must be lowered to ‘activated’. The need for a further lowering of the third one to ‘familiar’ is somewhat debatable. Unlike an ‘in-focus’ expression, it is possible for two ‘activated’ expressions to co-exist in a single sentence, or even in a single clause. Such cases are observed in explicit expressions. Whether the same may apply to implicit ones is an open question. There are not sufficient instances with two zero anaphors that can both be identified as having the ‘activated’ status. In the case of the situation in (12.1)d, the differentiated cognitive statuses for the second and the third zero anaphors are justifiable on the ground that the final zero anaphor refers to an entity that has been mentioned only once in the discourse.

The cognitive status of ‘referential’ is not attested in the passage above. It is found in the following utterance, given by the Crow as advice to the youngest brother (who has fed him some of his lunch):

```
(12.2) Debbó nee bbó zhinzhu ggée ddea-sshū,
then 2s ExT pestle InT to.sp-bring:2s
referential
referential meazii ggée ddea-sshāa, reabū ggée ddea-sshū.
cat InT to.sp-bring cock InT to.sp-bring:2s
```

*Then you take (from your home) a pestle, a cat, and a rooster with you.*
Notice the morphosyntactic marking of the expressions as internal topics. The entities referred to by these expressions are all ‘brand-new’ to the discourse (cf. Prince 1981). They could have had the numeral *di* “one” in lieu of the topic clitic *ggee*. The alternate is also appropriate under the discourse circumstances. The consultant pointed out that the referring expression in (12.2) implies that the item belongs to the young brother’s family, and that this implication will be lost in the alternative expression. Thus the expressions in (12.2) are actually specific. Accordingly, their cognitive status should be higher than ‘type-identifiable’, but not as high as ‘uniquely identifiable’, since their referents are new in the discourse. This leads them to the status of ‘referential’ in the Givenness Hierarchy.

Given the implicational nature of the Givenness Hierarchy, the cognitive status of a referring expression is determined by the highest possible status it may have in a discourse context. For reasons of simplicity as practiced by Gundel et al, three types of referring expression are excluded in the study of cognitive statuses: pronouns for speech act participants, interrogative pronouns, and abstract nouns (such as those denoting time). Note also that no zero anaphor is recognized if it refers to speech act participants. For a null element which does not exist, it is symbolized with ‘_' in the tables below. Thus a

Table 12-1: Referring expressions and their cognitive statuses in the Cuckoo and Golden Pheasant story

<table>
<thead>
<tr>
<th></th>
<th>Foc</th>
<th>Ac</th>
<th>Fm</th>
<th>Uq</th>
<th>Rf</th>
<th>Tp</th>
<th>totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 œ</td>
<td>19</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>A2 œ <em>ggee</em></td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>B1 <em>ni_</em> “s/he/it”</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>B2 <em>ni ggon</em> “by s/he/it”</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>B3 <em>ni ggia</em> “her/his/its”</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>C1 <em>de ggee</em> “this”</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>C2 <em>de ggia</em> “of this”</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>D1 <em>N di</em> “a N”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>E1 <em>N_</em> “N”</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>11</td>
<td></td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>E2 <em>Nre</em> “N (plural)”</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>E3 <em>N bbo</em> “N”</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>F1 <em>N ggee</em> “N”</td>
<td>2</td>
<td>2</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>F2 <em>N ggee bbo</em> “N”</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>F3 <em>N ggia</em> “of N”</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td>5</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>F4 <em>N ggon</em> “by N”</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>F5 <em>N ggon nee</em> “by N”</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>totals</td>
<td>24</td>
<td>30</td>
<td>4</td>
<td>28</td>
<td>3</td>
<td>19</td>
<td>108</td>
</tr>
</tbody>
</table>
bare noun is represented as ‘N _’, as in E1 of Table 12-1. The referring expressions can be sorted into six major groups: group A for zero anaphor, group B for pronouns, group C for those with a demonstrative, group D for those involving the numeral di “one”, and group E for those with a bare noun or infrequently found clitics such as re, ron and bbo, and Group F for nouns hosting ggee, including complex forms combined with the clitic and those with additional clitics. Notice that the highly abstract meaning of some clitics is not translated in the glosses.

All referring expressions from the Cuckoo and Golden Pheasant story falling within the target of analysis are itemized exhaustively in Table 12-1. To ensure that the potential contribution made by the clitic(s) in an expression is not overlooked, the information in the table is particularly detailed. A refined presentation of the results, combined with those found in the Deluge story, is provided in Table 12-2, based on the six major groupings of the referring expressions.

Table 12-2: Correlation between referring expressions and cognitive statuses in Prinmi

<table>
<thead>
<tr>
<th></th>
<th>Foc</th>
<th>Ac</th>
<th>Fm</th>
<th>Uq</th>
<th>Rf</th>
<th>Tp</th>
<th>totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Zero anaphor</td>
<td>137</td>
<td>22</td>
<td>17</td>
<td>2</td>
<td></td>
<td></td>
<td>178</td>
</tr>
<tr>
<td>B Quasi-pronouns</td>
<td>3</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>B’ Place pronouns</td>
<td>3</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>C de _/clitic “this”</td>
<td>1</td>
<td>10</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>C’ de N _/clitic “this N”</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>D N di “a N”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>D’ _ di “(pron.) one”</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>E N_/re /bbo</td>
<td>2</td>
<td>28</td>
<td>2</td>
<td>65</td>
<td>13</td>
<td>115</td>
<td>225</td>
</tr>
<tr>
<td>F N ggee/ggia/ggon</td>
<td>14</td>
<td>49</td>
<td>2</td>
<td>73</td>
<td>19</td>
<td>10</td>
<td>167</td>
</tr>
<tr>
<td>totals</td>
<td>157</td>
<td>136</td>
<td>33</td>
<td>141</td>
<td>33</td>
<td>141</td>
<td>640</td>
</tr>
</tbody>
</table>

As can be seen from Table 12-2, a discernible correlation exists for some referring expressions and cognitive statuses. The correlation is manifest when an expression is repeatedly associated with a particular cognitive status. The results from Row A to Row D suggest the following tendencies in Prinmi: the zero anaphor tends to be ‘in-focus’; the quasi-pronouns often have the cognitive status of ‘activated’; place pronouns are (the distal ones) often ‘familiar’; expressions with the proximal demonstrative are typically ‘activated’; and the use of the numeral di “one” after an overt noun tends to have the status of ‘type-identifiable’. The form-status correlation in Prinmi basically agrees with the findings in Gundel, Hedberg, & Zacharski (1993).
The remaining three rows in the table are less suggestive for a form-status correlation. When the numeral *di* "one" functions as a pronoun, i.e. without modifying a noun (much like English *(the) one*), its correlation with a cognitive status, if this exists, has not been revealed from the small number of tokens available. Although the cognitive status 'type-identifiable' is found to be frequently associated with expressions in Group E, i.e. those having a bare noun or clitics other than *ggee*, there is also a clear indication of the form generally accessible to other cognitive statuses. Thus the correlation, if recognized, can only be a weak one. Likewise, expressions containing *ggee* in Group F may only show a weak correlation with the status 'uniquely-identifiable'.

In addition to the form-status correlation, the results in Table 12-2 may also be interpreted as pragmatic conditions for the appropriate use of certain expressions. The shaded areas in the table indicate that a discourse referent with those cognitive statuses cannot be encoded as the corresponding expressions. Of particular interest is the condition set for the zero anaphor, which suggests that the zero element is on par with an explicit pronoun. It highlights the discourse condition for using the zero anaphor, which is not arbitrary nor intractable. Consider the complex sentence below:

(12.3) a Büuni'a ea-yan'si ggee sian bbó nee ddián ddea-mú;
today+M in-plow+Pf InT tomorrow ExT Dc field fr.sp-compact
b sian bbó ea-yan'si ggee kusian bbó ddián ddea-mú.
tomorrow ExT in-plow+Pf InT third day ExT field fr.sp-compact

(12.4) a Büuni'a ea-yan'si ggee sian bbó nee ddián ddea-mú;
b #sian bbó ea-yan'si ggee kusian bbó ø ddea-mú.

The noun *ddián* "field" has occurred twice in the sentence. If the use of zero anaphor were simply to avoid repetition, the second instance of the noun should be able to be omitted. That the omission shown in (12.4)b is unacceptable is attributed to the low cognitive status of the noun, being 'type-identifiable' only. As shown in Table 12-2, the use of zero anaphor is appropriate only if the expression has a status higher than 'referential'. It is thus problematic to render an expression with a cognitive status below the required level as a zero anaphor. A similar condition also applies to the use of various pronouns and demonstrative expressions; namely, if a referent is to be encoded as one of these expressions, its cognitive status cannot be lower than 'uniquely-identifiable'. The condition of cognitive status is reversed for the expression with a noun modified by *di* "one". The expression is appropriate only for referents low in cognitive status. If its
cognitive status is higher than ‘referential’, the referent cannot be encoded as such an expression.3

The study of cognitive status in terms of the Givenness Hierarchy also sheds some light on topicality of expressions that are morphosyntactically marked as internal topics. This will now be discussed.

12.2:2 Accessibility to topicality

Based on a general correlation between the cognitive status of topic referents and the pragmatic acceptability of sentences, Lambrecht (1994: 165) postulates a scale of acceptability that can measure the degree of pragmatic well-formedness of an utterance containing a topic expression by the cognitive status of the topic referent on the scale. If we interpret the pragmatic acceptability in terms of accessibility to topicality, the topic acceptability scale can also be construed as an indicator of the potentiality of an expression functioning as a pragmatic topic in a sentence, given its cognitive status in the discourse setting. The scale can then be adapted from topic acceptability to topic accessibility:

<table>
<thead>
<tr>
<th>Givenness Hierarchy</th>
<th>Accessibility to topicality</th>
</tr>
</thead>
<tbody>
<tr>
<td>in-focus</td>
<td>most accessible</td>
</tr>
<tr>
<td>activated</td>
<td></td>
</tr>
<tr>
<td>familiar</td>
<td></td>
</tr>
<tr>
<td>uniquely-identifiable</td>
<td></td>
</tr>
<tr>
<td>referential</td>
<td></td>
</tr>
<tr>
<td>type-identifiable</td>
<td>least accessible</td>
</tr>
</tbody>
</table>

Figure 12-2: The Topic Accessibility Scale

The topic accessibility scale essentially states that the higher cognitive status a referring expression bears in discourse, the more acceptable when it serves as a pragmatic topic. To verify the postulated scale, a separate empirical study is conducted on the Deluge story for investigating the pragmatic topichood of expressions marked by the internal topic clitic ggee. The function of pragmatic topic is determined by the co-existence of a comment, i.e. in terms of the topic-comment relation. In addition to this strict interpretation of topichood, the notion is further extended to include topics serving for scene setting. If a ggee-marked noun phrase cannot be construed as a topic for a

3 Although there are some blank areas adjacent to the shaded area in Table 12-2, these are tentatively regarded as ‘accidental gaps’ which may be filled when more analyses of cognitive status are conducted.
following comment, or as a scene setting topic for the utterance, it is considered as a 'non-pragmatic topic'. The results are provided in the following.

