A Grammar of Mantauran (Rukai)

by
Elizabeth Zeitoun



Institute of Linguistics, Academia Sinica 2007

LANGUAGE AND LINGUISTICS MONOGRAPH SERIES A4-2

A Grammar of Mantauran (Rukai)

by
Elizabeth Zeitoun

To my beloved parents, Victor and Martine and children, Yizhen and Yishan

Acknowledgements

I am grateful to the numerous people and institutions that have, at various stages, supported the writing of this book.

My gratitude goes, of course, to my Mantauran informants, the late Yu-zhi Lü (呂玉枝), Yue-ying Guan (關月英), Gui-ying Lan (藍貴英), Ching-mei Tsai (蔡清妹), and Chiu-hsiang Luo (駱秋香), as well as my assistant, Hui-chuan Lin (林惠娟). It would be perhaps unfair not to add a few words about Yu-zhi Lü, whose encounter, in the summer of 1992, transformed my life and turned my keen interest in the Formosan languages and linguistics into long-life passion.

I am indebted to the colleagues who agreed to read and comment on all or part of earlier versions of this grammar and provided helpful comments, in particular, Stacy F. Teng (鄧芳青), Isabelle Bril, Laurent Sagart, Byron Bender, David Bradley, William O'Grady, Marie-Claude Paris, Lillian M. Huang (黃美金). I am also grateful to three anonymous reviewers for their insightful and constructive remarks.

The writing of this grammar started in 1996 and I have benefited over the years from discussions with and encouragement from colleagues and students in Taiwan and abroad. Among others, I would like to thank Robert Blust, Malcolm Ross, the late Stanley Starosta, Frantisek Litchtenberk, Yuko Otsuka, Laurence Reid, Masayoshi Shibatani, John Wolff, Josiane Cauquelin, Paul Jen-kuei Li (李壬癸), Shigeru Tsuchida (土田滋), Jane C. Tang (湯志真), Ying-chin Lin (林英津), Dah-an Ho (何大安), Jackson T. Sun (孫天心), Chiu-yu Tseng (鄭秋豫), Hsiu-chuan Liao (廖秀娟) and Shan-shan Wang (王珊珊).

I wish to express my gratitude to Prof. Warren Brewer, Mr Yun-hsiang Chuang (莊雲翔), Mr Chia-jung Pan (潘家榮), Mrs Martine Zeitoun and Prof. Raleigh Ferrell for English editing and proof-reading help, Hui-chuan Lin for proof-reading all the Mantauran examples, Chih-hsien Lin (林志憲) for his constant and efficient support and Chun-yu Kuo (郭君瑜) for final typesetting.

This work could not have been made possible without the constant support of my family. For the past ten years or so, my two children, Yi-zhen (林意真) and Yi-shan Lin (林意善), and my parents, Martine and Victor Zeitoun, have taken part in many fieldtrips. My parents made frequent trips to Taiwan to help me take care of my children when I was not able to take them with me to the field. They have always been very supportive and I wish to thank them for their love, help and patience. I am especially grateful to my mother who has been unfailing in her interest in and support of

i

my research and who spent eight months in Taiwan (August-December 2005 and June-September 2006) so that I could finish this work.

In the earliest stages of this research, fieldwork was sponsored by a grant from the Kaohsiung County government, for a project on the Formosan languages of Kaohsiung, with which I was affiliated for a year in 1992-1993. I wish to thank Paul Jen-kuei Li, director of this project, for giving me the opportunity to start fieldwork on Rukai.

Fieldwork was financed for several years by the National Science Council of Taiwan—in 1997-1999, I was the recipient of a two-year grant to work on verb classification in Rukai (NSC 87-2411-H-001-042 and NSC 88-2411-H-001-35). In 2002-2004, I received a two-year grant to work on a morphosyntactic study of Rukai (NSC 91-2411-H-001-042 MD and NSC 92-2411-H-001-078 MD). The Institute of Linguistics of the Academia Sinica provided financial support from 1999 to 2002 and 2004-2006.

Taipei, August 15, 2006

Table of Contents

| Ackno | wledgemei | nts | i |
|---------|------------|---|------|
| List of | maps, tabl | es, and figures | xv |
| Glossir | ng convent | ions and abbreviations | xvii |
| | | | |
| Chapte | er 1 Intr | oduction | 1 |
| 1.1 | The Form | nosan languages | 1 |
| 1.2 | Geograp | hical distribution and setting | 2 |
| 1.3 | Internal a | and external relationships of Rukai | 5 |
| | 1.3.1 | Position of Mantauran within Rukai | 5 |
| | 1.3.2 | Position of Rukai within Austronesian | 5 |
| 1.4 | Languag | e use | 6 |
| | 1.4.1 | Loss of special registers | 7 |
| | 1.4.2 | Doublets | 8 |
| | 1.4.3 | Loan words | 9 |
| 1.5 | Previous | studies of Mantauran | 10 |
| 1.6 | Data gatl | hering procedures and theoretical orientations | 12 |
| | 1.6.1 | Data gathering procedures | 12 |
| | 1.6.2 | Theoretical orientations | 12 |
| 1.7 | Aims of | the present study and brief outline | 13 |
| | | | |
| _ | | nology and Morphophonemics | |
| 2.1 | Phoneme | e inventory | |
| | 2.1.1 | Description of the phonemes | |
| | 2.1.2 | Distribution | |
| | 2.1.3 | Sound changes | 24 |
| | 2.1.4 | Loan phonemes | 26 |
| 2.2 | Syllable- | level processes | 26 |
| 2.3 | Major m | orphophonemic alternations | 27 |
| | 2.3.1 | Vowel deletion | 28 |
| | 2.3.2 | Anticipatory (leftward) copying process | |
| | 2.3.3 | Alternation between i/o and [| 29 |
| | 2.3.4 | Coalescence | 30 |
| | 2.3.5 | Haplology | 31 |
| | 2.3.6 | Glottal hopping | |
| | | 2.3.6.1 More on the phonemic status of the glottal stop | 31 |

| | | 2.3.6.2 | Prefixation triggering apparent rightward glottal | |
|-------|-----------|-------------|---|----|
| | | | hopping in word-initial position | 32 |
| | | 2.3.6.3 | Prefixation triggering apparent <i>leftward</i> glottal | |
| | | | hopping in word-initial position | 33 |
| | | 2.3.6.4 | Circumfixation triggering apparent <i>rightward</i> glottal | |
| | | | hopping in word-final position | 34 |
| | | 2.3.6.5 | Change of verb stem triggering apparent <i>rightward</i> | |
| | | | glottal hopping in word-final position | 35 |
| | | 2.3.6.6 | Absence of glottal hopping | 36 |
| | | 2.3.6.7 | Generalizations and explanations | 38 |
| 2.4 | Remaini | ng problen | ns | 39 |
| | 2.4.1 | The epen | thetic vowel -a- | 39 |
| | 2.4.2 | Irregular | forms | 40 |
| 2.5 | Orthogra | phic syste | m | 40 |
| | 2.5.1 | Brief retr | ospective | 40 |
| | 2.5.2 | Orthogra | phic system adopted in this book | 41 |
| | | | | |
| Chapt | er 3 Mor | phologica | l Units and Morphological Processes | 43 |
| 3.1 | Theoretic | cal assump | tions | 43 |
| | 3.1.1 | A bird's- | eye view of the history of morphological approaches | 43 |
| | 3.1.2 | Morpholo | ogical approach to Mantauran grammatical description | 44 |
| | 3.1.3 | Agglutina | ative vs. fusional properties | 45 |
| 3.2 | Morphol | ogical unit | S | 46 |
| | 3.2.1 | Morphen | nes and allomorphs | 46 |
| | 3.2.2 | Roots | | 48 |
| | 3.2.3 | Stems | | 50 |
| | 3.2.4 | Affixes | | 51 |
| | 3.2.5 | Clitics | | 52 |
| | 3.2.6 | Words | | 53 |
| 3.3 | Morphol | ogical pro | cesses | 54 |
| | 3.3.1 | Affixatio | n | 54 |
| | 3.3.2 | Stem mo | dification | 56 |
| | 3.3.3 | Reduplic | ation | 57 |
| | | 3.3.3.1 | Lexicalized reduplication | 57 |
| | | 3.3.3.2 | CV-reduplication | 58 |
| | | 3.3.3.3 | Ca-reduplication | 59 |
| | | 3.3.3.4 | CVCV-reduplication | 59 |
| | | 3 3 3 5 | CV V-redunlication | 61 |

| | | 3.3.3.6 | Rightward reduplication | 61 |
|-------|-------------|-----------------|---|-----|
| | | 3.3.3.7 | Triplication | 61 |
| | 3.3.4 C | Compour | ding | 62 |
| | | 3.3.4.1 | Simplex and complex compounds | 62 |
| | | 3.3.4.2 | Nominal head in compounds | 65 |
| hapte | er 4 Word | Classes | | 67 |
| 4.1 | Morpholog | ical disti | nction between nouns and verbs and functional overlap | 67 |
| | 4.1.1 N | Morphosy | ntactic criteria that distinguish verbs from nouns | 68 |
| | 4.1.2 C | Color teri | ms as precategorial roots | 70 |
| 4.2 | Nouns and | noun cla | nsses | 73 |
| | 4.2.1 N | louns an | d nominals | 73 |
| | 4.2.2 A | bsence | of case markers | 73 |
| 4.3 | Verbs and | verb clas | sses | 75 |
| | 4.3.1 A | bsence | of adjectives | 76 |
| | | 4.3.1.1 | Morphological properties of stative verbs as opposed to dynamic verbs | 76 |
| | | 4.3.1.2 | Syntactic distribution of stative verbs as opposed to | |
| | | | dynamic verbs | 80 |
| | | | of prepositions | |
| | | | From verbs to prepositions in Tanan (Rukai) | 82 |
| | | 4.3.2.2 | Mantauran equivalents of English 'at', 'to', 'from' | |
| | | | and 'for' | |
| | | | of auxiliary verbs | |
| | • | _ | rs | |
| | | | nd temporal adverbial expressions | |
| 4.4 | | | ro 'very' | |
| 4.5 | | | | |
| 4.6 | | | tratives | |
| 4.7 | _ | | | |
| 4.8 | | | | |
| 4.9 | | | elements | |
| | | | ts | |
| 4.11 | Exclamatio | ns and i | nterjections | 99 |
| hapte | er 5 Nomin | al Morj | phology | 101 |
| 5.1 | Common n | ouns | | 101 |
| 5.2 | Locative ar | nd tempo | oral nouns | 103 |

| | 5.2.1 | Locative nouns | 103 |
|--------|-----------|---|-----|
| | 5.2.2 | Temporal nouns | 105 |
| 5.3 | Non-con | nmon nouns | 105 |
| | 5.3.1 | Kinship terms and related words | 106 |
| | | 5.3.1.1 Nearest older relatives | 106 |
| | | 5.3.1.2 The morphosyntactic behavior of 'adhi 'youn | ger |
| | | sibling' | 108 |
| | | 5.3.1.3 Spouse and friends | 109 |
| | | 5.3.1.4 Lexicalized root forms | 111 |
| | | 5.3.1.5 The terms for 'child' and their derivations | 111 |
| | 5.3.2 | Personal names | 112 |
| | 5.3.3 | Household names | 113 |
| | 5.3.4 | Insult nominals | 114 |
| 5.4 | Marking | of plurality | 115 |
| | 5.4.1 | Rules for plural marking | 115 |
| | 5.4.2 | Common nouns referring to a human participant | 118 |
| | 5.4.3 | Vocative and non-vocative kinship terms | 119 |
| | 5.4.4 | Nouns referring to a person or a household | 120 |
| | 5.4.5 | Insults | 121 |
| | 5.4.6 | Summary | 122 |
| 5.5 | Quantific | cation | 122 |
| 5.6 | Dual/plu | ral nominal reciprocals | 124 |
| | 5.6.1 | pa'a-+kinship*(-Pro _{Gen}) | 125 |
| | 5.6.2 | la-ma'a-+kinship(*-Pro _{Gen}) | 127 |
| 5.7 | Summar | y | 128 |
| 5.8 | Other no | minal affixes | 128 |
| | | | |
| Chapte | er 6 Verl | bal Morphology | 131 |
| 6.1 | Verb cla | ssification and verbal alternations | 131 |
| | 6.1.1 | Verb classification | 131 |
| | | 6.1.1.1 Dynamic verbs | 132 |
| | | 6.1.1.2 Stative verbs | 134 |
| | 6.1.2 | Verbal alternations | 135 |
| | | 6.1.2.1 Finite verb form | 135 |
| | | 6.1.2.2 Non-finite verb form | |
| | | 6.1.2.3 Subjunctive verb form | 138 |
| | | 6.1.2.4 Summary | |
| | 6.1.3 | Dynamicization and stativization | 141 |

| 6.2 | Voice | | 143 |
|------------|---------|--|-------|
| | 6.2.1 | The active/passive voice dichotomy | 143 |
| | 6.2.2 | Occurrence of the passive with dynamic and stative verbs | 144 |
| | 6.2.3 | 1 | |
| | 6.2.4 | Interaction between voice and mood | 149 |
| 6.3 | Mood an | d aspect | 150 |
| | 6.3.1 | Marking of realis vs. irrealis | |
| | | 6.3.1.1 Marking of realis | |
| | | 6.3.1.2 Marking of irrealis | |
| | 6.3.2 | Aspect | 154 |
| | | 6.3.2.1 Aspectual notions expressed through verbal | |
| | | morphology | |
| | | 6.3.2.2 Aspectual notions expressed through affixes and verbs | |
| | 6.3.3 | Interaction between mood and aspect | |
| 6.4 | | ve | |
| | 6.4.1 | • | |
| | 6.4.2 | "Mild" vs. "strong" requests | |
| | 6.4.3 | | |
| 6.5 | · · | L | |
| | 6.5.1 | | |
| | 6.5.2 | ε | |
| | 6.5.3 | (a-)ae and the marking of imperative negation | |
| 6.6 | • | of plurality, distributivity and quantification | |
| | 6.6.1 | | 170 |
| | | 6.6.1.1 Number agreement on nominal/nominalized | |
| | | predicates co-indexing with a human referent | 171 |
| | | 6.6.1.2 Number agreement on stative verbs co-indexing with | |
| | | a non-human referent | 171 |
| | | 6.6.1.3 Quantification of stative verbs co-indexing with a | |
| | | human referent | 172 |
| | | 6.6.1.4 Marking of the plurality of participants in reciprocal | |
| | | constructions | 172 |
| | 6.6.2 | maaraka- (~paaraka-) 'both/each' and the marking of | |
| | | distributivity | 173 |
| | 6.6.3 | makiniae (~pakiniae) 'all' and the marking of | 4 = - |
| <i>.</i> - | | quantification | |
| 6.7 | - | , comparative and superlative constructions | |
| | 6.7.1 | Equative construction. | 176 |

| | 6.7.2 | Comparative constructions | 179 |
|--------|-----------|---|-----|
| | | 6.7.2.1 'more than (before)' | |
| | | 6.7.2.2 'more and more' | |
| | | 6.7.2.3 'more than (Y)' | |
| | 6.7.3 | Superlative constructions | |
| 6.8 | Other ve | rbal affixes | |
| | 6.8.1 | Affixes conveying adverbial notions | |
| | 6.8.2 | Desiderative prefixes | |
| | 6.8.3 | The suffix -ane. | |
| Chapte | er 7 Trai | nscategorial Operations | 189 |
| 7.1 | | ization | |
| | 7.1.1 | Action/state nominals | 193 |
| | 7.1.2 | Gerunds | 196 |
| | 7.1.3 | Argument nominals | 196 |
| | | 7.1.3.1 Subjective nominals | 197 |
| | | 7.1.3.2 Objective nominals | 199 |
| | | 7.1.3.3 Instrumental, manner and result nominals | 201 |
| | | 7.1.3.4 Reason nominals | 203 |
| | | 7.1.3.5 Locative nominals | 204 |
| | | 7.1.3.6 Temporal nominals | 207 |
| | 7.1.4 | Nouns turning into other (more abstract) nouns | 208 |
| | | 7.1.4.1 Locative nominals | 208 |
| | | 7.1.4.2 Temporal nominals | 210 |
| | | 7.1.4.3 Reason nominals | 211 |
| | 7.1.5 | Clausal nominalization. | 212 |
| | 7.1.6 | Summary | 215 |
| | 7.1.7 | Distinction between syntactically and lexically derived nominals. | 217 |
| | 7.1.8 | Constructions triggering syntactic nominalization | 222 |
| 7.2 | | ation | |
| | 7.2.1 | Verbalization of locative nouns | 224 |
| | | 7.2.1.1 Verbalization of location, orientation and directional | 225 |
| | | nouns | |
| | 7.2.2 | 7.2.1.2 Verbalization of place names | |
| | | Verbalization of temporal nouns Verbalization of nouns referring to human beings | |
| | 7.2.3 | 7.2.3.1 Verbalization of human common nouns | |
| | | 7.2.3.1 Verbalization of human common nouns | |
| | 7.2.4 | | |
| | 1.4.4 | verbanzation of common nouns retening to body parts | ∠೨1 |

| | 7.2.5 | Verbalization of common nouns referring to nature | 232 |
|--------------|------------|--|-----|
| | 7.2.6 | Other verbalizing affixes. | 233 |
| Chant | an O. Wale | ence Adjusting Operations | 225 |
| Спари 8 1 | | ization | |
| 0.1 | | An overview of the three mechanisms for marking causatives | |
| | 8.1.2 | - | |
| | 8.1.3 | • | |
| | 8.1.4 | | |
| 8.2 | | sativization | |
| 8.3 | | ization | |
| 8.4 | | city | |
| | 8.4.1 | | |
| | 8.4.2 | · • · · · · | |
| | 8.4.3 | | |
| | 8.4.4 | | |
| | | | |
| - | | nerals, Composite Numerals and Quantifiers | |
| 9.1 | | s in serial counting: free vs. bound forms | |
| | 9.1.1 | | |
| | | Bound forms used for the formation of numerals above 11 | |
| 9.2 | | ite numerals | |
| | | Verbal affixes | |
| | 9.2.2 | 5 · · · · · · · · · · · · · · · · · · · | |
| | | 9.2.2.1 Affixes referring to time and frequency | |
| | | 9.2.2.2 Affixes referring to measure | |
| | 9.2.3 | | |
| | 9.2.4 | | |
| | | 9.2.4.1 Counting human beings | |
| | | 9.2.4.2 Counting referents being taken/caught | |
| | | 9.2.4.3 Counting containers | |
| | | 9.2.4.4 Counting floors | |
| | 9.2.5 | | |
| | | Addition and substraction | |
| 9.3 | Quantific | ers | 278 |
| Chante | er 10 Pro | onouns and Adnominal Demonstratives | 283 |
| - | | ns | |

| | 10.1.1 | Personal p | ronouns | 283 |
|---------|-----------|-------------|---|-----|
| | | 10.1.1.1 | Major morphosyntactic characteristics | 284 |
| | | 10.1.1.2 | Occurrence of pronominal variants | 286 |
| | | | 10.1.1.2.1 -mo'o vs. -mi' '2S.Nom' | 286 |
| | | | 10.1.1.2.2 -lrao vs. nao- '1S.Nom', -mita vs. ta- | |
| | | | '1PI.Nom' and -nai vs. nai- | |
| | | | '1PE.Nom' | 286 |
| | | | 10.1.1.2.3 -'o vsko '2S.Gen' | 288 |
| | | | 10.1.1.2.4 imite vs. ita '1PI.Top' | 288 |
| | | | 10.1.1.2.5 -ni vs. -i '3S.Gen' | 289 |
| | | 10.1.1.3 | The "free" vs. "bound" status of Mantauran | |
| | | | pronominal forms | 289 |
| | | 10.1.1.4 | Distribution and function | |
| | 10.1.2 | Impersona | l pronouns | 301 |
| | 10.1.3 | Demonstra | tive pronouns | 302 |
| 10.2 | Adnomir | nal demonst | ratives | 303 |
| | | | | |
| Chapter | · 11 Nou | n and Verb | Phrase Structures | 305 |
| 11.1 | Structure | of the nour | n phrase | 305 |
| | 11.1.1 | Simple no | un phrases | 305 |
| | 11.1.2 | Complex r | oun phrases | 308 |
| | | 11.1.2.1 | Verbal modifiers | 308 |
| | | 11.1.2.2 | Nominal modifiers | 311 |
| | | 11.1.2.3 | Compounds | 316 |
| | | | Coordinated NPs | |
| 11.2 | Structure | of the verb | phrase | 318 |
| | 11.2.1 | Simple ver | b phrases | 319 |
| | 11.2.2 | Complex v | verb phrases | 323 |
| | | | toramoro 'very' | |
| | | 11.2.2.2 | Verbal coordination | 324 |
| | | | | |
| Chapter | 12 Clau | ıse Types | | 327 |
| 12.1 | | | | |
| 12.2 | | | S | |
| 12.3 | | | | |
| 12.4 | | | n verbal and nominal clauses | |
| | - | | s between verbal and nominal clauses | |

| | | 12.4.1.1 | Ordering of nouns and pronouns after and before | |
|---------|-----------|----------------|---|-----|
| | | | the verbal/nominal predicate | 334 |
| | | 12.4.1.2 | Negation of verbal and nominal clauses | 339 |
| | | 12.4.1.3 | Subject-predicate agreement | 340 |
| | 12.4.2 | Dissimilar | ities between verbal and nominal clauses/sentences. | 341 |
| 12.5 | Tempora | ıl and locativ | ve expressions | 342 |
| 12.6 | Existenti | al, possessiv | ve and locative clauses | 344 |
| | 12.6.1 | Affirmativ | e existential, possessive and locative clauses | 344 |
| | 12.6.2 | Negative e | existential, possessive and locative clauses | 349 |
| | 12.6.3 | Two posse | ssive clauses | 351 |
| | 12.6.4 | Numerals | and quantifiers as existential predicates | 353 |
| Chapter | · 13 Inte | rrogative a | nd Exclamatory Sentences | 355 |
| 13.1 | Interroga | ative sentenc | ees | 355 |
| | 13.1.1 | | s-no') questions | |
| | 13.1.2 | Informatio | n ('wh-') questions | 357 |
| | | 13.1.2.1 | aanga-Pro _{Gen} 'who?' and related forms | 357 |
| | | 13.1.2.2 | kana-Pro _{Gen} 'what?' | 364 |
| | | 13.1.2.3 | omi-Pro _{Gen} -Pro _{Obl} (N) 'what is your name?' | 365 |
| | | 13.1.2.4 | pi- and saino 'how much, how many?' | 366 |
| | | 13.1.2.5 | amokoa, apokoa and pikoa 'how?' | 375 |
| | | 13.1.2.6 | ama-Pro _{Gen} 'how come?' | 376 |
| | | | kani 'why?' | |
| | | 13.1.2.8 | 'where?' | 378 |
| | | 13.1.2.9 | (lo) idhae 'when?' | 379 |
| | 13.1.3 | | e (or disjunctive) questions | |
| | 13.1.4 | Indefinite | usage of question words | 382 |
| 13.2 | Exclama | tory sentence | es | 383 |
| 13.3 | Greeting | s and related | d formulaic expressions | 384 |
| Chaptei | : 14 Cod | ing of Grar | nmatical Relations | 387 |
| 14.1 | Coding a | and behavior | ral properties of subjects and objects in active | |
| | sente | ences | | 387 |
| | 14.1.1 | Covert/ove | ert morphological marking of subjects and objects | 387 |
| | 14.1.2 | Syntactic f | functions, semantic roles and semantic properties | 392 |
| | 14.1.3 | Summary. | | 395 |
| 14.2 | Coding a | ınd behavior | ral properties of subjects and objects in passive | |
| | sent | ences | | 305 |

| 14.3 | Mantaur | ran as an accusative language and the validity of the notion of | | |
|---------|------------|---|---|-----|
| | subj | ect | | 396 |
| 14.4 | Split intr | ansitivity | | 399 |
| | | | | |
| - | | | nd Complementation | |
| 15.1 | | | tions | |
| | 15.1.1 | | and illustration | |
| | 15.1.2 | | ntactic tests used to detect verbal serialization | 404 |
| | 15.1.3 | • • | verbs followed by another subjunctive verb in an | 407 |
| | | | Phasal verbs | |
| | | | Modal verbs | |
| | | | Verbs expressing adverbial concepts | |
| | | | Directional verbs | |
| | | | Purposive verbs | |
| 15.2 | Complex | | F | |
| | 15.2.1 | | entation strategies | |
| | | • | Zero strategy or paratactic complements | |
| | | | Serial verb constructions as a complementation | |
| | | | strategy | 418 |
| | | 15.2.1.3 | Nominalization as a complementation strategy | |
| | | 15.2.1.4 | Causativization as a complementation strategy | 421 |
| | | 15.2.1.5 | Summary | 422 |
| | 15.2.2 | Types of c | complement-taking verbs | 422 |
| | | 15.2.2.1 | Perception verbs | 422 |
| | | 15.2.2.2 | Knowledge verbs | 424 |
| | | 15.2.2.3 | Commentative verbs | 426 |
| | | 15.2.2.4 | Manipulative verbs | 427 |
| | | 15.2.2.5 | The modal verb kai | 428 |
| | | 15.2.2.6 | Summary | 429 |
| | 15.2.3 | Utterance | clauses and related discourse markers | 430 |
| Chapter | · 16 Sub | ordination | and Coordination | 437 |
| 16.1 | | | | |
| | 16.1.1 | Temporal | clauses: 'before', 'when' and 'after' | 439 |
| | 16.1.2 | - | al/hypothetical clauses 'if' | |
| | 16.1.3 | Counterfa | ctual clauses | 447 |
| | 16.1.4 | Concessiv | e clauses | 450 |

| 1 | 16.1.5 | Summary. | | 451 |
|-------------|-----------|--------------|--|-----|
| 16.2 Cl | lausal ji | uxtapositioi | n and coordination | 451 |
| 1 | 16.2.1 | Juxtaposeo | d clauses: no overt conjunction | 452 |
| 1 | 16.2.2 | Coordinate | ed clauses: occurrence of an overt conjunction | 452 |
| | | 16.2.2.1 | Coordination with la 'and' | 452 |
| | | 16.2.2.2 | Coordination with mani 'then' | 454 |
| | | 16.2.2.3 | Reason and result clauses | 457 |
| | | 16.2.2.4 | Contrast clauses | 460 |
| | | 16.2.2.5 | Purpose clauses | 461 |
| 1 | 16.2.3 | Summary. | | 462 |
| | | | | |
| Chapter 17 | Con | clusion | | 463 |
| | | | | |
| Appendix 1 | List | of Affixes i | n Mantauran (Rukai) | 465 |
| Appendix 2 | Man | tauran (Ruk | ai) Texts | 491 |
| References. | | | | 525 |
| Index | | | | 543 |

List of maps, tables and figures

| Map 1.1 | Distribution of the Formosan languages of Taiwan | 1 |
|-----------|---|-----|
| Map 1.2 | Distribution of the Rukai dialects | 3 |
| Table 1.1 | Geographical location of villages where the Rukai dialects are spoken | 4 |
| Table 1.2 | List of nursery words collected by S. Tsuchida (1970) | |
| Table 1.3 | List of nursery words collected in 1999. | |
| Table 1.4 | Mantauran (Rukai) phrasal and clausal structures | |
| Table 2.1 | Consonants | |
| Table 2.2 | Vowels | |
| Table 2.3 | Consonantal distinctive features | |
| Table 2.4 | Vocalic distinctive features | |
| Table 2.5 | Distribution of consonants | |
| Table 2.6 | Distribution of vowels | |
| Table 2.7 | Vowel clusters | |
| Table 2.8 | Vowel clusters: an exemplification | 23 |
| Table 2.9 | Orthographic system | 42 |
| Table 3.1 | Examples of lexical bound roots in Mantauran | 49 |
| Table 4.1 | Formal morphosyntactic distinctions between nouns and verbs | 70 |
| Table 4.2 | Mantauran color terms as precategorial bound roots | 71 |
| Table 4.3 | Mantauran color terms and their derivations | 73 |
| Table 4.4 | Verbs and their prepositional counterparts in Tanan (Rukai) | 85 |
| Table 4.5 | Mantauran verbs equivalent to English prepositions | 85 |
| Table 5.1 | Non-vocative kinship terms | 107 |
| Table 5.2 | Words for one's spouse and friends | 109 |
| Table 5.3 | Mantauran boys' given names | 112 |
| Table 5.4 | Mantauran girls' given names | 113 |
| Table 5.5 | Mantauran household names | |
| Table 5.6 | Insults derived from verbs | 115 |
| Table 5.7 | Noun classes and the marking of plurality | |
| Table 5.8 | Morphological marking of plurality on nouns in Mantauran | |
| Table 5.9 | Noun classes and subclasses in Mantauran | |
| Table 6.1 | Finite, non-finite and subjunctive verb forms in Mantauran Rukai | |
| Table 6.2 | Morphological alternations of dynamic verbs in Mantauran Rukai | |
| Table 6.3 | Morphological alternations of stative verbs in Mantauran Rukai | |
| Table 6.4 | Stative verbs co-occurring with the suffix -ane | 188 |

| Table 7.1 | Action nominals (zero derivation) | .193 |
|-------------|--|-------|
| Table 7.2 | Action nominals derived through the prefixation of a | .194 |
| Table 7.3 | State nominals derived through the prefixation of a | .194 |
| Table 7.4 | State nominals derived through the suffixation of -ae | .195 |
| Table 7.5 | Subjective nominals | .197 |
| Table 7.6 | Objective nominals | .199 |
| Table 7.7 | Instrumental nominals | .202 |
| Table 7.8 | Manner nominals (stative verbs) | .203 |
| Table 7.9 | Result nominals | .203 |
| Table 7.10 | Reason nominals | .203 |
| Table 7.11 | Locative nominals | .205 |
| Table 7.12 | Temporal nominals | .207 |
| Table 7.13 | Locative nominals (derived from nouns) | .209 |
| Table 7.14 | Temporal nominals (derived from nouns) | .211 |
| Table 7.15 | Clausal nominals (1): Temporal clauses | .213 |
| Table 7.16 | Clausal nominals (2): Hypothetical/conditional clauses | .214 |
| Table 7.17 | Clausal nominals (3): Concessive clauses | .215 |
| Table 7.18 | Types of nominalizations in Mantauran Rukai | .216 |
| Table 7.19 | Verbalization of location, orientation and directional nouns | .226 |
| Table 7.20 | Language names and ethnonyms | .228 |
| Table 8.1 | Causative mechanisms in Mantauran Rukai | .238 |
| Table 9.1 | Co-occurrence restrictions between bound nominal and verbal roots | |
| | referring to a quantification and numeral classifiers for 'humans' | .273 |
| Table 9.2 | Mantauran affixes occurring in composite numerals and their | |
| | interrogative counterparts | . 277 |
| Table 10.1 | Mantauran personal pronouns | .284 |
| Table 14.1 | Behavioral properties of subjects and objects in active clauses | .395 |
| Table 14.2 | Co-occurrence restrictions between a stative verb and a | |
| | nominative/oblique argument | .399 |
| Table 15.1 | Types of complement strategies | .422 |
| Table 15.2 | Types of complement-taking verbs and complementation strategies in | |
| | Mantauran | .429 |
| Table 15.3 | Distribution of mani 'then' vs. omi 'like that' | .436 |
| Figure 8.1 | Direct and indirect causation in Mantauran, after Dixon (2000:69) | .241 |
| Figure 10.1 | Major clause types, verb alternations and marking of pronominal | |
| | arguments | |
| Figure 14.1 | Coding of core arguments (subjects and non-subjects) in Mantauran | .387 |

Glossing conventions and abbreviations

Glossing conventions

Affix boundaries are indicated by a hyphen. I have not attempted to make any distinction between clitics (usually preceded or followed by an equal sign) and affixes. Angled brackets <...> are used for infixes. A colon indicates a word is made up of an affix that is not easily divisible, e.g. **lroikiikisi** 'Red:Dyn.Subj:fish by poisoning'. A dot separates the two (or more) functions of a portmanteau morpheme, e.g. **ka-** 'Stat.NFin'.

Bound roots are also followed or preceded by a hyphen, e.g. **lili-** '(female) friend', **-poli** 'white'.

Glosses for pronominal clitics include person and number (and, if necessary, inclusivity and exclusivity) combined with case, e.g. 1S.Nom = 1st person singular nominative.

Abbreviations

The abbreviations used in this grammar include:

| Acc | Accusative | ObjNmz | Objective nominalization |
|----------|---------------------------|---------|--------------------------|
| Act | Active | Obl | Oblique |
| ActNmz | Action nominalization | P, plur | plural |
| AF | Agent Focus | Part | Particle |
| Anticaus | Anticausative | Pass | Passive |
| Caus | Causative | Perf | Perfective |
| CausLoc | Causative Locative | PF | Patient Focus |
| CausMvt | Causative Movement | Poss | Possessor |
| ClsNmz | Clausal nominalization | Qst | Question |
| CncNmz | Concessive nominalization | Real | Realis |
| Cntrfct | Counterfactual | ReasNmz | Reason nominalization |
| Def | Definite | Rec | Reciprocal |
| Dyn | Dynamic | Red | Reduplication |
| E | Exclusive | Ref | Reflexive |
| Excl | Exclamation | Rf | Referential |
| Fin | Finite | S | Singular |
| Gen | Genitive | Stat | Stative |
| I | Inclusive | StatNmz | State nominalization |

| Imp | Imperative | Subj | Subjunctive |
|----------|---------------------------|------------|---------------------------|
| Impers | Impersonal pronoun | SubjNmz | Subjective nominalization |
| Ind | Indefinite | Sup | Superlative |
| InstNmz | Instrument nominalization | TempNmz | Temporal nominalization |
| Irr | Irrealis | Тор | Topic |
| Lig | Ligature | | |
| Loc | Locative | 1 | 1 st person |
| LocNmz | Locative nominalization | 2 | 2 nd person |
| MnNmz | Manner nominalization | 3 | 3 rd person |
| NAgtPass | Non-agent passive | | portmanteau morpheme |
| Neg | Negation | : | (divisible) affix |
| NegImp | Negative Imperative | - <u>]</u> | (i) affix or clitic |
| NFin | Non-Finite | Ĵ | (ii) bound root form |
| Nom | Nominative | <> | infix |

Language and Protolanguage abbreviations

Abbreviations for languages and protolanguages include the following:

PAN Proto-Austronesian

PR Proto-Rukai MT Mantauran

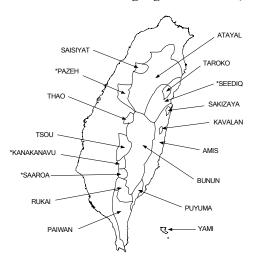
Chapter 1: Introduction

1.1 The Formosan languages

A number of indigenous languages are spoken in Taiwan. They are traditionally referred to as the "Formosan languages", and belong to the Austronesian family of languages, which stretch over a vast area from Madagascar in the east to Hawai'i in the west and from Taiwan in the north to New Zealand in the south.

Fourteen Formosan languages are still spoken today: Atayal, Saisiyat, Pazeh, Thao, Bunun, Tsou, Saaroa, Kanakanavu, Rukai, Paiwan, Puyuma, Amis, Kavalan and Seediq. (Their geographical distribution is shown on in Map 1.1.¹) A fifteenth indigenous language, Yami on Orchid Island (technically within Taiwan jurisdiction), is usually included in the literature on Formosan linguistics, even though Yami belongs to the Batanic group (Philippine sub-branch).

Map 1.1: Distribution of the Formosan languages of Taiwan (Based on Martin 2006)²



The linguistic situation regarding the Formosan languages is a bit complex. Until the late 1990's, the government officially recognized only nine tribes (Atayal, Saisiyat, Bunun, Tsou, Rukai, Paiwan, Puyuma, Amis and Yami). Nowadays, 13 tribes are officially recognized (Atayal, Saisiyat, Thao, Bunun, Tsou, Rukai, Paiwan, Puyuma, Amis, Yami, Kavalan, Taroko and Sakizaya), leaving out Kanakanavu, Saaroa (both subsumed under Tsou), Seediq and Pazeh—these four languages are preceded by an asterisk in Map 1.1—while singling out dialects of a particular family, viz. Taroko is part of Seediq and Sakizaya is a dialect of Amis.

² The map was re-drawn by Chih-hsien Lin.

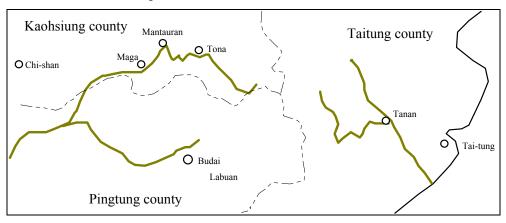
1.2 Geographical distribution and setting

Among the fourteen Formosan languages, Rukai forms a small communalect, both in terms of population (estimated at 11,200 as of 2005)³ and diffusion of the language. However, it differs from the other Formosan languages by its overall complexity. It includes only six dialects (Tanan, Labuan, Budai, Maolin, Tona and Mantauran) but their internal relationships have to date not been completely clarified (see Zeitoun, in preparation). It exhibits an active/passive voice dichotomy not found in other Formosan languages, which are generally characterized by a more complex focus (or voice) system (see, among others, Tung et al. 1964, Tsuchida 1976, Yeh 1991, Huang 1995a, Y. Chang 1997, Ross 2002, A. Chang 2006, Teng 2007 for detailed descriptions regarding some of these languages).

The Rukai dialects stretch across the south of Taiwan (see Map 1.2): Tanan is located in the east (Taitung county); Budai and Labuan are situated in the south (Pingtung county); Maga, Mantauran and Tona of the "Lower three villages" are found in the north (Kaohsiung county). In recent years, the Rukai have migrated to other places and formed new communities in areas occupied by other populations, viz. Tewen and Sanhe (originally Paiwan settlements in Pingtung county), and Fengshan (Kaohsiung county, with mainly Southern Min speakers).

According to Kaneko and Tsuchida (2005:149), who cite earlier Japanese sources (Utsurikawa et al. 1935:260-262 and Mabuchi 1974:348-354, 511), "the Mantauran originally settled in She-pu-nuk (內本庭), where they were attacked, moved to the area of the present Bunun village Varisan, and then settled in the location they left when they relocated to the present-day villages" in 1959, after various attempts by the Japanese and the Chinese to make them move from their earlier settlement. Nowadays, the village where Mantauran is spoken is split in two: the lower village is called *Wanshan* (萬山村) in Mandarin Chinese, and the upper village is known as *Fengli* (鳳梨村). There is no phonological, lexical or morphosyntactic variation between these two settlements which are about one kilometer apart.

Figure estimated by the Council of Indigenous Peoples, Executive Yuan, *cf.* http://others.apc.gov. tw/popu/9406/aprp5803.htm.



Map 1.2: Distribution of the Rukai dialects

The term *Mantauran* was first used by the Japanese (*cf.* Ogawa and Asai 1935) and can be found in the literature from the 1970's. In this monograph, I use either *Mantauran* or *Mantauran Rukai* interchangeably.

Rukai villages tend to be relatively independent in the sense that they have had no organization that would have encouraged the celebration of particular rituals reinforcing a cultural identity, as can be found in other communities, e.g. the Tsou or the Paiwan. So, as Li (1973) points out, Rukai communities call themselves by the name of their villages (see table 1.1). The Mantauran self-designation is [swa-]ponogo ('oponoho in Mantauran). 'oponoho is a generic term for the Mantauran people and the place they inhabit; i.e. there is no specific reference to an old or new location. There are, however, special words referring to the earlier Wanshan settlement, viz. ka'oponohae 'real/genuine Wanshan'; the new Wanshan village is known as tavele'eve'e 'windy place' with the upper part of the village being called tapangodhalae 'place where pineapples are/were planted'. For the sake of convenience, I shall hereafter refer to ka'oponohae as 'old Wanshan village' and tavele'eve'e as 'new Wanshan village'.

⁴ The transcription is explained in chapter 2.

Table 1.1: Geographical location of villages where the Rukai dialects are spoken

| Dialect | Self designation | Chinese name of the village(s) and geographical location | | |
|--------------------|--|--|--|--|
| Tanan | taromak | Funghsin, Taitung county, Peinan township | | |
| Labuan | laboa(n) Tawu, Pingtung county, Wutai township | | | |
| | talamakao | Chinye, Pingtung county, Wutai township | | |
| Budai ⁵ | vedai | Wutai, Pingtung county, Wutai township | | |
| | kucapungan | Haocha, Pingtung county, Wutai township | | |
| | adiri | Ali, Pingtung county, Wutai township | | |
| | kalramomodhesae | Chiamu, Pingtung county, Wutai township | | |
| kinulan Chulu, Pi | | Chulu, Pingtung county, Wutai township | | |
| Maga | teldr i ka | Maolin, Kaohsiung county, Maolin township | | |
| Tona | kongadavane | Tona, Kaohsiung county, Maolin township | | |
| Mantauran | 'oponoho | Wanshan, Kaohsiung county, Maolin township | | |
| | | Fengli, Kaohsiung county, Maolin township | | |

Traditional Mantauran society consisted of a hierarchy with four distinct levels: (i) **tailai** (nobles and chiefs); (ii) **ka'olo** (commoners serving the nobles and chiefs); (iii) **vecehae ocao** (a "middle-class" of neither nobles nor commoners, but who were however "free" from working for either nobles or chiefs); and (iv) **paloaloave** ("brave" hunters). In the old days, the Mantauran had a mixed hunter-gatherer and agrarian economy, which basically meant that, in the division of labor, men hunted and women gathered food and planted (see Zeitoun & Lin 2003).

The Rukai have an administrative center in Maolin and hot springs in Tona. The Mantauran are sandwiched in-between in Wanshan. And, despite having had their land declared a national park since the early 1990s, the Mantauran have not particularly benefited from tourism because of their difficult terrain. Wanshan lies on a steep slope with little to offer. A consequent rural exodus has left only small shop proprietors, the elderly, and the unemployed to tend to the beautiful homes built in recent years.

For countless centuries, the Mantauran have interacted for marriage and trade with the neighboring Rukai villages, Tona and Maolin, as well as with other Formosan ethnic groups, the Bunun (Isbukun) and the Saaroa. There were also, at times, intercommunity feuds. A linguistic consequence of these centuries of cultural contact has been the acquisition of loan words (*cf.* §1.4.3).

⁵ In some villages (e.g., Tanan, Tawu, Maolin, Tona, Wanshan), there is only one dialectal community, in others (villages situated in Pingtung county), on the other hand, different communities live together and have developed dialectal variants. In this context, a sociolinguistic analysis of the Budai dialect would be necessary in the future.

1.3 Internal and external relationships of Rukai

To date, the internal and external relationships of Rukai remain, to some extent, undetermined.

1.3.1 Position of Mantauran within Rukai

Since Li's (1977b) reconstruction of Proto-Rukai (PR), it is generally acknowledged that there are two distinct subgroups: Tanan, Labuan and Budai on the one hand, and Maga and Tona on the other. The position of Mantauran within the Rukai family, however, remains controversial because the structure of the language has been obscured by drastic phonological and syntactic changes.

Li (1977b) showed that phonologically, PR voiced stops have been weakened and spirantized. Hence, PR *b, *d and *d, *g correspond to MT v, ð and h respectively. Syntactically, though Mantauran shares some structural resemblances with other Formosan languages and Rukai dialects, it also displays a number of morphosyntactic features not found elsewhere: (i) it has bound pronouns which tend to coalesce with the verb stem and (ii) the third person oblique pronoun plays a role in case marking, just like an "agreement" marker.

There are three hypotheses regarding the position of Mantauran within Rukai: (1) Mantauran subgroups immediately with Maga and Tona (see Li 1977b); (2) Mantauran is the first offshoot of the Rukai family (see Tu and Cheng 1991, Starosta 1994 & 1995, Li 1995 & 1996); and (3) Mantauran forms a subgroup with the Tanan-Labuan-Budai cluster. The question of the internal relationships of the Rukai dialects will not be discussed in this book as it will be taken up elsewhere (Zeitoun, in preparation).

1.3.2 Position of Rukai within Austronesian

In the past forty years or so, various subgrouping hypotheses regarding the relationships of the Formosan languages have been advanced. Here I shall only summarize the most influential hypotheses.

Ferrell (1969) hypothesized a tripartite division of the Formosan languages: Atayalic, Tsouic, and Paiwanic. He proposed: (1) that Atayalic be composed of Atayal and Seediq; (2) that Tsouic include Tsou, Kanakanavu, and Saaroa; and (3) that Paiwanic be split in two: Paiwanic I (Rukai, Pazeh, Saisiyat, Thao, Puyuma, and Paiwan) and Paiwanic II (Bunun, Siraya, Amis, Kavalan, and Yami). His viewpoint prevailed until the 1990s,

⁶ This third hypothesis reflects my position on the subject. Ross (2003) has also reached this conclusion.

even though it had been generally acknowledged that his so-called "Paiwanic" group had problems.

Since the mid-nineties, other hypotheses have emerged, using as evidence innovations in phonology, morphology, or lexicon.

Blust (1999a), arguing from phonological evidence, proposed that the Formosan languages be assigned to nine of ten primary subgroups descending from PAN. His nine Formosan groups included: (i) Atayalic (Atayal and Seediq), (ii) East Formosan (Basay-Trobiawan, Kavalan, Amis, and Siraya), (iii) Puyuma, (iv) Paiwan, (v) Rukai, (vi) Tsouic (Tsou, Kanakanavu and Saaroa), (vii) Bunun, (viii) Western Plains (Taokas-Babuza, Papora-Hoanya, Thao), and (ix) Northwest Formosan (Saisiyat, Kulun-Pazeh). His tenth subgroup included all Austronesian languages spoken outside of Taiwan, i.e. (x) the Malayo-Polynesian languages.

Starosta (1994 and 1995), basing his argument on morphological innovations, proposed that Proto-Rukai be regarded as the ancestor of all the Formosan as well as the non-Formosan languages. His main argument was based on the relative simplicity of the grammar of Rukai and in particular its lack of a focus system: "the naked status of Rukai verbs closely reflects a primordial state of innocence and Rukai grammar is very close to the grammar of the proto language, while only slightly more decent morphological attire of Tsou, Saaroa, Kanakanavu represents successive steps along the difficult evolutionary path toward Philippinian morphological sophistication" (1994:4-5).

More recently, Sagart (2004) has proposed that Pazeh and Saisiyat are primary subgroups, the other Formosan languages falling into non-primary groups, e.g. "Pituish", "Enemish", "Walu-Siwaish" etc. His main conclusions are based on lexical innovations (the numerals from 1 to 10 and basic vocabulary).

The position of Rukai among the Formosan languages, and in particular its relationship to Tsouic and Paiwan, remains a controversial issue. Four hypotheses have been postulated that view Rukai as: (1) subgrouping with Tsouic and forming a higher group Rukai-Tsouic (Tsuchida 1976); (2) being closer to Paiwan (Ho 1983); (3) forming a linguistic group distinct from both Tsouic and Paiwan (Starosta 1994, 1995); (4) forming a group (referred to as the Walu-Siwaish group) with a cluster of languages/language families, including Tsouic, Paiwan, Puyuma, Amis, and Bunun (Sagart 2004).

1.4 Language use

Among the six Rukai dialects, Mantauran is the most endangered. For half a century, governmental policy dictated Mandarin as the only official language to be used on the island, and the younger generation has tended to leave their villages and migrate to neighboring towns (see §1.2). The Mantauran now number from 250 to 300 souls,

but only a few elderly residents can still be considered fluent in their dialect, which has ceased to be used as the *sole* means of communication in ordinary daily conversation. The gradual decay of this language variety has furthermore accelerated disastrous linguistic change, readily apparent at every level of the grammar. In this brief section, I shall examine language loss and language change with respect to (i) the loss of special lexical registers (*cf.* §1.4.1) and (ii) the introduction of doublets (*cf.* §1.4.2). Section 1.4.3 lists the very numerous loanwords in Mantauran.

1.4.1 Loss of special registers

There used to be a special lexical register that adults used when communicating with children up to three or four years of age. Tsuchida (1998) first drew attention to this register and had collected numerous forms in 1970, listed in table 1.2. Working with the same informant (Lü Yu-zhi 呂玉枝), I was able to record only a few nursery words; younger informants have no recollection or understanding of these words (table 1.3). An asterisk in table 1.2 indicates a discrepancy with my own data.

Table 1.2: List of nursery words collected by S. Tsuchida (1970)

| Nursery | Equivalent | Gloss | Nursery | Equivalent | Gloss |
|--------------|-------------|-----------------------|-----------|-------------|--------------------|
| word | | | word | | |
| tokonoho | alipoho | 'head' | coo'o | covo'o | 'sugarcane' |
| 'ingao | lringao | 'eye' | veeveele | velevele | 'banana' |
| tainga | calringa | 'ear' | рааро | votolo | 'pork' |
| tapale | dhapale | 'foot, leg' | ka'aa | ka'ange | 'fish' |
| 'eele | elrele | 'penis' | cengee | senge | 'shrimp' |
| *tati ~ caci | caki | 'excreta, defecate' | ta'oo | ta'olro | 'dog' |
| *peepe | 'apece | 'sleep' | maame | aalrame | 'bird' |
| 'omata | 'omaca | 'get up' | ooaoa | ove'eke | 'pig' |
| meemee | 'aina | 'no' | kaatoho | karadhoro | 'egg' |
| taataace | odhaadhaace | 'walk' | tati'i | mataadhi'i | 'good' |
| toohooae | toloholrae | 'sit' | takoa | matakolra | 'bad' |
| ae | oka'ace | 'bite' | maketelre | makecelre | 'cold' |
| ciai | acilai | 'water' | meeme | o'ange'ange | 'painful, hurt' |
| papaa | va'oro | 'cooked rice' | toaai | matoalrai | 'big' |
| tooko | coloko | 'glutinous rice cake' | cii'i | masi'i | 'small, a few' |
| ciia | kamosia | 'candy, goodies' | caoco | akaodho | 'there is none' |
| maia | mairange | 'sweet potato' | laitae | laidhae | '(female) friends' |

| Nursery word | | Equivalent | Gloss |
|--------------|-------|------------|-------------------------------|
| -voc. | +voc | | |
| mama | mamaa | amake | 'Daddy, Father' |
| nene nenee | | inake | 'Mummy, Mother' |
| momo momoo | | omoko | 'Grandpa/Grandma' |
| toto ~ coco | | soso | '(drink) milk (= breastfeed)' |
| 'ee'ee | | 'apeca! | 'sleep!' |
| 'e'e | | (mo-)caki | 'excrement, defecate' |
| 'o'oso | | valo'oso | 'pee' |
| kookoo | | kokolo | 'puppy' |
| taokoko | | tarokoko | 'chicken' |

Table 1.3: List of nursery words collected in 1999

1.4.2 Doublets

Ferrell (1982:47) defines doublets as "phonologically similar forms with identical glosses occurring within the same dialect". He mentions that doublets occur fairly commonly in Paiwan. That does not seem to be the case in Mantauran. Except for the doublets 'angato~nga'ato 'tree, wood, brushwood' which undergo exactly the same morphological derivations (1.1), most doublets are found in situations where part of a circumfix or a certain reduplication pattern has been "forgotten", cf. (1.2) and (1.3). Mantauran displays a series of verbal prefixes and numeral classifiers that attach to bound numeral forms. Among these, the circumfix tao-/taro-...-ae used to count persons in movement has two doublets in co-occurrence with tens, cf. tao-/taro-ma-N-l-ae and tao-/taro-ma-N-le/-lo (1.2). While in (1.1), there is no difference in terms of archaism between 'angato and nga'ato, in (1.2) and (1.3), the first term of the pair is regarded as more archaic.

```
(1.1) a. 'angato
                                  nga'ato
                                                       'tree, wood, brushwood'
      b. 'i-angato
                                  'i-nga'ato
                                                       'gather brushwood' < 'i- 'gather'
                                                       'woodshed' < ta-...-(a)e 'LocNmz'
      c. ta-'angato-e
                                  ta-nga'ato-e
      d. 'angato-ngato-e
                                  nga'ato-'ato-e
                                                       'forest' < -(a)e 'LocNmz'
                                                       'made of wood' < (o-)tali- 'made in'
      e. (o-)tali-'angato
                                  (o-)tali-nga'ato
(1.2) a. taro-ma-nge-l-ae
                                  taro-ma-nge-le
                                                       'ten (persons)'
      b. tao-ma-nge-l-ae
                                  tao-ma-nge-le
                                                       'ten (persons)'
(1.3)
         la-ma-'ivi-'ivoko
                                  la-ma-'ivo-'ivoko
                                                       'three (or more) friends'
```

1.4.3 Loan words

There are numerous loanwords in Mantauran, most of which were introduced during the Japanese colonial period. Though loans from Taiwanese Southern Min and Mandarin are also used in ordinary conversation, resort to Japanese is persistent. Other loans have been borrowed from neighboring languages, e.g., Saaroa, Siraya or Tona Rukai. The most frequent loan words are listed in (1.4), with their origin, if known, and their equivalent in Mantauran, if any.

| (1.4) | | Loan word | Gloss | Origin | | Equivalent in Mantauran |
|-------|----|-----------|------------------------------|-------------|-----------------------|---|
| | a. | paiso | 'money' | Spanish | peso(s) | toa'ipae Lit.: 'used to count, money', cf. o'ipi 'count' |
| | b. | tamako | 'cigarette tobacco' | Spanish | | aserepae Lit.: 'thing that is sucked', cf. oserepe 'suck' |
| | c. | mairange | 'sweet potato' | Saaroa | mairang | - |
| | d. | solate | 'paper, book' | Siraya(?) | sulat | |
| | e. | 'aomo | 'Japanese | Tona Rukai | kaomo | takerekerenge Lit.: 'who ties |
| | | | policeman, police station' | | | up, policeman', <i>cf.</i> okerenge 'tie up' |
| | f. | 'otobai | 'motorcycle' | Japanese | otobai | - |
| | | | • | (from an En | glish compo | ound <i>auto-bike</i>) |
| | g. | cokoi | 'desk, table' | Japanese | tsukue | apoto 'stone, table' |
| | h. | kopo | 'cup, glass' | Japanese | koppu | 'aongo'ongolo 'glass' |
| | | | | (from Dutch | origin, <i>cf</i> . 1 | kop) |
| | i. | sasingi | 'picture, take a picture' | Japanese | shashin | |
| | j. | kiokai | 'church' | Japanese | kyōkai | tasokosokovoe 'church' |
| | | | | | cf. | o-sokosokovo 'be in silent contemplation, pray' |
| | k. | sakale | 'bicycle' | Taiwanese | sakalen | _ |
| | | | | | 'three whee | els' |
| | 1. | tanse | 'television' | Taiwanese | tensi | |
| | m. | saosi | 'key, lock' | Taiwanese | soosi | taeceeceae 'lock' |
| | | | | | cf. | o-eceece '(to) lock' |
| | n. | kamosia | 'sweet(s)' | Taiwanese | kam-chia | |
| | | | | | 'sugarcane | |
| | 0. | mingtiao | 'pasta' | Mandarin | mien tyao | |
| | p. | ciokoko | 'Chinese' | Japanese | chuu-koku | pakisa 'plains (people)' |
| | q. | sangepare | 'car' | unknown | | |
| | r. | 'iingi | 'torch' | unknown | | apoi 'fire, light, electricity' |

Other loans include -ali '(female) friend' and -palange 'spouse' both likely

borrowed from Tona. They are found only in reciprocal constructions, while the distribution of their counterparts (*cf.* **lili-** and **palra-/lamengae** respectively) is less restrictive. Compare (1.5) and (1.6):

```
(1.5) a. la-ma'a-ali-ali ~ la-ma'a-lili-li 'three (or more) friends together' b. *ali-li ~ lili-li 'my (female) friend'
(1.6) a. la-ma'a-palange 'husband and wife' ~ *la-ma'a-lamengae ~ *la-ma'a-palra b. *palange-li ~ palra-li, lamengae-li 'my spouse'
```

Loan words can undergo the same morphological processes (affixation, reduplication and compounding), discussed in chapter 3, as other lexical items:

```
(1.7) a. paiso 'money' >
                                 'i-paiso
                                                             'make money' (< i- 'get, obtain')
                                 ta-paiso-iso-e
                                                             'purse' (< ta-...-(a)e 'LocNmz')
                                 'a-paiso-iso-e
                                                             'rich' (< 'a-...-(a)e 'a lot')
                                 ta-poa-poa todhi'i paiso
                                                             'bank'
      b. koli'i 'sun'
                                o-koli'i
                                                             'sunshine' (< o- 'verbalizer')
      c. saosi 'key'
                                o-saosi
                                                             'lock'
                                                             'lock (Subj)'
                                 ~soosi
                                                             'lock (N)'
                                 ta-saosi-osi-e
```

1.5 Previous studies on Mantauran

In this section, only studies dealing specifically with Mantauran are mentioned. The reader is referred to Chen (1999), Hsin (2000), Zeitoun (2000c) and Zeitoun & Lin (2003) for a more complete literature review and/or references on the whole Rukai language family.

Earlier studies on Mantauran fall into two main categories. Most offer lexical comparative data and draw phonological implications (i.e. reconstruction and subgrouping hypotheses) or provide comparative/typological descriptions of the morphosyntax of the Rukai dialects. Fewer describe in detail aspects of the Mantauran phonology and/or morphosyntax. The list of references that follows is based on this dichotomy, each study being summarized succintly.

Tsuchida (1976) presented lexical comparative data on the Rukai dialects of the "Lower three villages" to support his claim that Rukai and Tsou are closely related. In August of 2005, Prof. Tsuchida generously gave me a copy of the data and stories he had recorded in July and August of 1970. Most of these materials have never been published.

Li (1977b) provided a list of about 800 cognates in five dialects (Mantauran, Maga, Tona, Budai and Tanan) in order to reconstruct the phonological system of Proto-Rukai and determine the internal relationships of Rukai.

The second part of my Ph.D dissertation (see Zeitoun 1995a) was dedicated to the comparative study of the Rukai dialects and included an account of their main phonological and morphosyntactic characteristics and variations as well as a discussion of their subgrouping. A large corpus of elicited vocabulary, sentences as well as texts was provided in the appendices. I later tried to enhance some aspects of this preliminary work: in Zeitoun (1995b) for instance, I reconsidered the pronominal system of Rukai, and provided a reconstruction of the pronominal system of Proto-Rukai. In Zeitoun (2003), I provided the morphosyntax of Proto-Rukai and attempted to draw a theory of grammatical change that may have taken place among the Rukai dialects, as part of a larger project on the comparative study of the Rukai dialects (Zeitoun, in preparation).

Li's (1996) article concerning the pronominal system of Rukai was written as a response to my own paper (1995b) and illustrates the major resemblances and differences of the Rukai dialects, with a reflection on their internal relationships and a reconstruction of the pronominal system of Proto-Rukai, that differs slightly from my own.

Ross' (2003) study has not been published. It draws on (un)published sources and proposes another reconstruction of the pronominal system of Rukai with further implications for subgrouping, and in particular the position of Mantauran within this linguistic group.

Data on Mantauran were also cited in other papers relating to the typological study of the syntax of the Formosan languages (cf. Yeh et al. 1998, Huang et al. 1998, Zeitoun et al. 1999, Zeitoun 2000a, Zeitoun & Huang 2000, Zeitoun & Wu 2006). There are fewer descriptions regarding the phonology and morphosyntax of Mantauran (cf. Ogawa & Asai 1935 and Zeitoun 1997a-b, 2000b, 2001a, 2002b). Ogawa & Asai (1935) were the first to describe the Rukai dialects and provided a comparative analysis of the phonology and morphosyntax of Budai-Tanan and Maga-Tona as well as a phonological reconstruction of Proto-Rukai, with each dialect illustrated by a series of texts. In Zeitoun (1997a-b) I re-investigated (i) the case marking system and (ii) the pronominal system of Mantauran. In other papers (see Zeitoun 2000b, 2001a, 2002b and Zeitoun & Hsin 2002), I have examined phonological and morphosyntactic aspects of Mantauran that had not been investigated before: verb(al) classification and alternations, plurality, nominalization and glottal hopping.

1.6 Data gathering procedures and theoretical orientations

In this section, I outline briefly data gathering procedures (*cf.* §1.6.1) and theoretical orientations (*cf.* §1.6.2).

1.6.1 Data gathering procedures

In August 1992, I was asked to study Mantauran as part of a project headed by Paul Jen-kuei Li on a survey of the languages spoken in Kaohsiung county. I might well have worked on that dialect just for the duration of that year-long project but I decided otherwise because of the controversial position of Mantauran in the Rukai family (*cf.* §1.3), its seemingly "aberrant" grammar and the paucity of studies on this language before the early 1990's (*cf.* §1.5).

Indeed, when I started fieldwork, the only source of data that was available to me was Li (1977b) and Ogawa & Asai (1935). There was virtually no information whatsoever on the morphosyntax of this dialect. This study thus mainly draws on my own fieldwork, which has been conducted off and on since August 1992. Some fieldwork sessions were carried out with a Mantauran assistant, Lin Hui-chuan (林惠娟), whom I trained in ethnolinguistics and who published a series of textbooks on her language (see Lin 1999).

The data provided here are, to a large extent, extracted from texts, which comprise over 600 pages of transcribed narratives that relate our late informant's memories (vol. 1) and traditional folktales (vol. 2) that had been collected over a seven-year period. These texts were enriched with further elicited vocabulary and sentences.

My first and principal informant, Mrs. Lü Yu-zhi (呂玉枝), died in 2000 at the age of 76. She narrated the stories that were later published in 2003 (see Zeitoun & Lin 2003). Mrs. Guan Yue-ying (關月英), born in 1938, provided numerous folktales. Over the years, other informants I have worked with more particularly on the vocabulary and on the morphosyntax of this language include Mrs. Lan Gui-ying (藍貴英), born in 1947, Tsai Ching-mei (蔡清妹), born in 1935 and Luo Chiu-hsiang (駱秋香), born in 1960. Since 2003, I have also made use of newly available textbooks, edited under the direction of the Ministry of Education of Taiwan, with the support of the Council of Indigenous Peoples, Executive Yuan.

1.6.2 Theoretical orientations

This work presents a functional and empirically based account of the Mantauran grammar following principles laid out by Dixon (1997) and Noonan (2006). I have not

been able to analyze fully the phonological complexities of Mantauran, and hope that such a work can be carried out in the near future. The main body of this reference grammar is concerned with an analysis of the morphology and syntax of this dialect. The morphological analysis is cast in terms of the morpheme-based approach. Although this theoretical model has been discounted as inadequate for grammatical description, the segmentation of words into smaller units in Mantauran offers numerous advantages that are briefly outlined in §3.1.2. The syntactic analysis is drawn from the basic linguistic theory (Dixon 1997).

1.7 Aims of the present study and brief outline

The work aims to present a comprehensive grammar of Mantauran. My goals are two-fold: first, to provide a description of the most salient characteristics of the grammar of Mantauran in order to reach a better understanding of this language and second, to make available enough empirical data to show in what respect Mantauran differs from the other Rukai dialects and other Formosan languages in general.

In writing this grammar, I encountered two major challenges: (i) to supplement (rather than simply repeat) Li's (1973) earlier extensive grammar on a closely related dialect, Tanan Rukai; and (ii) to describe and analyze the Mantauran dialect, without falling into the pitfall of constantly referring to other Formosan languages. Except occasionally, I leave such comparisons with other Rukai dialects for another monograph (see Zeitoun, in preparation).

This grammar is traditionally arranged. It begins with a study of Mantauran phonology (chapter 2), goes on investigating its morphology (chapters 3-8) and proceeds to the syntactic study of the phrase, the clause and the sentence (chapters 11-16). At times, it has proven difficult to draw any line between morphology and syntax. Let us call chapters 9 and 10 a buffer between morphology and syntax.

Mantauran has fifteen consonants /p, t, k, ', v, s, h, dh, c, m, n, ng, l, r, lr/ and four vowels /a, i, e, o/. Stress usually falls on the first syllable. The basic syllable template is (C)V, with words typically consisting of di-, tri- and quadri-syllables.

Mantauran exhibits a very rich morphology. Of four morphological processes, three are relatively more productive than the fourth: affixation, stem modification, reduplication and compounding. Affixes attach to different types of bases, e.g. nouns, verbs, pronouns and numerals etc. At most four affixes can occur on a word base. Affixes can be divided into two main categories: "class-retaining" affixes and "class-changing" affixes. Class-retaining affixes do not affect or change the lexical category of the base/root they attach to and comprise two types of affixes: nominal and verbal affixes. Class-changing affixes, on the other hand, change the lexical category they attach to. They are divided

into verbalizers (i.e. affixes that turn a noun or a numeral into a verb) and nominalizers (i.e. affixes that typically make a noun out of a verb). Major morphological alternations take place in verbs, which exhibit three major forms: finite, non-finite and subjunctive. Mantauran also exhibits a small set of sortal classifiers that attach to numeral bound forms. There are two major types of reduplication processes, still actively used: monosyllabic (or partial) reduplication (which subsumes two reduplication processes, *cf.* CV- and C*a*-reduplication) and disyllabic (or foot) reduplication (which subsumes CVCV-reduplication, CV.V-reduplication and rightward reduplication). Compounding is a less productive process.

Mantauran displays eleven word classes (some of which comprise further subclasses): nouns, verbs, pronouns, demonstratives adverb, numerals, phrasal, clausal and interclausal elements, exclamations and interjections. Lacking, however, are major categories such as adjective, preposition, case marker, auxiliary verb etc. Nouns and verbs are rather easy to distinguish at the morphosyntactic level.

Mantauran is a head-marking language, which means that syntactic relations such as possession and grammatical relations are marked on the head, i.e. the head noun in an NP, and the verb in a VP. It is also an accusative language in that the single argument (S) of an intransitive sentence corresponds to the Agent (A) of a transitive sentence.

Within the noun phrase, the determiner always precedes the noun. There are two kinds of noun complements, the first is verbal and the second is nominal. There is no morphosyntactic distinction whatsoever between a relative clause and any other verbal modifiers within a noun phrase. The verb phrase is composed of a verb and its complement. Temporal adjuncts occur outside the verb phrase, either in sentence-initial or in sentence-final position. The voice system is based on a dichotomy between an active voice and a passive voice. The verb attracts aspectual and modal affixes as well as negators and pronominal clitics. An interesting phenomenon is the occurrence of a genitive pronoun after the negator **-ka** (predicative negation). Noun and verb phrases are coordinated with **la** 'and'.

Mantauran has two major types of clauses: the first is nominal and the second is verbal. Word order within the clause (i.e. in post-verbal position) is rather free. Topicalization represents a more restricted phenomenon. The subject of the sentence can be topicalized in both active and passive sentences, with a co-referent pronoun appearing on the main verb. Only definite objects are allowed to be topicalized.

Mantauran exhibits four types of complement strategies: zero strategy (i.e. paratactic complements), verb serialization, nominalization and causativization. Utterance clauses share the same structure as paratactic complement but differ in that they are usually followed by a verb of saying. Verb serialization as a complementation strategy takes

place whenever the predicates that occur in the main clause and in the complement clause share the same subject and is a particularly common phenomenon.

In Mantauran, adverbial clauses must be treated as subordinate clauses while juxtaposed/coordinated clauses are co-ranking clauses. In adverbial clauses, the verb is nominalized while it occurs as the main/matrix verb in juxtaposed/coordinated clauses. Clause linking is usually not expressed through the occurrence of (inter-)clausal elements in adverbial clauses. On the other hand, the occurrence of conjunctions and verbs reveals the coordination of two (or more) clauses, as opposed to two (or more) juxtaposed clauses.

Table 1.4 provides a schematic overview of the most typical phrasal and clausal structures of Mantauran Rukai.

Table 1.4: Mantauran (Rukai) phrasal and clausal structures (Based on Zeitoun & Lin 2003)

Notes:

'a = Topic marker, lo = 'when, if', alaka-i = 'because', ni-...-a = 'even if', mani = 'then', -ine = 'him/her' (3S.Obl), la = 'and', -iline/ilidhe = 'them' (3P.Obl), -nga = 'already', -na = 'still', -ka = 'not' (predicative negation), ta-= 'who' (subjective nominalization), a-= 'when' (clausal nominalization), ki-= 'not' (modal negation)

| | 1. Case | Nom | pers/non-pers | Ø NP |
|-----------|-------------------|----------------------|-----------------------|---|
| | marking | Obl | non-pers | Ø NP |
| | III WI KIII S | 001 | pers | V-ine/-idhe _i NP _i |
| | | | POIS | with agreement in plurality and visibility |
| NP | | Nom | pers/non-pers | [N la N] |
| | 2. Coordination | Obl | non-pers |][[, , , , , ,] |
| Structure | 2. Coordination | 001 | pers | V-iline/-ilidhe _i [N la N] _i |
| | | | P*** | with agreement in visibility and plurality |
| | 3. Nominal comp | olement | 1 | [[N] Mod [N-Pro _{Gen}] Head]NP |
| | 30111 | | | [[N-Pro _{Gen}] _{Head} [N] _{Mod}] _{NP} |
| | 4. Verbal comple | ement | | [[V _{Nmz} -Pro _{Gen}] _{Mod} [N] _{Head}] _{NP} |
| | l line | | | with nominalization agreement on the |
| | | | | verb reflecting the semantic role of the |
| | | | | modified noun |
| | 5. Affirmative | | | V _{Fin} -(nga/-na)-Pro _{Nom} |
| VP | 6. Negative | Predicative negation | | V _{Fin} -(nga/-na)-ka-Pro _{Gen} |
| structure | | Modal negation | | (ta-/a-)-ki-V _{NFin} -(nga/-na)-Pro _{Nom} |
| | 7. Coordination | | | V _{Fin} la V _{NFin} |
| | 8. Nominal | | N(P) $N(P)$ | |
| | 9. Verbal | | VOS or VSO | |
| | | | | (if S and O are both NPs) |
| | | | | V-Pro _{Nom} /S O |
| | 10. Topicalizatio | n | | NP[+agent] _i ('a) V-Pro _{Nomi} O or |
| | | | | NP[-agent/+definite] ('a) V S |
| Clause | | 1 | 1 | S_q ('a) S_p |
| types | | A. Complementation | zero strategy | [V _{Fin} S O] S _q [V _{Fin} S O] S _p |
| | | | verb serialization | V V _{Subj} |
| | 11. Complex | | nominalization | V (lo) V _{Nmz} |
| | sentences | | causativization | V _{manipulative} V _{Caus} |
| | | B. Subordination | Temporal (past) | [ClsNmz-V _{NFin} -Pro _{Gen} O]S _q ('a) S _{p (realis)} |
| | | | Hypothetical | $[\textbf{lo} \ V_{Subj}\text{-Pro}_{Gen} \ O]S_q \qquad \textbf{('a)} \ S_p$ |
| | | | Counterfactual | $[\textbf{la-Pro}_{Gen} V_{NFin} O] S_q \qquad \qquad S_p$ |
| | | | Concessive | $[\mathbf{ni}\text{-}V_{NFin}\text{-}\mathbf{a}\text{-}Gen \ O]S_q$ S_p |
| | | C. Coordination | Juxtaposed | SP_1 Ø SP_2 |
| | | | with la 'and' | SP ₁ la SP ₂ |
| | | | with mani 'then' | SP ₁ mani SP ₂ (whereby V _{NFin}) |
| | | | with alaka- 'because' | S _{p1} [alaka-Pro _{Gen} V-Pro _{Nom}]S _{p2} |

Chapter 2: Phonology and Morphophonemics

In this chapter, salient aspects of Mantauran phonology are discussed. Section 2.1 deals with the segmentals. Besides providing an inventory of consonants and vowels and their distribution, this section also deals with major phonological changes (whether past or on-going) and the phonology of loan words. Section 2.2 discusses stress assignment, syllable structure and intonation. Section 2.3 deals with major morphophonemic alternations. Section 2.4 examines some remaining problems. Section 2.5 introduces the orthographic system used in this study.

2.1 Phoneme inventory

Mantauran has fifteen consonants and four vowels, as shown in tables 2.1 and 2.2. Loan phonemes are put into parentheses and further discussed in §2.1.4.

Labial Palatal Retroflex Velar Glottal Alveolar ? Stop vl k p vd (b) (d) (d) (g) Fricative h vl S vd v ð, (z) Affricate ts Nasal m n ŋ Trill vd r Lateral vd 1

Table 2.1: Consonants

Table 2.2: Vowels

| | Front | Central | Back |
|------|-------|---------|------|
| High | i | | (u) |
| Mid | | Э | 0 |
| Low | | a | |

2.1.1 Description of the phonemes

In this section, the Mantauran consonant and vowel segments and their major allophones (if any) are listed and exemplified in (2.1) and (2.3) respectively. Minimal contrasts are provided in (2.2)-(2.4).

```
(2.1) / p/
            is a voiceless bilabial stop, e.g. mapipi 'drop'
             is a voiceless alveolar stop, e.g. titina 'middle-aged woman'
       /t/
            is a voiceless velar stop, e.g. ka?atsə 'bite'
       /k/
             The three voiceless stops are unaspirated.
       /2/
             is a glottal stop, e.g. ?aələnə 'flower'
       /m/ is a voiced bilabial nasal, e.g. mamələ?ə 'cheap, easy'
            is a voiced alveolar nasal, e.g. nana 'pus'
       /n/
            is a voiced velar nasal, e.g. nalai 'saliva'
       /ŋ/
             is a voiceless alveolar fricative, e.g. paiso 'money'
             It is palatalized and pronounced as [f] before [i], e.g. masi?i [mafi?i] 'small'
       /h/
             is a voiceless glottal fricative, e.g. Janaha 'rock'
       /v/
             is a voiced labio-dental fricative, e.g. ovilivili 'pull'
       /ð/
             is a voiced interdental fricative, e.g. ða?anə 'house'
       /ts/
            is voiceless palatal affricate, e.g. tsaviri 'throw away'
             It is palatalized and pronounced as [tf] before [i], e.g. tsikitsiki [tfikitfiki] 'tattoo'
       /1/
             is a voiced lateral, e.g. dapala 'foot, leg'
             It has been described as a voiceless fricative by Tsuchida (1976), and as a voiced
             fricative in Li (1977b) as well as in my earlier works (e.g. Zeitoun 1995a). However,
             when compared to a language such as Amis, for instance, it becomes clear that there
             is usually no frication whatsoever, except when /l/ precedes the vowel /i/, as in lili-li
             [lili-li] 'my friend'
       /1/
             is a voiced lateral retroflex, e.g. olalama 'run'
             Tsuchida (1976) believes that this consonant is a flap rather than a retroflex.
            is a trill, e.g. rihi 'horse' (cf. §2.1.3 for the on-going sound change from r to h and 1)
```

| (2.2) | a. | / p / | VS | / v / | patsame vatsange | 'feed in one's hand (talking about one's boyfriend/ girlfriend)' 'have a bit of a cough' |
|-------|----|--------------|----|--------------|------------------------|---|
| | b. | / t / | VS | / ð / | kə?əðə kə?ətə | 'shell' 'cut (with an instrument)' |
| | c. | / k / | vs | /2/ | kəðəkəðə ?əðəkə | 'long necklace with four strings of beads' 'diligent, interested in' |
| | d. | / ? / | vs | /Ø/ | ia?ə iaə | 'yes' 'me (1S.Obl)' |
| | e. | / s / | vs | / t / | ososo ototo | 'breastfeed' 'close a bottle' |
| | | | VS | /ts/ | kisikisi kitsikitsi | 'shave entirely one's hair' 'small silver-plated chain' |
| | f. | / h / | VS | / ? / | rihi kii?i | 'horse' 'goat' |

```
'millet'
         VS
               Ø
                    vətsənə
                    ətsəŋə
                                   'grasp'
                                   'work'
   /ð/
         VS
              /1/
                    ðiðapə
                    lilamə
                                   'ginger'
               /t/
                    omətsə
                                   'bring (Subj)'
                    omətə
                                   'close one's mouth with s.t (e.g. one's hand,
                                   a blanket, a cloth)'
   /m/vs
                    ðoma
                                   'other'
                    ðona
                                   'that'
                                   'still'
   /n/
         VS
               /ŋ/
                    -na
                                   'already'
                    -ŋa
1. /1/
               /1/
                    ka?olo
                                   'commoner'
         VS
                    ka?olo
                                   'framework'
                    tsoloko
                                   'glutinous cake'
         VS
                    tsoroko
                                   'jump'
m. /r/
              /1/
                    ovorovoro
                                   'operate'
         VS
                    ovolovolo
                                   'teach sb a lesson'
```

In earlier works (Zeitoun 1995a), I had recognized the existence of the glide $/\mathbf{j}$ /, but I now follow Li's (1977a) analysis in assuming that the two glides $/\mathbf{j}$ / and $/\mathbf{w}$ / are the allophones of the high vowels $/\mathbf{i}$ / and $/\mathbf{u}$ / in prevocalic or postvocalic positions (*cf.* the brief discussion on the distribution of vocalic phonemes in §2.1.2).

(2.3) /i/ is a high front unrounded vowel, e.g. icivi 'bake in stone'

It is pronounced as [e] after [?], e.g. kii?i [kii?e] 'goat'

/o/ is a back rounded vowel, e.g. omoko(o) 'grandpa!/grandma!'