Table 12-3: Pragmatic statuses of expressions marked by the internal topic clitic ggee

<table>
<thead>
<tr>
<th>Cognitive Status</th>
<th>Pragmatic topic</th>
<th>Non-Pragmatic topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>in-focus</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>activated</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>familiar</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>uniquely-identifiable</td>
<td>23</td>
<td>10</td>
</tr>
<tr>
<td>referential</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>type-identifiable</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Temporal</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Clausal</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td><strong>totals</strong></td>
<td><strong>57</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

The 83 tokens of ggee found in the story do not include those in complex forms such as ggia and ggon, but the presence of additional clitic(s), like ggee bbo (nee), is counted towards the expressions under investigation. Almost one third of the expressions is used without the co-existence of a comment (see Ex.(12.5) below). Discounting those conveying temporal sense and/or involving a clausal constituent, the cognitive statuses of the remaining 72 expressions reveal a condition for construing a ggee-marked noun phrase as a pragmatic topic: Unless an expression has the cognitive status 'uniquely-identifiable' or higher, it does not appear in a topic-comment relation. The 'uniquely-identifiable' status represents the threshold for entering pragmatic topichood. Expressions with this specific status may or may not function as a pragmatic topic.

The two statuses with a zero token in Table 12-3 ought to be interpreted differently. As shown earlier in Table 12-2, only 33 (or about 5%) referring expressions have the status of 'familiar', of which half occur as a zero anaphor, unable to host the topic clitic ggee. Therefore the lack of token for this status in Table 12-3 is probably due to the small size of data rather than any linguistic constraint. On the other hand, the lack of token for the 'type-identifiable' status may suggest some additional condition. Since this status has one of the highest tokens — 141, as shown in Table 12-2, the zero token for ggee-marked noun phrases with this status in Table 12-3 may be ascribed to the low cognitive status of this category, being the lowest possible one. Thus an additional condition can be proposed for the use of ggee: a noun phrase should have a cognitive status higher than 'type-identifiable' in order to receive the ggee marking, irrespective of its pragmatic function.
Examples in (12.5) and (12.6) illustrate some ggee-marked noun phrases from the story, with varying cognitive statuses and different pragmatic construal of the topic marking:

```
(12.5) a Debbó nee bbó zhinzhu ggee ddea-sshû, ...
   then 2s ExT pestle InT to.sp-bring:2s
   Then you take a pestle (from your home), ...

b née re bbêe zhinzhu ggee nea-ddì nea-xû gêe.
   2s first at pestle InT down-cast down-go let:sbj
   (When the water reaches your feet,) you throw the pestle down first.
```

Neither of the underscored expressions in (12.5) can be understood as a pragmatic topic in the discourse contexts in which they occur. The utterances are part of advice given by the Crow to the youngest brother. The constituents following the expressions are not intended as comments to zhinzhû “pestle”. Rather, the expressions themselves are part of the assertion. The focus domain in the sentences embraces both the underscored expression and adjacent constituents. Such a broad focus is not found in the sentences in (12.6). Instead, a narrow focus is found on the comment constituent, not covering the pragmatic topic. The internal topic marking in (12.6) signals that the ggee-marked noun phrase is in a topic-comment relation.

```
(12.6) a Son-baïgûân ggee la küé jjêe, ea-konhnîân bà.
   three_brothers InT also heart_angry in-indignant do
   All the three brothers feel angry and indignant.

b Bbô neerê son-baïgûân ggee bbo pian kû’gai.
   Dc 2p three_brothers InT Dc flee need+Vlt
   (The flood is coming.) Well, you — three brothers — need to run away.

c Xêe, bai ggûxxin, bai dâi, earê son-baïgûân ggee bbo pian’gûê.
   go:Hrt bro. median bro. big 1pîn three_brothers InT Dc flee+Hrt
   Let’s go, Middle Brother, Big Brother, let us — three brothers — run away.
```

The investigation of ggee-marked expressions illustrates that topic as a pragmatic category is not predictable by morphosyntactic marking in Prinmi. Once embarking on the path of grammaticalization, the clitic cannot be a reliable indicator of pragmatic categories. It is then necessary to consider other pragmatic properties such as cognitive status in determining whether an expression actually functions as a pragmatic topic.
12.3 Types of focus structure

Lambrecht discusses three major types of focus structure according to the different syntactic domains of a focus in a sentence. They are, from the narrowest to the broadest: NP focus, Predicate focus, and Sentence focus. In addition to these, Prinmi also makes use of a periphrastic construction to express (among other functions) a focus counter to a pragmatic presupposition. The domains of the four focus structures to be dealt with below can be summarized as follows (adapted from Lambrecht 1994: 236):

Table 12-4: The focus domains in different focus structures

<table>
<thead>
<tr>
<th>Focus domain</th>
<th>Argument/Adjunct</th>
<th>Predicate</th>
<th>Complement</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP focus</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Predicate focus</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Sentence focus</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Counter-Presupposition focus</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

Of the four focus structures in Prinmi, the most common one is the Predicate focus, expressed by the topic-comment construction; the least common one is the Counter-Presupposition focus, conveyed by one of the functions of the focus-presupposition construction -mi zzii. These two constructions will be scrutinized later in the chapter. The following provide representative examples for each of the four focus structures, with a general discussion of them.

Depending on whether a focal argument is presupposed to be a member of a set — defined by discourse setting — Prinmi distinguishes two subtypes of argument focus. If no pragmatically defined set is associated with the focal argument, it is an open NP-focus, or else a closed NP-focus. There are several channels to express this kind of argument focus. For instance (a focal expression is in small capital letters),

(12.7)  Open NP-focus

a HEA GGÓN ēa jjéé gge-tiān'si?
  who Inst 1s tea out-drink+Pf
  Who has drunk my tea?

b Ėa jjéé tiān mī ggee HĒA GGEÉ zzii?
  1s tea drink person InT who InT Cpl
  The person who drank my tea, who is (it)?

c Debbó HEA GGÓN NIA tea-gri-mī zzii?
  then who Inst De fr.sp-sing-nm Cpl
  (Those songs), what I’m saying is: who sang (them) then?
Based on the basic clause structure, (12.7)a is structurally the simplest. The focal argument coincides with the sentence-initial position. The utterance in (12.7)b utilizes the topic-comment construction and codes the focal constituent as the comment. The periphrastic focus-presupposition construction -mi zzii is employed in (12.7)c to achieve an emphatic reading on the focal argument.

Without any suspect in mind when asking the questions, the speaker can only code the intended focal argument as an open one. The construct of the pragmatic set is essentially subjective. A speaker can freely decide, within the reasonable discourse context, whether a focal argument is to be viewed against a potential set, regardless of its availability. For instance,

(12.8) Jin ggêe chon sian ggêe xxii yêa mi ggee bbo
house InT quick wood InT many fetch person InT De
AZHI GEEE zzii.
Azhî InT Cpl

The person who got home quicker and fetched more firewood, (it) is Azhi.

The utterance in (12.8) contains an open NP-focus, although it is clear from the story that two sons are involved in a test. In fact, the two sons have been coded as a closed NP-focus in some other places in the text, contrasting one against the other. This example illustrates the subjective coding of the focal argument even with a pragmatic set available.

The focus clitic xian is always used to mark an argument/adjunct from a set of possible candidates as a contrastive focus by singling out its host from the other members of the set (cf. §6.4.1 for its semantic analysis). The closed NP-focus subtype also includes an adjunct focus.

(12.9) Closed NP-focus

a [...] EA SUÁN XIAN lian wen jii'riu.
 1s father Foc firm Assr say+nInv
[I thought it wouldn't be stuck;] it's my father who said it would be stuck.

b NEE XIAN gû_gû ma'riü süudduu'ru.
 2s Foc egg_lay N+nInv think+Inv:2s
It's you who think (she) doesn't lay eggs. (I don't think so.)

c xxii ggon DÊA_PEE XIAN goyi ggìà liú la tea-chêe.
bow Inst one_shot Foc crow M crop also fr.sp-tear
It's just one shot that (he) tore the Crow's crop with his bow.

The first two examples in (12.9) see the focal argument contrasted against the speaker. Such contrast involving the speaker of an utterance is frequent but not necessary. The use of the clitic supports Lambrecht's treatment of adjunct focus as an extension under the
more general argument focus. In (12.9)c, xian is employed to contrast the manner in which the Crow gets wounded — one shot vs. several shots.

Predicate focus is realized by the topic-comment construction. Although the topic element is often followed by clitics such as ggee, the comment never receives any morphosyntactic marking for its focus status. One characteristic about the predicate focus in Prinmi is that its domain tends not to contain any resumptive element for the topic (which is also a characteristic for the topic-comment construction). Thus the entire comment part (within a pair of brackets) usually coincides with the focus domain (in small capital letters).

(12.10) Predicate focus

a De mĩ ggee [ÊA JlAN DÛU].
this person InT ls see exp
This person, I saw (him) before.

b De mĩ ggee [KÜE_GÊAZAI].
this person InT heart_small
This person, (he) is cowardly.

The topic-comment construction does not necesarily equate the entire comment as a predicate focus. The construction can be used for a narrower focus, as already seen in (12.8), where the focus domain falls on an NP within the comment rather than covering the complete comment. The narrower focus domain is observed on comments consisting of a noun phrase and a copula. The narrowing of the focus domain is feasible by virtue of the vacuous meaning of the copula. The following is another instance of NP-focus found in the topic-comment construction:

(12.11) Lhialhia ggêe bbo [ZÛ DÊA_CON zzii].
hôngzi InT Dc thorn one_kind Cpl
The 'lhialhia', (it) is a kind of thorny plant.

Sentence focus typically occurs in presentational sentences for introducing a new entity into the discourse, e.g.

(12.12) Sentence focus

a Debbó DÊA_HNI BBO GOYI GGEE GGE-QION.
then one_day ExT crow InT out-appear
Then one day, the Crow appears.
Once upon a time, there was an old man.

A lama is sitting under the tree.

Note that the morphosyntactic marking of goyi “crow” as a topic in (12.12)a does not imply the existence of a comment which often concurs with a predicate focus. The noun has only the cognitive status of referential. (The occurrence of a designated topic outside a topic-comment relation will be further discussed in §12.4.1, cf. also §12.2.2). The utterance is meant to introduce the Crow to the story, and thus the focus must encompass the entire sentence. Utterances with a sentence focus tend to be short and structurally simple. The entity being introduced is low in cognitive status, not exceeding the status of referential in the Givenness Hierarchy. The use of *di* “one” after the entity in (12.12)b–c is perhaps more natural, since the expression correlates with the lowest cognitive status in the Givenness Hierarchy.

Counter-presupposition focus is observed only in a few instances, almost all from translated materials. They are typically expressed by the negated focus-presupposition construction, e.g.

(12.13) Counter-presupposition focus

\[ \text{Ni nia dē kēe nia zhēa dō zzhezzhān-mī mà'zzii.} \]
\[ 3s \text{ Dc born time Dc earth on walk-nm N+Cpl} \]
\[ \text{When it (the fog) is born, it is not the case that (it) walks on the earth.} \]

It is also possible to express a focus as a counter-presupposition without using the periphrastic construction in (12.13). Consider the following example from the Deluge story:

(12.14) Debbo zhēa ggee mea_kao ggiā zzī jje da'riū kēe bbo, 
then after InT fire_smoke M vicinity at arrive+nInv time Dc
\( \text{(oh) jīn lā mā'zzīi, rabujjion dī'a wu mēa chee'non.} \)
\( \text{Intj house also N+Cpl cave one+M in fire kindle+Dur} \)
\( \text{Then afterwards when (he) gets close to the smoke, (oh,) it is not a house;} \)
\( \text{(someone) is making fire in a cave.} \)

The sentence in (12.14) portrays the situation when the sole survivor from the devastating deluge is searching for food and water. When he sees some smoke in the distance, he walks towards it with the thought that the smoke must come from some household that has also survived the disaster. Only when he gets close to the smoke does he realize that
the smoke does not come from a house. The consultant originally hinted at the counter-presupposition with an interjection when he told the story. However, he omitted it during text-transcribing, leaving the suggestion of a counter-presupposition to the contrastive adverb la alone.

Except for the subtype of closed NP-focus, none of the four major focus types has a one-to-one correspondence with a specific linguistic device in Prinmi. A construction can often convey more than one type of focus domain, as seen from the examples above. The following table summarizes the situation concerning the topic-comment construction, the focus-presupposition construction -mi zzii, and ‘plain’ sentences without a topic-comment articulation:

Table 12-5: The various focus domains expressible by major sentence types

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic-comment with zzii</td>
<td>frequent</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>-mi zzii</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Plain</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

It should be noted that ‘plain’ sentences are the only type which does not distinguish a topic-comment relation. The basic pragmatic articulation in the focus-presupposition construction is also that of topic-comment (see §12.5).

The topic-comment construction is fundamentally used for the predicate focus. For the focus domain to be narrowed to argument, the construction typically appears with the copula zzii “to be” in ascriptive or equational sentences. The topic-comment construction cannot express a sentence focus nor a counter-presupposition. The limited number of tokens of the focus-presupposition construction in the database do not reveal the type of focus structure with which it primarily associates. However, the construction is incapable of coding a sentence focus. ‘Plain’ sentences without a topic-comment distinction occur in a variety of forms and can be realized with various focus domains, but for the predicate focus. The restriction may be due to the close correlation between comment and predicate. Since comment does not exist in plain sentences, it is not surprising that they do not convey a predicate focus.
12.4 The topic-comment construction

The topic-comment construction is functionally unmarked, occurring pervasively in Prinmi. This section aims at providing a detailed description of the formal structure of the construction. Before proceeding to the structure of the construction, a definition for the construction is in order, since, as noted in §12.2.2, a designated topic such as a ggee-marked noun phrase may not be a pragmatic topic.

12.4.1 Defining the topic-comment construction

Of the two morphosyntactically marked topics, the internal topic (marked with ggee), is more likely to occur in a topic-comment relation than the external topic (marked with bbo; cf. §6.4.2). Even then, about one third of ggee-marked noun phrases, 227 out of 674 tokens in the database, is found to function not as a pragmatic topic. A similar ratio is obtained from the study of those in the Deluge story (cf. §12.2.2). Some representative examples of ggee-marked noun phrases without a topic-comment relation are presented in (12.15). In regard to syntactic functions, a ggee-marked noun phrase may serve as an adjunct, as in (12.15)a, S in (12.15)b, P in (12.15)c, or A as in (12.15)d. There is no indication of any connection between the syntactic function and the use of a ggee-marked noun phrase as a non-pragmatic topic.

(12.15) Ggee-marked noun phrases without a topic-comment relation

a  Nón Ḗzhēa ggee non jii bāi wu gge-roruā, ...
   Dc after InT Dc water boil in out-drench
   Afterwards, drench (it) in the boiling hot water, ...

b  Ėkee Zzonbba Lha ggee dde-hrē.
   then Zzonbba god InT to.sp-emerge
   At that time the 'Zzonbba' god emerged.

c  Sshii_qüēe bbee meazii dī ea-zzhuu — yi_zūu hraqii.
   right_side at cat one in-write conch_son play
   Wai_qüēe bbee SaddāXii_bbā pēadai ggee ea-zzhuu'sī — ...
   left_side at Dragon_family umbrella InT in-write+Pf
   At the rightside, a cat is drawn (there) — playing with a small conch. At the leftside, the Dragon Sadda family's umbrella is drawn (there) — …

---

5 This observed fact is sonorant with the unmarkedness of predicate focus discussed in Lambrecht (1994: 296-306); cf. also Gundel (1988); Primus (1993).

6 The total number of tokens of ggee in the database well exceeds 700, but many of them are not included because their occurring contexts are too vague for determining their pragmatic status confidently. The discounted tokens are mostly found in translated sentences.
The *ggee*-marked noun phrase in (12.15)a is a temporal expression which sets out a scene for the sentence rather than holding a topic-comment relation with the following clause. The use of the clitic *ggee* in (12.15)b appears to be out of consideration for other pragmatic purposes such as the cognitive status of the expression instead of indicating a pragmatic topic. The utterance in (12.15)b is successive to a description of the harsh environments on Earth during the early period of genesis; it is intended for explaining the context in which the ‘Zzonbbba’ god emerges, not for presenting additional information about the god. The non-pragmatic topic function of the *ggee*-marked noun phrase in (12.15)c can be clearly observed by comparing it with from the preceding clause which has an identical structure. Note that the corresponding argument *meazi* “cat” in the first clause is not expressed as a topic while *pédadai* “umbrella” in the second one is. Notwithstanding the marking, no topic-comment relation is intended in the sentence. Likewise, the sentence in (12.15)d is about what happened to the earth, not about *bbůuzi* “sunlight”, in spite of the marking by *ggon* (contracted from *ggee* and *'on*).

Some syntactic structures prevent a *ggee*-marked noun phrase at a certain position from functioning as a pragmatic topic. This is often observed in equational sentences, which tend to attract *ggee* after the nominal predicate, e.g.

(12.16) ‘guea’ *ggee bbo nee* ear’á jéemée xão rá *muuguu ggee* zzii.
*Ono InT De De 1pIn+M home raise M livestock InT Cpl*

*As for ‘guea’, it refers to the livestock we raise at home.*

Two noun phrases in the sentence receive the internal topic marking, but only the first one actually functions as a pragmatic topic. The *ggee*-marked noun phrase in the predicate can never bear this pragmatic function. In spontaneous speech, the consultant consistently employs additional clitic(s) for the initial noun phrase which is marked and serves as a topic, as seen in (12.16). The use of *bbo* and *nee* is not essential to the structure of the sentence; they seldom occur in translated sentences. The pragmatic function of *bbo* and *nee* for highlighting the host as a discourse topic is supported by the fact that they cannot occur after the *ggee*-marked noun phrase in the predicate, i.e. #’guea’ *ggee* ear’á jéemée xão rá *muuguu ggee bbo nee* zzii. Since the noun phrase, even morphosyntactically marked as an internal topic, is never a pragmatic topic, the use of the additional discourse clitics cannot but give rise to a pragmatic conflict.

In addition to the ‘stand-alone’ topic, there are occasions on which the internal topic, even in the presence of a comment, cannot possibly form a topic-comment relation with a
following constituent. This is found when the internal topic appears as an 'anti-topic' after the comment, e.g.

(12.17) Debbô déa-giē’a’non son_baigüän ggee.
then up-fear+Dur three_brothers InT

Then (they) get frightened, the three brothers.

The internal topic in (12.17) is clearly a pragmatic topic which the sentence is about. However, occurring after the comment, the topic cannot be analyzed in terms of the topic-comment construction. The sentence represents a minor type of structure, an anti-topic construction.

As morphosyntactic marking does not provide a reliable means for recognizing a pragmatic topic in Primi, it is vital that a rigid definition be made for the topic-comment construction to filter out those with a false appearance of topic. Based on the pragmatic essence of the construction, a definition for the topic-comment construction is proposed as follows:

Under a specific discourse context, a topic-comment construction is recognized if a sentence can be divided into two parts such that the focus domain is realized on/within the second part only. Further, the semantic content of the two parts should allow establishing an aboutness relation between them. The first part, outside the focus-domain, represents or contains the topic of the sentence, and the second part serves as a comment about this topic.

Note that scene-setting topics may, or may not, occur in a topic-comment relation, depending on the construal of an aboutness relation. The two central criteria for the topic-comment construction are the identifiability of a narrow focus domain on the comment and the feasible construal of the comment being about the topic. Below we will turn to the structure of the topic-comment construction as defined above.