/ə/ is a mid unrounded central vowel, e.g. ərai 'blood'

/a/ is a low unrounded vowel, e.g. aa]amə 'bird'

```
lili-
(2.4) a. /i/
                                             '(female) friend'
                      /o/
                               lolo
                                             'saliva'
                               -lini
                                             'their'
                VS
                      /a/
                               lina
                                             'parents'
                               titina
                                             'middle-aged woman'
                VS
                      /ə/
                               tətənə
                                             'heart'
                                             'spouse'
      b. /a/
                      /i/
                               pala-
                VS
                                             'choose'
                               pili
                VS
                      /o/
                               amətsə
                                             'bring (NFin)'
                               omətsə
                                             'bring (Subj)'
```

| | vs | /ə/ | lataŋə ləvaŋə | 'cabbage' 'deep hole, (mountain) cave |
|--------------|----|----------------------|------------------------------------|--|
| /o / | VS | / a / | toko | '(river) tortoise' |
| | | | taka- | 'elder sibling' |
| | VS | / i / | -tomo | 'grandfather/grandmother' |
| | | | timo | 'salt' |
| | VS | /ə/ | tokapi | 'twin' |
| | | | təkəpə | 'be in sb's way, obstruct' |
| / ə / | VS | /o / | Įэðэкэ | 'plant' |
| | | | ႞၀၀ီ၀႞၀၀ႆ၀ | 'mix' |
| | VS | / a / | tsəŋələ | 'see' |
| | | | tsəŋəla | 'see (Imp)' |
| | VS | / i / | tsapə | 'seed' |
| | | | tsipi | 'small taro' |
| | , | vs vs vs vs vs vs vs | vs /a/ vs /i/ vs /ə/ vs /o/ vs /a/ | ləvaŋə ləvaŋə ləvaŋə lovaŋə ləvaŋə ləvaŋə ləvaŋə ləvaŋə ləvaŋə ləvaŋə ləvaŋə ləvaŋə limo limo limo limo lipapp lip |

Table 2.3 and 2.4 provide an overview of major consonantal and vocalic distinctive features:

Radical Labial Coronal Dorsal ? h m v ð t n ts S 1 r k p + cons + + son + + + + cont + \pm + + + strid \pm + + + + + + + ant dist +nasal + -+ _ -+--stiff

Table 2.3: Consonantal distinctive features

Table 2.4: Vocalic distinctive features

| | i | a | 0 | Э |
|-------|---|---|---|---|
| high | + | - | - | - |
| low | - | - | - | - |
| back | - | + | + | - |
| round | - | - | + | - |

Vowel length is contrastive in Mantauran, as the following pairs of examples show, except for schwa in initial position:

| (2.5) a. /a | aa/ vs /a/ | | | | | |
|-------------|--------------|---------------|-------------|---------------|-------------|----------------|
| V | Vord-initial | Gloss | Word-medial | Gloss | Word-final | Gloss |
| a | amaə | '(my) father' | ðaatsə | 'leave' | l aa | 'squirrel' |
| a | makə | 'Father' | ða?ə | 'mud' | ala | 'take' |
| b. /c | 00/ VS /0/ | | | | | |
| V | Vord-initial | Gloss | Word-medial | Gloss | Word-final | Gloss |
| 0 | oma | 'field' | aololai | 'children' | omokoo | 'Grandpa!/ |
| | | | | | | Grandma!' |
| 0 | mala | 'take' | loolai | 'baby, child' | omo | `grand parent' |
| c. /i | ii/ vs /i/ | | | | | |
| V | Vord-initial | Gloss | Word-medial | Gloss | Word-final | Gloss |
| ii | inaə | 'Mum' | siiŋi | 'bent' | opiipii | 'bleat' |
| iı | nakə | 'Mother' | siŋi | 'cut' | papipi | 'drop' |
| d. /a | ee/ vs /e/ | | | | | |
| V | Vord-initial | Gloss | Word-medial | Gloss | Word-final | Gloss |
| | - | | pəələŋaə | 'name' | ခ႞ခခ | 'companion' |
| Э | ðəŋaə | 'tomb' | pələŋə | 'god' | eJeoq | 'all' |

In Mantauran (as in other Rukai dialects and in the Tsouic languages; see Li (1973), Tsuchida (1976) and Hsin (2000)), words end in an open syllable. The last vowel of the word might be (i) an echo vowel, e.g. tipitipi 'slap, beat', vələvələ 'banana'; (ii) an etymological word-final vowel (PAN *duSa > MT ŏo?a 'two'); or (iii) a vowel occurring at the end of a word as a result of the fall of a final consonant (PAN *Cabuq > MT tsavo 'wrap'). The rules for determining echo vowels in Mantauran are quite similar to those provided for Tsou by Tsuchida (1976:88). The value of the echo vowel is determined by the preceding vowel: it is i if the preceding vowel is /i/, as in vilivili 'pull'; o if the preceding vowel is /o/, as in ŏa?olo 'rain'; o if the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/, as in ŏa?olo 'rain'; of the preceding vowel is /o/.

2.1.2 Distribution

All the consonants appear in word-initial and medial position but not in word-final position since, as a rule, words end in an open syllable, the last vowel being usually an echo vowel. They all occur with the four vowels. Consonants occurring in word-final position are only found in loans, e.g. **takilolon** 'a Bunun place name'. There are no attested consonant clusters.

Table 2.5: Distribution of consonants

| | Word-initial | | | | | | | | Word | l-medial |
|----|---------------------|-------------------------|----------------|------------------|---------------|----------------------|----------|--------------------|----------|--------------------|
| | #i | Gloss | #o | Gloss | #a | Gloss | #ə | Gloss | v_v | Gloss |
| р | pili | 'choose' | ponai | 'pigeon' | pala | 'spouse' | pələhə?ə | 'taboo' | pələpələ | 'roll' |
| t | timo | 'salt' | tolo | 'three' | tamatama | 'middle-aged man' | təsəpə | 'inhale' | votolo | 'pork' |
| k | kiðiŋi | 'spoon' | koapə | 'sock' | kaava?i | 'come' | kəlai | 'hang' | taka | 'elder sibling' |
| ? | ?iko | 'tail' | ?o[a?a | 'snake' | ?aðiŋi | 'inside' | ?əkai | 'worm' | ða?anə | 'house' |
| m | milamili | 'name of a necklace' | motomoto | ʻlip' | ma?ino | 'embarrassed' | mənə | 'today' | olalamə | 'run' |
| n | ni- | 'counterfactual' | поађе | 'cow' | navini | 'dress' | nəka | 'one' | mani | 'then' |
| ŋ | ŋ i?aŋi?i | 'beard' | ŋoliŋoli | 'orchid' | ŋalai | 'saliva' | ŋəŋəsə | 'scrape out | ?aələŋə | 'flower' |
| | | | | | | | | one's nostrils' | | |
| s | siavə | 'chop' | sokovo | 'bow' | saloðiri | 'cradle' | səŋə | 'shrimp' | lisaisi | 'bracelet' |
| h | hikoki ⁷ | 'plane' | hololo | 'mountain' | haŋatə | 'in advance' | həcələ | 'pinch' | vaha | 'word' |
| v | vila?a | 'beside' | vovo | 'pour' | valio | 'village' | vətsəŋə | 'millet' | sivaraŋə | 'pregnant' |
| ð | ðiðapə | 'work' | ðolo | 'can' | ðaatsə | 'leave' | ðəkərə | 'lightning' | maðao | 'many' |
| ts | tsitsio | 'stir' | tsokolo | 'mortar' | tsaili | 'year' | tsəŋələ | 'see' | atsilai | 'water' |
| l | lilatsə | ʻliana' | loka | 'nail' | lalakə | '(own) child' | ləma?a | 'remain' | ka?olo | 'commoner' |
| l | emsőiJ | 'tongue' | l oolai | 'baby, child' | l aili | 'arrow' | edejedej | 'mountain' | lalisi | 'blaze' |
| r | rihi | 'horse' | rosolo | 'bench' | ramotso | 'finger' | rəəa | 'there' | maərəkə | 'greasy' |

All the vowels occur word-initially, medially and finally.

Table 2.6: Distribution of vowels

| | Word-initial and word-final | Gloss | Word-medial | Gloss |
|---|-----------------------------|----------------|-------------|----------|
| i | iki | 'exist, be at' | tsi?iki | 'poison' |
| a | ala | 'take' | ?avai | 'woman' |
| 0 | otsoroko | 'jump' | ?okoloðo | 'afraid' |
| Э | emene | 'milk' | kəmə?ə | 'cloud' |

Vowels appear alone or in clusters. If they do appear in clusters, they usually appear in a sequence of two (more rarely, of three) vowels. There are two types of vowel clusters: geminates and clusters of two different vowels. Attested vocalic sequences are shown in table 2.7 and are further illustrated in table 2.8.

-

 $^{^7\,}$ Japanese loan word. Another lexical item is **hiŋihiŋi** 'fry' (< **riŋiriŋi**).

 V_1 i a 0 ə V_2 i ++ ++a + + + 0 (+)+ Э

Table 2.7: Vowel clusters

Table 2.8: Vowel clusters: an exemplification

| | Word-initial | Gloss | Word-medial | Gloss | Word-final | Gloss |
|----|--------------|----------------|-------------|--------------|-------------|----------------|
| ia | iaə | 'me' | osiavə | 'chop' | kilisia! | 'tighten!' |
| io | 8 | | saliopo | 'whistle' | movalio | 'go back home' |
| iə | | | | | aikiə | 'where' |
| oa | oa | ʻgoʻ | toalakə | 'give birth' | poa | 'make' |
| oi | | | toipi | 'bra' | otopoi | 'make a fire' |
| 60 | oətsəvə | 'cross a river | poələ | 'all' | ?aŋatoə | 'forest' |
| | | on foot' | | | | |
| ai | aiði | 'youngest | ?aina | 'no' | lamolai | 'story' |
| | | sibling' | | | | |
| ao | aotoko | 'rabbit' | takovaokə | 'nostril' | maðao | 'many' |
| aə | aərətsə | 'rope' | ta?aələ | 'together' | tsəkəlaə | ʻall' |
| əa | -əa | 'one' | əməao | 'charcoal' | ?iaŋə?aŋəa! | 'hurt!' |

Clusters of two distinct vowels may either form a single syllable or constitute two different syllables.

They form a single syllable in the following two cases:

- 1) When the low vowel **a** is followed by /**i**/ or /**o**/ or if the mid vowel /**o**/ is followed by /**i**/, e.g. in lamolai [lámolàj], maðao [máðaw], topoi [tópoj].
- 2) When the vowels /i/ and /o/ precede the low vowel /a/, as there is a tendency in rapid speech to have the high(er) vowels phonetically realized as prevocalic glides, as in: **poa** [pwa] 'make', **toalake** [twalake] 'give birth, have child', ?iane?ane [?jane?ane] 'be hurt'.

They constitute two distinct syllables:

1) In normal speech, a glide is inserted in intervocalic position, as in: iaə [ijaə] '1S.Nom', osiavə [osijavə] 'chop', toipi [tojipi] 'make a fire', movalio [movalijo] 'return home'.

⁸ I believe that the non-occurrence of these vocalic sequences might represent a gap in my data collection rather than absence in the language.

2) When schwa follows or precedes another vowel, e.g. **ta.?a.ələ** 'together', **ə.mə.ao** 'charcoal'.

2.1.3 Sound changes

Mantauran has undergone the following sound changes:⁹

1. All the PR voiced stops have been spirantized, cf. PR * $\mathbf{b} > \text{MT } \mathbf{v}$, PR * $\mathbf{d} / \mathbf{d} > \text{MT } \mathbf{\delta}$, PR * $\mathbf{g} > \text{Mt } \mathbf{h}$.

| (2.6) | | Proto-Rukai | Mantauran | Gloss |
|-------|--------------|-------------|--------------|----------------|
| | b- | *bələbələ | vələvələ | 'banana' |
| | -b- | *baləbalə | valəvalə | 'bamboo' |
| | d- | *dapalə | ðapalə | 'foot, leg' |
| | -d- | *idai | iðai | 'hundred' |
| | d- | *dakəralə | ðakəralə | 'river' |
| | - d - | *laodo | laoðo | 'below' |
| | g- | *gəməgəmə | həməhəmə | 'hold in hand' |
| | -g- | *ləgələgə | [əhə]əhə | 'mountain' |

2. Among the PR fricatives, PR *v has become MT \emptyset , PR * θ is reflected as MT s and PR *s as MT? (further triggering the merger of PR *s and PR *? as MT?).

| (2.7) | | Proto-Rukai | Mantauran | Gloss |
|-------|-------------|-------------|-------------|-------------------|
| | V- | *valo | alo | 'bee' |
| | -V- | *[ava | l aa | 'flying squirrel' |
| | θ- | *θiabə | siavə | 'chop' |
| | -θ - | ∗θսθս | soso | 'breast' |
| | s- | *sipi | ?ipi | 'dream' |
| | -S- | *mabosoko | mavo?oko | 'drunk' |

3. The sound change PR *k > MT ? is, to date, ill-understood. It seems to have taken place only in few affixes, as in (2.8a) and loan words, as in (2.8b):

| (2.8) | a. k- | Proto-Rukai * ki- | Mantauran ?i- | Gloss i. 'gather' |
|-------|-----------------|-----------------------------|-------------------------|-------------------|
| | K- | KI- | 11- | ii. 'passive' |
| | | *ka- | ?a | 'Topic' |
| | but cf. | *ka | ka | 'ligature' |
| | b. | Tona | Mantauran | |
| | | kaomo | ?aomo | 'Japanese' |

⁹ Also listed in Li (1977b).

.

(2.9) Proto-Rukai Mantauran Gloss
k- *kaodo okaoðo 'not exist'
-k- *taka taka 'elder sibling'

4. PR *-j- has merged with PR *l in non-final position: 10

(2.10) Proto-Rukai Mantauran Gloss
-j- *daja ŏala 'up(wards)'
*ajamə aalamə 'bird'

5. The PR vocalic sequence *oa has merged as MT o:

(2.11) Proto-Rukai Mantauran Gloss
oa- *oakanə okanə 'eat'
-oa- *koanə konə 'eat (Subj)'

6. PR *n occurring between a a has become MT Ø:11

(2.12) Proto-Rukai Mantauran Gloss
anə *saloaŋanə ?aloŋaə 'deer'
*akananə akanaə 'food'

7. Among speakers below seventy years old, most have a tendency to pronounce the trill \mathbf{r} as \mathbf{h} .

(2.13) Mantauran Gloss
savarə ~ savahə 'young man'
ðamarə ~ ðamahə 'moon'

However, when the word in question contains both $/\mathbf{r}/$ and $/\mathbf{h}/$, in a sequence like $\mathbf{rVhV(rV)}$, then \mathbf{r} is pronounced as \mathbf{l} , as further shown in (2.13'):

(2.13') Mantauran Gloss
rihi ~ lihi 'horse'
but not *hihi
raharə ~ lahalə 'above'
but not *hahahə

-

Li (1977b:585) stipulates that in Mantauran it is not PR *j but PR *ð which coalesced with PR *l in non-final positions. In my mind, PAN *j is retained as PR *j. It has become Budai (Tanan and Labuan) ð, Mantauran l and Maga r.

However, the suffix -anə occurs in certain forms, e.g., **?olronganə!** 'Stupid!'

Note that I have not attempted to write uniformly the words that were undergoing such changes in this work, and have transcribed them the way they were initially pronounced by the informants.

2.1.4 Loan phonemes

The stops $/\mathbf{b}/$, $/\mathbf{d}/\sim/\mathbf{d}/$ and $/\mathbf{g}/$ are found in a few loan words as exemplified below. The presence of $/\mathbf{\theta}/$ has, so far, not been detected. $/\mathbf{z}/$ is found in a few personal names and in Japanese loans.

| (2.14) | /b/ | boo | 'exclamation' |
|--------|-----|---------------|--|
| | | ?otobai | 'motorcycle' |
| | /d/ | vədai~vəðai | 'Budai' |
| | /d/ | d əkai | 'Rukai' |
| | /g/ | gaŋ | 'sound produced (by a bear) when eating' |
| | /z/ | zikaŋ | 'time' |

The presence of /u/ was heard only in one word, *cf.* **soatimu**['Stimul' (from Paiwan **timu**]).

2.2 Syllable-level processes

Stress has been difficult to analyze and it would certainly deserve an in-depth study that I am unable to provide here. Stress usually falls on the first syllable as in **tamatama [támatama]** 'middle-aged man', **ŏa?anə [ŏá?anə]** 'house', **koapə [kóapə]** 'sock' and shifts to the first syllable if the base is prefixed, e.g. **titina [títina]** 'middle-aged woman' > **aitina [áitina]** 'middle-aged women'. There is also a secondary stress in multisyllabic words, e.g. **vələvələ [vələvələ]**. Stress has been treated as non-phonemic in earlier works (*cf.* Tsuchida 1976 and Li 1977b), and I tentatively follow this treatment here.

Most Formosan languages exhibit a CVC syllable structure. At an earlier stage of their history, echo vowels were added in Mantauran (*cf.* §2.1), resulting in the attrition of all words ending in a consonant, and altering the PAN canonical CVC syllable structure. The currently attested syllable structure can be represented by the formula (C)V. The occurrence of an onset is optional and there is no coda. The minimal Mantauran syllable consists of just a vowel (usually in word-initial position), and the maximal syllable structure is CVV, underlyingly CVG, where G stands for the phonetic glide (allophone of /i/ or /o/) occurring after or before the low vowel /a/ or the mid vowel /o/. Monosyllables are rare, e.g. -i 's/he', la 'and' lo 'if' and usually represent

grammatical words. Lexical roots might be disyllabic, trisyllabic or might even consist of four or more syllables.

| (2.15) Exemplification of syllables types | | |
|---|--------------------------|--------------------|
| 1. Two syllables | | |
| CVCV | pito | 'seven' |
| CVCVV [= CVCVG] | ?avai [?avaj] | 'woman' |
| VCV | ana | 'that' |
| VCVV [= VCVG] | iðai [iðaj] | 'hundred' |
| VVCV | ooma | 'field' |
| 2. Three syllables | | |
| CVCVCV | ?oŋolo | 'drink' |
| CVVCV | tsaili [tsajili] | 'year' |
| [= CVGVCV] | | 3 |
| CVVCVV | ?aolai [?aolaj] | 'man' |
| [= CVVCVG] | | |
| VCVCV | okanə | 'eat' |
| 4. Four syllables | | |
| CVCVCVCV | korokoro | 'dig' |
| CVCVCVV | movalio | 'go back home' |
| 5. Five syllables | - | |
| CVCVCVCV | kasomikatsə | 'healthy' |
| VCVCVCV | otipitipi | 'slap, beat' |
| CVCVCVCVV | karəðəraə | 'fontanel' |
| 6. Six syllables | | |
| CVCVCVCVCVCV | karanatənatə | 'palate' |
| | ka?apəpələŋə | 'doze off' |
| VCVCVCVCV | asavasavarə | 'young men' |
| 7. Seven syllables | | J 0 411-15 111-011 |
| VCVCVCVCVV | a?ono?onosa ə | 'lad, young boy' |
| CVCVCVCVCVCVV | kalavəŋəlanaə | 'spring' |

Intonation is another phonological area that needs further investigation, as I did not collect any data related to this topic. It contrasts undoubtedly in the following pair of (and similar) examples: a-?oŋol-aə! 'Don't drink (Imperative)' vs. a-?oŋol-aə 'drink (Objective nominalization)' but I did not attempt at all to represent any intonation contours.

2.3 Major morphophonemic alternations

There are a number of morphophonemic alternations in Mantauran which all result from the affixation of a morpheme in a word. They include: (i) vowel deletion (§2.3.1);

(ii) an anticipatory (leftward) copying process ($\S2.3.2$); (iii) the alternation between **i/o** and **l** ($\S2.3.3$); (iv) the coalescence of the vocalic sequence **-oa-** into **o** (from earlier **-o-** insertion) in certain verbal stems ($\S2.3.4$), (v) haplology of identical segments ($\S2.3.5$); and (vi) glottal hopping ($\S2.3.6$).

2.3.1 Vowel deletion

As in Tanan Rukai (see Li 1973:56ff), vowel deletion is triggered by the attachment of a prefix or a suffix to the base (either a root or a stem). It involves the deletion of identical or non-identical vowels.

1) Vowel deletion following prefixation:

```
(2.16) a. ta \sim t- 'inalienable'
                          'black'
                                                                     'black(ness), black'
           -ətsəlanə
                                                   ta-ətsə anə
                          'father'
                                                   -t-ama
                                                                     'father'
but
           ama-
                                                                     'mother'
                          'mother'
                                                   -t-ina
           ina-
           omo-
                          'grandparent'
                                                   -t-omo
                                                                     'grandparent'
        b. la-~l-'plural'
                                                                     '(male) friends'12
           ivoko-
                          '(male) friend'
                                                   la-?ivoko-
           ahanə
                          'grandchild'
                                                   la-ahanə
                                                                     'grandchildren'
                                         cf. also
                                                   l-ahanə
and
           ina-
                          'mother'
                                                   l-iina-
                                                                     'mothers'
           omo-
                          'grandparent'
                                                   l-oomo-
                                                                     'grandparents'
```

2) Vowel deletion following suffixation, involving either the deletion of the last vowel of the base—usually an echo vowel as in (2.17)—or the first vowel of the suffix (2.18):

| (2.17) | a. kanə | 'eat' | ~ | kon-a! | 'Eat!' |
|--------|----------------|--------------|---|------------|------------------------|
| | ?oŋolo | 'drink' | ~ | ?oŋol-a! | 'Drink!' |
| | tipitipiti | 'slap, beat' | ~ | tipitip-a! | 'Slap, beat!' |
| but | ala | 'take' | ~ | al(a)-a! | 'Take!' |
| | pato?o | 'tell' | ~ | pato?o-a! | 'Tell!' |
| | kilisi | 'tighten' | ~ | kilisi-a! | 'Tighten (your belt)!' |

¹² The insertion of the glottal stop in this particular example is not well understood at this stage.

| (2.18) | aaə ~ a⋅ | ə ʻobjectiv | e nominaliza | tion' | |
|--------|------------------|----------------|--------------|---------------|---------------------------------|
| | a. om-iki | 'exist, be at' | ~ | a-iki-ə(-?o) | 'where are (you)?' |
| | | | and not* | a-iki-aə(-?o) | |
| | b. ?aŋato | 'brushwood' | ~ | ta-?aŋato-ə | 'woodshed' |
| | | | and not* | ta-?aŋato-aə | |
| | c. om-oa | ʻgoʻ | ~ | ta-oa-ə | 'place where (one) goes' |
| | | | and not* | ta-oa-aə | |
| but | d. om-iki | 'exist, be at' | ~ | kiki-aə | 'space' and not *kiki-ə |
| | | | ~ | ta-iki-aə | 'room' |
| | | | vs. | ta-iki-ə | 'the place whereis' |
| | | | and | to-ta-ikiki-ə | 'build a room/bed' |
| | | | | | (Lit.: 'build a place to stay') |

2.3.2 Anticipatory (leftward) copying process

There is an anticipatory (leftward) copying process triggered by the reduplication of a **i**Co syllabic sequence, whereby: (i) the second vowel of the CiCo-reduplicated string becomes **i** thus resulting in a CiCi-CiCo sequence, as in (2.19a-b); and (ii) the vowel o becomes **i** when the stem undergoes CV.V- reduplication, thus producing a **i**Cii-Co, as in (2.19c):

| (2.19) | a. to-alipoho | 'draw a head' | ~ | to-alipilipoho | 'draw heads' |
|--------|----------------------|------------------|---|------------------|----------------------------|
| | b. o-liho?o | 'know' | ~ | ?ailihiliho?o | 'watch' |
| | c. la-ma?-ivoko | '(male) friends' | ~ | la-ma?-ivi?ivoko | '(male) friends' |
| | d. ?ipaiso | 'make/get, | ~ | ?ipaisiiso | 'make/get, withdraw |
| | | withdraw money' | | | money (hab.) ¹³ |

2.3.3 Alternation between $i/o \sim l$

Li (1973 and 1977b) showed that glides (among other types of consonants) may alternate with liquids as a result of suffixation in many Formosan languages. Indeed, the suffixation of $-\mathbf{a}$ in imperative constructions or in derived nominals triggers the alternation between \mathbf{i} (occurring after \mathbf{a} and \mathbf{o} , thus triggering a phonetic glide $/\mathbf{j}$ /) and \mathbf{j} :

The forms given in (2.19) seem to represent more "archaic" forms. Informants also accepted **to-alipolipoho** 'draw heads', **?ailiholiho?o** 'watch', **lama?ivo?ivoko** '(male) friends' and **?ipaisoiso** 'make/get, withdraw money' as alternative forms (*cf.* §1.4.2).

| (2.20) | | Base | Gloss | | Imperative | Gloss |
|--------|----|-------------|-------------------|---|-----------------|-------------------------|
| | a. | okəlai | 'hang' | ~ | kəlal-a | 'Hang!' |
| | b. | olaŋai | 'buy' | ~ | loŋa[-a | 'Buy!' |
| | c. | poatsilai | 'water (flowers)' | ~ | poatsila[-a | 'Water (flowers)!' |
| | d. | topoi | 'make a fire' | ~ | topol-a | 'Make a fire!' |
| (2.21) | | Daga | Class | | Derived nominal | Gloss |
| (2.21) | | Base | Gloss | | | |
| | a. | okəlai | 'hang' | ~ | ta-kəlakəlal-aə | 'hanger' |
| | b. | olaŋai | 'buy' | ~ | a-laŋa[-aə | 'merchandise' |
| | | ta-laŋa[-aə | 'store' | | | |
| | c. | mamamai | '(one)self' | ~ | ni-kamamal-a | 'even if(one)self' |
| | d. | poatsilai | 'water (flowers)' | ~ | ta-poatsilal-aə | 'paddy field' |
| | e. | atsilai | 'water' | ~ | atsilal-aə | 'pond' |
| | f. | pahai | 'rice' | ~ | kala-pahal-aə | 'harvest season (rice)' |
| | g. | ?aolai | 'male' | ~ | ?aola[-a-naə | 'groom's family' |

The suffixation of -a in imperative constructions or in derived nominals also triggers the alternation between \mathbf{o} (occurring after \mathbf{a} , thus triggering a phonetic glide $/\mathbf{w}/$) and $|\cdot|$:

| (2.22) | | Base | Gloss | | Imperative | Gloss |
|--------|----|----------|---------|---|-----------------------|-------------|
| | a. | maavanao | 'bathe' | ~ | maavanal-a | 'bathe!' |
| | b. | o-?ənao | 'wash' | ~ | ?əna[-a ¹⁴ | 'wash!' |
| | | | | ~ | ta?əna?ənalaə | 'washboard' |

2.3.4 Coalescence

Certain verbs occurring in the subjunctive (see §6.1 for details on verbal alternations) display an apparent alternation between $\bf a$ and $\bf o$. They are characterized by the fact that they either start with the low vowel $/\bf a/$, as in **amace** 'bring' or their first syllable contains $/\bf a/$, as in **kane** 'eat'. Comparative data shows that an epenthetic $/-\bf o-/$ (> Tona and Tanan $-\bf w-$) was inserted in these types of verbs, the vocalic sequence (cf. $-\bf oa-$) coalesced into $\bf o$ in Mantauran (cf. §2.2), triggering the apparent "alternation" between $\bf a$ and $\bf o$.

```
(2.23) a. o-aha'a 'cook' ~ oha'-a 'Cook!'
b. o-amətsə 'bring' ~ oməts-a 'Bring!'
c. o-kanə 'eat' ~ kon-a 'Eat!'
d. o-laŋai 'buy' ~ loŋal-a! 'Buy!'
```

¹⁴ **?ənao-a** was given as an alternative form.

```
(2.24) Tona
a. wakanə 'eat' ~ kwanə 'Eat!'
b. walaŋai 'buy' ~ lwaŋaa! 'Buy!'
```

A few verbs do not undergo the **-o-** insertion, e.g. **pato?o** 'tell', **?aovaovaha** 'speak'.

2.3.5 Haplology

Two identical syllables coalesce as a result of haplology. This phenomenon was first noticed by Li (1977b) on the historical level (2.25). Haplology is also evidenced by synchronic data: when two circumfixes co-occur together or if part of a circumfix is identical to the base it attaches to, one of the identical parts is deleted (2.26).

```
(2.25) Li (1977a:29)
       Proto-Rukai
                         Hypothetical (1)
                                              Hypothetical (2)
                                                                     Mantauran
                                                                                   Gloss
       *boso?o
                         *vo?o?o*
                                              vo?o-Ø
                                                                     vo?o
                                                                                   'bow'
       *toko?oso
                         *toko?o?o*
                                              toko?o-Ø
                                                                     toko?o
                                                                                   'chest'
(2.26) a. maatali-...-le/-lo 'N floor' + ma-...-lo 'tens' > maatali-ma-...-le/-lo
          ma-valo-lo
                       'eighty'
                                       maatali-ma-valo-lo
                                                              'eighty-storeyed (house)'
                                       *maatali-ma-va[o-lo-lo
                        and not
       b. maka-...-le/-lo 'up to/for N (time)' + ma-...-lo 'tens' > maka-ma-...-le/-lo
                                       maka-ma-lima-lə '(for) fifty (days)'
          ma-lima -lə 'fifty'
                                       *maka-ma-lima-lə-lə
                        and not
```

2.3.6 Glottal hopping

The term "glottal hopping" is used to refer to the change of the position of the glottal stop within a word. After having given evidence for the phonemic status of the glottal stop in Mantauran (*cf.* §2.3.6.1), I mention four different cases of affixation triggering glottal hopping (*cf.* §2.3.6.2~2.3.6.5). In §2.3.6.6, I list cases where glottal hopping does not occur. In §2.3.6.7, generalizations are captured and explanations provided.

2.3.6.1 More on the phonemic status of the glottal stop

The phonemic status of the glottal stop is well established. It occurs in initial and medial positions before any vowel:

| (2.27) | a. | ?olipotso | 'unwrap' | VS. | olipotso | 'wrap' |
|--------|----|------------------|---------------|-----|----------|----------------|
| | b. | ?alo | 'person name' | VS. | alo | 'bee, honey' |
| | c. | ?iko | 'tail' | vs. | iki | 'exist, be at' |
| | d. | ?əkai | 'worm' | vs. | ərai | 'blood' |

It also occurs intervocalically:

```
(2.28) a. ka?olo
                       'commoner'
                                                  kaolo
                                                            'hoe'
                                          vs
       h ða?ana
                      'house'
                                                  ?aanə
                                                             'noon'
                                          vs.
       c. ana?i
                      'that'
                                                             'who'
                                          vs.
                                                  aangai
       d. ia?ə
                       'yes'
                                                  iaə
                                                            Ή,
                                          vs.
```

Sequences such as $2V_12V_{1/2}$, whereby the second vowel can be identical or distinct from the first, are also found, though they are rare. They include: 2i2ias (a bird name), a19292 'nit', 2020 'wash (one's) hair'.

2.3.6.2 Prefixation triggering apparent *rightward* glottal hopping in *word-initial* position

The prefix **a-** attaches to [+common, +human] nouns to indicate plurality. The base usually undergoes reduplication unless it attaches to a lexicalized reduplicated root (*cf.* §3.2.2).

```
(2.29) a. tamatama
                      'middle aged-man'
                                               a-tamatama
                                                               'middle-aged men'
       b. tomotomo
                      'old (wo)man'
                                               a-tomotomo
                                                               'old (wo)men'
       c. valovalo
                      'young woman'
                                              a-va|ova|o
                                                               'young women'
       d. savarə
                      'young man'
                                               a-savasavarə
                                                               'young men'
```

The prefixation of **a-** causes the glottal stop occurring in word-initial position as onset to move rightward:

```
(2.30) a. ?avai 'girl, female, woman' ~ a?ivivai 'girls, females, women' b. ?aolai 'boy, male, man' ~ a?olalai 'boys, males, men'
```

In (2.30a), note the irregular reduplication pattern, cf. vi instead of the expected syllable **va and the insertion of i after the glottal stop. In (2.30b), note the correspondence between Mantauran ?aolai 'boy, male, man' and Budai saovalaj, showing three attested sound changes in the former dialect: PR *s > MT ?; PR *v > MT \emptyset and PR *oa > MT o.

The prefix ?i- has several functions. It might indicate a passive (2.31a), or entail

such meanings as (i) "wear, put on" (2.31b), (ii) "gather" (2.31c) or "look for" (2.31d):¹⁵

```
(2.31) a. kanə 'eat' ~ ?i-kanə 'be eaten'
b. kipiŋi 'clothes' ~ ?i-kipiŋi 'put on clothes'
c. pahai 'rice' ~ ?i-pahai 'harvest rice'
d. ooma 'field' ~ ?i-omoomoma 'look for (new) fields (to cultivate)'
```

The prefixation of **?i-** causes the glottal stop occurring in word-initial position to move rightward:

2.3.6.3 Prefixation triggering apparent *leftward* glottal hopping in *word-initial* position

Unlike the above example, the prefixation of **?i-** in (2.33) causes the glottal stop occurring in word-initial position to *apparently* move leftward:

| (2.33) | a. | ?аŋэ?аŋэ | 'hurt' \sim and not | ?iaŋə?aŋə ∗?i?aŋə?aŋə | 'be/get hurt' |
|--------|----|----------|---------------------------|------------------------------|--------------------|
| | b. | ?onoro | 'cut hair' ~ and not | ?ionoro *?i?onoro | 'get an haircut' |
| | c. | ?aŋato | 'wood, brushwood' and not | ?iaŋato *?i?aŋato | 'gather brushwood' |
| | d. | ?o[a?a | 'snake' ~ and not | ?iola?ola?a *?i?ola?ola?a | 'look for snakes' |

The nominalizer ?a- derives an instrumental noun from a verb stem:

(2.34) a. o-tsəŋa?a 'drive in a nail' ~ ?a-tsəŋa-tsəŋa?a 'nail'
b. o-ða[i 'pave the floor with slate' ~ ?a-ða[i-ða[i 'floor, slate'
c. o-pana 'shoot' ~ ?a-pana 'arrow'
d. o-taŋətaŋə 'beat (with a board)' ~ ?a-taŋətaŋə 'washboard'

It also causes the glottal stop occurring in word-initial position to *apparently* move leftward:

¹⁵ There are two different origins for the prefix **?i-**: (i) it can come from PR *si- 'wear, put on', or from PR *ki- '(i) obtain -N/(ii) passive'.

```
?aəna?ənao
                                                                  'washing powder'
(2.35) a. o-?ənao
                       'wash (clothes)'
                                                 *?a?əna?ənao
                                      and not
                                                 ?aoðooðooðo
       b. o-?oðooðo
                      'mop (the floor)'
                                                                  'mop'
                                                 *?i?oðooðooðo
                                      and not
                                                 ?aosarisario
       c. o-?osario
                                                                  'tov'
                       'play'
                                                 *?i?osarisario
                                      and not
```

The prefix **?ini-** followed by Ca-reduplication indicates "reflexivity":

```
(2.36) a. tsolo 'kill a pig' ~ ?ini-tsa-tsolo 'kill a pig oneself'
b. patə?ətə 'kill (sb)' ~ ?ini-pa-patə?ətə 'kill oneself'
c. kaðalamə 'love (sb)' ~ ?ini-ka-kaðalamə 'love oneself'
```

When this prefix attaches to a base with a glottal stop as onset, it causes the glottal stop occurring in word-medial position in the derived word to move leftward.

```
(2.37) a. ?okoloŏo 'be frightened' ~ ?ini?aokoloŏo 'to frighten oneself' and not *?ini?a?okoloŏo

b. ?onoro 'cut hair' ~ ?ini?aonoro 'cut one own hair'

and not *?ini?a?onoro
```

2.3.6.4 Circumfixation triggering apparent *rightward* glottal hopping in *word-final* position

Nominalization in Mantauran is a very productive and fairly predictable derivational process cf. §7.1). The circumfixation of two nominalizers, (a-)...-aə 'objective nominalization' and ta-...-aə 'locative nominalization', causes glottal hopping, as further shown below.

The circumfix (a-)...-aa derives a verb into its object counterpart. There is a distinction between dynamic verbs, which are circumfixed by a-...-aa, and stative verbs which just take ...-aa. Note in these examples the deletion of the last vowel of the base after the suffixation with vowel-initial morpheme.

```
(2.38) a. o-alopo
                         'hunt'
                                           a-lop-aə
                                                           'game'
       b. o-vələtə
                         'pile up'
                                           a-vələt-aə
                                                           'wall'
                                          ka-ðalam-aə
       c. ma-ðalamə
                         'like, love'
                                                           'the loved one'
       d. ma-səkələ
                         'angry'
                                           ka-səkə]-aə
                                                           'the one engendering anger'
```

Locative nominalization (which implies that "X is the place where Y did/does something")

usually manifests itself through the circumfixation of ta-...-(a) to the verb base.

```
(2.39) a. o-?avolo
                         'bury'
                                        ~ ta-?avo-?avol-aə
                                                                'tomb'
       b. m-o?alo
                         'draw water'
                                            ta-o?alo-?alo-ə
                                                                'well'
       c. ma-ətsələnə
                        'black'
                                        ~ ta-ka-ətsə[aŋ-aə
                                                                'dirt' (Lit.: 'dark spot')
       d. ma-takola
                         'bad'
                                            ta-ka-tako]-aə
                                                                'disadvantage'
```

As shown in the following examples, the circumfixation of (a-)...-aə and ta-...-(a)ə to the base causes the glottal stop occurring in word-final position to move rightward and triggers the "break-up" of the morpheme -aə.

```
(2.40) a. o-sərasəra?a 'cut band to make a patchwork' ~ asərasəraa?ə
                                                                           'patchwork'
                                                  and not
                                                            *asarasəra?aə
       b. o-liho?o
                      'know'
                                          ki-lihoa?ə-li '(what) I do not know'
                               and not
                                          *ki-liho?aə-li
(2.41) a. ma-taaði?i 'good'
                                          takataaðia?ə 'advantage'
                               and not
                                          *takataaði?aa
       b. iði?i
                                          taiðia?ə
                      'stand'
                                                         'place where (one) stands'
                               and not
                                          *taiði?aa
                                 ~
                                          tatsovoa?ə
       c. tsovo?o
                      'sugarcane'
                                                         'place where sugarcane (grows)'
                                          *tatsovo?a>
                               and not
```

2.3.6.5 Change of verb stem triggering apparent *rightward* glottal hopping in *word-final* position

Mantauran is characterized by a rich verbal morphology. Verbs undergo different morpho-phonological alternations depending on whether they are dynamic or stative and whether they occur as finite, non-finite or subjunctive (*cf.* §6.1). Subjunctive verbs beginning with a syllable containing /a/ usually undergo an alternation between a and o (*cf.* §2.3.4).

```
(2.42) Dyn./Fin. Dyn./Subj. Gloss
a. o-kanə ~ konə 'eat'
b. o-laŋai ~ loŋai 'buy'
```

The change of a verb form as subjunctive or non-finite causes the glottal stop to move **rightward** in word-final position:

(2.43) Realis/finite Subjunctive Non-finite Gloss o-va?ai voa?i vaa?i 'give'

Compare these forms in the following examples:

- (2.44) a. o-va?ai-ŋa-la-inə paiso ŏipolo
 Dyn.Fin-give-already-1S.Nom-3S.Obl money Dhipolo
 'I have given money to Dhipolo'
 - b. lo m-iki-ða a-kana-kan-aə
 if Dyn.Subj-exist-3S.Gen ObjNmz-Red-Dyn.NFin:eat-ObjNmz
 mani oa voa?i la-a-lakə-ða...
 then Dyn.NFin:go Dyn.Subj:give child-plur-child-3S.Gen
 'If he had food, he would give some to his children...'
 - c. ðona ?a taka-taka mani ?o-lisaisi that Red-older sibling Top then take off-bracelet ?aði-ða mani vaa?i pa-?i-lisaisi Dyn.NFin:give younger sibling-3S.Gen Caus-wear-bracelet then 'The eldest sister then took off her bracelet and gave it to her younger sister to wear.'
 - d. mani vaa?-inamə pakisa taləkə ...
 then Dyn.NFin:give-1PE.Obl plain food
 'Then the (local government) gave us food...'
 - e. mani vaa?-iliŏə.... then Dyn.NFin:give-3P.Obl 'Then they were given...'
 - f. amo-vaa?i-na-inomə ŏona?i vəkənələ...
 Irr-Dyn.NFin:give-1PE.Nom-2P.Obl that land
 'We will give you that land...'

2.3.6.6 Absence of glottal hopping

It has been shown above that in Mantauran the glottal stop apparently moves rightward or leftward in word-initial, -medial and -final positions after a word has undergone affixation. In the following examples, glottal hopping does not take place.

In (2.45)-(2.46), the circumfixation of **a-...-aə** 'objective nominalization' does not produce glottal hopping.

(2.45) Stem Gloss Nominalized form Gloss

?onolo 'drink' a?ono?onolaə '(a) drink'

and not *?aono?onolaə

(2.46) kana-ni a-va?a[-aə-?-inamə pava[olo what-3S.Gen ObjNmz-Dyn.NFin:give-ObjNmz-2S.Gen-1PE.Obl dowry 'What will you give us as dowry?'

In (2.47), the verb occurs in the subjunctive form (imperative) but this alternation does not trigger glottal hopping either.

(2.47) a. vo?a[-a-iaə pa-ka-əa pa-?atsakəlaə ðona Dyn.Subj:give-Imp-1S.Obl Caus-Stat.NFin-one that Caus-marry lalakə-?o! child-2S.Gen 'Give me one of your children (i.e. daughter) to marry!' b. *voa?i-a-iaə pa-ka-əa pa-?atsakəlaə **Ž**ona Dyn.Subj:give-Imp-1S.Obl Caus-Stat.NFin-one Caus-marry that lalakə-?o! child-2S.Gen

The examples below show that the verb **va?ai** 'give' exhibits two non-finite and two subjunctive forms. When and why glottal hopping occurs in these different examples remains to be accounted for.

| (2.48) | Realis/finite | Subjunctive | Non-finite | Gloss |
|--------|---------------|-------------|------------|--------|
| | o-va?ai | voa?i | vaa?i | 'give' |
| | | vo?al- | va?al- | 'give' |

Even more intriguing is the non-occurrence of glottal hopping in (2.49a) and (2.49b), which contrasts with (2.49a') and (2.49b') and poses a challenge to any explanatory analysis. In (2.49a), the root is circumfixed by the locative nominalizer **ta-...a9** to form a derived nominal, whereas in (2.49b) the locative meaning is obtained through (i) the reduplication of the base and (ii) the suffixation of **-a9**.

| (2.49) | a. | o-sə?əsə?ə | ` / | tasə?əsə?aə 'place (where the sun) rises' *tasə?əsəa?ə |
|--------|-----|-------------|-----|--|
| vs. | a'. | m-orələhə?ə | | taorələhələhə?a 'place where rituals are hold' *taorələhələhə?aə |
| | b. | ?ola?a | | ?o[a?o[a?aa 'place where there are snakes' *?o[a?o[aa?a |
| vs. | b'. | aha?a | | taahahaa?ə 'kitchen' *taahaha?aə |

2.3.6.7 Generalizations and explanations

A number of generalizations can be made.

- 1) Glottal hopping is found only in morphologically derived contexts (i.e. it is induced by affixation), but *not* in the lexicon.
- 2) It might induce the "break-up" of a morpheme boundary in final position, e.g. **takataaðia?ə** 'advantage' (< **kataaði?i** 'good'). Two counter-examples were given, which I cannot account for at this point, *cf.* (2.49a-b).
- 3) It usually happens when a glottal stop occurs between either a high vowel $\langle \mathbf{o} \rangle$ or $\langle \mathbf{i} \rangle$ (less frequently $\langle \mathbf{o} \rangle$) and the low vowel $\langle \mathbf{a} \rangle$.
- 4) Glottal hopping might simultaneously occur with another common process, whereby the final vowel of the stem is deleted when attached by a vowel-initial suffix.

A straightforward solution to glottal hopping would be to propose that it results from epenthesis. This is not the case, however.

An analysis invoking deletion fails somehow to capture the contrast in (2.50a-b) and (2.51a-b):

In (2.51a-b), both roots begin with a glottal stop and are prefixed by ?i-. However, the glottal stop is deleted in (2.51a), while it is preserved in (2.50b) and there is no way to account for the (non-)appearance of the glottal stop in these examples.

Alternatively, the surface alternation of the glottal segment can be treated as the result of a process of metathesis that inverts the order of a glottal stop and the adjacent low vowel /a/. This inversion induces four possible situations, schematically represented in (2.52a-d), depending on the segment (either a consonant or a vowel) following the low vowel and the segment undergoing glottal hopping, and occurs in word-initial or word-final position.

```
(2.52) A. Word-initial position
        a. ?V-?aC
                              ?V-a?C
                                                  ?V-a C
                       \rightarrow
        b. ?V-?aV
                              ?V-a?V
                                                  ?V-a?V
                        \rightarrow
        B. Word-final position
        c. V?V-aə
                              V?-aə
                                                  Va?-ə
                       \rightarrow
        d. V?VV
                              VV?V
```

In the first scenario, the glottal stop is placed before another consonant. It is deleted since neither word-final codas nor complex onsets are allowed in Mantauran.

In the second scenario, the inverted glottal stop is followed by a vowel; hence it is realized as the onset of the following nucleus.

$$(2.54)$$
 /?i-?aələ?ələnə/ \rightarrow ?i-a?ələ?ələnə \rightarrow ?ia?ələ?ələnə

In the third, the glottal stop is inverted with the first vowel of the suffix after the deletion of the last vowel of the base.

$$(2.55) /ki-liho?o-aə(-li)/ \rightarrow ki-liho?-aə(-li) \rightarrow ki-lihoa?-a(-li)$$

In the last, the vowel and the glottal stop also undergo inversion.

$$(2.56)$$
 /o-va?ai/ \rightarrow va?ai \rightarrow vaa?i

Though glottal hopping was treated as applying in rightward and leftward position in sections 2.3.6.2~2.3.6.5, these four scenarios show that the glottal stop *only* moves *rightward*.

There appears to be a morphophonemic factor, whereby the word-final high vowel becomes a lateral retroflex before /a/, (cf. §2.3.3), that blocks metathesis from applying in certain forms (cf. voa?i 'give (Subj)' vs. vo?a[-a 'give (Imp)' and vaa?i 'give (NFin)' vs. a-va?a[-aə 'give (ObjNmz)'), in other words, the variations between these surface forms seem to result from the blocking effect of morphophonemic alternation.

2.4 Remaining problems

There are a number of exceptional phonological processes going on in Mantauran, which require an account I am unable to offer at this stage.

2.4.1 The epenthetic vowel -a-

An epenthetic vowel -a- seems to be inserted in (2.57a):

| (2.57) | a. | ?aolai | 'male, man, boy' | ~ and not | ?aola[-a-naə *?aolai-naə | 'groom's family' |
|----------|----|--------|-----------------------|--------------|-----------------------------|--------------------------|
| but | b. | ?avai | 'female, woman, girl' | ~ and not | ?avai-naə *?ava[-a-naə | 'bride's family' |
| cf. also | c. | mənə | 'now, day' | \sim and | mən-a-naə mənə-naə | 'day, time' 'which day?' |

I am actually not too sure whether -a- should be treated as an epenthetic vowel in (2.57a) because -a also represents a suffix that attaches to temporal/locative nouns and can be glossed as 'beyond (in time or space)', cf. dha?anə 'house' ~ ða?an-a-naə '(one) household', hololo 'mountain' ~ holol-a-naə '(one) mountain', mənə 'now, today' ~ mən-a-naə '(one) day'. On the other hand, if we do not do so, there is no way to account for the contrast between ?aolalanaə 'groom's family' as opposed to ?avainaə 'bride's family'.

2.4.2 Irregular forms

Irregular forms after the prefixation of the plural marker **a-** include:

```
(2.58) a. ?avai
                    'female, girl, woman'
                                             ~ a-?ivivai
                                                             'females, girls, women'
                    'baby, child'
                                                             'children'
       b. loolai
                                             ~ a-o|olai
       c. ka?olo
                    'commoner'
                                             ~ a-oka?olo
                                                             'commoners'
       d. titina
                    'middle-aged woman'
                                             ~ a-itina
                                                             'middle-aged women'
(2.59)
          to-?avai 'give birth to a girl'
                                             ~ to-a?iivai
                                                             'give birth to girls'
```

2.5 Orthographic system

The present section presents a brief review on the orthographic systems of the Formosan languages that led to the orthographic system agreed upon Mantauran Rukai and has been adopted in the present study.

2.5.1 Brief retrospective

Different writing systems (alphabetic, syllabic and logographic) have been adapted to transcribe the Formosan languages during the past four hundred years. Four stages can be distinguished that reflect the history of Taiwan, the last of which is, by far, the most complex:

(1) Dutch colonization (1629-1661): the Roman alphabet was first introduced in

Taiwan to record primarily Siraya and Favorlang.

- (2) Chinese colonization (1661-1895): many land contracts, songs, and place or family names were transcribed in Chinese characters; the phonetic value of these Chinese characters is somewhat complex, sometimes referring to Mandarin Chinese and at other times to the Minnan pronunciation.
- (3) Japanese colonization (1895-1945): At that time, Taiwan was a Japanese colony. Aboriginal children were enrolled in schools (up to age 12) and learned Japanese, so they were able, in later years, to transcribe their own language in Katakana.
- (4) Post-1945: With the arrival of the Nationalist Chinese under the leadership of Chiang Kai-shek, the Chinese government imposed Mandarin Chinese as the sole official language. The Zhuyin Fuhao system, more popularly known as Bopomofo, was introduced and used in textbooks, dictionaries etc. At one time, it was also used to transcribe the Formosan languages (e.g. the Bible, songs and textbooks). Bopomofo consists of 37 symbols derived from Chinese characters, and some of these symbols were slightly altered to convey sounds recorded in the Formosan languages that are not found in Chinese. Different writing systems (all Romanized) were devised by the Catholic and the Protestant missionaries and used during the same period. The lack of adherence to common principles had the unfortunate consequence of producing different writing systems for different tribes. In 1991, Prof. Li Jen-kuei (cf. Li 1992) was asked by the Ministry of Education of Taiwan to devise writing systems for the Formosan languages and proposed different solutions (e.g. replacing IPA symbols such as η with a capital letter N or with two symbols, ng). In 2002, linguists were asked by the Council of [Taiwan] Indigenous Peoples, Executive Yuan, to work in collaboration with each tribe according to their individual expertise and finalize the orthographic system(s) of all the aboriginal languages of Taiwan. This has also led to a variety of Romanized systems that have tried to improve on the Romanization systems of the Catholic and Protestant churches while taking into account Li's (1992) recommendations.

2.5.2 Orthographic system adopted in this book

The following chart shows the correspondence between the orthographic system adopted in this study and the Mantauran phonemes and their actual phonetic representation. It follows the orthographic system that has been adopted by the Rukai since 2002—officially promulgated December 15, 2005—and is now in common use. This is the orthographic system I will use henceforth.

Table 2.9: Orthographic system

| Phoneme | Orthographic character | Phonetic representation |
|--------------|------------------------|---|
| / p / | р | [p] in all environments |
| /t/ | t | [t] in all environments |
| / k / | k | [k] in all environments |
| /?/ | , | [?] in all environments |
| / m / | m | [m] in all environments |
| / n / | n | [n] in all environments |
| / ŋ / | ng | [ŋ] in all environments |
| /s/ | S | [s] in all environments except before the high vowel /i/ |
| | | [ʃ] before the high vowel / i / |
| / h / | h | [h] in all environments |
| / v / | v | [v] in all environments |
| / ð / | dh | [ð] in all environments |
| /ts/ | c | [ts] in all environments except before the high vowel /i/ |
| | | [t ∫] before the high vowel / i / |
| /1/ | 1 | [1] in all environments except before the high vowel /i/ |
| | | [1] before the high vowel /i/ |
| / l / | lr | [1] in all environments |
| / r / | r | [r] in all environments |
| / b / | b | [b] loan phoneme |
| / d / | d | [d] loan phoneme |
| / d / | dr | [d] loan phoneme |
| / z / | z | [z] loan phoneme |
| / a / | a | [a] in all environments |
| / i / | i | [i] in all environments except before /?/ and /a/ |
| | | [e] before [?] |
| / o / | 0 | [o] in all environments |
| /ə/ | e | [a] in all environments |
| / u / | u | [u] loan phoneme |

Chapter 3: Morphological Units and Morphological Processes

This chapter first explains the theoretical background underlying the study of Mantauran morphology (§3.1). It goes on to introduce major morphological units (§3.2) and to discuss four morphological processes: affixation (§3.3.1), stem modification (§3.3.2), reduplication (§3.3.3) and compounding (§3.3.4) as a backdrop for the study of nominal and verbal morphology in chapters 5 and 6 respectively. Word classes are examined in chapter 4.

3.1 Theoretical assumptions

Morphology deals with the study of word-structure: it needs to account for "a wide range of phenomena, from alternations in phonetic shape affecting units above the phoneme level to processes of word-compounding, and even syntactic properties of form classes or phrases" (Swiggers 1998:252).

For the past forty or fifty years, competing views regarding the notions of "morpheme" and "word" have been addressed in general linguistic theories. Debates have revolved around the lexical or grammatical status that should be attributed to morphemes as opposed to the weight to be given to the word and are deeply rooted in three major theoretical models: Morpheme-based morphology, Lexeme-based morphology and Word-based morphology.

The main theoretical assumptions that underlie each approach are briefly summarized in §3.1.1. In §3.1.2, I discuss my choice of the Morpheme-based morphology approach as the theoretical basis for the study of Mantauran Rukai. In §3.1.3, I show that Mantauran is a synthetic-agglutinative language with fusional traits.

3.1.1 A bird's-eye view of the history of morphological approaches

The Morpheme-based morphology is perhaps best represented by the two "structuralist" approaches: Item-and-Arrangement (IA) and Item-and-Process (IP). Bloomfield (1933) and Hockett (1954), as advocates of IA, viewed the morpheme as the most basic meaningful unit of a language. Words are accounted for as clusters of linearly-arranged morphemes which can be isolated and bear a semantic content. In IP, words are not analyzed as a set of morphemes arranged in a particular way but are treated as deriving through syntactic rules that alter earlier base forms.

IP gave rise to more generative-like models such as Lexeme-based morphology (*cf.* Williams 1981a-b, Selkirk 1982, Aronoff 1994 and Beard 1995 among others) which further contend that words display an internal structure and can be decomposed into a head and immediate constituents ordered in a hierarchical way.

Word-based morphology such as the Word-and-Paradigm (WP) approach, on the other hand, states that the word is regarded as "the unit that carries in its paradigmatic and syntagmatic associations the main weight of grammatical description" (Robins 1959:119) while morphemes are treated as "minimal grammatical units". As shown in Bender (1998:16), another major distinction is that WP does not distinguish different morphemes with the same shape, e.g. -er in English as in poor-er, do-er, New York-er, chat[t]-er. Rather, he treats them as a single formative carrying out different functions. Robins (1959:118-119) summarizes the distinction between his word-based model and the earlier IA and IP approaches as follows: "The salient difference between WP and both the other two models is the centrality it accords to the word as a fundamental unit in the grammar as a whole and as the basic unit of syntactic structure. IA and IP both start from the morpheme as the minimal grammatical element and also the basic syntactic unit, passing through the word as relatively unimportant..." The "seamless morphology" approach advocated by Ford et al. (1997) takes its roots in WP but goes a step further by rejecting the internal structure of words while treating morphology as residing "exclusively in differences exploited in more than one pair of words" (Neuvel & Singh 2002:318).

3.1.2 Morphological approach to Mantauran grammatical description

The Morpheme-based morphology approach has been regarded as inadequate as a model of grammatical description because there is not always a one-to-one correspondence between sound and meaning: a morpheme may not be semantically interpretable; it might convey two or more meanings while carrying out various morphosyntactic functions; a semantic unit may not be overtly expressed by a morpheme in a word or the same function might be represented by two or more different morphemes; last, but not least, a word might be indivisible though it contains different morphemes (see, among others, Bybee 1985 and Uhlenbeck 1992a-b, 1996 for criticisms of this theoretical model).

Despite these noticeable disclaimers, the segmentation of words into smaller units in Mantauran offers a number of advantages which are difficult to dismiss:

(i) it allows for the unified (or more transparent) treatment of the internal structure of words. Compare, for instance, the pairs of words presented in (3.1a-c):

```
(3.1) a. valrovalro 'young woman' ~ a-valrovalro 'young women' b. tamatama 'middle-aged man' ~ a-tamatama 'middle-aged men' c. savare 'young man' ~ a-sava-savare 'young men'
```

Why is the third example reduplicated in the plural, but the first two are not? The addition of the prefix **a-** 'plural' actually requires the noun to be reduplicated, as shown in the minimal pair contrast: **savare~a-savare**. That's because both **valrovalro** and **tamatama** represent lexicalized reduplicated roots and thus cannot undergo further reduplication when prefixed by **a-** (*cf.* §3.3.3.1 and §5.4.2).

(ii) it helps to account for the behavior of certain words: the Mantauran verb **tila!** 'Let's go, leave/get away' differs from **dhaace!** 'leave', for instance, in that **tila** cannot be preceded by a pronominal clitic, while **dhaace** 'leave' can. Compare the grammaticality of (3.2a-b):

(3.2) a. *ta-tila!

1PI.Nom-leave

b. ta-dhaace!

1PI.Nom-Dyn.NFin:leave 'Let's leave!'

One way to account for the ungrammaticality of *ta-tila is to posit that historically it represents the combination of the nominative pronoun ta- '1PI.Nom' and the verb ila 'go' (cf. Budai ila 'go') and thus disallows the re-cliticization of ta-'1PI.Nom' on this no-longer-divisible word form.

(iii) it facilitates the comparison between Mantauran and the other Rukai dialects on the one hand and the Formosan languages on the other as this approach underlies the descriptions of various Formosan languages, e.g. Pazeh (Blust 1999b, Li & Tsuchida 2001), Thao (Blust 2003b), Kavalan (Li & Tsuchida 2006), Paiwan (A. Chang 2006), Puyuma (Teng 2007) to cite but a few.

3.1.3 Agglutinative vs. fusional properties

In terms of morphological typology, Mantauran can be characterized as a synthetic-agglutinative language in that many words in a clause tend to be composed of a series of morphemes that can be easily identified. As an illustration, consider (3.3):

(3.3) o-ara-to-'apa'a dhona'i a-valrovalro voa'i

Dyn.Fin-only-produce-mat that plur-young woman Dyn.Subj:give
asavasavare-lidha pasopalra.
boyfriend(s)-3P.Gen Dyn.Subj:help

'Young women (could) only make mats and give them to their sweethearts to help them.'

It further displays fusional traits, whereby fusion can be treated as the result of the sound changes this dialect has undergone. In other words, Mantauran exhibits a relatively large quantity of affixes but while morpheme boundaries are usually clear, there are examples of morphemes being lumped together in such a way that they are difficult to segment, i.e. they constitute portmanteau morphemes. Instances of morphemes with clear-cut boundaries can be drawn from ex. (3.3), *cf.* **ara-** 'only', **to-** 'make, produce, build', **a-** 'plur'. The prefix **o-**, on the other hand, is a portmanteau morpheme: it indicates that a verb is dynamic and occurs in the matrix position (finite form); it also implies that the whole situation in which the event takes place is realized (realis) and that the verb is in the active voice. Other morpheme boundaries are more difficult to detect and the meaning of certain affixes is difficult to determine, as in the case of **dhona'i** 'that' < **dhona + 'i** and **pasopalra** 'help' < **pa-** 'Caus' + **so-** 'tribute' + **palra** 'spouse/relative'.

3.2 Morphological Units

This section includes a discussion on morphemes and allomorphs (§3.2.1), roots (§3.2.2), stems (§3.2.3), affixes (§3.2.4), clitics (§3.2.5) and words (§3.2.6).

3.2.1 Morphemes and allomorphs

A morpheme represents the minimal meaningful unit of a language and includes roots, affixes and clitics.

A distinction must be made between "independent" (or free) vs. "dependent" (or bound) and between "lexical" vs. "grammatical" morphemes.

Non-dependent morphemes include: (i) lexical items such as **tomotomo** 'old person/old (wo)man', **ta'olro** 'dog', or **kane** 'eat'; and (ii) function (or grammatical) words like **mani** 'then' or **la** 'and', which occur freely. Dependent morphemes consist of affixes, clitics and bound (lexical and grammatical) roots, all of which cannot occur as independent words: affixes (e.g. **a-** 'plural') and clitics (e.g. **-lrao** '1S.Nom') must be attached to a base, either a root (*cf. a-*tomotomo 'old persons/old (wo)men'), a stem (*cf.* **a-sava-savare** 'young men') or a phrase (*cf.* **o-kane-***lrao* 'I eat'); lexical bound roots such as **-valre** 'smelly' or **ama-** 'father' must occur with an affix (*cf.* **ma-valre** 'smelly', **ama-li** 'my father'); grammatical bound roots must also appear with an affix (*cf.* **alaka-i** 'because').

Lexical and grammatical morphemes share different phonotactic and morphological properties, because they fulfill distinctive functions. Lexical morphemes (i.e. free and bound lexical roots) are usually disyllabic, trisyllabic or quadrisyllabic, typically CVCV(CVCV), e.g. **ka.ne** 'eat', 'o.ngo.lo 'drink', ve.nge.ve.nge 'roll into, encircle'.

They bear stress (e.g. **sávare** 'young man') and can undergo various morphological processes, most commonly affixation and reduplication, as in: **á-sava-savàre** 'young men'. Grammatical morphemes (i.e. functions words, clitics and affixes) are most commonly monosyllabic or disyllabic, e.g. function words: **la** 'and', **mani** 'then', clitics: **-li** 'my/Gen', **-lrao** 'I/1S.Nom', affixes: **to-** 'produce, build', **tali-** 'belong to/originate from'. In Mantauran, only prefixes influence stress, *cf.* **títina** 'middle-aged woman' > **áitina** 'middle-aged women'. Grammatical morphemes can be subject to affixation or to reduplication, but such processes occur under very restricted conditions. For instance, while demonstrative pronouns such as **'ina** 'this', **ana** 'that (+vis)', **dhona** 'that (-vis)' can be suffixed with **-lo**, to mark plurality, *cf.* **'ina-lo** 'these', **ana-lo** 'those (+vis)', **dhona-lo** 'those (-vis)', their morphosyntactic distribution is less free than adnominal demonstratives, that never occur with any affix (*cf.* §10.1.3 and §10.2). Certain prefixes can be reduplicated, *cf.* **to-dha'ane** 'build a house' > **'ini-ta-to-dha'ane** 'build a house oneself'; but other types of affixes, clitics and function words never are.

There are different types of allomorphs in Mantauran, which will be discussed in the course of this grammar. Three examples are given as a short illustration below.

The marking of objective nominalization of (prototypical) dynamic verbs (as opposed to that of stative verbs) can be treated as an instance of grammatically conditioned allomorphy. The circumfix **a-...-ae** is used to obtain the nominalization of dynamic verbs, e.g. **kane** 'eat' > **a-kan-ae** 'which is eaten, food', '**ongolo** 'drink' > **a-'ongol-ae** 'which is drunk, drink (n.)'. This circumfix surfaces as **-ae**, when attached to stative verb roots, which are prefixed with the non-finite stative marker **ka-**, e.g. **ka-dhalame** 'love, like' > **ka-dhalam-ae** 'who/which is loved', **ka-sekelre** 'angry at' > **ka-sekelr-ae** 'whom anger is directed at, object of anger' (cf. §7.1).

A case of lexically conditioned allomorphy involves the formation of plural common nouns that refer to humans. To form the plural of such nouns, e.g. **valrovalro** 'young woman', **tamatama** 'middle-aged man', the prefix **a-** is attached to the root (or the stem), thus yielding forms like **a-valrovalro** 'young women', **a-tamatama** 'middle-aged men'. The plural for the word **lalake** 'child' is different. It surfaces as: **la-a-lake** 'children' (see §5.4.2).

There is a rather complex case of suppletion involving the word **-lili** '(female) friend' in relation to its vocative (3.4a) and non-vocative (3.4b-c) usage and singular (3.4b) as opposed to plural (3.4c) marking which will be further discussed in §5.3.1.3.

In most other Formosan languages (e.g., Tsou, Seediq), it is the suffix that causes stress shift. Compare: Tsou émi 'wine' with me-émi 'make wine' and ámo 'father' with amó-'u 'my father'.

(3.4) a. *lili-l*-imia'e, amo-pato'o-lra-imia'e. (< lili-li) (female) friend-1S.Gen-2S.Obl Irr-Dyn.NFin:tell-1S.Nom-2S.Obl *Lit.*: 'You are my friend, I will tell you.'

b. lamae! amo-pato'o-lra-imia'e.

(female) friend (+voc.)

'(My) friend, I will tell you.'

b'. *lili-li! amo-pato'o-lra-imia'e.

(female) friend Irr-Dyn.NFin:tell-1S.Nom-2S.Obl

c. *laidhae* amo-pato'o-lra-inome.

plur:(female) friend (+voc) Irr-Dyn.NFin:tell-1S.Nom-2P.Obl

'(My) friends, I will tell you'

c'. *lamae amo-pato'o-lra-inome.
plur:(female) friend Irr-Dyn.NFin:tell-1S.Nom-2P.Obl

3.2.2 Roots

Roots consist of a single, underived morpheme. They divide into free roots, e.g. **amece** 'take', **dha'olo** 'rain', **ecenge** 'grasp', **irovo** 'pile up', **kacia** 'scissors', **lamolai** 'story', **ocao** 'person' etc. and bound roots which cannot appear unaffixed. For instance, **-dhi'i** 'good' cannot appear independently and must be affixed, as in **ma-taa-dhi'i** 'good' (*Lit.*: 'Stat-?-good') and **to-dhi'i** 'put away' (*Lit.*: 'do-good').

Morphologically subcategorized bound roots include nearly all stative verbs, color terms, two sets of kinship terms used for reference and a set of numerals from one to nine distinct from the set of numerals used in serial counting. Stative verb roots need to be prefixed with **ka-/ma-** 'stative' and these derived stems can undergo further derivations (e.g. causativization, imperativization etc.) (see §6.1.1.2). Color terms can be prefixed by **ta-** to form a noun, or by a verbal prefix, most commonly **ma-** (~ka-) 'stative' (see §4.1.2). The first set of kinship terms, *cf.* -tama 'father', -tina 'mother', -tomo 'grandparent', -kaka 'elder sibling', occurs only in so-called reciprocal constructions, e.g. lama'atama 'father and son', the second, *cf.* ama- 'father', ina- 'mother', omo- 'grandparent', kaka- 'elder sibling', must be suffixed with a genitive pronoun expressing possession, e.g. ama-li 'my father' (see §5.3.1). Numerals can be used with a verbal prefix, e.g. ma- (~ka-) 'stative', to- 'make, produce, build', ordinal prefixes, e.g. 'aka- 'the Nth' or numeral classifiers, e.g. matara- 'take, catch, get' (see §9.1.2). Some of these bound roots are listed in table 3.1.

Table 3.1: Examples of lexical bound roots in Mantauran

| | Bound root | Gloss | Derived stem | Gloss |
|----------------|-------------|---------------------------|----------------|------------------------------|
| | -ateleke | 'cold' | ma-ateleke | '(be) cold' |
| | -ca'eme | 'ill' | ma-ca'eme | '(be) ill' |
| | -dhao | 'many' | ma-dhao | '(be) many' |
| | -ereke | 'disgusted' | ma-ereke | '(be) disgusted' |
| | -kecelre | 'cold' (weather) | ma-kecelre | '(be) cold' |
| | -lameke | 'decomposed' | ma-lameke | '(be) decomposed' |
| Stative verbs | -lrihili | 'clever' | ma-lrihili | '(be) clever' |
| Stative verus | -ngeta | 'raw' | ma-ngeta | '(be) raw' |
| | -opongo | 'bored, upset' | ma-opongo | '(be) bored, upset' |
| | -rikoco | 'busy' | ma-rikoco | '(be) busy' |
| | -si'i | 'small, few' | ma-si'i | '(be) small, few' |
| | -vare'e | 'tired' | ma-vare'e | '(be) tired' |
| | -'ino | 'embarrassed' | ma-'ino | '(be) embarrassed' |
| | -sangedha'a | 'long' | 'o-sangedha'a | '(be) long' 17 |
| | -poli | 'white' | ta-poli | 'white' |
| | | | ma-poli | 'be white' |
| | -ecelrange | 'black' | ta-ecelrange | 'black' |
| | | | ma-ecelrange | 'be black' |
| Color terms | -dhiliange | 'red' | ta-dhiliange | 'red' |
| | | | ma-dhiliange | 'be red' |
| | -vala'ava'a | 'yellow' | ta-vala'ava'a | 'yellow' |
| | | | ma-vala'ava'a | 'be yellow' |
| | -'aleke'eke | 'green/blue' | ta-'aleke'eke | 'green/blue' |
| | | (0.4) | ma-'aleke'eke | 'be green/blue' |
| | -tama | 'father' | (la-)ma'a-tama | 'father and child' |
| Kin terms (I) | -tina | 'mother' | (la-)ma'a-tina | 'mother and child' |
| | -tomo | 'grandfather/grandmother' | (la-)ma'a-tomo | 'grandparent and grandchild' |
| | -kaka | 'older sibling' | (la-)ma'a-kaka | 'siblings' |
| | ama- | 'father' | ama-li | 'my father' |
| Kin terms (II) | ina- | 'mother' | ina-li | 'my mother' |
| | omo- | 'grandfather/grandmother' | omo-li | 'my grandfather/grandmother' |
| | kaka- | 'older sibling' | kaka-li | 'my older sibling' |
| | -(ea)ea | 'one' | ma-(ea)ea | '(be) one' |
| | -dho'a | 'two' | ma-dho'a | '(be) two' |
| | -tolro | 'three' | ma-tolro | '(be) three' |
| Nivers and 1- | -'epate | 'four' | ma-'epate | '(be) four' |
| Numerals | -lrima | 'five' | ma-lrima | '(be) five' |
| | -eneme | 'six' | ma-eneme | '(be) six' |
| | -pito | 'seven' | ma-pito | '(be) seven' |
| | -valro | 'eight' | ma-valro | '(be) eight' |
| | -vangate | 'nine' | ma-vangate | '(be) nine' |

_

To my knowledge, this is the only stative verb formed with a prefix 'o-.

3.2.3 Stems

Stems represent derived roots, though derived roots can be identical in form to roots. Both **pato'o** 'tell' and **okane** 'eat' are examples of stems. The first is also a root, but can be used as such in an utterance because its form is invariable, *cf. pato'o-*lra-imia'e 'I told you'. The second is further decomposed into a root **kane** 'eat' and a verbal prefix **o-**, as shown in the contrast between: *o-kane-*nga-lrao [Dyn.Fin-eat-already-1S.Nom] 'I have already eaten' *vs.* mani *kane-*lrao... [then Dyn.NFin:eat-1S.Nom] 'Then I ate...'.

It is sometimes rather difficult to distinguish roots from stems in Mantauran. So-called "roots" might actually contain an affix that is no further divisible because it has become fossilized and is no longer productively used. The word **'oponoho** 'self-reference (to the Mantauran people and/or to the place they live)' is indivisible from a synchronic point of view. Historically, though, it is derived from the prefixation of **'o-** (< PR *swa-'from') to the base ponoho (< PR *ponogo 'place name').

Another case involves the two roots **valrovalro** 'young woman' and **savare** 'young man' and their derived stems **avalrovalro** and **asavasavare**. Both roots can be prefixed with **a-** to indicate plurality, *cf.* **a-valrovalro** 'young women' and **a-sava-savare** 'young men'. This new base, however, when followed by a genitive pronominal suffix as in **avalrovalro-li** 'my girlfriend(s)' or **asavasavare-'o** 'your boyfriend(s)', constitutes an indivisible word: it is rather difficult to interpret **a-** as a marker of plurality, as the whole phrase might refer to one person in particular as in (3.5a) or many persons as in (3.5b):

(3.5) a. la dhona'i 'aolai a-lriho'o-dha "om-oa Dyn.Fin-go and that male ClsNmz-Dyn.NFin:know-3S.Gen avalrovalro-li" m-ia, ooma mani girlfriend-1S.Gen field Dyn.Subj-so then Dyn.NFin:go lolodho m-o-idhe ta'onae. Dyn.Subj-go-3S.Obl Dyn.Subj:follow hut 'When the man knew that his girlfriend was going to the field, he followed her to the hut.'

b. **olo taro-maidhai-dha maava'i avalrovalro-dha...**if persons in mvt-many-3S.Gen Dyn.Subj:come girlfriend-3S.Gen
'If many of his girlfriends came....'

Two reasons can be advanced to explain the lexicalization of **a-valrovalro** 'young women' and **a-sava-savare** 'young men' into **avalrovalro** 'girlfriend(s)' and **asavasavare** 'boyfriend(s)'. The first is linguistic, and the second anthropological. From a linguistic

point of view, it is not rare among the world's languages to employ a plural as a polite form, *cf.* the distinction in French between **tu** 'you (sg)' and **vous** 'you (pl)'. Though that might account for the data at hand, I tend to think that the answer has to be sought in the social organization of the Mantauran, in which there was no recognition of one's (unique) girlfriend or boyfriend. Instead, young men and women met in groups and were chaperoned by elders (see Zeitoun & Lin 2003). The terms "young women-Gen"/ "young men-Gen" referred to a group of "girls" or "boys", rendering opaque the question of who was whose girlfriend/boyfriend before later being used to refer to a specific and unique person.

In the course of this grammar, I shall be using the term 'base' to refer to classes of words that undergo similar morphological processes (e.g. affixation, reduplication etc.) and include both roots and stems, whenever a fine-grained distinction between the two is necessary.

3.2.4 Affixes

Affixes form a closed class of bound morphemes, both phonologically and morphosyntactically. It has been shown in §3.2.1 that only prefixes have an influence on stress, *cf.* támatàma 'middle-aged man' > á-tamatàma 'middle-aged men'.

There are three main types of productive affixes in Mantauran: prefixes (3.6a), suffixes (3.6b) and circumfixes (3.6c), though prefixes significantly outnumber the two other types of affixes. Circumfixes are distinguished from combinations of affixes (3.6d) in that they form a single affix, i.e. neither part can appear independently of the other (cf. appendix 1 for a list of affixes). Mantauran displays only one infix, viz. $\langle in \rangle$. Its meaning is opaque and its usage is extremely limited. It has been found in only one instance, cf. $c\langle in \rangle$ ekelae 'villager(s)' ($\langle cekelae 'all'^{18} \rangle$) and in combination with another affix, cf. $k\langle in \rangle$ a-...-ae 'more and more' (cf. §6.7).

```
(3.6) a. Prefixation
                     'clothes' \rightarrow
                                     'i-kipingi
                                                      'wear, put on clothes'
         kipingi
                                                      < 'i- 'wear'
      b. Suffixation
          'avai
                     'female'
                                                     'bride's family'
                                      'avai-nae
                                                     < -nae 'LocNmz (on nominal bases)'

    c. Circumfixation

                                                             'whose hat?'
         tolropongo 'hat'
                                      ki-tolropong-ae
                                                             < ki-...-ae 'whose'
```

¹⁸ The term **cekel(e)** means 'village' in all the other Rukai dialects.

d. Combination of two affixes
 valrio 'village' → ta-i-valri-valri-ae 'resting time, week-end'
 < ta-..-ae 'LocNmz' + i- 'at'

3.2.5 Clitics

Clitics are distinguished from affixes in that they are not selective of their hosts. Affixes, on the contrary, exhibit a high degree of selection with respect to the roots/stems they attach to (Zwicky 1985).

One major class of clitics in Mantauran is composed of pronouns (both personal and impersonal pronouns) to be further discussed in sections 10.1.1 and 10.1.2.

Example (3.7) shows that in Mantauran, clitics, e.g. -iae¹⁹ '1S.Obl' or -ine '3S.Obl' can appear on either sequential verbs, 'atoloro 'so' or madhiliange 'red' in (3.7a-b) and pasopalra 'help' or cekale 'stand up' in (3.7a'-b').

- (3.7) a. ma-vo'oko-lrao 'atolor-iae ma-dhiliange maca-li.
 Stat.Fin-drunk-1S.Nom so-1S.Obl Stat.Fin-red eye-1S.Gen
 'I am drunk so my eyes are red.'
 - pasopalr-ine 'n a'. o-lravele taotao lalake-ni mani child-3S.Gen help-3S.Obl Dyn.Fin-slip Taotao then takanao cekale Takanao Dyn.Subj:stand up 'Taotao's child slipped and Takanao helped him to stand up.'
 - b. ma-vo'oko-lrao 'atoloro ma-dhiliang-iae maca-li.
 Stat.Fin-drunk-1S.Nom so Stat.Fin-red-1S.Obl eye-1S.Gen
 'I am drunk so my eyes are red.'
 - b'. o-lravele taotao lalake-ni mani pasopalra takanao Dyn.Fin-slip Taotao child-3S.Gen then help Takanao cekal-ine.

Dyn.Subj:stand up-3S.Obl

'Taotao's child slipped and Takanao helped him to stand up.'

Clitics are distinguished in terms of their relative position at either the beginning or end of a word and in terms of their relationship with the constituent they attach to. Proclitics occur at the beginning of a word (or a phrase/clause), while enclitics (as in the case of **-ine** '3S.Obl') appear at the end of it. Mantauran only exhibits three pronominal

_

¹⁹ Clitics are usually distinguished from affixes through the use of the sign =. As mentioned previously (see glossing conventions on p. xvii), no attempt at a written distinction between clitics and affixes is made here.

proclitics, nao- '1S.Nom' (3.8a), ta- '1PI.Nom' (3.8b) and nai- '1PE.Nom'.

(3.8) a. *nao-*'apece.

1S.Nom-Dyn.NFin:sleep 'I want to sleep.'

b. ta-dhaace!

1PI.Nom-Dyn.NFin:leave 'Let's go!'

Proclitics contrast with prefixes in that they never bear stress and do not have any incidence on stress, as prefixes do. Compare (3.9a-b):

(3.9) a. *nao-*káne.

1S.Nom-Dyn.NFin:eat 'I want to eat.'

b. ámo-kane-lrao.

Irr-Dyn.NFin:eat-1S.Nom 'I will eat.'

3.2.6 Words

A morphological word is a unit equal to a root, a stem (a root in combination with one or more affixes) or a reduplicated stem, with stress usually falling on the first syllable. A word may contain up to three prefixes (3.10) and one or two suffixes (3.11), including circumfixes or combined affixes, though no more than four affixes in total are found in a single word.

- (3.10) a. **-dhao** '(be) many' ~ **a-ka-dhao-nga(-dha)** 'when (they) were many' ClsNmz-Stat.NFin-many-already(-3S.Gen)
 - b. **-rodhange** '(be) old' ~ **ta-ka-a-rodhange** '(those) who are old' SubjNmz-Stat.NFin-plur-old
- (3.11) a. **Iriho'o** 'know' ~ **o-Iriho'o-na-ka(-i)** '(s/he) still does not know' Dyn.Fin-know-still-Neg(-3S.Gen)
 - b. **mene** 'today, now' ~ **men-a-nae** '(one) day' day-beyond-TempNmz

3.3 Morphological processes

This section introduces the four morphological processes in Mantauran of affixation, stem modification, reduplication and compounding, the first three being more productive than the last one.

Incorporation—whereby the direct object forms a compound with the verb resulting in the reorganization of argument structure and the interpretation of the incorporated nominal argument as generic or indefinite—is not further discussed as it has not been detected in Mantauran Rukai.

3.3.1 Affixation

In the recent literature on Formosan languages, different terms have been used to refer to identical forms that are prefixed to serialized verbs. Tsuchida (2000) refers to this phenomenon as "prefix harmony", Blust (2003b) as "affix echoing" and Adelaar (2004) as "anticipating sequences". "Prefix harmony" has been reported so far in only four Formosan languages, including Tsou (Tsuchida 1990), Bunun (Nojima 1996), Thao (Blust 2003b) and Siraya (Tsuchida 2000; Adelaar 1997 and 2004).

In Mantauran, this phenomenon is not productive, though worth mentioning. Only one prefix, *cf.* **to-** 'make, produce, build', yields 'prefix harmony'. It attaches to nouns and numerals to form denominal and denumeral²⁰ verbs.

'Prefix harmony' is compulsory if the sequence **to-**+Num is followed or preceded by a denominal verb that relates to 'producing, making, building', e.g. **to-alake** 'give birth' (*Lit*. 'produce child'), as in (3.12a-b).

```
(3.12) a. to-dho'a-lrao to-alake. produce-two-1S.Nom produce-child 'I have two children.' (Lit.: 'I gave birth to two children.')
```

a'. to-alake-lrao to-dho'a.

produce-child-1S.Nom produce-two

'I have two children.' (Lit.: 'I gave birth to two children.')

If the numeral is preceded by another verbal prefix, e.g. **ma-** 'stative', the sequence **ma-**+Num cannot be followed by a denominal verb but by a nominal argument, *cf.* (3.13a-3.13b):

-

²⁰ I owe this term to Byron Bender.

(3.13) a. *ma-dho'a-lrao to-alake.
Stat.Fin-two-1S.Nom produce-child

b. ma-dho'a-lrao O-lalake.
Stat.Fin-two-1S.Nom
'I have two children.'

The sequence **to-**+Num can be followed by another verb other than a denominal verb denoting production, but in that latter case, the second verb cannot be prefixed by **to-**.

| (3.14) a. | to-dho'a-lra-ine | voa'i | kamosia. |
|-----------|---|--|-------------------|
| | produce-two-1S.Nom-3S.Gen 'I give him/her two candies.' | Dyn.Subj:give | sweet |
| b. | * to-dho'a-lra-ine produce-two-1S.Nom-3S.Gen | <i>to-va'ai</i> produce-Dyn.NFin:give | kamosia. sweet |

In Mantauran, only a few prefixes derive from an independent verb. They include:

| (3.15) | | Prefix | Gloss | Related verb | Gloss |
|--------|----|--------|--------|--------------|---------------|
| | a. | 'ali- | 'from' | 'aliki | '(come) from' |
| | b. | 'ira- | 'for' | 'iraki | '(do) for' |
| | c. | to'a- | 'with' | to'araki | 'use' |

On the other hand, a number of lexical affixes exhibit verbal alternations (*cf.* §6.1) identical to those of verbs (most notably $\mathbf{o} \sim \emptyset$ and $\mathbf{m} \sim \mathbf{p}$). For instance:

| (3.16) | | | Non-finite form | Finite form | Gloss |
|--------|----|----|-----------------|-------------|----------------------------|
| | A. | a. | ara- | o-ara- | 'just, only' |
| | | b. | 'ara- | o-'ara- | 'early, in advance' |
| | | c. | ka'ale | o-ka'ale | 'a number of (containers)' |
| | B. | a. | paa- | maa- | 'each other' |
| | | b. | paaraka- | maaraka- | 'each' |
| | | c. | pati- | mati- | 'well, very, completely' |

Note that in **kapa-** 'continuously', it is the **p-** occurring in the second syllable that alternates with **m-**, *cf.* **kapa-ka-dhao-dhao** 'always many, a lot'.

3.3.2 Stem modification

Verbs in Mantauran divide into two major categories, dynamic vs. stative verbs. Verbal bases undergo three major alternations (finite, non-finite and subjunctive), depending on their relative position in the sentence and their being affixed or not: finite dynamic verbs are usually marked by **o**- (3.17a) while finite stative verbs are prefixed by **ma**- (3.17b). Non-finite dynamic verbs are zero-marked (3.18a), whereas non-finite stative verbs are prefixed by **ka**- (3.18b). Subjunctive dynamic verbs are generally unmarked (3.19a), unless the first vowel of the root is /a/ (there is an a~o alternation, cf. §2.3.4) (3.19b); stative verbs are prefixed by **ma**- (3.19c). Verbal stem modification is discussed in detail in §6.1.2.

- (3.17) a. *o*-va'ai-nga-na-inome dhona'i vekenelre.

 Dyn.Fin-give-already-1PE.Nom-2P.Obl that land

 'We already gave you that/those land(s).'
 - b. *ma*-olripi-na-ka-i 'ina'i vaha-nai 'oponoho.
 Stat.Fin-disappear-still-Neg-3S.Gen this language-1PE.Gen Mantauran
 'Our language has not disappeared yet.'
- (3.18) a. amo-vaa'i-na-inome dhona'i vekenelre...

 Irr-Dyn.NFin:give-1PE.Nom-2P.Obl that land

 'We will give you that/those land(s)...'
 - b. *amo-ka-*olripi 'ina'i vaha-nai 'oponoho.

 Irr-Stat.NFin-disappear this language-1PE.Gen Mantauran
 'Our language will disappear.'
- (3.19) a. **lo** *lriho'o-*li **ako-'oponoh-ae vaha...**if Dyn.Subj:know-1S.Gen speak-Mantauran-speak language
 'If I knew how to speak Mantauran...'
 - b. *vo'alr*-a-iname dhona'i vekenelre! (< o-va'ai 'give')

 Dyn.Subj:give-Imp-1PE.Obl that land

 'Give us that/those land(s).'
 - c. lo ma-olripi-ni 'ina'i vaha-nai 'oponoho...

 if Stat.Subj-disappear-3S.Gen this language-1PE.Gen Mantauran

 'If our language disappears...'

3.3.3 Reduplication

Marantz (1982:437) defines reduplication as a "morphological process relating the base form of a morpheme or stem to a derived form that may be analyzed as being constructed from the base via the affixation (or infixation) of phonemic material which is necessarily identical in whole or in part to the phonemic content of the base form." For the sake of convenience, I shall stick to this definition in the discussion of reduplication in Mantauran.

Mantauran displays a large array of reduplication patterns—which apply more productively to verbs than to nouns—and a few instances of triplication. Whether a base undergoes reduplication or triplication, only two syllables can be reduplicated *at most*.²¹

For ease of exposition, the following subsections deal with these different *patterns* of reduplication which are distinguished from *structures* of reduplication. A pattern only refers to one type of reduplication, while a single underlying structure can subsume different patterns of reduplication which perform the same (or similar) functions. Patterns of reduplication that will be discussed include: lexicalized reduplication (§3.3.3.1), CV-reduplication (§3.3.3.2), Ca-reduplication (§3.3.3.3), CVCV- (or disyllabic reduplication) (§3.3.3.4), CV.V-reduplication (§3.3.3.5) and rightward reduplication (§3.3.3.6). Triplication is discussed in §3.3.3.7. As will become clear below, on the synchronic level, two main *structures* of reduplication in Mantauran can be distinguished: monosyllabic (or partial) reduplication (which subsumes CV- and Ca-reduplication) and disyllabic (or foot) reduplication (which subsumes CVCV-reduplication, CV.V-reduplication, and rightward reduplication).

3.3.3.1 Lexicalized reduplication

Lexicalized reduplication refers to historically reduplicated disyllables. These reduplicated forms are usually characterized by the fact that:

1) They have no attested simplex counterparts:

(3.20) a. valrovalro 'young woman' (<*valro) (<*vele)
(3.21) a. o-hisihisi 'saw' (<*o-hisi) (<*o-kelrange) c. o-moromoro 'rinse (one's mouth)' (<*o-moro)

²¹ This constraint applies cross-linguistically to all the Formosan languages, as has been shown in Blust (2003b) and Zeitoun & Wu (2006).

```
d. o-pangepange
                           'blossom'
                                                        (<*o-pange)
                           'cover with a cloth'
e. o-petepete
                                                        (<*o-pete)
                           'fry'
f. o-ringiringi
                                                        (<*o-ringi)
                           'rinse'
g. o-savesave
                                                        (<*o-save)
h. o-vengevenge
                           'roll into, encircle'
                                                        (<*o-venge)
i. o-ve'eve'e
                           'windy'
                                                        (<*o-ve'e)
```

2) They can undergo quite productively the same reduplicated patterns, e.g. CVCV-reduplication as in (3.22a-e) and Ca-reduplication, as in (3.22a'-b') as other words do.

```
(3.22) a. o-kelra-kelrakelrange
                                           'beat (often), keep on beating'
       a'. 'ini-ka-kelrakelrange
                                           'beat oneself'
                                           '(often) roll (into)/encircle'
       b. o-venge-vengevenge
       b'. 'ini-va-vengevenge
                                           'encircle oneself'
                                           'windy place'
                                                             (ta-...-ae 'LocNmz')
       c. ta-ve'e-ve'eve'-ae
       d. 'a-hisi-hisihisi
                                           'saw'
                                                             (< 'a- 'InstNmz')
       e. 'a-moro-moromoro
                                           'toothpaste, toothbrush'
```

I also classify among lexicalized reduplication terms used as:

- 1) Generic reference for humans such as **tamatama** 'middle-aged man' as well as their derived verbal counterparts, e.g. **ma-tamatama** 'be a middle-aged man'. The word **tamatama** 'middle-aged man' is historically derived from the kinship term **-tama** 'father' but it exhibits quite different morphosyntactic characteristics that make it a "whole" and no longer divisible entity: **tamatama** is a free lexical base, **-tama** is a bound root; **tamatama** can be prefixed by **a-** 'plural', **-tama** cannot; **tamatama** can further be verbalized as **ma-tamatama** 'be a middle-aged man' while such derivation is not possible for **-tama**, *cf.* ***ma-tama** (*cf.* §5.3.1).
- 2) Certain verbs which have a different (though related) lexical meaning from the original verb they derive from. Compare:

```
(3.23) a. o-dhaadhaace 'walk' ≠ o-dhaace 'leave' b. o-'ape'apece 'lie down' ≠ o-'apece 'sleep' c. om-alraalra 'greet' ≠ om-alra 'take'
```

3.3.3.2 CV-reduplication

CV reduplication involves the reduplication of the first syllable of a root. It is extremely rare in Mantauran and usually triggered by the occurrence of an affix, e.g. the plural marker **a-** in (3.24a) and the verbal prefix **apa'a-** 'reciprocal causative' in (3.24b).

```
(3.24) a. ma-oloho-nga 'grown up' ~ ma-a-lo-loho-nga 'all grown up' b. Irima 'five' ~ apa'a-lri-Irima 'five for each'
```

3.3.3.3 Ca-reduplication

Ca-reduplication (as defined by Blust 1998) refers to the copy of the first consonant of the root and the addition of a fixed vowel /a/ or the occurrence of /a/ if the word begins with a vowel. Whilst it is reported to be extremely productive in a fairly high number of Formosan languages (Amis, Thao, Saisiyat, Siraya, Pazeh, Puyuma, Atayal, Paiwan), it is always triggered by prefixation in Mantauran, e.g. 'ini-Ca-+ verb 'oneself' (3.25) and ma-Ca-+ verb 'reciprocal' (3.26). These are the only cases where affixes can also undergo reduplication, cf. the reduplication of ka- 'stative' in (3.25a) and to-'produce, make, build' in (3.25b).

```
(3.25) a. ma-dhalame 'like, love' ~ 'ini-<u>ka-</u>kadhalame 'like, love oneself' b. to-dha'ane 'build a house' ~ 'ini-<u>ta-</u>todha'ane 'build a house oneself'
```

(3.26) ma-ca-cengele 'see each other' ~ ma-ca-cenge-cengele 'see one another'

3.3.3.4 CVCV-reduplication

CVCV-reduplication refers to the copying of the first foot of the base. In case of disyllabic bases as in (3.27)-(3.29), the whole base is reduplicated, i.e. it undergoes "full" reduplication.

```
(3.27) a. tai
                           'taro'
                                           ~ tai-tai-e
                                                                    'a place full of taros'
                                                                    'three (or more) siblings'
       b. maa-to-'adhi 'two siblings'
                                           ~ ma-to-'adhi-'adhi
(3.28) a. o-lrodho
                        'mix'
                                           ~ o-lrodho-lrodho
                                                                    'be mixing'
                                                                    'keep on eating'
       b. o-kane
                        'eat'
                                           ~ o-kane-kane
                                                                    'be driving in a nail'
       c. o-cenga'a
                        'drive in a nail'
                                           ~ o-cenga-cenga'a
                                                                    'be carrying on back'
       d. o-odho
                        'carry on back'
                                           ~ o-'odho-'odho
                        'be white'
(3.29) a. ma-poli
                                              ma-poli-poli
                                                                    'be very white'
                        'be embarrassed'
       b. ma-'ino
                                              ma-'ino-'ino
                                                                    'be very embarrassed'
       c. ma-si'i
                        'small, few'
                                           ~ ma-si'i-si'i
                                                                    'be very small, few'
```

If CVCV-reduplication applies to tri- and quadri-syllabic roots, it copies the first two syllables, CVCV- or CV.V- (if the second syllable starts with a vowel), leaving out the last or last two syllables:

| (3.30) | a. lraodho | 'below' | ~ | tali- <i>lrao</i> -lraodho | 'Pingtung county' |
|--------|-------------------|-----------------|---|----------------------------|---------------------------|
| | b. savare | 'young man' | ~ | a-sava-savare | 'young men' |
| | c. vecenge | 'millet' | ~ | vece-veceng-ae | 'a place full of millet' |
| (3.31) | a. o-akame | 'roast' | ~ | o- <i>aka</i> -akame | 'be roasting' |
| | b. i-valrio | 'rest' | ~ | i- <i>valri</i> -valrio | 'rest (continuously)' |
| | c. to-ka'ange | 'fish' | ~ | to- <i>ka'a</i> -ka'ange | 'be fishing' |
| (3.32) | a. ma-lrakase | 'dislike, hate' | ~ | ma <i>-lraka</i> -lrakase | 'dislike, hate very much' |
| | b. ma-caleme | 'rotten' | ~ | ma-cale-caleme | '(completely) rotten' |
| | c. ma-ca'eme | ʻill' | ~ | ma-ca'e-ca'eme | 'very ill/often ill' |

CVCV-reduplication indicates plurality/collectivity in nouns, *cf.* (3.27) and (3.30). It conveys a progressive, continuative or repetitive meaning with dynamic verbs (3.28) and (3.31) and intensification with stative verbs (3.29)-(3.32).

CVCV-reduplication also refers to a plurality of participants in reciprocals both in co-occurrence with nouns (3.33) as well as dynamic and stative verbs (3.34):

```
(3.33) a. -taka 'older sibling' ~ la-ma'a-taka-taka 'three (or more) siblings' b. -tama 'father' ~ la-ma'a-tama-tama 'father and children'
```

- (3.34) a. ma-pa-pana 'shoot at each other' ~ ma-pa-pana 'shoot at one another'
 - b. ma'a-ka-'ino 'be embarrassed with each other' ~ ma'a-ka-'ino-'ino 'be embarrassed with one another'

It also frequently co-occurs with three types of nominalizers, **a-...-ae** 'objective nominalization' (3.35), **ta-...-ae** 'locative nominalization' (3.36) and '**a-** 'instrumental nominalization' (3.37).

| (3.35) | a. o-lrodho | 'mix' | ~ | a-lrodho-lrodh-ae | 'mixture' |
|--------|----------------------|-------------------|---|---|--------------|
| | b. o-kane | 'eat' | ~ | <i>a-</i> kane-kan- <i>ae</i> ²² | 'food' |
| (3.36) | a. o-kane | 'eat' | ~ | ta-kane-kan-ae | 'restaurant' |
| | b. o-dhomingi | 'whitewash' | ~ | ta-dhomi-dhoming-ae | 'wall' |
| | c. o-solate | 'study, write' | ~ | ta-sola-solat-ae | 'school' |
| (3.37) | a. o-cenga'a | 'drive in a nail' | ~ | 'a-cenga-cenga'a | 'nail' |
| | b. o-lrakipi | 'stick' | ~ | <i>'a-</i> lraki-lrakipi | 'glue' |
| | c. o-'ongolo | 'drink' | ~ | 'a-ongo-'ongolo | 'glass' |

²² Doublet form: **a-kana-kan-ae** 'food'.

-

3.3.3.5 CV.V-reduplication

CV.V-reduplication applies to disyllabic and trisyllabic roots. It usually copies the first two syllables but leaves out the second consonant, if any. CV.V-reduplication entails a diminutive (3.38a-b) or collective (3.38c) meaning in nouns, habitual or iterative aspect in dynamic verbs (3.39) and a comparative degree in stative verbs (3.40).

```
(3.38) a. dha'ane
                          'house'
                                                 dhaa-dha'ane
                                                                        'doll house'
        b. a'ivivai
                          'women'
                                                  a'iviivivai
                                                                        'little girls'
        c. aolrolai
                          'children'
                                                  aolroolrolai
                                                                        'a place full of children'
(3.39) a. o-dhodho'o
                          'pour water'
                                                 o-dhoo-dhodho'o
                                                                        'pour water (often)'
        b. o-lraikisi
                          'fish'
                                                 o-lraikiikisi
                                                                        'fish (often)'
        c. o-lredheke
                          'plant'
                                              ~ o-lredheedheke
                                                                        'plant (often)'
        d. o-akame
                          'roast'
                                                  o-akaakame
                                                                        'roast (often)'
(3.40) a. ma-dhalame
                          'like, love'
                                                 ma-dhaa-dhalame
                                                                        'like, love more'
        b. ma-si'i
                          '(be/have) a little' ~
                                                 ma-sii-si'i
                                                                        '(be/have) less'
                                                                        '(be) the cleverest'
        c. ma-lrihili
                          '(be) clever'
                                                  ma-lrii-lrihili-nga
```

3.3.3.6 Rightward reduplication

Rightward reduplication usually refers to the copy of the last two syllables of disyllabic (3.41) or trisyllabic (3.42) roots/stems.

```
(3.41) a. 'i-nga'ato 'gather brushwood'
                                                 'i-nga'ato-'ato
                                                                       'gather brushwood'
       b. saosi
                      'key, (to) lock'
                                                 ta-saosi-osi-e
                                                                       'lock'
       c. o-lingao
                      'wash (dishes)'
                                                 'a-lingao-ngao
                                                                       'washing liquid, sponge'
(3.42) a. masolria
                      'in turn'
                                                 masolria-lria
                                                                       'take turns'
       b. pato'o
                      'tell'
                                                 pato'o-to'o
                                                                       'teach'
       c. o-tamako 'smoke'
                                             ~ o-tamako-mako
                                                                       'smoke (often)'
                                                                       'running field'
       d. o-'osario 'play'
                                                 ta-'osari-sari-ae
```

3.3.3.7 Triplication

Blust (2001, 2003b) defines triplication as involving the reduplication of the same part or the totality of the root twice in a unitary process, e.g. Thao **apa** 'carry' > /**apa-apa-apa-n**/ [**apapápan**] 'be carried' (Blust 2003b:196). This term is to be distinguished from serial reduplication, which consists of the reduplication of a segment that has already been reduplicated (Blust 2001), e.g. Mantauran **ma-ta-tobi** 'cry for

each other' > ma-ta-tobi-tobi 'cry for one another'. Very few instances of triplication are found in Mantauran. They are listed in (3.43).

```
(3.43) a. mena-mena-menanae 'every day' < men-a-nae '(one) day'
b. laha-laha-lahane 'great grandchildren' < l(a)-ahane 'grandchildren'
c. kama-ka-vahe-vahe-vahe'e 'continuously tired' < ma-vahe'e 'tired'
```

3.3.4 Compounding

In Mantauran, the most (and perhaps sole?) productive pattern of compounding consists of two separate words that are linked in a lexical compound but in which each constituent remains phonologically separate. They are phonologically separate in that the two words in the compound preserve their original stress, e.g.: **óvale** 'body hair' + **kípingi** 'clothes' > **óvale kípingi** 'pull-over'. Katamba (1993:321) refers to this kind of compounds as "copulative compounds because they have two words which are coupled (or conjoined)."

In this section, I first examine two types of compounds (*cf.* simplex *vs.* complex compounds) and then discuss the head of the compound. In §11.1.2.3, compounds are distinguished from nominal complements on the syntactic level.

3.3.4.1 Simplex and complex compounds

Compounds might be simplex as in (3.44) or complex as in (3.46)-(3.49).

Simplex compounds are composed of two unaffixed words. The meaning of such compounds is usually straightforward, except in the case of (3.45), which is treated as a lexicalized compound.

| (3.44) | a. | body hair 'pull-over' | clothes |
|--------|----|-----------------------------------|--------------------|
| | b. | kipingi clothes 'uniform' | vanidho student |
| | c. | dha'olo rain 'rubber boots' | kavale shoe |
| | d. | koli'i sun 'sandals' | kavale shoe |

e. eneme noange milk cow 'cow milk'

f. eneme pania milk bottle 'feeding bottle'

g. kahongo sangepare belt car 'car seatbelt'

(3.45) **lelepe mavoroko** bean monkey 'green beans'

Complex compounds are made up of two nouns, one of which is usually derived through nominalization, e.g. locative nominalization as in (3.46) or objective nominalization as in (3.47). In (3.48a), the two bases are formally nouns, but the first is derived, *cf.* **ka-oca-ae** 'real/genuine person' < **ocao** 'person'. In (3.48b), **-ecelrange** is a bound root which is prefixed by **ta-** and thus functions as a noun.

(3.46) a. ta-se'ese'-ae koli'i
LocNmz-Dyn.NFin:rise-LocNmz sun
'east' (*Lit.*: 'place where the sun rises')

b. ta-valrilo-e koli'i LocNmz-Dyn.NFin:get down-LocNmz sun

'west' (Lit.: 'place where the sun goes down')

c. ta-pa-'ototalo-e molrae
LocNmz-Caus-Dyn.NFin:put away-LocNmz fabric
'cupboard' (*Lit.*: 'place where clothing is put away')

d. ta-pa-'ototalo-e solate
LocNmz-Caus-Dyn.NFin:put away-LocNmz paper/book
'schoolbag' (*Lit.*: 'place where papers/books are put away')

(3.47) a. **to-ngotoa-'e kipingi** produce-short-ObjNmz clothes 'short clothes forming a suit (including skirt and blouse)'

b. **a-pa-cenge-cengel-ae solate**ObjNmz-Caus-Dyn.NFin:Red-see-ObjNmz paper/book
'references' (*Lit.*: 'papers/books that are let to be looked at')

(3.48) a. ka-oca-ae kipingi

clothes genuine-person-genuine

'traditional clothes' (Lit.: 'clothes (worn) by aborigines')

b. ta-ecelrange kipingi

inal-black clothes

'black clothes' (i.e., 'that used to be worn by old persons')

In only few examples such as (3.49), the compound is made up of a combination of two or three separate complex words:

car

to-dhi'i paiso (3.49) a. ta-poa-poa

SubjNmz-Red-Dyn.NFin:put produce-good money

'bank' (Lit.: '(who) put away (one's) money')

b. ta-langa-langai aa'o sangepare

SubjNmz-Red-Dyn.NFin:sell vegetable

'delivery car' (Lit.: '(who) sells vegetables')

'adhamadhamai c. ta-pa-ka-tee-telek-ae

LocNmz-Caus-Stat.NFin-Red-cold-LocNmz Red:side dish

a-'ongol-ae

ObjNmz-Dvn.NFin:drink-ObjNmz

'refrigerator' (Lit.: 'place where dishes and drinks are kept cool')

Though any compound can be actually created (cf. for instance the occurrence of lamolai solate 'story book' (< lamolai 'story', solate 'paper, book'), 'aaico'ono solate 'diary' (< 'aico'ono 'remember, remembrance') in the newly edited Mantauran textbooks (2004)), compounding remains rather rare. As shown in the above examples, only nouns (or derived nominals) are found to fit such a construction. There are, however, two examples that seem to contradict this claim: in the following examples, aloalopo 'hunt/hunting' and pi'api'a 'make/making' could be analyzed as verbs. However, they function as derived nominals in these two examples:

(3.50) a. alo-alopo ta'olro

Red-Dyn.NFin:hunt dog

'hunting dog'

b. pi'a-pi'a alrace

Red-Dyn.NFin:make

name

'(government) officer' (Lit.: 'name making')

3.3.4.2 Nominal head in compounds

The head of a compound is not easy to identify because the ordering of the two nouns is rather free:

| (3.51) | a. | kipingi | ovale | ~ | ovale | kipingi |
|--------|----|------------|-----------|---|-----------|---------|
| | | clothes | body hair | | body hair | clothes |
| | | 'pullover' | , | | | |
| | b. | kavale | dha'olo | ~ | dha'olo | kavale |
| | | shoe | rain | | rain | shoe |
| | | 'rubber b | oots' | | | |

The only test that permits identification of the head is the following: the head noun cannot be coordinated while nouns not functioning as the head can. The coordination of compounds is illustrated in (3.52c)-(3.54c), with the head being underlined and the coordinated nouns into brackets.

| (3.52) | a. | ta-pa-'ototalo-e LocNmz-Caus-Dyn.NFin:put away-LocNmz 'a cupboard' | molrae fabric | | |
|--------|-----|--|-------------------------------------|------------------|------------------|
| 1 | b. | ta-pa-'ototalo-e LocNmz-Caus-Dyn.NFin:put away-LocNmz 'a schoolbag' | solate paper | | |
| , | c. | ta-pa-'ototalo-e LocNmz-Caus-Dyn.NFin:put away-LocNmz Lit.: '(a) place where clothing and papers are stored a But not: *'(a) cupboard and (a) school bag' | [molrae fabric away' | <i>la</i> and | solate] paper |
| ≠ (| c'. | ta-pa-'ototalo-e LocNmz-Caus-Dyn.NFin:put away-LocNmz ta-pa-'ototalo-e LocNmz-Caus-Dyn.NFin:put away-LocNmz '(a) cupboard and (a) school bag' | molrae fabric solate paper | <i>la</i> and | |

(3.53) a. **a-vea-vecah-ae**ObjNmz-Red-middle-ObjNmz 'middle/high school' ta-sola-solat-ae LocNmz-Red-Dyn.NFin:write-LocNmz

b. toalrai ta-sola-solat-ae
 big LocNmz-Red-Dyn.NFin:write-LocNmz
 'university'

A Grammar of Mantauran (Rukai)

c. [a-vea-vecah-ae la toalrai]
ObjNmz-Red-middle-ObjNmz and big

ta-sola-solat-ae

LocNmz-Red-Dyn.NFin:write-LocNmz 'middle/high school and university'

(3.54) a. **ta-se'ese'-ae koli'i**LocNmz-Dyn.NFin:rise-LocNmz sun
'east' (*Lit.*: 'place where the sun rises')

b. **ta-valrilo-e koli'i**LocNmz-Dyn.NFin:get down-LocNmz sun
'west' (*Lit.*: 'place where the sun goes down')

'east and west' (Lit.: 'place where the sun rises and where it goes down')

Chapter 4: Word Classes

This chapter presents an overview of major word classes of Mantauran. The syntactic behavior of these different lexical categories is further examined in chapters 10 through 16. It is sometimes difficult to draw a boundary between morphology and syntax and whenever such a distinction would have rendered opaque the data being analyzed, syntactic criteria have been included.

Eleven word classes can be distinguished in Mantauran, some of which comprise further subclasses: nouns, verbs, pronouns, demonstratives, numerals, adverb (there is only one adverb, *cf.* **toramoro** 'very'), phrasal, clausal and interclausal elements, exclamations and interjections.

Nouns and verbs constitute two open word classes. Pronouns, demonstratives, numerals, adverbs, phrasal, clausal and interclausal elements, exclamations and interjections are subsumed under closed word classes. Lexical categories such as "adjectives", "prepositions", "quantifiers", "manner/temporal adverbs", "interrogative" words are not postulated because these concepts are expressed through morphemes that belong to other well-defined categories, i.e. nouns and verbs, or through affixation. There are no attested auxiliary verbs in Mantauran, although the causative verb **o-poa** 'make' is undergoing a grammaticalization process that might result in its being used as an auxiliary verb in the future. There is no apparent system of case markers either.

The distinction between nouns and verbs, and their overlap in terms of categorial function is dealt with in §4.1. Section 4.2 introduces noun classes. Section 4.3 provides an overview of verb classes. It also discusses the absence of adjectives, prepositions, quantifiers, manner/temporal adverbs and further accounts for their treatment as verbs. Sections 4.4 through 4.11 provide an overview of closed classes, including the adverb **toramoro** 'very' (§4.4), pronouns (§4.5), demonstratives (§4.6), interrogative words (§4.7), numerals (§4.8), phrasal/clausal elements (§4.9), interclausal (§4.10) elements, exclamations and interjections (§4.11).

4.1 Morphological distinction between nouns and verbs and functional overlap

Mantauran has just two open word classes, noun and verb, which undergo a large array of derivations. These will be introduced in chapters 5 and 6 respectively. Formal distinctions between nouns and verbs are discussed in §4.1.1. Color terms, which can be treated as precategorial roots, are examined in §4.1.2.

4.1.1 Morphosyntactic criteria that distinguish verbs from nouns

The morphosyntactic resemblances between verbs and nouns in Formosan languages have been noticed by many scholars (e.g. Ferrell 1982, Starosta et al. 1982, Cauquelin 1991a-b, Ross 1995 among others) and have led to a questioning of the nominal nature of what apparently seem to be verbal sentences (Haudricourt 1979).

In Mantauran, the distinction between a verb and its nominal counterpart is, to some extent, easy to establish. Formal distinctions between these two categories include:

1. the modification of nouns by adnominal demonstratives:

| (4.1) a. | dhona'i | lalake |
|----------|--------------|--------|
| | that | child |
| | 'that child' | |
| b. | * dhona'i | pato'o |

that

2. the modification of verbs by the irrealis prefix **amo-** 'will' (4.2a) and the two "aspectual" suffixes **-nga** 'already' (4.2b) and **-na** 'still, yet' (4.2c).

| (4.2) a | a. | amo-pato'-imia'e Irr-Dyn.NFin:tell-2S.Obl 'Dhipolo will tell you' | dhipolo Dhipolo |
|---------|----|---|----------------------------|
| 1 | b. | pato'o-ng-imia'e Dyn.Fin:tell-already-2S.Obl 'Dhipolo has already told you' | dhipolo Dhipolo |
| (| c. | pato'o-n-imia'e Dyn.Fin:tell-still-2S.Obl 'Dhipolo is still telling you' | dhipolo. Dhipolo |

tell

Bare nouns cannot occur with such affixes, *cf.* (4.3a-c) unless they are marked as stative verbs through the prefixation of **ma-** or **ka-** (4.3a'-c').

| (4.3) | a. | * amo-savare | lalake-li. |
|-------|-----|---------------------------------|--------------|
| | | Irr-young man | child-1S.Gen |
| | a'. | amo- <i>ka</i> -savare | lalake-li. |
| | | Irr-Stat.NFin-young man | child-1S.Gen |
| | | 'My child will be a young man.' | |

b. *savare-nga lalake-li.
young man-already child-1S.Gen

but b'. ma-savare-nga lalake-li.

Stat.Fin-young man-already child-1S.Gen

'My child is already a young man.'

c. *savare-na lalake-li.
young man-still child-1S.Gen

but c'. ma-savare-na lalake-li.

Stat.Fin-young man-still child-1S.Gen

'My child is still a young man.'

3. the modification of verbs by **toramoro** 'very':

(4.4) a. toramoro ka ma-taadhi'i

very Lig Stat.Subj-good

'very good'

b. *toramoro ka valrovalro very Lig young woman

but b'. toramoro ka 'a-ka-valrovalro

very Lig MnNmz-Stat.NFin-young woman

'a very good/beautiful girl'

4. the negativization of verbs by the prefix **ki-** (modal negation):

(4.5) a. ki-kaava'i

Neg-Dyn.NFin:come

'did not/do not want to come'

b. *ki-tamatama

Neg-middle-aged man

These formal morphosyntactic distinctions are summarized in table 4.1.

| Table 4.1: Formal | morphosyntactic | distinctions | between | nouns and | verbs |
|-------------------|-----------------|--------------|---------|-----------|-------|
| | | | | | |

| | | Nouns | Verbs |
|--------------------------------|------|-------|-------|
| Morphological distinctions | | | |
| Can be followed or preceded by | | | |
| - modal/aspectual markers: | amo- | - | + |
| | -na | - | + |
| | -nga | - | + |
| - the modal negator: | ki- | - | + |
| Syntactic distinctions | | | |
| Can be modified by: | | | |
| - a demonstrative | | + | - |
| - toramoro 'very' | | - | + |

Nominalization and verbalization, i.e. change in lexical category, will be further discussed in chapter 7. The occurrence of nouns in predicate position is discussed in chapter 12.

4.1.2 Color terms as precategorial roots

Color terms are precategorial bound roots, i.e. "lexical bases which do not occur without further affixation or outside a compound in any syntactic function and from which items belonging to different morphological or syntactic categories (nouns and verbs, for example) can be derived, without there being clear evidence that one of the possible derivations from a given root is more basic than the other one(s)." (Himmelmann 2005a: 129).

There are only five color terms in Mantauran, **-dhiliange** 'red', **-ecelrange** 'black', **-poli** 'white', **-vala'ava'a** 'yellow', and **-'aleke'eke** 'green/blue', which function as nouns when prefixed by **ta-** 'inalienable'²³ (4.6) and as verbs when prefixed (among others) by **ma-** (~**ka-**) 'stative' (4.7):

- (4.6) olo poca'e-nai 'a to'araki-mao dhona'i if Dyn.Subj:embroider-1PE.Gen Top use-Impers.Nom that ta-ecelrange molrae.

 Inal-black fabric 'When we did embroidery, we (would) take (a piece) of black fabric.'
- (4.7) *ma-ecelrange* **dhona'i molrae.**Stat.Fin-black that fabric
 'This cloth is black.'

70

²³ I am following L. Sagart's suggestion (p.c) in treating ta- as 'inalienable'.

Table 4.2 provides the basic derivations of the Mantauran color terms.

Table 4.2: Mantauran color terms as precategorial bound roots

| Function | Affixation | red | black | white | yellow | green/blue |
|----------|---------------|-------------|-------------|--------|--------------|--------------|
| Noun | ta- | tadhiliange | taecelrange | tapoli | tavala'ava'a | ta'aleke'eke |
| Verb | ma- (stative) | madhiliange | maecelrange | mapoli | mavala'ava'a | ma'aleke'eke |

Tests to show that the sequence **ta-**+color term forms a noun include those given in §4.1.1: the stem **ta-**+color term can be preceded by a demonstrative (4.8a); it cannot be modified by aspectual/modal affixes (4.8b); it cannot be preceded by **ki-** (4.8c), but it can attract a genitive pronoun as it functions as the head of a nominal complement (4.8d).

(4.8) a. **om-alra-lrao ana ta-poli.**Dvn.Fin-take-1S.Nom that Inal-white

'I take the white (one).'

b. *ta-poli-na picingi-li.
Inal-white-still skin-1S.Gen

c. *ki-ta-poli ma-lrakas-iae.

Neg-Inal-white Stat.Fin-dislike-1S.Obl

d. **ta-poli-ni molrae.**Inal-white-3S.Gen fabric
'the white(ness) of the cloth.'

Compare with:

d'. **vila'a-ni dha'ane.** beside-3S.Gen house

'the side of the house'

Color terms can function as stative verbs when they are prefixed by **ma-** 'stative' (4.9a) or as dynamic verbs when they are prefixed by **to-** 'produce, make' (4.9b).

(4.9) a. **ma-poli picingi-li.** Stat.Fin-white skin-1S.Gen

'My skin is white.'

b. **mati-ka-ecelrange-ka-i, mati-to-ecelrang-a!** well-Stat.NFin-black-Neg-3S.Gen well-produce-black-Imp 'It is not black (enough). Make it blacker!'

Stative color verbs prefixed by **ka-** can further undergo causativization (further discussed in §8.1) as in (4.10) or nominalization (*cf.* §7.1) as in (4.11). Two nominalization patterns are found productively in relation to color terms: subjective nominalization, e.g. **takaecelrange** 'who/which is black', and locative nominalization, e.g. **takaecelrange** 'black spot, dirt' (4.11b). Note that the nominalized form **takaecelrange** in (4.11a) can be used as an equivalent to the noun **taecelrange** given in (4.11a').

(4.10) **o-poa tomolroro** *pa-ka-ecelrange* **dhona'i ali'i-dha.**Dyn.Fin-make Dyn.Subj:chew Caus-Stat.NFin-black that tooth-3S.Gen 'S/he chewed (a plant) to blacken his/her teeth.'

(4.11) a. **ki-kane-lrao dhona'i** *ta-ka-ecelrange*. Neg-Dyn.NFin:eat-1S.Nom that SubjNmz-Stat.NFin-black 'I won't eat the black one.'

- a'. **ki-kane-lrao dhona'i** *ta-ecelrange*.

 Neg-Dyn.NFin:eat-1S.Nom that Inal-black
 'I won't eat the black (one).'
- 'n b. mani alra-nai dha'e poa then Dyn.NFin:take-1PE.Nom mud Dyn.Subj:make lingao pi'amadhamalae Dyn.Subj:wash dishes first Dyn.Subj:take off ta-ka-ecelrang-ae... LocNmz-Stat.NFin-black-LocNmz

'We would use dirt to wash (the dishes) to first take off the dirt.'

The distinction between dark and light colors is only made through the prefixation of **mati-** 'very, well' (4.12a) and '**ako-**' barely' to the verbal stem.

- (4.12) a. mati-ka-poli dhona'i kipingi.
 very-Stat.NFin-white that clothes
 'That garment is very white.'
 - b. 'ako-ka-poli dhona'i kipingi.
 barely-Stat.NFin-white that clothes
 'That garment is creamy white.'

Table 4.3 provides all the derivations of the Mantauran color terms.

Function Affixation black white green/blue As tatadhiliange taecelrange tapoli tavala'ava'a ta'aleke'eke nouns 'red' 'black' white' 'vellow' 'green/blue' ma- (stative) madhiliange maecelrange mapoli mavala'ava'a ma'aleke'eke 'be red' be black' 'be white' 'be yellow' 'be green/blue' todhiliange tovalava'ava'a to'aleke'eke to- (produce) toecelrange topoli 'make red' 'make black' 'make white' 'make yellow' 'make green/blue' As verbs pa-kapakadhiliange pakaecelrange pakapoli pakavala'ava'a paka'aleke'eke 'make yellow' (causative) 'make red' make black' 'make white' 'make green/blue' matikadhiliange mati- 'very' matikaecelrange matikapoli matikavala'ava'a matika'aleke'eke dark red' very black' very white' dark yellow' 'dark green/blue' 'ako-'akokadhiliange 'akokapoli akokavala'ava'a 'akoka'aleke'eke 'akokaecelrange 'barely' 'light red, pink' barely black' barely white 'light yellow' 'light green/blue' ta-katakadhiliange takaecelrange takavala'ava'a As takapoli taka'aleke'eke derived (SubjNmz) 'which is red' which is black' which is white' 'which is yellow' 'which is green/blue' nominals ta-ka-...-ae takadhiliangae takaecelrangae takapolie takavala'avaa'e taka'aleke'ekae (LocNmz) 'red spot' 'black spot' white spot' 'yellow spot' 'green/blue spot'

Table 4.3 Mantauran color terms and their derivations

4.2 Nouns and noun classes

Nouns include the forms which function as the head of a nominal phrase or as the argument of a predicate/verb. Nouns can be subcategorized into two major subclasses: nouns (which further include underived and derived nominals) and pronouns.

Nominal morphology is discussed in chapter 5. In chapter 7, different nominalization processes are introduced. Chapter 10 deals with pronouns. The syntactic structure of noun (phrases) is described in chapter 11.

4.2.1 Nouns and nominals

Nouns divide into three major categories: (i) common nouns, e.g. **ta'olro** 'dog', **savare** 'young man'; (ii) locative nouns, e.g. **vila'a** 'beside' and temporal nouns, e.g. **mene** 'now, today'; and (iii) non-common nouns, e.g. **dhipolo** (girl's name).

These three classes further divide into subcategories based on the different derivational processes they can undergo. These processes include the marking of plurality, quantification ('each' vs. 'all') and (dual/plural) reciprocity, further discussed in chapter 5.

4.2.2 Absence of case markers

Nearly all Formosan languages possess a system of case markers (see among others Huang et al. 1998). They typically occur before the noun (or the noun phrase) and fulfill two functions, the first syntactic and the second semantic. Syntactically, they indicate

the syntactic role of the noun (or noun phrase) they precede; semantically, they encode distinctions between personal vs. non-personal/common nouns, singular vs. plural nouns, referential vs. non-referential nouns and/or visible/near vs. non-visible/far-away participants. The first of these distinctions, i.e. personal vs. non-personal/common nouns, is certainly the commonest among the Formosan languages, with the exception of Tsou. While case markers referring to personal nouns are generally suffixed with -i, the vowels -o~u or -a appear on case markers referring to common nouns (Blust 1977, Y. Chang et al. 1998). The other three distinctions are less prototypical: plurality is marked on case markers through the suffixation of -a in Amis and Paiwan and -l in Saisiyat while notions of referentiality, identifiability, visibility and distance are best developed in Tsou (see Zeitoun 1992, 1993c and 2005).

Mantauran has a very restricted case marking system (see chapter 14 on coding of grammatical relations), and no case marker *per se*. There is a particle 'i, which might historically be related to the Tona and Maga (Rukai) morpheme ki. In these two dialects, ki still functions as a nominative case marker for personal (4.13a) and kinship (4.13b) nouns:

(4.13) Tona Rukai

- a. **w-a-ba'ay nakoa na paiso ki egeay.**Act-Real-Dyn.NFin:give 1S.Obl Obl money Nom Egeay
 'Egeay gave me money.'
- b. w-a-ba'ay nakoa na paiso ki tatava.
 Act-Real-Dyn.NFin:give 1S.Obl Obl money Nom father
 '(The) father gave me money.'

In Mantauran, however, 'i no longer serves to indicate a case relation—it can occur before the subject (4.14a-b) or the object (4.14c) and it can precede nearly any type of nouns, *cf.* the noun is a personal name in (4.14a), a human common noun in (4.14b) and a non-human common noun in (4.14c).

- (4.14) a. **ma-dhalam-ine** 'i taotao dhipolo.

 Stat.Fin-love-3S.Obl Taotao Dhipolo
 'Taotao loves Dhipolo.'
 - b. lo maava'i-dh-imae 'i asavasavare-mao if Dyn.Subj:come-3S.Gen-Impers.Obl boyfriend-Impers.Gen ma-a'a...

Stat.Subj-court

'When one's boyfriend came (to one's house) to court....'

c. a'iviivivai 'a 'i-kipingi 'i navini la 'imai.
plur:Red:female Top wear-clothes dress and skirt
'As for little girls, they (would) wear dresses and skirts.'

'i does usually not precede locative and temporal nouns. Compare the grammaticality of (4.14d)-(4.14d') and (4.14e)-(4.14e'):

(4.14) d. ona'i lo a-iki-na-nai ka-'oponoh-ae... if ClsNmz-Dyn.NFin:be at-still-1PE.Gen genuine-Wanshan-genuine 'When we were still in the old village....' ka-'oponoh-ae...²⁴ d'. *ona'i lo a-iki-na-nai if ClsNmz-Dyn.NFin:be at-still-1PE.Gen genuine-Wanshan-genuine 'ara-kaaya'i-a lo'idha maelre! Dyn.Subj-come-Imp tomorrow morning 'Come early tomorrow morning!' e'. * 'ara-kaava'i-a maelre! lo'idha

tomorrow

morning

4.3 Verbs and verb classes

Dvn.Subj-come-Imp

Two major verb classes can be distinguished in Mantauran, viz. dynamic verbs vs. stative verbs, based on their morphological marking. Verbs can, of course, be derived from nouns through the prefixation to the base of verbalizing prefixes, e.g. to-'produce, make, build' as in to-dha'ane 'build a house' (< dha'ane 'house'), 'a-...-ae '(have) a lot' as in 'a-cakel-ae 'marry' (< cakele 'sexual partner'). These derivational processes will be further discussed in §7.2.

Verbs are characterized by the fact that they can be negated and/or carry modal/ aspectual information (cf. §4.1.1). Negation is usually expressed through affixes—cf.
-ka 'did not/do not/not' (predicative negation), as in o-dholro-ka-i 's/he cannot', ki'will not' (modal negation), as in ki-kane va'oro 's/he won't eat rice', and a-...-ae
'don't' (imperative), as in a-kan-ae-'o! 'Don't eat!'—except for the negation of existence, which is expressed through a verb, cf. o-kaodho 'there is/was not'. Modal and aspectual affixes include: amo- 'will' (irrealis—occurs on the verb), as in amo-'ongolo 'will drink', ni- 'would' (counterfactual), as in ni-dhaace 'would leave', ni-...-a 'even if' (concessive), as in ni-ka'ac-a(-ni) 'Even if s/he/it bit', -na 'still, yet', as in ma-lroolai-na 'still a child' and -nga 'already', as in madho'o-nga 'already cooked'.

(i) 'ina'i vaha-nai ('i) 'oponoho...
this language-1PE.Gen Mantauran
'Our Mantauran language....'
where 'oponoho refers to the name of the population.

²⁴ As opposed to:

Negation, mood, and aspect will be further examined in chapter 6 in relation to verbal morphology.

The present section shows that adjectival, prepositional, quantifying and adverbial concepts are usually expressed through verbs.

4.3.1 Absence of adjectives

It has been long recognized that "not all languages have the major word class Adjective", (cf. Dixon 1977:20, cf. also Dixon 1982). Mantauran is one language that lacks a class of adjectival-like morphemes. Adjectival concepts are, in fact, expressed through stative verbs, which form a subclass of verbs as a whole. The distinction between stative verbs and other classes of verbs will be discussed in chapter 6. Below, I examine the morphological properties (cf. §4.3.1.1) and syntactic distribution (cf. §4.3.1.2) they have in common.

4.3.1.1 Morphological properties of stative verbs as opposed to dynamic verbs

Stative verbs and more prototypical verbs, such as dynamic verbs, co-occur with the same types of verbal(izing) and nominalizing affixes and they undergo the same reduplicative patterns.

Verbalizing affixes include:

1. -a 'imperative'—in the imperative form, both stative and dynamic verbs are marked as subjunctive (cf. §6.1.2.3):

(4.15) a. kon-a!

Dyn.Subj:eat-Imp 'Eat!'

b. ma-raveraver-a!

Stat.Subj-happy-Imp 'Be happy!'

2. **amo-** 'will'—irrealis (*cf.* §6.3.1.2)

(4.16) a. *amo*-lekalekate dhona'i 'angato.

Irr-Dyn.NFin:measure that tree

'I will measure that tree.'

b. **pakon-a maava'i, amo-ka-esenge-mo'o!** quickly-Imp Dyn.Subj:come Irr-Stat.NFin-soak-2S.Nom 'Come back quickly, (or) you will be soaked.'

- 3. -na 'still' (cf. §6.3.2.2)
- (4.17) a. mavaavanao-na-lrao.

Dyn.Fin:bathe-still-1S.Nom 'I am still taking a bath.'

b. ma-va'oae-na.

Stat.Fin-new-still 'It is still new.'

- 4. **-nga** 'already' (*cf.* §6.3.2.2)
- (4.18) a. **om-iki-**nga **'i koli'i 'aka-tolro.**Dyn.Fin-exist-already sun Nth-three

'It is already three o'clock.'

- b. ma-laodho-nga koli'i.
 Stat.Fin-get down-already
 'The sun is getting down.'
- 5. **pa-** 'causative' (*cf.* §8.1)
- (4.19) a. pa-lolodh-iae!

Caus-Dyn.NFin:follow-1S.Obl 'Repeat after me!'

- b. o-savesave-ka-'o pa-ka-dholrilange dha'ane?

 Dyn.Fin-wash-Neg-2S.Gen Caus-Stat.NFin-clean house

 'Did you wash your house well?'
- 6. **kina-...-ae** 'more (and more)' (*cf.* §6.7.2.2)
- (4.20) a. kina-kan-ae velevele.

more-Dyn.NFin:eat-more banana

'S/he eats more and more bananas.'

- b. *kina*-ka-taadhia'-e dhipolo. more-Stat.NFin-good-more Dhipolo 'Dhipolo is more and more beautiful'
- 7. **mata-...-(a)e** 'certainly' (*cf.* §6.8.1)

(4.21) a. lo m-oa-'-idhe polra 'a if Dyn.Subj-go-2S.Gen-3S.Obl Dyn.Subj:touch Top mata-'i-ange'ang-ae-mo'o.

Dyn.Fin:certainly-Pass-Dyn.NFin:hurt-certainly-2S.Nom 'If you go and touch it, you will certainly be hurt.'

b. lo pa-kane-n-ine taadhi'i, if Caus-Dyn.NFin:eat-3S.Gen-3S.Obl good mata-ka-oloh-ae ana lroolai.

Dyn.Fin:certainly-Stat.NFin-grow-certainly that child 'If (s)he feeds him/her well, that child will certainly grow up.'

8. mati- 'well, very, completely' (cf. §6.8.1)

(4.22) a. mati-lriho'o-lrao.

Dyn.Fin:well-Dyn.NFin:know-1S.Nom 'I understand (perfectly) well.'

b. mati-ka-ecelrange

Dyn.Fin:very-Stat.NFin-black 'very/completely black'

9. 'ako- 'barely, a little' (cf. §6.8.1)

(4.23) a. 'ako-sialalra.

barely-Dyn.NFin:hear 'He barely hears (= he barely understands).'

b. **ma-'ete-nga lamengae-ni dhipolo, mani 'ako-ka-raveravere.**Stat.Fin-die-already spouse-3S.Gen Dhipolo then barely-Stat.NFin-happy 'Dhipolo's husband has already passed away so she is barely happy.'

10. **'ini-** 'reflexive' (*cf.* §8.3)

(4.24) a. o-lriho'o-nga 'ini-a-aha'a

Dyn.Fin-know-already self-Red-cook

a-kan-ae-nidhona'iIroolai.ObjNmz-Dyn.NFin:eat-ObjNmz-3S.Genthatchild'That child already knows how to cook his/her food alone.'

b. 'ini-ka-ka-dhalame.

self-Red-Stat.NFin-live/love 'She (just) likes herself.'

There are at least two nominalizing affixes that can co-occur with dynamic and stative verbs: (i) **a-** 'when' (clausal nominalization), (ii) **ta-...-ae** 'place where...' (locative nominalization).

1. a- 'when...' attaches to the verb to nominalize a clause:

(4.25) a. ona'i *a*-iki-na-nai

ka-'oponoh-ae...

that ClsNmz-Dyn.NFin:be at-still-1PE.Gen 'When we still were in the old village....'

genuine-Wanshan-genuine

b. ona'i a-ka-a-olrolai-na-nai...

that ClsNmz-Stat.NFin-plur-child-still-1PE.Gen

'When we still were children....'

2. ta-...-(a)e marks 'locative nominalization'

(4.26) a. *ta*-pa-'ena-'ena-e

LocNmz-Caus-Red-Dyn.NFin:wash-LocNmz 'washing machine'

b. ta-pa-ka-tee-telek-ae

'adhamadhamai

LocNmz-Caus-Stat.NFin-Red-cold-LocNmz

Red:side dish

a-'ongol-ae

ObjNmz-Dyn.NFin:drink-ObjNmz

'fridge'

Another prefix **ka-** 'in fact, indeed, actually' nominalizes the verb:

(4.27) a. ka-kaava'i-nomi!

in fact-Dyn.NFin:come-2P.Gen

'You have come!' (Welcoming words)

b. ka-ka-vahe'e-ni

dhipolo.

in fact-Stat.NFin-tired-3S.Gen Dhipolo

'Dhipolo is actually tired.'

Both stative and dynamic verbs exhibit the same reduplicative patterns, e.g.:

(4.28) a. ma-pa-pana 'shoot at each other' ~ ma-pa-pana 'shoot at one another'

b. ma'a-ka-dhalame 'like/love each other' ~ ma'a-ka-dhala-dhalame 'like/love one another'

They undergo the same derivational processes (i.e. reduplication) in comparative constructions.

(4.29) **o-lrihi-Iriho'o-Ira-ine dhipolo.**Dyn.Fin-Red-know-1S.Nom-3S.Obl
'I know more than Dhipolo.'

(4.30) **ma-taa**dhiadhi'i-Ira-ine dhipolo.
Stat.Fin-Red:good-1S.Nom-3S.Obl Dhipolo
'I am better/more beautiful than Dhipolo.'

4.3.1.2 Syntactic distribution of stative verbs as opposed to dynamic verbs

Stative verbs (4.32), just like dynamic verbs (4.31), might either be intransitive or transitive:

(4.31) a. Intransitive dynamic verb

amo-dhaace-nga-lrao.

Irr-Dyn.NFin:leave-already-1S.Nom

'I am leaving.'

b. Transitive dynamic verb

o-ravisili-Irao Iroolai.

Dyn.Fin-carry in arms-1S.Nom baby/child
'I am carrying the baby/child in my arms.'

(4.32) a. Intransitive stative verb

ma-taadhi'i dhipolo. Stat.Fin-good Dhipolo 'Dhipolo is good/kind/beautiful.'

b. Transitive stative verb

ma-salrai dhipolo lalake-ni.
Stat.Fin-love deeply Dhipolo child-3S.Gen
'Dhipolo loves her child deeply.'

As transitive verbs, stative verbs co-index the (in)direct object if it is a proper noun via the cliticization of an oblique pronoun, just like dynamic transitive verbs do:

(4.33) a. **taotao 'a o-tipitip-**ine **dhipolo.**Taotao Top Dyn.Fin-beat-3S.Obl Dhipolo '(As for) Taotao, (he) beats/beat Dhipolo.'

```
b. taotao 'a ma-dhalam-ine dhipolo.
Taotao Top Stat.Fin-like/love-3S.Obl Dhipolo '(As for) Taotao, (he) loves Dhipolo.'
```

In their attributive function, stative verbs are nominalized like other dynamic verbs (cf. §7.1).

(4.34) **dhona** *ta-ka-lrihili*, **dhona** *ta-lriho'o*that SubjNmz-Stat.NFin-clever that SubjNmz-Dyn.NFin:know
'a mani pa-dhaac-ilidhe...
Top then Caus-Dyn.NFin:leave-3P.Obl
'Those (who were) clever, those (who) understood (would be) allowed to leave.'

As for dynamic verbs, they can be modified by **toramoro**, like stative verbs (*cf.* ex. (4.4) above).

(4.35) a. ...'atoloro-nga-nai ki-cengele-nga-nai ka ...so-already-1PE.Nom Neg-Dyn.NFin:see-already-1PE.Nom Lig toramoro la-a-lake-nai. child-plur-child-1PE.Gen "...so we do not see our children regularly" b. ma-dhalame-lrao toramoro kone velevele. Stat.Fin-like/love-1S.Nom Dvn.Subi:eat verv banana 'I like to eat banana very much.'

4.3.2 Absence of prepositions

A number of studies on Formosan languages deal with the presence or absence of prepositions in the Formosan languages (*cf.* Li 1973, Starosta 1988, Yeh 1991, Huang 1995a, Tang 2002, C. Wu 2004). Li (1973), for instance, argues that Tanan (Rukai) exhibits prepositions, which have evolved from verbs. C. Wu (2004) concludes that Paiwan might only possess one preposition, i.e. **ka** "which can undergo 'pied-piping', as prepositions do, but cannot occur in pre-verbal position" (p.150). Huang (1995a), on the other hand, analyzes morphemes that translate as 'on', 'at', 'to' and 'with' in English as case markers in Mayrinax Atayal. Prepositional concepts in Mantauran are actually expressed through orientation/directional prefixes and nouns (these will be introduced in chapter 7.2.1 and 5.2 respectively) or verbs.

In the following section, I briefly summarize Li's (1973) study. I show in §4.3.2.2 that the grammaticalization that has taken place in Tanan (Rukai) is not visible in Mantauran (Rukai), i.e. there is no ground for setting up prepositions as a distinct word class in Mantauran.

4.3.2.1 From verbs to prepositions in Tanan (Rukai)

Li (1973:121ff) mentions the existence of four prepositions in Tanan (Rukai) — 'akay 'at', twalay 'from', 'akela 'to' and ara 'with'. These are presumably historically all derived from verbs. The following examples illustrate the distribution of prepositions, *cf.* examples in (4.36a), (4.37a), (4.38a) and (4.39a) as compared to that of verbs, *cf.* examples in (4.36b), (4.37b), (4.38b) and (4.39b). For ease of exposure and comparison with the Mantauran data, I have adapted the Tanan (Rukai) orthography and the glosses to fit those used in this grammar. For the sake of consistency, I have used different terms from Li (1973) whenever his terminology would have led to confusion with respect to the analysis proposed here.

- (4.36) Tanan [adapted from Li 1973:120, ex. 3-1]
 - a. loa 'akay ino koadra lalak-li. at where that child-1S.Gen 'It is not known where my child is.'
 - b. w-a-tobi *ikay* daan kay Irolay.
 Act-Real-Dyn.NFin:cry Dyn.Subj:be at house this child 'This child cried in a house.'
- (4.37) Tanan [adapted from Li 1973:122, ex. 9-10]
 - a. **kayvay drakeral moalodr** *twalay* **omaoma 'akela ladrek.** this river flow from field to sea 'As for this river, it flows from the field to the sea.'
 - b. 'a-twalay-ako inia Irolay sa Irima ka 'ayso.
 Caus-come from-1S.Nom that child five money
 'I got five dollars from that child.'
- (4.38) Tanan [adapted from Li 1973:122, ex. 11-13]
 - a. 'akela ino kay daedae-so? to where this land-2S.Gen 'How far is this land of yours?'
 - b. w-a-'akela-so 'akay ino?
 Act-Real-arrive-2S.Nom at where
 'Where did you arrive?'
- (4.39) Tanan [adapted from Li 1973:124, ex. 6-2]
 - a. **ki-a-ceel-nga ara lingo kay lrolay inia ising.**Pass-Real-Dyn.NFin:look-already with glasses this child that doctor 'This child was looked at with glasses by that doctor.'

b. 'a-'athak arakay sa balbal kikay romay kay Irolay. cause-break use bamboo this bowl this child 'This child broke this bowl, using a [piece of] bamboo.'

Since prepositions and verbs occur in the same sentential position, Li (1973:145) provides four criteria to distinguish verbs from prepositions:

- 1. While verbs can be followed by a determiner preceding the object (4.40a), prepositions cannot, as shown by the ungrammaticality of (4.40c):
- (4.40) Tanan [adapted from Li 1973:126, ex 13-15]
 - a. **ki-a-'a'acay kay comay** *arakay sa kwang*.

 Pass-Real-kill this bear use gun

 'This bear was killed with a gun.'
 - b. **ki-a-'a'acay kay comay** *ara kwang*.

 Pass-Real-kill this bear with gun

 'This bear was killed with a gun.'
 - c. *ki-a-'a'acay kay comay ara sa kwang.

 Pass-Real-kill this bear with gun
- 2. (Transitive) verbs can occur without their object; prepositions cannot. The ungrammaticality of (4.41) lies in the fact that 'akay 'at' is not followed by an NP.
- (4.41) Tanan

| *am-oa | 'akay | Ø | koadra | marodrang. |
|------------|-------|---|--------|------------|
| Dyn.Fin-go | at | Ø | that | old man |

- 3. Verbs are marked as subjunctive when occurring in embedded position; they carry aspect information and attract personal pronouns when they shift in initial position as main verbs. Compare the two verbal forms **ikay** and **v-a-kay** in (4.42a-b):
- (4.42) Tanan
 - a. w-a-tobi *ikay* inia daan kay Irolay.

 Act-Real-cry be at that house this child

 'This child cried in that house.' [adapted from Li 1973:120, ex.2]
 - b. *yakay* inia daan tobi kay Irolay. be at:Real that house Dyn.Subj:cry this child 'This child cried in that house.'

Prepositions never undergo any morphological alternation in initial or medial position:

(4.43) Tanan

- a. ania'alay twalay obolo 'akela taromak kay adhadham. fly:Real from hill to place this bird 'This bird flew from the hill to Taromak.' [adapted from Li 1973:122, ex. 8]
- b. 'akela ino kay daedae-so? to where this land-2S.Gen 'How far is this land of yours?' [=(4.38a)]
- 4. Subjunctive verbs must always take the infix <**o**> in embedded position if the stem begins with a consonant followed by the low vowel /**a**/ (4.44); prepositions never do (4.45):

(4.44) Tanan

- a. **koani marodrang arakay inia balbal** *d<o>amek* **inia taw'aung.** that old man use that bamboo Dyn.Subj:beat that dog 'As for that old man, he used that bamboo to beat that dog.' [adapted from Li 1973: 123, ex.1]
- b. *koani marodrang arakay inia balbal damek inia taw'aung. that old man use that bamboo Dyn.NFin:beat that dog

(4.45) Tanan

- a. **koani ababay swaswa' 'akay ino**? that woman sweep at where 'Where is that woman sweeping?' [adapted from Li 1973:121]
- b. *koani ababay swaswa' 'a<o>kay ino?
 that woman sweep at where
- 5. Last, but not least, Li (1973:121) also mentions that both a verb and its derived preposition may occur in sequence in the same sentence (4.46)—the verb occurring before the preposition—though they cannot be used interchangeably (4.47):
- (4.46) Tanan [adapted from Li 1973:121, ex. 7]

 y-a-kay-nga 'akay ino koadra ki-a-ani'alay sasavevera?

 be at-Real-be at-already at where that Pass-Real-blow wind

 'Where is that which has been blown away by the wind?'
- (4.47) Tanan [adapted from Li 1973:121, ex. 5]

 koani ababay swaswa' 'akay/*ikay ino?

 that woman sweep at/*be at where

 'Where is that woman sweeping?'

Table 4.4 is based on Li's (1973) data:

Table 4.4: Verbs and their prepositional counterparts in Tanan (Rukai)

| Verb | Gloss | Derived preposition | Gloss |
|------------|----------------|---------------------|--------|
| y-a-kay | 'be at, exist' | 'akay | 'at' |
| arakay | 'use' | ara | 'with' |
| w-a-'akela | 'arrive' | 'akela | 'to' |
| pa-twalay | 'get from' | twalay | 'from' |

The data provided in table 4.4 and the arguments that are given by Li (1973) demonstrate that prepositions have been grammaticalized in Tanan (Rukai). The following subsection shows that in Mantauran, no convincing argument can be advanced to posit the existence of prepositions.

4.3.2.2 Mantauran equivalents of English 'at', 'to', 'from' and 'for'

Mantauran equivalents of English 'at', 'to', 'from' and 'for' function as verbs. They are listed in table 4.5, along with their verbal alternations (if any), as well as notes on their word formation.

Table 4.5: Mantauran verbs equivalent to English prepositions

| Gloss | Finite form | Subjunctive form | Non-finite form | < Word formation |
|-------------------|-------------|------------------|-----------------|--|
| 'be at, at' | om-iki | m-iki | iki | < Cf. om- 'Fin/Dyn/Act' |
| 'come from, from' | 'aliki | 'aliki | 'aliki | < Cf. 'ali- 'from' |
| 'reach, to' | mokela | mokela | okela | < Cf. m- 'Fin/Dyn/Act' |
| 'until' | paokela | paokela | paokela | < Cf. pa- 'Caus' + o- 'to(ward)' |
| 'use, with' | to'araki | to'araki | to'araki | < Cf. to?a- 'use for' |
| 'do for, for' | 'iraki | 'iraki | 'iraki | < Cf. 'i- 'get' |
| 'in order to' | paoriki | paoriki | paoriki | < Cf. paori- 'stick to, think of' |

The arguments that can be advanced to show that they are verbs are as follows:

(1) These words can occur in sentence-(or clause-)initial position, *cf.* (4.48a)-(4.52a) and (4.53) or in medial position (4.48b)-(4.52b), as other verbs do.

(4.48) a. lo ma-lrakase-mao m-o-valrio, ma-'adhaili, if Stat.Subj-lazy/dislike-Impers.Gen Dyn.Subj-to-village Stat.Fin-far om-iki-mao ooma i'olai.

Dyn.Fin-exist-Impers.Nom field stay overnight 'If we did not feel like returning to the village (because) it was far away, we (would) stay overnight.'

- b. maava'i dhona'i a-sava-savare-mao m-iki latadhe.

 Dyn.Fin:come that plur-Red-young man-Impers.Gen Dyn.Subj-be at outside 'Young men would come to the girl's house and wait outside.'
- "'aliki-mita (4.49) a. mani ia: 'n ta-teme then Dyn.NFin:so from-1PI.Nom SubjNmz-Dyn.NFin:obstruct opalrae" mani i-iae. grindstone then Dyn.NFin:so-1S.Obl 'He replied to me: "We come from a hole obstructed by a grindstone."
 - b. maava'i-mita 'aliki 'i ta-teme opalrae.

 Dyn.Fin:come-1PI.Nom from SubjNmz-Dyn.NFin:obstruct grindstone 'We come from a hole obstructed by a grindstone.'
- (4.50) a. lo maongo-nga, am(o)-okela-nga-mita
 if Stat.Subj:night-already Irr-Dyn.NFin:reach-already-1PI.Nom
 dhona valrio.
 that village
 'At night, we will reach that village.'
 - b. ...mani o-dhalra-nga-mao m-oa
 ...then Dyn.NFin:to-up-already-Impers.Nom Dyn.Subj-go
 m-okela o'i valrevalre'ae.
 Dyn.Subj-reach that road
 '...then one (would) go up (again) to the road.'
- (4.51) a. *to'araki*-ka-nai ka paiso... use-Neg-1PE.Gen Neg money 'We did not use money...'
 - b. o-dholro-ka-nai ka to'araki paiso.

 Dyn.Fin-can-Neg-1PE.Gen Neg use money

 'We could not use money...'
- (4.52) a. *'iraki*-nai mene-nga longai sangepare... for-1PE.Nom now-Sup Dyn.Subj:buy car *Lit.*: 'We did that (because) nowadays we (want to) buy cars...'
 - b. **o-langai-nai** sangepare *'irak-*iline la-a-lake-nai.

 Dyn.Fin-buy-1PE.Nom car for-3P.Obl child-plur-child-1PE.Gen

 'We buy cars for our children...'
- (4.53) paorikik-iline 'ina-lo ta-(a)mo-(o)a
 in order to:Red-3P.Obl this-plur SubjNmz-Irr-Dyn.NFin:go
 'i-dho'oko caha'e.

 Pass-Dyn.NFin:press (with a finger/seal) chief/official
 'They are (doing this) in order to be elected as chiefs/officials.'

- (2) Both **omiki** 'exist, be at' and **mokela** 'reach' undergo certain derivational processes identical to verbs sharing the same shape. The verb **om-iki** in (4.54a-c) exhibits the same verbal alternations as **om-alra** 'take' (4.55a-c), cf. **om-~m-~Ø-**:
- (4.54) a. ...o-lriho'o-ka-nai om-iki valrinae dha'ane. ...Dyn.Fin-know-Neg-1PE.Gen Dyn.Fin-exist Valrinae house '... we did not know that there were houses in Valrinae.'
 - b. ma-'ino toparadhaolae m-o-dha'ane Stat.Fin-embarrassed at once Dyn.Subj-to-house m-iki 'i talapingae 'n 'edhengae 'ilepenge... Dyn.Subj:hide Dyn.Subj-be at entrance door partition wall '(They would feel) too embarrassed to go into the house at once (so) they (would) hide (behind) the entrance door (near) the partition wall.'
 - c. mani *O-iki-*Irao dha'ane... then Dyn.NFin:be at-1S.Nom house 'then I was in the house...'
- (4.55) a. olo 'olrovo'o-mao dhona'i pahai, vecenge la Dyn.Subj:pound-Impers.Gen that millet rice if and 'avelre om-alra-mao topo'o. Dyn.Fin-take-Impers.Nom big rounded bamboo dish Dvn.Subj:winnow 'When we pounded millet and rice, we (would) take a big rounded bamboo dish to winnow (the grains).'
 - b. tila, (o)m-oa-mita ooma m-alra mairange leave:Imp Dyn.Fin-go-1PI.Nom field Dvn.Subj-take sweet potato mani la-a-lake-dha. Dvn.NFin:so child-plur-child-3S.Gen "Come on, we are going to the field to gather sweet potatoes" she said to her children.'
 - c. mani *Ø-alra-*lrao tai... then Dyn.NFin:take-1S.Nom taro 'then I took the taro...'

The verb **m-okela** 'reach' in (4.56a-b) exhibits the same verbal alternations as **m-ore-lehe'e** 'hold rituals' (4.57a-b):

(4.56) a. *m-okela*-nga ta-ka-ma-po'a-le la

Dyn.Fin-reach-already SubjNmz-Stat.NFin-tens-two-tens and ka-tolro caili.

Stat.NFin-three year

'She is already 23 years old.' [adapted from Lin 1999, vol.3:48]

b. om-oa-ka-'o m-okela tara-mangele
Dyn.Fin-go-Neg-2S.Gen Dyn.Subj-reach Dyn.Subj:time-ten
la ka-dho'a caili?
and Stat.NFin-two year
'Are you twelve years old?' [adapted from Lin 1999, vol.3:48]

(4.57) a. olo maka-'i-vecenge-nga-nai

if Dyn.Subj:finish-harvest-millet-already-1PE.Gen

m-ore-lehe'e-nga-nai... kala-paeceec-ae...

Dyn.Fin-hold-ritual-already-1PE.Nom TempNmz-festival name-TempNmz '(In the old days), when we had finished harvesting millet, we (would) celebrate the *Kalapaeceecae* festival.'

b. mani oa leleve omece o'i coloko
then Dyn.NFin:go Leleve Dyn.Subj:bring that glutinous cake
m-ore-lehe'e...

Dyn.Subj-hold-ritual

'They (would) bring the glutinous cakes to a place called *Leleve*, (where) they held the ceremony...'

The verbs 'aliki 'come from, from', to'araki 'use, with' and 'iraki 'do for, for' are invariable (see §6.1 for details on verb classification and verb alternations):

- (4.58) a. 'aliki-lrao taipake maava'i. from-1S.Nom Taipei Dyn.Subj:come 'I come from Taipei.'
 - a'. maava'i-Irao 'aliki taipake.

 Dyn.Fin:come-1S.Nom from Taipei
 'I come from Taipei.'
 - b. **to'araki-Irao nga'ato topoi.**use-1S.Nom firewood make fire
 'I use firewood to make a fire.'
 - b'. topoi-lrao to'araki nga'ato. make fire-1S.Nom use firewood 'I made a fire using/with firewood.'
 - c. 'irak-iae dhona'i ta-ka-rodhange longai solate.
 for-1S.Obl that SubjNmz-Stat.NFin-old Dyn.Subj:buy book
 'That old man bought a book for me.'
 - c'. o-langai solate 'irak-iae dhona'i ta-ka-rodhange.

 Dyn.Fin-buy book for-1S.Obl that SubjNmz-Stat.NFin-old 'That old man bought a book for me.'

(3) Third person oblique pronouns can appear on the first lexical verb or on the second. Compare the following two minimal pairs:

- (4.59) a. **taotao 'a o-omal-ine 'iraki dhipolo.**Taotao Top Dyn.Fin-sing-3S.Obl Dyn.Subj:do for Dhipolo 'Taotao sings for Dhipolo.'
 - b. **taotao 'a** *o-omale* **'irak-ine dhipolo.**Taotao Top Dyn.Fin-sing Dyn.Subj:do for-3S.Obl Dhipolo 'Taotao sings for Dhipolo.'
- (4.60) a. o-lravele lalake-ni pasopalr-ine 'n taotao mani Dyn.Fin-slip Taotao child-3S.Gen then help-3S.Obl takanao cekale. Takanao Dyn.Subj:stand up 'Taotao's child slipped and Takanao helped him to stand up.'
 - b. o-lravele taotao lalake-ni mani pasopalra takanao Dyn.Fin-slip Taotao child-3S.Gen then help Takanao cekal-ine.

Dyn.Subj:stand up-3S.Obl

The only counterevidence one may raise against treating the Mantauran equivalents to English prepositions as verbs is the fact that **omiki** can also occur in its bare form (that is **iki**), as the following examples illustrate:

- (4.61) a. mani 'aela dhoma m-oa iki
 then Dyn.NFin:move other Dyn.Subj-go Dyn.Subj:be at
 valrinae to-dha'ane.
 Valrinae build house
 'Some moved to Valrinae to build houses.'
 - b. **o-aha'a-ka-i ka** *iki* **'i sakovo.**Dyn.Fin-cook-Neg-3S.Gen Neg Dyn.Subj:exist men's house 'They could not cook in the men's house.'

In (4.61a-b), **iki** is treated as subjunctive, as the same bare form occurs in places where a subjunctive form is expected, i.e. in conditional and imperative sentences. Thus, we can get the following variants, which I am still unable to account for:

(4.62) a. **lo m-iki-ni ta-'i-valra...**if Dyn.Subj-exist-3S.Gen SubjNmz-kill-enemy
'If [a middle-aged man] went head-hunting...'

^{&#}x27;Taotao's child slipped and Takanao helped him to stand up.'

- b. lo Ø-iki-ni ta-'i-valra...

 if Dyn.Subj-exist-3S.Gen SubjNmz-kill-enemy

 'If [a middle-aged man] went head-hunting...'
- (4.63) a. "'a! ceela! m-iki-a-na 'inai...!" Ah! look:Imp Dyn.Subj-be at-Imp-still this 'Look! Stay here!' b "'a! ceela! Ø-iki-a-na 'inai...!" Ah! look:Imp Dyn.Subj-be at-Imp-still this

4.3.3 Absence of auxiliary verbs

'Look! Stay here!'

Synchronically, only a few Formosan languages (*cf.* Tsou, Atayal and Seediq) have auxiliary verbs. Mantauran has none and the head of the clause is usually a full lexical verb, as the following examples show:

- (4.64) a. *o-dhaace* **o'i a'ivivai 'acakelae.**Dyn.Fin-leave that plur:Red:female marry

 'Girls (would) leave and get married.'
 - b. *o-langai-ka-mao* ka 'adhamadhamai.

 Dyn.Fin-buy-Neg-Impers.Gen Neg Red:side dish

 'We did not buy (any) vegetables (there).'

However, the verb **o-poa** 'make', originally used as a periphrastic causative verb, is undergoing grammaticalization and might evolve into an auxiliary verb. At this stage, though, it can only be treated as a supporting verb. It can occur as the first verb of the clause as in (4.65a) or in an embedded position (in a series of two or three verbs) as in (4.65b), but in a redundant way, i.e. it does not carry any semantic weight. It does not carry over modal or aspectual distinctions as is rather common in the languages that exhibit auxiliary verbs. The causative function of this verb is further discussed in §8.1.1.