12.4:2 Basic structure of topic-comment construction

The basic structure of the topic-comment construction is rather simple. It can be illustrated as follows:7

7 The positions of constituents in the diagram and those below reflect their occurring order in the constructions.
The construction comprises two essential parts: a topic and a comment. The former is not necessarily expressed explicitly, however. The topic, if overt, always precedes the comment, and it usually occurs at the very beginning of a simplex sentence. The topic can be marked by *ggee* or *bbo*. A topic without morphosyntactic marking must be an inferable one whose topical status is already established in the discourse situation. Furthermore, the complex clitic *ggon*, combined from *ggee* and the instrumental *on*, may also be considered as a kind of topic, ‘agentive topic’. Whatever impact the syntactic function contributed by the instrumental may have on the complex clitic, it does not annihilate the pragmatic function associated with *ggee*. Examples for the variety of topics are presented in the following, with the topic constituent underscored:

(12.18)a  Béaddi éa zzhu zzii.  
*Frog, (he) is my friend.*

b  Beazii ggée prin.  
*Its flowers are white.*

c  Qií bbo zzheazzhea yon.  
*Badgers are certainly harmful animals.*

d  xión ggon bián wu da dea-pan.  
*The Golden Pheasant, (he) just hides (himself) in the wood.*

Topics are often encoded on noun phrases. It is quite common for a noun phrase to comprise only a single morphological word, usually the head noun with clitic(s), as in (12.19)a. Sometimes the single element can be a demonstrative if the head noun is implicit, as in (12.19)b; it can also be a pronoun, as in (12.19)c.
Noun phrases serving as a topic

a. 'Bu' ggē bbo ziandôn do'a shîi ggee zzîi.
   brisket InT De chest on+M meat InT Cpl
   'Brisket', (it) is the (part of) meat (taken) from the chest.

b. Ède ø ggee bbô pân.
   that InT De flee
   That (girl), (she) escaped.

c. Èa bbô bbo dé'rê qibîa zzû mà'yôn.
   1s ExT De this+p always repair N+know how
   As for me, (I) just don't know how to repair them.

The topic can also be expressed by a noun phrase conveying a location, or more generally, containing a postposition. This kind of topic is found in several Prinmi proverbs. It often appears as an external topic, e.g.

(12.20) Xxian_bbûu bbēe bbo wea_gâi pēe;
   manure_pile at ExT ox_shit mend
   Jiibamâ bbēe bbo aaddēe hmehme.
   witch at ExT granny recognize as relative
   Onto the manure pile, (it's ridiculous one should) mend (it with) cattle excrement; to the monstrous witch, (it's ridiculous one should) recognize (her as) granny. (Proverb)

Less frequently, a topic can also be a clause. A clausal topic often receives a clitic marking. In the simplest case, it may consist of no more than a verb, as in (12.21)a and (12.22)a–b.

(12.21) Clauses serving as a topic

a. Ggüân bbô ggüân yôn.
   tall ExT tall Assr
   As for being tall, (the tree) is certainly tall.

b. Hon_qüêe xi bbo diá ko_qüêe xi yôn.
   inner_side exist ExT now outer_side exist Assr
   (Since) there exists an 'innerland', certainly there exists an 'outerland'.

c. Bûuni'a ea-yan'sî ggee sian bbô nee ddiân dde-a-mû; ...
   today+M in-plow+Pf InT tomorrow ExT De soil fr.sp-compact
   (They) plow today but the soil becomes compact tomorrow; ...

(12.22) Conditional clauses serving as a topic

a. Bbô pián bbo hēaggî tea-xii?
   De flee ExT where fr.sp-go
   Well, (if we) run away, where (should we) go?
b Ma'pian bbô nee tea-hûgi ma'gaî.
N+flee ExT Dc fr.sp-release N+Vlt
(If you) don't flee, (you) won't extricate (from the flood).

c Lô tea-biâ lá née dde-préa ma'gaî.
work fr.sp-work also 2s to.sp-meet N+Vlt
Even (if you) work, you won't be rewarded.

The pragmatic function of clausal topic is to introduce a discourse setting for the comment in the following clause. As such, it is typically expressed as an external topic. An important function of clausal topics is to encode the topic as a conditional clause, illustrated in (12.22). Unless followed by other words with a rich pragmatic content, as with the contrastive adverb la “also” in (12.22)c, the conditional clause must be encoded as an external topic.

The discussion of the topic-comment construction above has centered around the coding of the topic. The construction can be very complex when there are two topics or more than one comment. For those with a topic-comment construction embedded within another topic-comment construction, they are given a general label of ‘Embedded Topic-Comment Construction’. There are also the ‘Double Topic Construction’ for those with two pragmatic topics, and ‘Chained Comment Construction’ for those with multiple comments. Embedding of a topic-comment construction is also possible for the latter two types, but is not common. In the next three subsections, we will address these specific types of topic-comment construction.

12.4.3 Double Topic Construction

The Double Topic Construction consists of pragmatic topics of different kinds. The first one, ‘scene topic’, is typically a scene setting topic outside a topic-comment relation, and the second one appears in an aboutness relation with its comment. The structure of the construction can be depicted as follows:

```
Double Topic Construction
  \_________\_________\_________
   |       |       |       |
   |       |       |       |
   |       |       |       |
   | NP    | NP    | Clause|
  \_________
   [Clause]

Figure 12-4: The structure of the Double Topic Construction
```

The diagram in Figure 12-4 has also indicated the kinds of syntactic constituents permitted for the topics in the construction. The scene topic is often followed by the
external topic clitic bbo, as in (12.23)a. It may also occur as an inferable topic without any discourse clitics, as shown in (12.23)b. The second topic tends to be marked as an internal topic or is left unmarked. It can also be rendered as a zero anaphor (not exemplified here), but has not been found to encode as an external topic. In the following examples, the scene topic is double underlined, while the second topic is indicated by a single line underneath, and the comment is placed within a pair of brackets.

(12.23)a  Jii  ggee  niä  krê  bo  déa-dâ  ra  kee  bbo,
  water  InT  2s:M  foot  below  up-reach  nInv:M  time  ExT
  née  [re  bbêe  zhinzhu  ggee  nea-ddi  nea-xii  gêê].
  2s  first  at  pestle  InT  down-cast  down-go  let:sbj
  When the water reaches your feet, you throw the pestle down first.

b  Nón  mâ'zzii  hhoiïi  gge-hîn  nee  mî  ggee
  De  N+Cpl  wart  out-grow  De  person  InT
  [néa-rin  gge-qion].
  down-suffer  out-appear
  (If) not, bad things are going to happen to the person with warts.

As the scene topic is often used for setting a temporal frame, the use of scene topic, as in (12.23)a, is very common. Like the conditional clause in (12.23)b, a temporal scene topic may also appear without any discourse clitics.

It must be emphasized that the notions of ‘external topic’ and ‘scene topic’ are independent of each other. The former refers to a morphosyntactic marking while the latter exists in the Double Topic Construction.

The analysis of the Double Topic Construction in terms of apposition of the scene topic before the commented topic is much influenced by the definition of topic-comment construction proposed above. Should the aboutness relation be downplayed, the distinction between the two kinds of pragmatic topics would smear, leaving the Double Topic Construction difficult to distinguish from the Embedded Topic-Comment Construction. It should also be pointed out that the use of ‘double topic’ in the labeling does not imply a restriction on the possible pragmatic topics for this kind of complex construction. For instance, a total of four pragmatic topics occur in the following Double Topic Construction:

(12.24)  Prînmi’rê  Wuxi_qiia  chii  kee  bbo,  déa_giu  déa_gea
  Pumi+p  New Year_pig  slaughter  time  ExT  one_year  one_family
  niän’rê  [ni  chii],  xxî’rê  [wêa  chii].
  few+p  two  slaughter  many+p  five  slaughter
  When the Pumi slaughter New Year pigs, every year every household, for the few, two are slaughtered; for the many, five are slaughtered.
The sentence starts with two scene topics, one denoting the time frame for the activity and the other setting up a frequency-unit frame. The other two topics are associated with two comments respectively, forming a pair of chained clauses. The pair has the pragmatic function of conveying contrastive foci. Notice that the second scene topic does not hold a topic-comment relation with the following clauses. Otherwise, the sentence would involve a topic-comment embedding.

12.4.4 Chained Comment Construction

Clause-chaining sentences often involve a single topic for several comments expressed in chained clauses. The information structure of these sentences can be analyzed as a Chained Comment Construction:

![Chained Comment Construction](image)

Figure 12-5: The structure of the Chained Comment Construction

The topic constituent in the Chained Comment Construction is explicitly expressed once. It often receives some morphosyntactic marking. The topic is either marked as an internal topic, as in (12.25)a–b, or as an external topic, (12.25)c.

(12.25)a Lhasian gee bbo [rɔnddiăn bbo la ddiŏn yon],
Lhasian InT Dc lowland ExT also existinan Assr
[ɡõnddiăn bbo la ddiŏn yon].
highland ExT also existinan Assr

The 'Lhasian' tree, (it) is found in the low land, (as well as) in the high land.

b Luubbon gee [sianbbôn dēa_con], [bbîn], [lealiän ggûän].
China fir InT tree one_kind radially thick very tall

The China fir is a kind of tree, radially thick, and very tall.

c Suuggê'e bbo [hhan_gûgu]; [ddea-hmiăn ra kee dēa-nee'non].
fruit+p ExT yellow_ldp to.sp-ripe M time up-red+Dur

As for the fruit, (it) is yellow, (but) turns red when ripe.

As shown in (12.25)b–c, the chained comments need not have parallel structures. What is required for the comments in the construction is that there are at least two comments which provide additional information about the initial constituent, the topic. Such pragmatic relation even allows the actual topic referents of the chained comments to be different, as long as they are part of the topic constituent of the construction. With a clausal topic as in (12.26), the chained comments can relate to different referents situated in the clausal topic:
As for (the reason why) nowadays man's fingers and toes are not equally long, it's said that in the ancient time (man) was swallowed by the flood-starter, and (the fingers and toes) became of different lengths.

The first comment in the Chained Comment Construction is about mî “man” and the second one about kelhäziixialhäziiz “toe and finger”. Both of the topic referents are part of the clausal topic of the sentence. Their status of pragmatic topic stems directly from their occurrence in the topic constituent. Recall that the topic-comment construction, as defined in §12.4.1, permits a flexible identification of topic — either coinciding with the entire constituent outside the focus domain or confining to a smaller constituent within it. Thus the kind of topic-comment relation found in (12.26) is unusual, but not deviant.