- (4.65) a. *mani* **poa-nai to'onai po-alrace.** then Dyn.NFin:make-1PE.Nom any(thing) give-name 'We refer to them as we like.'
 - b. mani *alra poa* votoro 'i sakovo aleve. then Dyn.NFin:take Dyn.Subj:make Dyn.Subj:display men's house below 'Then they (would) excavate [*Lit.*: take] (the skulls) and expose them below the men's house.'

4.3.4 Quantifiers

There are two types of quantifiers in Mantauran: (i) affixes occurring on nouns and verbs (further discussed in §5.5 and §6.6 respectively) and (ii) verbs, which will be further examined in relation to composite numerals in chapter 9. A list of quantifier verbs is given in (4.66) with illustrative examples provided in (4.67).

- (4.66) Quantifiers as verbs
 - a. ma-dhao ~ ma-maidhai 'a lot', cf. (4.67a)
 - b. ma-si'i \sim ma-vekele 'a few', cf. (4.67b)
 - c. **poelre** 'all' [-human], *cf.* (4.67c)
 - d. idhopele~odhopele 'all' [±human], cf. (4.67d)
 - e. (o)cekelae~maesale~moelre 'all' [+human], cf. (4.67e-f)
- (4.67) a. *ma-dhao* a-lredhek-ae-li aa'o.
 Stat.Fin-many ObjNmz-Dyn.NFin:plant-ObjNmz-1S.Gen vegetable *Lit.*: 'The vegetables I planted are many.'
 - b. m-o-'adhaili-nga ki-dha'olo, ma-si'i acilai.

 Dyn.Fin-to-far-already Neg-Dyn.NFin:rain Stat.Fin-a few/a little water

 'It has not rained for a long time; there is little water.'
 - c. lo m-o-valra-valr-ae-mao [...] poelre-mao if Dyn.Subj-to-Red-village-LocNmz-Impers.Gen all-Impers.Nom dhoadhaace.

Dyn.Subj:walk

'If one went to other villages, one had to walk all (the way).'

- d. ma-dho'a idhopele la-a-lake-li a'ivivai.
 Stat.Fin-two all child-plur-child-1S.Gen plur:Red:female 'I have two daughters.'
- e. *maesale/cekelae*-nai to-a'iivai.
 Stat.Fin:all/Dyn.Fin:all-1PE.Nom produce-plur:female 'We all have daughters.'
- f. moelre-a lrongai!

 Dyn.Subj:all-Imp Dyn.Subj:had better

 'You'd better put them together!'

The status of **to'onai** 'anything, everything, something' as a verb or a noun is ambiguous, as it can appear in both predicate (4.68a) and argument position (4.68b):

(4.68) a. **lo** 'a-lrihoa'-e-nga-dha o-sivarange m-ia

> a lot-Dyn.NFin:know-a lot-already-3S.Gen Dyn.Fin-pregnant Dyn.Subj-so

pelehe'e. to'onai

everything taboo

'If someone knew she was pregnant (= if it was already obvious that she was pregnant), everything was taboo.'

b. o-dholro-ka-dha kone to'onai. Dyn.Subj:eat Dyn.Fin-can-Neg-3S.Gen Neg anything 'S/he can't/couldn't eat anything.'

4.3.5 Manner and temporal adverbial expressions

In a recent study, Y. Chang (2006) shows that so-called "adverbs" in Kavalan actually function as matrix verbs (or lexical heads) and that adverbial modification involves complementation.

Only one word is treated as an adverb in Mantauran, cf. toramoro 'very' (§4.4).

Adverbial notions are either expressed through the occurrence of affixes (they will be introduced in §6.7.1) as in *mata-sialalr-ae* 'listen absolutely' (< mata-...-ae 'certainly, absolutely') or through verbs (discussed in §15.2.7), such as manner expressions that include: maridhare 'fast' (4.69a), oahamaca 'carefully', poveelai 'lightly', 'iniaveelai 'slowly', pakono 'quickly' (4.69b), ohangate 'early' (4.69c), tolromao 'suddenly' (4.69d) as well as temporal expressions (frequency) such as pamenanae 'every day' (4.69e), tokalianae 'often' (4.69f). As shown in (4.69), these verbs are followed by another verb and form a serial verb construction:

- (4.69) a. *ma-ridhare* Irolrame. Stat.Fin-fast Dyn.Subj:run
 - 'He runs fast.'

'ongolo.

b. pakono-lrao fast/quickly-1S.Nom Dyn.Subj:drink

'I drink quickly.'

c. o-hangate-lrao savo'oe. kone Dyn.Fin-early-1S.Nom Dyn.Subj:eat medicine 'I ate the medicine earlier than due/in advance.'

- d tolromao ma-valrovalro dhona Iroolai. suddenly Stat.Subj-young woman that child 'The child became suddenly a young woman.'
- e. *pa-men-a-nae-*lrao dhoadhaace. every-(to)day-beyond-TempNmz-1S.Nom Dyn.Subj:walk 'I walk every day.'

f. tokalianae-Irao maava'i 'oponoho.
often-1S.Nom Dyn.Subj:come Wanshan
'I often go to Wanshan.'

A few verbs, *cf.* **ta'asoki** 'attentively/diligently', **o-ahamaca** 'carefully', **'anomaelae** 'especially', are followed by a noun (4.70a), a derived nominal (4.70b) or a derived nominal clause (4.70c).

- (4.70) a. *ta'asoki-*a dhidhape-'o! work-2S.Gen 'Work diligently!'
 - b. 'anomaela-idhe 'a-ka-salrai dhona lroolai.
 especially-3S.Obl MnNmz-Stat.NFin-tender that baby/child
 'They cared for the baby/child a lot.'
 - c. *o-ahamaca* **lo 'adhidhapae-ni.**Dyn.Fin-careful if work-3S.Gen
 'He works carefully.' (*Lit*: 'He is careful when(ever) he works.')

4.4 The adverb toramoro 'very'

The only adverb that has been posited in Mantauran is **toramoro** 'very'. It shares the same properties as other verbs in that it can be cliticized by nominative arguments as in (4.71a) or oblique arguments as in (4.71b) and suffixed with aspectual markers such as **-nga** 'already' (4.72a) and **-na** 'still' (4.72b).

- (4.71) a. **ona'i lo kala-kecelr-ae 'a toramoro-***nai* **ka ma-kecelre.** that if TempNmz-cold-TempNmz Top very-1PE.Nom Lig Stat.Subj-cold 'During winters, we (felt/feel) very cold.'
 - b. **toramor-***iname* **ka ma-takolra 'i 'iidheme-nai ta-ka-a-rodhange.** very-1PE.Obl Lig Stat.Subj-bad heart-1PE.Gen SubjNmz-Stat.NFin-plur-old 'We old people feel very sad (about this situation).'
- (4.72) a. **toramoro-nga-nai ka ma-vahe'e.**very-already-1PE.Nom Lig Stat.Subj-tired
 'We are already very tired.'
 - b. **toramoro-***na* **ka ma-Iroolai ana lalake-dha.** very-still Lig Stat.Subj-child that child-3S.Gen 'His/her child is still very young.'

On the other hand, it cannot undergo reduplication, cf. *toramoramoro,

*toramoromoro and the occurrence of a ligature in serial-verb-like clauses makes it a marked construction: the sequence toramoro 'very' + verb (4.73a) is, to some extent, identical to that of a serial verb construction (4.73b), in that the verb that follows toramoro is in its subjunctive form. The major difference lies in the occurrence of the ligature ka between toramoro and the verb that follows. Compare (4.73a-b):

(4.73) a. toramoro ka ma-kocingai
very Lig Stat.Subj-expensive
a-langalr-ae-ni 'adhamai.
ObjNmz-Dyn.NFin:buy-ObjNmz-3S.Gen side dish
'The side dishes s/he bought are very expensive.'

b. om-oa longai ta-ka-kocingai 'adhamai.

Dyn.Fin-go Dyn.Subj:buy SubjNmz-Stat.NFin-expensive side dish

'S/he went to buy expensive dishes.'

4.5 Pronouns

Pronouns will be discussed in detail in chapter 10. There are three sets of pronouns: personal, impersonal, and demonstrative pronouns.

Personal pronouns consist of four sets: topic, nominative, oblique and genitive. The "topic" set refers to pre-verbal free pronouns, which function as topics. The other three sets, "nominative", "oblique", and "genitive" all constitute bound forms (clitics) that appear post-verbally. Nominative pronouns mark the subject in affirmative clauses and oblique pronouns serve for non-subjects. Genitive pronouns express possession when they occur on nouns or lexically derived nominals but refer to the subject in negative sentences, when they follow the negator **-ka**. There are three nominative pro-clitics, *cf*. the first person singular and plural nominative pronouns **nao-** '1S.Nom', **ta-** '1PI. Nom' and **nai-** '1PE.Nom'.

Mantauran is rather unique among the Formosan languages in that it exhibits, as in Tona Rukai, a series of impersonal pronouns. Impersonal pronouns do not have a topic form but exhibit a nominative, genitive and oblique declension *cf.* -mao 'Nom/Gen' and -imae 'Obl'.

Demonstrative pronouns (as opposed to "adnominal" demonstratives, following Diessel's (1999) terminology) carry out different functions. They include: 'ina~'ina'i 'this', ana~ana'i 'that [+vis, -far]', ona~ona'i 'that [±vis, ±far]', dhona~dhona'i 'that [-vis, +far]'. They are free forms that are used to refer to third person participants, occurring either in topic position, subject or object position. Demonstrative pronouns can, in that case, be marked for plurality by the suffixation of -lo to the base, e.g. dhona 'that, they' ~ dhona-lo 'these, they'. Demonstrative pronouns can also refer to a

temporal or spatial location, in which case the occurrence of the plural suffix -lo is ungrammatical.

4.6 Adnominal demonstratives

Adnominal demonstratives — exemplified in (4.74) — are distinguished from demonstrative pronouns in that they always modify a head noun; some of these adnominal demonstratives overlap to some extent with demonstrative pronouns. They are further examined in chapter 10 (cf. §10.2).

- (4.74) a. **o-lralrame-nga ana ocao.**Dyn.Fin-run-already that person 'That (person)/s/he has already run.'
 - b. **o-lralrame-nga o'i ocao.**Dyn.Fin-run-already that person 'That person has already run.'

4.7 Interrogative words

Interrogative words are discussed in detail in chapter 13 (cf. §13.1). Most of them, cf. 'who', 'whom', 'whose', 'what', 'where', 'when' constitute derived nominals. The status of **kani** 'why' is difficult to determine, and I have not been able to decide whether it is a verb or a derived nominal for lack of morphological evidence (e.g. no occurrence of a genitive pronoun on the interrogative word, no nominalization device etc.). The interrogative words referring to time, cf. **idhae** 'when (realis)' and **lo idhae** 'when (irrealis)', function as temporal adjuncts.

```
(4.75) Interrogative nominals:
```

```
a. 'aanga(-Pro<sub>Gen</sub>) 'who?', cf. (4.76a)
b. kana-(-Pro<sub>Gen</sub>) 'what?', cf. (4.76b)
c. a-iki-e(-Pro<sub>Gen</sub>) 'where (realis)?', cf. (4.76c)
d. ma-pi-(Pro<sub>Gen</sub>) 'how much/many?' (generic), cf. (4.76d)
Undetermined category:
e. kani 'why?', cf. (4.76e)
Temporal adjuncts:
```

f. **(lo) idhae** 'when?', *cf.* (4.76f-f')

```
(4.76) a. aanga-i ta-tipitip-imia'e? subjNmz-Dyn.NFin:beat-2S.Obl 'Who beat you?'
```

b. kana-ni pi'a-'o?

what-3S.Gen Dyn.NFin:do-2S.Gen

'What are you doing?'

c. a-iki-e-'o solate?

ObjNmz-Dyn.NFin:be at-ObjNmz-2S.Gen Dyn.Subj:study

'Where are you studying?'

d. **ma-pi-ni langai-'o solate?**Stat.Fin-how many-3S.Gen Dyn.NFin:buy-2S.Gen book

'How many books did you buy?'

e. kani tipitipi-'-idhe?

why Dyn.NFin:beat-2S.Gen-3S.Obl

'Why did you beat him/her?'

f. dhoac-a-'o lo idhae?

Dyn.Subj:leave-Irr-2S.Gen when:Irr

'When are you going to leave?'

f'. o-dhaace-'o idhae?

Dyn.Fin-leave-2S.Gen when:Real

'When did you leave?'

4.8 Numerals

There are two sets of numerals in Mantauran: the first set is free and is used in serial counting and the second set is bound and serves to form the remaining higher numerals, i.e. all the numerals above '11'; they are also used in the formation of denumeral verbs (*cf.* §9.1.2). As shown in (4.77), there are a few phonological variations between these two sets of numerals.

| (4.77) | Serial counting (free) | Suffixed numeral forms |
|--------|------------------------|------------------------|
| 1 | neka | -(ea)ea, -a, -nge(a) |
| 2 | nosa | -dho'a, -po'a |
| 3 | tolro | -tolro |
| 4 | pate | -'epate |
| 5 | lrima | -lrima |
| 6 | neme | -(e)neme |
| 7 | pito | -pito |
| 8 | valro | -valro |
| 9 | vangate | -vangate |

Numerals will be further discussed in chapter 9, in relation to different types of quantifiers.

4.9 Phrasal and clausal elements

Phrasal and clausal elements will be discussed in chapters 11 and 12 in relation to the morphosyntactic study of verb phrases and clauses. The main phrasal element is the ligature **ka** which occurs between a verb and **toramoro** 'very' as in:

(4.78) **'ina'i vaha-nai 'i 'oponoho toramoro ka ma-kocingai.**this language-1PE.Gen Mantauran very Lig Stat.Subj-difficult
'Our language is very difficult'

The major clausal element is the topic marker 'a, which can introduce a noun as in (4.79) or a whole subordinate clause as in (4.80):

- (4.79) **dhona'i sakovo 'a om-iki vecahae-ni valrio.** that men's house Top Dyn.Fin-exist middle-3S.Gen village 'The men's house was (situated) in the middle of the village.'
- (4.80) la olo ma-celekere-li 'a topodhaolae om-ia-lrao and if Stat.Subj-thorough-1S.Gen Top true Dyn.Fin-so-1S.Nom dhona'i omo-li.

 that grandparent-1S.Gen
 'But when I (come to) think about (it), I say: "My grandfather is right."

4.10 Interclausal elements

Most interclausal elements function as conjunctions, which are further divided as: (i) coordinating conjunctions as in (4.81a) and subordinating conjunctions (4.81b).

(4.81) a. Coordinating conjunctions

la 'and, but' (nominal (4.82a), verbal (4.82b) and clausal (4.82c) coordination)

la-Pro_{Gen} 'so that' (4.82d) (occurs in the second part of the complex sentence)

mani 'then' (4.82e)

ara'eve 'but, however, on the other hand' (4.82f)

i'a 'besides' (4.82g)—rarely used

b. Subordinating conjunctions

la-Pro_{Gen} 'if' (4.83a) (occurs in the first part of the complex sentence) lo~olo~alo 'if' (4.83b) alaka-Pro_{Gen} 'because' (4.83c) (when it occurs in initial position)

- (4.82) a. **ma-dhalame-Ira-iline** [**dhipolo** *la* '**elrenge**]_{NP}. Stat.Fin-like/love-1S.Nom-3P.Obl Dhipolo and Elrenge 'I like/love Dhipolo and Elrenge.'
 - b. **dhona'i koape 'a** [**ma-poli**]_{VP1} *la* [**ka-lri'emedhe**]_{VP2}. that sock Top Stat.Fin-white and Stat.NFin-thick 'Those socks were white and (very) thick.'
 - c. [o-dhaace-nga ina-'o] $_{S1}$ la [iki-na ana Dyn.Fin-leave-already mother-2S.Gen and Dyn.NFin-exist-still that ama-'o] $_{S2}$. father-2S.Gen

'Your mother has left already but your father is still there.'

- d. ...la-ni lriho'o, la-ni
 ...so that-3S.Gen Dyn.NFin:know so that-3S.Gen
 ki-ka-olro vaha-nai 'oponoho.
 Neg-Stat.NFin-disappear language-1PE.Gen Mantauran
 '...so that (the children might) know (our language) so that it won't disappear.'
- e. ma-celekere-lrao mani solate-lrao.
 Stat.Fin-ponder/think-1S.Nom then Dyn.NFin:write-1S.Nom
 'I think then I write'
- 'I think then I write.'

 f. lo 'i-ra'opo-dha 'a-pa-ka-'ete-'ete
 - if Pass-Dyn.NFin:make an injection-3S.Gen InstNmz-Caus-Stat.NFin-die-Red mani 'i-vorovoro-dha o-dholro-ka-nai ka then Pass-Dyn.NFin:operate-3S.Gen Dyn.Fin-can-Neg-1PE.Gen Neg 'ini-ka-ka-ma-mai ara'eve pi'a [....] lo self-Red-Stat.NFin-Red-be Dyn.Subj:do but if dhona'i ma-lradhi'i-nga-n-idhe

Stat.Fin-heal-already-3S.Gen-3S.Obl that ta-cikip-ae-n-idhe (o)m-alra-nga-nai

LocNmz-Dyn.NFin:sew-LocNmz-3S.Gen-3S.Obl Dyn.Fin-take-already-1PE.Nom

'ini-ka-ka-ma-mai 'o-cikipi.

self-Red-Stat.NFin-Red-be take off-Dyn.NFin:sew

- 'If (we) had to give (him) an anaesthesia and operate, then we could not do it ourselves; [...] on the other hand, if the wound had healed and (we had to) remove the stitches, then we could do it by ourselves.'
- g. lo m-o-dha'ane-mao ohoolrongae-mao
 if Dyn.Subj-to-house-Impers.Gen Dyn.Fin:bend-Impers.Nom
 m-o-dha'ane, i'a ma-dhalremedheme...

 Dyn.Subj-to-house besides Stat.Fin-dark
 'If we entered the house, we had to bend down. Besides, (the rooms) were (very) dark...'

(4.83) a. *la*-ni pato'-iae, *ni-leka-lekate*-lrao

if-3S.Gen Dyn.NFin:tell-1S.Obl Crtfct-Red-Dyn.NFin:measure-1S.Nom ooma-li.

field-1S.Gen

'If he/she had asked me, I would have measured my field.'

- b. *lo* dhoace-nga-nai m-oa ooma, if Dyn.Subj:leave-already-1PE.Gen Dyn.Subj-go field i'olai-nai, to'araki-nai cai'i erece 'elevae. use-1PE.Nom stay overnight-1PE.Nom rope Dyn.Subj:tie door 'If we left for the field and we spent the night there, we (would) use a rope to tie up the door.'
- c. *alaka-li* m-oa cengel-ine asavasavare-li, because-1S.Gen Dyn.Subj-go Dyn.Subj:see-3S.Obl boyfriend-1S.Gen mani valrovalroe-lrao.
 then Dyn.NFin:dress well-1S.Nom
 'Because I am going to see my boyfriend, so I dress well.'

Verbs such as **'atoloro** 'so therefore' (4.84a), and **ora'eve** 'but, however' (4.84b) can also function as interclausal elements.

- (4.84) a. **o-kelrakelrang-ine ina-ni 'atoloro tovi ana lroolai.**Dyn.Fin-beat-3S.Obl mother-3S.Gen so Dyn.Subj:cry that child 'The mother beat(s) the child so he crie(d/s).'
 - b. ora'eve la ta-ka-taadhia'-e ma-dhao-nga LocNmz-Stat.NFin-good-LocNmz Stat.Fin-many-already but and ta-totiame 'ina'i katalrisie... SubjNmz-open:store this aborigine 'However, the advantage (is that) there are many aborigines who are making loans (to open stores)...'

4.11 Exclamations and interjections

There are exclamations, the most common of which is 'akosaae ... 'how much':

(4.85) 'akosaae-'o ka taadhia'-e 'ina navini-'o! how much-2S.Gen Lig good-StatNmz this traditional dress-2S.Gen 'How beautiful your traditional dress is!'

Interjections include single words used as a response to a preceding utterance: **ia'e** 'yes' (4.86b-b'), **'aina** 'no' (4.86c-c').

(4.86) a. o-kane-nga-ka-'o?

Dyn.Fin-eat-already-Neg-2S.Gen 'Have you already eaten?'

b. ia'e!

'Yes!'

b'. ia'e, o-kane-nga-lrao.

yes Dyn.Fin-eat-already-1S.Nom 'Yes, I have already eaten.'

c. 'aina!

'No!'

c'. 'aina, o-kane-na-ka-li.

No Dyn.Fin-eat-still-Neg-1S.Gen 'No, I have not eaten yet.'

Exclamations also include single words that appear in sentence-initial position:

(1) **boo**, **mah**, 'ia to express astonishment:

(4.87) mah! 'anana! ma-'ete-nga-lrao ia

Oh ayayay Stat.Fin-die-already-1S.Nom Dyn.NFin:so like that "Oh, ayayay! I am dead" s/he said."

omi.

(2) **'ananee** to express astonishment, fright, and annoyance:

(4.88) 'ananee, ma-rimoro-lrao solate-li!

Oh Stat.Fin-forget-1S.Nom book-1S.Gen

'Oh, I forgot my book!'

(3) 'anana(a) to express pain:

(4.89) 'anana(a), o-'akel-iae ta-lralrisi,

Ouch Dyn.Fin-pour down-1S.Obl SubjNmz-Dyn.NFin:scald

o-'ange'ange!

Dyn.Fin-hurt

'Ouch, I was burned. It hurts!'

(4) 'aii to express grief, sorrow:

(4.90) 'aii, dhona asavasavare-li...

Oh, my boyfriend-1S.Gen

On, my boymend-15.dei

'Oh, my boyfriend...'

Chapter 5: Nominal Morphology

Nouns/nominals include the forms which function as the head of a nominal phrase or as the argument of a predicate/verb. This chapter deals with nominal morphology. Related issues on (i) nominalization processes, (ii) personal, impersonal and demonstrative pronouns and (iii) the syntactic structure of noun (phrases) will be discussed in chapters 7, 10 and 11 respectively.

Nouns can be divided into three major categories—common nouns (§5.1), locative/temporal nouns (§5.2) and non-common nouns (§5.3)—which further divide into subcategories, based on the various derivational processes they can undergo.²⁵ These derivational processes include the marking of: (i) plurality (§5.4), (ii) quantification (§5.5) and (iii) (dual/plural) reciprocity (§5.6).²⁶ A brief summary is given in §5.7. Other nominal affixes are discussed in §5.8.

5.1 Common nouns

Common nouns include all nouns referring to human and non-human referents, e.g. 'aolai 'male, man', ta'olro 'dog', apoto 'stone', with the exception of locative and temporal nouns as well as given names, household names, kinship terms and insult nominals.

A short list of common nouns is given below, relating to different semantic categories:

(5.1) Humans

a. katalrisie 'aborigine'
b. valra 'enemy'
c. valravalrae 'guest'
d. tokapi 'twin'
e. 'alriasao 'widow'
f. tamatama 'middle-ag

1. tamatama

'middle-aged man'

As mentioned in chapter 4, both morphological and syntactic criteria help determine noun classes in Mantauran, even if they are discussed separately in this grammar. For instance, while personal names are never marked for plural, they must be cross-referenced on the verb if they function as oblique arguments (see chapter 14).

Li (1973:107) argues that in Tanan Rukai, "the features 'dual', 'plural' and 'collective' have little or no syntactic consequence aside from the semantic content." This claim does not stand unchallenged any longer, with regard to the linguistic facts presented in this chapter, most of which also hold for the other Rukai dialects and the Formosan languages in general.

A Grammar of Mantauran (Rukai)

| g. | tomotomo | 'old (wo |)man' |
|----|-------------|----------|-------|
| ₽. | *********** | 0.00 | , |

(5.2) Body parts

a. votolro'o 'body'
b. pangolro 'bone'
c. picingi 'skin'
d. alrima 'hand'
e. dhapale 'foot, leg'

(5.3) Fauna

a. **konga'a** 'duck, goose'

b. ove'eke 'pig'c. aalrame 'bird'

d. vavoi 'wild pig, boar'

e. 'alongae 'deer'

(5.4) Flora

a. pilaka 'branch'
b. saviki 'betel nut'
c. 'olrao 'grass'
d. 'aelrenge 'flower'
e. madho 'fruit'

(5.5) Nature

a. apoto 'stone'
b. lrenehe 'rock'
c. lrehelrehe 'mountain'
d. dhakerale 'river'
e. lrana 'stream'

(5.6) Natural phenomena

a. koli'i 'sun'
b. dhamare 'moon'
c. tario 'star'
d. dha'olo 'rain'
e. lrikace 'thunder'

(5.7) Cultural materials

a. livase 'knife'
b. kaolo 'small hoe'
c. cacavake 'pottery jar'
d. navini 'traditional dress'

There is no overt distinction in gender. There is, on the other hand, a distinction between human and non-human referents in terms of the marking of plurality and case (cf. §5.4 and §14.1).

Common nouns may be underived, e.g. **ove'eke** 'pig' or derived through various processes, the most common of which is nominalization, *cf.* **tave'ekae** (< **ta-ve'ek-ae** [LocNmz-pig-LocNmz] 'pigpen').

5.2 Locative and temporal nouns

Locative and temporal nouns are structurally distinguished from other nominals in that they usually cannot be preceded by 'i:

(5.8) Locative nouns

- a. om-iki-nai 'oponoho.

 Dyn.Fin-exist-1PE.Nom Wanshan

 'We are in Wanshan.' / 'We live in Wanshan.'
- a'. * **om-iki-nai** 'i '**oponoho.**Dyn.Fin-exist-1PE.Nom Wanshan

Temporal nouns

b. dhona lo kala-pahalr-ae lo that if TempNmz-rice-TempNmz if maka-'i-pahai-nga-mao...

Dyn.Subj:finish-gather-rice-already-Impers.Gen

'The rice season (refers to) the time when we have finished harvesting rice...'

- b'.*dhona lo 'i kala-pahalr-ae lo that if TempNmz-rice-TempNmz if maka-'i-pahai-nga-mao...
 - Dyn.Subj:finish-gather-rice-already-Impers.Gen

5.2.1 Locative nouns

Locative nouns include:

- nouns referring to a location, e.g.
- (5.9) a. **valrio** 'village' b. **dha'ane** 'house'
 - orientation and directional nouns such as:

(5.10) a. **dhalra** 'up(wards)' 'down(wards)' b. Iraodho 'above' c. rahare/lrahalre 'below' d. aleve e. 'adhingi 'inside' f. latadhe 'outside' g. talicovongae 'in front' h. alrikodhae 'behind' i. vila'a 'beside' 'middle' j. vecahae

- place names,²⁷ for instance:

| (5.11) | a. | 'oponoho | 'Wanshan 萬山' |
|--------|----|-----------------|----------------|
| | b. | koodhiae | 'Jiuliao 舊寮' |
| | c. | 'akao | 'Pingtung 屏東' |
| | d. | takao | 'Kaohsiung 高雄' |
| | e. | taitoo | 'Taitung 台東' |
| | f. | laecenge | 'Kaoshu 高樹' |
| | g. | lakolrocae | 'Liugui 六龜' |
| | h. | soatimulr | 'Sandimen 三地門' |
| | i. | kalramomodhesae | 'Chiamu 佳幕' |
| | j. | kodhengehe | 'Ila 伊拉' |
| | k. | kocapongae | 'Haocha 好茶' |
| | 1. | soadhihi | 'Ali 阿禮' |
| | m. | tokovolo | 'Tewen 德文' |
| | n. | pahidhahae | 'Dashe 大社' |

- derived common nouns being used to refer to a location 'a place full of':

| (5.12) | | Common n | ouns | | Derived locative nomi | nals |
|--------|----|----------|---------------|---|-----------------------|-------------------------------|
| | a. | vecenge | 'millet' | ~ | vecevecengae | 'a place full of millet' |
| | b. | pahai | 'rice' | ~ | pahapahalrae | 'a place full of rice' |
| | c. | tai | 'taro' | ~ | taitaie | 'a place full of taros' |
| | d. | dha'ane | 'house' | ~ | dha'adha'adha'anae | 'a place full of houses' |
| | e. | tomotomo | 'old (wo)man' | ~ | atomotomotomoe | 'a place full of old (wo)men' |

104

 $^{^{27}}$ I have collected very few place names and most of them have to do with neighboring places, villages and towns.

5.2.2 Temporal nouns

Temporal nouns include "basic" nouns as in (5.13), and derived/abstract nominals as in (5.14).

(5.13) Underived temporal nouns

```
a. 'idha 'yesterday' ~ lo 'idha 'tomorrow'
```

b. peela 'day before yesterday' ~ lo peela 'day after tomorrow'

c. icaili 'last year' ~ lo icaili 'next year'

d. mene 'today, now'

(5.14) Derived temporal nominals

| a. | 'idhanae | 'next day (past)' | ~ | lo 'idhanae | 'next day (future)' |
|----|--------------|--------------------|----------|------------------------|----------------------|
| b. | kapeleelae | 'three days ago' | ~ | lo kapeleelae | 'in three days' |
| c. | menanae | '(one) day' | ~ | menamenamenanae | 'every day' |
| d. | dhomanae | 'sometimes' | | | < cf. dhoma 'other' |
| e. | kalakecelrae | 'winter' | | | < cfkecelre 'cold' |
| f. | kalalrapa'ae | 'summer' | | | < cflrapa'a 'hot' |
| g. | kalapahalrae | 'time for the | rice ha | arvest, rice harvest' | < cf. pahai 'rice' |
| h. | kalavecengae | time for the n | nillet h | < cf. vecenge 'millet' | |
| i. | kaladhodha' | olae 'monsoon, rai | ning | season' | < cf. dha'olo 'rain' |

5.3 Non-common nouns

Non-common nouns include kinship terms (5.15), personal names (5.16) and household names (5.17). Insults (5.18) that function as nominals also behave as non-common nouns.

(5.15) Kinship terms

| Reference | Gloss | Address | Gloss |
|-----------|---------------------------|---------|---------------|
| a. ina- | 'mother' | inakee! | 'Mother!' |
| b. ama- | 'father' | amakee! | 'Father!' |
| c. omo- | 'grandfather/grandmother' | omokoo! | 'Grandpa/ma!' |

(5.16) Personal names

| Masculine names | Feminine names |
|-----------------|----------------|
| a. taotao | dhipolo |
| b. takanao | 'elrenge |
| c. laoco | leeve |

- (5.17) Household names
 - a. lakadhaalae
 - b. lapangolai
 - c. lasavarae
- (5.18) Insults
 - a. lrakape 'Lazybones!'b. kalaici 'Bastard!'

These different nominal subcategories are discussed in turn in the sections that follow.

5.3.1 Kinship terms and related words

In Mantauran, kinship terms are defined as all the terms that refer to a specific system of familial relationships, including affines, i.e. spouse(s) and friends, but excluding words such as **saka-dha'ane** 'brother/sister-in-law'. Most of these terms can be marked with the plural prefix **la-** (used for non-common nouns) and the reciprocal prefixes **ma'a-~la-ma'a-**. Some of these can be quantified through **kapa-...-nga** 'all'. They all include terms of address as opposed to terms of reference, though in a few cases, there is no overt lexical or morphosyntactic distinction between these two sets.

A few notes are in order. Kinship terminology distinguishes between different generations but there are no sex differentiation for grandparents, siblings and spouses. Sibling relations are differentiated in terms of relative age, i.e. there is a distinct word for "older sibling(s)" and "younger sibling(s)". The terms for 'grandparent', 'father', 'mother' and '(elder/younger) sibling(s)' lump together reference to close relatives, e.g. siblings of the grandparents or parents, i.e. great-grand-uncles/aunts and uncles/aunts as well as cousins.

Major morphosyntactic distinctions can be drawn along two parameters: relative age and relative affiliation, i.e. the behavior of terms referring to nearest older relatives (§5.3.1.1) must be distinguished from that of those referring to younger sibling(s) (§5.3.1.2) and one's spouse and friends (§5.3.1.3). Related words such as **tamatama** 'middle-aged man' (i.e. generic term meaning 'father') and **lalake** '(own) child' as opposed to **lroolai** 'child (generic)' are discussed in sections 5.3.1.4 and 5.3.1.5 respectively.

5.3.1.1 Nearest older relatives

Mantauran Rukai exhibits three different but related words for kinship terms, used in a non-vocative context:

Table 5.1: Non-vocative kinship terms

| | bound form | bound form+ProGen | free form |
|-------------------------------|------------|--------------------------|-----------|
| 'father (and uncles)' | -tama | ama-+Pro _{Gen} | aamae |
| 'mother (and aunts)' | -tina | ina-+Pro _{Gen} | iinae |
| 'grand-father/-mother' | -tomo | omo-+Pro _{Gen} | oomoe |
| 'older sibling (and cousins)' | -taka | taka-+Pro _{Gen} | taakae |

-tama, -tina, -tomo and -taka are bound forms which occur *only* in reciprocal construction, e.g. 'father and son(s)/daughter(s)', 'mother and daughter(s)/son(s)', 'grandparent and grandchild(ren)', 'two (or more) siblings'. This reciprocal relationship (or "converse relationship" in Lichtenberk's (1999) terms) is asymmetrical in that it involves two participants in an unequal (inter)relationship, i.e. the base always corresponds to an elder, e.g. tama 'father' > (la)ma'a-tama 'father and child'. It is expressed through the prefixation of ma'a- (~pa'a-) or la-ma'a- (~pa'a-) to the base (see §5.6 for a discussion on the distinction between (la)ma'a- and pa'a-). When prefixed by ma'a-, the base functions as a predicate which can occur in sentence-initial position as the main verb (5.19), or embedded to another verb (5.20).

(5.19) a. *ma'a-tina* ana-lo Rec:Stat.Fin-mother that-plur 'They are mother and daughter.'

b. amo-pa'a-tina ana-lo.

Irr-Rec:Stat.NFin-mother that-plur

'There will be mother and daughter.'

(5.20) **"'ai! o-sivahange-Ira-imia'e ma'a-tiina la..."**Excl Dyn.Fin-pregnant-1S.Nom-2S.Obl Rec:Stat.Subj-mother:Emph and ""Ayayay! I was pregnant with you and..."

When prefixed by la-ma'a-, the base functions as a nominal argument:

(5.21) **o-dhaace-nga** *la-ma'a-itina*. Dyn.Fin-leave-already plur-Rec-plur:mother 'Mother and daughters left.'

The forms **ama-**, **ina-**, **omo-** and **taka-** can also be treated as bound forms, in that they must *always* occur with a genitive pronoun, e.g. **ama-li** 'my father', **ina-'o** 'your mother', **omo-ni** 'his/her grandparent' etc..., as in (5.22a). As shown by the ungrammaticality of (5.22b-c), such terms cannot occur independently nor can they be replaced by the kinship forms starting with **t-** such as **-tomo** 'grandparent'.

that

(5.22) a. **ona'i a-'itovolro-li 'i omo-li...**that ClsNmz-Dyn.NFin:ask-1S.Gen grandparent-1S.Gen
'I once asked my grandfather...' (*Lit.*: 'When I asked my grandfather...')

b. *ona'i a-'itovolro-li 'i omo...
that ClsNmz-Dyn.NFin:ask-1S.Gen grandparent
c. *ona'i a-'itovolro-li 'i -tomo...

ClsNmz-Dyn.NFin:ask-1S.Gen

The forms **aamae**, **iinae**, **oomoe**, **taakae** are free forms but their usage is extremely restricted. They refer *exclusively* to one's (grand)parent/older sibling and are respective synonyms of **ama-li** 'my father', **ina-li** 'my mother', **omo-li** 'my grandparent' and **taka-li**. Thus, **omo-li** in (5.22a) can be replaced by **oomoe**, as in (5.23):

grandparent

(5.23) **ona'i a-'itovolro-li 'i oomoe...**that ClsNmz-Dyn.NFin:ask-1S.Gen one's grandparent
'I once asked my grandfather...' (*Lit*.: 'When I asked my grandfather...')

Vocative (or address) terms include: **amake(e)** 'Father', **inake(e)** 'Mother', **omoko(o)** 'grandpa/grandma' and **taaka** 'older sibling'.

(5.24) amakee/inakee/omokoo/taaka, kana-ni pi'a-'o?
Father/Mother/Grandpa~ma/older sibling what-3S.Gen Dyn.NFin:do-2S.Gen 'Father/Mother/Grandpa~Grandma/Older brother~sister, what are you doing?'

5.3.1.2 The morphosyntactic behavior of 'adhi 'younger sibling'

The word 'adhi 'younger sibling' exhibits the following characteristics:

1) It functions like words for nearest (older) relatives in that (i) it is a bound root (5.25a) and (ii) 'aadhi is an equivalent to 'adhi-li (5.25b):

(5.25) a. **kana-ni pi'a-'o 'adhi-li**/***'adhi?**what-3S.Gen Dyn.NFin:do-2S.Gen younger sibling-1S.Gen
'What is my younger brother/sister doing?'

b. kana-ni pi'a-'o 'aadhi? what-3S.Gen Dyn.NFin:do-2S.Gen one's younger sibling 'What is my younger brother/sister doing?'

2) It differs in the formation of reciprocals. As it is prefixed by **to-** 'make, produce, build', the reciprocal prefix is the one used for dynamic verbs, *cf.* **ma(a)-**:

(5.26) bound root dual Gloss plural Gloss
'adhi maa-to-'adhi 'two siblings' ma-to-'adhi-'adhi 'three (or more) siblings'

5.3.1.3 Spouse and friends

Words for one's spouse and friends represent bound forms when used non-vocatively (reference) but free when used vocatively (address).

Table 5.2: Words for one's spouse and friends

| | bound form | free form |
|-------------------|------------------------------|-----------|
| 'spouse' | -palange, lamengae- ~ palra- | kiili |
| '(male) friend' | ivoko- | ivokoo |
| '(female) friend' | lili- | lamaee |

While **-palange** only occurs in reciprocal constructions, *cf.* **(la)ma'apalange** 'husband and wife' (5.27a-b), **palra-**²⁸ and more commonly **lamengae-** 'spouse' only appear in possessive constructions (5.27c):

(5.27) a. *ma'a-palange/*ma'a-lamengae* ana-lo.

Rec-spouse that-plur

'They are husband and wife.'

b. o-dhaace-nga la-ma'a-palange/*la-ma'a-lamengae.

Dyn.Fin-leave-already plur-Rec-spouse

'Husband and wife left.'

c. kana-ni pi'a-'o lamengae-li/palra-li/*palange-li?

what-3S.Gen Dyn.NFin:do-2S.Gen spouse-1S.Gen

'What is my husband/wife doing?'

The vocative (or address) term is kiili 'Darling!'.

(5.28) kiili, kana-ni pi'a-'o?

Darling what-3S.Gen Dyn.NFin:do-2S.Gen

'Darling, what are you doing?'

The term **ivoko-** '(male) friend' can occur both in reciprocal constructions (5.29) and in possessive constructions (5.30):

palra- can be used as a base to form a reciprocal, but the sequence: (la-)ma'a-palra does not refer to 'husband and wife' but rather to '(two) relatives'. The reason for this semantic shift is ill-understood at this stage.

Gloss (5.29) bound root dual Gloss plural la-ma'-ivoko 'two friends la-ma'-ivi-'ivoko 'three (or more) friends'29 ivoko-

ivoko-li/*ivoko? (5.30) kana-ni pi'a-'o what-3S.Gen Dyn.NFin:do-2S.Gen (male) friend-1S.Gen 'What are you doing, my friend?'

The vocative (or address) term is: **ivokoo** '(My male) friend'.

(5.31) ivokoo, kana-ni pi'a-'o? what-3S.Gen Dyn.NFin:do-2S.Gen (male) friend '(My) friend, what are you doing?'

The term for 'female friend' stands for a rather complex case of suppletion in Mantauran: lili- is the singular form of the term meaning a '(female) friend'. It can occur in reciprocal constructions (5.32) and in possessive constructions (5.33):

(5.32) bound root dual Gloss plural Gloss lilila-ma'a-lili³⁰ 'two friends la-ma'a-lili-li 'three (or more) friends'

(5.33) amo-pato'o-lra-ine lili-'o/*lili. Irr-Dyn.NFin:tell-1S.Nom-3S.Obl (female) friend-2S.Gen 'I will tell your friend.'

Its vocative counterpart is **lamae** '(my female) friend':

(5.34) a. lamae! amo-pato'o-lra-imia'e. (female) friend (+voc.) Irr-Dyn.NFin:tell-1S.Nom-2S.Obl '(My) friend, I will tell you.'

b * *lili-li*! amo-pato'o-lra-imia'e. (female) friend-1S.Gen Irr-Dyn.NFin:tell-1S.Nom-2S.Obl '(My) friend, I will tell you.'

The plural of lili- '(female) friend (reference)' and lamae '(female) friend (address)' is **laidhae** that can be used as both non-vocative (5.35a) and vocative (5.35b) contexts:

Doublet form: la-ma-'ivo-'ivoko 'three (or more) friends'.

As mentioned in §1.4.3, the term -ali is usually treated (by informants) as a loan from Tona though it occurs in folktales, cf. la-ma'a-ali 'two friends', pa'a-ali-lidha 'two friends'.

(5.35) a. amo-pato'o-lra-iline laidhae-'o.

Irr-Dyn.NFin:tell-1S.Nom-3P.Obl (female) friends-2S.Gen

'I will tell your friends.'

b. laidhae! amo-pato'o-lra-inome.

'(My) friends, I will tell you.'

5.3.1.4 Lexicalized root forms

Words referring to generic terms such as 'middle-aged (wo)man', 'old (wo)man', 'relatives' etc. are actually derived from kinship terms, but synchronically behave like common nouns on the morphosyntactic level (*cf.* §5.2). Thus, I treat them as lexicalized root forms (*cf.* also §3.3.3.1). They include:

(5.36) a. **tamatama** 'middle-aged man' < **-tama** 'father' b. **titina** 'middle-aged woman' < **-tina** 'mother'

c. **tomotomo** 'old person' < **-tomo** 'grandfather/grandmother'

d. takataka 'older (cousin, relative)' < -taka 'older sibling'
 e. palrapalra 'relative' < -palra 'spouse'

5.3.1.5 The terms for 'child' and their derivations

The term that designates one's child (either biological, adopted, or in-law) is **lalake** as opposed to the generic term for 'child', *cf.* **Iroolai**. The first is usually followed by a genitive pronoun, as shown in (5.37a-b); the second never is; compare (5.38a-b). Both function as common nouns.

(5.37) a. **naa-tovi-ni dhona'i** *lalake-li*. continuously-Dyn.NFin:cry-3S.Gen that child-1S.Gen 'My child does not stop crying.' (*Lit*.: 'That child of mine...')

b. ?*naa-tovi-ni dhona'i lalake. continuously-Dyn.NFin:cry-3S.Gen that child

(5.38) a. **naa-tovi-ni dhona'i** *lroolai*. continuously-Dyn.NFin:cry-3S.Gen that child

'That child does not stop crying.'

b. *naa-tovi-ni dhona'i *lroolai-li*.

continuously-Dyn.NFin:cry-3S.Gen that child-1S.Gen

Forms derived from **lalake** and **lroolai** also occur in complementary distribution: *cf.* **to-alake** 'give birth', '**i-olrolai** 'bear a child, give birth, take care of a baby' (as opposed to **to-lroolai** 'take s.o. for a child').

5.3.2 Personal names

The Mantauran choose their personal names according to the "noble/chief-commoner" hierarchy (noble names are preceded by an asterisk in the tables that follow), i.e. if a baby is born in a noble household, s/he is entitled to a noble name; otherwise, the parents need to "buy a noble name" through gifts (usually gifts in nature, as shown in Zeitoun & Lin 2003:75).

As shown in tables 5.3 and 5.4, names are sex-specific. They are usually chosen among one's ancestors, preferably grandparents. Less commonly, names can be borrowed from another Rukai village, from which one of the parents originates. A juvenile name—a name used during infancy—usually corresponds to each adult name. Names that serve when scolding someone can be used also during adulthood.

Table 5.3: Mantauran boys' given names (From Zeitoun & Lin 2003:76)

| Adult names | Juvenile names | Name used when scolded |
|-------------------------|----------------|--------------------------|
| *dhangalro | 'aalro | lokolokongo, 'aalokongo |
| *dhoodholo | 'oolo | |
| kolele | | |
| *kooi | 'oicang(e) | kolingitili, kolipang(e) |
| *lee'e | lee'e | lee'elrele |
| *laoco | 'aoco | tila'ocolro |
| *lavakao | 'akao | |
| *lavorasi | 'oati | |
| *lrangepao | 'angpao | lrangkale |
| *lritahe | taa'e | |
| *ngedhelre | 'etele | ngetengete |
| *hilalilao | 'iao | helale |
| malrongana | 'engane | malrangelrange |
| *pakiringae, cikihingae | 'iitingae | pokolrititi |
| *paralidhi | maadhi, paali | pangalidhi |
| *pasolrange | taonge | 'asolange |
| ripono | poono | pooco |
| *seehe | | maseheale |
| *takanao | 'aanao | takanalropo |
| *taotao | 'ao'ao | taotaongoso |
| *vaaho | 'aaho | kavaho |
| *'adhio | 'atio | 'adhilrale |
| *'alro | | |
| *'arase | 'aate | 'aasingkolro |
| *'esai | 'etai | |
| *'inepelre | kinepelre | |
| *'oovake | | tanovake |
| 'atoane | | |
| 'idholo | | tanovake |

Table 5.4: Mantauran girls' given names (From Zeitoun & Lin 2003:77)

| Adult names | Juvenile names | Name used when scolded |
|-------------|----------------|--------------------------|
| *dheedhese | 'eese | dhekepe |
| dheeme | 'eeme | dhemekece, madhemedheme |
| *dhipolo | 'ipolo | madhipolane |
| keeke | | |
| *leeve | 'eeve | livici |
| leheai | | |
| leheane | 'eheane | |
| levetai | | |
| lavaoso | 'avaoso | lavaosokolrolo |
| ledheme | dheme | leeleledheme |
| *molrino | 'oino | molrikoalavange |
| *mooni | 'ooni | 'oonikiniki |
| paelrese | 'aece | |
| vedhao | 'itao | sahivedhale, salrevedhao |
| *'alaiomo | 'iongo | 'alaiococo, salaiongo |
| *'aoni | 'aoni | 'aonikiniki |
| *'aroai | 'aoai | 'aloang(e) |
| 'eepe | | sekepe |
| *'elrenge | 'eenge | |
| 'enedhe | nedhe | |
| 'ingoho | 'iingo | |

5.3.3 Household names

Mantauran counts over 40 household names (or more commonly "family" names), which are provided in table 5.5. Each household name is prefixed by the plural marker **la-**, which occurs in specific circumstances, as explained in §5.4.

Table 5.5: Mantauran household names (From Zeitoun & Lin 2003:91)

| 1. | 顏國忠 Yan Guo-chong | laparolisi | 22. | 駱懷德 Luo Huai-de | locorovo |
|-----|--------------------|---------------|-----|--------------------|--------------|
| 2. | 戴秀盛 Tai Hsiu-sheng | latavelengae | 23. | 金德玉 Jin De-yu | lapotoe |
| 3. | 賴必日 Lai Bi-ri | lakadhangilae | 24. | 曾銘舜 Ceng Ming-shun | lataodha'ae |
| 4. | 陳漢麟 Chen Han-lin | lasavarae | 25. | 拓正安 Tuo Cheng-an | lakotalao |
| 5. | 賴樹來 Lai Shu-lai | ladholoe | 26. | 呂一平 Lü Yi-ping | lapangolai |
| 6. | 李麗珍 Li Li-chen | laradhae | 27. | 林清文 Lin Ching-wen | lama'avalrio |
| 7. | 王仕那 Wang Shih-na | lacoringao | 28. | 江德送 Chiang De-song | latapilio |
| 8. | 藍健安 Lan Jian-an | lavinarae | 29. | 施金石 Shih Jin-shih | latalidhalra |
| 9. | 金清山 Jin Ching-shan | laovalate | 30. | 柯貴財 Ke Gui-tsai | lakadhaalae |
| 10. | 范金富 Fan Jin-fu | lapalrii'ae | 31. | 蔡文悌 Tsai Wen-ti | lasalimarao |
| 11. | 林進貴 Lin Jin-gui | latavatae | 32. | 吳武松 Wu Wu-song | ladharalape |
| 12. | 林順發 Lin Shun-fa | lakadhaalae | 33. | 鄭文財 Cheng Wen-tsai | laolrangae |

| 13. | 尤三榮 You San-rong | laoholrongae | 34. | 梁景興 Liang Jing-hsing | lapalrai |
|-----|-----------------------|---------------|-----|----------------------|----------------|
| 14. | 廖春田 Lian Chun-tian | lakodhia'e | 35. | 金茂榮 Jin Mao-rong | lapalrivolongo |
| 15. | 高雲騰 Gao Yun-teng | laovilase | 36. | 曾尾妹 Ceng Wei-mei | lati'io |
| 16. | 蔡正男 Tsai Cheng-nan | lakadhe'engae | 37. | 戴萬順 Tai Wan-shun | lama'avalrio |
| 17. | 方再發 Fang Chai-fa | latarongili | 38. | 盧義唐 Lu Yi-tang | lataolingi |
| 18. | 武 漢 Wu Han | lapa'idhingi | 39. | 范熾欽 Fan Chih-chin | ladhomalalrase |
| 19. | 關清江 Guan Ching-chiang | lalipalrasae | 40. | 黃金豹 Huang Jin-pao | lapaavecelae |
| 20. | 林福德 Lin Fu-de | lakomakae | 41. | 曹招勇 Tsao Chang-yong | lari'adha |
| 21. | 范桂花 Fan Gui-hua | laperelai | | | |

5.3.4 Insult nominals

Insult nominals are derived from (i) body parts referring to male or female genitals, *cf.* (5.39)-(5.40) and from (ii) verbs as in (5.41).

(5.39) Male genitals

a. elrele-'o!

penis-2S.Gen

'You're bloody foolish!'

b. ngapolo-'o!

foreskin/prepuce-2S.Gen

'Blockhead!'

c. pehae-'o!

male genitals-2S.Gen

'Blockhead!'

d. *voco'o-*'o!

testicle-2S.Gen

'Blockhead!'

e. *vee'e-*'o!

sperm-2S.Gen

'Blockhead!'

(5.40) Female genitals

a. ngatale-'o!

female genitals-2S.Gen

'You're bloody foolish!'

b. ngece'e-'o!

lip-2S.Gen

'Blockhead!'

(5.41) a. ma-lrakap-iae.

Stat.Fin-lazy-1S.Obl 'I am lazy.'

b. **kasa-ni lo iki-ni dha'ane 'apece,** *lrakape*! only-3S.Gen if Dyn.NFin:be at-3S.Gen house Dyn.Subj:sleep lazybones 'You only (know how to) stay at home and sleep, lazybones!'

Table 5.6 provides a list of insult nominals derived from verbs.

| Base | Gloss | Derived form | Gloss |
|-----------------------------|-----------------------------------|------------------|--------------------|
| o-tovi | 'cry' | tovicae | 'snivelling child' |
| o-talrina'oae ³¹ | 'head-hunt, sever someone's head' | talrina'oae | '(you're) dead' |
| ma-'olrongo | 'stupid' | la-'olro'olrongo | 'stupid' (pl.) |
| ma-mo'oso | 'prognathous' | mo'osae | 'prognathous' |
| ma-lrakane | 'lazy' | lrakane | 'lazybones' |

Table 5.6: Insults derived from verbs

5.4 Marking of plurality

Plurality in Mantauran is triggered by morphological, syntactic, and semantic factors. Plural formation is expressed through morphological means (affixation and/or reduplication). Syntactically, plural formation is both subject-sensitive and object-sensitive, i.e. it is triggered by the quantification of a subject and yielded by the occurrence of a non-volitional/human/oblique participant. Semantically, the notion of plurality is closely associated with that of "humanness", i.e. only nouns referring to humans are overtly marked as plural.

5.4.1 Rules for plural marking

Common nouns can be divided into at least the two following types: common nouns referring to non-human participants and common nouns referring to human participants. Common nouns referring to non-human referents can further be divided according to whether they are countable/non-countable or refer to a single entity.

Common nouns referring to non-human participants are never marked for plural, i.e. they are always grammatically marked as singular no matter how many referents are involved. Compare:

Doublet form: **o-talrina'oa** 'headhunt, sever someone's head'.

(5.42) a. om-iki latadhe ta-ka-eaea ta'olro. Dyn.Fin-exist outside SubjNmz-Stat.NFin-one:Red dog 'There is one dog outside.' b. om-iki latadhe ta-ka-dhao ta'olro. Dvn.Fin-exist outside SubjNmz-Stat.NFin-many dog 'They are many dogs outside.'

They might, however, be circumfixed with **kapa-...-nga** 'all' to express a notion of "quantification/collectivity", e.g. **kapa-ta'olro-nga** 'all the dogs', **kapa-dha'ane-nga** 'all the houses'. For instance:

(5.42) c. **om-iki latadhe** *kapa-ta'olro-nga*.

Dyn.Fin-exist outside all-dog-Sup

'All the dogs are outside.'

Many (underived or derived) common nouns referring to a human participant can appear in a plural form. They include nouns referring to a human entity (e.g. **Iroolai** 'child', 'avai 'woman', 'aolai 'man' etc...) as in (5.43) and abstract or derived nouns obtained through nominalization, e.g. takarodhange '(who is) old' (5.44).

- (5.43) a. "amo-pate'ete-lra-imia'e" mani ia dhona 'aolai.

 Irr-Dyn.NFin:kill-1S.Nom-2S.Obl then Dyn.NFin:so that man
 "'I am going to kill you" said that man.'
- (5.44) a. **o-dholro tomako dhona** *ta-ka-rodhange*.

 Dyn.Fin-can Dyn.Subj:smoke that SubjNmz-Stat.NFin-old 'That old person can/is allowed to smoke.'
 - b. **o-dholro tomako dhona** *ta-ka-a-rodhange*.

 Dyn.Fin-can Dyn.Subj:smoke that SubjNmz-Stat.NFin-plur-old 'Those old persons can/are allowed to smoke.'

Underived locative and temporal nouns are never marked for plurality nor can they be quantified through **kapa-...-nga**, *cf.* (5.45). Derived locative and temporal nouns may undergo reduplication to express a notion of collectivity or quantification, *cf.* **tai** 'taro' ~ **taitaie** 'a place full of taros' (5.46a), **menanae** '(one) day' ~ **menamenanae** 'every day' (5.46b):

(5.45) a. *kapa-'idha-nga

b. *kapa-'idhanae-nga

c. *? kapa-menanae-nga

d. kapa-kalakecelrae-nga
e. kapa-kalalrapa'ae-nga
f. kapa-kalapahalrae-nga
g. kapa-kalavecengae-nga
'all the winters'
'all the rice harvests'
'all the millet harvests'

(5.46) a. ta-lredhek-ae-li

tai-tai-e.

LocNmz-Dyn.NFin:plant-LocNmz-1S.Gen Red-taro-LocNmz 'The place where I do plantations is full of taros.'

b. lo mena-mena-men-a-nae maavanao-lrao.

if Red-Red-day-beyond-TempNmz Dyn.Fin:bathe-1S.Nom

'I take a bath every day.'

Non-common nouns, including address/vocative and reference/non-vocative kinship terms, household names, insults (functioning as nouns), can be marked for plural (5.47). Given names, on the other hand, never are.

- (5.47) a. imia m-o-a kone amakee! come:Imp Dyn.Subj-go-Imp Dyn.Subj:eat father:voc 'Father, come to eat.'
 - a'. imia m-o-a kone l-amakee!
 come:Imp Dyn.Subj-go-Imp Dyn.Subj:eat plur-father:voc
 'Father and uncles, come to eat.'
 - b. kani tovi-ni ina-li?
 why Dyn.NFin:cry-3S.Gen mother-1S.Gen
 'Why is my mother crying?'
 - b'. **kani tovi-lini** *l-iina*? why Dyn.NFin:cry-3P.Gen plur-mother 'Why are my mother and aunts crying?'
 - c. **o-dhaace-nga** *(*la-*)*kadhaalae*.

 Dyn.Fin-leave-already plur-household name 'The Kadhaalae have already left.'
 - d. **kalaici/***la***-kalaici!** bastard/plur-bastard

'Bastard/Bastards!'

| Noun classes | | Singular | Plural |
|------------------|---------------------|----------|---|
| Common nouns | non-human | yes | no |
| | human | yes | yes |
| | | | for the majority of nouns |
| Temporal nouns | basic/underived | yes | no |
| | abstract/derived | yes | yes |
| | | | but restricted to collectivity/quantification |
| Locative nouns | basic/underived | yes | no |
| | abstract/derived | yes | yes |
| | | | but restricted to collectivity/quantification |
| | Kinship terms +voc | yes | yes |
| | Kinship terms - voc | yes | yes |
| Non-Common nouns | Personal names | yes | no |
| | Household names | yes | yes |
| | Insults | yes | yes |

Table 5.7: Noun classes and the marking of plurality

In the following subsections, I focus specifically on plural marking on human common nouns and non-common nouns through the suffixation of **a-/la-** to the base. A summary is given in §5.4.6.

5.4.2 Common nouns referring to a human participant

Plural nouns referring to human participants are usually derived through the prefixation of **a**- to the base.

Nouns referring to human participants might represent basic/underived forms, as in (5.48) or more abstract entities derived through nominalization as in (5.49).

Among basic/underived nouns, a distinction might be made between base forms that undergo overt reduplication and those which do not. The prefixation of the plural marker **a-** usually yields the reduplication of the root, *cf.* **savare** 'young man' ~ **a-sava-savare** 'young men'. If the plural marker attaches to a lexicalized reduplicated root as in **valrovalro** 'young woman' ~ **a-valrovalro** 'young women', the base form does not undergo further reduplication.

```
(5.48) a. 'avai
                      'female, girl, woman'
                                               ~ a-'ivivai
                                                                 'females, girls, women'
                      'male, boy, man'
                                                                 'males, boys, men'
       b. 'aolai
                                                  a-'olalai
       c. Iroolai
                      'baby, child (gen.)'
                                               ~ a-olrolai
                                                                 'babies, children'
       d. tailai
                      'chief'
                                                                 'chiefs'
                                               ~ a-talialai
       e. titina
                      'middle-aged woman'
                                               ~ a-itina
                                                                 'middle-aged women'
       f. tamatama 'middle-aged man'
                                                                 'middle-aged men'
                                               ~ a-tamatama
```

```
g. tomotomo
               'old person'
                                           a-tomotomo
                                                          'old men'
               'young man'
h. savare
                                           a-savasavare 'young men'
i. valrovalro
               'young woman'
                                                          'young women'
                                           a-valrovalro
j. takataka
               'older (cousin, relative)' ~
                                           a-takataka
                                                          'older (cousins, relatives)'
k. ka'olo
                'commoner'
                                           a-oka'olo
                                                          'commoners'
1. valravalrae 'guest, outsider'
                                           a-valravalrae 'guests, outsiders'
               'child (own)'
m. lalake
                                           la-a-lake
                                                          'children (own)'
```

There is at least one type of derived/abstract common nouns obtained through nominalization—cf. subjective nominals—that can occur in the plural form, through the prefixation of **a-** to the base. Note that the position of the plural marker is slightly different in nominals derived from dynamic verbs and those derived from stative verbs: the plural prefix occurs just after the nominalizer **ta-** in nominals derived from dynamic verbs, but follows the stative prefix **ka-** in nominals derived from stative verbs, i.e. it occurs the closest to the root.

```
(5.49) Dynamic verbs
       a. ta-ki-kane
                             'who does not eat'
                                                  ~ ta-a-ki-kane
                                                                          'who do not eat'
       b. ta-'acakelae
                             'who is married'
                                                  ~ ta-a-'acakelae
                                                                          'who are married'
       Stative verbs
                            'who is old'
                                                                          'who are old'
       c. ta-ka-rodhange
                                                     ta-ka-a-rodhange
                             'who is clever'
                                                                          'who are clever'
       d. ta-ka-lrihili
                                                  ~ ta-ka-a-lrihili
```

A number of (underived/derived) common nouns referring to human nouns cannot be marked for plurality, and thus are grammatically singular whatever the number of referents involved. They usually cannot undergo reduplication either.

```
(5.50) a. katalrisie
                                                     *a-katalrisie/*katalrisilrisie
                           'aborigine'
                           'enemy'
                                                     *a-valra/*valravalra
       b. valra
       c. tokapi
                           'twin'
                                                     *a-tokapi/*tokapikapi
                           'widow'
                                                     *a-'alriasao/*'alriasaosao
       d. 'alriasao
                                                     *a-cara'e/*caracara'e
       e. cara'e
                           'chief, official'
       f. ta-ka-ca'eme
                          'patient/who is ill'
                                                     *ta-ka-a-ca'eme
                                                     ta-ka-ca'e-ca'eme 'patients'
                                               but
```

5.4.3 Vocative and non-vocative kinship terms

Plural reference/non-vocative and address/vocative kinship terms are derived through the prefixation of **l(a)-**.

(5.51) Reference/non-vocative kinship terms

```
Singular
                                                    Plural
                                                   l-iina-<sup>32</sup>
a. ina-
               'mother'
                                                                   'mother and aunts'
                                                                   'father and uncles'
b. ama-
               'father'
                                                   l-aama-
c. omo-
               'grandfather/grandmother'
                                                   l-oomo-
                                                                   'grandparents'
               'elder sibling'
                                                                   'elder siblings'
d. taka-
                                                    la-ataka-
e. 'adhi-
               'young sibling'
                                                                   'younger siblings'
                                                    la-a'adhi-
                                                                   'grandchildren'
f. ahane
               'grandchild'
                                                   l(a)-ahane
g. ivoko-
                                                                   '(male) friends'
               '(male) friend'
                                                    la-'ivoko-
h. lili-
               '(female) friend'
                                                   laidhae-
                                                                   '(female) friends'<sup>33</sup>
```

(5.52) Address/vocative kinship terms

```
Singular
                                               Plural
a. inakee!
             'Mother!'
                                               l-inakee!
                                                             'Mother and aunts!'
b. amakee! 'Father!'
                                               l-amakee!
                                                             'Father and uncles!'
c. omokoo! 'Grandpa/Grandma!'
                                                            'Grandparents!'
                                               l-omokoo!
d. taaka!
             'Elder sibling!'
                                               la-taakae!
                                                            'Elder siblings!'
e. 'adhii!
             'Younger sibling!'
                                                             'Younger siblings!'
                                               la-'adhii!
             'Grandchild!'
                                                            'Grandchildren!'
f. ahanee!
                                               l(a)-ahanee
g. ivokoo!
             '(male) Friend!'
                                               la-'ivokoo!
                                                             '(male) Friends!'
                                                             '(female) Friends!'
h. lamaee!
             '(female) Friend!'
                                               laidhaee!
```

While **iinae** 'my mother' can be used as a near synonym of **ina-li** 'my mother', there is no plural counterpart to **iinae** (and the like) such as *l-iinae.

```
(5.53) Singular Plural
a. ina-li~iinae 'my mother' ~ l-iina-li~*l-iinae 'my mother and aunts'
b. ama-li~aamae 'my father' ~ l-aama-li~*l-aamae 'my father and uncles'
c. omo-li~oomoe 'my grandparent' ~ l-omoo-li~*l-oomoe 'my grandparents'
d. taka-li~taakae 'my elder sibling' ~ la-ataka-li~*la-taakae 'my elder siblings'
```

5.4.4 Nouns referring to a person or a household

Given names never appear in the plural form, though a group of people bearing the same name might be referred to with the prefix **tali-** 'belong to' adjoined to the given name, e.g. **tali-dhipolo** 'group of persons which are called Dhipolo'.

Household names, on the other hand, are marked as plural through the prefixation of **la-** to the base. The plural form must be used when the name refers to the whole family/household (5.54a). A non-plural form occurs when a single referent of that

2

³² As opposed to: **lina** 'parents' (no singular counterpart).

³³ Cf. §5.3.1.3 for a discussion on this term.

family/household is introduced (5.54b).

| (5.54) a. | dhona'i | la-padhoma | o-dhaace | 'aela | m-oa |
|-----------|--|------------------|---------------|----------------|-------------|
| | that | plur-family name | Dyn.Fin-leave | Dyn.Subj:move | Dyn.Subj-go |
| | songao, | lema'a-nga | dhona'i | dha'ane-lidha. | |
| | Bunun | left-already | that | house-3P.Gen | |
| | 'As for the Lapadhoma, they left and moved to the Bunun tribe; (they) left (behind | | | | |
| | their hous | e.' | | | |

| a'. | * dhona'i that songao, Bunun | padhoma family name lema'a-nga left-already | o-dhaace Dyn.Fin-leave dhona'i that | 'aela Dyn.Subj:move dha'ane-lidha. house-3P.Gen | m-oa Dyn.Subj-go |
|-----|--|--|--|--|----------------------------|
| b. | b. 'elrenge-lrao surname-1S.Nom 'I am Elenge Padhoma.' | | padhoma. family name | | |

b'. *'elrenge-lrao la-padhoma. surname-1S.Nom plur-family name

5.4.5 Insults

Whether they are derived from verbs, as in (5.55) or body parts as in (5.56), insults can be used vocatively and be marked for plurality through the prefixation of **la-** to the root when functioning as nouns.

(5.55) a. la-'olro-'olrongo!

plur-Red-stupid 'Stupid!'

b. la-ponga'a!

plur-lie/cheat 'Liars'

c. la-lrakape!

plur-lazy 'Lazybones!'

(5.56) a. la-elrele!

plur-penis '(You're) bloody foolish!'

b. la-ngapolo!

plur-foreskin/prepuce 'Blockhead!'

5.4.6 Summary

Mantauran exhibits two distinct prefixes to mark plurality: **a-** and **la-**.

The prefix **a-** usually attaches to (underived or derived) common nouns referring to a human participant. Underived common nouns usually simultaneously undergo reduplication, unless the root is a lexicalized reduplicated root.

The prefix **la-** attaches to non-common nouns, (vocative and non-vocative) kinship terms, household names, and, if they function as nouns, insults. Nouns referring to a person are never marked for plurality.

The morphological marking of plurality on nouns is summarized in a tabular form as follows:

| | Common nouns referring | | Non-common nouns | | | | |
|---------|------------------------|------------------|------------------|----------------|--------------------|--------------------|--|
| | to a hu | ıman entity | Kinship terms | | Household names | Insults | |
| | underived | derived | + vocative | -vocative | | | |
| Marking | a- | | l(a)- | | | | |
| Example | a-tomotomo | ta-a-karodhange | <i>l</i> -omoko | l-oomo | <i>la-</i> paŋolai | <i>la-</i> kalaici | |
| Gloss | 'old person' | '(who are) old' | 'Grandpas/mas!' | 'grandparents' | household name | 'Bastards!' | |

Table 5.8: Morphological marking of plurality on nouns in Mantauran

5.5 Quantification

Quantification is indicated through the circumfixation to the root/stem of **kapa-...-nga**. It seems that **kapa-...-nga** can attach on nearly any type of nouns (5.57)-(5.60) except kinship terms, orientation and directional nouns, underived locative nouns and temporal nouns as well as nouns that refer to a single reference or a non-countable entity (5.61):

(5.57) kapa-...-nga + common noun Humans katalrisie 'aborigine' kapa-katalrisie-nga 'all the aborigines' valra 'enemy' kapa-valra-nga 'all the enemies' valravalrae 'guest' kapa-valravalrae-nga 'all the guests' tokapi 'twin' kapa-tokapi-nga 'all the twins' 'alriasao 'widow' kapa-'alriasao-nga 'all the widows' 'all the middle-aged men' tamatama 'middle-aged man' ~ kapa-tamatama-nga 'all the old (wo)men' tomotomo 'old (wo)man' kapa-tomotomo-nga Body parts 'all the bodies' votolro'o 'body' kapa-votolro'o-nga 'bone' kapa-pangolro-nga 'all the bones' pangolro 'skin' 'all the skins' picingi kapa-picingi-nga alrima 'hand' kapa-alrima-nga 'all the hands'

| | dhapale | 'foot, leg' | ~ | kapa-dhapale-nga | 'all the | e feet, legs' |
|--------|---|--|----------------------|---|--|--|
| | Fauna konga'a ove'eke aalrame vavoi akece 'alongae | 'duck, goose' 'pig' 'bird' 'wild pig, boar' 'muntjac' 'deer' | ~ ~ ~ ~ ~ ~ | kapa-konga'a-nga kapa-ove'eke-nga kapa-(a)alrame-nga kapa-vavoi-nga kapa-akece-nga kapa-'alongae-nga | 'all the 'all the 'all the 'all the | e ducks, geese' e pigs' e birds' e pigs' e muntjacs' e deers' |
| | Flora pilaka saviki 'olrao 'aelrenge madho | 'branch' 'betel nut' 'grass' 'flower' 'fruit' | ~ ~ ~ ~ ~ | kapa-pilaka-nga kapa-saviki-nga kapa-'olrao-nga kapa-'aelrenge-nga kapa-madho-nga | 'all the 'all the 'all the 'all the | e branches' e betel nuts' e grass' e flowers' e fruits' |
| | Nature apoto lrenehe lrehelrehe dhakerale | 'millet' 'stone' 'rock' 'mountain' 'river' 'stream' | ~ ~ ~ ~ ~ ~ ~ | kapa-vecenge-nga kapa-apoto-nga kapa-lrenehe-nga kapa-lrehelrehe-nga kapa-dhakerale-nga kapa-lrana-nga | 'all the 'all the 'all the | e millet' e stones' e rocks' e mountains' e rivers' e streams' |
| | Cultural ma dha'ane livase kaolo cacavake vakare navini | terials 'house' 'knife' 'small hoe' 'pottery jar' '(bamboo) basket' 'traditional dress' | ~ ~ ~ ~ ~ ~ | kapa-dha'ane-nga kapa-livase-nga kapa-kaolo-nga kapa-cacavake-nga kapa-vakare-nga kapa-navini-nga | 'all the 'all the 'all the 'all the | e houses' e knives' e small hoes' e pottery jars' e (bamboo) baskets' e traditional dresses' |
| (5.58) | | a + derived locativeae 'a place full of m'a place full of ta | nillet | ns '` ~ kapa-veceveceng | | 'all the places full of millet' 'all the places full of taros' |
| (5.59) | kapang dhamare caili menanae kalakecelra kalalrapa'a | | ka ka ka ka | l nouns apa-dhamare-nga apa-caili-nga apa-menanae-nga apa-kalakecelrae-nga apa-kalalrapa'ae-nga | 'all the 'all the 'all the | e months' e years' e days' e winters' e summers' |

(5.60) **kapa-...-nga** + non-common nouns

```
ivoko
                                               ~ kapa-ivoko-nga
                                                                             'all the friends'
                        '(male) friend'
        lili
                        '(female) friend'
                                                  kapa-lili-nga
                                                                             'all the friends'
                        'father and child'
        lama'atama
                                                  kapa-lama'atama-nga
                                                                             'all the fathers
                                                                              and children'
        lama'apalange 'husband and wife'
                                                  kapa-lama'apalange-nga 'all the husbands
                                                                              and wives'
        dhipolo
                        'Dhipolo'
                                                  kapa-dhipolo-nga
                                                                             'all the Dhipolo'
                        'the Kadhalae family'
                                                  kapa-lakadhaalae-nga
                                                                             'all the Kadhalae'
        lakadhaalae
        lakalaici
                        'bastard'
                                                  kapa-lakalaici-nga
                                                                             'all the bastards'
(5.61) Instances of nouns which cannot occur with kapa-...-nga
        Natural phenomena
                                                   *?kapa-keme'e-nga<sup>34</sup>
        keme'e
                         'cloud'
        koli'i
                         'sun'
                                                   * kapa-koli'i-nga
                                                   * kapa-dhamare-nga<sup>35</sup>
                         'moon'
        dhamare
                                                   * kapa-dha'olo-nga
        dha'olo
                         'rain'
        lrikace
                         'thunder'
                                                   * kapa-lrikace-nga
        acilai
                         'water'
                                                   * kapa-acilai-nga
        Orientation and directional nouns
        dhalra
                         'up(wards)'
                                                   * kapa-dhalra-nga
        lraodho
                         'down(wards)'
                                                   * kapa-lraodho-nga
        Locative nouns
                         'Wanshan'
                                                   * kapa-'oponoho-nga<sup>36</sup>
        'oponoho
        Temporal nouns
        'idha
                         'yesterday'
                                                   * kapa-'idha-nga
        Kinship terms
        -tina
                         'mother'
                                                   * kapa-tina-nga
        ina-
                         'mother'
                                                   * kapa-ina-nga
```

5.6 Dual/plural nominal reciprocals

Reciprocity in Mantauran is expressed by different prefixes, viz. ma-Ca- (where Ca represents the reduplication of the first consonant of the base followed by the vowel a), ma(a)- and ma'a- that attach to dynamic verb roots (viz. ma-Ca- and ma(a)-) or

The grammaticality of kama-keme'e-nga is controversial among informants, since some of them treat it as a non-countable entity.

³⁵ This form is acceptable if it refers to 'month' and can be glossed as: 'all the months'.

³⁶ This form is acceptable if it refers to the 'Mantauran *people*' and can be glossed as: 'all the Mantauran people'.

stative stems (cf. ma'a-) (see chapter 8, §8.4 for an account of the distribution and usage of reciprocal prefixes on verbs).

The prefix ma'a- can also attach to kinship terms to express a "converse" relationship (Lichtenberk 1999). The relation can be symmetrical or asymmetrical. It is symmetrical when it involves two participants in an equal (inter)relationship, e.g. -palange 'spouse' > (la-)ma'a-palange 'husband and wife'. It is an asymmetrical relation when it involves two participants in an unequal (inter)relationship, i.e. the base specifically refers to only one of them. In Mantauran, the base always corresponds to an elder, e.g. tama 'father' > (la)ma'a-tama 'father and child'.

The prefixation of **ma'a-** (and its derived forms) in different scenarios is summarized as follows:

- (i) the sequence **ma'a-**+bound kinship root forms a predicate, e.g. **ma'a-tina** '(be in a) mother-daughter (relationship)'. This construction is dealt with in §8.4.3.
- (ii) the prefix **ma'a-** alternates with **pa'a-**, but under the following two conditions: (i) the predicate appears in a non-finite form, e.g. **amo-pa'a-tina** 'will (be in a) mother-daughter (relationship)', (ii) the sequence **pa'a-**+bound kinship root functions as a noun, e.g. **pa'a-tina-lidha** 'mother and daughter'.
- (iii) the prefix **ma'a-** is preceded by the plural prefix **la-** yielding **la-ma'a-**+bound kinship root and the resulting sequence functions as a noun.

In this section, I focus on reciprocals functioning as nouns/nominal arguments, that is, on the following two constructions: **pa'a-**+kinship*(-Pro_{Gen}) and **la-ma'a-**+kinship-(*Pro_{Gen}). Only specific kinship roots can be used as a base in nominal-based reciprocal constructions. They include:

(5.62) Bound kinship roots

| | Base | Gloss |
|----|----------|---|
| a. | -tina | 'mother' |
| b. | -tama | 'father' |
| c. | -tomo | 'grandparent (grandfather/grandmother)' |
| d. | -taka | 'elder sibling' |
| e. | -ivoko | '(male) friend' |
| f. | -lili | '(female) friend' |
| g. | -palange | 'spouse' |
| h | -nalra | 'spouse' |

5.6.1 pa'a-+kinship*(-Pro_{Gen})

All the kinship terms listed above take the prefix pa'a- as in (5.63) and (5.64).

(5.63) Dual reciprocal

a. pa'a-tina 'mother and child'b. pa'a-tama 'father and child'

c. pa'a-tomo 'grandparent and grandchild'

d. pa'a-taka '(two) siblings'
e. pa'-ivoko '(two) friends'
f. pa'a-lili '(two) friends'
g. pa'a-palange 'husband and wife'
h. pa'a-palra '(two) relatives'

(5.64) Plural reciprocal

a. pa'a-a-itina 'mother and children'b. pa'a-tama-tama 'father and children'

c. pa'a-tomo-tomo 'grandparent and grandchildren'

d. pa'a-taka-taka
e. pa'-ivi-'ivoko
f. pa'a-pala-palange
h. pa'a-palra-palra

(three or more) siblings'
(three or more) friends'
(three or more) friends'
'thusbands and wives'
(three or more) relatives'

This construction (cf. pa'a-+kinship) exhibits two major distinctions with the following one (cf. la-ma'a-+kinship): (i) the sequence pa'a-+bound kinship root is always followed by a genitive pronoun (5.65); (ii) it can never be preceded by la- 'plural', thus *la-pa'a-tina is ungrammatical.

(5.65) a. o-dhaace-nga pa'a-tina-lidha.

Dyn.Fin-leave-already Rec:Stat.NFin-mother-3P.Gen

'Mother and daughter left (together).'

a'. * o-dhaace-nga pa'a-tina-Ø.

Dyn.Fin-leave-already Rec:Stat.NFin-mother-Ø

| b. | kama-iiki-nga | omi-ilidhe | o'i |
|----|---|------------------|------|
| | Dyn.Fin:continuously-Dyn.NFin:exist-already | like that-3P.Obl | that |
| | pa'a-palange-lidha | omi [] | |
| | Rec:Stat.NFin-spouse-3P.Gen | like that | |
| | (Th | | |

'There was a couple [...]

b'.*kama-iiki-nga omi-ilidhe o'i Dyn.Fin:continuously-Dyn.NFin:exist-already like that-3P.Obl that

pa'a-palange-Ø omi [...]
Rec:Stat.NFin-spouse-Ø like that

c. mani Iralrame omi-ilidhe pa'a-lili-lidha...

then Dyn.NFin:run like that-3P.Obl Stat.NFin:Rec-(female) friend-3P.Gen

'Then the (two) friends ran (away)...'

c'.*mani Iralrame omi-ilidhe pa'a-ilil-Ø... then Dyn.NFin:run like that-3P.Obl Stat.NFin:Rec-(female) friend-Ø

5.6.2 la-ma'a-+kinship (*-Pro_{Gen})

All the kinship terms listed in (5.62) also take the sequential prefix **la-ma'a-**, as in (5.66)-(5.67).

(5.66) Dual reciprocal

a. la-ma'a-tina 'mother and child' b. la-ma'a-tama 'father and child'

c. la-ma'a-tomo 'grandparent and grandchild'

d. la-ma'a-taka '(two) siblings'
e. la-ma'-ivoko '(two) friends'
f. la-ma'a-lili '(two) friends'
g. la-ma'a-palange 'husband and wife'
h. la-ma'a-palra '(two) relatives'

(5.67) Pluractional reciprocal

a. la-ma'a-a-itina 'mother and children'b. la-ma'a-tama-tama 'father and children'

c. la-ma'a-tomo-tomo 'grandparent and grandchildren'

d. la-ma'a-taka-taka
e. la-ma'-ivi-'ivoko
f. la-ma'a-lii-lili
g. la-ma'a-pala-palange
h. la-ma'a-palra-palra

'(three or more) siblings'
'(three or more) friends'
'husbands and wives'
'(three or more) relatives'

The sequence **la-ma'a-**+bound kinship is never followed by a genitive pronoun, as shown in (5.68).

(5.68) a. o-dhaace-nga la-ma'a-tina-Ø.

Dyn.Fin-leave-already plur-Rec-mother-Ø

'Mother and daughter left (together).'

a'. *o-dhaace-nga la-ma'a-tina-lidha.

Dyn.Fin-leave-already plur-Rec-mother-3P.Gen

b. **kama-iiki-nga omi-ilidhe o'i**Dyn.Fin:continuously-Dyn.NFin:exist-already like that-3P.Obl that

la-ma'a-palange-Ø omi [...] plur-Rec-spouse-Ø like that

'There was a couple...'

b'. *kama-iiki-nga omi-ilidhe o'i
Dyn.Fin:continuously-Dyn.NFin:exist-already like that-3P.Obl that

la-ma'a-palange-*lidha* **omi** [...] plur-Rec-spouse-3.P.Gen like that

c. mani Iralrame omi-ilidhe la-ma'a-ali-Ø...

then Dyn.NFin:run like that-3P.Obl plur-Rec-(female) friend-Ø

'Then the (two) friends ran (away)...'

c'. *mani Iralrame omi-ilidhe la-ma'a-ali-lidha...

then Dyn.NFin:run like that-3P.Obl plur-Rec-(female) friend-3P.Gen

5.7 Summary

There are three main classes of nouns in Mantauran which can be further subdivided according to their co-occurrence restrictions with different affixes indicating plurality, quantification and reciprocity.

Table 5.9: Noun classes and subclasses in Mantauran

| Noun classes | | Subclasses | Plu | ral | Quantifier | Reciprocal | |
|----------------|-------------------|----------------------------|-----|-----|------------|------------|----------|
| | | | a- | la- | kapanga | pa'a- | la-ma'a- |
| Common nouns | non-human | + countable | | | ✓ | | |
| | | - countable | | | | - | |
| | human | | ✓ | | ✓ | | |
| Temporal nouns | s basic/underived | | | | | | |
| | abstract/derived | | | | ✓ | | |
| Locative nouns | basic/underived | | | | | | |
| | abstract/derived | | | | ✓ | | |
| | Kinship terms | + vocative | | ✓ | | | |
| Non-Common | Kinship terms | - vocative (1): Ø - | | ✓ | | | |
| nouns | | - vocative (2): t- | | ✓ | | ✓ | ✓ |
| | Personal names | | | | ✓ | | |
| | Household names | | | ✓ | ✓ | | |
| | Insult nominals | | | ✓ | ✓ | | |

5.8 Other nominal affixes

Many of the most important nominal affixes have been introduced in this chapter. Mantauran exhibits other affixes, some of which occur on nouns as well as on verbs, such as **-nga** 'superlative'. For instance:

(5.69) a. **'ina'i mene-***nga* this now-Sup 'nowadays...'

b. o-lriho'o-nga-lrao.

Dyn.Fin-know-Sup-1S.Nom 'I am the most intelligent.'

This section introduces three more affixes, -a 'beyond (in time or space)', ka-...-ae 'genuine, original, real' and saka- 'external to', which occur productively in this language.

The prefix **a-** 'beyond (in time or space)' only occurs with nominals derived from nouns (i.e. that have undergone nominalization) as in **dha'an-a-nae** 'another/one household' (< **dha'ane** 'house'), **men-a-nae** '(one) day' (< **mene** 'now, today'), **holrol-a-nae** 'beyond a mountain' (< holrolo 'mountain'). Consider for instance:

(5.70) a. ma-dha'an-a-nae-nai.

Stat.Fin-house-beyond-LocNmz-1PE.Nom 'We are a family.'

b. om-iki ta-ka-eaea men-a-nae Stat.Fin-exist today-beyond-TempNmz SubjNmz-Stat.NFin-one:Red 'ica'oca'o ocao maava'i m-oa 'oponoho Dyn.Subj:come Dyn.Subj-go Wanshan Dyn.Subj:learn person to'onai 'itovolro la Dyn.Subi:ask (any)thing and Dvn.NFin:write 'One day, there was a person that came to Wanshan to do research.' (Lit.: 'learn everything, ask and write')

The circumfix **ka-...-ae** 'genuine, original, real' attaches to nearly any type of nouns, for instance:

(5.71) a. **ma-dhalame-Irao 'ongolo ka-vavaa-e.**Stat.Fin-like/love-1S.Nom Dyn.Subj:drink genuine-wine-genuine
'I like/love to drink aboriginal wine.'

b. olo 'aovaovaha-nai ka-'oponoh-ae ocao 'ina'i genuine-Wanshan-genuine if speak-1PE.Gen person that vaha-nai [...] lo 'ako-'oponoh-ae-nai language-1PE.Gen if speak-Mantauran-speak-1PE.Gen om-i'a-ka-i ka maramaramao. Dyn.Fin-like-Neg-3S.Gen Neg Dyn.Subj:Red:identical '(If you listen to) us authentic Mantauran [...] (you'll find that) when we speak Mantauran, (our speech) varies (from one person to another).'

c. to-ka-oma-omal-ae-lrao.

do-genuine-Red-sing-genuine-1S.Nom 'I sing conscientiously.' (*Lit.*: 'I do real singing')

The prefix **saka-** 'extern(al) to' is, by far, the most interesting. Semantically speaking, it reflects the egocentric distinction the Mantauran make between what belongs to or is located around them and what is "outside". Such a division is a very pervasive one and includes distinct terms for persons, house(holds) (5.72a), villages (5.72b), territory (5.72c-d), and even time (5.72e-g).... On the morphological level, it can thus co-occur with the suffixes **-ae** (5.72b, d) and **-a-nae** (5.72a', c, e, f, g) that indicate a location in space or time.

- (5.72) a. dha'ane saka-dha'ane 'brother/sister in-law' 'house' a'. saka-dha'an-a-nae 'another/one household' b. valrio 'village' saka-valr-ae 'other village(s)' c. holrolo 'mountain' saka-holrol-a-nae '(an)other mountain(s)' d. vekenelre 'ground, land' saka-vekenelr-ae '(an)other place(s), land(s)' e. caili 'year' saka-cail-a-nae 'another year' f. dhamare 'month' saka-dhamar-a-nae 'another month' g. mene 'now, today' saka-men-a-nae '(an)other day' (< cf. men-a-nae 'day')
- (5.73) a. **ma-takolra** 'iidheme-ni saka-dha'ane-ta.
 Stat.Fin-bad heart-3S.Gen external-house-1PI.Gen
 'Our sister-in-law is feeling bad.'
 - b. lo dhoma-nae 'a om-oa-lrao saka-valr-ae
 if other-TempNmz Top Dyn.Fin-go-1S.Nom external-village-LocNmz
 longalangai.

Dyn.Subj:trade

'Sometimes, I go to other villages to do business.'

Chapter 6: Verbal Morphology

This chapter deals with verbal morphology. The major morphosyntactic characteristics of verbs (as opposed to nouns) were given in §4.1, and a justification for the absence of adjectives (as opposed to stative verbs) was provided in §4.3.1.

Mantauran exhibits an elaborate set of concepts morphologically marked on the verb. As shown in §6.1, one of the most pervasive distinctions is between dynamic and stative verbs. Dynamic verbs usually refer to "the volitional and controlled doing of an action" while stative verbs refer to "states of affairs which do not involve any kind of agent" (Himmelmann 2005b:362-363). Dynamic and stative verbs generally display verbal alternations (finite, non-finite and subjunctive) that are further discussed in §6.1.2. They are also usually voice-marked (*cf.* §6.2) while distinctions of mood and aspect—which interact closely with the marking of dynamicity/stativity and voice—can be explicitly or implicitly expressed (*cf.* §6.3). Mantauran makes a distinction between realis and irrealis. In the realis, there is no overt distinction between past and present and the temporal frame of a clause/sentence can be marked through morphological or lexical means. In the irrealis, there is a distinction between an event that will happen in the future and one that should have happened but did not take place.

Other concepts such as imperativization (*cf.* §6.4), negation (*cf.* §6.5), plurality, distributivity and quantification (*cf.* §6.6) as well as comparison of degree (*cf.* §6.7) are also expressed through morphological means on verbs. Mantauran exhibits a considerable number of other derivational affixes which attach to verb stems to form new verbs, the most productive of which are mentioned in §6.8.

6.1 Verb classification and verbal alternations

This section deals with verb classification and verbal alternations (or verbal stem modification). As the notion of transitivity is not overtly marked on the verb, it will not be further discussed here unless necessary (see chapter 14 for a discussion on grammatical relations).

6.1.1 Verb classification

Mantauran exhibits a dichotomy between dynamic and stative verbs. The dynamic/stative contrast is a very pervasive one which is reflected in many constructions (e.g. causative, reflexive, reciprocal etc...). Verbs can also be derived from nouns or numerals through the attachment to the base of verbalizing affixes, e.g. to-'make, produce, build' ~ to-dha'ane 'build a house', to-dho'a 'make two' (see sections 7.2 and 9.1.2).

The major morphological contrast between dynamic/stative verbs and denominal/denumeral verbs lies in their stem modification. Dynamic and stative verbs usually exhibit three verbal alternations (finite, non-finite and subjunctive), while denominal and denumeral verbs are typically invariable, unless they are prefixed by lexical affixes that display the same alternations as verbs do (*cf.* §3.3.1, ex. 3.16).

6.1.1.1 Dynamic verbs

As shown in (6.1), a majority of dynamic verbs take an **o**- prefix which is derived from PR ***o**-**a**-. Note that in Mantauran, the prefix **o**- is multifunctional in that it includes a combination of different verbal categories: verb classification, verbal conjugation, mood and voice, i.e. it indicates that a verb is dynamic, finite, in the realis mood and in the active voice. Based on comparative evidence, it can be ascertained that the PR prefix **o**- used to indicate voice, while **a**- signaled realis mood. Unless necessary, I gloss **o**- as 'Dyn.Fin' even though this gloss renders opaque the original portmanteau function of this prefix, because the opposition between (i) dynamic *vs.* stative verbs and (ii) finite *vs.* non-finite/subjective overrides the voice (active *vs.* passive) and mood (realis *vs.* irrealis) distinctions.

(6.1) a. **o-amece** 'bring' 'lift' b. o-alroho c. o-cehecehe 'plant into' 'jump' d. o-coroko e. o-dholro 'can, be able to' f. o-eceve 'cross a river' g. o-edhenge 'block, obstruct' h. o-hecelre 'pinch' i. o-hopahopo 'rub (big pieces)' j. o-ke'ete '(use an instrument to) cut' 'buy' k. o-langai 1. o-lapo 'raise' 'run' m. o-lralrame 'rinse one's mouth' n. o-moromoro 'be short of breath' o. o-nga'enga'e p. o-ngelrece 'frown' q. o-omale 'sing' r. o-omoomo 'kiss' s. o-pilipili 'scratch with a finger' t. o-polravo 'plant (millet)' u. o-ringiringi 'fry'

```
v. o-rosoroso 'brush'
w. o-singi 'cut (with s.t sharp)'
x. o-tipitipi 'slap, beat'
y. o-va'ai 'give'
z. o-'avalri 'smell'
```

Few verbs are marked by other affixes, cf. om- in (6.2), m- in (6.3) or are left unmarked \emptyset (6.4). These affixes serve the same grammatical function as \mathbf{o} -, i.e. they indicate that a verb is dynamic and finite; they also signal that the verb in question is marked as active/realis. Note that (i) there are only five verbs that can be marked by the prefix om- and they all begin with a vowel; (ii) the onset of m-prefixed verbs varies: **kaava'i** 'come' (6.3a) is the only verb that has an initial /k/ replaced by m-; a few verbs start with the vowel /o/ (6.3m-6.3o) while all the other verbs given in (6.3a-l) show that **p**-initial bases usually tend to take m-, cf. (6.3b)-(6.3l).

```
(6.2) a. om-alra
                             'take'
      b. om-oa
                             'go'
                             'like'
      c. om-i'a
      d. om-ia
                             '(say) so'
      e. om-iki
                             'exist, be at'
                             'come'
(6.3) a. maava'i
                                                         (< kaava'i)
      b. maineke
                             'breathe'
                                                         (< paineke)
                             'to'
      c. makaki
                                                         (< pakaki)
      d. maramao
                             'resemble, be identical'
                                                         (< paramao)
      e. masilrio
                             'gesture back and forth'
                                                         (< pasilrio)
      f. mate'ete
                             'kill'
                                                         (< pate'ete)
      g. matoladhame
                             'spy'
                                                         (< patoladhame)
      h. maavanao
                             'bathe'
                                                         (< paavanao)
      i. maia
                             'go through'
                                                         (< paia)
                             'distribute'
                                                         (< pa'avi)
      j. ma'avi
      k. ma'ilrikae
                             'give a meaningful glance' (< pa'ilrikae)
      l. ma'ikai
                             'farm'
                                                         (< pa'ikai)
      m. m-olekate
                             'enough'
      n. m-oleve
                             'go down, sink down (sun)'
      o. m-olrehe'e
                             'find a small hole to enter/penetrate (a house), fall into a well or
                              a cave and be unable to come out'
(6.4) a. Ø-avi'i
                             'give'
      b. Ø-omikace
                             'open one's eyes'
      c. Ø-irovo
                             'pile up'
      d. Ø-padhalro'o
                             'at once, immediately, straight away'
```

a. o-amece

(6.5)

The prefixes \mathbf{o} -, \mathbf{om} -, \mathbf{m} - and $\mathbf{Ø}$ cannot be treated as phonologically conditioned because of the occurrence of near minimal pairs with an initial $/\mathbf{a}/(6.5)$, $/\mathbf{i}/(6.6)$, $/\mathbf{o}/(6.7)$ on the one hand, $/\mathbf{k}/(6.8)$ and $/\mathbf{p}/(6.9)$ on the other. Besides, there is a semantic distinction signaled by \mathbf{o} -marked verbs as opposed to \mathbf{m} -marked verbs as shown in (6.10). As a consequence, these prefixes must be analyzed as lexically conditioned.

```
b. om-alra
                             'take'
       c. Ø-avi'i
                             'give'
(6.6) a. o-isiki
                             'dodge quickly'
       b. om-iki
                             'exist, be at'
       c. Ø-irovo
                             'pile up'
(6.7)
       a. o-omale
                             'sing'
       b. om-oa
                             'go'
                             'open one's eyes'
       c. Ø-omikace
                                    o-ka'ace
                                                      'bite'
(6.8)
       a. ka'ace
       b. kaava'i
                                    maava'i
                                                      'come'
```

'bring'

- (6.9) a. palrici ~ o-palrici 'turn' b. patoladhame ~ matoladhame 'spy'
- (6.10) a. lekate ~ o-lekate 'measure' b. olekate ~ m-olekate 'enough'

6.1.1.2 Stative verbs

Stative verbs are characterized by the fact that they represent bound roots. Unlike other Formosan languages whereby stative verbs can be marked by **Ø-** or **ma-** (*cf.* Huang 2000b on Atayal and Zeitoun 2001b on Saisiyat), nearly all stative verbs are marked by **ma-** (6.11). To my knowledge, the only stative verb that differs is 'osangedha'a 'long' (<-sangedha'a) (6.12).

```
(6.11) ma-'stative' + bound root
a. ma-caleme '(be) rotten (sweet potatoes)'
b. ma-ca'eme '(be) ill'
c. ma-dhaposo '(be) very dirty'
d. ma-eleme '(be) poor'
e. ma-hamelre 'ache (body)'
f. ma-isi'ili '(be) uneven'
```

```
'(be) thirsty'
g. ma-kalrame
h. ma-lapai
                      '(be) light'
                      '(be) lazy, dislike'
i. ma-lrakase
                      '(be) swollen'
i. ma-mekece
k. ma-ngeta
                      '(be) raw'
1. ma-oloho
                      '(be) grown up'
                      '(be) bitter'
m. ma-palili
                      'forget'
n. ma-rimoro
o. ma-sarivo
                      'miss'
p. ma-taipi
                      '(be) flattened'
                      '(be) smelly'
q. ma-valre
r. ma-'alriti
                      '(be) flexible'
```

(6.12) 'o- + bound root (the meaning of the prefix 'o- here is unknown) 'o-sangedha'a '(be) long'

6.1.2 Verbal alternations

Most dynamic and stative verbs exhibit three verbal alternations: finite, non-finite and subjunctive.³⁷ Denominal verbs, on the other hand, are invariable and will not be further discussed in this section.

The three verbal alternations, finite, non-finite and subjunctive, are defined and illustrated in sections 6.1.2.1-6.1.2.3, with a brief summary given in §6.1.2.4.

6.1.2.1 Finite verb form

Dynamic verbs are marked as finite through the prefixation of **o-**, **om-**, **m-** and \emptyset -, *cf.* (6.1)-(6.4) and most stative verbs are marked by **ma-**, *cf.* (6.11).

A verb occurs in its finite form (i) when it is in sentence-initial position—it thus refers to a past or present event (realis); (ii) if it is not preceded by any other verbal prefix, e.g. **amo-** 'will', **pa-** 'causative' and (iii) if it does not follow any conjunction, e.g. **la** 'and' or **mani** 'then'. It thus can head an independent clause, which can stand on its own as a complete sentence.

Examples (6.13a-d) provide an illustration of dynamic/finite verbs and those in (6.14a-e) of stative/finite verbs.

Scholars have referred to verbal alternations differently in the literature on Formosan languages. Li (1973:162), for instance, treats embedded verb forms as "non-finite". Ross (1995), on the other hand, makes a distinction between indicative verb forms (that include the finite/non-finite dichotomy established in the present study) and atemporal verb forms (that correspond to the subjunctive).

(6.13) a. *o-lriho'o-*lrao 'ako-'oponoh-ae vaha.

Dyn.Fin-know-1S.Nom speak-Mantauran-speak language 'I know how to speak Mantauran'.

b. *o-va'ai*-nga-na-inome dhona'i vekenelre.

Dyn.Fin-give-already-1PE.Nom-2P.Obl that land

'We already gave you that/those land(s).'

c. *o-lapo*-na-nai ove'eke.

Dyn.Fin-raise-still-1PE.Nom pig

'We still raise pigs.'

d. *o-Iralrame* ma-ridhahe ana ocao.

Dyn.Fin-run Stat.Subj-fast that person 'That person runs fast.'

(6.14) a. *ma-ecelrange* **dhona'i ali'i-dha.**Stat.Fin-black that tooth-3S.Gen
'His/her teeth are black.'

b. ma-valre toramoro ana ta-ki-to-dhi'i
Stat.Fin-smelly very that SubjNmz-Neg-produce-good piki capa votolo.

Dyn.Subj:put at cupboard pork

'The pork that was not put (back) in the cupboard is very smelly.'

c. *ma-olripi*-na-ka-i 'ina'i vaha-nai Stat.Fin-disappear-still-Neg-3S.Gen this language-1PE.Gen 'oponoho.

Mantauran

'Our language has not disappeared yet.'

d. *ma-takolr-*iname 'i 'iidheme-nai ta-ka-a-rodhange.

Stat.Fin-bad-1PE.Obl heart-1PE.Gen SubjNmz-Stat.NFin-plur-old 'We old people feel sad (about this situation).'

e. *ma-rilai* 'i dhipolo.
Stat.Fin-slim Dhipolo
'Dhipolo is slim.'

6.1.2.2 Non-finite verb form

The term 'non-finite' designates the verb root. Dynamic verbs marked by **o**- and **om**- are unmarked in their non-finite form, cf. **o-moromoro** \sim **moromoro** 'rinse one's mouth', **om-alra** \sim **alra** 'take'. Dynamic verbs marked by **m**- begin with an initial /**k**/, cf. **maava'i** \sim **kaava'i** 'come', /**o**/, cf. **m-olekate** \sim **olekate** 'enough' and more frequently

with /p/, cf. maavanao ~ paavanao 'bathe'. Ø-marked verbs are invariable, cf. 'omaca 'wake up'. Most stative verbs are marked by ka- in their non-finite form, e.g. ma-dhalame ~ ka-dhalame 'like, love' while the verb 'osangedha'a 'long' is invariable.

A verb occurs in its non-finite form (i) when it is preceded by a verbal prefix, e.g. **pa-** 'causative' (6.15a)-(6.16a), **amo-** 'will' (6.15b)-(6.16b), **ki-** 'modal negation' (6.15c)-(6.16c) even if it occurs in sentence-initial position or (ii) if it follows a conjunction such as **la** 'and' (6.15d)-(6.16d) or **mani** 'then' (6.15e)-(6.16e). Though in a non-finite form, such verbs can be followed by pronouns marked as nominative and can head independent clauses.

- (6.15) a. **olo** dhona'i aidhi pa-'aela-dha if Caus-Dyn.NFin:move-3S.Gen that youngest sibling mata-po-ae to-dha'ane, build-house Dyn.Fin:certainly-make-certainly Dyn.Subj:kill pig 'n pa-lriho'o cinekelae 'aela-nga... Caus-Dyn.NFin:know villager(s) Dyn.Subj:move-already 'If (one of the) younger brother(s) built (his own) house, he (would) kill a pig for the house warming, to let the villagers know that he had moved...'
 - b. amo-vaa'i-na-inome dhona'i vekenelre...
 Irr-Dyn.NFin:give-1PE.Nom-2P.Obl that land
 'We will give you that/those land(s)...'
 - c. olo *ki-Iriho'o-*dha solate ka polringao-ka-dha. if Neg-Dyn.NFin:know-3S.Gen Dyn.Subj:write Neg matter-Neg-3S.Gen 'If he did/does not know how to write, it did/does not matter.'
 - d. ana ocao tako-kane-kane la lralrame.
 that person while-Red-Dyn.NFin:eat and Dyn.NFin:run
 'That person is eating and running at the same time.'
 - e. *mani lapo*-nai ove'eke... then Dyn.NFin:raise-1PE.Nom pig 'Then we (would) raise pigs...'
- (6.16) a. **o-poa tomolroro** *pa-ka-ecelrange* **dhona'i ali'i-dha**Dyn.Fin-make Dyn.Subj:chew Caus-Stat.NFin-black that tooth-3S.Gen

 'S/He/They chewed (a plant) to blacken his/her/their teeth.'
 - b. *amo-ka-olripi* 'ina'i vaha-nai 'oponoho.
 Irr-Stat.NFin-disappear this language-1PE.Gen Mantauran
 'Our language will disappear.'
 - c. mani to-dhi'i piki capa, mani ki-ka-valre.
 then produce-good Dyn.Subj:put at cupboard then Neg-Stat.NFin-smelly
 '(We would) put (pork) in the cupboard, so that it did not smell.'

- d. **dhipolo 'a ma-ka'anarale** *la ka-rilai*.

 Dhipolo Top Stat.Fin-tall and Stat.NFin-slim 'Dhipolo is tall and slim.'
- e. **ma-'ete-nga lalake-nai** *mani ka-takolr-*iname 'iidheme-nai. Stat.Fin-die-already child-1PE.Gen then 'Our child died and/so we feel very sad.'

6.1.2.3 Subjunctive verb form

Dynamic **o**-type verbs in which the first vowel of the base is \mathbf{i} (6.17), \mathbf{o} (6.18) or \mathbf{e} (6.19) occur as unmarked in their subjunctive form.

```
(6.17) a. livaca
                              'carry s.t with a pole on one's shoulder'
        b. pilipili
                              'scratch with a finger'
        c. singi
                              'cut (with s.t sharp)'
        d. vilivili
                              'pull'
(6.18) a. coroko
                              'jump'
        b. dholro
                              'can, be able to'
        c. hopahopo
                              'rub (big pieces)'
        d. kovokovo
                              'cover'
        e. moromoro
                              'rinse one's mouth'
```

(6.19) a. edhenge 'block, obstruct'

b **ke'ete** '(use an instrument to) cut'

c. **ngelrece** 'frown'

Most **o**-type verbs in which the first vowel is **a** exhibit a vocalic **a**~**o** alternation (*cf.* §2.3.4). Exceptions include verbs like **pato'o** 'tell', **padhalro'o** 'at once', **pacame** 'feed in one's hand', perhaps because they represent stems rather than roots. In certain verb roots such as **va'ai** 'give', the subjunctive also causes glottal hopping (*cf.* §2.3.6), *cf.* **voa'i** in (6.20d).

```
(6.20) a. dhopele 'fish' (< dhapele)
b. longai 'buy' (< langai)
c. vo'alr-~voa'i 'give' (< va'ai)
d. lronge'e 'farm' (< lrange'e)
```

om-type verbs are marked by **m**- in the subjunctive (6.21). As indicated in (6.21e), for the verb **om-iki** 'be at', a zero-marked verb form is also allowed as subjunctive (*cf*. §4.3.2.2).

'take' (6.21) a. m-alra b. m-oa 'go' c. m-i'a 'like' d. m-ia '(say) so' e. m-iki ~ iki 'exist, be at'

All m-type verbs are marked by m- in their subjunctive form, whatever their non-finite verb form is:

(6.22) a. maava'i 'come' < kaava'i 'to' b. maaki < paaki 'bathe' c. maavanao < paavanao d. maineke 'breathe' < paineke e. ma'ikai 'farm' < pa'ikai f. molekate 'enough' < olekate g. moleve 'go down, sink down (sun)' < oleve

Ø- type verbs are invariable:

(6.23) a. 'omaca 'wake up' b. irovo 'pile up'

Stative verbs are marked by ma- in their subjunctive form (6.24). The verb 'osangedha'a 'long' is invariable.

(6.24) a. ma-ca'eme '(be) ill' '(be) very dirty' b. ma-dhaposo

A verb occurs in its subjunctive form (i) when it appears in embedded position as V₂ as in (6.25) (ii) in imperative sentences (6.26), (iii) in conditional/hypothetical clauses introduced by lo 'if' (6.27).

(6.25) Subjunctive marking of V₂

a. o-dholro-nai longai 'i-paiso. Dyn.Fin-can-1PE.Nom Dyn.Subj:buy get-money

'We can/could trade (them) against money.'

b. o-dholro-lrao ma-dhalam-ine taotao. Dyn.Fin-can-1S.Nom Stat.Subj-like/love-3S.Obl Taotao 'I can like/love Taotao.'

(6.26) Subjunctive marking of imperative verbs

a. *m-o-a* kone!

Dyn.Subj-go-Imp
'Go eat!'

b. ma-raveraver-a!

Stat.Subj-happy-Imp 'Be happy!'

(6.27) Subjunctive marking of verbs occurring in conditional/hypothetical clauses introduced by **lo** 'if'

| a. | lo | <i>lopo</i> -nai | ove'eke, | o-langalangai-nga-nai. |
|----|-------|-------------------------------|----------|-------------------------------|
| | if | Dyn.Subj:raise-1PE.Gen | pig | Dyn.Fin-trade-already-1PE.Nom |
| | ʻIf v | we raised pigs, we (would) tr | | |

| b. | lo | <i>m-oa</i> -nai | a'ivivai, | ma-ha'aoc-iname |
|----|------|------------------------------|-------------|------------------------|
| | if | Dyn.Subj-go-1PE.Gen | plur:female | Stat.Fin-scold-1PE.Obl |
| | 'If' | we girls went (there), we wo | , , | |

6.1.2.4 Summary

The different verbal alternations for dynamic and stative verbs are summarized in tabular forms.

Table 6.1 provides the general patterns for finite, non-finite and subjunctive verb stem modification.

Table 6.1: Finite, non-finite and subjunctive verb forms in Mantauran Rukai

| Verb class | Verb type | Finite | Non-finite | Subjunctive |
|------------|-----------------------------|---------|------------|------------------------------------|
| | 1a. o- C <i>V</i> CV | o-root | Ø-root | Ø-root |
| Dynamic | 1b. o- CaCV | o-root | Ø-root | Ø-CoCV |
| | 2. om- | om-root | Ø-root | m-root |
| | | | | (except for om-iki where Ø-root is |
| | | | | also allowed, cf. §4.3.2.2) |
| | 3a. m- | m- | k- | m- |
| | 3b. m- | m- | p- | m- |
| | 3c. m- | m- | Ø- | m- |
| | 4. Ø- | Ø- | Ø- | Ø- |
| Stative | ma- | ma-root | ka-root | ma-root |
| | | | | (except for 'o-sangedha'a 'long') |

Tables 6.2 and 6.3 illustrate these morphological alternations in dynamic and stative verbs.

Table 6.2: Morphological alternations of dynamic verbs in Mantauran Rukai

| Verb type | Finite | Non-finite | Subjunctive | Gloss |
|-----------|------------|------------|-----------------|------------------------|
| o-CaCV | o-akame | akame | <i>o</i> akame | 'roast' |
| | o-langai | langai | l <i>o</i> ngai | 'buy' |
| o-CVCV | o-eceve | eceve | eceve | 'cross a river' |
| | o-lriho'o | lriho'o | lriho'o | 'know' |
| | o-'onoro | 'onoro | 'onoro | 'cut hair' |
| om- | om-oa | oa | m-oa | 'go' |
| | om-alra | alra | m-alra | 'take' |
| | om-oa | oa | m-oa | ʻgo' |
| m-~k- | maava'i | kaava'i | maava'i | 'come' |
| m-~p- | maavanao | paavanao | maavanao | 'bathe' |
| m-~ Ø- | molekate | olekate | molekate | 'enough' |
| Ø- | padhalro'o | padhalro'o | padhalro'o | 'at once, immediately' |

Table 6.3: Morphological alternations of stative verbs in Mantauran Rukai

| | Finite | Non-finite | Subjunctive | Gloss |
|-------------|---------------|---------------|---------------|--------------|
| | ma-raveravere | ka-raveravere | ma-raveravere | '(be) happy' |
| | ma-taadhi'i | ka-taadhi'i | ma-taadhi'i | '(be) good' |
| | ma-takolra | ka-takolra | ma-takolra | '(be) bad' |
| ma- | ma-ha'aoco | ka-ha'aoco | ma-ha'aoco | 'scold' |
| | ma-dhalame | ka-dhalame | ma-dhalame | 'like/love' |
| | ma-'amadhe | ka-'amadhe | ma-'amadhe | 'dislike' |
| | ma-lrakase | ka-lrakase | ma-lrakase | '(be) lazy' |
| | ma-pacai | ka-pacai | ma-pacai | '(be) dry' |
| ' 0- | 'o-sangedha'a | 'o-sangedha'a | 'o-sangedha'a | 'long' |

6.1.3 Dynamicization and stativization

A few verbal stems can be prefixed by both the dynamic verbal prefix \mathbf{o} - and the stative verbal prefix \mathbf{ma} -.

| (6.28) | a. | o-dhalrese | 'squeeze, knead' | ~ | ma-dhalrese | 'soft and tender, malleable, squeezed' |
|--------|----|------------|------------------|---|-------------|--|
| 1 | b. | o-solate | 'write' | ~ | ma-solate | '(be) printed' |
| | c. | o-kahici | 'mix' | ~ | ma-kahici | '(be) mixed together (e.g. thread)' |
| | d. | o-kilisi | 'tighten' | ~ | ma-kilisi | '(be) tightened' |
| | e. | o-lrotoko | 'break' | ~ | ma-lrotoko | '(be) broken' |
| | f. | o-kane | 'eat' | ~ | ma-kane | '(be) eaten' |
| | g. | o-ngoto'o | 'cut' | ~ | ma-ngoto'o | '(be) cut, short' |
|] | h. | o-vecake | 'break in two' | ~ | ma-vecake | '(be) broken in two (e.g. egg)' |
| | i. | o-vesake | 'break in two' | ~ | ma-vesake | '(be) broken in two (bamboo)' |
| | j. | o-visare | 'damage' | ~ | ma-visare | '(be) damaged' |
|] | k. | o-picongo | 'separate' | ~ | ma-picongo | '(be) different (of character)' |

In these cases, verbs marked by **o**- are usually transitive as shown in (6.29a-c); those marked by **ma**- are intransitive (6.29a'-c'). Compare the following pairs of examples:

| (6.29) | 29) a. <i>o-vecake</i> -lrao | | | 'ina savi | | saviki. |
|--------|------------------------------|-------------------------------|--|-----------|--|-----------|
| | | Dyn.Fin-break in two-1S.Nom | | this | | betel nut |
| | | Dyn.rin-oreak in two-13.110in | | uns | | octel II |

'I break/broke the betel nut in two.'

a'. *ma-vecake*Stat.Fin-break in two
this betel nut

'The betel nut is broken in two.'

b. *o-visare-*lrao dhona lralingi.

Dyn.Fin-damage-1S.Nom that water pipe

'I damage(d) that water pipe.'

b'. *ma-visare* **dhona Iralingi alaka-i 'inidhadhao acilai** Stat.Fin-damage that water pipe because-3S.Gen come out:a lot water **mo-kavole.**

Dyn.Subj:to-out

'That water pipe is/was damaged and a lot of water comes/came out.'

c. *o-picongo-*lrao **to-dha'ane.**Dyn.Fin-separate-1S.Nom build-house

'I built another house.'

c'. *ma-picongo* ana ta-ka-oca-(a)e-ni ocao.
Stat.Fin-separate that LocNmz-Stat.NFin-person-LocNmz person

'That person's character is different.'

Another way to dynamicize a verb is to prefix **to-** 'make, produce, build' to a stative verb base as in:

```
(6.30) a. ma-takolra
                          '(be) bad'
                                                  to-takolra
                                                                 'do s.t bad'
       b. ma-taadhi'i
                          '(be) good'
                                                   to-dhi'i
                                                                 'put away'
                          'many, a lot'
                                                  to-dhao
                                                                 'make many, a lot'
       c. ma-dhao
                          'a few, small'
                                                                 'make a few'
       d. ma-si'i
                                                   to-si'i
                                                                 'make big'
       e. ma-toalrai
                          '(be) big'
                                                   to-toalrai
```

The dynamicity of verbs prefixed by **to-** is particularly flagrant in view of the two reciprocal constructions **ma'a-** vs. **ma(a)-**. The prefix **ma'a-** is always followed by a verb marked as stative through the prefixation of **ka-** while the prefix **maa-** is always followed by a dynamic verb or otherwise by a stative which is dynamicized through the prefixation to the base of **to-** 'make'.

(6.31) ma'a-ka-takolra 'be bad to each other' ~ maa-to-takolra 'do s.t bad to each other'

The contrast between **ma'a-ka-V** as opposed to **maa-to-V** is further illustrated through the following pair of examples:

| (6.32) | a. ma'a- <i>ka-</i> takolra | dhipolo | la | takanao. |
|--------|-----------------------------|-------------|-----|----------|
| | Rec:Stat.Fin-Stat.NFin-bad | Dhipolo | and | Takanao |
| | 'Dhipolo and Takanao are on | bad terms.' | | |

| b. | maa- <i>to-</i> takolra | dhipolo | la | takanao. |
|----|-----------------------------|---------|-----|----------|
| | Rec:Dyn.Fin-produce-bad | Dhipolo | and | Takanao |
| | 'Dhipolo and Takanao do bad | | | |

6.2 Voice

6.2.1 The active/passive voice dichotomy

In most Formosan languages, two major syntactic devices—morphological marking on the verb and/or the noun—fulfill the grammatical coding of the subject:

- (i) The semantic role of the NP (agent, theme/patient, locative, instrument) selected as subject is morphologically marked on the verb by means of an affix. Two main constructions are found. In the first, the agent is viewed as the focus of the clause (A(gent) F(ocus) construction). In the second, an NP other than the agent can function as subject (N(on)-Agent F(ocus) construction). 38
- (ii) The syntactic role of each NP argument is usually determined by a preceding case marker. In Tsou, for instance, case markers are obligatory (see Tung et al. 1964, Zeitoun 1992, 2000d, 2005, Szakos 1994). In Wulai Atayal, on the other hand, full lexical NPs are usually not marked for case (see Huang 1993).

Mantauran differs from other Formosan languages in a number of respects. Some of these morphosyntactic variations characterize the Rukai dialects as a linguistic group, while others are only found in Mantauran.

- (i) Like the other Rukai dialects, Mantauran lacks the focus system commonly found in the other Formosan languages.
 - (ii) There is no pre-nominal case marker in Mantauran.

Mantauran (like the other Rukai dialects) displays an active/passive voice distinction, morphologically marked by the contrast between **o-** (**om-**, **m-**, \emptyset) for dynamic verbs and **ma-** for stative verbs in the active voice (6.33a) and 'i- in the passive voice (6.33b), the prefix 'i- being derived from PR *ki-a- 'Pass-Real' (PR *k > ' with the coalescence of 'i and a-):

Among others, see Blust (2002) for an overview of the notion of focus/voice in Austronesian languages, and in Formosan languages, refer to Ross & Teng (2005) and Teng (2007) for a reinterpretation of the focus system in Puyuma.

```
(6.33) a. 'olra'a 'a o-ka'ace ta'olro.
snake Top Act-Dyn.NFin:bite dog
'As for the snake, (it) bit the dog.'
```

b. **ta'olro** 'a 'i-ka'ace 'olra'a. dog Top Pass-Dyn.NFin:bite snake 'As for the dog, (it) was bitten by the snake.'

Section 6.2.2 focuses on the active/passive voice dichotomy and more particularly on the occurrence of the passive with both dynamic and stative verb roots. In §6.2.3, I deal with the major morphosyntactic discrepancies that are found in passive constructions between Mantauran and the other Rukai dialects. Section 6.2.3 further examines the interaction between voice and mood.

6.2.2 Occurrence of the passive with dynamic and stative verbs

Both dynamic and stative verbs usually undergo passivization if they subcategorize for two arguments, an agent and a patient. Paradigmatic lists of dynamic (6.34) and stative verbs (6.35) are given below to illustrate this point.

(6.34) Dynamic verbs

a. One-argument verbs

| o-alopo | 'hunt' | *'i-alopo |
|--------------|-------------------------|----------------|
| o-cilao | 'steep, stir' | *'i-cilao |
| o-coroko | ʻjump' | *'i-coroko |
| o-dhaace | 'leave' | *'i-dhaace |
| o-dhaadhaace | 'walk' | *'i-dhaadhaace |
| o-dhakohae | 'crawl (like a snake)' | *'i-dhakohae |
| o-dhedhere | 'thunder' | *'i-dhedhere |
| o-eceve | 'cross a river on foot' | *'i-eceve |
| o-hemeheme | 'stare blankly' | *'i-hemeheme |
| o-halrange | 'yawn' | *'i-halrange |
| o-'oto | 'fart' | *'i-'oto |
| om-oa | ʻgo' | *'i-oa |
| maava'i | 'come' | *'i-kaava'i |

b. Two-argument verbs

| Finite/Active | Gloss | Passive | Gloss |
|---------------|-----------------------|---------------|-------------------------|
| o-aha'a | 'cook' | 'i-aha'a | 'be cooked' |
| o-a'ipi | 'count' | 'i-a'ipi | 'be counted' |
| o-hoahoa'e | 'kill (chicken, pig)' | 'i-hoahoa'e | 'be killed' |
| o-akame | 'roast' | 'i-akame | 'be roasted' |
| o-alravisili | 'hold in one's arms' | 'i-alravisili | 'be held in one's arms' |

| o-alroho | 'lift' | 'i-alroho | 'be lifted' |
|-----------------|---------------------------|---------------|-----------------------------|
| o-amece | 'bring' | 'i-amece | 'be brought' |
| o-ava | 'carry on one's back' | 'i-ava | 'be carried on one's back' |
| o-avili | 'carry (a child)' | 'i-avili | 'be carried' |
| o-ca'ilripi | 'flatten, hit' | 'i-ca'ilripi | 'be flattened, hit' |
| o-cakele | 'make love' | 'i-cakele | 'be raped' |
| o-cakopo | 'mend clothes' | 'i-cakopo | 'be mended' |
| o-cangehe | 'soak (for a couple | 'i-cangehe | 'be soaked' |
| ð | of days)' | 8 | |
| o-ca'avolo | 'throw in handfuls' | 'i-ca'avolo | 'be thrown in handfuls' |
| o-cehecehe | 'insert into, plant into' | 'i-cehecehe | 'be inserted, planted into' |
| o-cengele | 'see' | 'i-cengele | 'be seen' |
| o-cepake | 'pierce, prick' | 'i-cepake | 'be pierced, pricked' |
| o-cikipi | 'sew' | 'i-cikipi | 'be sewn' |
| o-dhalrase | 'knead' | 'i-dhalrase | 'be kneaded' |
| o-dhengere | 'aim at' | 'i-dhengere | 'be aimed at' |
| o-dherenase | 'paint' | 'i-dherenase | 'be painted' |
| o-dhe'ele | 'wipe (with a cloth)' | 'i-dhe'ele | 'be wiped' |
| o-dhilra | 'lick' | 'i-dhilra | 'be licked' |
| o-dhisidhisi | 'wipe, gum' | 'i-dhisidhisi | 'be wiped' |
| o-dhodhoho | 'push' | 'i-dhodhoho | 'be pushed' |
| o-hecelre | 'pinch' | 'i-hecelre | 'be pinched' |
| o-kadhange | 'kick' | 'i-kadhange | 'be kicked' |
| o-kane | 'eat' | 'i-kane | 'be eaten' |
| o-ka'ace | 'bite' | 'i-ka'ace | 'be bitten' |
| o-kelrakelrange | 'beat' | | nge 'be beaten' |
| o-kereve | 'cover' | 'i-kereve | 'be covered' |
| o-ketekete | 'cut in small pieces' | 'i-ketekete | 'be cut in small pieces' |
| o-ke'ete | 'cut' | 'i-ke'ete | 'be cut' |
| o-'ongolo | 'drink' | 'i-ongolo | 'be drunk' |
| o-'ovo'ovo | 'cover' | 'i-ovo'ovo | 'be covered' |
| | | | |

(6.35) Stative verbs

a. One-argument verbs

| ma-rilai | 'slim' | *'i-ka-rilai |
|------------------|------------------------------|----------------------|
| ma-caleme | 'rotten' | *'i-ka-caleme |
| ma-calokocoko | 'have a headache' | *'i-ka-calokocoko |
| ma-calringacingi | 'puny, dwarf' | *'i-ka-calringacingi |
| ma-ca'eme | ʻill' | *'i-ka-ca'eme |
| ma-celekere | 'ponder, think' | *'i-ka-celekere |
| ma-ce'elae | 'clear' | *'i-ka-ce'elae |
| ma-dhalrase | 'soft and tender, malleable' | *'i-ka-dhalrase |
| ma-dhalremedheme | 'dark' | *'i-ka-dhalremedheme |
| ma-dhao | 'a lot' | *'i-ka-dhao |

| ma-dhepedhepe | 'flatten' | *'i-ka-dhepedhepe |
|----------------|-------------------------------|--------------------|
| ma-dhelrelreme | 'cloudy' | *'i-ka-dhelrelreme |
| ma-dhe'elrehe | 'heavy' | *'i-ka-dhe'elrehe |
| ma-dhoso | 'rotten, over-ripe' | *'i-ka-dhoso |
| ma-eceme | 'wither, dried up' | *'i-ka-eceme |
| ma-eleme | 'poor' | *'i-ka-eleme |
| ma-esenge | 'wet, soaked' | *'i-ka-esenge |
| ma-heteke | 'broken (thread, cord, rope)' | *'i-ka-heteke |
| ma-isi'ili | 'uneven' | *'i-ka-isi'ili |
| ma-akalrame | 'thirsty' | *'i-ka-akalrame |
| ma-kecelre | 'cold' | *'i-ka-kecelre |
| ma-kelese | 'narrow' | *'i-ka-kelese |
| ma-kocingai | 'difficult, expensive' | *'i-ka-kocingai |
| ma-kodholro | 'very dirty' | *'i-ka-kodholro |
| ma-kolai | 'thin' | *'i-ka-kolai |
| 'o-sangedha'a | 'long' | *'i-o-sangedha'a |

b. Two-argument verbs

| U | | | |
|------------|-----------------|---------------|------------------|
| ma-dhalame | 'like, love' | 'i-ka-dhalame | 'be liked/loved' |
| ma-ha'aoco | 'scold' | 'i-ka-ha'aoco | 'be scolded' |
| ma-lavahe | 'envy' | 'i-ka-lavahe | 'be envied' |
| ma-lrakase | 'dislike, lazy' | 'i-ka-lrakase | 'be disliked' |
| ma-opongo | 'bother' | 'i-ka-opongo | 'be bothered' |
| ma'amadhe | 'dislike' | 'i-ka-'amadhe | 'be disliked' |

There are very few exceptions to this rule. The two most noticeable are: maavanao 'bathe' \sim 'i-paavanao 'be bathed' and o-'ange'ange 'hurt' \sim 'i-ange'ange 'be hurt'. For instance:

(6.36) **'i-ange'ange-lrao** *ta-sing-ae*. Pass-Dyn.NFin:hurt-1S.Nom LocNmz-Dyn.NFin:scratch-LocNmz

Lit.: 'I am hurt by the scratch.'

Prototypical passives are defined:

- on the morphosyntactic level as involving (i) the omission or demotion of the agent to an oblique role, (ii) the promotion to subject position of the patient and (iii) the marking of the verb which becomes intransitive.
- on the pragmatic level as allowing the agent suppression or detopicalization (Shibatani 1985, Givón 1990, Payne 1997).

In Mantauran, the passive carries out these two morphosyntactic and pragmatic functions as shown in (6.37) and (6.38), even if it is not productively used in texts.

(6.37) a. o-cengele-Ira-ine o-avil-ine lalake-ni dhona
Dyn.Fin-see-1S.Nom-3S.Obl Dyn.Fin-carry-3S.Obl child-3S.Gen that
titina.

middle-aged woman

'I saw the middle-aged woman carry her child.'

a'. o-cengele-lra-ine 'i-avil-ine lalake-ni
Dyn.Fin-see-1S.Nom-3S.Obl Pass-Dyn.NFin:carry-3S.Obl child-3S.Gen
dhona titina.
that middle-aged woman

'I saw the child carried by the middle-aged woman.'

b. lo ma-ecelrange-nga-dha, mani alra sipadhe Stat.Subj-black-already-3S.Gen Dyn.Subj:sharpen if then Dyn.NFin:take 'n 'angato mani poa dhisidhishi dhona wood then Dyn.NFin:make Dyn.Subj:wipe that ta-ka-ecelrange-nga a-lrodho-lrodh-ae-dha. SubjNmz-Stat.NFin-black-already ObjNmz-Dyn.NFin:mix-Red-ObjNmz-3S.Gen 'When it was black, they (would) take a thin piece of wood, sharpen it and dip it in the black ink.'

b'. o-solat-idhe dhona apoto-li la
Dyn.Fin-write-3S.Obl that stone/table-1S.Gen and
'i-dhisidhisi-nga.

Pass-Dyn.NFin:wipe-already

'Someone wrote (something) on my table and (my table) was wiped.'

c. o-temeteme dhona **Irenehe** valrevalre'ae mani Dyn.Fin-obstruct that rock road then dhodhoho-nga-lrao ta-vilaa'-e. poa Dyn.NFin:push-already-1S.Nom Dyn.Subj:make LocNmz-beside-LocNmz 'The rock obstructed the road and I pushed it aside.'

c'. 'aeleele-ka-i dhona ocao mani
move-Neg-3S.Gen that person then
'i-dhodhoho-nga poa ta-vilaa'-e.
Pass-Dyn.NFin:push-already Dyn.Subj:make LocNmz-beside-LocNmz
'That person did not want to move, and was pushed aside.'

(6.38) a. *ma-opongo-*lrao.

Stat.Fin-bother-1S.Nom

'I am bothered.'

b. 'i-ka-opongo-lra-imia'e.

Pass-Stat.NFin-bother-1S.Nom-2S.Obl

'I am bothered by you.'

6.2.3 Discrepancies between Mantauran and the other Rukai dialects

There are at least three major variations between Mantauran and the other Rukai dialects: (i) the morphosyntactic opacity of **o**- and **'i**-; (ii) the absence of a non-agentive passive; (iii) the passive-like interpretation yielded by verb-object agreement.

In Mantauran, the two prefixes **o-** and **'i-**—which have become portmanteau morphemes—are actually derived from the Proto-Rukai morphemes ***o-a-** 'Act-Real' and ***ki-a-** 'Pass-Real' and represent (among other things) the combination of voice and mood. In all the other dialects except Maga, e.g. Tona (6.39), the active voice is marked by **w-** and the (agentive) passive voice is marked by **ky-**.

(6.39) Tona Rukai

- a. a-nakay soa'a ka w-a-ka'ace na atho.

 Top-that snake Top Act-Real-bite Obl dog

 'As for that snake, (it) bit a dog.'
- b. **a-nakay atho ka** *ky*-**a-ka'ace na soa'a.**Top-that dog Top Pass-Real-bite Obl snake 'As for that dog, it was bitten by a snake.'

Mantauran also differs from the other Rukai dialects in that it does not exhibit an "agentless" passive. In agentless passive constructions, the agent is covert, i.e. it cannot be overtly expressed. This dichotomy is expressed by the distinction between **ky-** *vs.* **kw-** in Budai (6.40), Labuan and Tanan,³⁹ and by **ky-** *vs.* 'y- in Tona (6.41).

(6.40) Budai Rukai

ky-a-lama ku daane-su ki omaomas. AgtPass-Real-Dvn.NFin:burn house-2S.Gen Nom Obl person 'Your house was burned (by someone).' b. *kw-a-lama daane-su ki ku omaomas. NAgtPass-Real-Dyn.NFin:burn Nom house-2S.Gen Obl person ku

c. **kw-a-lama ku daane-su.**NAgtPass-Real-Dyn.NFin:burn Nom house-2S.Gen
'Your house got burned.'

-

Ruo's (1979) analysis differs slightly from mine. He distinguishes three passives in Budai Rukai, an "ordinary passive" marked by **ky**-, an "adversative passive" marked by **kw**- and an "adjectival passive" marked by **ni**- (which I analyze as objective nominalization). Li (1973) only introduces one passive in Tanan Rukai, viz. **ky**-.

(6.41) Tona Rukai

- a. **ky-a-akame na coaw na boathi.**AgtPass-Real-Dyn.roast Obl person Nom sweet potato
 'The sweet potatoes were roasted by someone.'
- b. * 'y-a-akame-nga na coaw.

 NAgtPass-Real-Dyn.NFin:roast Obl person
- c. 'y-a-akame-nga.

NAgtPass-Real-Dyn.NFin:roast

'They have already been roasted.'

Mantauran differs from the other Rukai dialects (and the Formosan languages as a whole) in that it has developed an object-verb agreement, that will be discussed in more details in chapter 14. Suffice it to say here that in many cases, this verb-object agreement leads to a passive interpretation, though the verb is marked as "active", as for instance:

(6.42) **o-kane-ng-iae**; **tamatama velevele-li**; **poelre.**Act-Dyn.NFin:eat-already-1S.Obl middle-aged man banana-1S.Gen all
'I had my whole banana/all my bananas eaten by the middle-aged man.'

Lit.: 'The middle-aged man ate my whole banana/all my bananas on me.'

This phenomenon may explain why passive is not extremely productive in Mantauran. It can be easily elicited, but it is rarely found in texts.

6.2.4 Interaction between voice and mood

The main distinction between the active and the passive lies in the fact that in the irrealis, a dynamic verb is unmarked for dynamicity/active voice while the passive prefix 'i- is retained and co-occurs with **amo-** 'will' (6.43b), **ni-** 'would have (but did not)' (6.44b) and **ni-...-a** 'even if' (6.45b).

(6.43) a. amo-paavanao-lrao.

Irr-Dyn.NFin:drink-1S.Nom 'I will bathe/take a bath.'

b. ma-ca'eme-lrao, amo-'i-paavanao-lrao.
Stat.Fin-ill-1S.Nom Irr-Pass-Dyn.NFin:bathe-1S.Nom
'I am ill (so) I will be bathed.'

(6.44) a. **la-ko 'ongolo vavaa,** if-2S.Gen Dyn.NFin:drink wine

ni-ki-omoomo-lra-imia'e.

Cntrfct-Neg-Dyn.NFin:kiss-1S.Nom-2S.Obl 'If you had drunk wine, I would not have kissed you.'

b. la-ko 'ongolo vavaa, if-2S.Gen Dyn.NFin:drink wine

ni-ki-'i-omoomo-mi'-iae.

Cntrfct-Neg-Pass-Dyn.NFin:kiss-2S.Nom-1S.Obl

'If you had drunk wine, you would not have been kissed by me.'

(6.45) a. ni-paavana-a-li,

CncNmz-Dyn.NFin:bathe-CncNmz-1S.Gen amo-ka-dholrilange-ka-li ka.
Irr-Stat.NFin-clean-Neg-1S.Gen Neg

'Even if I bathe, I will not be clean.'

b. ni-'i-paavana-a-l-imia'e,

CncNmz-Pass-Dyn.NFin:bathe-CncNmz-1S.Gen-2S.Obl

amo-dholrilange-ka-lika.Irr-clean-Neg-1S.GenNeg

'Even if I am bathed by you, I will not be clean.'

6.3 Mood and aspect

Mantauran exhibits a basic distinction between realis and irrealis, i.e. it has not grammaticalized the notion of tense. Tense is traditionally defined as a deictic category, in that it grammaticalizes the temporal relationship between the time at which an event (E) takes place and speech time (ST) or any other reference time (RT) (see Comrie 1986a and Chung & Timberlake 1985). As pointed out by Chung & Timberlake (1985:206), "the different temporal locations of an event—past, present, and future—are inherently correlated with difference in mood and aspect. An event that will occur after the speech moment is nonfactual and potential. Hence there is a correlation between future tense and nonfactual potential mood and, by implication, between non-future tense and actual mood."

In Mantauran, mood closely interacts with voice on the one hand (*cf.* §6.2.4) and aspect on the other. Mood (realis and irrealis) (*cf.* §6.3.1) and aspect (perfective, progressive/iterative, habitual) (*cf.* §6.3.2) distinctions are expressed through morphological or lexical means, i.e. realis/irrealis interpretations depend on the occurrence of voice markers (realis), modal affixes (irrealis) and/or temporal adjuncts (realis/irrealis);

aspectual distinctions are indicated through reduplication, aspectual affixes or full lexical verbs.

6.3.1 Marking of realis vs. irrealis

Realis is usually unmarked on verbs (*cf.* §6.3.1.1), the temporal frame of a clause/sentence depending on the morphological level or the lexical level of aspectual affixes or temporal adjuncts. The irrealis, on the other hand, is usually overtly marked (*cf.* §6.3.1.2).

6.3.1.1 Marking of realis

In Mantauran, there is no overt distinction of past vs. present. In other words, a verb marked by **o-** (**om-**, **m-**, \mathcal{O} -) 'active' as in (6.46a-b), '**i-** 'passive' (6.46c) or **ma-** 'stative' (6.46d) refers to a past or present situation if the temporal frame of an utterance is left undetermined.

(6.46) a. *o-kelrakelrange*-lra-ine ana lalake-'o. Dyn.Fin-beat-1S.Nom-3S.Obl that child-2S.Gen 'I beat (pres./past) your child.'

b. maavanao-lrao.

Dyn.Fin:bathe-1S.Nom 'I bathe(d).'

c. 'i-ange'ange-lrao.

Pass-Dyn.NFin:hurt-1S.Nom 'I am/was hurt.'

d. ma-lavahe-lra-imia'e.

Stat.Fin-envy-1S.Nom-2S.Obl 'I envy you.'

The notions of "past" and "present", to the extent they are expressed, are conveyed through the aspectual distinctions "perfective" vs. "imperfective", which are expressed through reduplication of the verb stem or the occurrence of aspectual affixes or phasal verbs (cf. §6.3.2). They can also be rendered through the occurrence of a temporal adjunct (6.47a) or a temporal predicate as in (6.47b).

(6.47) a. makini-'ano-pa-palr-ae m-oa taipake 'idha.

Dyn.Fin:all-with-Red-spouse-all Dyn.Subj-go Taipei yesterday 'They all went to Taipei together yesterday.'

b. pa-caili-nai mo-lapangolai

every-year-1PE.Nom Dyn.Subj:celebrate a ritual-Lapangolai

more-lehe'e valrio-nai.Dyn.Subj:hold-ritual village-1PE.Gen

'Each year, in our village we celebrate the ritual of the Lapangolai household.'

6.3.1.2 Marking of irrealis

Irrealis can be marked on the morphological level through affixation, or on the lexical level through the occurrence of temporal adjuncts or conditional and counterfactual clauses that frame a situation as unrealized.

Future is marked through the prefixation of **amo-** 'will' to the verb root/stem. As mentioned earlier, **amo-** attaches to a bare root if the verb is dynamic, i.e. there is no marking of the active voice as in (6.48a-b); **amo-** precedes prefixes marking a passive as in (6.48c) or a state as in (6.48d).

(6.48) a. lo ki-sialalra-ni, amo-kelrakelrange-lra-ine ana

if Neg-Dyn.NFin:hear-3S.Gen Irr-Dyn.NFin:beat-1S.Nom-3S.Obl that lalake-'0.

child-2S.Gen

'If he does not listen to me, I will beat your child.'

b. lo pa'amaolro-li amo-paavanao-lrao.

 $if \quad have \ time-1S. Gen \quad Irr-Dyn. NF in: bathe-1S. Nom$

'If I have time, I will bathe.'

c. lo 'i-ka'ace-li 'olra'a, amo-'i-ange'ange-lrao.

if Pass-Dyn.NFin:bite-1S.Gen snake Irr-Pass-Dyn.NFin:hurt-1S.Nom 'If I am bitten by a snake, I will be hurt.'

d. lo longai-'o, amo-ka-lavahe-lra-imia'e.

 $if \quad Dyn. Subj: buy-2S. Gen \quad Irr-Stat. NF in-envy-1S. Nom-2S. Obl$

'If you buy a house, I will envy you.'

The prefixation of **ni**- to the verb conveys a counterfactual meaning. As shown in (6.49), **ni**- attaches to any type of verbs, i.e. dynamic/stative, active/passive verbs.

(6.49) a. la-ni ki-sialalr-iae, *ni*-kelrakelrange-lra-ine

if-3S.Gen Neg-Dyn.NFin:hear-1S.Obl Cntrfct-Dyn.NFin:beat-1S.Nom-3S.Obl

ana lalake-'o. that child-2S.Gen

'If he had not listened to me, I would have beaten your child.'

b. la pa'amaolro-li, *ni*-paavanao-lrao.

if have time-1S.Gen Cntrfct-Dyn.NFin:bathe-1S.Nom 'If I had had time, I would have bathed.'

c. la-ni 'i-ka'ace-li 'olra'a, if-3S.Gen Pass-Dyn.NFin:bite-1S.Gen snake ni-'i-ange'ange-lrao.

Cntrfct-Pass-Dyn.NFin:hurt-1S.Nom

'If I had been bitten by a snake, I would have been hurt.'

d. la-ko langai dha'ane, ni-ka-lavahe-lra-imia'e.
and-2S.Gen Dyn.NFin:buy house Cntrfct-Stat.NFin-envy-1S.Nom-2S.Obl
'If you had bought a house, I would have envied you.'

The circumfixation of \mathbf{ni} -...- \mathbf{a}^{40} to a verb expresses a concessive meaning. What is important to note is that the verb is nominalized (*cf.* §7.1.3.5).

(6.50) a. ni-sialalra-a-n-iae,

CncNmz-Dyn.NFin:hear-CncNmz-3S.Gen-1S.Obl

amo-kelrakelrange-lra-ineanalalake-'o.Irr-Dyn.Nin:beat-1S.Nom-3S.Oblthatchild-2S.Gen'Even if he listens to me, I will beat your child.'

b. ni-ka-'amadha-a-li maayanao,

CncNmz-Stat.NFin-dislike-CncNmz-1S.Gen Dyn.Subj:bathe

amo-maavanao-lrao pa-mene-nae.

Irr-Dyn.NFin:bathe-1S.Nom every-today-TempNmz

'Even if I dislike bathing, I take a bath every day.'

c. *ni-*'i-ange'ang-a-li amo-ka-tovi-ka-li.

CncNmz-Pass-Dyn.NFin:hurt-CncNmz-1S.Gen Irr-Neg-Dyn.NFin:cry-Neg-1S.Gen 'Even if I am hurt, I will not cry.'

Examples with temporal adjuncts such as **lo 'idha** 'tomorrow' and **lo icaili** 'next year' are given below:

Incidentally, the suffix -a also indicates 'irrealis' in gerunds, the verb marked as such occurring either in its non-finite (i) or subjunctive form (ii):

(i) kana-ni 'ongol-a-'o?
what-3S.Gen Dyn.NFin:drink-Irr-2S.Gen
'What will you drink?'

(ii) **kon-a-'o lo idhae?**Dyn.Subj:eat-Irr-2S.Gen when:Irr
'When are you going to eat?'

- (6.51) a. amo-pakini-'ano-pa-palr-ae m-oa taipake lo 'idha.

 Irr-Dyn.NFin:all-with-Red-spouse-all Dyn.Subj-go Taipei tomorrow 'They will all go to Taipei together tomorrow.'
 - b. *lo icaili-nga*, (a)mo-oa-lrao 'amelrika 'ano-hikoki.
 next year-Sup Irr-Dyn.NFin:go-1S.Nom US take-plane
 'Next year, I will fly to the US.'

Epistemic and deontic modality is expressed both lexically and morphologically, through the co-occurrence of the modal marker **kai** in initial position followed by a verb prefixed by **a-** 'when' (clausal nominalization) if the meaning of the sentence is epistemic as in (6.52) or marked by **(a)mo-** 'will' (irrealis) if the interpretation is deontic as in (6.53):

- (6.52) a. *kai a*-dha'olo-nga 'idha.

 Mod ClsNmz-Dyn.NFin:rain-already yesterday
 'It may have rained yesterday.'
 - b. *kai a*-kane-nga aha'a.

 Mod ClsNmz-Dyn.NFin:eat-already Dyn.NFin:cook 'He may have eaten already.'
 - c. *kai a-*'ongolo-nga vavaa.

 Mod ClsNmz-Dyn.NFin:drink-already wine
 'He may have drunk wine already.'
- (6.53) a. *kai* (*a*)*mo*-kaane aha'a.

 Mod Irr-Dyn.NFin:eat Dyn.NFin:cook
 'He must eat.'
 - b. **vo'ok-ane ana,** *kai* **(a)mo-'ongolo vavaa.** drunk-? that Mod Irr-Dyn.NFin:drink wine 'He is a drunkard; he must drink wine.'
 - c. **o-sialalra-ka-i ka lalake-ni,** *kai* (*a)mo-*'i-kelrakelrange.

 Dyn.Fin-hear-Neg-3S.Gen Neg child-3S.Gen Mod Irr-Pass-Dyn.NFin:beat 'His child did not listen to him, (so) he must beat his child.'

6.3.2 Aspect

Aspect is defined as a nondeictic category, in that it does not locate a situation in time but rather characterizes the internal constituency of that situation.

Mantauran distinguishes, to some extent, between perfective and imperfective situations, that is, between situations viewed as completed and those viewed as on-going or habitual.

Aspectual notions can be expressed through reduplication or through the use of verbal prefixes and/or lexical verbs.

6.3.2.1 Aspectual notions expressed through verbal morphology

Progressive, continuous, habitual/repetitive are the only aspects that can be marked on the verb by default, without addition of any other element in the sentence.

An imperfective interpretation can be rendered through the reduplication of the verb stem. Reference to the past or to the present depends entirely on the context. Compare, for instance, (6.54a) and (6.54b). Reduplication might convey a progressive (6.54a), continuous (6.54b) or repetitive/habitual (6.54c-e) meaning depending on the verb that is being reduplicated: there is no overt aspectual distinction.

- (6.54) a. **ona'i a-ki-'acakelae-na-li, 'asika'oka'olo-lrao.** that ClsNmz-Neg-marry-still-1S.Gen work:Red-1S.Nom 'Before I got married, I was working.'
 - b. *o-kane-kane* taotao.

 Dyn.Fin-Red-eat Taotao

 'Taotao keeps on eating.'
 - c. takanao 'a *o-'ongolo-*ka-i ka vavaa la Takanao Top Dyn.Fin-Red-drink-Neg-3S.Gen Neg wine and *o-tamako-mako-ka-i.*

Dyn.Fin-smoke-Red-Neg-3S.Gen 'As for Takanao, he does not drink nor does he smoke.'

- d. *ma-ca'e-ca'eme*Stat.Fin-Red-ill
 'Dhipolo is often ill.'
- dhapele-nai e. olo dhoma-nae, mani if other-TempNmz then Dyn.NFin:fish by poisoning-1PE.Nom to-ka'a-ka'ange lroikiikisi mani alra o'i produce-Red-fish Dyn.Subj:Red:fishhook then Dyn.NFin:take that to-'adhamadhamai. ka'ange fish produce-Red:dish 'Sometimes we (would go) fishing and we (would) cook the fish we had caught.'

6.3.2.2 Aspectual notions expressed through affixes and verbs

Notions such as 'perfectivity' as opposed to 'imperfectivity' are expressed through verbal affixes: the suffix **-nga** 'already' serves to mark perfectivity (6.55), as opposed to

-na 'still, yet' that indicates imperfectivity (6.56):

(6.55) a. o-kelrakelrange-nga-lra-ine

ana lalake-'o. that child-2S.Gen

Dyn.Fin-beat-already-1S.Nom-3S.Obl 'I have beaten your child.'

b. maavanao-nga-lrao.

Dyn.Fin:bathe-already-1S.Nom

'I have bathed already.'

c. 'i-ange'ange-nga-lrao.

Pass-Dyn.NFin:hurt-already-1S.Nom 'I have been hurt.'

d. ma-lavahe-nga-lra-imia'e.

Stat.Fin-envy-already-1S.Nom-2S.Obl 'I have envied you.'

(6.56) a. o-kelrakelrange-na-lra-ine

ana lalake-'o.

that

child-2S.Gen

Dyn.Fin-beat-still-1S.Nom-3S.Obl 'I am still beating your child.'

b. maavanao-na-Irao.

Dyn.Fin:bathe-still-1S.Nom 'I am still bathing.'

c. 'i-ange'ange-na-lrao.

Pass-Dyn.NFin:hurt-still-1S.Nom 'I am still hurt.'

d. ma-lavahe-na-lra-imia'e.

Stat.Fin-envy-still-1S.Nom-2S.Obl 'I still envy you.'

Other interpretations can be obtained through the use of specific affixes and verbs.

A continuous reading can be rendered through the prefixation of **naa**- (6.57a) or **kama-/kapa-** (6.57b). Both prefixes translate as 'continuously' but the first conveys a notion of annoyance. Note that a verb prefixed by **naa**- is nominalized, and so must be followed by a genitive pronoun, as shown in (6.57a). In both examples, reference to either past or present depends entirely on the context.

(6.57) a. *naa-*tovi-ni continuously-Dyn.NFin:cry-3S.Gen

dhona'i lroolai. that child

'That child does not stop crying.'

b. kama-ka-ke'eecenge

lrokipi

Dyn.Fin:continuously-Stat.NFin-strong

Dyn.Subj:stick

ta-toloholra-nae-ni.

LocNmz-sit-LocNmz-3S.Gen

'He is continuously glued to his chair.'

The notion of completion can also be marked by the prefix maka- 'finish' as in (6.58a), in co-occurrence (or not) with **-nga** 'already' as in (6.58b), or through a temporal clause (6.58c):

(6.58) a. maka-kane

taotao.

Dyn.Fin:finish-Dyn.NFin:eat

Taotao

'Taotao has finished eating.'

b. maka-kane-nga

taotao.

Dyn.Fin:finish-Dyn.NFin:eat-already

Taotao

'Taotao has already finished eating.'

c. a-paavanao-li,

o-'apece-lrao.

ClsNmz-Dyn.NFin:bathe-1S.Gen

Dyn.Fin-sleep-1S.Nom

'When I had bathed, I (went to) sleep.'

On the lexical level, it can be rendered by the occurrence of the verb o-lepenge 'finish' in initial position:

(6.59) a. *o-lrepenge*

taotao.

Dyn.Fin-finish

Taotao

'Taotao has finished eating.'

Inception is conveyed through the use of three verbs, which function as synonyms: ta'okamai, ta'asa and arongo.

(6.60) a. dhona'i aidhi

o-dholro-na-ka-dha

ka

that

youngest sibling ta'okamai

kone

Dyn.Subj:eat

Dyn.Fin-can-still-Neg-3S.Gen holrolaholai.

Neg

dhoadhaace, Dyn.Subj:walk

just

Dyn.Subj:crawl

'Her youngest sister could not walk yet, (as) she was just starting to crawl.'

b. dhona'i aidhi

o-dholro-na-ka-dha

ka

that youngest sibling Dyn.Fin-can-still-Neg-3S.Gen

Neg

dhoadhaace, ta'asa holrolaholai.

Dyn.Subj:walk just Dyn.Subj:crawl

'Her youngest sister could not walk yet, (as) she was just starting to crawl.'

c. dhona'i aidhi o-dholro-na-ka-dha ka
 that youngest sibling Dyn.Fin-can-still-Neg-3S.Gen Neg dhoadhaace, arongo-ni holrolaholai.
 Dyn.Subj:walk just-3S.Gen Dyn.Subj:crawl
 'Her youngest sister could not walk yet, (as) she was just starting to crawl.'

6.3.3 Interaction between mood and aspect

Mood interacts closely with aspect. Aspectual notions—expressed through the reduplication of the verbal stem or through the occurrence of affixes—were shown to determine the temporal frame of an utterance in the realis. In the irrealis, on the other hand, future, counterfactual, or concessive notions are marked through verbal morphology. The use of reduplication as in (6.61) or the occurrence of aspectual affixes as in (6.62a-b) are also possible but rare.

| mani | pato'-iname | a-talialai | pakisa: | |
|-----------------------|--------------------------------------|---|--|--|
| then | tell-1PE.Obl | plur-chief | plain | |
| "amo-le | eka-lekate-nga-mita | | 'ina | |
| Irr-Red- | Dyn.NFin:measure-alı | ready-1PI.Nom | this | |
| ta-kasa-(a)e-ni ooma" | | ia-ng-iname. | | |
| LocNm | z-only-LocNmz-3S.Ge | en field | Dyn.NFin:so-already-1PE.Obl | |
| 'Then the are." | ne local government to | ld us: "We will m | neasure the fields (to see how) big they | |
| | then "amo-le Irr-Red- ta-kasa LocNm: | then tell-1PE.Obl "amo-leka-lekate-nga-mita Irr-Red-Dyn.NFin:measure-ali ta-kasa-(a)e-ni LocNmz-only-LocNmz-3S.Ge 'Then the local government to | then tell-1PE.Obl plur-chief "amo-leka-lekate-nga-mita Irr-Red-Dyn.NFin:measure-already-1PI.Nom ta-kasa-(a)e-ni ooma" LocNmz-only-LocNmz-3S.Gen field 'Then the local government told us: "We will m | |

The suffix **-nga** 'already' in co-occurrence with **amo-** 'will' as in (6.62) indicates the imminent happening of a situation.

(6.62) a. amo-o-valrio-nga-lrao.

Irr-Dyn.NFin:to-village-already-1S.Nom 'I am returning back home.'

b. amo-vengelrai-nga, ta'okamai-nga tovoho
Irr-Dyn.Fin:warm-already just-already Dyn.Subj:come out (plants)
'apo-li'ange.
come out-leaf

'It is already/is getting warm, the plants are just blooming, the leaves are coming out.'

In (6.63a-c), the occurrence of **-nga** 'already' helps establish the anteriority of the event described in the adverbial clause (*cf.* §16.1.1):

- (6.63) a. **lo 'acekelae-***nga***-lidha, mani poa tovaa.**if Dyn.Subj:marry-already-3P.Obl then Dyn.NFin:make make:wine 'If they had gotten married, (we would) make wine.'
 - b. lo 'a-lrihoa'-e-nga-dha o-sivarange
 if a lot-Dyn.NFin:know-a lot-already-3S.Gen Dyn.Fin-pregnant
 m-ia to'onai pelehe'e.

 Dyn.Subj-so everything taboo
 'If someone knew she was pregnant (= if it was already obvious that she was pregnant), everything was taboo.'
 - c. ona'i 'ao-maidhai-nga-dha kone, mani that Nth times-many-already-3S.Gen Dyn.Subj:eat then ka-a-rilai dhona dha'an-a-nae.

 Stat.NFin-plur-slim that house-beyond-LocNmz 'After they had eaten a number of times, they (all started) to slim down.'

Similarly, the use of **-na** 'still, yet' in co-occurrence with the negator **ki-** in the temporal clause enables the establishment of the anteriority of the event described in the main clause:

- (6.64) a. **ona'i a-***ki-*'acakelae-*na*-li, 'asika'oka'olo-lrao. that ClsNmz-Neg-marry-still-1S.Gen work:Red-1S.Nom 'Before I got married, I was working.'

 (*Lit.*: 'When I had not gotten married yet...')
 - b. a-ki-kaava'i-na-dha 'aomo olo 'iidheme-nai ClsNmz-Neg-Dyn.NFin:come-still-3S.Gen Japanese if towards-1PE.Gen tangiacae, toramoro ka ma-kelese dhona'i valrevalre'ae. Dagin Lig Stat.Subj-narrow 'Before the Japanese came, if we went towards Daqin, the roads were very narrow.' (Lit.: 'When the Japanese had not come yet...')

6.4 Imperative

The imperative is used to express a command, whereby the hearer is asked or required to do something. It is usually expressed through the suffixation of **-a** to the verb base in Mantauran. This marking is found across the other Rukai dialects (*cf.* Li 1973, Zeitoun 1995a and 2003). The present section deals with this imperative form (*cf.* §6.4.1) and introduces briefly "polite" or "mild requests" (as opposed to "strong" requests) (*cf.* §6.4.2) and exhortatives (*cf.* §6.4.3). Negative imperatives are discussed in §6.5.

6.4.1 The imperative suffix -a

The imperative is marked through the prefixation of a- to the base, the verb occurring in its subjunctive form, as shown in (6.65) (cf. §6.1.2).41 The subject (referring to a second person singular or plural) is zero-marked (6.66).

(6.65) (Affirmative) Imperative dynamic verbs

| a. | o-alroho | 'lift' | olroh-a | (ana)! | 'Lift (that)!' |
|----|------------|-------------------|------------|--------|--------------------|
| | o-langai | 'buy' | longalr-a | (ana)! | 'Buy (that)!' |
| | o-piki | 'put' | piki-a | (ana)! | 'Put (that down)!' |
| | o-vilivili | 'pull' | vilivili-a | (ana)! | 'Pull (that)!' |
| b. | om-alra | 'take' | m-alr-a | (ana)! | 'Take (that)!' |
| | om-oa | ʻgoʻ | m-o-a! | | 'Go!' |
| | om-iki | 'exist, be at' | m-iki-a | (ana)! | 'Be (there)!' |
| c. | maava'i | 'come' | maava'i-a | ! | 'Come!' |
| | maavanao | 'bathe' | maavanalı | r-a! | 'Bathe!' |
| d | Ø-omikace | 'onen one's eves' | omikac-a! | | 'Onen vour eves!' |

d. **Ø-omikace** 'open one's eyes' omikac-a! Open your eyes!

(6.66)"vo'alr-a-Ø-iae pa-'acakelae dhona pa-ka-ea Dyn.Subj:give-Imp-Ø-1S.Obl Caus-Stat.NFin-one that Caus-marry lalake-'o!" child-2S.Gen

Li (1973:218) claims that in Tanan, "imperatives occur only with nonstative verbs". This statement does not hold in Mantauran Rukai, as shown in the following paradigm.