### 12.4.5 Embedded Topic-Comment Construction

Taking the topic-comment construction as an information structure, its ability to recur and embed the same days one is parallel to that found in many syntactic structures. For a variety of reasons, the possibility of an embedded topic-comment construction has not been well explored. Applying the definition of topic-comment construction in §12.4.1, we can find sentences with delicate semantico-pragmatic relations embodying an embedded topic-comment within another topic-comment construction. Consider the following:

(12.27) a Eqiän dē mî ggee [piqi [ēa kūe bō ma’qion]].
Eqian this person InT temper 1s heart under N+open
_Eqian this guy, (his) temper I don’t like._

b Ggân do’a zåggiôn son ggee
bed on+M dried pig three InT
[hränzå ggee [di mezza son riû güee]].
_length InT one every three_elbowspan exist_in
_The three dried pigs on the bed, (their) length each has three elbows long._

8 For a different motivation for such complex information structure, see the pragmatic analysis of the Mandarin resultative construction in terms of topic-comment embedding in Ding (1993).
The construal of the initial part of the sentences in (12.27) as a topic is straightforward, as it can be easily interpreted as what the sentence is about. If we look inside the comment of the topic, we find that the comment itself can be partitioned into two parts with the first word (underscored within the brackets) serving the topic and the remainder (placed within a second pair of brackets) providing information about this embedded topic. That is, there exists two instances of topic-comment relations, one within another. These pragmatic relations give rise to an Embedded Topic-Comment Construction which may be analyzed as follows for the sentences in (12.27):  

<table>
<thead>
<tr>
<th>Embedded Topic-Comment Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic</td>
</tr>
<tr>
<td>about</td>
</tr>
<tr>
<td>Comment</td>
</tr>
</tbody>
</table>

Figure 12-6: The structure of the Embedded Topic-Comment Construction

The fundamental distinction between the Embedded Topic-Comment Construction and the Double Topic Construction rests on whether the initial topic is construable as what the rest of the sentence is about. If and only if the aboutness relation holds, the sentence is analyzed as the Embedded Topic-Comment Construction. The following is a pragmatic test useful for diagnosing the Embedded Topic-Comment Construction:

(12.28) Provided that the sentence X-Y-Z is given as a reply to:

Q1 -  X qiini’riu?  (What about X?)

The sentence X-Y-Z is an Embedded Topic-Comment Construction if it can also answer the question:

Q2 -  X Y qiini’riu?  (What about Y in relation to X?)

If we apply the set of test to the sentence in (12.27)b, we get the following results:

9 The Embedded Topic-Comment Construction proposed here has been labeled such as 'double nominative construction' (Teng 1974), 'double subject construction' (Li & Thompson 1976), 'pragmatic incorporation' (LaPolla 1995), and so forth in study of Mandarin Chinese. Although the Prinmi construction is very similar to that of Mandarin, I will refrain from treating topic-comment embedding in Prinmi as identical to that in Mandarin.
Q1 - What about the three dried pigs on the bed?
Reply - The three dried pigs on the bed, their length each has three elbows long.
ACCEPTABLE

Q2 - What about the length of the three dried pigs on the bed?
Reply - The three dried pigs on the bed, their length each has three elbows long.
ACCEPTABLE

Similar results are obtained for the other examples identified as the Embedded Topic-Comment Construction.10 The test will fail, however, when applied to the Double Topic Construction in §12.4.3, because the scene topic is too vague for establishing an appropriate topic-comment relation.

As in other types of topic-comment construction described earlier, the morphosyntactic marking of the topic expression is not restrictive in the Embedded Topic-Comment Construction. The topics can be coded as an internal topic, an external topic, or without any clitic marking. The varying possibilities can be easily observed from (12.27) above and (12.30) below. There is no discernible combination pattern for the morphosyntactic marking of the topics. However, the least favored, and perhaps unacceptable, one is for both topics to occur without any clitics. Such an instance has not been attested. In regard to syntactic constituent, clausal topic is not permitted in the Embedded Topic-Comment Construction. The construction requires that the outer topic holds a certain semantic relation with the inner topic. Thus the topic must be a noun phrase.

12.4.5.1 The set-and-member relation between topics

When a topic-comment relation is embedded within another comment, the two topics are typically in a kind of possessive relation, with the outer topic understood as the possessor and the embedded topic as possessee. More common than property terms serving for the embedded topic, as found in (12.27), body part terms feature frequently as an inner topic in the Embedded Topic-Comment Construction. For instance,
(12.30) a  
**Dé qii ggee [ggi̯ohnmǐà̯n bbo [zhëa má’yon]],**  
this badger InT body ExT big N+Assr  
[ejià bbezìi pä la ede dai].  
there piglet half also that big  
*The badger, (its) body is not big, about as big as half a piglet there.*

b  
**Yonzzii baba [ssuu ggee [zzhea’non]] [zho ggee [zzı].**  
bat face InT bad+Dur organ InT wonderful  
*The bat, (its) face is ugly; (yet its) organs are perfect. (Proverb)*

The examples in (12.30) are structurally more complex than those in (12.27). As the number of clauses in a sentence increases, more topic-comment relations may be embodied. For a more visual presentation, the information structures of these sentences are illustrated graphically below:

For (12.30)a:  
```
Topic1 + Comment + Comment

Topic2 Comment
```

For (12.30)b:  
```
Topic1 + Comment + Comment

Topic2 Comment
Topic3 Comment
```

As can be seen from the illustration, both sentences in (12.30) involve topic-comment embedding within the comment(s) of a Chained Comment Construction. All the topics concerned are expressed overtly, with varying morphosyntactic markings.

Notice that the third topic in (12.30)b holds with the initial topic a part-and-whole relation parallel to that between the second and the initial topics. The whole-and-part relation, or more generally the set-and-member relation, does not necessarily involve the initial topic as the base in connection with an embedded topic-comment. In a delicate information structure, it is possible for a third topic to hold a member-set relation to the second topic which, in turn, has a member-set relation to the initial topic. Such a case is found in (12.31), from an expository text:

(12.31)  
**Dé sian dëa con [seabâ ggee bbo nee [ruearuéa]],**  
this wood one_kind leaf InT Déc Déc round  
[ku ggee [lialià di qìå]], ènìzzii.  
top InT a bit sharp like that Cpl  
*This kind of tree, (its) leaf is of round shape, a bit sharp at the top (of the leaf), like that.*

While a set-member relation exists between tree (the initial topic) and leaf (the second topic), the third topic top holds a direct semantic relation to the second topic instead of the first topic. Otherwise, what is sharp would be the top part of the tree, not the leaf.
Agent-and-activity is another feasible realization of the set-member relation for the Embedded Topic-Comment Construction. Coding an animate noun as the initial topic and theme-verb compounds denoting general activities as the inner topics, a clause-chaining sentence can accommodate topic-comment embedding within the comments. For example, each of the three chained comments in (12.32) consists of an embedded topic-comment relation. All the inner topics are directly related to the outer topic at the outset of the sentence in terms of activity-and-Agent.

(12.32)  
Zhèa do’a zzheazzhèa qī mi bbo [zi_lāi bbo [wu_zzha
earth on+M bad do person ExT seed_sow ExT harvest_poor
ke-qion yon]], [ggin_xāo bbo [zzhōn má’yon]],
out-appear Assr livestock_raise ExT smooth N+Assr
[con_qīī là [gūzzi rī má’yon]].
business_do also profit get N+Assr

_Persons who behave badly on Earth, for cultivation, a poor harvest will certainly come; for livestock-raising, (it) certainly won’t be smooth; for doing business, profit certainly won’t be made._

(12.33) Bbo miā ni, hniijīo nî, nēaajiō ni, kēni ni,
Dē eye with nose with ear with mouth with
dē’re [dēa_con [ma’liōn nēa-zzhon]], ...
this+p one_kind N+suifice down-become

_Hm, eyes, nose, ears, and mouth, (among) these, one kind becomes missing, ..._

Presented in (12.33) is a topic-comment construction with a scene topic as well as a topic-comment embedding. The embedding involves a prototypic set-member relation between two topics. At the outset of the utterance, the individual members of the intended set are explicitly listed and the constituent is coded as a scene topic. With this, the speaker establishes a well-defined set facilitating the semantic relation of the topics in the topic-comment embedding. Referring to the defined set, the demonstrative dē’re “these” serves as the outer topic; whereas the compound _dēacon_ “one kind” functions as the inner topic, making reference to the member of the set. Thus a conspicuous set-member relation is found in the sentence.

The set-member relation between topics is essential for topic-comment embedding. The semantic relation is a necessary, but not sufficient, condition. It is possible for

---

11 For the sake of simplicity, the complete sentence is not provided in the example. The omitted part is: ēni’a dī dēa-pē’xo, ssō a’gāi? “(I)”ll cough up one like that, will (that) be alright?” The information structure of the extraction is not affected by the simplification in any way.
sentences with expressions in such semantic relation to occur without topic-comment embedding. Consider the following cases:

(12.34)a  Zâggîôn jji râ lhuâîcôn ggee bbo
  dried pig saturate M spice InT Dc

  [cf, sée, gîì, rezhîì, sshê_con zziì].
  salt pepper garlic wine four_kind Cpl

The spices for seasoning the dried pig, (they) are salt, pepper, garlic, (and) wine — four kinds.

b  Dô nônn sshe_kre jjiôn. gasû jjiôn. miâ jjon're
  up Dc four_foot hole anus hole eye hole+p

  [dëa_jjon dëa_jjon zzhî nea-câ qîî].
  one_hole one_hole sew down-complete do

The four foot cavities, anus cavity, (and) eye cavities at the top, sew (them) up one after another.