(6.67) (Affirmative) Imperative stative verbs

| ma-raveravere | 'happy' | ma-raveraver-a! | 'Be happy!' |
|---------------|----------------------|-----------------|---------------------------|
| ma-rimoro | 'forget' | ma-rimor-a! | 'Forget (it)!' |
| ma-lrakase | '(be) lazy, dislike' | ma-lrakas-a! | 'Dislike (it/him/her)!' |
| ma-'amadhe | 'dislike, hate' | ma-'amadh-a! | 'Hate (it/him/her)!' |
| ma-dhalame | 'like, love' | ma-dhalam-a! | 'Like/love (it/him/her)!' |

Nonetheless, it is true that some verbs might need to be first dynamicized through the prefixation of to- to the base (6.68a)—or causativized—usually through the

160

[&]quot;Give me one of your children (i.e. daughter) to marry!"

⁴¹ Though the terminology differs, Li (1973:218) notes also that "there is a close connection between infinitives and imperatives in many languages, and Rukai is but one of many languages that manifest such a phenomenon."

prefixation of **pa-** (6.68b-c)—to occur in the imperative:

(6.68) a. to-dhao-a! vs. ma-dhao-a!

produce-many-Imp Stat.Subj-many-Imp

'Make more!' 'More!'

b. pa-ka-ke'eceng-a! vs. ma-ke'eceng-a!

Caus-Stat.NFin-strong-Imp Stat.Subj-strong-Imp

'Make (it) strong!' 'Be strong!'

c. pa-ka-ea-a-iae kamosia!
Caus-Stat.NFin-one-Imp-1S.Obl sweet

'Give me one candy!'

When two verbs occur in a sequential order, the first takes the imperative suffix and the second is marked as subjunctive (6.69a-a'). The only exception to this rule is the occurrence of **imia** 'come' that requires the second verb to occur also in the imperative form. Compare (6.69b-b'):

(6.69) a. **m-o-a** kone!

Dyn.Subj-go-Imp Dyn.Subj:eat

'Go eat!'

a'. * m-o-a kon-a!

Dyn.Subj-go-Imp Dyn.Subj:eat-Imp

b. imia kon-a!

come:Imp Dyn.Subj:eat-Imp

'Come (to) eat!'

b'.*imia kone!

come:Imp Dyn.Subj:eat

'Come (to) eat!'

6.4.2 "Mild" vs. "strong" requests

A mild request is expressed through the occurrence of **-nga** on the verb marked as imperative.

(6.70) a. **o-kane** 'eat' kon-a-nga! 'Eat, please!' maava'i 'come' maava'i-a-nga! 'Come, please!' 'bathe' 'Bathe, please!' maavanao maavanalr-a-nga! 'Be happy, please!' b. ma-raveravere 'happy' ma-raveraver-a-nga!

A strong request is expressed through the occurrence of the modal **kai** 'may, must, should' preceding the verb marked as imperative.

```
(6.71) a. o-kane
                                                               '(You should) eat!'
                           'eat'
                                       kai kon-a!
                                                               '(You should) come!'
          maava'i
                           'come'
                                       kai maava'i-a!
                           'bathe'
                                       kai maavanalr-a!
                                                               '(You should) bathe!'
          maavanao
       b. ma-raveravere
                           'happy'
                                       kai ma-raveraver-a!
                                                               '(You should) be happy!'
```

6.4.3 Hortative

The hortative does not require the verb to occur in the imperative. It is expressed through the occurrence of **ita** '1PI.Top' followed by a non-finite verb or by the cliticization of **ta-** on the verb base.

```
(6.72) a. o-kane
                           'eat'
                                     ita kane
                                                     or ta-kane!
                                                                        'Let's eat!'
          om-oa
                           ʻgoʻ
                                                     or ta-oa!
                                                                        'Let's go!'
                                     ita oa
          maayanao
                           'bathe'
                                     ita paavanao or ta-paavanao!
                                                                        'Let's bathe!'
       b. ma-raveravere
                           'happy'
                                     ita ka-raveravere or
          ta-ka-raveravere! 'Let's be happy!'
```

For instance:

```
(6.73) a. "ita poa pa-ka-a'a la-a-lake-ta" mani

1PI.Top Dyn.NFin:make Caus-Stat.NFin-court child-plur-child-1PI.Gen then

ia dhona ka'olo titina.

Dyn.NFin:so that commoner middle-aged woman

"Let our children flirt" said the mother who was a commoner.'
```

b. **tila!** *t(a)-oa* **polidhao ta-siraovo.**leave:Imp 1PI.Nom-Dyn.NFin:go Dyn.Subj:watch SubjNmz-Dyn.NFin:dance
'Leave! Let's go and watch (those who) dance.'

6.5 Negation

There are four different types of negators in Mantauran: (i) -ka negates an event or a situation (predicative negation); (ii) ki- has to do with modality (modal negation); (iii) a-...-ae forms the imperative negation; and (iv) o-kaodho negates the existence of a referent (existential negation). Existential negation will be discussed in §12.3.

6.5.1 -ka and the marking of predicative negation

-ka attaches to any type of verbs, e.g. dynamic (6.74a), stative (6.74b), denominal (6.74c), denumeral (6.74d) as well as nominal predicates (6.74e):

(6.74) a. **o-dholro-na-***ka***-li ka dhoadhaace.**Dyn.Fin-can-still-Neg-1S.Gen Neg Dyn.Subj:walk 'I still cannot walk.'

b. ona'i a-valrovalro lo ki-'i-cikiciki-dha
that plur-young woman if Neg-Pass-Dyn.NFin:tattoo-3S.Gen
ka ma-taadhi'i-ka-i om-ia.
Neg Stat.Fin-good-Neg-3S.Gen Dyn.Fin-so
'(Our parents used to) say that young woman who did not get tottoood w

'(Our parents used to) say that young women who did not get tattooed were not beautiful.'

c. ona'i a-ka-Iroolai-li, mata'oo-dhapale-ka-li
that ClsNmz-Stat.NFin-child-1S.Gen Dyn.Fin:wash-foot/leg-Neg-1S.Gen
mani o-iae ngosangoso dhapale-li a'ata'atange.
then Dyn.NFin:go-1S.Obl Dyn.Subj:nibble foot/leg-1S.Gen mouse
'When I was little, I would not wash my feet, and mice would come and nibble my feet.'

d. *matara-dho'a-ka-i* **ka sirir-ine ana**Dyn.Fin:take-two-Neg-3S.Gen Neg Dyn.Subj:take as wife-3S.Obl that **valrovalro.**young woman

'He did not take two young women as his wives.'

e. ka 'oponoho-ka-'o.

Neg Mantauran-Neg-2S.Gen
'I am not Mantauran.'

The use of the negator -ka is actually quite complex, and requires some clarification. The verb is usually in its finite form (6.75a), unless it occurs with one (or more) prefixes such as amo- 'will', ni- 'would', pa- 'causative' or a conjunction like mani 'then' that inherently induce the modification of the verb stem (6.75b). Compare:

(6.75) a. a-'otalivee'ao-ni dhona taka-taka 'n ClsNmz-unwrap-3S.Gen that Red-older sibling Top o-dholro-ka-i ka kone; ma-takolra. Dyn.Fin-can-Neg-3S.Gen Dyn.Subj:eat Stat.Fin-bad Neg 'When the oldest brother unwrapped his glutinous rice dumpling, he could not eat it; it was bad '

b. 'ira-ca'em-ae ana mani dholro-ka-i 'adhidhapae. for-ill-StatNmz that then Dyn.NFin:can-Neg-3S.Gen work 'He cannot work because of his illness.'

The negator **-ka** is usually followed by a genitive pronoun which co-refers with the agent/subject of the sentence (6.76a); it never co-occurs with a nominative pronoun (6.76b).

(6.76) a. **ohanae**-*ka-li* **paoli.** intentionally-Neg-1S.Gen wrong 'I did not do it wrong intentionally.'
b. ***ohanae**-*ka-lrao* **paoli.** intentionally-Neg-1S.Nom wrong

In very few examples, though, the negator **-ka** is followed by an oblique pronoun. For instance:

- (6.77) a. om-iki-ka-imia'e lalake valrovalro?

 Dyn.Fin-exist-Neg-2S.Obl child young woman 'Do you have (grown up) daughter(s)?'
 - b. m-okela-ka-ine ka dhamare-ni to-alake mani
 Dyn.Fin-reach-Neg-3S.Obl Neg month-3S.Gen produce-child then
 pa-kovokovo-ng-ine.
 Caus-Dyn.NFin:incubate-already-3S.Obl
 'The child was born premature, so he was put in an incubator.'

Li (1977b and 1996) treats the sequence -ka 'Neg' + Pro_{Gen} as a special set of pronouns and considers -ka to actually be a "free" morpheme. It is difficult to analyze -ka+Pro_{Gen} as a set of pronouns, since -ka+Pro_{Obl} is also found (though less productively) in the corpus (6.77). On the other hand, there is no doubt that -ka is a "bound" morpheme. This is supported by the facts that: (i) an NP cannot be inserted between the verb and the sequence -ka+Pro_{Gen} (6.78); (ii) -ka+Pro_{Gen} precedes genitive and oblique pronouns that are bound (6.79); (iii) it cannot be used independently as an answer to a question (6.80); and (iv) when preposed in initial position, it must be preceded by the topic prefix i- (6.81), which also occurs on topic pronouns, *cf.* ilrae '1S.Top'.

- (6.78) a. **o-kane-***ka-li* **ka velevele.**Dyn.Fin-eat-Neg-1S.Gen Neg banana
 'I am not eating/did not eat a banana.'
 - b. *o-kane ka velevele *ka-li*.

 Dyn.Fin-eat Neg banana Neg-1S.Gen

(6.79) o-cengele-ka-'-ine a-kane-ni?

Dyn.Fin-see-Neg-2S.Gen-3S.Obl ClsNmz-Dyn.NFin:eat-3S.Gen

'Did you see what s/he ate?'

(6.80) a. **dhipolo-ka-'o?**Dhipolo-Neg-2S.Gen

'Are you Dhipolo?'

b. *ka-li / ka dhipolo-ka-li.

Neg-1S.Gen Neg Dhipolo-Neg-1S.Gen

'I am not Dhipolo.'

(6.81) a. *i*-ka-'o ka⁴² kane-nga velevele-'o?
Top-Neg-2S.Gen Dyn.NFin:eat-already banana-2S.Gen

'Have you eaten a banana already?'

b. * **Ø-ka-'0** ka kane-nga velevele-'0?
Ø-Neg-2S.Gen Dyn.NFin:eat-already banana-2S.Gen

To negate a clause, -ka is usually cross-referenced by another negator ka that occurs either before (6.80a) or after the negated verb (6.78a). In a serial verb construction, ka occurs between the two verbs (6.82). Otherwise, it appears before the nominal

complement if any:

(6.82) a. **ma-dhalame-ka-li ka kone velevele.** Stat.Fin-like/love-Neg-1S.Gen Neg Dyn.Subj:eat banana 'I do not like eating bananas.'

b. *ma-dhalame-ka-li kone ka velevele.
Stat.Fin-like/love-Neg-1S.Gen Dyn.Subj:eat Neg banana

I follow Yeh et al.'s (1998) analysis in proposing that this second **ka** constitutes part of the negation. The main reason for such a claim is that if the sequence V-**ka**-Pro_{Gen} is not preceded or followed by **ka**, the utterance is understood as interrogative, not declarative. Compare the following pairs of examples:

4

Note that if **-ka** is preposed in initial position in interrogative sentences, then the occurrence of a second **ka** (meaning unknown) *before* the predicate is compulsory.

| (i) | <i>i-ka-</i> 'o | ka | kane-nga | velevele-'o? |
|-----|---------------------|--------|----------------------|---------------|
| | Top-Neg-2S.Gen | | Dyn.NFin:eat-already | banana-2S.Gen |
| | 'Have you eaten a l | nanana | already? | |

⁽ii) * *i-ka-*'o Ø kane-nga velevele-'o?

Top-Neg-2S.Gen Ø Dyn.NFin:eat-already banana-2S.Gen

(6.83) a. o-'enao-ka-'o to'akene?

Dyn.Fin-wash-Neg-2S.Gen tidy

'Did you wash it well?'

a'. o-'enao-ka-'o ka to'akene.

Dyn.Fin-wash-Neg-2S.Gen Neg tidy

'You did not wash it well.'

b. amo-va'ai-ka-'-iae ana'i kipingi-'o?

Irr-Dyn.NFin:give-Neg-2S.Gen-1S.Obl that clothes-2S.Gen

'Will you give me those clothes of yours?'

b'. amo-ka-va'ai-ka-'-iae ka ana'i kipingi-'o.

Irr-Neg-Dyn.NFin:give-Neg-2S.Gen-1S.Obl Neg that clothes-2S.Gen

'You will not give me those clothes of yours.'

c. ma-dhalame-ka-li kone velevele?

Stat.Fin-like/love-Neg-1S.Gen Dyn.Subj:eat banana

'Do I like to eat bananas?'

c'. ma-dhalame-*ka*-li *ka* kone velevele.

Stat.Fin-like/love-Neg-1S.Gen Neg Dyn.Subj:eat banana

'I do not like to eat bananas.'

The occurrence of the irrealis marker **amo-** 'will' before **ka** deserves a special mention. In that case, **amo-** prefixes to **-ka** and the sequence **amo-ka-** appears obligatorily before the negated verb, as shown in (6.84a-c).

(6.84) a. ma-'amadh-iae iinae [...]

Stat.Fin-dislike-1S.Obl own mother

amo-ka-dholro-nga-ka-li m-o-valrio,

Irr-Neg-Dyn.NFin:can-already-Neg-1S.Gen Dyn.Subj-to-village

amo-'aa-lrikolao-nga-lrao.

Irr-become-leopard-already-1S.Nom

'Mother does not like me [...] I cannot come back home. I will become a leopard.'

b. ni-leka-lekat-a-li ooma-li,

CncNmz-Red-Dyn.NFin:measure-CncNmz-1S.Gen field-1S.Gen

amo-ka-ka-raveravere-ka-'o.

Irr-Neg-Stat.NFin-happy-Neg-2S.Gen

'Even if I measure my field, you will not be happy.'

c. "lo dholro-'-iae pa-'acakelae la-a-lake-'o

if Dyn.Subj:can-2S.Gen-1S.Obl Caus-marry child-plur-child-2S.Gen

'a amo-ka-ka-'ete-ka-'o..."

Top Irr-Neg-Stat.NFin-Neg-2S.Gen...

"If you let me marry one of your children, you will not die..."

6.5.2 ki- and the marking of modal negation

ki- usually expresses deontic modality. It differs from -**ka** in at least two respects. First, **ki**- attaches to the verb root/stem; -**ka**, on the other hand, attaches to a finite verb form. Second, the sequence **ki**-V is usually followed by a *nominative* pronoun (unless the verb is part of an interrogative, conditional or nominalized clause); -**ka** is typically followed by a *genitive* pronoun. Compare the following pairs of examples:

(6.85) a. ki-kane-lrao.

Neg-Dyn.NFin:eat-1S.Nom 'I won't eat.'

b. ka o-kane-ka-li.

Neg Dyn.Fin-eat-Neg-1S.Gen 'I did not eat.'

(6.86) a. olo kala-dho-dha'ol-ae,

if TempNmz-Red-Dyn.NFin:rain-TempNmz

ki-oa-mao ooma...Neg-Dyn.NFin:go-Impers.Nom field

'During the rainy season, if one stayed home, one would not go to the field...'

b. **olo dho'olo-ni**, **om-oa-ka-li ooma...** if Dyn.Subj:rain-3S.Gen Dyn.Fin-go-Neg-1S.Gen field

'If it rains, I won't go to the field...'

The distribution of **ki**- is much broader than that of -**ka** in terms of the types of constructions (both verbal and nominal) where it can occur.

It can be attached to embedded verbs as in (6.87a); **-ka** cannot (6.87b). It must occur in the first verb of the clause, i.e. the matrix verb as in (6.87c).

(6.87) a. **m-o-'adhaili-nga ki-dha'olo mani ma-si'i acilai.**Dyn.Fin-to-far-already Neg-Dyn.NFin:rain then Stat.Fin-a little water 'It has not rained for a long time so there is little water.'

b. *m-o-'adhaili-nga dho'olo-ka-i, mani Dyn.Fin-to-far-already Dyn.Subj:rain-Neg-3S.Gen then ma-si'i acilai. Stat Fin-a little water

c. m-o-'adhaili-ka-i ka dha'olo, mani ma-si'i acilai.

Dyn.Fin-to-far-Neg-already Neg rain then Stat.Fin-a little water

'It has been a long time since there was no rain so there is little water.'

The examples given in (6.88) provide a panorama of all the nominalized clauses where **ki-** (but not **-ka**) can appear, including: clauses introduced by **kasa-** 'only' (6.88a), nominalized clauses introduced by **avasae** 'what a pity' (6.88b), subjective nominals (6.88c), objective nominals (6.88d), gerunds (6.88e-f), conditional (6.88g) and concessive (6.88h) clauses.

(6.88) a. kasa-li ta-ki-kaava'i.

only-1S.Gen SubjNmz-Neg-Dyn.NFin:come 'Only I did not come.'

a'. *kasa-li ta-kaava'i-ka-li.

only-1S.Gen SubjNmz-Dyn.NFin:come-Neg-1S.Gen

b. avasae-li ki-to-alake.

a pity-1S.Gen Neg-produce-child 'What a pity I did not give birth to a child.'

b'. * avasae-li to-alake-ka-li.

a pity-1S.Gen produce-child-Neg-1S.Gen

. dhona ta-ka-kocingai kipingi

that SubjNmz-Stat.NFin-expensive clothes

ki-langalr-ae-nai...

Neg-Dyn.NFin:buy-ObjNmz-1PE.Gen

'Those expensive clothes that we cannot buy...'

c'. * dhona ta-ka-kocingai

that SubjNmz-Stat.NFin-expensive clothes

kipingi

langalr-ae-ka-nai...

Dyn.NFin:buy-ObjNmz-Neg-1PE.Gen

d. akaodho ka ki-lrihoa'-e-li.

not exist Neg Neg-Dyn.NFin:know-ObjNmz-1S.Gen 'There is nothing that I do not know.'

d'. * akaodho ka lrihoa'-e-ka-li.

not exist Neg Dyn.NFin:know-ObjNmz-Neg-1S.Gen

e. kani ki-'omaace-na-'o?

why Neg-Dyn.NFin:wake up-still-2S.Gen

'Why don't you wake up?'

e'. *kani 'omaace-na-ka-'o?

why Dyn.NFin:wake up-still-Neg-2S.Gen

f. ama-dha *ki-*tipitipi-mi'-ine?

how come-3S.Gen Neg-Dyn.NFin:beat-2S.Nom-3S.Obl 'How come you did not beat him/her?'

f'. * ama-dha tipitipi-ka-'-ine?

how come-3S.Gen Dyn.NFin:beat-Neg-2S.Gen-3S.Obl

- g. **olo ki-lriho'o-dha solate, ka polringao-ka-dha...** if Neg-Dyn.NFin:know-3S.Gen Dyn.Subj:study Neg matter-Neg-3S.Gen 'If he did not know how to study, that would not matter...'
- g'.*olo lriho'o-ka-dha solate, ka polringao-ka-dha... if Dyn.Subj:know-Neg-3S.Gen Dyn.Subj:study Neg matter-Neg-3S.Gen
- h. **ni-ki-kaava'i-a-'o, amo-dhaace-lrao.**CncNmz-Neg-Dyn.NFin:come-CncNmz-2S.Gen
 'Even if you come, I will leave.'
- h'.***ni-kaava'i-a-***ka***-'0, amo-dhaace-lrao.** CncNmz-Dyn.NFin:come-CncNmz-Neg-2S.Gen Irr-Dyn.NFin:leave-1S.Nom

6.5.3 (a-)...-ae and the marking of imperative negation

The nominalizing circumfix (a-)...-ae forms negative imperative verbs: a-...-ae attaches to dynamic verb forms (6.89), and ...-ae to other verb forms (6.90)-(6.91). The circumfixed verb must be followed by a 2nd person genitive pronoun, -'o '2S.Gen' or -nomi '2P.Gen' (6.92).

(6.89) Negative imperative dynamic verbs

| a. | o-alroho | 'lift' | a-alroh-ae-'o | (ana)! | 'Don't lift (that)!' |
|----|----------------------------------|-------------------|------------------------------|--------|-------------------------|
| b. | o-langai | 'buy' | a-langalr-ae-'o | (ana)! | 'Don't buy (that)!' |
| c. | o-piki | 'put' | a-piki-e-'o | (ana)! | 'Don't put (that)!' |
| d. | o-vilivili | 'pull' | a-vilivili-e-'o | (ana)! | 'Don't pull (that)!' |
| e. | om-alra | 'take' | <i>a</i> -alr- <i>ae</i> -'o | (ana)! | 'Don't take (that)!' |
| f. | om-oa | 'go' | a-oa-e-'o! | | 'Don't go!' |
| g. | om-iki | 'exist, be at' | <i>a-</i> iki- <i>e-</i> 'o! | (ana)! | 'Don't be (there)!' |
| h. | maava'i | 'come' | a-kaava'i-e-'o! | | 'Don't come!' |
| i. | maavanao | 'bathe' | a-paavanalr-ae- | ·'o! | 'Don't bathe!' |
| j. | $\hbox{\it \emptyset-omikace}$ | 'open one's eyes' | a-omikac-ae-'o! | | 'Don't open your eyes!' |

(6.90) Negative imperative stative verbs

| a. ma-raveravere | 'happy' | ka-raveraver <i>-ae</i> -'o! | 'Don't be happy!' |
|------------------|----------------------|------------------------------|----------------------|
| b. ma-rimoro | 'forget' | ka-rimor-ae-'o! | 'Don't forget (it)!' |
| c. ma-lrakase | '(be) lazy, dislike' | ka-lrakas-ae-'o! | 'Don't dislike |
| | | | (it/him/her)!' |
| d. ma-'amadhe | 'dislike, hate' | ka-'amadh-ae-'o! | 'Don't hate |
| | | | (it/him/her)!' |
| e. ma-dhalame | 'like, love' | ka-dhalam-ae-'o! | 'Don't like/love |
| | | | (it/him/her)!' |

- (6.91) a. **to-dhao** 'make more' **to-dhao-***e***-'o!** 'Don't make more!' b. **pa-ka-ke'ecenge** 'make strong(er)!' **pa-ka-ke'eceng-***ae***-'o!** 'Don't make(it) strong!'
- (6.92) a. *a-kan-ae-*'o ana velevele!
 ObjNmz-Dyn.NFin:eat-ObjNmz-2S.Gen that banana
 'Don't eat that banana!'
 - b. *ka-'ino-e-*'o!

d. lo m-oa-lini

Stat.NFin-embarrassed-ObjNmz-2S.Gen 'Don't be embarrassed!'

c. "a-polr-ae-nomi!" mani ia
ObjNmz-Dyn.NFin:touch-ObjNmz-2P.Gen then Dyn.NFin:so
I-ahane-dha.
plur-grandchild-3S.Gen

sakovo

'He said to his grandchildren: "Don't touch (anything)!"'

if Dyn.Subj-go-3P.Gen men's house plur-male:Red
"a-visa-visar-ae-nomi to-takolra!" mani
ObjNmz-Red-Dyn.NFin:damage-ObjNmz-2P.Gen produce-bad then
i-iline.

Dyn.NFin:so-3P.Obl

'If (young) boys went to the men's house, they (would be warned:) "Don't damage (anything)!""

a-'olalai

6.6 Marking of plurality, distributivity and quantification

Notions of plurality (cf. §6.6.1), distributivity (cf. §6.6.2) and quantification (cf. §6.6.3) are expressed through morphological means (affixation and/or reduplication on verbs). In certain instances, such marking is compulsory; in others, it is optional.

6.6.1 The marking of plurality

Plurality on verbs is expressed through the affixation of **a-** 'plural' to the root/stem, and/or the reduplication of the verb base. Depending on the type of verbs and the type of arguments (human or non-human) involved, four distinct (though related) phenomena can be distinguished: number agreement on (i) nominal predicates and (ii) stative verbs is compulsory; (iii) the prefixation by **a-** 'plural' of a reduplicated stative verb conveys a quantification meaning 'all'; (iv) plurality of participants is expressed through the reduplication of dynamic/stative verbs marked as reciprocal.

6.6.1.1 Number agreement on nominal/nominalized predicates co-indexing with a human referent

Nominal predicates as in (6.93)—as well as nominalized predicates as in (6.94) agree in number with the subject argument they co-index with if that argument is a common noun referring to a human participant. Plurality is expressed through the prefixation of a- to the base; number agreement is compulsory.

(6.93) a. ilrae 'n valrovalro-lrao.

> 1S.Top Top young woman-1S.Nom

'As for me, I am a young woman.'

b. iname a-valrovalro-nai.

> 1PE.Top Top plur-young woman-1PE.Nom

'As for us, we are young women.'

b'. *iname 'n Ø-valrovalro-nai.

> 1PE.Top Top Ø-young woman-1PE.Nom

(6.94) a. a-ka-valrovalro-li... ona'i

> that ClsNmz-Stat.NFin-young woman-1S.Gen

'When I was a young woman....'

b. ona'i a-ka-a-valrovalro-nai...

> that ClsNmz-Stat.NFin-plur-young woman-1PE.Gen

'When we were young women....'

b'. * ona'i a-ka-Ø-valrovalro-nai...

> ClsNmz-Stat.NFin-Ø-young woman-1PE.Gen that

6.6.1.2 Number agreement on stative verbs co-indexing with a non-human referent

Plurality on stative verbs co-indexing with a non-human referent is expressed through the reduplication of the verb base. Plural marking here is again obligatory.

(6.95) a. ma-voti'i dhona ngiao. Stat.Fin-blind that cat

'That cat is blind.'

h ma-voti-voti'i dhona kapa-ngiao-nga. Stat.Fin-Red-blind all-cat-Sup

that

'All the cats are blind.'

b' * ma-voti'i dhona kapa-ngiao-nga. Stat.Fin-blind all-cat-Sup that

6.6.1.3 Quantification of stative verbs co-indexing with a human referent

The prefixation of **a**- on a stative verb (6.96a-b) or a denominal verb referring to a common human participant (6.97a-b) in co-occurrence with reduplication does not only pluralize the subject but allows its quantification.

(6.96) a. ma-vahe'e-nai.

Stat.Fin-tired-1PE.Nom

'We are tired.'

b. ma-a-vahe-vahe'e-nai.

Stat.Fin-plur-Red-tired-1PE.Nom

'We are all tired.'

(6.97) a. ma-valrovalro-nai.

Stat.Fin-plur-young woman-1PE.Nom

'We are young women.'

b. ma-a-valrovalro-nai.

Stat.Fin-plur-young woman-1PE.Nom

'We are all young women.'

Fuller paradigms are given in (6.98) and (6.99):

(6.98) Quantified stative verbs marked by ma-a

| a. | ma-tonao | '(be) torn' | ma-a-tona-tonao | 'alltorn' |
|----|------------|---------------|-----------------------------|-------------|
| b. | ma-takolra | '(be) bad' | ma-a-takolra-kolra | ʻallbad' |
| c. | ma-ca'eme | '(be) ill' | ma-a-ca'e-ca'eme | ʻallill' |
| d. | ma-lrihili | '(be) clever' | ma- <i>a</i> -lrihi-lrihili | 'allclever' |
| e. | ma-vahe'e | '(be) tired' | ma-a-vahe-vahe'e | 'alltired' |
| f. | ma-vo'oko | '(be) drunk' | ma-a-vo'o-vo'oko | 'alldrunk' |
| g. | ma-poli | '(be) white' | ma- <i>a-</i> poli-poli | 'allwhite' |

(6.99) Quantified denominal verbs marked by ma-a

```
    a. ma-titina '(be) a middle-aged woman' ma-a-titina 'be all middle-aged women'
    b. ma-tamatama '(be) a middle-aged man' ma-a-tamatama 'be all middle-aged men'
    c. ma-tomotomo '(be) an old (wo)man' ma-a-tomotomo 'be all old (wo)men'
    d. ma-savare '(be) a young man' ma-a-sava-savare 'be all young men'
    e. ma-valrovalro '(be) a young woman' ma-a-valrovalro 'be all young women'
```

6.6.1.4 Marking of the plurality of participants in reciprocal constructions

In reciprocal verbs marked by **maa**- (dynamic) as in (6.100) or **ma'a**- (stative) as

in (6.101), reduplication refers to a plurality of participants.

(6.100) a. **maa-ka'ace dhona'i ta-ka-dho'a a-olrolai.**Dyn.Fin:Rec-bite that SubjNmz-Stat.NFin-two plur-child 'The two children bit each other.'

b. ma-ka'a-ka'ace dhona'i ta-ka-'epate a-olrolai.

Dyn.Fin:Rec-Red-bite that SubjNmz-Stat.NFin-four plur-child

'The four children bit one another.'

(6.101) a. **ma'a-ka-dhalame dhona'i la-ma'a-palange.**Stat.Fin:Rec-Stat.NFin-like/love that plur-Rec-spouse 'The husband and wife love each other.'

b. ma'a-ka-dhala-dhalame dhona'i la-ma'a-pala-palange.
Stat.Fin:Rec-Stat.NFin-Red-like/love that plur-Rec-Red-spouse
'The husbands and wives love one another.'

6.6.2 maaraka- (~paaraka-) 'both/each' and the marking of distributivity

maaraka- (~**paaraka-**) 'both/each' attaches to both dynamic verbs (6.102)-(6.103), stative verbs (6.104)-(6.105) and denominal verbs (6.106)-(6.107) and usually refers to two participants, or three at most.

(6.102) Dynamic verbs marked by maaraka-(~paaraka-)

| a. | o-kane | 'eat' | maaraka-kane | 'eacheat' |
|----|------------|---------|------------------|-------------|
| b. | o-'ongolo | 'drink' | maaraka-'ongolo | 'eachdrink' |
| c. | o-tipitipi | 'beat' | maaraka-tipitipi | 'eachbeat' |
| d. | o-dhaace | 'leave' | maaraka-dhaace | 'eachleave' |
| e. | o-tovi | 'cry' | maaraka-tovi | 'eachcry' |
| f. | maava'i | 'come' | maaraka-kaava'i | 'eachcome' |

(6.103) a. *maaraka*-vaa'-iae **solate takanao la dhipolo**.

Dyn.Fin:each-Dyn.NFin:give-1S.Obl book Takanao and Dhipolo

'Takanao and Dhipolo both gave me a book.' (i.e. each of them gave me a book)

b. maaraka-tovi.

Dyn.Fin:each-Dyn.NFin:cry 'Each (of them) is crying.'

c. amo-paaraka-pa-'ongol-iae vavaa takanao la dhipolo. Irr-Dyn.NFin:each-Caus-Dyn.NFin:drink-1S.Obl wine Takanao and Dhipolo 'Takanao and Dhipolo will both invite me to drink wine.' (i.e. each of them will invite me to drink wine)

(6.104) Stative verbs marked by maaraka-(~paaraka-)

| a. | ma-takolra | '(be) bad' | maaraka-ka-takolra | 'each(is) bad' |
|----|------------|---------------|--------------------|-------------------|
| b. | ma-ca'eme | '(be) ill' | maaraka-ka-ca'eme | 'each(is) ill' |
| c. | ma-Irihili | '(be) clever' | maaraka-ka-lrihili | 'each(is) clever' |
| d. | ma-vahe'e | '(be) tired' | maaraka-ka-vahe'e | 'each(is) tired' |
| e. | ma-vo'oko | '(be) drunk' | maaraka-ka-vo'oko | 'each(is) drunk' |
| f. | ma-'ilrao | '(be) hungry' | maaraka-ka-'ilrao | 'each(is) hungry' |
| g. | ma-poli | '(be) white | maaraka-ka-poli | 'each(is) white' |

(6.105) a. maaraka-ka-eae(a)-imite

lalake-ta 'avai.

Dyn.Fin:each-Stat.NFin-one-1PI.Obl child-1PI.Gen female 'Each/both of us has/have a daughter.'

b. maaraka-ka-ca'eme-nai.

Dyn.Fin:each-Stat.NFin-ill-1PE.Nom 'Each/both of us is/are ill.'

(6.106) Denominal verbs marked by maaraka-(~paaraka-)

| a. | ma-titina | '(be) a middle-aged woman' | maaraka-ka-titina | 'each(is) a middle-aged woman' |
|----|---------------|----------------------------|-----------------------|--------------------------------|
| b. | ma-tamatama | '(be) a middle-aged man' | maaraka-ka-tamatama | 'each(is) a middle-aged man' |
| c. | ma-tomotomo | '(be) an old (wo)man' | maaraka-ka-tomotomo | 'each(is) an old (wo)man' |
| d. | ma-savare | '(be) a young man' | maaraka-ka-savare | 'each(is) a young man' |
| e. | ma-valrovalro | '(be) a young woman' | maaraka-ka-valrovalro | 'each(is) a young woman' |
| f. | ma-takataka | '(be) an older (sibling)' | maaraka-ka-takataka | 'each(is) an older (sibling)' |
| g. | ma-palrapalra | '(be) a relative' | maaraka-ka-palrapalra | 'each(is) a relative' |

(6.107) *maaraka*-ka-savare

ana-lo.

Dyn.Fin:each-Stat.NFin-young man that-plur

'Each of them/both of them is/are a young man/young men.'

6.6.3 makini-...-ae (~pakini-...-ae) 'all' and the marking of quantification

makini-...-ae (\sim **pakini-...-ae**) 'all' attaches to dynamic verbs (6.108)-(6.109), stative verbs (6.110)-(6.111) and denominal verbs (6.112)-(6.113). This prefix refers to a group of people engaged in the same activity/sharing the same (stative) property.

(6.108) Dynamic verbs marked by makini-...-(a)e (~pakini-...-(a)e)

| a. o-kane | 'eat' | makini-kan-ae | 'alleat' |
|---------------|---------|-------------------|------------|
| b. o-'ongolo | 'drink' | makini-'ongol-ae | 'alldrink' |
| c. o-tipitipi | 'beat' | makini-tipitip-ae | 'allbeat' |
| d. o-dhaace | 'leave' | makini-dhaac-ae | 'allleave' |
| e. o-tovi | 'cry' | makini-tovi-e | 'allcry' |
| f. maava'i | 'come' | makini-kaava'i-e | 'allcome' |

(6.109) a. makini-va'alr-a-iae

Dyn.Fin:all-Dyn.NFin:give-all-1S.Obl book 'All of them gave me a book.'

b. makini-tovi-e.

Dyn.Fin:all-Dyn.NFin:cry-all 'They are all crying.'

c. amo-pakini-pa-'ongol-a-iae vavaa dhona ocao. Irr-Dyn.NFin:all-Caus-Dyn.NFin:drink-all-1S.Obl wine that person 'All of them will invite me to drink wine.'

(6.110) Stative verbs marked by makini-...-(a)e (~pakini-...-(a)e)

| a. | ma-takolra | '(be) bad' | makini-ka-takolr-ae | '(be) allbad' |
|----|------------|---------------|---------------------|------------------|
| b. | ma-ca'eme | '(be) ill' | makini-ka-ca'em-ae | '(be) allill' |
| c. | ma-Irihili | '(be) clever' | makini-ka-lrihil-ae | '(be) allclever' |
| d. | ma-vahe'e | '(be) tired' | makini-ka-vahe'-ae | '(be) alltired' |
| e. | ma-vo'oko | '(be) drunk' | makini-ka-vo'ok-ae | '(be) alldrunk' |
| f. | ma-'ilrao | '(be) hungry' | makini-ka-'ilra-ae | '(be) allhungry' |
| σ. | ma-poli | '(be) white' | makini-ka-poli-e | '(be) allwhite' |

(6.111) a. *makini*-ka-eae(a)-imite

lalake 'avai. child female

solate.

Dyn.Fin:all-Stat.NFin-one:all-1PI.Obl child fema 'We all have a daughter.'

b. makini-ka-ca'em-ae-nai.

Dyn.Fin:all-Stat.NFin-ill-all-1PE.Nom 'All of us are ill.'

(6.112) Denominal verbs marked by makini-...-(a)e (~pakini-...-(a)e)

| a. | ma-titina | '(be) a middle-aged woman' | makini-ka-a-titin-ae | '(be) all(are) middle-aged women' |
|----|---------------|----------------------------|---------------------------|-----------------------------------|
| b. | ma-tamatama | '(be) a middle-aged man' | makini-ka-a-tamatam-ae | '(be) all(are) middle-aged men' |
| c. | ma-tomotomo | '(be) an old (wo)man' | makini-ka-a-tomotomo-e | '(be) all(are) old (wo)men' |
| d. | ma-savare | '(be) a young man' | makini-ka-a-sava-savar-ae | '(be) all(are) young men' |
| e. | ma-valrovalro | '(be) a young woman' | makini-ka-a-valrovalro-e | '(be) all(are) young women' |

(6.113) *makini*-ka-a-sava-savar-ae ana-lo.

Dyn.Fin:all-Stat.NFin-plur-Red-young man-all that-plur 'They are all young men.'

A few notes are in order:

- 1) Both dynamic and stative verbs can be reduplicated, but the reduplication of the base yields a repetitive/continuous or intensifying meaning, e.g. *makini-kana-kan-ae* 'they all keep on eating', *makini-ka-ta-kolra-kolra-e* 'they are all very bad'.
- 2) Denominal verbs must be marked for plurality if circumfixed by **makini-...-ae** 'all', thus ***makini-ka-savar-ae**, in opposition to **makini-ka-a-savar-ae** given in

(6.113), is ungrammatical.

3) Stative verbs and denominal verbs marked by **makini-...-ae** are equivalent to those prefixed by **ma-a-** 'Stat-plur' discussed in section 6.6.1.3. Compare (6.114a)-(6.114b) and (6.115a)-(6.115b):

(6.114) a. makini-ka-vahe'-ae-nai.

Dyn.Fin:all-Stat.NFin-tired-all-1PE.Nom 'We are all tired.'

b. ma-a-vahe-vahe'e-nai.

Stat.Fin-plur-Red-tired-1PE.Nom

'We are all tired.'

(6.115) a. makini-ka-a-valrovalro-e-nai.

Dyn.Fin:all-Stat.NFin-plur-young woman-all-1PE.Nom 'We are all young women.'

b. ma-a-valrovalro-nai.

Stat.Fin-plur-young woman-1PE.Nom

'We are all young women.'

6.7 Equative, comparative and superlative constructions

In this section, the marking of equative (cf. §6.7.1), comparative (cf. §6.7.2) and superlative (cf. §6.7.3) constructions is investigated.

6.7.1 Equative construction

Equality is marked through the use of the dynamic verb **maramao** 'be identical to' followed by a nominalized stative (6.116) or dynamic (6.117) verb.

(6.116) a. *maramao 'a-ka-taadhi'i-*lini 'elrenge la dhipolo. Dyn.Fin:identical MnNmz-Stat.NFin-good-3P.Gen Elrenge and Dhipolo are equally good.' 'Elrenge is as good as Dhipolo.'

b. *maramao* 'a-ka-lrihili-lini taotao la 'aanao.

Dyn.Fin:identical MnNmz-Stat.NFin-clever-3P.Gen Taotao and Anao

Lit. 'Taotao and Anao are equally clever.'

'Taotao is as clever as Anao.'

c. *maramao 'a-ka-takolra*-lini dhona'i la-ma'a-lili.

Dyn.Fin:identical InstNmz-Stat.NFin-bad-3P.Gen that plur-Rec-(female) friend 'The two friends are equally bad.'

(6.117) a. maramao 'a-to-dhao-lini tomako

Dyn.Fin:identical MnNmz-produce-a lot-3P.Gen Dyn.Subj:smoke

taotao la ritahe. Taotao and Ritahe

Lit. 'Taotao and Ritahe equally smoke a lot.'

'Taotao smokes as much as Ritahe.'

b. *maramao* 'a-to-si'i-lini kone

Dyn.Fin:identical MnNmz-produce-a few-3P.Gen Dyn.Subj:eat

moni la leheai. Moni and Leheai

Lit. 'Moni and Leheai equally eat a little.'

'Moni eats as little as Leheai.'

Unlike other constructions where agreement is compulsory, note that the genitive pronoun that occurs on the verb and refers to the subject (agent) of the sentence can actually be marked as singular (6.118a-a') or plural (6.118b-b'), visible (6.118a-b) or non-visible (6.118a'-b').

(6.118) a. maramao 'a-pati-lriho'o-ni taotao la 'aanao.

Dyn.Fin:identical MnNmz-well-know-3S.Gen Taotao and Anao

Lit. 'Taotao and Anao equally understand.'

'Taotao understands as well as Anao.'

a'. maramao 'a-pati-Iriho'o-dha taotao la 'aanao.

Dyn.Fin:identical MnNmz-well-know-3S.Gen Taotao and Anao

Lit. 'Taotao and Anao equally understand.'

'Taotao understands as well as Anao.'

b. maramao 'a-pati-Iriho'o-lini taotao la 'aanao.

Dyn.Fin:identical MnNmz-well-know-3P.Gen Taotao and Anao

Lit. 'Taotao and Anao equally understand.'

'Taotao understands as well as Anao.'

b'. maramao 'a-pati-Iriho'o-lidha taotao la 'aanao.

Dyn.Fin:identical MnNmz-well-know-3P.Gen Taotao and Anao

Lit. 'Taotao and Anao equally understand.'

'Taotao understands as well as Anao.'

The negative counterparts of these examples are given below. Compare (6.116)-(6.118) and (6.119-6.121). The construction is the same, i.e. the verb **maramao** is followed by a nominalized verb. The negator **-ka** must occur on the first verb, i.e. **maramao** '(be) identical'. It can be followed by a singular or plural genitive pronoun referring to a visible/non-visible referent. The pronoun must agree in number and

visibility with the one that appears on the nominalized verb (6.121).

(6.119) a. maramao-ka-i/-lini 'a-ka-taadhi'i-ni/-lini

Dyn.Fin:identical-Neg-3S.Gen/-3P.Gen MnNmz-Stat.NFin-good-3S.Gen/-3P.Gen

'elrenge la dhipolo.

Elrenge and Dhipolo

'Elrenge and Dhipolo are not equally good.'

(Lit. '(their) goodness/kindness is not the same')

b. maramao-ka-i/-lini 'a-ka-lrihili-ni/-lini

Dyn.Fin:identical-Neg-3S.Gen/-3P.Gen MnNmz-Stat.NFin-clever-3S.Gen/-3P.Gen

taotao la 'aanao. Taotao and Anao

'Taotao and Anao are not equally clever.'

c. maramao-ka-i/-lini 'a-ka-takolra-ni/-lini

Dyn.Fin:identical-Neg-3S.Gen/-3P.Gen MnNmz-Stat.NFin-bad-3S.Gen/-3P.Gen

dhona'i la-ma'a-lili.

that plur-Rec-(female) friend 'The two friends are not equally bad.'

(6.120) a. maramao-ka-i/-lini 'a-to-dhao-ni/-lini

Dyn.Fin:identical-Neg-3S.Gen/-3P.Gen MnNmz-produce-a lot-3S.Gen/-3P.Gen

tomako taotao la ritahe. Dyn.Subj:smoke Taotao and Ritahe

'Taotao and Ritahe do not smoke the same quantity of cigarettes.'

b. maramao-ka-i/-lini 'a-to-si'i-ni/-lini

Dyn.Fin:identical-Neg-3S.Gen/-3P.Gen MnNmz-produce-a few-3S.Gen/-3P.Gen

kone moni la leheai. Dyn.Subj:eat Moni and Leheai

'Moni and Leheai do not eat the same small amount of food.'

(6.121) a. maramao-ka-i 'a-pati-lriho'o-ni/*-dha/*-lini/*-lidha

Dyn.Fin:identical-Neg-3S.Gen MnNmz-well-know-3S.Gen

taotao la 'aanao. Taotao and Anao

'Taotao and Anao do not understand (the same things).'

a'. maramao-ka-dha 'a-pati-lriho'o-dha/*-ni/*-lini/*-lidha

Dyn.Fin:identical-Neg-3S.Gen MnNmz-well-know-3S.Gen

taotao la 'aanao. Taotao and Anao

'Taotao and Anao do not understand (the same things).'

b. maramao-ka-lini 'a-pati-lriho'o-lini/*-ni/*-dha/*-lidha

Dyn.Fin:identical-Neg-3P.Gen MnNmz-well-know-3P.Gen

taotao la 'aanao. Taotao and Anao

'Taotao and Anao do not understand (the same things).'

b'. maramao-ka-lidha 'a-pati-lriho'o-lidha/*-ni/*-dha/*-lini

Dyn.Fin:identical-Neg-3P.Gen MnNmz-well-know-3P.Gen

taotao la 'aanao. Taotao and Anao

'Taotao and Anao do not understand (the same things).'

6.7.2 Comparative constructions

There are at least three types of comparatives in Mantauran: 'more than (before)', 'more and more', 'more than (Y)', which are realized differently on the morphosyntactic level.

6.7.2.1 'more than (before)'

The first type of comparatives refers to one (and only one) referent with respect to what used to be, e.g. 'She feels better (than before)', 'It is whiter (than before)' and is expressed by the prefixation of 'ako-...-nga⁴³ to a stative (6.122) or dynamic (6.123) verb.

(6.122) a. 'ako-ka-taadhi'i-nga dhipolo.

more-Stat.NFin-good-Sup Dhipolo

- i. 'Dhipolo is better than before.' (implied, 'she is recovering from illness')
- ii. 'Dhipolo is more beautiful than before.'

b. 'ako-ka-takolra-nga takanao.

more-Stat.NFin-bad-Sup Takanao

'Takanao is worse than before.'

c. taotao 'a 'ako-ka-dhalame-ng-ine ka dhipolo.

Taotao Top more-Stat.NFin-like/love-Sup-3S.Obl Neg Dhipolo

'Taotao likes/loves Dhipolo more than before.'

(i) a. 'ako-kane-lrao.

barely-Dyn.NFin:eat-1S.Nom

'I barely eat.'

 $^{^{43}}$ There is a homophonous morpheme 'ako- that means 'barely':

(6.123) a. 'ako-kane-nga dhipolo. more-Dyn.NFin:eat-Sup Dhipolo

'Dhipolo eats more than before.'

b. 'ako-'ongolo-nga takanao. more-Dvn.NFin:drink-Sup Takanao

'Takanao drinks more than before.'

c. 'ako-tipitipi-ng-ine dhona lroolai ana ocao more-Dyn.NFin:beat-Sup-3S.Obl that child that man

'That man beats the child more than before.'

Negative counterparts are given below:

(6.124) a. 'ako-ka-taadhi'i-nga-ka-i dhipolo.

more-Stat.NFin-good-Sup-Neg-3S.Gen Dhipolo

- i. 'Dhipolo is not better than before.'
- ii. 'Dhipolo is not more beautiful than before.'

b. 'ako-ka-takolra-nga-ka-i takanao. more-Stat.NFin-bad-Sup-Neg-3S.Gen Takanao

'Takanao is not worse than before.'

c. **taotao 'a 'ako-ka-dhalame-**nga-ka-i-ine **ka dhipolo.**Taotao Top more-Stat.NFin-like/love-Sup-Neg-3S.Gen-3S.Obl Neg Dhipolo 'Taotao does not like/love Dhipolo more than before.'

(6.125) a. 'ako-kane-nga-ka-i ka dhipolo.

more-Dyn.NFin:eat-Sup-Neg-3S.Gen Neg Dhipolo

'Dhipolo does not eat more than before.'

b. 'ako-'ongolo-nga-ka-i ka takanao. more-Dyn.NFin:drink-Sup-Neg-3S.Gen Neg Takanao

'Takanao drinks more than before.'

c. 'ako-tipitipi-nga-ka-i-ine ka dhona lroolai ana ocao. more-Dyn.NFin:beat-Sup-Neg-3S.Gen-3S.Obl Neg that child that man 'That man does not beat the child more than before.'

6.7.2.2 'more and more'

The second construction refers to a situation where something happens 'more and more', e.g. 'She is more and more beautiful', 'It is more and more white'. It is marked by the circumfixation of the complex affix **kina-...-ae** to a stative (6.126) or dynamic (6.127) verb:

(6.126) a. kina-ka-taadhi-a'e

dhipolo.

more and more-Stat.NFin-good-more and more dhipolo

- i. 'Dhipolo is better and better.'
- ii. 'Dhipolo is more and more beautiful.'

b. kina-ka-takolr-ae

takanao.

more and more-Stat.NFin-bad-more and more Takanao 'Takanao is worse and worse.'

c. taotao 'a kina-ka-dhalam-a(e)-ine

dhipolo.

Taotao Top more and more-Stat.NFin-like/love-3S.Obl Dhipolo 'Taotao likes/loves Dhipolo more and more.'

(6.127) a. kina-kan-ae

dhipolo.

more and more-Dyn.NFin:eat-more and more Dhipolo 'Dhipolo eats more and more.'

b. kina-'ongol-ae

takanao.

more and more-Dyn.NFin:drink-more and more Takanao 'Takanao drinks more and more.'

c. kina-tipitip-a-ine

dhona lroolai ana ocao.

more and more-Dyn.NFin:beat-more and more-3S.Obl that child that man 'That man beats the child more and more.'

Negative counterparts are as follows:

(6.128) a. kina-ka-taadhi-a'e-ka-i

dhipolo.

more and more-Stat.NFin-good-more and more-Neg-3S.Gen dhipolo 'Dhipolo is not more and more beautiful.'

b. kina-ka-takolr-ae-ka-i

takanao.

more and more-Stat.NFin-bad-more and more-Neg-3S.Gen Takanao 'Takanao is not worse and worse.'

c. taotao 'a kina-ka-dhalam-ae-ka-i-ine

dhipolo.

Taotao Top more and more-Stat.NFin-like/love-Neg-3S.Gen-3S.Obl Dhipolo 'Taotao does not like/love Dhipolo more and more.'

(6.129) a. *kina*-ki-kan-ae

ka dhipolo.

more and more-Neg-Dyn.NFin:eat-more and more Neg Dhipolo 'Dhipolo does not eat more and more.'

b. kina-ki-'ongol-ae

ka takanao.

more and more-Neg-Dyn.NFin:drink-more and more Neg Takanao 'Takanao does not drink more and more.'

c. kina-ki-tipitip-a-ine

more and more-Neg-Dyn.NFin:beat-more and more-3S.Obl

dhona lroolai ana ocao. that child that man

'That man does not beat the child more and more.'

6.7.2.3 'more than (Y)'

The third construction refers to two (or more) referents, e.g. 'Jane is more beautiful than Mary', 'This cloth is whiter than that one'. In that case, the comparative is expressed through CVV-reduplication of the verb stem (usually a stative verb) as in (6.130):

(6.130) a. ma-'adhaadhaili tongodhae (toladhekae). (< ma-'adhaili 'far')

Stat.Fin-Red:far Tona (Maolin)

'Tona is farther away (than Maolin).'

b. ma-'adhiidhiidhali toladhekae tongodhae. (< ma-'adhiidhali 'near')

Stat.Fin-Red:near Maolin Tona

'Maolin is nearer than Tona.'

b'. ma-'adhiidhiidhali-na-mita.

Stat.Fin-Red:near-still-1PI.Nom

'We are (even more) closer to each other (as of family).'

c. ma-sii-si'-iae, ma-dhaa-dha-imi'ae.

Stat.Fin-Red-a little-1S.Obl Stat.Fin-Red-a lot-2S.Obl

'I have less, you have more.' (< ma-si'i 'small, few', ma-dhao 'a lot')

d. ma-dhaa-dhalame-lra-ine dhipolo.

Stat.Fin-Red-like/love-1S.Nom-3S.Obl Dhipolo

'I prefer Dhipolo.' (< ma-dhalame 'like, love')

Negative counterparts are as follows:

(6.131) a. ma-'adhaadhaili-ka-i tongodhae (toladhekae).

Stat.Fin-Red:far-Neg-3S.Gen Tona (Maolin)

'Tona is not farther away (than Maolin).'

b. ma-'adhiidhiidhali-ka-i toladhekae tongodhae.

Stat.Fin-Red:near-Neg-3S.Gen Maolin Tona

'Maolin is not nearer than Tona.'

b'. ma-'adhiidhiidhali-ka-ta.

Stat.Fin-Red:near-Neg-1PI.Gen

'We are not closer to each other (as of family).'

c. ma-sii-si'i-ka-iae,

ma-dhaa-dhao-ka-imia'e.

Stat.Fin-Red-a little-Neg-1S.Obl Stat.Fin-Red-a lot-Neg-2S.Obl 'I do not have less, you do not have more.'

d. ma-dhaa-dhalame-ka-l-ine

dhipolo.

Dhipolo Stat.Fin-Red-like/love-Neg-1S.Gen-3S.Obl 'I do not prefer Dhipolo.'

6.7.3 Superlative constructions

Superlatives are expressed by the addition of the superlative suffix -nga to a stative (6.132) or dynamic (6.133) verb, which may or may not undergo reduplication:

(6.132) a. ma-lrihili-nga-lrao.

Stat.Fin-clever-Sup-1S.Nom

'I am the cleverest.'

b. ma-lrii-lrihili-nga-lrao.

Stat.Fin-Red-clever-Sup-1S.Nom

'I am the cleverest.'

(6.133) a. o-lriho'o-nga-lrao.⁴⁴

Dyn.Fin-know-Sup-1S.Nom

'I am the most intelligent.'

b. o-lrihi-lriho'o-nga-lrao.

Dyn.Fin-Red:know-Sup-1S.Nom

'I am the most intelligent'

In passing, let us mention another prefix mati-, which, though it does not mark the superlative, expresses that something or someone is "completely, well...", for instance:

(6.134) a. mati-ka-lrihili-lrao.

Dyn.Fin:very-Stat.NFin-clever-1S.Nom 'I am very clever.'

b. mati-ka-takolra

takanao. Takanao

Dyn.Fin:very-Stat.NFin-bad

'Takanao is very bad.'

dhipolo.

c. mati-ka-poli

Dhipolo Dyn.Fin:very-Stat.NFin-white

'Dhipolo is very/completely white.'

This example is ambiguous and can also be interpreted as: 'I know already.'

(6.135) a. mati-lriho'o-lrao.

Dyn.Fin:very-Dyn.Nin:know-1S.Nom 'I understand very well/completely.'

b. *mati*-'apece dhona lroolai.

Dyn.Fin:well-Dyn.Nin:sleep that baby/child

'The baby sleeps soundly.'

6.8 Other verbal affixes

Mantauran exhibits a considerable number of other derivational affixes which attach to verb stems to form new verbs. There are three types of affixes that deserve special mention: (i) affixes conveying adverbial concepts, (ii) desiderative prefixes and (iii) the suffix **-ane**, which only surfaces on verbs of insults.

6.8.1 Affixes conveying adverbial notions

There are a number of verbal affixes that convey adverbial notions in Mantauran. They include the following: **ka-**⁴⁵ 'in fact, indeed, actually' (6.136a), **mata-...-ae** 'certainly, absolutely' (6.136b), **mati-** 'well, completely' (6.136c), **ma'ati-** 'a little' (6.136d), 'ako- 'barely' (6.136e), (o)-ara- 'just/only' (6.136f), (o)-'ara- 'early' (6.136g), **toka-...-ae** 'by-...ing, use for...' (6.136h):

(6.136) a. *ka*-ka-poli-ni

in fact-Stat.NFin-white-3S.Gen Dhipolo 'Dhipolo is actually white.'

b. lo pato'o-l-imia'e,

mata-sialalr-ae.

if Dyn.Subj:tell-1S.Gen-2S.Obl Dyn.Fin:certainly-listen-certainly 'If I tell you (something), you must absolutely listen.'

dhipolo.

c. mati-lriho'o-lrao.

Dyn.Fin:well-Dyn.NFin:know-1S.Nom 'I understand well/completely.'

d. ma'ati-kane-kane-lrao,

a poelre-ka-li kone.

Dyn.Fin:a little-Red-Dyn.NFin:eat-1S.Nom Neg all-Neg-1S.Gen Dyn.Subj:eat 'I ate very little; I did not eat it all.'

e. 'ako-'onor-ine.

a little-Dyn.NFin:cut s.o's hair-3S.Obl

'Cut his/her hair a little'

The occurrence of **ka-** 'in fact' nominalizes the verb which must be followed by a genitive pronoun.

- f. 'ina mene 'a *o-ara-kane-*lrao velevele.
 this today Top Dyn.Fin-just-Dyn.NFin:eat-1S.Nom banana
 'Today I just eat bananas.'
- la-ko 'ara-'apece, g. m-o-a maavanao, Dyn.Subj-go-Imp Dyn.Subj:bathe if-2S.Gen early-Dyn.NFin:sleep la-ko 'ara-'omaca, la-ko ka-somikace. if-2S.Gen early-Dyn.NFin:wake up if-2S.Gen Stat.NFin:healthy 'Go take a shower, sleep early, rise early and you will feel refreshed.'
- h. om-oa longai kavale toka-lralram-ae.

 Dyn.Fin-go Dyn.Subj:buy shoe by-Dyn.NFin:run-by 'S/he went running to buy shoes.'

Two verbal prefixes, *cf.* 'ako- 'speak' and to- 'make' do not refer by themselves to any adverbial expression. However, in co-occurrence with stative verb roots such as **-dhao** 'many, a lot' in (6.137) and **-sisa'i** 'very few, very little' in (6.138), they form a derived verb which conveys an adverbial meaning and which can modify another verb:

- (6.137) a. 'ako-dha-dhao-nga omale takanao. speak-Red-a lot-Sup Dyn.Subj:sing Takanao 'Takanao sings/sang loudly.'
 - b. *to-dha-dhao* 'aovaovaha takanao.

 produce-Red-a lot speak Takanao

 'Takanao speaks a lot.'
- (6.138) a. 'ako-sisa'i omale takanao.
 speak-a little Dyn.Subj:sing Takanao
 'Takanao sings in a low voice.'
 - b. *to-sisa'i* 'aovaovaha takanao.

 produce-a little speak Takanao

 'Takanao speaks (very) little.'

6.8.2 Desiderative prefixes

Mantauran displays at least four desiderative prefixes, 'api- 'want to, like to', sa'api- 'prone to, inclined to', apano- 'prone to, like to' and samori- 'like to', the exact meaning of these four prefixes being somewhat difficult to determine, *cf.* (6.139). The prefix 'api- is, by far, the most productive among the four; samori- the least productive: it has been found in co-occurrence with only one root, *cf.* kane 'eat'.

(6.139) a. 'api-kane 'like eating' sa'api-kane 'like eating' < o-kane 'eat' a''. apano-kane 'like eating' b. 'api-'ongolo 'like drinking' < o-'ongolo 'drink' sa'api-'ongolo 'like drinking' b'. apano-'ongolo 'like drinking' 'api-dhaadhaace 'like walking' c. sa'api-dhaadhaace 'like walking' < o-dhaadhaace 'walk' c''. * apano-dhaadhaace * 'api-ka-ca'eme d. < ma-ca'eme 'be ill' sa'api-ka-ca'eme 'tend be ill easily' ď. apano-ca'em-ae⁴⁶ 'tend to be ill easily 'api-ka-lrihili e. e'. * sa'api-ka-lrihili apano-lrihil-ae 'clever'

Examples illustrating the use of these prefixes are given below:

(6.140) a. **lo kone-ni va'oro, 'api-'ongolo vavaa.** if Dyn.Subj:eat-3S.Gen rice like-Dyn.NFin:drink wine 'When he eats rice, he likes to drink wine.'

b. a-topatilai-li sivarange,
ClsNmz-Dyn.NFin:start-1S.Gen Dyn.Subj:pregnant
ma'ati-kane-kane-lrao 'api-'oo'adh-iae.

Dyn.Fin:a little-Red-eat-1S.Nom want to-Dyn.NFin:vomit-1S.Obl

'When I first became pregnant, I would eat very little. I (often) wanted to vomit.'

(6.141) sa'api-apo'o-lrao.

like to/a lot-Dyn.NFin:chew betel nut-1S.Nom 'I chew betel nuts a lot.'

(6.142) a. *apano*-kane-lrao velevele. like to-Dyn.NFin:eat-1S.Nom banana 'I like eating bananas.'

A stative verb following the prefix **apano-** always undergoes state nominalization, *cf.* **apano-ca'em-ae** 'tend to be ill easily' and not * **apano-ka-ca'eme**.

186

b. ka ma-somikace-ka-li, apano-ca'em-ae-lrao. Neg Stat.Fin-healthy-Neg-1S.Gen prone to-ill-StatNmz-1S.Nom 'I am not healthy. I am always getting sick.'

(6.143) samori-kane-kane-lrao.

like to/keep on-Red-Dyn.NFin:eat-1S.Nom 'I eat a lot/keep on eating.'

6.8.3 The suffix -ane

The suffix **-ane** (meaning unknown) has a restricted usage—it occurs in only one dynamic verb, *cf.* **tovi** 'cry', and a few stative verb roots—and seems to be used exclusively to insult someone, e.g. **ponga'-ane** 'liar!' (< **ma-ponga'a** 'lie, cheat'), **vo'ok-ane** 'drunkard' (< **ma-va'oko** 'be drunk'). The derived form must be treated as a verb, not as a nominal, because the occurrence of a genitive pronoun is ungrammatical. Compare (6.144a-b). In that respect, the suffix **-ane** can be opposed to **-ae** which nominalizes a patient (6.145a-b).

(6.144) a. ponga'-ane-mo'o!

lie-?-2S.Nom

'You're a liar!'

b. *ponga'-ane-'o!

stupid-?-2S.Gen

(6.145) a. 'olrong-ane-mo'o!

stupid-?-2S.Nom 'You're stupid!'

a'. * 'olrong-ane-'o!

stupid-?-2S.Gen

b. 'olrong-ae-'o!

stupid-ObjNmz-2S.Gen 'You're stupid!'

b'. * 'olrong-ae-mo'o!

stupid-ObjNmz-2S.Nom 'You're stupid!'

Verbs that can be suffixed with **-ane** are listed in table 6.4:

Table 6.4: Stative verbs co-occurring with the suffix -ane

| Base | Gloss | Derived form | Gloss |
|-------------|--------------------|--------------|--------------------|
| o-tovi | 'cry' | tovi-c-ane | 'snivelling child' |
| ma-mo'oso | '(be) prognathous' | mo'os-ane | 'prognathous' |
| ma-ngorolo | '(be) toothless' | ngorol-ane | 'toothless' |
| ma-ponga'a | 'lie' | ponga'-ane | 'liar' |
| ma-vo'oko | 'be drunk' | vo'ok-ane | 'drunkard' |
| ma-'olrongo | '(be) stupid' | 'olrong-ane | 'stupid' |

Chapter 7: Transcategorial Operations

This chapter deals with transcategorial operations including nominalization (§7.1) and verbalization (§7.2). Both processes are extremely productive in Mantauran.

7.1 Nominalization

Derived nominals are identified as such based on their similar distribution with other nominal arguments (cf. §4.1), and their sharing of the same morphosyntactic properties. In the following pairs of examples, the first (numbered (a)) illustrates the distribution of (underived) nouns and the second (b) that of derived nominals.

1. They occur in an argument position of a verb/predicate:

- (7.1) a. **o-kaodh-iname ka** *paiso*.

 Dyn.Fin-not exist-1PE.Obl Neg money

 'We did not have any money.'
 - b. **akaodho ka** *ki-lrihoa'-e-li*.
 not exist Neg Neg-Dyn.NFin:know-ObjNmz-1S.Gen
 'There is nothing that I do not know.'
- 2. They can be modified by another noun, i.e. they function as the head of the nominal phrase:
- (7.2) a. *velevele-ni* taotao. banana-3S.Gen Taotao 'Taotao's banana'

b. *kane-ni* taotao.

Dyn.NFin:eat-3S.Gen Taotao 'Taotao's eating'

3. They may co-occur with a genitive pronoun:

- (7.3) a. **ina-li** mother-1S.Gen 'my mother'
 - b. a-pa-solate-nai
 ActNmz-Caus-Dyn.NFin:study-1PE.Gen
 'our education'

This test—though not effective for all derived nominals, i.e. subjective nominals which are formed by the prefixation of **ta-** to the verb stem cannot be followed by a genitive pronoun (see §7.1.7)—allows determination of the lexical category of a derived form. The verb **o-kane** can be derived through the circumfixation of **toka-...-ae** to convey an instrumental/manner interpretation and **to'a-...-ae** to express the meaning 'the reason for...'. However, in the first case (7.4a), it is followed by a nominative pronoun—it thus remains in its verbal form—while in the second (7.4b), it is followed by a genitive pronoun, i.e. it is used as a derived nominal:

- (7.4) a. toka-kana-kan-ae-Irao va'oro, ma-eleme-Irao use for-Red-Dyn.NFin:eat-use for-1S.Nom rice Stat.Fin-poor-1S.Nom ki-langai 'adhamai.

 Neg-Dyn.NFin:buy side dish

 'I eat nothing other than rice (because) I am poor and cannot afford to buy other dishes.'
 - b. *to'a-kan-ae-li* savo'oe, ma-ca'eme-lrao.
 ReasNmz-Dyn.NFin:eat-ReasNmz-1S.Gen medicine Stat.Fin-ill-1S.Nom
 'The reason why I take medicine is because I am ill.'
 - 4. They can undergo topicalization. Compare (7.5a') and (7.5b'):
- (7.5) a. mani vaa'-idhe 'adhi dhona'i 'aodholro'o. then Dyn.NFin:give-3S.Obl younger sibling that lunch box 'S/he gave that lunch box to the younger brother.'
 - a'. *dhona'i 'aodholro'o* mani vaa'-idhe 'adhi.
 that lunch box then Dyn.NFin:give-3S.Obl younger sibling 'That lunch box, s/he gave it to the younger brother.'
 - b. mani vaa'-idhe 'adhi dhona ta-ka-eaea.

 then Dyn.NFin:give-3S.Obl younger sibling that SubjNmz-Stat.NFin-one:Red
 'S/he gave that one to the younger brother.'
 - b'. *dhona ta-ka-eaea* mani vaa'-idhe 'adhi. that SubjNmz-Stat.NFin-one:Red then Dyn.NFin:give-3S.Obl younger sibling 'That one, (s/he) gave it to the younger brother.'
- 5. Example (7.6a) shows that derived nominals such as **ta-'acakelae-nga** '(the one) already married' and **ta-ka-rodhange** '(the one) who is old' can take the plural prefix **a-** if they refer to human participants (*cf.* **ta-a-'acakelae-nga** '(the ones) already married' and **ta-ka-a-rodhange** '(the ones) who are old'), as any other common/human noun such as **a-olrolai** 'children' (*cf.* **Iroolai** 'child'). If they refer to a non-human participant, they can be circumfixed by the quantifier **kapa-...-nga** 'all'. Compare

kapa-Irana-nga 'all the streams' in (7.6b) and **kapa-a-langalr-ae-nga** 'all the merchandise' as in (7.6b'), (cf. §5.4):

- (7.6) a. **ona'i** *a-olrolai* **la ona'i** *ta-a-'acakelae-nga*that plur-child and that SubjNmz-plur-married-already *ta-ka-a-rodhange* **o-dholro-nai** 'i-karidhi.
 SubjNmz-Stat.NFin-plur-old Dyn.Fin-can-1PE.Nom wear-sleeveless garment
 'Children, already married (women) and old people could wear sleeveless (fur) jackets.'
 - b. mani poa-ng-iname tolodho dhona'i *kapa-Irana-nga*. then Dyn.NFin:make-already-1PE.Obl bridge that all-stream-Sup 'Then, they built bridges for us on all the streams.'
 - b'. 'iraki-nai mene-nga longai sangepare, to'onai 'ina'i for-1PE.Nom now-Sup Dyn.Subj:buy car any(thing) this *kapa-a-langalr-ae-nga*-nai.... all-ObjNmz-Dyn.NFin:buy-ObjNmz-already-1PE.Gen 'That's because nowadays we (want to) buy cars (as well as other) commodities.'
- 6. If it refers to a [+human] participant, a derived nominal can trigger verbal agreement, as any other noun marked as [+human] does. Compare (7.7a-a') and (7.7b-b'):
- (7.7) a. **dhona'i 'avai, kapa-ki-kaava'-idhe**i that woman Dyn.NFin:continuously-Neg-Dyn.NFin:come-3S.Obl *lamengae-dha*i. spouse-3S.Gen 'As for that woman, her husband did not come to her.'
 - a'. * dhona'i 'avai, kapa-ki-kaava'-O_i
 that woman Dyn.NFin:continuously-Neg-Dyn.NFin:come-O
 lamengae-dha_i.
 spouse-3S.Gen
 - b. [dhona ta-ka-lrihili, dhona ta-lriho'o]_i 'a
 that SubjNmz-Stat.NFin-clever that SubjNmz-Dyn.NFin:know Top
 mani pa-dhaac-ilidhe_i....
 then Caus-Dyn.NFin:leave-3P.Obl

 'Those (who were) clever, those (who) understood (would be) allowed to leave.'
 - b'.*[dhona ta-ka-lrihili, dhona ta-lriho'o]; 'a
 that SubjNmz-Stat.NFin-clever that SubjNmz-Dyn.NFin:know Top
 mani pa-dhaace-\(\theta_{i}\)....
 then Caus-Dyn.NFin:leave-\(\theta\)

The distinction between verbs and nouns is further illustrated in the following pairs

of examples, which contrast the syntactic distribution of the verb 'adhidhapae 'work' (cf. 'a-dhidhap-ae, where 'a-...-ae can be glossed as 'a lot') with the noun dhidhape 'work' (cf. §4.1).

```
(7.8) a. 'adhidhapae-lrao.
work-1S.Nom
'I work(ed).'
```

- a'. * dhidhape-lrao. work-1S.Nom
- b. 'adhidhapa-a! work-Imp 'Work!'
- b'. * dhidhape-a! work-Imp
- (7.9) a. **ikaodho ka dhidhape-li.**not exist Neg work-1S.Gen
 'I do/did not have any work (to do).'
 - a'. *ikaodho ka 'adhidhapae-li. not exist Neg work-1S.Gen
 - b. pa'ehemao dhidhape-li.
 laborious work-1S.Gen
 'My work is laborious'
 - b'. * pa'ehemao 'adhidhapae-li. laborious work-1S.Gen

Following Comrie & Thompson (1985), different nominalization processes are examined whereby nouns are derived from (i) verbs and turn into action/state nominals (§7.1.1), gerunds (§7.1.2) or argument nominals (§7.1.3); (ii) nouns (§7.1.4); and (iii) verb phrases or clauses, which turn into nominalized phrases/clauses (§7.1.5). A summary is given in §7.1.6. In §7.1.7, a number of morphosyntactic tests are proposed that permit the differentiation of lexically and syntactically derived nominals. Section 7.1.8 provides an array of constructions that trigger the occurrence of syntactically derived nominals.

For clarity's sake and whenever possible, paradigms are given in tabular forms and are illustrated with examples where non-derived verbs and their nominalized counterparts are given to illustrate a particular nominalization process.

7.1.1 Action/state nominals

In an earlier study (see Zeitoun 2002b), I had lumped together action/state nominals and gerunds because their morphological marking overlap to some extent. I now make a distinction between these two types of nominals, as they behave differently on the syntactic level: action/state nominals are treated as lexically derived while gerunds are analyzed as syntactically derived (*cf.* §7.1.7).

Three nominalization processes are involved in the derivation of action/state nominals: (i) **zero** derivation on dynamic verb roots as in (7.10), (ii) prefixation of **a-** on dynamic and stative verb bases as in (7.11)-(7.12), (iii) prefixation of **-ae** on stative verb roots as in (7.13).

The overlap between these two different processes on stative verbs (cf. **a-** vs. **-ae**) is pending further investigation. These three nominalization processes are summarized in tables 7.1-7.4 and further illustrated in examples that follow, cf. (7.10)-(7.12).

| Marking | Verbal stem | Gloss | Derived nominal | Gloss |
|---------|--------------|------------|-----------------|-------------|
| | o-aha'a | 'cook' | aha'a | 'food' |
| | o-cengele | 'see' | cengele | 'look' |
| Ø- | o-halacelace | 'comb' | halacelace | 'comb' |
| | o-kane | 'eat' | kane | 'food' |
| | o-teme | 'obstruct' | teme(teme) | 'tollbooth' |
| | o-velrete | 'pile up' | velrete | 'wall' |

Table 7.1: Action nominals (zero derivation)

(7.10) Action nominals—zero derivation

- a. *o-aha'a* **aamae** 'irak-iline a-olrolai.

 Dyn.Fin-cook own father for-3P.Obl plur-child 'My father is cooking for the children.'
- a'. **o-cengele-Ira-ine kone** *aha'a*.

 Dyn.Fin-see-1S.Nom-3S.Obl Dyn.Subj:eat ActNmz:Dyn.NFin:cook
 'I saw him eating food.'
- b. ...mani vekenelre velrete patol-idhe pa-okela ...then ground Dyn.Subj:pile up Caus-Dyn.NFin:reach from-3S.Obl dhona ta-iki-ki-ae-lidha 'apece that LocNmz-Red-Dyn.NFin:be at-LocNmz-3P.Gen Dyn.Subj:sleep a-'olalai... plur-male

[&]quot;...stones were piled up from the ground to the place where men slept..."

| b'. mani | cengele-nai | dhona'i | dha'ane | 'i |
|-----------------|----------------------|---------|---------|----|
| then | Dvn NFin see-1PF Nom | that | house | |

velrete mani Iriho'o-nai

ActNmz:Dyn.NFin:pile up then Dyn.NFin:know-1PE.Nom

ka-iki-lidha 'ina valrio. in fact-Dyn.NFin:exist-3P.Gen this village

'Then we saw the ruins of (earlier) houses and we realized that originally there had been a village there.'

Table 7.2: Action nominals derived through the prefixation of a-

| Marking | Verbal stem | Gloss | Derived nominal | Gloss |
|---------|------------------|---------------|--------------------|----------------|
| | Ø-topatilai | 'start' | a-topatilai | 'introduction' |
| a- | pa-solate | 'makestudy' | a-pa-sola-solate | 'education' |
| | pa-valrisi | 'makechange' | a-pa-valri-valrisi | 'antonym' |
| | to-valrevalre'ae | 'build roads' | a-to-valrevalre'ae | 'traffic' |

(7.11) Action nominals—prefixation of a-

a. pa-solate-lra-ine.

Caus-Dyn.NFin:study-1S.Nom-3S.Obl

b. ma-ha'aoco dhona'i kala-'aom-ae

Stat.Fin-scold that TempNmz-Japanese-TempNmz

a-pa-sola-solate.

ActNmz-Caus-Red-Dyn.NFin:study

Table 7.3: State nominals derived through the prefixation of a-

| Marking | Verbal stem | Gloss | Derived nominal | Gloss |
|---------|-------------|---------|-----------------------|-------------|
| | ma-a'a | 'flirt' | a- <i>ka-</i> 'aa'aa | 'flirt' |
| a- | ma-lroolai | 'young' | a- <i>ka-</i> lroolai | 'childhood' |

(7.12) State nominals—prefixation of a-

a. ona'i lo to-dha'ane-nai, to'a-tolor-ae-nai

that when build-house-1PE.Gen ReasNmz-basis-ReasNmz-1PE.Nom

to-dhelepe to-iki-ki-ae

build-stone living room LocNmz-Red-Dyn.NFin:be at-LocNmz

a-valrovalro a-sava-savare *ma-a'a*. plur-young woman plur-Red-young man Stat.Subj-flirt

'At that time, when we built a house, we (would) have a living-room so that young women and young men (could) flirt.'

^{&#}x27;I make him/her study.'

^{&#}x27;The Japanese education was/is (very) strict/rigorous.'

b. dhona lo ma-a-valrovalro-mao mani that if Stat.Subj-plur-young woman-Impers.Gen then ka-dhao dhona'i a-ka-'aa'aa-mao lo Stat.NFin-many StatNmz-Stat.NFin-flirt-Impers.Gen if that

ma-taadhi'i-dhadhonavalrovalroStat.Subj-good-3S.Genthatyoung woman

ta-ka-oca-(a)e-ni.

LocNmz-Stat.NFin-person-LocNmz-3S.Gen

'At that time, when we were young, a girl (would) have many admirers if she was kind.'

Table 7.4: State nominals derived through the suffixation of -ae

| Marking | Verbal stem | Gloss | Derived nominal | Gloss |
|---------|-------------|-----------------|-------------------|---------------------|
| | ma-ca'eme | 'ill' | ca'em-ae | 'illness' |
| | ma-rikoco | 'busy' | rikoc-ae | 'business' |
| 90 | ma-taadhi'i | 'good' | taadhia'-e | 'goodness',47 |
| -ae | ma-takolra | 'bad' | takolra-e | 'badness' |
| | ma-dhalame | 'like, love' | dhalam-ae | 'love' |
| | ma-lrakase | 'dislike, lazy' | lrakas- <i>ae</i> | 'dislike, laziness' |

(7.13) State nominals—suffixation of -ae

a. olo dhoma-nae ma-ca'eme-nai o-dholro-nai
when other-TempNmz Stat.Subj-ill-1PE.Gen Dyn.Fin-can-1PE.Nom
'iase sangepare...

Dyn.Subj:call car

'If, at times we are ill, we can call a taxi...'

a' dhona ta-ka-kocingai ca'em-ae... that SubjNmz-Stat.NFin-serious ill-StatNmz

'Those who had a serious disease...'

b. 'ina'i ta-o-ae-nga-nai tavale'eve'e
this LocNmz-Dyn.NFin:go-LocNmz-already-1PE.Gen new Wanshan
'aela, toramoro-nga-nai ka ma-rikoco.

Dyn.Subj:move very-already-1PE.Nom Lig Stat.Subj-busy
'Since we've moved to the new Wanshan village, we have been very busy.'

b'. ona'i a-iki-na-nai 'oponoho
that ClsNmz-Dyn.NFin:be at-still-1PE.Gen Wanshan
akaodho ka rikoc-ae-nai.
not exist Neg busy-StatNmz-1PE.Gen

'When we still were in the old village, we were not busy.'

⁴⁷ Compare with: *ta-*ka-taaðia'-*e* 'advantage' (*Lit.* 'good place').

7.1.2 Gerunds

There are three types of gerunds: verbs can be (i) **zero**-marked (i.e. marked as non-finite) as in (7.14a'-b'), (ii) marked as finite as in (7.14c') or (iii) marked as subjunctive as in (7.14c''). Gerunds surface either in interrogative or pseudo-cleft sentences: zero-marked gerunds usually occur in interrogative sentences introduced by 'who', 'which', 'why', *cf.* (7.14a') and pseudo-cleft sentences as in (7.14b') and refer to the realis. Gerunds marked as finite appear in (realis) *when*-interrogative sentences (7.14c'); gerunds marked as subjunctive appear in (irrealis) *when*-interrogative sentences (7.14c'').

(7.14) a. *o-cengele*-ka-'ine?

Dyn.Fin-see-Neg-2S.Gen-3S.Obl 'Did you see her?'

a'. kani cengele-'-ine?

why Dyn.NFin:see-2S.Gen-3S.Obl 'Why did you look at her?'

b. maka-solate-nga ta-ka-eaea

Dyn.Fin:finish-Dyn.NFin:write-already SubjNmz-Stat.NFin-one:Red

solate dhipolo.
book Dhipolo

'Dhipolo has finished writing one book.'

b'. ana solate 'a solate-ni dhipolo. that book Top Dyn.NFin:write-3S.Gen Dhipolo 'That book, it is Dhipolo who wrote it.'

c. ona'i a-kaava'i-ni ana o-dhaace-nga-lrao. that ClsNmz-Dyn.NFin:come-3S.Gen that Dyn.Fin-walk-already-1S.Nom When he came, I had already left.'

c'. *o-dhaace-*'o idhae? Dyn.Fin-leave-2S.Gen when:Real 'When did you leave?'

c". dhoace-'o
Dyn.Subj:leave-2S.Gen
'When will you leave?'

7.1.3 Argument nominals

Argument nominals may be categorized as: subjective (§7.1.3.1), objective (§7.1.3.2), instrumental/manner/result (§7.1.3.3), reason (§7.1.3.4), locative (§7.1.3.5) and temporal

(§7.1.3.6) nouns.

What is important to note is that the distinction between dynamic and stative verbs (or other derived verbs, such as causative verbs prefixed by **pa-**, denominal verbs prefixed by **to-**) is marked on the morphological level (non-finite marking): dynamic verbs are morphologically unmarked when they are nominalized, e.g. **o-kane** 'eat' vs. **ta-O-kane** '(the one who) eats, the eater', **ta-O-kana-kan-ae** 'restaurant' (Lit.: 'place (where one) often eats'); stative verbs are marked by **ka-**, e.g. **ma-dhalame** 'like/love' vs. **ta-ka-dhalame** '(the one) who likes/loves', **ka-dhalam-ae** '(the) loved one'; other derived verbs preserve their deriving prefixes, e.g. **pa-cengele** 'make....see' vs. **a-pa-cenge-cengel-ae solate** 'references', **to-dha'ane** 'build a house' vs. **ta-to-dha'ane** '(the one) who builds a house, builder'.

7.1.3.1 Subjective nominals

Subjective nominalization is rendered by the prefixation of **ta-** to the verb base (see table 7.5) and conveys the meaning of 'one who/which...'. The "noun need not be in an 'agent' relationship with the verb" (Comrie & Thompson 1985:350). The term "subjective" was suggested by M.-C. Paris instead of "agentive", which narrows down the usage of **ta-**.

Table 7.5: Subjective nominals

| Verb type | Verbal stem | Gloss | Derived nominal | Gloss |
|-----------|-------------------|----------------|-----------------------|--|
| | o-alopo | 'hunt' | ta-alopo | '(who) hunts, hunter' |
| | o-kane | 'eat' | ta-kane | '(who) eats' |
| | o-lriho'o | 'know' | ta-lriho'o | '(who) knows' |
| | o-harange | 'snore' | ta-haraharange | '(who) snores' |
| Dynamic | o-pi'api'a alrace | 'write names' | ta-pi'api'a alrace | '(who) writes names, officer, civil servant' |
| | o-solate | 'study, write' | ta-solate | '(who) studies/writes' |
| | o-'osario | 'play' | ta-'osario | '(who) plays, player' |
| | maava'i | 'come' | ta-kaava'i | '(who) comes' |
| | om-oa | ʻgoʻ | ta-oa | '(who) goes' |
| Derived | to-alake | 'give birth' | <i>ta-to-</i> alake | '(who) gives birth' |
| Deliveu | to-podhaolae | 'true, right' | ta-to-podhaolae | '(who) is right' |
| | ma-ca'eme | ʻill' | ta-ka-ca'eme | '(who) is ill, patient' |
| | ma-lrihili | 'clever' | <i>ta-ka-</i> lrihili | '(who is) clever' |
| | ma-rodhange | 'old' | ta-ka-rodhange | '(who is) old, old person (sg.)' |
| Stative | ma-si'i | 'small, few' | ta-ka-si'i | '(who/which is/has) few, small' |
| Stative | ma-dho'a | 'two' | <i>ta-ka-</i> dho'a | '(who/which are) two' |
| | ma-dhao | 'a lot' | <i>ta-ka-</i> dhao | '(who/which are) many' |
| | ma-caleme | 'rotten' | ta-ka-caleme | 'which is rotten' |
| | ma-dhalrese | 'soft' | ta-ka-dhalrese | 'which is soft/malleable' |

- (7.15) a. ara'eve la *o-kane*-ka-i ka iki 'i sakovo.

 but and Dyn.Fin-eat-Neg-3S.Gen Neg Dyn.Subj:be at men's house
 'But they did not eat in the men's house.'
 - a'. olo to-saisakipi-mao kasa-ni
 when produce-small glutinous cake-Impers.Gen only-3S.Gen
 a-olrolai ta-kane.
 plur-child SubjNmz-Dyn.NFin:eat
 'When someone made small glutinous cakes (saisakipi), only children would eat them.'
 - b. mani *lriho'o* 'oponoho maava'i-nga then Dyn.NFin:know Mantauran Dyn.Subj:come-already ta-alopo.

SubjNmz-Dyn.NFin:hunt

'Then the Mantauran people knew the hunters had already come back.'

- b'. dhona ta-lriho'o o-va'a-idhe 'eme'emelre, that SubjNmz-Dyn.NFin:know Dyn.Fin-give-3S.Obl prize ta-'a-ka-ea, 'a-ka-dho'a 'a-ka-tolro. SubjNmz-Nth-Stat.NFin-one Nth-Stat NFin-two Nth-Stat NFin-three 'The cleverest were given a prize (to show who was) the first, the second (and) the third.'
- (7.16) a. ona'i arongo-nga-nai m-oa 'ina tavale'eve'e that just-already-1PE.Gen Dyn.Subj-go this new Wanshan ma-si'i-na-nai ocao.

 Stat.Fin-few-still-1PE.Nom person
 'When we first arrived in Tavale'eve'e, we were (still) few (people).'
 - a'. o ta-ka-si'i soso 'a o-poa-ka-dha ka that SubjNmz-Stat.NFin-small breast Top Dyn.Fin-make-Neg-3S.Gen Neg 'i-toipi.

wear-bra

'As for those who had small breasts, they (would) not wear a bra.'

- b. lo pa-solate-dh-iname
 - if Caus-Dyn.NFin:study-3S.Gen-1PE.Obl

o-lriho'o-ka-nai ka sialalra, ma-lrihili-ka-nai.

Dyn.Fin-know-Neg-1PE.Gen Neg Dyn.Subj:hear Stat-Fin-clever-Neg-1PE.Gen 'When we were studying, if we did not listen, we (would) not be clever.'

b'. dhona ta-ka-lrihili, dhona
that SubjNmz-Stat.NFin-clever that
ta-lriho'o 'a mani pa-dhaac-ilidhe...
SubjNmz-Dyn.NFin:know Top then Caus-Dyn.NFin:leave-3P.Obl

'Those (who were) clever, those (who) understood (would be) allowed to leave.'

7.1.3.2 Objective nominals

Objective nominalization is usually indicated by **a-...-ae** in dynamic verbs (7.17) and by **...-ae** in stative verbs (7.18).

Table 7.6: Objective nominals

| Verb type | Verbal stem | Gloss | Derived nominal | Gloss |
|-----------|-------------|--------------|-----------------------------|-------------------------------|
| | o-amece | 'bring' | a-amec-ae | '(thing) brought' |
| Dynamic | o-alopo | 'hunt' | a-lop-ae | 'game' |
| | o-kane | 'eat' | a-kan-ae | 'food' |
| | o-'ongolo | 'drink' | a-'ongol-ae | 'drink' |
| | o-langai | 'buy' | a-langalr-ae | '(thing) bought, merchandise' |
| | o-velrete | 'pile up' | a-velret-ae | '(stones) piled up, wall' |
| Derived | pa-cengele | 'makesee' | a-pa-cenge-cengel-ae solate | 'references' |
| Stative | ma-dhalame | 'like, love' | ka-dhalam-ae | 'the loved (one)' |
| Stative | ma-sekelre | 'angry' | ka-sekelr-ae | 'the one being angered at' |

(7.17) a. ka *o-kane*-nga-ka-li.

Neg Dyn.Fin-eat-already-Neg-1S.Gen

'I have not eaten yet.'

a'. dhona'i 'a kasa-dha dhona'i *a-kan-ae*-nai.

that Top only-3S.Gen that ObjNmz-Dyn.NFin:eat-ObjNmz-1PE.Gen 'That was the only food we had.'

b. **dhona ka** *o-langai*-ka-nai **ka to'onai...** that Neg Dyn.Fin-buy-Neg-1PE.Gen Neg any(thing) 'We never bought anything.'

b'....**mani** alra m-oa longai o'i molrae ...then Dyn.NFin:take Dyn.Subj-go Dyn.Subj:buy that fabric dhona'i timo, to'onai a-lang-ae-lidha. ObjNmz-Dyn.NFin:buy-ObjNmz-3P.Gen salt everything that

'Then, they would go and buy fabric, salt, everything they needed to buy.'

(7.18) a. ma-dhaa-dhalame-ka-'-ine dhipolo,

Stat.Fin-Red-like/love-Neg-2S.Gen-3S.OblDhipoloma-dhaa-dhalame-ka-'-inetaotao?Stat.Fin-Red-like/love-Neg-2S.Gen-3S.OblTaotao

'Do you prefer Dhipolo or Taotao?'

a'. a-iki-e-ni 'i ka-dhaa-dhalam-ae-'o?

ObjNmz-Dyn.NFin:exist-ObjNmz-3S.Gen Stat.NFin-Red-like/love-ObjNmz-2S.Gen 'Which one do you prefer?'

b. ma-sekelr-ine dhipolo taotao.

Stat.Fin-angry-3S.Obl Dhipolo Taotao

'Taotao is/was angry at Dhipolo'~'Dhipolo is/was angry at Taotao.'

b'. aanga-i ka-sekelr-ae-ni?

who-3S.Gen Stat.NFin-angry-ObjNmz-3S.Gen

'With whom is he angry?'

The major distinction between stative verbs undergoing state nominalization as opposed to those undergoing objective nominalization lies in the occurrence/non-occurrence of the prefix **ka-** 'stative'. Compare **dhalam-ae** 'love' (state nominalization) *vs.* **ka-dhalam-ae** 'loved one, the one being loved' (objective nominalization) and **sekelr-ae** 'anger' (state nominalization) *vs.* **ka-sekelr-ae** 'the one being angered at' (objective nominalization).

Another process has been reported in the Southeastern Rukai dialects as well as in other Formosan languages (e.g. Saisiyat, Atayal, Puyuma, Kavalan): the infixation of <in> to correlate an aspectual/modal distinction while functioning as a nominalizer, i.e. it marks the perfective aspect (realis) in derived nominals (see Teng 2000 and 2007, Yeh 2000c, Chen 1999). In Saisiyat, for instance, the distinction between "past" (realis) and "future" (irrealis) is rendered by <in> vs. ka-...-en, as shown in (7.19).

(7.19) Saisiyat (Yeh 2000c)

a. t<in>awbon
a'. ka-tawbon-en
b. t<in>alek
b'. ka-talek-en
'something to be pounded'
'something cooked, food'
'something to be cooked'

The infix **<in>** has only been found in one word in Mantauran, *cf.* **c<in>ekelae** 'villagers' (*cf.* §3.2.4) and its function remains obscure. Though in this dialect, **<in>** does not serve to mark the perfective in derived nominals, Mantauran exhibits a distinction between realis/irrealis: realis is not overtly marked; verbs are circumfixed by (**a-**)...-**ae** as in (7.20a', b', c', d'); irrealis is overtly marked and is expressed by the occurrence of **-a** in (7.20a-b) and **-i** in (7.20c-d). The distinction between **-a** and **-i** seems to be purely phonological: **-i** attaches to roots ending with the vowel /**a**/, and **-a** occurs elsewhere.

(7.20) a. kana-ni *kan-a-'o*?

what-3S.Gen Dyn.NFin:eat-ObjNmz:Irr-2S.Gen

'What do you want to eat?'

a'. kana-ni a-kan-ae-'o?

what-3S.Gen ObjNmz-Dyn.NFin:eat-ObjNmz-2S.Gen

'What did you eat?'

b. kana-ni 'ongol-a-'o?

what-3S.Gen Dyn.NFin:drink-ObjNmz:Irr-2S.Gen

'What do you want to drink?'

b'. kana-ni a-'ongol-ae-'o?

what-3S.Gen ObjNmz-Dyn.NFin:drink-ObjNmz-2S.Gen

'What did you drink?'

c. kana-ni alra-i-'o?

what-3S.Gen Dyn.NFin:take-ObjNmz:Irr-2S.Gen

'What do you want to take?'

c'. kana-ni a-alr-ae-'o?

what-3S.Gen ObjNmz-Dyn.NFin:take-ObjNmz-2S.Gen

'What did you take?'

d. oa-i-'o?

Dyn.NFin:go-ObjNmz:Irr-2S.Gen

'Where are you going?'

d'. *a-oa-e-*'o?

ObjNmz-Dyn.NFin:go-ObjNmz-2S.Gen

'Where did you go?'

7.1.3.3 Instrumental, manner and result nominals

Morphologically speaking, instrumental, manner and result nominals are marked in the same way as shown in tables 7.7-7.8. This type of nominalization is indicated through the prefixing of 'a- (< P(roto) R(ukai) *sa-, cf. Starosta 1995) to the verb base.

The main distinction between instrumental and manner nominalization lies in the fact that an "instrumental" meaning is obtained if the verb is dynamic (table 7.7), ex. (7.21) while a "manner" interpretation is perceived if the verb is inherently stative (table 7.8), ex. (7.22). If a stative verb has previously undergone another morphosyntactic process such as causativization, then the derived nominal might be interpreted as instrumental, *cf.* ma-poli 'white' > pa-ka-poli 'make...white' > 'a-pa-ka-poli-poli 'detergent', ma-'ete > pa-ka-'ete > 'a-pa-ka-'ete-'ete 'anaesthesia'.

In co-occurrence with other prefixes (e.g. **po-** 'put, give, make'), 'a- conveys another interpretation: "as a result of..." (table 7.9), though this occurred only once in the corpus.

As reported in Blust (1998), in many Formosan languages, instrumental nominalization is expressed through Ca-reduplication. Such a reduplication pattern conveying an instrumental meaning is not found in Mantauran Rukai.

Table 7.7: Instrumental nominals

| Verb type | Verbal stem | Gloss | Derived nominal | Gloss |
|-----------|-----------------|------------------------------|--------------------------------|-----------------------------|
| | o-cenga'a | 'drive in a nail' | 'a-cenga-cenga'a | 'nail' |
| | o-congolo | 'join' | 'a-congolo | 'water pipe' |
| | o-dhalri | 'pave the floor with slates' | 'a-dhalri-dhalri | 'floor, slate' |
| | o-ko-ngi'angi'i | 'shave (beard)' | <i>'a-ko</i> -ngi'a-ngi'angi'i | 'twizzers, razor' |
| | o-kongokongo | 'beat with a hammer' | 'a-kongokongo | 'hammer' |
| | o-korovongo | 'cover' | 'a-korovongo | 'cover' |
| | o-hisihisi | 'saw' | 'a-hisi-hisihisi | 'saw' |
| | o-lingao | 'wash (dishes)' | 'a-lingao-ngao | 'washing up liquid, sponge' |
| | o-lrakipi | 'stick' | 'a-lraki-lrakipi | 'glue' |
| Dynamic | o-lriho'o | 'know' | 'a-lrihi-lriho'o | 'watch' |
| Dynamic | o-moromoro | 'clean one's teeth, rinse' | 'a-moro-moromoro | 'toothbrush' |
| | o-pana | 'shoot (with a bow)' | <i>'a</i> -pana | 'arrow' |
| | o-palripalrici | 'screw, twist, turn' | 'a-palripalrici | 'screwdriver' |
| | o-solate | 'study, write' | 'a-sola-solate | 'pencil' |
| | o-seredhe | 'zip (one's zipper)' | 'a-sere-seredhe | 'zipper' |
| | o-tangetange | 'beat' (with a board) | 'a-tange-tangetange | 'washboard' |
| | o-'enao | 'wash (clothes)' | 'a-ena-'enao | 'washing powder' |
| | o-'odho'odho | 'mop (the floor)' | 'a-odho-'odho'odho | 'mop' |
| | o-'osario | 'play' | 'a-osarisario | 'toy' |
| | maavanao | 'wash (body)' | 'a-paavaavanao | 'soap' |
| | pa-solate | 'make study, write' | 'a-pa-sola-solate | 'school fees' |
| Derived | pa-ka-poli | 'makewhite' | 'a-pa-ka-poli-poli | 'detergent' |
| | pa-ka-'ete | 'makedie/kill' | 'a-pa-ka-'ete-'ete | 'anaesthesia' |

| (7.21) a. | 'ina'i | mene-nga | to'onai-nga | ma-dhao | 'ina'i | pakisa, |
|-----------------|----------------------------|------------------------------|-------------------|----------------|---------------|---------|
| | this | now-Sup | any(thing)-Sup | Stat.Fin-many | this | plain |
| | mani | dholro-ng-i | dholro-ng-iname | | solate, | |
| | then | Dyn.NFin:can-already-1PE.Obl | | Dyn.Subj:buy | book | |
| 'a-sola-solate, | | | 'a-lraki-lrakipi. | | | |
| | InstNmz-Red-Dyn.NFin:write | | | InstNmz-Red-Dy | yn.NFin:stick | |

'Nowadays, there is everything in the plains, and we can afford to buy books (or paper), pencils and glue (for our children)...'

b. o-kaodh-iname 'a-hisi-hisihisi la
Dyn.Fin-not exist-1PE.Obl InstNmz-Red-Dyn.NFin:saw and
'a-palri-palripalrici.
InstNmz-Red-Dyn.NFin:screw

'(In the past), we did not have saws or screwdrivers.'

Table 7.8: Manner nominals (Stative verbs)

| Verb type | Verbal stem | Gloss | Derived nominal | Gloss |
|-----------|-------------|-----------------|-----------------|-----------------------|
| Stative | ma-taadhi'i | 'good' | 'a-ka-taadhi'i | '(how) good' |
| | ma-kecelre | 'cold' | 'a-ka-kecelre | '(how) cold' |
| | ma-lrihili | 'clever, smart' | 'a-ka-lrihili | '(how) clever, smart' |
| | ma-ridhahe | 'fast' | 'a-ka-ridhahe | '(how) fast' |

(7.22) a. ma-ridhare Irolrame.

Stat.Fin-fast Dyn.Subj:run

'He runs fast.'

a'. amokoa-ni 'a-ka-ridhare-ni

lo dhoadhaace-ni?

how-3S.Gen MnNmz-Stat.NFin-fast-3S.Gen

if Dyn.Subj:walk-3S.Gen

'How fast does he walk?'

b. ma-lrihili-nga-lrao.

Stat.Fin-clever-Sup-1S.Nom

'I am the cleverest.'

b'. amokoa-ni 'a-ka-lrihili-ni

omale?

how-3S.Gen MnNmz-Stat.NFin-clever-3S.Gen Dyn.Subj:sing

'How well does he sing?'

Table 7.9: Result nominals

| Verb type | Verbal stem | Gloss | Derived nominal | Gloss |
|-----------|-------------|---------------|--------------------|--------------------------|
| Deverbal | po-timo | 'put on salt' | <i>'a-po-</i> timo | 'as a result of salting' |
| noun | | | | |

7.1.3.4 Reason nominals

Reason nominalization is conveyed through the circumfixation of **to'a-...-ae** 'the reason for...' to the verb base (table 7.10). **to'a-...-ae** 'the reason for...' also derives the noun **toloro** 'basis', *cf.* **to'a-tolor-ae** 'the reason for...', that introduces reason clauses (*cf.* §7.1.4.3).

Table 7.10: Reason nominals

| Verb type | Verbal stem | Gloss | Derived nominal | Gloss |
|-----------|-------------|---------|-----------------|--------------------------|
| Dynamic | o-dhaace | 'leave' | to'a-dhaac-ae | 'the reason for leaving' |
| | o-kane | 'eat' | to'a-kan-ae | 'the reason for eating' |
| | o-langai | 'buy' | to'a-langalr-ae | 'the reason for buying' |
| | o-omale | 'sing' | to'a-omal-ae | 'the reason for singing' |

(7.23) a. amo-dhaace-Irao.

Irr-Dyn.NFin:leave-1S.Nom 'I am leaving.'

a'. to'a-dhaac-ae-li

ma-lrakas-iae

ReasNmz-Dyn.NFin:leave-ReasNmz-1S.Gen Stat.Fin-dislike-1S.Obl

m-iki 'ina'i.
Dyn.Subj-be at this

'The reason I am leaving is because I dislike being here.'

b. 'api-omale-Irao.

like to-Dyn.NFin:sing-1S.Nom

'I like singing.'

b'. to'a-omal-ae-li

ma-raveravere-lrao

Stat.Fin-happy-1S.Nom

'The reason I am singing is because I am happy.'

ReasNmz-Dyn.NFin:sing-ReasNmz-1S.Gen

7.1.3.5 Locative nominals

Locative nominalization, which implies that "X is the place where Y did/does something", manifests itself through the circumfixation of **ta-...-ae** to the verb base. Only one locative nominal—derived from the verb **om-iki** 'be at, exist'—was found to be formed by the suffixation of **-ae** (and not the circumfixation of **ta-...-ae**); *cf.* **kiki-ae** 'space'. Examples with dynamic and stative verbs are given in (7.24) and (7.25) respectively.

Table 7.11: Locative nominals

| Verb type | Verbal stem | Gloss | Derived nominal | Gloss |
|-----------|----------------|--------------------|-------------------------------------|----------------------------|
| | o-cikipi | 'sew' | ta-cikip-ae | 'seam, stitch' |
| | o-dhomingi | 'white-wash' | ta-dhomi-dhoming-ae | 'wall' |
| | o-kelrai | 'hang' | ta-kelra-kelr-ae | 'hanger' |
| | o-langai | 'buy' | ta-langalr-ae ~ | 'store' |
| | | | <i>ta-</i> langa-langalr <i>-ae</i> | |
| | o-saosi | 'lock (the door)' | ta-sao-saosi-e | 'lock' |
| | o-sokovosokovo | 'pray' | ta-sokosokov-ae | 'church' |
| | o-solate | 'study, write' | ta-sola-solat-ae | 'school' |
| | o-velrete | 'pile up' | ta-velret-ae | 'wall' |
| Dynamic | | | | (Lit.: 'place where stones |
| | | | | are piled up') |
| | o-'avolo | 'bury' | ta-'avo-'avol-ae | 'tomb' |
| | o-'osario | ʻplay' | ta-'osari-sari-ae | 'running field, |
| | | | | touristic area' |
| | maavanao | 'wash (body)' | ta-paavaavan-ae | 'bathroom' |
| | m-o'alro | 'draw water' | ta-o'alro-'alro-e | 'well' |
| | om-iki | 'exist, be at' | ta-iki-e | 'place whereis' |
| | | | ta-iki-ki-ae ⁴⁹ | 'room' |
| | om-oa | ʻgo' | <i>ta</i> -0a- <i>e</i> | 'place to go' |
| | mo-vila'a | 'go besides' | (ta-oao-ae) mo-ta-vilavila'a-e | 'toilet' |
| | pa-'ototalo | 'makeput away' | ta-pa-'ototalo-e solate | 'schoolbag' |
| | | | | (Lit.: 'place where books |
| | | | | are put away') |
| | | | ta-pa-'ototalo-e molrae | 'cupboard' |
| Derived | | | | (Lit.: 'place where |
| Donivou | | | | belongings are put away') |
| | pa-'enao | 'makewash' | ta-pa-'ena-'en-ae | 'washing machine' |
| | po-acilai | 'water (flowers)' | ta-po-acilalr-ae | 'paddy field' |
| | 'i-lingo | 'look (oneself) in | ta-'i-lingo-lingo-e | 'dresser'50 |
| | | a mirror' | | |
| | 'aliki | '(come) from' | ta-'aliki-ki-ae mokavole | 'origin' |
| | ma-ecelrenge | 'black' | ta-ka-ecelrang-ae | 'dirt' |
| | | | | (Lit.: 'black spot') |
| | ma-taadhi'i | 'good' | ta-ka-taadhia'-e | 'advantage' |
| a: | | <i>a</i> . 12 | | (Lit.: 'good place') |
| Stative | ma-takolra | 'bad' | <i>ta-ka-</i> takolr <i>-ae</i> | 'disadvantage' |
| | | | | (Lit.: 'bad place') |
| | ma-teeteleke | 'cooler' | ta-pa-ka-teetelek-ae | 'fridge' |
| | | | 'adhamadhamai | (Lit.: 'place that keeps |
| | | | a'ongolongolae | dishes and drinks cooler') |

An anonymous reviewer suggested that the vowel /i/ is perhaps deleted. Thus, ta-iki-ki-ae could actually be derived from: ta-iki-iki-ae.
 A doublet form ta'ilingilingoe was recorded, *cf.* (§2.3.2).

(7.24) a. mani pa-valrisi avo-avoko cikipi votolro'o-dha... then Caus-Dyn.NFin:change Red-blanket Dyn.Subj:sew body-3S.Gen '(The bride would) be put on a blanket (we) saw around her body...'

a'. **ara'eve lo ma-radhi'i-ng-idhe dhona'i**but if Stat.Subj-heal-already-3S.Obl that *ta-cikip-ae*-n-idhe

LocNmz-Dyn.NFin:sew-LocNmz-3S.Gen-3S.Obl

m-alra-nga-nai 'ini-ka-ka-ma-mai 'o-cikipi.

Dyn.Subj-take-already-1PE.Nom self-Red-Stat.NFin-Red-be take off-Dyn.NFin:sew 'When the wound had healed and (we had to) take out the stitches, then we could do that by ourselves.'

b. dhona'i ta-iki-e-dha 'ape'apece lroolai that LocNmz-Dyn.NFin:be at-LocNmz-3S.Gen Dyn.Subj:lay child salodhiri mani po-idhe o'i tolongo la cradle then Dyn.NFin:make-3S.Obl that receptacle and ako'edhe kelrai. knife Dyn.Subj:hang 'The receptacle and the knife were hung on the cradle where the baby slept.'

b'. ona'i a-kaava'i-nga-dha 'aomo,
that ClsNmz-Dyn.NFin:come-already-3S.Gen Japanese
o-dholro-nga-nai longai kavane
Dyn.NFin-come-already-1PE.Nom Dyn.Subj:buy wardrobe

ta-kelra-kelralr-aekovokovolaLocNmz-Red-Dyn.NFin:hang-LocNmzActNmz:Dyn.NFin:coverandta-'i-lingo-lingo-e

LocNmz-look at-Red-mirror-LocNmz

'When the Japanese came, we were able to buy wardrobes, coat hangers, mosquito nets and dressers.'

- c. **om-iki latadhe** *'olilio* **ana a-olrolai.**Dyn.Fin-be at outside Dyn.Subj:play that plur-child 'The children are playing outside.'
- c'. **m-olekate** *ta-'olili-ae*-nomi.

 Dyn.Fin-enough LocNmz-Dyn.NFin:play-LocNmz-2P.Gen
 'You've played enough.'
- (7.25) a. *ma-ecelrange* **dhona'i molrae.**Stat.Fin-black that fabric
 'That cloth is black.'

a'. mani alra-nai 'i dha'e poa

then Dyn.NFin:take-1PE.Nom mud Dyn.Subj:make

lingao pi'amadhalae 'olra

Dyn.Subj:wash first Dyn.Subj:take off

ta-ka-ecelrang-ae.

LocNmz-Stat.NFin-black-LocNmz

'We (would) use some mud to wash (the dishes) to first take off the dirt.'

b. ma-taadhi'i toramoro.

Stat.Fin-good very 'It is/was very good.'

b'. ora'eve la *ta-ka-taadhia'-e*

ma-dhao-nga

but and LocNmz-Stat.NFin-good-LocNmz Stat.Fin-many-already

ta-totiame 'ina'i katalrisie...
SubjNmz-open:store this aborigine

'However, the advantage (is that) there are many aborigines who are making loans (to open stores)...'

Other locative nouns are examined below (cf. §7.1.4.1), which are derived from original nouns through much the same morphological processes.

7.1.3.6 Temporal nominals

Temporal nouns are formed through the circumfixation of **kala-...-ae**⁵¹ to the verb base and convey the meaning 'season' (e.g. 'cold season', i.e. 'winter'; 'rainy season', i.e. 'monsoon').

Table 7.12: Temporal nominals

| Verb type | Verbal stem | Gloss | Derived nominal | Gloss |
|-----------|-------------|---------------|--|----------------|
| Dynamic | o-dha'olo | 'rain' | <i>kala-</i> dho-dha'ol- <i>ae</i> ⁵² | 'rainy season' |
| Ctativo | ma-kecelre | 'cold' | kala-kecelr-ae | 'winter' |
| Stative | ma-lrapa'a | 'burning hot' | kala-ka-Irapa'-ae | 'summer' |

(7.26) a. **amo-***dha'olo* **lo 'idha.** Irr-Dyn.NFin:rain tomorrow

'It will rain tomorrow.'

⁵¹ Whether this circumfix should be decomposed as **ka-la-...ae** is still under investigation.

52 Doublet form: kaladha'odha'olae 'rainy season'.

b. olo kala-dho-dha'ol-ae lo i-valri-valrio-mao, if TempNmz-Red-Dyn.NFin:rain-TempNmz if at-Red-village-Impers.Gen ki-oa-mao ooma...

Neg-Dyn.NFin:go-Impers.Nom field 'During the rainy season, if one stayed home, one would not go to the field...'

'n (7.27) a. **lo** toramoro-dha ma-kecelre dhona'i a-valrovalro very-3S.Gen Stat.Subj-cold plur-young woman Top that o-dholro-ka-dha 'i-karidhi. ma-'ino. Dyn.Fin-can-Neg-3S.Gen wear-sleeveless garment Stat.Fin-embarrassed 'When it was very cold, young women did not dare to wear sleeveless (fur) jackets (because) they were (too) embarrassed (to do so).'

a'. *kala-kecelr-ae*TempNmz-cold-TempNmz
Top
Dyn.Fin-cross on foot-Impers.Nom
m-o-talrovalre.
Dyn.Subj-to-opposite side of the river bank
'During the winter, (it was possible) to cross the river on foot.'

7.1.4 Nouns turning into other (more abstract) nouns

Two major classes of nouns turning into other (abstract) nouns through a process of nominalization have been found: locative (§7.1.4.1) and temporal (§7.1.4.2) nouns. There is only one noun, **toloro** 'basis' that undergoes reason nominalization (§7.1.4.3).

7.1.4.1 Locative nominals

There are four major ways to transform a common noun into a location: the first consists of the circumfixation of **ta-...-ae** to a non-human common noun, the second and the third of the suffixation of **-ae** (PR *-ane) and -nae (<-n-ae) to (non-)human nouns and the fourth of the reduplication of a human common noun.

Table 7.13: Locative nominals (derived from nouns)

| Noun type | Nominal stem | Gloss | Derived nominal | Gloss |
|-----------|-----------------------|-----------------------|----------------------|---------------------------------|
| | acilai | 'water' | ta-cilalr-ae | 'spring' |
| | lrima | 'hand' | ta-lrima-ae | 'sleeve' |
| -human | ove'eke | 'pig' | ta-ve'ek-ae | 'pigpen' |
| | palongo | 'pot' | ta-palogn-ae | 'hearth' |
| | 'angato ⁵³ | 'wood, brushwood' | ta-'angato-e | 'woodshed' |
| | acilai | 'water' | acilalr-ae | 'pond' |
| | dhakerale | 'river' | dhakerakeral-ae | 'river bank' |
| | dha'ane | 'house' | dha'adha'adha'an-ae | 'place full of houses' |
| | pahai | 'rice' | pahapahalr-ae | 'place full of rice' |
| ±human | tamatama | 'middle-aged man' | atamatamatam-ae | 'place full of middle-aged men' |
| | holrolo | 'mountain' | holrol-a-nae | '(one) mountain' |
| | dha'ane | 'house' | dha'an-a- <i>nae</i> | 'household' |
| | 'avai | 'female, girl, woman' | 'avai-nae | 'bride's family' |
| | 'aolai | 'male, boy, man' | 'aolalr-a-nae | 'groom's family' |
| +human | a-olrolai | 'children' | aolroolrolai | 'place full of children'54 |

(7.28) a. **amo-dholro-ka-li 'ongolo ta-ka-tee-teleke**Irr-Dyn.NFin:can-Neg-1S.Gen Dyn.Subj:drink SubjNmz-Stat.NFin-Red-cold *acilai*?
water

'Can I drink cold water?' (adapted from Lin 1999, vol.6:46)

a'. "Io m-oa-'o ta-cilalr-ae 'a
if Dyn.Subj-go-2S.Gen LocNmz-water-LocNmz Top
m-olredhe-mo'o, ma-'ete."

Dyn.Fin-sink-2S.Nom Stat.Fin-die
"If you go to the spring, you will sink and die."

a''. lo m-iki-nga-mao valrevalre'ae maavanao lo if Dyn.Subj-exist-already-Impers.Gen road Dyn.Subj:bathe if lrivate-mao aicilalr-ae.

Dyn.Subj:cross-Impers.Gen water-LocNmz

'We washed ourselves on the road if we came across a pond of water.'

b. ma-eaea dhakerale aleve 'oponoho.
Stat.Fin-one:Red river below Wanshan
'There was a river at the foot of the (old) Wanshan village.'

53 Doublet forms include: **nga'ato** 'wood, brushwood' and **ta-nga'ato-e** 'woodshed'.

Only one such occurrence was found.

rice

b'. dhona'i vilrilae-nga mani po-iname

that after-Sup then Dyn.NFin:make-1PE.Obl

ta-sola-solat-ae piki lraodho LocNmz-Red-Dyn.NFin:study-LocNmz Dyn.Subj:put down dha-kera-keral-ae.

river-Red-river-LocNmz

'Afterwards, a school opened (which) was situated on the river banks.'

c. **o-coloko-lrao poicoa'-e vecenge la**Dyn.Fin-make glutinous cake-1S.Nom Dyn.NFin:mix-ObjNmz millet and *pahai*.

'I make/made glutinous cakes of millet and rice mixed together.'

- c'. **dhona'i vekenelre 'a** paha-pahalr-ae. that land Top Red-rice-LocNmz 'That place is full of rice.'
- (7.29) a. **dhona** *dha'ane*-lidha a-olrolai, 'anomaelae ma-taadhi'i. that house-3P.Gen plur-child especially Stat.Subj-good 'As for the house of the children, it was really beautiful.'
 - a'. lo 'idha-nae-nga mani va'oro 'aolai if day-TempNmz-Sup then Dyn.NFin:cook male dha'an-a-nae-lidha.
 house-beyond-LocNmz-3P.Gen

'The day after, the groom's family (would) cook rice.'

b. mani avil-idhe then Dyn.NFin:carry-3S.Obl young man toward dha'ane-dha 'aolai.
house-3S.Gen male

'The young woman (would) be carried to the groom's house.'

'The groom's family then took pottery jars, necklaces, knives....'

b'. dhona'i 'aolalra-nae mani alra dhona'i cacavake.
that male-LocNmz then Dyn.NFin:take that pottery jar
ce'elre, livase...
necklace knife

7.1.4.2 Temporal nominals

At least two morphological processes whereby temporal nouns turn into other (temporal) nouns have been identified.

The first, which consists of the circumfixation of **kala-...-ae** 'season' to [-temporal]

nouns (7.30), is productive to the extent that even loans (e.g. 'aomo 'Japanese', ciokoko 'Chinese') can be taken as the base of derivation. The second consists of the suffixation of -nae to [+temporal] nouns (7.31) to form temporal adjuncts.

Table 7.14: Temporal nominals (derived from nouns)

| Noun type | Nominal stem | Gloss | Derived nominal | Gloss |
|--------------|--------------|------------|-----------------|-------------------------|
| | pahai | 'rice' | kala-pahalr-ae | 'harvest season' (rice) |
| -temporal | 'aomo | 'Japanese' | kala-'aom-ae | 'Japanese occupation' |
| | ciokoko | 'Chinese' | kala-ciokok-ae | 'Chinese occupation' |
| I tome monel | 'idha | 'day' | 'idha-nae | 'afterwards, when?' |
| +temporal | mene | 'now, day' | men-a-nae | 'day, time',55 |

(7.30) *kala-'aom-ae* a-pa-sola-solate.

TempNmz-Japanese-TempNmz ActNmz-Caus-Red-Dyn.NFin:study 'Japanese education'

(7.31) a. 'idha-nae lo maava'i-nomi?

day-TempNmz if Dyn.Subj:come-2P.Gen

'When will you come again?'

b. mene-nae lo maava'i-nomi?

day-TempNmz if Dyn.Subj:come-2P.Gen

'Which day will you come?'

c. mani iki *men-a-nae* dhona'i

then Dyn.NFin:exist today-beyond-TempNmz that

lamengae-dhapeelrengae"amo-dhaace-lraoolopo"spouse-3S.GenPeelrengaeIrr-Dyn.NFin:leave-1S.NomDyn.Subj:hunt

mani ia.

then Dyn.NFin:so

'One day, her husband Peelrengae said: "I am going hunting."

7.1.4.3 Reason nominal

Only one noun, *cf.* **toloro** 'basis' was found to take the circumfix **to'a-...-ae** 'the reason for...' as in **to'a-tolor-ae** 'the reason for...'. It introduces reason clauses, as in (7.32):

 $^{^{55}\,}$ The doublet form mene-nae 'which day' given in Zeitoun (2002b) now seems to be rarely used.

- (7.32) a. dhona'i to'a-tolor-ae-n-idhe sakovo, 'oki lo that ReasNmz-basis-ReasNmz-3S.Gen-3S.Obl if men's house if 'i-valra-dha, ma-takolr-idhe 'iidheme lo a-sava-savare plur-Red-young man kill-enemy-3S.Gen if Stat.Subj-bad-3S.Obl heart a-tamatama om-oa iki sakovo 'apece. plur-middle-aged man Dyn.Fin-go Dyn.Subj:be at men's house Dyn.Subj:sleep 'The reason for men building a men's house was because when they came back from head-hunting expeditions, or if they were sad, they would go there to sleep.'
 - ta-kavaa'-iname b. ma-dhao-nga pakisa Stat.Fin-many-already plains (people) SubjNmz-Dyn.NFin:come-1PE.Obl 'olilio. m-oa to'a-tolor-ae-ni Dvn.Subj-go Dvn.Subj:amuse ReasNmz-basis-ReasNmz-3S.Gen iki aana teme-teme [...] 'oki lo if if Dvn.NFin:exist that ActNmz:Red-Dvn.NFin:obstruct m-iki-ni ta-ka-takolra pakisa Dyn.Subj-exist-3S.Gen SubjNmz-StatNFin-bad plain (people) m-o-iname to-takolra valrio-nai ocao. Dyn.Subj-go-1PE.Obl make-bad village-1PE.Gen person 'A lot of Chinese come here to distract themselves. The reason why we built the tollbooth (is to prevent) the Chinese from polluting our villages.'
 - c. to'a-tolor-ae-li 'i-paiso-iso, to'araki-lrao ReasNmz-reason-ReasNmz-1S.Gen make-money-Red use-1S.Nom voa'i 'a-sola-solate-li.
 Dyn.Subj:give InstNmz-Red-Dyn.NFin:study-1S.Gen 'The reason why I am making money is to pay for my school (and related) fees.'

7.1.5 Clausal nominalization

Comrie & Thompson (1985:392) use the term "clausal nominalization" to refer to the process by which clauses are nominalized. Though I have earlier dubbed this process "adverbial nominalization" (so-called because one of the structures in question can be glossed as "when X happened/happens") in Zeitoun (2000e), I am adopting Comrie & Thompson's terminology for the sake of clarity.

This type of nominalization process is readily seen in temporal, conditional, and concessive clauses in Mantauran. Three different processes are involved:

(i) If the verb refers to a situation that has already taken place, it is prefixed by **a**-(temporal clauses); see table 7.15, ex. (7.33).⁵⁶

⁵⁶ Adverbial clauses whereby the verb is marked by **a-** to indicate a relation of posteriority 'before-clauses', concomitance 'when-clauses' or anteriority 'after- clauses' are productively

- (ii) If the verb refers to a situation that is to happen or may happen, it appears in its subjunctive form (conditional/hypothetical clauses); see table 7.16, ex. (7.34).
- (iii) If the verb indicates a concession, it is circumfixed by **ni-...-a(e)** (concessive clauses); see table 7.17, ex. (7.35).

Table 7.15: Clausal nominals (1): Temporal clauses

| Verb type | Verbalstem | Gloss | Derived clausal nominal | Gloss |
|-----------|---------------|--------------------|-------------------------|--------------------|
| | o-dhaace | 'leave' | a-dhaace | 'when left' |
| | o-kane | 'eat' | a-kane | 'whenate' |
| | o-lriho'o | 'know' | a-lriho'o | 'whenknew' |
| Dymomio | o-tovi | 'cry' | a-tovi | 'when cried' |
| Dynamic | maava'i | 'come' | a-kaava'i | 'whencome' |
| | om-oa | 'go' | a-oa | 'when went' |
| | om-iki | 'exist' | a-iki | 'when were' |
| | 'itovolro | 'ask' | a-'itovolro | 'whenasked' |
| | ma-aloho | 'grow up' | a-ka-aloho | 'whengrown up' |
| | ma-dhao | 'a lot, many' | a-ka-dhao | 'when a lot, many' |
| Stative | ma-lroolai | 'be young (child)' | a-ka-lroolai | 'as a child' |
| | ma-savare | 'be young (man)' | a-ka-savare | 'as a young man' |
| | ma-valrovalro | 'be young (woman)' | a-ka-valrovalro | 'as a young woman' |

(7.33) a. ona'i *a-iki-*na-nai

ka-'oponoh-ae,

that ClsNmz-Dyn.NFin:exist-still-1PE.Gen genuine-Wanshan-genuine

om-iki-nomita-se'ese'ekoli'iDyn.Fin-exist-1PE.NomSubjNmz-Dyn.NFin:risesun

om-i-inamelocengele-n-inamevalravalrae.Dyn.Fin-so-1PE.OblifDyn.Subj:see-3S.Gen-1PE.Obloutsider(s)

'When we still were in the old Wanshan village, outsiders (would) tell us that we were located in the east, when they came to see us.'

b. *ma-lroolai*-na lalake-li. Stat.Fin-child-still child-1S.Gen

'My child is still young.'

found in the corpus. Note that the verb that occurs in the main clause must be marked as realis. If the verb that occurs in the main clause is marked as irrealis, the nominalized verb in the subordinate clause must be unmarked, i.e. it cannot be prefixed by the nominalizer \mathbf{a} -. Such sentences do not occur as productively (cf. §16.1.1).

(i) (*a-)ki-'acakelae-na-li amo-oa-lrao taipake 'adhidhapae.

Neg-marry-still-1S.Gen Dyn.Fin-be at-1S.Nom Taipei work

'Before I marry, I will go to Taipei to work.'

b'. mani a-ka-lroolai-li o-lriho'o-ka-li

then ClsNmz-Stat.NFin-child-1S.Gen Dyn.Fin-know-Neg-1S.Gen

om-iki valrinae dha'ane m-ia.

Dyn.Fin-exist Valrinae house Dyn.Subj-so

'When I was young, I did not know that there were houses in Valrinae.'

Table 7.16: Clausal nominals (2): Hypothetical/conditional clauses

| Morphological process | Verb type | Verbal stem | Clausal nominal |
|-----------------------|---------------|---------------------------------|---------------------------------|
| | | o-dhapele 'fish (by poisoning)' | dhopele 'iffish (by poisoning)' |
| | | o-kane 'eat' | kone 'ifeat' |
| | | o-cengele 'see' | cengele 'ifsee' |
| | Dynamic verbs | o-tovi 'cry' | tovi 'ifcry' |
| | Dynamic verus | maava'i 'come' | maava'i 'ifcome' |
| | | om-oa 'go' | m-oa 'ifgo' |
| Vsubj | | om-alra 'take' | m-alra 'iftake' |
| [hyp/cond. clauses] | | 'itovolro 'ask' | 'itovolro 'ifask' |
| | | ma-aloho 'grow up' | ma-aloho 'ifgrow up' |
| | | ma-dhao 'a lot, many' | ma-dhao 'ifa lot, many' |
| | Stative verbs | ma-lroolai 'be a child' | ma-lroolai 'ifbe a child' |
| | Stative verbs | ma-savare 'be young (man)' | ma-savare 'ifbe a young (man)' |
| | | ma-valrovalro | ma-valrovalro |
| | | 'be young (woman)' | 'ifbe a young (woman)' |

(7.34) a. **olo dhoma-nae mani dhapele-nai to-ka'a-ka'ange** if some-TempNmz then Dyn.NFin:fish-1PE.Nom do-Red-fish **lroikiikisi.**

Red-Dyn.Subj:fishhook

'Sometimes, we (would) go fishing....'

- a'. **dhona'i lo** *dhopele*-nai m-alra o'i ka'ange.... that if Dyn.Subj:fish-1PE.Gen Dyn.Subj-take that fish 'If we had been fishing and catching fish....'
- b. om-alra-lrao to-dho'a.

 Dyn.Fin-take-1S.Nom produce-two 'I caught two.'
- b'. ceela 'i valravalrae lo m-alra-nai siriri,
 look:Imp outsider(s) if Dyn.Subj-take-1PE.Gen Dyn.Subj:take as wife
 ka mati-lriho'o-ka-i m-ii'a vaha-nai.

 Neg Dyn.Fin:well-Dyn.NFin:know-Neg-3S.Gen Dyn.Subj-like language-1PE.Gen
 'Look at those outsiders; (even) if they inter-marry with the Mantauran, they do not understand our language very well.'

Table 7.17: Clausal nominals (3): Concessive clauses

| Morphological process | Verb type | Verbal stem | Clausal nominal |
|-----------------------|---------------|-----------------------------|---------------------------------------|
| ni-V-a(e) | Dynamic | o-kaodho 'there is/was not' | ni-kaodho-a 'even ifthere is/was not' |
| [concessive clauses] | verbs | o-dholro 'can' | ni-'i-dholro-a 'even if can'57 |
| [concessive clauses] | Stative verbs | ma-(ma)mai 'self' | ni-ka-mamalr-a 'even ifself' |

(7.35) a. o-kaodh-iname

paiso.

Dyn.Fin-not exist-1PE.Obl money 'We do/did not have money.'

a'. ni-kaodho-a-dh-iname

paiso,

CncNmz-Dyn.NFin:not-exist-CncNmz-3S.Gen-1PE.Obl money

ka ma-koa-ka-i.

Neg Stat.Fin-matter-Neg-3S.Gen

'Even if we did not have any money, it did not matter.'

b. ni-'i-dholro-a-dha

ma-taka-taka

dhona'i

CncNmz-?-Dyn.NFin:can-CncNmz-3S.Gen Stat.Subj-Red-elder sibling that

'avai o-dholro-ka-dha

'i-dha'ane.

female Dyn.Fin-can-Neg-3S.Gen inherit-house

'Even if they had (wanted to), eldest daughters could not stay in (their ancestral) home.'

c. lo ma-taadhi'i dhona 'aolai *ni-ka-'amalr-a-dha*

if Dyn.Subj-good that male CncNmz-Stat.NFin-self-CncNmz-3S.Gen

dhona valrovalro, o-dholro a-itina

that young woman Dyn.Fin-can plur-middle-aged woman

a-tamatama kaamai poa pa-'acakelae. plur-middle-aged man Stat.NFin:self Dyn.Subj:make Caus-marry

'If the boy was good/kind, the parents could have them marry, even if the girl disliked

him'

7.1.6 Summary

In the foregoing subsections, different nominalization processes have been outlined. In Mantauran, nominalization is very productive and fairly predictable. It can be said to be unconstrained because:

(i) loan words and compounds can also undergo nominalization, *cf.* **kala-'aom-ae** 'Japanese era/occupation' (< 'aomo 'Japanese') and **ta-pa-'ototalo-e solate** 'schoolbag' (< **pa-'ototalo** 'put away' + **solate** 'paper, book');

The meaning of the prefix 'i- in this particular environment is still unclear, *cf.* *ni-dholro-a, though in other instances it clearly functions as a passive.

- (ii) a verb can undergo different types of nominalization; e.g. gerund kane 'eating', subjective nominalization ta-kane '(who) eats/ate', objective nominalization a-kan-ae 'food', locative nominalization ta-kanekan-ae 'restaurant', instrumental nominalization 'a-kane 'instrument used for eating; e.g. fork', etc.;
- (iii) it is not blocked because of the existence of lexical items "already filling the 'slot' which the derived form might occupy", as argued by Comrie & Thompson (1985:358), cf. 'a-pana 'arrow' (< o-pana 'shoot with a bow') vs. lraili 'arrow'.

Table 7.18 provides a recapitulation of these different processes.

Table 7.18: Types of nominalizations in Mantauran Rukai

| Action/State Nom | inals and gerund | s | |
|-------------------|------------------|-----------------------------------|--------------------------|
| Action/state | a-V | a-pasolate | 'education' |
| nominal | | a-ka'aa'aa | 'flirt' |
| State nominal | V-ae | ca'em-ae | 'disease' |
| | V | kane | 'eating' |
| Gerunds | V_{Fin} | odhaace(-ni) | '(when) did (he)?' |
| | V_{Subj} | dhoace(-ni) | '(when) will (he)?' |
| Argument nomina | alization | | |
| Subject(ive) | ta-V | ta-lriho'o | '(who) knows' |
| Subject(ive) | | ta-karodhange | 'old people' |
| Objective | a-V-ae | a-kan-ae | 'food' |
| Objective | V-ae | kasekelr- <i>ae</i> | 'angered about' |
| Instrumental | 'a-V | 'a-osarisario | 'toy' |
| Manner | | 'a-kataadhi'i | 'how good' |
| Result | 'a-po-V | 'a-po-timo | 'as a result of salting' |
| Reason | to'a-V-ae | to'a-dhaac-ae | 'the reason for leaving' |
| Locative | ta-V-ae | ta-oa-e | 'place wherego' |
| Locative | | ta-kaecelrang-ae | 'dirt' |
| Temporal | kala-V-ae | <i>kala-</i> dhodha'ol- <i>ae</i> | 'rainy season' |
| Temporar | | kala-kalrapa'-ae | 'summer' |
| Clausal nominaliz | ation | | |
| Temporal (past) | a-V | <i>a-</i> iki | 'whenwere' |
| Temporal (past) | | a-kalroolai | 'whena child' |
| Conditional, | V_{Subj} | dhoadhaace | '(if)walk' |
| hypothetical | | maraverevere(-ni) | '(if) happy' |
| Concessive | ni-V-a | <i>ni</i> -kaodho- <i>a</i> | 'even if there is not' |
| Concessive | | <i>ni</i> -kamamalr- <i>a</i> | 'even ifself' |

| Abstract nouns | | | | | | |
|----------------|--------|------------|-----------------------|-------------------------------|--|--|
| | | ta-N-ae | ta-ve'ek-ae | 'pigpen' | | |
| | ±human | N-ae | acilalr-ae | 'pond' | | |
| Locative | | Red-N-(a)e | veceveceng-ae | 'a place full of millet' | | |
| Locative | | | atomotomotom-ae | 'a place full of old (wo)men' | | |
| | +human | N-nae | 'avai-nae | 'girl/bride's family' | | |
| | Thuman | Red-N | ao <i>lroo</i> lrolai | 'place full of children' | | |
| Temporal | | kala-N-ae | kala-pahalr-ae | 'rice harvest season' | | |
| | | N-nae | mena- <i>nae</i> | '(one) day' | | |

7.1.7 Distinction between syntactically and lexically derived nominals

The following examples show that the same morphological processes are actually used to derive nominals both through lexical and syntactic processes:

(7.36) a. Lexically derived action nominal

kala-'aom-ae a-pa-sola-solate

TempNmz-Japanese-TempNmz ActNmz-Caus-Red-Dyn.NFin:study

'Japanese education'

a'. Syntactically derived clausal nominal

dhona'i a-pa-sola-solate-lidh-iname...

that ClsNmz-Caus-Red-Dyn.NFin:study-3P.Gen-1PE.Obl

'At that time, when they taught us...'

b. Lexically derived objective nominal

dhona'i 'a kasa-dha dhona'i *a-*kan-*ae*-nai.

that Top only-3S.Gen that ObjNmz-Dyn.NFin:eat-ObjNmz-1PE.Gen

'That was the only food we had.'

b'. Syntactically derived objective nominal

ma-taadhi'i kone a-kan-ae-ni mairange.

Stat.Fin-good Dyn.Subj:eat ObjNmz-Dyn.NFin:eat-ObjNmz-3S.Gen sweet potato 'The sweet potato he ate was good.'

These two types of nominals exhibit different morphosyntactic properties that are enumerated and illustrated in turn below.

1. The occurrence of a genitive pronoun after syntactically derived nominals is obligatory (7.37b), but optional with lexically derived nominals (7.37a):

(7.37) a. Lexically derived nominal

to'a-cakar-idhevalevaledhonause for-Dyn.NFin:tie-3S.Oblbamboothatta-iki-ki-ae'apece.LocNmz-Red-Dyn.NFin:be at-LocNmzDyn.Subj:sleep

'(Splints of) bamboo were fixed together to form the (upper) place where (men) slept.'

b. Syntactically derived nominal

dhona'i patolrange ta-piki-ki-e-nai

that chest LocNmz-Dyn.NFin:put-Red-LocNmz-1PE.Gen

molrae o-piki-mao 'i sororo
belongings Dyn.Fin-put-Impers.Nom stone bed
ta-iki-ki-ae*(-mao) 'apece.
LocNmz-Red-Dyn.NFin:be at-LocNmz-Impers.Gen sleep

'We (would) place the chest where we put away our clothes on the stone bed where we slept.'

- 2. Syntactically derived nominals may occur with aspectual suffixes (7.38a-b); lexically derived nominals do not.
- (7.38) a. **ona'i** *a-iki-na-nai* **'oponoho...** that ClsNmz-Dyn.NFin:be at-still-1PE.Gen Wanshan 'When we still were in the old Wanshan village...'
 - b. **ona'i** *a-kaava'i-nga*-**dha 'aomo...** that ClsNmz-Dyn.NFin:come-already-3S.Gen Japanese 'After the Japanese came...' ~ 'When the Japanese had come...'
- 3. Syntactically derived nominals may be negated (7.39); lexically derived nominals cannot.
- (7.39) **dhona ta-ka-kocingai ca'em-ae** that SubjNmz-Stat.NFin-serious ill-StatNmz

ki-lrihoa'-e-nai

Neg-Dyn.NFin:know-ObjNmz-1PE.Gen

ki-dholro-e-nai, mani pato'o-na-ine cara'e-nai.

Neg-Dyn.NFin:can-ObjNmz-1PE.Gen then tell-1PE.Nom-3S.Obl chief-1PE.Gen
'If the disease was (more) serious and we did not know how to (treat the patient), we (would) tell the (doctor-in)-chief.'

4. Syntactically derived nominals may take an object (7.40); lexically derived nominals cannot.

(7.40) olo ki-lriho'o-nai dhona'i *a-pato'o-to'o-dh-iname*,

if Neg-Dyn.NFin:know-1PE.Gen that ClsNmz-tell-Red-3S.Gen-1PE.Obl maatara-iname ma-ha'aoco...

Dvn.Fin:take one-1PE.Obl Stat.Subj-scold

'If we did not understand our teachers (*Lit.*: when they taught us), we (would) be scolded one by one ...'

5. Syntactically derived clausal nominals agree in plurality with certain genitive subjects (7.41b-b'); their lexically derived action nominal counterparts do not (7.41a-a').

(7.41) a. *a-ka-*lroolai

ActNmz-Stat.NFin-child 'childhood'

a'. *a-ka-a-olrolai

ActNmz-Stat.NFin-plur-child

b. onai a-ka-lroolai-li.../*a-ka-a-olrolai-li...

that ActNmz-Stat.NFin-child-1S.Gen/*ActNmz-Stat.NFin-plur-child-1S.Gen 'When I was a child...'

b'. onai a-ka-a-olrolai-nai.../*a-ka-lroolai-nai...

that ActNmz-Stat.NFin-plur-child-1PE.Gen/*ActNmz-Stat.NFin-child-1PE.Gen 'When we were children...'

- 6. Lexically derived nominals can undergo (re-)verbalization, through the prefixation of **to-** 'do, make, build', for instance, as in (7.42). No syntactically derived nominals were found to undergo such a process in the corpus collected.
- (7.42) **dhona** lo maka-to-ta'onae-nga-mao o-po-idhe that if Dyn.Subj:finish-build-hut-already-Impers.Gen Dyn.Fin-make-3S.Obl to-[ta-iki-ki-e] 'apece..., mani build-LocNmz-Red-Dyn.NFin:be at-LocNmz Dyn.Subj:sleep then poa-mao to-[ta-palong-ae]. Dyn.NFin:make-Impers.Nom build-LocNmz-cooking pot-LocNmz 'When we had finished the construction of the hut, we (would) make a bed ... and we (would) build a cooking stove (with stones).'
- 7. Lexically derived nominals can undergo re-nominalization, usually through the prefixation of **ta-ka-** 'SubjNmz-Stat.NFin' to the derived stem (7.43). No syntactically derived nominals were found to undergo such a process in the corpus collected.

(7.43) Textbook on Mantauran (8th teacher's volume, p.12)

a. [ta-ka-[ta-ka-dhala-dhalam-ae]] lamolai SubjNmz-Stat.NFin-LocNmz-Stat.NFin-Red-like/love-LocNmz story 'exciting stories'

b. [ta-ka-[ta-ka-havehaveh-ae]] lamolai SubjNmz-Stat.NFin-LocNmz-Stat.NFin-happy-LocNmz story

'happy stories'

c. [ta-ka-[ta-ka-sahengehengeh-ae]] lamolai SubjNmz-Stat.NFin-LocNmz-Stat.NFin-sad-LocNmz story 'sad stories'

- 8. Lexically derived locative and instrumental nominals usually undergo reduplication (7.44a-a'); syntactically derived nominals do not (7.44b-b').
- (7.44) Lexically derived nominals
 - a. **lo moromoro-mao, o-kaodho 'a-moro-moromoro.**if Dyn.Subj:rinse-Impers.Gen Dyn.Fin-Neg InstNmz-Red-Dyn.NFin:rinse
 'If we (wanted to) clean our teeth, there was no toothpaste/toothbrush.'
 - a'. ?*lo moromoro-mao, o-kaodho 'a-moromoro.

 when Dyn.Subj:rinse-Impers.Gen Dyn.Fin-Neg InstNmz-Dyn.NFin:rinse

Syntactically derived nominals

b. ara'eve lo ma-radhi'i-ng-idhe dhona'i but if Stat.Subj-heal-already-3S.Obl that

ta-cikip-ae-n-idhe

LocNmz-Dyn.NFin:sew-LocNmz-3S.Gen-3S.Obl

om-alra-nga-nai 'ini-ka-ka-ma-mai

Dyn.Fin-take-already-1PE.Nom self-Red-Stat.NFin-Red-be

'o-cikipi.

take off-Dyn.NFin:sew

'When the wound had healed and (we had to) take out the stitches, then we could do it by ourselves.'

b'. *?ara'eve lo ma-radhi'i-ng-idhe dhona'i

but if Stat.Subj-heal-already-3S.Obl that

ta-ciki-cikip-ae-n-idhe

LocNmz-Red-Dyn.NFin:sew-LocNmz-3S.Gen-3S.Obl

om-alra-nga-nai 'ini-ka-ka-ma-mai

Dyn.Fin-take-already-1PE.Nom self-Red-Stat.NFin-Red-be

'o-cikipi.

take off-Dyn.NFin:sew

Subjective nominals function like other syntactically derived nominals in that they retain the aforementioned verbal properties (7.45). More specifically, they may occur with modal and aspectual affixes, *cf.* (7.45a-c), be negated (7.45d) and take an object (7.45e).

- (7.45) a. olo pa-solate-dh-iname "aanga-i if Caus-Dyn.NFin:study-3S.Gen-1PE.Obl who-3S.Gen ta-(a)mo-lriho'o?" lo m-ia-dha.

 SubjNmz-Irr-Dyn.NFin:know if Dyn.Subj-so-3S.Gen 'When we were at school, we would sometimes take exams. '

 (Lit.: 'When they taught us, they would say: "Who will know?"')
 - b. ona'i a-olrolai ona'i ta-a-'acakelae-nga la that plur-child and that SubjNmz-plur-married-already 'i-karidhi. ta-ka-a-rodhange o-dholro-nai SubjNmz-Stat-plur-old Dyn.Fin-can-1PE.Nom wear-fur jackets 'Children, already married (women) and old people could wear fur jackets.'
 - c. dhona ta-ki-kane va'oro, o-dholro-ka-i that SubjNmz-Neg-Dyn:NFin:eat rice Dyn.Fin-can-Neg-3S.Gen ka m-o-latadhe 'olilio.

 Neg Dyn.Subj-to-outside Dyn.Subj:play/amuse oneself 'Those who have not eaten cannot go outside to play.'
 - d. lo 'i-ra'opo-dha 'a-pa-ka-'ete-'ete mani when Pass-Dyn.NFin:inject-3S.Gen InstNmz-Caus-Stat.NFin-die-Red then 'i-vorovoro-dha, o-dholro-ka-nai ka Pass-Dyn.NFin:operate-3S.Gen Dyn.Fin-can-Neg-1PE.Gen Neg 'ini-ka-ka-ma-mai ona'i ta-pato'oto'-iname pi'a, self-Red-Stat.NFin-Red-self do that SubjNmz-Red:tell-1PE.Obl SubjNmz-Dyn.NFin:do

'If we had to give (the patient) an anaesthesia and operate, then we could not do it by ourselves.'

They differ in that they cannot co-occur with genitive pronouns, *cf.* (7.46a-a'), as opposed to gerunds, for instance, which must co-occur with such pronouns, as shown in (7.46b-b').

(7.46) a. **ana latenge 'a** *ta-lredheke* **taotao.** that vegetable Top SubjNmz-Dyn.NFin:plant Taotao 'Those vegetables, it is Taotao who planted (them).'

(*Lit.*: 'Those vegetables, Taotao is the one who planted them.')

a'. * ana latenge 'a ta-lredheke-ni taotao.

that vegetable Top SubjNmz-Dyn.NFin:plant-3S.Gen Taotao
'Those vegetables, it is Taotao who planted (them).'

(Lit.: 'Those vegetables, Taotao is the one who planted them.')

b. ana latenge 'a *lredheke-ni* taotao.
that vegetable Top Dyn.NFin:plant-3S.Gen Taotao
'Those vegetables, it is Taotao who planted (them)'
(Lit.: 'Those vegetables, (they are) Taotato's planting.')

b'.*ana latenge 'a lredheke taotao.

that vegetable Top Dyn.NFin:plant Taotao

'Those vegetables, it is Taotao who planted (them)'

(Lit.: 'Those vegetables, (they are) Taotato's planting.')

7.1.8 Constructions triggering syntactic nominalization

The following examples form a list of all the types of constructions that trigger syntactic nominalization in Mantauran: *wh*-questions (7.47), subordinate clauses (7.48), pseudo-cleft sentences (7.49), relative clauses (7.50) and imperative sentences (7.51).

- (7.47) a. **aanga-i** *ta-'okolodh-*imia'e? who-3S.Gen SubjNmz-afraid-2S.Obl 'Who is afraid of you?'
 - b. **aanga-i** 'okolodh-ae-'o? who-3S.Gen afraid-ObjNmz-2S.Gen 'Whom are you afraid of?
 - c. kani pi'a-'o m-oa taipake?
 why Dyn.NFin:do-2S.Gen Dyn.Subj-go Taipei
 'Why did you go to Taipei?'
 - d. amokoa-ni 'a-ka-taadhi'i-ni
 how-3S.Gen MnNmz-Stat.NFin-good-3S.Gen
 ta-ka-oca-e-ni?
 LocNmz-Stat.NFin-person-LocNmz-3S.Gen
 'How nice is he/she?'
- (7.48) a. **ona'i a-kaava'i-dha dhipolo...** that ClsNmz-Dyn.NFin:come-3S.Gen Dhipolo 'When Dhipolo came...'
 - b. ...lo pato'o-dh-iname a-'ia'ipi...

 if Dyn.Subj:teach-3S.Gen-1PE.Obl ActNmz-Dyn.NFin:count
 '...when they taught us arithmetic...'

- c. *ni-kaodho-a-*dh-iname paiso....
 CncNmz-not exist-CncNmz-3S.Gen-1PE.Obl money
- 'Even if we had no money...'
- (7.49) a. **aanga-li** *ta-tipitip*-ine ana **lroolai.** who-1S.Gen SubjNmz-Dyn.NFin:beat-3S.Obl that child 'It is I who beat that child.'
 - b. ona'i *a-tipitip-ae-*l-ine ana'i lroolai.
 that ObjNmz-Dyn.NFin:beat-ObjNmz-1S.Gen-3S.Obl that child
 'That is the child I beat.'
- (7.50) a. **ana'i** *ta-'i-kipingi* **ta-dhiliange lalake-li ana.** that SubjNmz-wear-clothes Inal-red child-1S.Gen that 'The one who wears red clothes is my child.'
 - b. *a-kan-ae*-ni velevele ma-si'i.
 ObjNmz-Dyn.NFin:eat-ObjNmz-3S.Gen banana Stat.Fin-small 'The banana s/he eats is small.'
- (7.51) a. *a-kan-ae-*'o!
 ObjNmz-Dyn.NFin:eat-ObjNmz-2S.Gen
 'Don't eat!'
 - b. a-'ongol-ae-'o! ObjNmz-Dyn.NFin:drink-ObjNmz-2S.Gen 'Don't drink!'

7.2 Verbalization

There are a number of verbalizing affixes in Mantauran, i.e. verbal prefixes that turn a noun into a verb (see appendix 1). Most of these affixes have specialized meanings and attach to certain nouns only. They are classified and discussed below according to the type of nouns they can attach to, *cf.* locative nouns (§7.2.1), temporal nouns (§7.2.2), common nouns referring to human beings (§7.2.3), body parts (§7.2.4) and nature (§7.2.5). The use of other affixes is freer, i.e. they can co-occur with various types of nouns and are discussed in §7.2.6.

Denominal verbs are identified as such based on their identical distribution with other verbal predicates (*cf.* §4.1), and their sharing the same morphosyntactic properties. In the following pairs of examples, the first (numbered (a)) illustrates the distribution of (underived) verbs and the second (b) that of derived verbs.

1. They occur in predicative (i.e. sentence-initial) position and are followed by a nominative pronoun when the action involves a first or second person participant:

(7.52) a. o-kane-lrao velevele. banana

Dyn.Fin-eat-1S.Nom

'I eat/ate (a) banana.'

b. to-alake-lrao to-dho'a. produce-child-1S.Nom produce-two 'I gave birth to two children~I have two children.'

2. They can co-occur with modal and aspectual affixes such as: amo-'will', -nga 'already', -na 'still, yet' etc:

(7.53) a. amo-dhaace-nga-lrao.

Irr-Dyn.NFin:leave-already-1S.Nom 'I am leaving.'

b. amo-o-valrio-nga-lrao.

Irr-Dyn.NFin:to-village-already-1S.Nom 'I am returning back home.'

3. They can be negated by the modal negator **ki**-:

(7.54) a. ki-'ongolo-lrao

vavaa.

Neg-Dyn.NFin:drink-1S.Nom wine 'I will not drink wine.'

b. ki-to-dha'ane-lrao.

Neg-build-house-1S.Nom 'I will not build a house.'

7.2.1 Verbalization of locative nouns

As shown in §5.2.1, locative nouns include: (i) nouns referring to a location, e.g. valrio 'village'; (ii) orientation and directional nouns, e.g. aleve 'down'; (iii) place names, e.g. 'oponoho 'Wanshan'; and (iv) derived common nouns, e.g. atomotomotom-ae 'a place full of old (wo)men'. The verbal prefixes that occur on location and orientation/ directional nouns (§7.2.1.1) differ from those attaching to place names (§7.2.2.2) while derived common nouns denoting a location cannot be verbalized.

7.2.1.1 Verbalization of location, orientation and directional nouns

There are four prefixes that occur productively on locative nouns: **i-** 'be at' (7.55), **pi-** 'put (at)' (locative causative) (7.56), **mo-** 'go (to)' (7.57) and **po-** 'bring (back)' (movement causative) (7.58).

- (7.55) a. *i-valrio*-lrao m-iki dha'ane. at-village-1S.Nom Dyn.Subj-be at house 'I am staying at home, resting.'
 - b. *i-aleve* dha'ane-li. at-below house-1S.Gen 'My house is below.'
- (7.56) a. ma-ca'eme lalake-li mani *pi-valrio*-lra-ine.

 Stat.Fin-ill child-1S.Gen then CausLoc-village-1S.Nom-3S.Obl
 'My child is ill so I put him in the village.'
 - b. *pi-latadh-*a! CausLoc-outside-Imp 'Put (it) outside!'
- (7.57) a. amo-o-valrio-nga-lrao.

Irr-Dyn.NFin:to-village-already-1S.Nom 'I am returning back home.'

- b. m-o-dha'ane dhona 'olra'a, 'aa-ocao-nga, Dyn.Fin-to-house that snake become-person-already toramoro ka ma-taadhi'i. ma-savare. Lig Stat.Subj-good Stat.Fin-young man very 'The snake entered the house and turned into a person. He was a very handsome young man.'
- (7.58) a. omec-a po-dho'-a po-valrio!

 Dyn.Subj:bring-Imp CausMvt-two CausMvt-village 'Bring back two!'
 - b. o-dha'olo mani ki-dholro-lrao po-latadhe

 Dyn.Fin-rain then Neg-Dyn.NFin:can-1S.Nom CausMvt-outside
 topa'ai 'i-vecenge-li!

 Dyn.Subj:dry in the sun harvest-millet-1S.Gen

 'It rains so I can't put outside the millet I have gathered.'

The verbal derivations are shown in table 7.19.

'inside'

talicovongae 'in front'

outside'

behind'

'middle'

'beside'

'adhingi

latadhe

vecahae

vila'a

alrikodhae

| Noun | Gloss | i-+base | pi-+base | m-o-+base | po-+base |
|----------|---------------|------------|-------------|--------------|----------------|
| | | 'be at' | 'put (at)' | 'go (to)' | 'bring (back)' |
| dha'ane | 'house' | *i-dha'ane | pi-dha'ane | m-o-dha'ane | po-dha'ane |
| valrio | 'village' | i-valrio | pi-valrio | m-o-valrio | po-valrio |
| dhalra | 'up(wards)' | i-dhalra | pi-dhalra | m-o-dhalra | po-dhalra |
| lraodho | 'down(wards)' | i-lraodho | pi-lraodho | m-o-lraodho | po-lraodho |
| lrahalre | 'above' | i-lrahalre | pi-lrahalre | m-o-lrahalre | po-lrahalre |
| aleve | 'below' | i-aleve | pi-aleve | m-o-aleve | po-aleve |

pi-'adhingi

pi-latadhe

pi-vecahae

pi-vila'a

pi-alrikodhae

m-o-'adhingi

m-o-latadhe

m-o-vecahae

m-o-vila'a

m-o-alrikodhae

i-talicovongae pi-talicovongae m-o-talicovongae po-talicovongae

po-'adhingi

po-latadhe

po-vecahae

po-vila'a

po-alrikodhae

Table 7.19: Verbalization of location, orientation and directional nouns

A few other affixes attach to orientation/directional nouns, but their usage is extremely restricted and co-occur with a few bases, cf. aleve 'below', lrahalre 'above', dhalra 'up(wards)' and lraodho 'down(wards)'.

The stative prefix **ma-**, which attaches only to **aleve** 'below', as in:

i-'adhingi

i-latadhe

i-alrikodhae

i-vecahae

i-vila'a

dha'ane-ni. (7.59) *ma-aleve* dhona'i house-3S.Gen Stat.Fin-below that 'His house is below.'

The two roots **aleve** 'below' and **Irahalre** 'above' can be prefixed by:

- maka'an-, cf. maka'an-aleve 'low' and maka'an-ahalre 'high, tall', as in:
- (7.60) **dhipolo** 'a maka'anahalre ka-rilai. la Stat.NFin-slim Dhipolo Top and 'Dhipolo is tall and slim.'
- ma'o- (~pa'o-) 'look', cf. ma'o-aleve 'look down' and ma'o-lrahalre 'look up'. For instance:
- (7.61) ma'o-aleve-lrao m-iki 'a-paatali-po'a-le Dyn.Fin:look-down-1S.Nom Dyn.Subj:be at Nth-Dyn.NFin:floor-two-floor dha'ane cengele ana ocao la sangepare. house Dyn.Subj:see that person and car 'I look down at persons and cars (from) the second floor of my house.'

- mota'a- (~ota'a-) 'get, raise, pull', cf. mota'a-aleve 'get down, fall down, drop'. There is a case of suppletion for the word dhalra 'upwards', cf. mota'a-mao 'get up, raise up' (instead of the expected form ** mota'a-dhalra; -mao is not found in any other construction):

(7.62) a. **o-coroko-lrao** *mota'-aleve*. Dyn.Fin-jump-1S.Nom 'I jumped down.' Dyn.Subj:get-down

b. *mota'a-mao-*lrao ta-sola-solat-ae-li.

Dyn.Fin:get-above-1S.Nom 'My education is (very) high.' LocNmz-Red-Dyn.NFin:study-LocNmz-1S.Gen

- (o-)ta'i- 'precede', cf. . o-ta'i-aleve 'be a little more below' and o-ta'i-lrahalre 'be a little more above':

(7.63) o-ta'ilrahalre-lra-imia'e.

Dyn.Fin-be a little more above-1S.Nom-2S.Obl 'I am a little above you.'

The two roots **dhalra** 'up(wards)' and **lraodho** 'down(wards)' can be prefixed by **ma'oa-** (~**pa'oa-**) 'sloping', as in: **ma'oa-dhalra** 'sloping (from the standpoint of someone being down)' and **ma'oa-lrodho** 'sloping (from the standpoint of someone being up)', e.g.:

- (7.64) a. **dhona'i calrai 'a** *ma'oalrodho***.** that roof Top Dyn.Fin:sloping 'That roof is/was sloping.'
 - b. *ma'oadhalra* 'ina'i valrevalre'ae.

 Dyn.Fin:sloping this road
 'That road is sloping.'

7.2.1.2 Verbalization of place names

Ethnonyms are usually derived from place names and are used for language names. They are listed in a tabular form in table 7.19. Place names/ethnonyms can be verbalized through the affixation of **tali-** 'belong to' (7.65) and **'ako-...(-ae)** 'speak' (7.66):

(7.65) om-i'a-ka-i-imite

vaha-ni

Dyn.Fin-look like-Neg-3S.Gen-1PI.Obl

language-3S.Gen

tali-lrao-lraodho.

belong to-Red-down(wards)

'The language spoken by the people from Pingtung county is different from ours.'

(7.66) o-lriho'o-lrao

'ako-'oponoh-ae

vaha.

Dyn.Fin-know-1S.Nom speak-Mantauran-speak language

'I know how to speak Mantauran'.