While a topic-comment relation can be observed from the sentences in (12.34) and the underscored topic can be construed as in a set-member relation with a successive noun phrase, neither of the examples can be analyzed as an Embedded Topic-Comment Construction. Despite the obvious set-member relation between lhuâîcôn “spice” and the individual spice terms in (12.34)a, the syntactic structure of the equational sentence precludes any interpretation of the spice terms as a topic (cf. the discussion for Ex. (12.16) above). This prohibition can be verified by the pragmatic test introduced in (12.28). We get the following results from the two components when the test is applied to (12.34)a:

(12.35)

Q1 - What about the spices for seasoning the dried pig?
  Reply - The spices for seasoning the dried pig, they are salt, pepper, garlic, and wine — four kinds.
  ACCEPTABLE

Q2 - What about salt, pepper, garlic, and wine in relation to the spices for seasoning the dried pig?
  Reply - The spices for seasoning the dried pig, they are salt, pepper, garlic, and wine — four kinds.
  UNACCEPTABLE

Likewise, when the test is applied to (12.34)b, the sentence passes the first component Q1 but inevitably fails the other component Q2, revealing that only one topic-comment articulation exists in the sentence.
12.4.5.2 Semantico-pragmatic constraints on embedding

That the semantic relation of set-and-member is a necessary condition for topic-comment embedding may be ascribed to the hypothesis that topicality can be shared between a referent and its member(s) in an utterance. Through the semantic relation, a set that has established the pragmatic status of topic may spread the topicality to its members, paving way to topic-comment embedding. If this understanding is correct, it can provide a semantic basis for discounting a topic-comment construction lacking this feature from being an Embedded Topic-Comment Construction. Since a clausal topic cannot hold a set-member relation with another topic, it will rule out the possibility of topic-comment embedded within a clausal topic. Consider the information structure of the sentence below:

(12.36)a “Mëe qii xii la bbo, nee bbâ dë hmi son_zii ggee what do go also Dc 2s_family this daughter three_Ctr InT
téa-má’zhüän bbo, züu ggee [ma’xi].
fr.sp-N+send Dc son InT N+exist
b Dë hmi son_zii ggee [tea-zhüe xin].” jii’riu.
this daughter three_Ctr InT fr.sp-send go:2p say
“(No matter) what (you) try to do, (as long as) the three daughters in your family aren’t sent away, sons (you) won’t have. These three daughters, send (them) away.” (It’s) said.

The utterance in (12.36)a is a Double Topic Construction with two conditional clausal topics, both functioning as scene topics. The entire speech in (12.36) is given as advice to a couple seeking help for conceiving sons in a story. At the beginning of the story, the couple is said to have only three daughters, without any sons. Of concern to the current discussion is the possibility of analyzing the second conditional clausal topic as containing an embedded topic-comment. Let us first consider the sentence in (12.36)b, with an essentially identical piece of information and a very similar structure to the second clausal topic in (12.36)a. The discourse context of the utterance strongly supports the analysis of (12.36)b as a topic-comment construction, commenting about the topical expression — the three daughters — with the assertion of sending them away. The sentence actually provides a presupposition to the utterance in (12.36)a, in spite of the inverse order between the two sentences. The inversion appears to be a discourse strategy for emphasizing the assertion made in (12.36)b. If the order between the utterances is reverse, the sound logic of having the assertion first is achieved at the cost of the emphasis. Presented as it is in (12.36), pragmatic accommodation, discussed in Lambrecht (1994: 65-73), is needed for the construal of the intended message in (12.36)a. That the hearer is already clear about what to do with the three daughters must be assumed. Without such pragmatic accommodation, (12.36)a is difficult to understand.
Given the assumption, the information expressed in (12.36)b becomes a repetition, giving rise to a discourse emphasis. The intent of the conditional topic is therefore to counter an assumed presupposition, not to convey an assertion about the daughters. Hence, it does not embed a topic-comment construction.

Although we find an instance of topic-comment embedding in a Double Topic Construction, (12.33) above, the Embedded Topic-Comment Construction has not been attested to occur with a scene topic denoting a time frame or a conditional frame. This lack seems attributable to some semantico-pragmatic factors. The presence of a scene topic in the Double Topic Construction confines a topic-comment relation within the frame set by the scene topic. Hence, the meaning of the proposition taking the topic-comment articulation tends to be specific, i.e. non-generic, being subject to potential semantic constraints. On the other hand, with the set-member relation between two topics, propositions in the Embedded Topic-Comment Construction typically concern gnomic information whose truth holds irrespective of time or other conditions. As such, it is difficult, if not impossible, to introduce a scene topic to a proposition with a topic-comment embedding.

To summarize, the Embedded Topic-Comment Construction requires a semantic relation of set-and-member as a necessary, but not sufficient, condition. The semantic relation is often realized as whole-and-part, but it can also be materialized as entity-and-property, Agent-and-activity, and so forth. The construction involves two instances of topic-comment relation, one within the other. The embedding can take place only within a comment, not a topic. In a delicate discourse context, the construction may be co-used with the Chained Comment Construction, and marginally with the Double Topic Construction.

12.5 The focus-presupposition construction -mi zzii

The major morphosyntactic properties of the focus-presupposition construction were presented in §9.1.1.2. The focus-presupposition construction is the only information structure expressed periphrastically in Prinmi. It is constructed with a topic-comment articulation, serving to convey a narrow focus on an element within the comment. The construction is also characterized with pragmatic presupposition. To some extents, the discourse function of the construction is akin to English cleft sentences or Mandarin pseudo-cleft sentences shì ... de. The term ‘cleft construction’ is not adopted here as extraction is not involved in the construction in Prinmi. The lack of extraction in the focus-presupposition construction renders its intended focus domain indistinguishable by the surface structure. The syntactic structure of the construction is the same for various
kinds of foci, i.e. an (open) argument, a complement clause, or a counter-presupposition, exemplified respectively in (12.37)a–c:

(12.37) a  Debbó HEA GGÓN NIA tea-gri-mì zzii?  
then who Inst Dc fr.sp-sing-nm Cpl
(Those songs), what I'm saying is: who sang (them) then?

b  Qée ea-wā déa-mee'hmiån ggee ZZII MA’XXIAN-mi zzii.  
meal in-cook up-Npfr+ripe InT eat N+can-nm Cpl
Rice not cooked to ripe, what I'm saying is: (it) cannot be eaten.

c  Dè seeliào ggee EA NI’ÓN SIANBBÔN BBEE TEA-KÀ-mi mâ’zzii.  
this pear InT ls Dc+Inst tree at fr.sp-pick-nm N+Cpl
This pear, what I'm saying is: I didn't pick (it) from the tree.

The focus-presupposition construction is ambiguous in regard to its focus domain when the sentence is examined out of context. Sentence accents are sometimes helpful, but more importantly the discourse context must be considered. Notice that in (12.37)c the general negator is attached to the copula in order to form a counter-presupposition sentence; otherwise, the negator is attached to the complement head within the focus domain, as in (12.37)b. The attachment of the negative clitic provides a useful morphosyntactic clue for recognizing a counter-presupposition sentence.12

The database contains a total of 26 tokens for the focus-presupposition construction. The figure excludes those that do not undergo nominalization, i.e. with the suffix -mi omitted. The actual focus domain of the construction in these sentences is provided below:

(12.38)

<table>
<thead>
<tr>
<th>Open argument/adjunct</th>
<th>Complement clause</th>
<th>Counter-presupposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

When the construction expresses focus on an argument/adjunct, the constituent must be open, i.e. not selected from a closed set, vis-à-vis the closed NP focused by xian. The open NP-focus is often an Agent/Instrument, as in (12.39)a, but it can also be an oblique noun phrase concerning place, manner, or time, as shown in (12.39)b–d respectively. The discourse context for the sentences is supplemented in the translations.

12 The opposite function of presupposition-focus has not been found. Its non-existence is understandable from discourse motivation. Inasmuch as presupposition is not worthy of attention, it receives no focus. Presupposed information becomes focal only when it is contradicted.
(12.39) Focus domain on an open argument/adjunct

a /gin MÉALHEE GGNON NEE tea-hméa tea-qión-mi zzii.
    door wind Inst Dc fr.sp-blow fr.sp-open-nm Cpl
    The door, what I’m saying is: the wind blew (it) open. [Said when explaining
to a child who thought a ghost has opened the door.]

b Zzonbbâ Lha ggee HEAGÍ ddea-qión-mi zzii?
    Zzonbbâ god InT where to.sp-appear-nm Cpl
    The ‘Zzonbbâ’ god, what I’m saying is: where did (he) come from? [Said so as
to pave way for the immediate discussion of the origin of the ‘Zzonbbâ’ god.]

c Eqián xian BÀXXIÀ zzâdoddin nea-gruân-mî zzii.
    Eqian Foc deliberately mirror down-break-nm Cpl
    It’s Eqian, what I’m saying is: (who) smashed the mirror deliberately. [Said
    with the intent to emphasize that it’s an act of will.]

d Eazzân WUXI QĪ KĒE NON ddea-mansii-mi zzii.
    1dîn New Year do time Dc to.sp-know-nm Cpl
    The two of us, what I’m saying is: (we) met at the time of celebrating New Year.
    [Said as a partial reply to the question ‘Do you still remember last New Year?’]

The focus domain of the open argument/adjunct is generally a word or a phrasal
constituent. The clausal argument in (12.39)d is the only known example suggesting the
extendibility of the domain to a clause.13

A focus on the Patient has not been found in the construction. As the data are not
elicited specifically for the focus-presupposition construction, it is unclear whether the
absence of such focus represents a functional restriction on the construction. Although
the topic constituent is explicitly expressed throughout the examples in (12.39), it can
often be rendered as a zero anaphor, as shown in (12.40). The ellipsis is facilitated by
the high cognitive status typically associated with pragmatic topics (cf. §12.2.1).

(12.40)a XIÀN GGÖN gge-zão-mî zzii.
    iron Inst out-hit-nm Cpl
    (The pickaxe,) what I’m saying is: (it) is forged from iron. [Said after
    introducing the pickaxe as a kind of tool for farmwork.]

b NÎÁ BÁI LA jüän-mi zzii.
    2s:M brother also see:3-nm Cpl
    (Regarding this), what I’m saying is: your elder brother also saw (it). [Said
    after the matter becomes the topic of a discussion.]

13 The focus domain of the sentence corresponds to a clause, as it is possible to insert an
explicit Agent such as Ggionniá “the Yi” in the clause, leading to the modified
meaning “we met at the time when the Yi celebrated their New Year.”
On the other hand, when the focus of the construction is intended to be a complement, its domain embraces an entire clause which can be of considerable length and/or complexity, e.g.

(12.41) Focus domain on the complement clause

(a) Zzonbba Lha ggee SÖNJJEE Qī GGEE NI XUXŪ Zzonbba god InT Sakyamuni religion InT with together JUU_DDIÂN WU KE-DA-mī zziī. Buddhist_place in out-arrive-nm Cpl

The 'Zzonbba' god, what I'm saying is: (he) comes together with Sakyamuni's religion to the Buddhist area. [Said after the rhetoric question in (12.39)c.]

(b) Zzuee ggee bbo XIÂN GGŌN TEA-ZZU, GGE-ZĀO-mī zziī. pickaxe InT Dc iron Inst fr.sp-make out-hit-nm Cpl

The pickaxe, what I'm saying is: (it) is made of and forged from iron. [Said as a recapitulation at the end of explaining what a pickaxe is.]

(c) Dē bbiea mī ggee YŪAN DŌ LA GIĒA KU-mì zziī. this kind person InT bear than also fear need-nm Cpl

This kind of person, what I'm saying is: (he) is even more horrible than a bear. [Said at the end of a story in which a friend abandons his friend when running away from a bear.]

As shown in (12.41)a, the sentence contains a well-stretched focus domain. While the domain in the next two examples is relatively shorter, the complement is syntactically more complex. The one in (12.41)b consists of a clause chaining complement; whereas the one in (12.41)c involves an embedded complement as well as the comparative construction. From the pragmatic point of view, the focus-presupposition construction basically highlights the comment part when its focus is on the complement of the copula. The relation between the topic and the focused comment is more than just aboutness; the focal predicate appears to denote some permanent or unchangeable properties of the topic. Note also that the topic is expressed overtly in this function.

The counter-presupposition function of the construction is the easiest to recognize, thanks to the attachment of the general negator on the copula. The construction resembles the comment-focus function in having an extensive focus domain over the complement. The topic in this function also appears to be resistant to omission. Despite the presence of a negator, the construction is not absolutely confined to a negative sentence when conveying a counter-presupposition. It may also occur in a question, e.g.

(12.42) Ni'ŌN NĒE GRI-mī mā'zzii a? 2s+InT Dc sing-nm N+Cpl Q

(Those songs), what I'm saying is: didn't you sing (them)? [Part of dialogue between two singers.]
The discourse situation for the question in (12.42) is complicated. Two singers are introduced at the beginning of the story. They talk about hearing some songs. Each of them thinks that the other has sung them. When the first singer checks with the second singer, the second singer in turn reveals his presupposition of the other’s singing by the question in (12.42). Since the checking by the first singer already implies that he is not the one who sang those songs, it is necessary for the second singer to produce the question as a counter-presupposition to acknowledge his realization of the new situation. Thus, given a delicate discourse context, a counter-presupposition sentence may appear in a question.

12.6 Summary

The pragmatic aspect of Prinmi has been described in some detail, using Lambrecht’s theory of information structure. The discussion of the cognitive status of noun phrases in discourse shows that while the internal topic marker ggee is used increasingly outside its archetypal function of signifying a pragmatic topic, the extended function is under the constraint of the cognitive status of the host noun. Even when it does not mark a noun phrase as a pragmatic topic, it is necessary for the noun phrase to have a cognitive status not lower than ‘referential’ in the Givenness Hierarchy. Noun phrases functioning as a pragmatic topic require at least the status of ‘uniquely-identifiable’. 

After the topic-comment construction is defined in terms of the focus domain and pragmatic aboutness, a few subtypes of the construction emerge. The topic-comment construction may contain an additional scene-setting topic in the Double Topic Construction, or it may have serial comments in the Chained Comment Construction. Under a more delicate context, it is possible to have a topic-comment construction embedded within another one — an Embedded Topic-Comment Construction, which is restricted by the semantic relation of set-and-member.

The various pragmatic functions of the focus-presupposition construction have also been discussed. Its focus domain can be on an open argument/adjunct or on the complement clause. It can also be used to counter a presupposition when the copula, the head of the construction, is negated.
Chapter 13.  
Conclusion

The present study has described the Prinmi language on the basis of the variety spoken in Niuwozi. While it has dealt with many important aspects of the language, one area that is unable to address is intonation. As all the consultants are fluent in Mandarin and literate in Chinese and almost all linguistic materials are collected from non-monolingual speakers, it may be useful to conclude the description of Prinmi with a cursory comparison to Mandarin.

Since both Prinmi and Mandarin belong to the Sino-Tibetan family, there are quite a number of similarities between them. Some similarities differ in minor details, while other resemble each other even at a deeper level. But there are also conspicuous dissimilarities, e.g. Prinmi is a verb-final language, but Mandarin a verb-medial language. Some major observations are provided below according to the topics discussed from Chapter 2 to Chapter 12.

Phonology

While the number of vowels in Prinmi is about the same as in Mandarin, Prinmi has a much larger inventory of consonants than Mandarin. Almost all Prinmi consonants contrast minimally in terms of voicing in a pair or a trio, but voicing is not a distinctive feature for Mandarin consonants. In addition, Prinmi also has some complex consonants related to consonant clusters. The syllable structure of Prinmi does not allow any consonant in the coda position; whereas this is possible with two nasals in Mandarin.

Although both languages employ suprasegmentals for lexical contrast, they differ fundamentally in the mechanism for achieving the contrast. Prinmi has a word-based system; whereas Mandarin has a syllable-based system.

Lexical categories and Morphology

Prinmi is morphologically richer than Mandarin, but is basically an analytic language like Mandarin. Neither of them has any affix for the sole purpose of changing the membership of a word from one category to another. Conjunction as a lexical category does not exist in Prinmi, but is found in Mandarin. While counters in Prinmi are

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1 In Mandarin, but not Prinmi, it appears possible to reanalyze certain functions of the modificatory marker as a conversional suffix that converts a verb to an adjective. But in actual use, the morpheme still behaves more like a modificatory marker.
somewhat similar to classifiers in Mandarin, they are much smaller in number and much restricted in distribution. Both languages have a sizeable inventory of ideophones.

Prinmi and Mandarin are rich in compounds. Compounds (discounting scientific terms in Mandarin) are predominantly disyllabic or quadrisyllabic. Trisyllabic ones mainly involve ideophones which are always bisyllabic reduplicates.

Noun phrases

Prinmi noun phrases tend to receive more morphosyntactic markings, thanks to the large inventory of clitics. For example, the Agent-marking, especially on third-person arguments, is quite common in Prinmi. On the other hand, noun phrases which are frequently bare in Mandarin may give rise to the so-called ‘double object’ sentences for some ditransitive verbs; this is not observed in Prinmi. Although weak evidence from person/number agreement can be used to postulate a ‘subject’ in Prinmi, the grammatical system as a whole is fluid, similar to the one in Mandarin (cf. LaPolla 1993).

Both Prinmi and Mandarin have a modificatory clitic which is used extensively to mark a possessor and a relative clause, among other attributive functions. However, the one in Prinmi does not serve as a nominalizer; whereas its counterpart in Mandarin does. On the other hand, it is possible for this clitic in Prinmi to mark an Agent in a relative clause when the Agent is also understood as a possessor; this function is not available in Mandarin.

Grammatical categories of verbs and Auxiliary verbs

The larger inventory of clitics allows Prinmi to express more grammatical categories than Mandarin does. For instance, evidentials lacked in Mandarin have important functions in Prinmi. The perfective and experiential in these languages are quite similar but not identical, while the durative shows considerable difference. Modality also diverges significantly: meanings of some modal clitics/auxiliary verbs in Prinmi are conveyed by adverbs in Mandarin. Both languages have three negators: the general and perfective ones are alike their counterparts, but the desiderative one has a wider usage in Prinmi than the imperative one in Mandarin.

While Mandarin does not impart controllability into clitics or auxiliary verbs, Prinmi has several pairs/sets of clitics/auxiliary verbs differentiating whether a situation is controllable by one’s will. This is found with the variants of the perfective, the contrast between the involvementals and the non-involvemental, the difference between the optative and the volitive, and the divergence between the two doing verbs bä and qii. Perhaps because of the inherently high controllability of speech act participants, the distinction expressed by the variants often correlates to a complementary distribution
between first-/second-person pronouns on the one hand and third-person arguments on the other. But there is evidence indicating that such a person association is merely an epiphenomenon.

**Structures of clauses and sentences**

Prinmi and Mandarin are quite alike in respect to the basic structures of clauses and sentences, although Mandarin has a number of conjunctions, including some coordinate ones. The small amount of verb morphology is not used to signal any grammatical relation of clauses in a complex Prinmi sentence. Clauses are generally simple in these languages. Complexity of sentences builds up mainly by means of direct conjoining between clauses (i.e. without the help of conjunctions), giving rise to clause-chaining sentences; clause embedding is not as productive, except for temporal adverbial clauses.

Dependent clauses and nominal clauses are found in Prinmi, but not in Mandarin. Dependent clauses essentially have a reduced structure which precludes oblique arguments, i.e. the Peripheral layer is not available to this kind of clause.

**Complex predicates**

While both Prinmi and Mandarin certainly have complex predicates in the form of serial verbs, their (dis)similarities will not be fully revealed until a comparative study is pursued. The Double-verb Predicate identified in Prinmi is undoubtedly a subtype of verb serialization, and it displays many characteristics of verb serialization reported in the literature. A new observation in this kind of complex predicate in Prinmi is the constraint on the number of units that genuinely form a single predicate — although a unit may contain more than one verb, the maximum units are two.

The most productive causative sentences in Prinmi are those headed by gee/giie. They contain a kind of complex predicate with various choices available for encoding different situations of causation, including three possible semantic roles for the causee argument and a selection of variants from the causative verb. The corresponding causative sentences in Mandarin do not have these encoding mechanisms and are less sensitive to the subtleties involved in a causation.

Complement clauses to auxiliary verbs and verbs of cognition are not introduced by a complementizer or marked in any other formal ways in Prinmi and Mandarin. Subordinate complement clauses appear to occur infrequently in Prinmi. Sometimes a corresponding complement clause is expressed as a (non-embedded) chained clause rather than a subordinate clause in the language.
Information structure

In terms of structure, the topic-comment constructions in Prinmi and Mandarin are very similar. The variety of topic-comment constructions — the Double-topic construction, the Chained-comment construction, and the Embedded topic-comment construction — discussed in Prinmi is also found in Mandarin. A major discrepancy is that Prinmi has various choices for coding the topic constituent, while Mandarin has few. Another difference is that conditional clauses are expressed as a clausal topic in Prinmi; whereas they are usually introduced by a conditional conjunction in Mandarin.

Other types of information structure diverge considerably in these two languages. As a verb-final language, Prinmi does not have the resource to introducing a new entity into discourse by rendering an argument at the post-verbal slot, in contrast to that in Mandarin (cf. Ho 1993: 92-99). Although there is a significant overlap in function between the focus-presupposition construction in Prinmi and the pseudo-cleft construction in Mandarin (cf. Teng 1979), the two are structurally quite dissimilar. No cleft but a nominalization is involved in Prinmi.

Having habituated on the border between the Tibetans and the Chinese for centuries, the Pumi must have some influence in their language from the others through the prolonged contact. Consequently, Prinmi may be grouped into what Matisoff (1991a: 485-486) calls ‘languages of Sinosphere’. Nonetheless, from the cursory comparison between Prinmi and Mandarin above, we see a number of differences, although often subtle, between Prinmi and Mandarin. Similarities between the two languages are extensive at the first sight; on a closer look, however, Prinmi exhibits an interesting combination of grammatical features and properties which is certainly unique to it.
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Appendix

Two sample texts are included in this appendix: one from a brief expository note and the other from a short story. These are presented in parallel texts, with Prinmi on the left and English on the right. Glosses for words and morphemes are also supplied underneath Prinmi texts. Those English words underlined indicate that they do not occur in the Prinmi text. Some corrections/revisions by the consultant are also shown in the short story.

Text 1: China fir

1. Lûubbon ggee sianbbôn dêa_con, bbin, lealiân ggûân. The China fir is a kind of tree, thick and very tall.
   The China fir is a kind of tree, thick and very tall.

2. Dîwû’a gönddiän kû ddion yon. For sure, it exists in the highland.
   For sure, it exists in the highland.

3. Bûu_ggô la bbânbo dêa-hin yon. For sure, it also grows at the bottom of snowy mountains.
   For sure, it also grows at the bottom of snowy mountains.

4. Dé sian ggee puu_dâi ssho yôn. For sure, the wood is of excessive value.
   For sure, the wood is of excessive value.

5. Jjîi wu gi xîi râ kee la market in sell Pps nInv:M time also
   When selling it at the market, it is certainly reckoned as valuable.

6. Jîi wu nea-jjî’non, ea-jjîi ggia
   Soaking it in water, there is no maxim of its getting rotten.
   Soaking it in water, there is no maxim of its getting rotten.

7. Yînzea bbée nea-qian’nôn, tea-baijî ggiä
   Drying it under the sun, there is no maxim of its getting cracked.
   Drying it under the sun, there is no maxim of its getting cracked.

8. Dé ggee bbo siantâ bbo liân ssho râ
   This is timber of the sort that is extremely firm.
   This is timber of the sort that is extremely firm.
Once upon a time, the Cuckoo’s dress was very very pretty; the Golden Pheasant’s dress was ugly.

Day after day, when the Golden Pheasant meets the Cuckoo, how jealous is he about the Cuckoo’s pretty dress.

After he thinks: “My goodness! Some day I should also wear a dress like that, shouldn’t I?”, he looks for the dress day after day.

He searches but can’t get one.

Then, when he meets the Cuckoo, he always feels jealous.

Then, whenever the Golden Pheasant meets the Cuckoo, he feels jealous.

Then, one day he plays a trick on the Cuckoo.
7. Gību bbo ddea-prea ba ra ḋee bbo nee:
cuckoo ExT to.sp-meet do nInv:M time ExT Dc
gūī bu n̄a zonggūī ggee qinī ggiā.
cuckoo 2s:M dress InT how pretty

Èa diá mřēw pu pri̊_tian, weamì qii xii-yi zzii.
1s now people in wine_drink guest do Pps-nm Cpl
N̄a zonggūī ggee ea bbēe dd̦e-yin dî bû;
2s:M dress InT 1s at to.sp-lend one do:2s
e̊a ggee ni tea-ggüeggū di qii yi.
1s InT with fr.sp-exchange one do Pps:2s
Èa dde-x̪iī ra ḋee bbo, nee bbēe
1s to.sp-come nInv:M time ExT 2s at
qeeggūi ggee bbo g̥e̥a ggiā bu dî yēa’xo.”
gift InT Dc ox M brisket one bring+Opt

cuckoo Inst Dc Intj fine+Vlt Sgst Dc
Èazzăn tiētation zzhezzhu ddīn. Dē ggee jjiān.”
1d in concord friends Cpl:1p this InT true

9. Bbo zonggūī nea-shuā——bbo-ne,
Dc dress down-undress:3 Dc Dc
Gību ggon zonggūī nea-shuā bbo nee,
cuckoo Inst dress down-undress:3 Dc Dc
xion bbēe tea-kūn.
g.pheasant at fr.sp-give:3

10. Xion ggon n̄i ggia ggee nea-shuā bbo,
g.pheasant Inst 3s M InT down-undress:3 ExT
gi̥bu bbēe nea-ggūāi gee.
cuckoo at down-wear let:sbj

cuckoo M InT 3s Inst down-wear to.sp-carry go

12. Gību ggia zonggūī nea-ggūāi dde-sshā nee bbo,
cuckoo M dress down-wear to.sp-carry Dc Dc
xion ggon biān wu da dea-pan.
g.pheasant Inst grove in only up-flee

When he pretends to run
into the Cuckoo, he says:
“Cuckoo, your dress is so
beautiful.

I’m now going to be a
guest at a wedding banquet
in someone’s house.
Your dress, lend it to me
for a while;
come and exchange with
me the clothes.
As for the reward for you,
when I return, I will bring
a piece of brisket.”

The Cuckoo replies,
“Well, that’s fine. Then
We two are congenial
friends. This is true.”
he takes his clothes off,

The Cuckoo takes his
clothes off, and
gives them to the Golden
Pheasant.
The Golden Pheasant, he
takes off his and lets the
Cuckoo wear them.
The Cuckoo’s clothes, he
wears them and goes
away.
Wearing the Cuckoo’s
clothes, the Golden
Pheasant just flees into the
woods.
13. “Xionquanquanz, xionquanquanz” jii bian wu da Calling “xionquanquanz, xionquanquanz”, the Golden Pheasant just
Onomatope Onomatope say grove in only vanishes into the woods;
gge-xii kee bbo, gibu ggee bbee gua ggi bu he doesn’t bring the
out-go time ExT cuckoo InT at ox M brisket Cuckoo any brisket, nor
lā ma’yūán, zonggüi la dde-dèe mee’qion. also N+fetch:3 dress also to.sp-return Npf+appear
also N+fetch:3 dress also to.sp-return Npf+appear
lā ma’yūán, zonggüi la dde-dèe mee’qion. also N+fetch:3 dress also to.sp-return Npf+appear

14. Debbō gibu ggee bbo dēa_hni nia qionhnuān. Then, the Cuckoo waits
De dēa_hni nia qionhnuān. Then, the Cuckoo waits
day after day.

15. Nī bbee gua ggi bu ggee yēa a’riu? Will the Golden Pheasant
3s at ox M brisket InT fetch Q+nInv

16a. Zonggüi ggee dde-yēa nī bbee dde-kian xīi a’riu? Will the Golden Pheasant
dress InT to.sp-fetch 3s at to.sp-give Pps Q+nInv

16b. Zonggüi ggee nī bbee dde-yēa dde-kian xīi a’riu? Will the Golden Pheasant
dress InT 3s at to.sp-fetch to.sp-give Pps Q+nInv

17. Da qionhnuān. He just keeps waiting.
just wait

18. Debbō dēa_hni nia gibu ggon ruèn kee bbo, So all the time when the
De dēa_hni nia gibu ggon ruèn kee bbo, So all the time when the
one_day Dc cuckoo Inst call time ExT Cuckoo calls “guabu, guabu — beef brisket”,
“guèa_bu, guèa_bu” jii kee bbo, ruèn rā kee, “gu — cattle” refers to the
ox_brisket ox_brisket say time ExT call nInv:M time livestock that we raise at
“guèa” ggee bbo nee earā jèemèe xào rā home raise nInv:M
ox InT Dc Dc 1p in:M home raise nInv:M
muugu ggee zzi; “bu” ggee bbo ziangdōn do’a livestock InT Cpl brisket InT Dc breast on+M
livestock InT Cpl brisket InT Dc breast on+M
shī ggee jii’riu, eni zzi. brisket InT to.sp-fetch Dur gift feed out-say
meat InT say+nInv like.that Cpl

19. Debbō “guèa_bu” ggee bbo guèa ggiā ziangdōn do’a So “guabu” means the
“guèa_bu” ggee bbo guèa ggiā ziangdōn do’a present, the beef brisket
ox_brisket InT Dc ox M breast on+M (that is supposed) to be
bu ggee dde-yea’nōn, qéeggüi chée gge-jii. brought to feed (the
brisket InT to.sp-fetch’Dur gift feed out-say Cuckoo).

20. Gibu dēa_hni nia dē ggee leelee ba. So “guabu” means the
The Cuckoo turns this into
cuckoo one_day Dc this InT folk.song do
(something like) a folk
song day after day.
21. Xiön ggee bbo bbó de ggiá zzhēa ggee bbo g.pheasant InT Dc Dc this M after InT Dc seāku ku xia wâa má’wen, ehá bián wu da twig top rest dare N+Asr always grove in only gge-bāi ea-bāi qīi. out-hide in-hide do After this, the Golden Pheasant dare not rest on top of the twig; he just hides around in the woods.

22. Bbö gibu ggon tea-jiān’gāi jii, Dc cuckoo Inst fr.sp-see+Vlt say gge-bāi eabāi bbo dēacēa do qion gūe’si. out-hide in-hide ExT present on appear let+Pf He says that the Cuckoo will see him; this makes him to hide around to this date.

23. Xiön ggia diá nea-gguāi si’a zhalâla zongguī g.pheasant M now down-wear Pf:M colorful dress The colorful dress that the Golden Pheasant wears nowadays was the Cuckoo’s dress in the past.

ggee bbo xxiahniān gibu ggia zongguī zii ggee zziī. InT Dc ancient cuckoo M dress_Ctr InT Cpl

24. Gibu ggia diá zongguī zzheazzhēa ma-ggiā ggēe bbo cuckoo M now dress bad ugly InT Dc The ugly dress that the Cuckoo wears nowadays belonged to the Golden Pheasant in the past.

xxiahniān xiōnreabu ggia ggee zziī. ancient g.pheasant M InT Cpl