Table 7.20: Language names and ethnonyms

| Base | Gloss | tali-+N 'from' | Gloss | 'ako-+ N 'speak' | Gloss |
|-----------------|-------------------------|----------------------|-----------------------------|----------------------|------------------------------|
| 'oponoho | Mantauran, Wanshan | tali-'oponoho | people from Wanshan | 'ako-'oponoh-ae | speak Mantauran |
| tongodhae | Tona | tali-tongodhae | people from Tona | 'ako-tongodhae | speak Tona |
| toladhekae | Maga, Maolin | tali-toladhekae | people from Maolin | 'ako-toladhekae | speak Maga |
| tailavoe | Labuan | tali-tailavoe | people from Labuan | 'ako-tailavoe | speak Labuan |
| drekai | Rukai (Wutai county) | tali-drekai | Rukai people | 'ako-drekai | speak Rukai |
| soa'odhai | Budai, Wutai | tali-soa'odhai | people from Wutai | 'ako-soa'odhai | speak Budai |
| songao | Bunun | tali-songao | Bunun people | 'ako-songasongao | speak Bunun |
| sa'imae | Saaroa | tali-sa'imae | Saaroa people | 'ako-sa'isa'imae | speak Saaroa |
| takanoa | Kanakanavu | tali-takanoa | Kanakanavu people | 'ako-takanoa | speak Kanakanavu |
| tapange | Tsou | tali-tapange | people from Tapang | 'ako-tapange | speak Tsou |
| talilraolraodho | Paiwan | tali-talilraolraodho | people from Pingtung county | 'ako-talilraolraodho | speak Paiwan |
| 'aomo | Japanese | tali-'aomo | people from Japan | 'ako-'ao'aomo | speak Japanese |
| ciokoko | Chinese | tali-ciokoko | people from China | 'ako-ciookoko | speak Chinese |
| 'amelrika, | US | tali-'amelrika | White people (US, | 'ako-'amelrikalrika | speak English |
| tadhiliange | (EU included) | tali-tadhiliange | EU) | 'ako-tadhiliange | |
| taecelrange | black | tali-taecelrange | Black people | 'ako-taecelrange | speak an African language |

7.2.2 Verbalization of temporal nouns

'ali- 'from' is a prefix derived from the verb 'aliki '(come) from' which can attach to orientation/directional nouns, e.g. 'ali-lraodho 'from down(wards)', 'ali-aleve 'from below', 'ali-lrahalre 'from above' as well as temporal nouns, as in 'ali-'aamadhalae 'from the beginning', pa-'ali-lroolai 'since childhood':

(7.67) a. akaodho ta'avangae dha'ane la paia

not exist window house and Dyn.NFin:go through

'ali-Irahalre m-olrehe'e dhona from-above Dyn.Subj-enter through a breach that ta-ka-dhongoso.

SubjNmz-Stat.NFin-pilfer

'This house has no window, so the burglar broke into it by going in from above.'

b. **pa-**'ali-lroolai-lrao **piki** '**oponoho.**Caus-from-child-1S.Nom Dyn.Subj:put at Wanshan
'I have been living in Wanshan since childhood.'

ma'akala- (pa'akala-) 'until' attaches to temporal nouns such as: ma'akala-ongo 'until (late at) night', ma'akala-'aane 'until noon'. For instance:

(7.68) a. ma'akala-ongo-lrao solate.

Dyn.Fin:until-night-1S.Nom Dyn.Subj:study

'I study/studied until (late at) night.'

b. ma'akala-'aane-lrao 'apece.

Dyn.Fin:until-noon-1S.Nom Dyn.Subj:sleep

'I slept until noon.'

7.2.3 Verbalization of nouns referring to human beings

Nouns referring to human beings can be categorized as (i) common or (ii) non-common nouns and are verbalized through different affixes.

7.2.3.1 Verbalization of human common nouns

Human common nouns are most commonly prefixed by the stative marker **ma**-(~**ka**-) when referring to a property or a quality of the subject as in **ma-tamatama** 'be a middle-aged man, a father (generic sense)':

(7.69) *ma-valrovalro*-nga lalake-li 'avai.
Stat.Fin-young woman-already child-1S.Gen female 'My daughter is already a young woman.'

Less productive (and more specialized) affixes include:

- 'ini-...(-ae) 'behave like, look like' (from the verb 'inilrao 'resemble'), e.g. 'ini-tamatama 'behave like a father', 'ini-savare ~ 'ini-savarae 'behave like a

young man', 'ini-valrovalro-(e) 'behave like a young woman', 'ini-lroolalr-ae 'behave like a child', as in (7.70):

- (7.70) *'ini-titina*, **ma-rodhange** 'iidheme-ni. behave like-middle-aged woman Stat.Fin-old heart-3S.Gen 'She behaves like a mother; she has the heart of an old person.'
- (o-)...-e 'dress well', as in: o-sava-savar-ae 'dress well (as of a young man)' and o-valrovalro-e 'dress well (as of a young woman)' as in (7.71):
- (7.71) om-oa-lrao cengel-ine asavasavare-li mani
 Dyn.Fin-go-1S.Nom Dyn.Subj:see-3S.Obl boyfriend-1S.Gen then
 valrovalroe-lrao.
 Dyn.NFin:dress well-1S.Nom

'I am going to see my boyfriend so I dress well.'

- 'i- 'look after, take care of' as in: 'i-lalake 'look after a child', 'i-olrolai 'bear a child, give birth, take care of a baby'. For instance:
- (7.72) **aanga-i ta-(a)mo-**'*i-lalake* 'ina'i? who-3S.Gen SubjNmz-Irr-look after-child this 'Who will take care of this child?'

7.2.3.2 Verbalization of human non-common nouns

Non-common nouns include (i) kinship terms, (ii) personal names and (iii) household names.

Kinship terms can be prefixed by:

- the reciprocal marker ma'a- (~pa'a-) (cf. §5.6):
- (7.73) *ma'a-tama*-na-ine taotao.

 Rec:Dyn.Fin-father-1PE.Nom-3S.Obl Taotao

 'Taotao and I are father and child.'
 - 'i- 'have for, recognize as', e.g. 'i-ama 'have for a father/recognize as a father':
- (7.74) "'i-inae-lra-ine tainengehao,
 have for-own mother-1S.Nom-3S.Obl Tainengehao
 'i-amae-lra-ine peelrengae" ia omi.
 have for-own father-1S.Nom-3S.Obl Peelrengae Dyn.NFin:so like that
 "Tainengehao is my mother and Peelrengae is my father" (she) said."

- paori 'stick to, think about' (derived from paoriki 'stick to, think about'—the root needs to be reduplicated), as in: paori-ama-ama 'stick to (one's) father', paori-ina-ina 'stick to (one's) mother' < ina- 'mother':
- (7.75) ma-Iroolai-na 'ina lalake-'o 'atoloro paori-ina-ina.
 Stat.Fin-child-still this child-2S.Gen so stick to-Red-mother
 'Your child is still small so he clings to (his) mother.'

Personal names can be prefixed by **tali-** 'belong' to refer to a group of persons sharing the same name, e.g. **tali-dhipolo** (group of girls being called Dhipolo).

Household names can be prefixed by $(\mathbf{m}-)\mathbf{o}-$ 'hold X's ritual (where X= household name)'. For instance:

(7.76) **pa-caili-nai m-o-la-pangolai m-ore-lehe'e**every-year-1PE.Nom Dyn.Subj-hold-plur-Pangolai Dyn.Subj-hold-ritual **valrio-nai.**village-1PE.Gen
'Every year, we would hold the Lapangolai household rituals in our village.'

7.2.4 Verbalization of common nouns referring to body parts

Common nouns referring to body parts can be verbalized through the prefixation of:

- mata'oo- (~pata'oo-) 'wash (a body part)', e.g. mata'oo-maca 'wash one's face' (< maca 'eye'). mata'oo-lrima 'wash one's hand' (< alrima 'hand') and mata'oo-dhapale 'wash one's foot, leg' (< dhapale 'foot'), as in (7.77):
- (7.77) mata'oo-maca-Irao lo 'anolake'e lo
 Dyn.Fin:wash-eye-1S.Nom if early morning if
 mamalrele-ni.
 Stat.Subj:Red:daybreak-3S.Gen
 'I wash my face every morning.'
- 'apo- 'come out' as in 'apo-lolo 'dribble, slobber', 'apo-erai 'bleed', 'apo-ovale 'grow (body) hair', 'apo-veke 'have a running nose' (< 'aveke 'sputum'). For instance:
- (7.78) 'apo-era-iae 'ini-dha-dhao. come out-blood-1S.Obl come out-Red-a lot 'I bled a lot.'

Note that 'apo- 'come out, grow' can also attach to common nouns relating to flora

such as 'apo-li'ange 'come out/grow leaves', 'apo-nga'ato 'grow (a lot of) brushwood', as shown in (7.79):

(7.79) **amo-vengelrai-nga, ta'okamai-nga tovoho 'apo-li'ange**. Irr-Dyn.NFin:warm-already just-already Dyn.Subj:bloom come out-leaf 'It is already warm. The plants are just blooming, the leaves are coming out.'

7.2.5 Verbalization of common nouns referring to nature

Terms for flora such as **pahai** 'rice', **vecenge** 'millet', '**angato** 'wood, tree, brushwood' can be verbalized through the prefixation of 'i- 'get, harvest, gather' as in:

(7.80) **om-oa** *'i-angato-ngato* **dhona tomotomo.**Dyn.Fin-go gather-brushwood-Red that old (wo)man 'That old woman had gone to gather brushwood.'

'i- also attaches to common nouns referring to insects and means 'infested with', e.g.:

(7.81) *'i-avongo'o* ana kamosia. be infested with-ant that sweet 'There are ants on that/those candy/candies.'

Nouns relating to nature are most commonly prefixed by **o-**, e.g. **o-koli'i** 'come out (sun), sunny', **o-dhamare** 'come out (moon)' **o-dha'olo** 'rain', **o-dhedhere** 'thunder', **o-ve'eve'e** 'be windy', **o-alrehele** '(there are) flies', **o-avongo'o** '(there are) ants', **o-atavange** '(there are) cockroaches'.

(7.82) *o-koli'i*-ka-i?
Dyn.Fin-sun-Neg-3S.Gen
'Is it sunny?'

mo- (~**o-**) attaches to common nouns such as **dhamare** 'moon', **enai** 'sand', **timo** 'salt', **pelenge** 'god/ghost' and forms anticausative verbs, i.e. verbs that denote an involuntary event, *cf.* **mo-dhamare** 'have one's menses', **mo-enai** 'be covered with sand', **mo-timo** 'be covered with salt', **mo-pelenge** 'be possessed', (*cf.* §8.2). For instance:

(7.83) a. *mo-dhamare-*lrao.
Anticaus-moon-1S.Nom
'I have my menses.'

b. *mo-enai* ooma-li.
Anticaus-sand field-1S.Gen
'My field is covered with sand.'

7.2.6 Other verbalizing affixes

Other affixes attach to various types of nouns. They include:

- 'aa- become N' as in 'aa-comai 'become a bear', 'aa-ove'eke 'become a pig' from ove'eke 'pig', 'aa-ocao 'become a person', 'aa-savare 'become a young man', e.g.:
- (7.84) 'api-'aa-comai-ka-li?

like to-become-bear-Neg-1S.Gen 'Would I like to become a bear?'

- 'ano- 'walk, ride, take' as in 'ano-holrolo 'cross a mountain', 'ano-sangepare 'ride a car/take a car', ano-rihi 'ride a horse', 'ano-hikoki 'take a plane'. For instance:
- (7.85) **o-dholro-lrao** *'ano-rihi.*Dyn.Fin-can-1S.Nom ride-horse
 'I know how to ride a horse.'
- 'ira- 'for, out of' (derived from 'iraki '(do) for') attaches to nominal stems such as 'ira-ca'emae 'out of illness':
- (7.86) 'ira-ca'em-ae ana mani dholro-ka-i ka 'adhidhapae. for-ill-StatNmz that then Dyn.NFin:can-Neg-3S.Gen Neg work 'He cannot work because of his illness.'
- 'a-...-e 'a lot', cf. 'a-paisoiso-e ~ 'a-paisiiso-e 'have a lot of money, be rich', 'a-cakel-ae 'marry' (< cakele 'partner with whom one has a sexual relationship'), 'a-dhidhap-ae '(to) work'. For instance:
- (7.87) **ma'a-ka-lere-lrao** 'adhidhapae. until-Stat.NFin-dawn-1S.Nom work 'I work(ed) until daybreak.'
 - 'i- 'put on, wear' as in 'i-kipingi 'wear clothes', 'i-navini 'wear a traditional skirt':
- (7.88) a'iviiviai 'a 'i-kipingi 'i navini la 'imai.
 plur:Red:female Top wear-clothes dress and skirt
 'As for little girls, they (would) wear dresses and skirts.'

- 'o- 'take off', e.g. 'o-loka 'trim one's nails', 'o-kipingi 'take off one's clothes'.
- (7.89) **'osangedha'a loka-li mani 'o-loka-lrao.**long nail-1S.Gen then trim-nail-1S.Nom
 'My nails are long, so I trim(med) them.'

(would) build a cooking stove (with stones).'

- to- 'make, produce, build', e.g. to-alake 'give birth', to-dha'ane 'build a house', to-poi 'make a fire' (< apoi 'fire'):
- (7.90) dhona lo maka-to-ta'onae-nga-mao o-po-idhe
 that if Dyn.Subj:finish-build-hut-already-Impers.Gen Dyn.Fin-make-3S.Obl
 to-ta-iki-ki-e 'apece..., mani
 build-LocNmz-Red-Dyn.NFin:be at-LocNmz Dyn.Subj:sleep then
 poa-mao to-ta-palong-ae.
 Dyn.NFin:make-Impers.Nom build-LocNmz-cooking pot-LocNmz
 'When we had finished the construction of the hut, we (would) make a bed ... and we

Chapter 8: Valence Adjusting Operations

This chapter deals with valence adjusting operations, including: (i) causativization (cf. §8.1), (ii) anticausativization (cf. §8.2), (iii) reflexivity (cf. §8.3) and (iv) reciprocity (cf. §8.4).

8.1 Causativization

Causativization represents a valency-increasing voice operation, which adds one argument to the verb. **apaa-** 'reciprocal causative' is the causative counterpart of **maa-** 'reciprocal'. Both prefixes attach to dynamic verbs, e.g. **dhe'enge** 'meet'. But while **maa-dhe'enge** 'meet each other' is an intransitive verb, **apaa-dhe'enge** 'let meet each other' cannot occur if there is no causation. Causation is marked through the occurrence of an extra argument, the causer of the action. Compare the grammaticality of (8.1a-c):

| (8.1) | a. | maa-dhe'enge Rec:Dyn.Fin-Dyn.NFin:meet 'Dhipolo and Taoto met.' | dhipolo Dhipolo | la and | taotao. Taotao | |
|-------|----|---|---------------------------|--|--------------------------|---------------------------------|
| | b. | * apaa-dhe'enge Caus:Rec-Dyn.NFin:meet | dhipolo Dhipolo | la and | taotao. Taotao | |
| | c. | apaa-dhe'enge- <u>lra</u> -iline Caus:Rec-Dyn.NFin:meet-1S.Ne 'I introduced Dhipolo to Taotao | | dhipolo Dhipolo ade Dhipolo a | la and and Taot | taotao. Taotao ao meet.') |

Dixon (2000:78) identifies "five mechanisms for marking a causative—morphological, two verbs in one predicate, periphrastic, lexical and exchanging auxiliaries".

Mantauran exhibits three of these mechanisms, *cf.* morphological, periphrastic and lexical, the first of which is, by far, the most productive. These three processes are outlined in §8.1.1. The remaining sections (*cf.* §§8.1.2-8.1.4) deal more specifically with the prefixes **pa-**, **pi-** and **po-** that form morphological causatives.

8.1.1 An overview of the three mechanisms for marking causatives

On the morphological level, Mantauran displays three causative morphemes, **pa-**, **pi-** and **po-** (*cf.* Blust 2003a for a reconstruction of these three prefixes in PAN), which occur in complementary distribution: **pa-** attaches to verb bases (8.2a, *cf.* §8.1.2); the two prefixes **pi-** and **po-** only attach to certain nouns, the former referring to 'locative causation' (8.2b), the latter to 'movement causation' (8.2c, *cf.* §8.1.3).

(8.2) a. olo pa-'aela-dha dhona'i aidhi to-dha'ane, if Caus-Dyn.NFin:move-3S.Gen that youngest sibling build-house ta'adha'ane, mata-po-ae colo Dyn.Fin:certainly-make-certainly Dyn.Subj:kill pig house warming pa-lriho'o 'n cinekelae 'aela-nga Caus-Dyn.NFin:know villager(s) Dyn.Subj:move-already

pa-picongo [...]

Caus-Dyn.NFin:separate

'If one of the youngest [brother(s)] built his (own) house, he had to kill a pig for the house warming to let the villagers know that he had moved and (started his own family).'

ma-dhao-dha la-a'adhi-dha b. [...] lo if Stat.Subj-many-3S.Gen plur-younger sibling-3S.Gen a-vil-ae-dha m-oa ObjNmz-Dyn.NFin:carry-ObjNmz-3S.Gen Dyn.Subj-go ta-sola-solat-ae pi-valrio. LocNmz-Red-Dyn.NFin:study-LocNmz CausLoc-village 'If (s/he) had a lot of younger siblings, s/he had to take them to school and take care (of them).'

c. dhona 'n ta-ka-lrihili, dhona ta-lriho'o SubjNmz-Stat.NFin-clever that SubjNmz-Dyn.NFin:know Top that pa-dhaac-ilidhe, po-latadh-ilidhe... mani Caus-Dyn.NFin:leave-3P.Obl then CausMvt-outside-3P.Obl 'Those who were clever, those who understood, they would be allowed to leave and go outside...'

Mantauran also exhibits a series of "reciprocal causatives", *cf.* **apaa-** [+dynamic verb] (8.3a) *vs.* **apa'a-** [+stative verb] (8.3b), which are further discussed in §8.1.4:

(8.3) a. *apaa-dhe'enge*-Ira-iline taotao la dhipolo.

Rec:Caus-Dyn.NFin:meet-1S.Nom-3P.Obl Taotao and Dhipolo

'I introduced Taotao to Dhipolo.' (*Lit.*: 'I made Taotao and Dhipolo meet.')

b. *apa'a-ka-sekelre-*Ira-iline dhona'i ta-ka-dho'a
Rec:Caus-Stat.NFin-angry-1S.Nom-3P.Obl that SubjNmz-Stat.NFin-two
a-olrolai.
plur-child

'I made those two children angry at each other.'

The verb **o-poa** 'make, do' occurs in a serial verb construction in initial or in embedded position. When it occurs in initial position, as in (8.4), it might be followed by a verb marked as causative and thus exhibits the characteristics of a periphrastic causative 'make...do something'. Its causative function is becoming opaque, though, because of the grammaticalization of **o-poa** as a supporting verb (*cf.* §4.3.4).

(8.4) a. "ita poa pa-ka-a'a la-a-lake-ta" mani
1PI.Top Dyn.NFin:make Caus-Stat.NFin-court child-plur-child-1PI.Gen then
ia dhona ka'olo titina.

Dyn.NFin:so that commoner middle-aged woman
"'Let our children flirt" said the mother who was a commoner.'

b. *o-poa*-lra-iline *apaa-dhe'enge* **dhipolo la**Dyn.Fin-make-1S.Nom-3S.Obl Rec:Caus-Dyn.NFin:meet Dhipolo and taotao.

Taotao

'I introduced Dhipolo to Taotao.' (Lit.: 'I made Dhipolo and Taotao meet.')

On the lexical level, the following pairs were identified:

(8.5) Stative/Intransitive Dynamic/Transitive/Causative
Finite Non-finite Finite Non-finite
ma-'ete ka-'ete 'die' mate'ete pate'ete 'kill'

The major contrast between these two pairs lies in the notion of stativity/dynamicity—and not so much one of transitivity—as reflected in their non-finite forms.

(8.6) a. toramoro ka ma-kocingai ca'em-ae-li,
very Lig Stat.Subj-serious ill-StatNmz-1S.Gen
la (a)mo-ka-'ete-lrao.
and Irr-Stat.NFin-die-1S.Nom
'My disease is very serious and I am going to die.'

b. "kani ki-'ivaha-n-imite pa-'acakelae lina-ta mani Neg-agree-3S.Gen-1PI.Obl why Caus-marry parents-1PI.Gen then pa'a-ka-dhalame-mita, amo-pate'ete-lra-imia'e" Rec:Stat.NFin-Stat.NFin-like/love-1PI.Nom Irr-Dyn.NFin:kill-1S.Nom-2S.Obl mani ia dhona 'aolai. then Dyn.NFin:so that male "Why don't our parents agree to let us marry. We love each other. I am going to kill you" said the man.'

Table 8.1 summarizes the three mechanisms for causativization in a tabular form.

Table 8.1: Causative mechanisms in Mantauran Rukai

| | Morphological | | | | Periphrastic |] | Lexical | |
|---------|---------------|----------|------------|-------------|------------------|--------|-----------|----|
| general | locative | movement | reciprocal | | | | | |
| pa- | pi- | po- | apaa- | apa'a- | o-poa 'make, do' | ma'ete | ~ pate'et | te |
| +V | +N | +N | $+V_{Dyn}$ | $+V_{Stat}$ | | 'die' | 'kill' | |

8.1.2 The causative pa-

The causative **pa-** attaches to any type of verbs, i.e. dynamic (8.7)-(8.8), stative (8.9)-(8.10) and denominal (8.11-8.12) verbs.

(8.7) Causative dynamic verbs

| a. | o-alroho | 'lift' | pa-alroho | 'makelift' |
|----|------------|-------------------|-------------|-----------------------|
| b. | o-langai | 'buy' | pa-langai | 'makebuy' |
| c. | o-piki | 'put' | pa-piki | 'makeput' |
| d. | o-vilivili | 'pull' | pa-vilivili | 'makepull' |
| e. | 0-'0'0 | 'wash hair' | pa-'o'o | 'makewash hair' |
| f. | om-alra | 'take' | pa-alra | 'maketake' |
| g. | om-oa | 'go' | pa-oa | 'makego' |
| h. | om-iki | 'exist, be at' | pa-iki | 'makebe at' |
| i. | maava'i | 'come' | pa-kaava'i | 'makecome' |
| j. | maavanao | 'bathe' | pa-paavanao | 'makebathe' |
| k. | molekate | 'enough' | pa-olekate | 'makeenough' |
| 1. | Ø-omikace | 'open one's eyes' | pa-omikace | 'makeopen one's eyes' |

(8.8) a. maavanao-na-ka-i mani pa-paavanao-lra-ine.

Dyn.Fin:bathe-still-Neg-3S.Gen then Caus-Dyn.NFin:bathe-1S.Nom-3S.Obl 'S/he has not bathed yet (so) I make him/her take a bath.'

| b. | "nai- <i>oa</i> | | m-o-latadhe" | | mani | ia | a-olrolai |
|----|------------------------------------|----------------|---------------------|-----|---------|-----------------|------------|
| | 1PE.Nom-Dyn.NFin:go | | Dyn.Subj-to-outside | | then | Dyn.NFin:so | plur-child |
| | mani | 'akovilri-lrao | "dhona'i | ta- | ki-kane | ٠, | |
| | then | answer-1S.Nom | that | Su | bjNmz-l | Neg-Dyn.NFin:e | at |
| | pa-oa-k | a-l-iline | | ka | p | o-latadhe | |
| | Caus-Dyn.NFin:go-Neg-1S.Gen-3P.Obl | | | | g C | CausMvt-outside | |
| | pa-'olili | o." | | | | | |

Caus-Dyn.NFin:play

"We want to go outside" said the children but I replied that "as to those who do not eat, I won't let them go out and play."

(8.9) Causative stative verbs

| a. | ma-rilai | 'slim' | pa-ka-rilai | 'makeslim' |
|----|---------------|-------------------------------|------------------|----------------------------|
| b. | ma-ca'eme | 'ill' | pa-ka-ca'eme | 'makeill' |
| c. | madhao | 'a lot' | pa-ka-dhao | 'makemany' |
| d. | ma-eceme | 'wither, dried up' | pa-ka-eceme | 'makedried up' |
| e. | ma-dhalame | 'like, love' | pa-ka-dhalame | 'makelike/love' |
| f. | ma-esenge | 'wet, soaked' | pa-ka-esenge | 'makewet, soaked' |
| g. | ma-heteke | 'broken (thread, cord, rope)' | pa-ka-heteke | 'makebroken' |
| h. | ma-akalrame | 'thirsty' | pa-ka-akalrame | 'makethirsty' |
| i. | ma-kecelre | 'cold' | pa-ka-kecelre | 'makecold' |
| j. | ma-kocingai | 'difficult, expensive' | pa-ka-kocingai | 'makedifficult, expensive' |
| k. | ma-kodholro | 'very dirty' | pa-ka-kodholro | 'makedirty' |
| 1. | ma-lrakase | '(be) lazy, dislike' | pa-ka-lrakase | 'makedislike' |
| m. | ma-pacai | 'dry' | pa-ka-pacai | 'makedry' |
| n. | ma-raveravere | 'happy' | pa-ka-raveravere | 'makehappy' |
| 0. | ma-rimoro | 'forget' | pa-ka-rimoro | 'makeforget' |
| p. | ma-'amadhe | 'dislike, hate' | pa-ka-'amadhe | 'makedislike, hate' |
| q. | ma-poli | 'white' | pa-ka-poli | 'makewhite, whiten' |
| r. | ma-ecelrange | 'black' | pa-ka-ecelrange | 'makeblack, blacken' |
| S. | 'o-sangedha'a | 'long' | pa-'o-sangedha'a | 'makelong' |

(8.10) a. "la a-valrovalro la a-sava-savare ma-taadhi'i plur-young woman and plur-Red-young man Stat.Fin-good ta-ka-ecelrange ali'i" mani dhona'i SubjNmz-Stat.NFin-black that tooth then Dyn.NFin:so a-itina tomolroro mani poa plur-middle-aged woman Dyn.NFin:make Dyn.Subj:chew then pa-ka-ecelrange.

Caus-Stat.NFin-black

"Young women and young men with black teeth are beautiful" (would) say middle-aged women and they (would) chew to blacken their teeth.'

| b. <i>ma-pacai</i> -na-ka-i | dhona'i | 'ali | mani |
|--------------------------------|---------|---------------|------|
| Stat.Fin-dry-still-Neg-3S.Gen | that | shell ginger | then |
| topa'ai-lrao | pa-ka | -pacai. | |
| Dyn.NFin:dry in the sun-1S.Nom | Caus- | Stat.NFin-dry | |

'That shell ginger is not dry yet, so I am going to make it dry by drying it in the sun.'

(8.11) Causative denominal verbs

| a. | 'apo-erai | 'bleed' | pa-'apo-erai | 'makebleed' |
|----|----------------|--------------------|-------------------|--------------------|
| b. | 'ano-sangepare | 'take a car' | pa-'ano-sangepare | 'maketake a car' |
| c. | 'i-pahai | 'harvest rice' | pa-'i-pahai | 'makeharvest rice' |
| d. | 'i-kipingi | 'wear clothes' | pa-'i-kipingi | 'makedress' |
| e. | 'o-loka | 'trim one's nails' | pa-'o-loka | 'maketrim nails' |

| f. | 'a-cakel-ae | 'marry' | pa-'a-cakel-ae | 'makemarry' |
|----|---------------|--------------------|------------------|------------------------|
| g. | to-dha'ane | 'build a house' | pa-to-dha'ane | 'makebuild a house' |
| h. | o-dha'olo | 'rain' | pa-dha'olo | 'makerain' |
| i. | ma-valrovalro | 'be a young woman' | na-ka-valrovalro | 'makebe a young woman' |

(8.12) a. nao-'acakela-ine taotao.

1S.Nom-marry-3S.Obl Taotao

'I want to marry Taotao.'

b. "lo dholro-'-iae pa-'acakelae la-a-lake-'o

if Dyn.Subj:can-2S.Gen-1S.Obl Caus-marry child-plur-child-2S.Gen

'a amo-ka-ka-'ete-ka-'o..."

Top Irr-Neg-Stat.NFin-die-Neg-2S.Gen...

Causative verbs occurring in a series as in (8.13) are rare but obligatory in verbs that follow manipulative verbs, as in (8.14), (*cf.* §15.1.4 and §15.2.2.4).

(8.13) *pa-ka-taadhi'i*-lra-ine

pa-'i-molramolrae.

Caus-Stat.NFin-good-1S.Nom-3S.Obl Caus-wear-traditional clothes 'I made him/her dress beautifully in traditional clothes.'

(8.14) pa-'adhi'adhil-ine aamae

iinae

Caus-Dyn.NFin:endure-3S.Obl own father own mother

*pa-(pa-)kelrakelrange*⁵⁸ **a-olrolai.** Caus-(Caus-)Dyn.NFin:beat plur-child

'My father forced my mother to beat the children.'

8.1.3 The causatives *pi*- and *po*-

The causative prefixes **pi-** and **po-**— which are the respective counterparts of **i-** 'be at' and **m-o-** 'go to, toward'—attach to orientation/directional and locative nouns as shown in (8.15) and (8.16):

(8.15) Causative **pi-** verbs

a. i-valrio 'be in the village, rest'
b. i-aleve 'be below'
c. i-lraodho 'be down'
d. i-latadhe 'be outside'
pi-valrio 'make...be in the village, rest' 'make...be below'
pi-latodho 'make...be down'
make...be outside'
make...be outside'

[&]quot;If you let me marry one of your children, you will not die..."

o-kelrakelrange 'beat' is regarded as an equivalent of pa-kelrakelrange 'beat/make...beat', hence the use of a double causative on this verb.

(8.16) Causative **po-** verbs

```
'return, go back home'
                                                          'bring back to the village'
a. m-o-valrio
                                            po-valrio
                  'go below'
                                                          'bring down'
b. m-o-aleve
                                            po-aleve
                  'go down'
                                                         'bring down'
c. m-o-lraodho
                                            po-lraodho
d. m-o-latadhe
                  'go outside'
                                            po-latadhe
                                                          'put outside'
```

Examples (8.17) and (8.18) illustrate the contrast between **i-** and **pi-** on the one hand, **m-o-** and **po-** on the other.

- (8.17) a. **ma-ca'eme ana lroolai mani i-valrio.**Stat.Fin-ill that child then at-village 'That child is ill and he stayed at home.'
 - b. **ma-ca'eme ana lroolai mani pi-valrio-lra-ine.**Stat.Fin-ill that child then at-village-1S.Nom-3S.Obl
 'That child is ill and I made him stay at home.'
- (8.18) a. *m-o-*dha'ane-lrao.

Dyn.Fin-to-house-1S.Nom

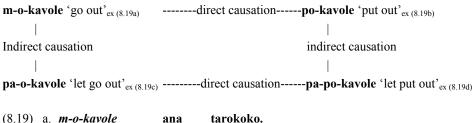
'I entered the house.'

b. *po*-dha'ane-lrao ove'eke. CausMvt-house-1S.Nom pig

'I made the pig enter the house.'/'I brought the pig into the house.'

Dixon (2000:60) reports, based on Nedjalkov, Otaina & Xolodovic (1995:67), that in Nivkh, a causative can form in either two ways, through direct or indirect causation. He reproduces the schema given in Nedjalkov et al. (ibid) in a symmetrical array. Such a schematic representation can also account for certain Mantauran verbs such as **m-o-kavole** 'go out' as shown in (8.19).

Figure 8.1: Direct and indirect causation in Mantauran, after Dixon (2000:60)



(8.19) a. **m-o-kavole** ana tarokoko
Dyn.Fin-to-out that chicken
'That/those chicken come/came out.'

- b. *po-kavole-*lrao ana tarokoko.
 CausMvt-out-1S.Nom that chicken
 'I put the chicken out.'
- c. *pa-o-kavole-*lrao ana tarokoko.
 Caus-Dyn.NFin:to-out-1S.Nom that chicken
 'I let the chicken go out.'
- d. *pa-po-kavole-*Ira-ine taotao ana tarokoko.

 Caus-CausMvt-out-1S.Nom-3S.Obl Taotao that chicken

 'I let Taotao put the chicken out.'

Figure 8.1 shows that two causative prefixes can co-occur together. Indeed, **pa**-can occur twice in the same stem, as in (8.20a); it can also co-occur with **pi**- (8.20b) and **po**- (8.20c). There is no restriction, whatsoever, on the double occurrence of the **pa**-causative. There are, on the other hand, permissible and impermissible instances of **pa**-with **pi**- and **po**-. Example (8.20) lists out a distributional paradigm that illustrates such restrictions.

(8.20) Permissible/nonpermissible double causatives

```
    a. pa-pa-
pa-kane 'make/let...eat, feed' pa-pa-kane 'let feed'
pa-kelrakelrange 'beat/make/let...beat' pa-pa-kelrakelrange 'let...(let) beat'
```

pi-valrio 'make...be in the village, rest' pa-pi-valrio 'let...make rest'
pi-aleve 'make...be below' *pa-pi-aleve
pi-lraodho 'make...be down' *pa-pi-lraodho
pi-latadhe 'make...be outside' *pa-pi-latadhe

c. pa-popo-valrio 'bring back to the village'

'bring down'

b. pa-pi-

po-aleve

pa-po-valrio 'let...bring back to the village'

* pa-po-aleve

po-lraodho 'bring down' pa-po-lraodho 'let...bring down' po-latadhe 'put outside' pa-po-latadhe 'let...put outside'

8.1.4 The reciprocal causatives apaa-/apa'a- and related forms

There are two reciprocal causative prefixes **apaa-** and **apa'a-** that occur in complementary distribution.

apaa- is the causative counterpart of **maa-** (\sim **paa-**) (*cf.* §8.4.2) and attaches to dynamic verbs, as shown in (8.21)-(8.22):

(8.21) Dynamic/Finite Reciprocal Reciprocal/Causative
a. o-ke'ete 'cut' maa-ke'ete 'split (e.g. family)' apaa-ke'ete 'cut in half'
b. 'oilri 'return' maa-'oilri 'return together' apaa-'oilri 'reconcile'
c. o-poa 'make' maa-poa 'make love' apaa-poa 'put together'
d. o-dhe'enge 'welcome' maa-dhe'enge 'meet' apaa-dhe'enge 'introduce'

(8.22) *apaa-poa*-lra-iline *apaa-'oilri* **dhipolo la taotao.**Caus:Rec-Dyn.NFin:make-1S.Nom-3P.Obl Caus:Rec-return Dhipolo and Taotao 'I made Dhipolo and Taotao reconcile.'

apa'a- is the causative counterpart of ma'a- (~pa'a-) and is usually prefixed to stative verbs as in (8.23-24) and to verbs of sharing that are marked as stative reciprocal such as: ma'avi ~ pa'avi 'share, distribute' vs. apa'avi 'make...share, distribute' as in (8.25)-(8.26).

(8.23) Stative/Finite Reciprocal Reciprocal/Causative
a. ma-dhalame 'like, love' ma'a-ka-dhalame 'like, love each other'
b. ma-sekelre 'angry' ma'a-ka-sekelre 'be angry at each other'
c. ma-'amadhe 'dislike' ma'a-ka-'amadhe 'dislike each other'
d. ma-takolra 'be bad' ma'a-ka-takolra 'be on bad terms'
apa'a-ka-takolra

(8.24) *apa'a-ka-dhalame*-lra-ine
Caus:Rec-Stat.NFin-like/love-1S.Nom-3S.Obl that plur-Rec-spouse
'I made that husband and wife love each other.'

(8.25) Reciprocal Reciprocal/Causative

ma'avi 'share, distribute' apa'avi

ma'akaiki 'share' apa'akaiki

ma'a-posoalopo 'give a tribute to each other' apa'a-posoalopo⁵⁹

(8.26) a. **ita pa'akaiki dhona taleke!**1PI.Top Rec:share that food
'Let's share that food!'

b. apa'a-kaiki-lra-ine pa'a-taka-lini taleke.
Caus:Rec-share-1S.Nom-3S.Obl Stat.NFin:Rec-elder sibling-3S.Gen food
'I made the siblings share the food.'

The prefix **apa'a-** can also attach to bound numerals, *cf.* **ma'a-dho-dho'a** 'two for each' ~ **apa'a-dho-dho'a** 'let/make...two for each', **ma'a-to-tolro** 'three for each' ~ **apa'a-to-tolro** 'let/make...three for each' (*cf.* §9.2.1). For instance:

9 But cf. *apa'a-pa-'ongolo < ma'a-pa-'ongolo 'invite each other to drink'.

- (8.27) a. *ma'a-to-tolro*-nai ma'avi votolo.

 Rec:Dyn.Fin-Red-three-1PE.Nom Dyn.Subj:share pork

 'We shared the pork among us, three (pieces) for each.'
 - b. *apa'a-to-tolro*-lra-iline ma'avi votolo.

 Rec:Caus-Red-three-1S.Nom-3P.Obl Dyn.Subj:share pork
 'I shared the pork and gave them three (pieces) each.'

A related form is **apa'ohi-** 'split (causative)', which attaches to bound numerals, is discussed briefly in §9.2.1. It refers to the division of one referent, the fraction being expressed through the numeral, e.g. **apa'ohi-dho'a** 'let/make...split in two'.

(8.28) apa'ohi-dho'a-Ira-ine ana coloko.

Caus:split-two-1S.Nom-3S.Obl that glutinous cake 'I made him/her share the glutinous cake in halves.'

8.2 Anticausativization

This section deals very briefly with the anticausative construction, whereby "a verb form [denotes] an involuntary dynamic event, i.e. an event which lacks a volitional agent" (Ross 2004a:1). Puyuma has been reported as a language exhibiting an anticausative construction, with the occurrence of the prefix **mu-** on a verb that downgrades the syntactic function of the agent to a peripheral argument position. In a typical transitive sentence such as (8.29a), the agent is marked as genitive; it represents a core argument. In an anticausative clause such as (8.29b), it is marked as oblique. For the sake of convenience, the glosses used in these two examples follow those used throughout this monograph.

- (8.29) Puyuma (Ross 2004a:2, Teng 2007)
 - a. First transitive

ku=alradr-aw na aputr i, *tu=dupa'-aw* **dra gung.** Gen:1S-surround=PF Nom:Def flower Top Gen:3S=step-PF Obl:Indef ox 'Although I fenced in the flowers, they were still stepped on by an ox.'

b. Anticausative

ku=s<in>alremna

aputr

i, mu-dupa' dra

gung.

Nom:Poss:1S=<Perf>plant

Nom:Def flower Top Anticaus-step Obl:Indef ox

'The flowers I planted were stepped on by an ox.'

Teng (2007) accounts for the distinctions between the movement prefix **m-u-** 'to(ward)' and the anticausative prefix **mu-** as follows:

(i) the movement prefix **m-u-** attaches to nouns referring to space and to deictic

- expressions to form denominal verbs; the anticausative **mu-** attaches to verbal roots (e.g. **ba'itr** 'burn', **puwar** 'escape', **dupa'** 'step, trample', **bu'utr** 'stop')
- (ii) denominal verbs (marked by **m-u-**) are verbs of motion; anticausative verbs (marked by **mu-**) imply a "passive" meaning
- (iii) verbs of motion (marked by **m-u-**) subcategorize for an agentive subject while anticausative verbs (marked by **mu-**) subcategorize for a patient subject

Mantauran exhibits also a construction that can be equated with the aforementioned 'anticausative' construction which downgrades the syntactic function of the agent, i.e., the subject is a patient and there is no agent. Compare (8.30a)-(8.30b):

| (8.30) a. | O-dhaolo-nga- <i>lrao</i> Dyn.Fin-mix-already-1S.Nom 'I mixed black and white together.' | ta-poli Inal-white | la and | ta-ecelrange. Inal-black | |
|-----------|--|------------------------------|------------------|------------------------------------|--|
| b. | mo-dhaolo-nga-∅ Anticaus-Dyn.NFin:mix-already-∅ 'White and black mixed together.' | ta-poli Inal-white | la and | ta-ecelrange. Inal-black | |

cf. b'. *mo-dhaolo-nga-*lrao* ta-poli la ta-ecelrange.

Anticaus-Dyn.NFin:mix-already-1S.Nom Inal-white and Inal-black

The verb is marked by **mo-** and the subject (the patient) is usually marked as nominative. For instance:

(8.31) a. o-dhamare.

Dyn.Fin-moon 'The moon is (coming) out.'

b. *mo-*dhamare-*lrao*. 60

Anticaus-moon-1S.Nom

'I have my menses.'

(8.32) a. 'a-pele-peleng-ae ana. a lot-Red-god-a lot that

'S/he is a witch.'

b. *mo*-pelenge *ana*.
Anticaus-god that 'S/he is possessed.'

⁶⁰ The following sentence can be treated as synonymous:

(i) 'i-kele-lrao

get-menstruation-1S.Nom

'I have my menses.'

(8.33) a. o-valrisi-lra-imia'e

kipingi.

Dyn.Fin-change-1S.Nom-2S.Obl 'I exchanged clothes with you.'

clothes

b. mo-valrisi-nga

kipingi.

Anticaus-Dyn.NFin:change-already clothes

'The clothes have changed.' (i.e. because of the weather).

(8.34) a. o-dholici(-lrao)

ana

sangepare(-li). that car(-1S.Gen)

Dyn.Fin-dirt(-1S.Nom) '(I) had (my) car stuck in the mud.' (Purposive event)

b. mo-dholici kipingi(-li).

Anticaus-dirt clothes(-1S.Gen)

'My clothes are dirty with mud.'

(8.35) a. ma-dhokace ooma-li.

field-1S.Gen Stat.Fin-dirt

'My field is (all) mud.'

b. mo-dhokace ooma-li.

Anticaus-dirt field-1S.Gen

'My field is covered with mud.'

8.3 Reflexivization

Cross-linguistically, many languages (German, for example) make a distinction between reflexive and emphatic pronouns (cf. Geniušiené 1987, Kroeger 2005). Mantauran does not have any reflexive/emphatic pronouns; the reflexive is expressed by the prefix 'ini- followed by Ca-reduplication, but its status as a reflexive or as an emphatic marker has not been investigated at this stage.

I follow Li's (1973) treatment in tentatively analyzing this prefix as a reflexive. Its antecedent is the agent and has to occur in the same clause. The verb must be a verb of control, whether or not it refers to an inanimate referent and whether or not it is a dynamic, stative or denominal verb.

(8.36) a. o-palepale 'wide open' 'ini-pa-palepale 'open itself' b. o-pengale 'break' 'ini-pa-pengale 'break itself' c. o-peredhe 'flow (water)' 'ini-pa-peredhe 'flow itself' d. o-eleve 'close (door)' 'ini-a-eleve 'close itself' e. o-pi'a 'do, make' 'ini-pa-pi'a 'make oneself' f. maavanao 'bathe' 'ini-pa-paavanao 'bathe oneself' g. ma-dhalame 'like, love' 'ini-ka-ka-dhalame 'like/love oneself' h. **to-dha'ane** 'build a house' ~ **'ini-ta-to-dha'ane** 'build a house oneself'
i. **'adhidhapae** 'work' ~ **'ini-'a-adhidhapae** 'work oneself'

j. 'i-pa-cavo 'wear leggings' ~ 'ini-'a-ipacavo 'put on leggings oneself'

(8.37) a. o-palepale-lrao ana soko-li.

Dyn.Fin-wide open-1S.Nom that umbrella-1S.Gen

'I opened my umbrella.'

a'. 'ini-pa-palepale ana soko-li.

self-Red-Dyn.NFin:wide open that umbrella-1S.Gen

'My umbrella opened itself.'

b. o-kaodho acilai, o-dholro-ka-i ka maavanao

Dyn.Fin-not exist water Dyn.Fin-can-Neg-3S.Gen Neg Dyn.Subj:bathe

ana lroolai.

that child

'There is no water. The child cannot bathe/take a bath.'

b'. o-dholro 'ini-pa-paavanao ana Iroolai.

Dyn.Fin-can self-Red-Dyn.NFin:bathe that child

'That child knows how to bathe himself.'

c. kana-ni pi'a-'o? what-3S.Gen Dyn.NFin:do-2S.Gen 'What are you doing?'

c'. dhona'i kamosingi, o-dholro-ka-nai ka *'ini-pa-pi'a*.

that button Dyn.Fin-can-Neg-1PE.Gen Neg self-Red-Dyn.NFin:do

'As for the buttons, we could not make them ourselves.'

8.4 Reciprocity

There are *at least* four reciprocal prefixes in Mantauran Rukai: **ma-C***a*- (~**pa-C***a*-), **ma(a)**-, **ma'a**- (~**pa?a**-) and **ma'a-pa**- (~**pa?a-pa**-), (*cf.* also the two reciprocal causative prefixes discussed in §8.1.4).

Besides marking reciprocity, these morphemes also encode two other pieces of information: the stativity/dynamicity and the finiteness/non-finiteness of the verb to which they are attached. As shown below, these prefixes are verb-class sensitive (though there exist a few exceptions); the **m**~**p** alternation corresponds to the finite~non-finite dichotomy mentioned in §6.1. Plurality of participants is rendered possible through the reduplication of the verbal/nominal base. The term "reciprocal" is used as a cover term to refer to a reciprocal or a collective situation (reciprocity expressed on verbs) or a "converse" relationship (reciprocity marked on nouns).

8.4.1 ma-Ca- (\sim pa-Ca-) + dynamic verbs

ma-Ca- (~pa-Ca-), whereby Ca- refers to the reduplication of the first consonant followed by the vowel a, attaches to dynamic verbs, e.g. ma-ra-ra'e 'snatch from each other' ~ ma-ra-ra'e 'snatch from one another'. This form seems to be now rather quite unproductive in Mantauran.

8.4.2 ma(a)- (\sim pa(a)-) + dynamic verbs

The prefixes **maa-**(~**paa-**) and **ma-**(~**pa-**) attach to dynamic verbs, *cf.* (8.40). **maa-**always prefixes to non-reduplicated verb roots (8.38a)-(8.39a) while **ma-** only appears on reduplicated verb roots (8.38b)-(8.39b).

(8.38) a. *maa-vaa'i* solate takanao la dhipolo.

Rec:Dyn.Fin-give book Takanao and Dhipolo

'Takanao and Dhipolo gave a book to each other.'

b. ona'i a-iki-nai ka-'oponoh-ae that ClsNmz-Dyn.NFin:be at-1PE.Gen genuine-Wanshan-genuine 'ali-'aamadhalae-nga dhona'i ta-iki-e-nai that LocNmz-Dyn.NFin:be at-LocNmz-1PE.Gen from-before-Sup dhona'i dha'ane pa-ocongocongolo dhona'i mani Rec:Dyn.NFin-Red:pass on that house then that taka-taka lalake. Red-older sibling child

'When we were in the old village, the houses we lived in were passed on since the beginning to the eldest child [boy].'

(8.39) a. maa-to-'iingi-nai.

Rec:Dyn.Fin-make-torch-1PE.Nom

Lit.: 'We use(d) torches to light up each other.'

b. ma-to-'ii-'iingi-nai.

Rec:Dyn.Fin-make-Red-torch-1PE.Nom

Lit.: 'We use(d) torches to light up one another.'

| (8.40) | a. | o-cengele | 'see' | maa-cengele | 'see each other' | ma-cenge-cengele | 'see one another' |
|--------|----|------------|---------|--------------|----------------------|------------------|-----------------------|
| | b. | o-ka'ace | 'bite' | maa-ka'ace | 'bite each other' | ma-ka'a-ka'ace | 'bite one another' |
| | c. | o-pana | `shoot' | maa-pana | 'shoot each other' | ma-pana-pana | 'shoot one another' |
| | d. | o-tipitipi | 'beat' | maa-tipitipi | 'beat each other' | ma-tipi-tipitipi | 'beat one another' |
| | e. | o-tovi | 'cry' | maa-tovi | 'cry together' | ma-tovi-tovi | 'cry together' |
| | | | | | 'cry for each other' | | 'cry for one another' |
| | f. | mate'ete | 'kill' | maa-te'ete | 'kill each other' | ma-te'ete-'ete | 'kill one another' |

8.4.3 ma'a- (~pa'a-) + stative verbs and kinship terms

ma'a- (~pa'a-) attaches to stative verb bases. The prefixation of ka- to the root is compulsory.

| (8.41) | a. | ma'a- <i>ka-</i> takolra | dhipolo | la | takanao. |
|--------|----------------------------|--|---------------|-----|----------|
| | Rec:Stat.Fin-Stat.NFin-bad | | Dhipolo | and | Takanao |
| | | 'Dhipolo and Takanao are on bad term | ns.' | | |
| | b. | ma'a- <i>ka</i> -salrai | 'elrenge | la | ritahe. |
| | | Rec:Stat.Fin-Stat.NFin-tender | Elrenge | and | Ritahe |
| | | 'Elrenge and Ritahe love each other de | eeply.' | | |
| | c. | ma'a-ka-'ino | taotao | la | leeve. |
| | | Rec:Stat.Fin-Stat.NFin-embarrassed | Taotao | and | Leeve |
| | | 'Taotao and Leeve are embarrassed w | ith each othe | r.' | |
| | | | | | |

(8.42) a. ma-dhalame 'like, love'

| | b. ma-Irakase | 'dıslıke' | ma'a-ka-lrakase | 'dislike each other' |
|--------|-----------------------|--------------------|-------------------|--------------------------------------|
| | c. ma-'ino | '(be) embarrassed' | ma'a-ka-'ino | 'be embarrassed with each other' |
| | d. ma-taadhi'i | '(be) good' | ma'a-ka-taadhi'i | 'be good to each other' |
| | e. ma-takolra | '(be) bad' | ma'a-ka-takolra | 'be on bad terms with each other' |
| | | | | |
| (8.43) | a. ma-dhalam e | 'like, love' | ma'a-ka-dhala-dha | alame 'like, love one another' |
| | b. ma-lrakase | 'dislike' | ma'a-ka-lraka-lra | kase 'dislike one another' |
| | c. ma-'ino | '(be) embarrassed' | ma'a-ka-'ino-'ino | 'be embarrassed with one another' |
| | d. ma-taadhi'i | '(be) good' | ma'a-ka-taadhia- | dhi'i 'be good to one another' |
| | e. ma-takolra | '(be) bad' | ma'a-ka-takolra-l | colra 'be bad to one another' |

ma'a-ka-dhalame 'like, love each other'

ma'a- (rather than maa- or ma-Ca-) also attaches to the verb pasopalra 'help', perhaps by analogy with other dynamic verbs taking ma'a- when causativized, cf. ma'a-pa-kane 'invite each other to eat'.

```
(8.44) lo ma-taadhi'i-dha a-poa-e vecenge,
if Stat.Subj-good-3S.Gen ObjNmz-Dyn.NFin:make-ObjNmz millet
pahai, o-dholro-mao ma'a-pasopalra-palra.
rice Dyn.Fin-can-Impers.Nom Rec:Stat.Subj-help-Red
'If the millet and the rice were ready, we could help each other (to make the harvest).'
```

With kinship terms, a reciprocal/converse relationship can be expressed through the prefixation of **ma'a-** or **la-ma'a-** to the base. Note that **ma'a-** is the same prefix that occurs on stative verbs but **ka-** never appears on nouns. As mentioned in §5.6, a noun can function as predicate when prefixed by **ma'a-** (or by **pa'a-** in its non-finite form).

This predicate can occur in sentence-initial position as the main verb, or embedded to another verb. Marked by **la-ma'a-** or **pa'a-** (the sequence **pa'a-**+bound kinship root must be followed by a genitive pronoun), the derived reciprocal noun can only function as an argument.

(8.45) a. **ma'a-tina** ana-lo.

Rec:Stat.Fin-mother that-plur 'There are mother and daughter.'

b. amo-pa'a-tina ana-lo.

Irr-Rec:Stat.NFin-mother that-plur 'There will be mother and daughter.'

c. "'ai! o-sivahange-lra-imia'e ma'a-tiina la..."

Ouch Dyn.Fin-pregnant-1S.Nom-2S.Obl Rec:Stat.Subj-mother:Emph and
"'Ayayay! I was pregnant with you and..."

8.4.4 ma'a-pa- (~pa'a-pa-) + dynamic verbs

The fourth reciprocal prefix, ma'a-pa- (~pa'a-pa-) represents the combination of the stative reciprocal prefix ma'a- followed by the causative pa-. This sequential prefix attaches to a few dynamic verb roots, e.g. ma'a-pa-kane 'invite each other to eat', ma'a-pa-tamako 'invite each other to smoke', ma'a-pa-'ongolo 'invite each other to drink'. For reasons unknown, ma'a- is followed by po- rather than pa- in ma'a-po-soalopo/*ma'a-pa-soalopo 'offer a tribute to each other' (< so- 'offer a tribute to a chief', alopo 'hunt').

(8.46) ona lo ma-a'a-mao,

that if Stat.Subj-court-Impers.Gen

ma'a-pa-tamako-mako-mao voa'-ine

Rec-Caus-Dyn.NFin:smoke-Red-Impers.Nom Dyn.Subj:give-3S.Obl

a-sava-savare-dha.

plur-Red-young man-3S.Gen

'When we were courting, we (would) invite one another to smoke (using the same pipe...).'

250

As shown in Zeitoun (2002a) and Teng (2007), this construction also occurs in Paiwan and in Puyuma.

Chapter 9: Numerals, Composite Numerals and Quantifiers

This chapter examines numerals used in serial counting (9.1a), cf. $(\S9.1)$, composite numerals (9.1b), cf. $(\S9.2)$ and quantifiers (9.1c), cf. $(\S9.3)$:

(9.1) a. *neka*, *nosa*, *tolro*, ma-tolro ocao one two three Stat.Fin-three person ta-iki ana.

SubjNmz-Dyn.NFin:be at that 'One, two, three, there are three persons over there.'

b. *ma-dho'a* la-a-lake-li a'ivivai.
Stat.Fin-two child-plur-child-1S.Gen plur:Red:female 'I have two daughters.'

c. *(o-)cekelae*-nai m-oa taipake. (Dyn.Fin-)all-1PE.Nom Dyn.Subj-go Taipei 'We all went to Taipei.'

On the syntactic level, composite numerals and quantifiers behave identically in the following:

- (i) They function as verbs. As such, they can occur in initial position (9.2a)-(9.3a) or in embedded position (9.2b)-(9.3b):
- (9.2) a. *apa'ohi*-dho'a-lrao 'ina saviki opo'o.

 Rec:Caus-two-1S.Nom that betel nut Dyn.Subj:chew 'I chewed the betel nut (and made it) split in two.'

b. om-oa-mao ma-'ano-ngea-ngea

Dyn.Fin-go-Impers.Nom dha'an-a-nae Dyn.Subj:Rec-with-Red-one
house-beyond-TempNmz Dyn.Subj-go Dyn.Subj:hold ritual-plur-Pangolai

'One from each family would go to perform the rituals of the Lapangolai household'

(9.3) a. ni-poelre-nga-lra-ine kone tamatama
 Cntrfct-all-already-1S.Nom-3S.Obl Dyn.Subj:eat middle-aged man velevele-ni.
 banana-3S.Gen
 'I could have entirely eaten the middle-aged man's banana.'

b. **o-kane-ng-iae tamatama velevele-li** *poelre*.

Dyn.Fin-eat-already-1S.Obl middle-aged man banana-1S.Gen all

'I had my whole banana/all my bananas eaten by the middle-aged man.'

(ii) They yield plural agreement on the noun they modify, if that noun refers to a human participant. Compare the grammaticality of the examples in (9.4) and (9.5).

(9.4) a. *ma-tolro* la-*a*-lake-li.

Stat.Fin-three child-plur-child-1S.Gen

'I have three children.' (Lit.: 'My children are three.')

b. * *ma-tolro lalake-li*.
Stat.Fin-three child-1S.Gen

(9.5) a. **om-iki dhona tamatama** *idhopele a*'ivivai

Dyn.Fin-exist that middle-aged man all and only plur:female

la-a-lake-dha

child-3S.Gen

child-plur-child-3S.Gen

'There was a middle-aged man who had three daughters.' (implied: he only had daughters)

b. *om-iki dhona tamatama idhopele 'avai Dyn.Fin-exist that middle-aged man all and only female lalake-dha

One distinction between composite numerals and quantifiers is that the former can also modify a noun as in (9.6a) or turn into headless NPs if nominalized by **ta-** 'subjective

maka-lrima-le-nga-lrao poca'e

Dyn.Fin:up to-five-up to-already-1S.Nom Dyn.Subj:embroider

nominalizer', as in (9.6b), while such a usage is not found with quantifiers.

ta-ka-tolro **kipingi.** SubjNmz-Stat.NFin-three clothes

'I embroidered three pieces of clothing for five days.'

b. **dhona** *ta-ka-ea-ea*, **om-iki latadhe oaha'a.** that SubjNmz-Stat.NFin-Red-one Dyn.Fin-exist outside Dyn.Subj:cook 'As for that one, s/he is/was outside cooking.'

9.1 Numerals in serial counting: free vs. bound forms

9.1.1 Free forms used in serial counting from 1 to 10

Numerals used in serial counting from 1 to 10 do not differ greatly from the consensual reconstructed PAN numeral forms (Blust 2003b):⁶²

(9.6) a.

⁶² Sagart (2004) argues that (i) the PAN numerals from 5 to 10 were analytic forms that were

| (9.7) | Gloss | PAN | MT |
|-------|-------|-----------|---------|
| | 1 | *esa~*isa | neka |
| | 2 | *duSa | nosa |
| | 3 | *telu | tolro |
| | 4 | *Sepat | pate |
| | 5 | *lima | lrima |
| | 6 | *enem | eneme |
| | 7 | *pitu | pito |
| | 8 | *walu | valro |
| | 9 | *Siwa | vangate |
| | 10 | *sa-puluq | polroko |

Phonological changes and innovations account for the forms **neka** 'one', **nosa** 'two' and **vangate** 'nine'. While the origin of **neka** is uncertain, the form for '2' **nosa** represents the "assimilation of the voiced interdental fricative **dho'a** to the alveolar nasal of 'one' [**neka**]" (see Blust 1995a:452). The word **vangate** 'nine' is inherited from PR *bangate. The word for 'ten', *cf.* **polroko** (< PAN *sa-puluq), is a false cognate and should be treated as a loan word because it is phonologically irregular: PAN **q** has been lost in PR so the expected form should have been *pulru. There is no term for 'zero'. The non-existence of an entity is expressed by the negative existential verb **okaodho** 'there is not'.

Blust (2003b:205) suggests that PAN "had two morphologically related sets of numerals, an unaffixed set used in serial counting and in the enumeration of non-human referents, and a second set derived from the first by Ca-reduplication and used in counting human referents". Li (2006) provides a survey of cardinal numerals in Formosan languages and comes up with the same conclusion, i.e. that there is a distinction in 'humanness' reflected in different sets of numerals. Example (9.8) shows this human/non-human contrast in Thao:

```
(9.8) Thao (Blust 2003b)
```

```
a. tusha wa qali
two Lig day
'in two days' (p.1026)
```

```
b. a kan ta-tusha yamin mu-qariwan
Fut go Red-two 1PE.Nom go-Puli
'We two (excl.) are going to Pu-li.' (p.1027)
```

made up through addition, multiplication or substraction (as in Saisiyat) but were lost in various Formosan languages, (Rukai, for example) and that (ii) **bangate** 'nine' must have "displaced a reflex of *Siwa" in this language family.

9.1.2 Bound forms used for the formation of numerals above 11

In Mantauran, there is, indeed, another set of suffixed numeral forms with numbers from 1 to 9. This set differs slightly from the first that is used for serial counting.

| (9.9) | Gloss | Serial counting | Suffixed numeral forms |
|-------|-------|-----------------|------------------------|
| | 1 | neka | -(ea)ea, -a, -nge(a) |
| | 2 | nosa | -dho'a, -po'a |
| | 3 | tolro | -tolro |
| | 4 | pate | -'epate |
| | 5 | lrima | -lrima |
| | 6 | neme | -(e)neme |
| | 7 | pito | -pito |
| | 8 | valro | -valro |
| | 9 | vangate | -vangate |

However, the set of suffixed numerals is not only exploited to count human referents. The following examples show that there is actually no distinction in Mantauran between [-human] and [+human] counting.

| (9.10) | (9.10) a. ma-eaea | | ta'olro | ta-iki | dhona. |
|-----------------------------------|--------------------------|---------------------|------------|------------------------|--------|
| | Stat.Fin-one:Red | | dog | SubjNmz-Dyn.NFin:be at | that |
| | | 'There is one dog o | ver there. | | |
| | b. | ma-eaea | ocao | ta-iki | dhona. |
| | | Stat.Fin-one:Red | person | SubjNmz-Dyn.NFin:be at | that |
| 'There is one person over there.' | | | | | |

These bound numeral forms attach to different verbal prefixes and numeral classifiers to form cardinals, ordinals, complex numbers (above 11), and to refer to time/frequency, measure and different classes of objects (see §9.2). Among these affixes, a few are used to refer only to humans, *cf.* (o-)ta'a- 'with', 'ano-Ca- 'along, with (< 4 persons)', (o-)taro- and tao- 'along, with (> 4 persons)' (*cf.* §9.2.4.1).

Suffixed numeral forms exhibit a few phonological and morphological variations that require further explanations (*cf.* the alternation between -(ea)ea \sim a- \sim -nge(a) and -dho'a \sim -po'a; the deletion of the first syllable for 'six'):

The distinction between -(ea)ea, a- and -nge(a) is as follows:

- -ea is always reduplicated when it follows the verbal prefixes ma- (ka-) 'stative' (in sentence-initial position) and to- 'make, produce, build', cf. (9.11):

(9.11) a. ma-eaea 'one' *ma-ea 'make/produce/give birth to one' b. to-eaea *to-ea

It occurs as unreduplicated after other prefixes, either ordinals or numeral classifiers as in (9.12):

(9.12) a. 'aka-ea 'the first' b. (o-)tar-ea caili 'one year old'

- -a is an allomorph of -ea that co-occurs with circumfixes (ordinals or numeral classifiers) as in (9.13):

(9.13) a. 'apaka-a-le 'the first day' 'one floor' b. maatali-a-le c. o-ka'a-a-le 'one bowl'

-ea can also undergo triplication as in to-ea-ea but in that case it refers to a repetitive action 'make one (after the other)'.

- -nge is used for ten as in ma-nge-le 'ten' (Lit.: 'one ten').
- As for -ngea, it implies the notion of 'loneliness'; it attaches to the prefixes ta'a-'with', taka- 'with' and 'ano- 'with' (9.14a), and ma'ohi- 'split', apa'ohi- 'make/let... split' (9.14b).
- (9.14) a. ta'angea ~ takangea ~ 'anongangea 'alone' b. ma'ohingea '(split in) one' ~ apa'ohingea 'make/let (split in) one'

The distinction between **-dho'a** and **-po'a** 'two' lies in the type of affixes they take:

-dho'a is only preceded by prefixes, while -po'a co-occurs with circumfixes. 63 for instance:

(i) Saisiyat kina-rosha'-an 'two glasses' *kina-posha-an a. a'. kina-posha-l-an 'two glasses' *kina-rosha-l-an shaa-posha-l 'see twice' *shaa-rosha' Thao (after Blust 2003b) c min-tusha 'become two' (p.1027) *min-pusha d. Ihin-tusha-in 'be divided in two (PF)' (p.1027) *lhin-pusha e. makim-pusha-z 'two floors' (p.752) *makim-tusha-z

The distribution of PAN *duSa should be treated as being in complementary distribution with that of *puSa. In Formosan languages other than Mantauran, reflexes of *puSa also only occur with circumfixes ending with *N, reflexes of *duSa elsewhere, cf.:

```
(9.15) a. o-tara-dho'a 'two (months/years)' *o-tara-po'a
b. o-ka'a-po'a-le '(drink/eat) two bowls' *o-ka'a-dho'a-le
```

The suffixed form for 'ten' is -ma-nge-le which is composed of the circumfix ma-...-le/-lo used for 'tens' (cf. Ossart 2004).⁶⁴ Note that (i) in co-occurrence with ma-ma-...-le, eneme is reduced to neme and that (ii) the suffixal form for 'nine' is never suffixed with -le (thus, the expected form **ma-ma-vangate-le is ungrammatical), though it takes the same prefixes as the other numerals with the same meanings. Multiple of tens are preceded by the stative prefix ma- (which alternates with the non-finite form ka-), unless used with numeral classifiers or ordinals.

```
(9.16) Tens
```

- 10 ma-ma-nge-le ka-ma-nge-le 20 ma-ma-po'a-le ka-ma-po'a-le ma-ma-tolro-lo ka-ma-tolro-lo ma-ma-'epate-le ka-ma-'epate-le 50 ma-ma-lrima-le ka-ma-lrima-le 60 ma-ma-neme-le ka-ma-neme-le 70 ma-ma-pito-lo ka-ma-pito-lo 80 ma-ma-valro-lo ka-ma-valro-lo 90 ma-ma-vangate ka-ma-vangate
- (9.17) a. *ma-ma-nge-le* **ocao ta-iki latadhe.** Stat.Fin-tens-one-tens person SubjNmz-Dyn.NFin:be at outside 'There are ten persons outside.'
 - a'. **om-iki latadhe** *ta-ka-ma-nge-le* **ocao.**Dyn.Fin-exist outside SubjNmz-Stat.NFin-tens-one-tens person 'There are ten persons outside.'

The word for 'hundred' is **idhai** (< PR *idai, cf. Li 1977b:56). It combines with

If the above hypothesis is correct, then the word for '20' in PAN is not *ma-pusaN as reconstructed by Blust (2003:206) but rather *ma-pusa-N, *ma-...-N indicating 'tens'.

Sagart (2004:424) notes that the "consensus PAN" word for '10' occurs exclusively in some dialects of Rukai, Paiwan, Puyuma and Amis. He argues that in pre-Walu-Siwaic, another form must be reconstructed in PAN, cf. *sa-iCit '10' and proposes as a Pituish innovation the form #masehaN '10'. However, the reconstruction of such a form does not explain the occurrence of ma-...-le in Mantauran Rukai for all the other decades except '90' (cf. mamavangate and not **mamavangatele) in particular and in the other Formosan languages, e.g., Saisiyat ma-too-l, Thao ma-turu-z, Tsou m-tue-hu, Isbukun Bunun ma-ti'u-n, Saaroa ma-tulu-lh '30'. The circumfix ma-...-N is thus a potential candidate for reconstruction at the PAN level, at least for numerals under 5, assuming that Sagart's (2004) analysis is correct.

the suffixal numeral forms from one to nine preceded by the stative prefix **ma-** to form higher numbers, from 100 to 900.

| (9.18) | 100 | ma-eaea idhai |
|--------|-----|------------------|
| | 200 | ma-dho'a idhai |
| | 300 | ma-tolro idhai |
| | 400 | ma-'epate idhai |
| | 500 | ma-Irima idhai |
| | 600 | ma-eneme idhai |
| | 700 | ma-pito idhai |
| | 800 | ma-valro idhai |
| | 900 | ma-vangate idhai |

The word for 'thousand' is **kodholo** (< PR ***kodrolo**, *cf.* Li 1977b:76). As in the case of **idhai**, it combines with the suffixal numeral forms from one to nine; it is further preceded by the stative prefix **ma-** to form higher numbers, from 1,000 to 9,000.

```
(9.19) 1,000
                ma-eaea kodholo
       2,000
                ma-dho'a kodholo
       3,000
                ma-tolro kodholo
       4,000
                ma-'epate kodholo
       5,000
                ma-lrima kodholo
                ma-eneme kodholo
      6,000
       7,000
                ma-pito kodholo
       8,000
                ma-valro kodholo
       9,000
                ma-vangate kodholo
```

It can also co-occur with multiple of tens to form numbers from 10,000 to 90,000:

| 0 ma-ma-nge-le kodholo | 10,000 | (9.20) |
|---------------------------|--------|--------|
| 0 ma-ma-po'a-le kodholo | 20,000 | |
| 0 ma-ma-tolro-lo kodholo | 30,000 | |
| 0 ma-ma-'epate-le kodholo | 40,000 | |
| 0 ma-ma-lrima-le kodholo | 50,000 | |
| 0 ma-ma-neme-le kodholo | 60,000 | |
| 0 ma-ma-pito-lo kodholo | 70,000 | |
| 0 ma-ma-valro-lo kodholo | 80,000 | |
| 0 ma-ma-vangate kodholo | 90,000 | |

Intermediate numbers represent a combination of these complex forms. Tens and hundreds appear first. They are coordinated to the sequence **ka-** + -Num by **la** 'and'.

| (9.21) 11 | mamangele la kaea | 21 | mamapo'ale la kaea | 31 | mamatolrolo la kaea |
|-----------|----------------------------|------------|--------------------------|------------|--------------------------|
| 12 | mamangele la kadho'a | 22 | mamapo'ale la kadho'a | 32 | mamatolrolo la kadho'a |
| 13 | mamangele la katolro | 23 | mamapo'ale la katolro | 33 | mamatolrolo la katolro |
| 14 | mamangele la ka'epate | 24 | mamapo'ale la ka'epate | 34 | mamatolrolo la ka'epate |
| 15 | mamangele la kalrima | 25 | mamapo'ale la kalrima | 35 | mamatolrolo la kalrima |
| 16 | mamangele la kaeneme | 26 | mamapo'ale la kaeneme | 36 | mamatolrolo la kaeneme |
| 17 | mamangele la kapito | 27 | mamapo'ale la kapito | 37 | mamatolrolo la kapito |
| 18 | mamangele la kavalro | 28 | mamapo'ale la kavalro | 38 | mamatolrolo la kavalro |
| 19 | mamangele la kavangate | 29 | mamapo'ale la kavangate | 39 | mamatolrolo la kavangate |
| 4.1 | | <i>-</i> 1 | | <i>(</i> 1 | |
| 41 | mama'epatele la kaea | 51 | mamalrimale la kaea | 61 | mamanemele la kaea |
| 42 | mama'epate le la kadho'a | 52 | mamalrimale la kadho'a | 62 | mamanemele la kadho'a |
| 43 | mama'epate le la katolro | 53 | mamalrimale la katolro | 63 | mamanemele la katolro |
| 44 | mama'epate le la ka'epate | 54 | mamalrimale la ka'epate | 64 | mamanemele la ka'epate |
| 45 | mama'epate le la kalrima | 55 | mamalrimale la kalrima | 65 | mamanemele la kalrima |
| 46 | mama'epate le la kaeneme | 56 | mamalrimale la kaeneme | 66 | mamanemele la kaeneme |
| 47 | mama'epate le la kapito | 57 | mamalrimale la kapito | 67 | mamanemele la kapito |
| 48 | mama'epate le la kavalro | 58 | mamalrimale la kavalro | 68 | mamanemele la kavalro |
| 49 | mama'epate le la kavangate | 59 | mamalrimale la kavangate | 69 | mamanemele la kavangate |
| 71 | mamapitolo la kaea | 81 | mamavalrolo la kaea | 91 | mamavangate la kaea |
| 72 | mamapitolo la kadho'a | 82 | mamavalrolo la kadho'a | 92 | mamavangate la kadho'a |
| 73 | • | 83 | mamavalrolo la katolro | 92 | · · |
| | mamapitolo la katolro | | | | mamavangate la katolro |
| 74 | mamapitolo la ka'epate | 84 | mamavalrolo la ka'epate | 94 | mamavangate la ka'epate |
| 75 | mamapitolo la kalrima | 85 | mamavalrolo la kalrima | 95 | mamavangate la kalrima |
| 76 | mamapitolo la kaeneme | 86 | mamavalrolo la kaeneme | 96 | mamavangate la kaeneme |
| 77 | mamapitolo la kapito | 87 | mamavalrolo la kapito | 97 | mamavangate la kapito |
| 78 | mamapitolo la kavalro | 88 | mamavalrolo la kavalro | 98 | mamavangate la kavalro |
| 79 | mamapitolo la kavangate | 89 | mamavalrolo la kavangate | 99 | mamavangate la kavangate |

la can appear more than once in more complex numbers:

| (9.22) | a. ma-dho'a | idhai | la | ka-ma-lrima-le | la | ka-tolro |
|--------|---------------------------------------|---------|-----|---|------------------|-----------------------------------|
| | Stat.Fin-two '253' | hundred | and | Stat.NFin-tens-five-tens | and | Stat.NFin-three |
| | b. ma-vangate Stat.Fin-nine | | | ka-ma-neme-le Stat.NFin-tens-six-tens | <i>la</i> and | ka-pito Stat.NFin-seven |

 ${f la}$ can also be followed by the verbs ${f ollowed}$ or ${f lrivate}$ 'surpass, exceed' and followed by the sequence ${f ka-+}$ Num, preceded by ${f ta-:}$

(9.23) a ma-eaea kodholo la olravale
Stat.Fin-one:Red thousand and Dyn.NFin:surpass
ta-ka-ma-tolro-lo
SubjNmz-Stat.NFin-tens-three-tens
'1030'

= b. ma-eaea kodholo la lrivate
Stat.Fin-one:Red thousand and Dyn.NFin:surpass
ta-ka-ma-tolro-lo
SubjNmz-Stat.NFin-tens-three-tens
'1030'

= c ma-eaea kodholo la ka-ma-tolro-lo
Stat.Fin-one:Red thousand and Stat.NFin-tens-three-tens
'1030'

9.2 Composite numerals

Composite numerals are made up of an affix which combines with a bound numeral form (introduced in §9.1.1) and function as verbs. Bound numeral forms can attach to different types of affixes, which are categorized as follows: (i) verbal affixes (§9.2.1), i.e. affixes which occur with other verbs/nouns; (ii) affixes occurring exclusively with numerals and referring to measure in time and space (§9.2.2); (iii) ordinal affixes which represent a combination of 'a- 'ordinal' with the above two types of affixes (§9.2.3); and (iv) sortal classifiers (§9.2.4).

9.2.1 Verbal affixes

There are a number of verbal affixes that can co-occur with numerals: the stative prefix ma-(~ ka-), the prefix to- 'make, produce, build', the two causative prefixes pa- 'let...have' (generic causative) and po- 'make, put, bring' (movement causative), maaraka- (~ paaraka-) 'each', makini-...-(a)e (~ pakini-...-(a)e) 'all', the reciprocal prefixes ma'a- '...for each' (non causative) and apa'a- 'make/let...for each' (causative) and the two prefixes ma'ohi- 'split' ~ apa'ohi 'make/let...split'. The prefix ma- (~ ka-) is the most productive in terms of distribution (it can replace different affixes) and frequency.

(9.24) a. *ma-eaea* **dhakeralre aleve** 'oponoho.

Stat.Fin-one:Red river below Wanshan

'There was a river on the foot of the village.'

b. om-ik-iae ta-ka-eaea lalake.

Dyn.Fin-exist-1S.Obl SubjNmz-Stat.NFin-one:Red child

'I have one child.'

c. ma-ma-lrima-le vanidho ta-iki ana
Stat.Fin-tens-five-tens student SubjNmz-Dyn.NFin:be at that
ta-sola-solat-ae.

LocNmz-Red-study-LocNmz

'There are fifty students in that school.'

d. makini-lang-ae-nga solate ta-ka-ma-lrima-le
 Dyn.Fin:all-buy-all-already book SubjNmz-Stat.NFin-tens-five-tens vanidho.
 student

'The fifty students all bought books.'

The prefix **to-** must occur with a suffixed numeral form when followed or preceded by a denominal verb referring to the production of something (e.g. 'give birth', 'build a house' etc...), as shown in (9.26a-b), *cf.* (§3.3.1).

- (9.25)to-eaea 'make one' to-eneme 'make six' to-dho'a 'make two' 'make seven' to-pito to-tolro 'make three' to-valro 'make eight' to-'epate 'make four' 'make nine' to-vangate to-lrima 'make five' to-ma-nge-le 'make ten'
- (9.26) a. om-iki dhona tamatama la titina, Dvn.Fin-exist that middle-aged man and middle-aged woman to-alake to-dho'a/*dho'a aolrolai. produce-child produce-two plur:child 'There was a man and a woman who had given birth to two children.'
 - b. *to-ma-lrima-le-nga*-lrao to-dha'ane. produce-tens-five-tens-already-1S.Nom 'I have already built fifty houses.'
 - c. *to-ma-po'a-le-nga*-lra-ine voa'i paiso. produce-tens-two-tens-already-1S.Nom Dyn.Subj:give money 'I gave him/her twenty dollars.'

The two causative prefixes, **pa-** '(generic) causative' and **po-** 'movement causative' can co-occur with a suffixed numeral form. **pa-** must be followed by the stative prefix **ka-**; **po-** never is. It attaches directly to a numeral. The sequence **pa-ka-**Num can be glossed as 'make...(give) N'; **po-**Num can be translated as 'make, put, bring N'.

| (9.27) | pa-ka-eaea | 'make(give) one' | pa-ka-eneme | 'make(give) six' |
|--------|--------------|--------------------|-----------------|--------------------|
| | pa-ka-dho'a | 'make(give) two' | pa-ka-pito | 'make(give) seven' |
| | pa-ka-tolro | 'make(give) three' | pa-ka-valro | 'make(give) eight' |
| | pa-ka-'epate | 'make(give) four' | pa-ka-vangate | 'make(give) nine' |
| | pa-ka-lrima | 'make(give) five' | pa-ka-ma-nge-le | 'make(give) ten' |

- (9.28) o-va'ai-lra-ine pa-ka-dho'a kamosia ana lroolai.

 Dyn.Fin-give-1S.Nom-3S.Obl Caus-Stat.NFin-two sweet that child 'I gave two candies to that child.'
- (9.29) omec-a po-dho'a po-valrio!

 Dyn.Subj:bring-Imp CausMvt-two CausMvt-village
 'Bring back two!'

Both **maaraka-** 'each' and **makini-...-(a)e** must be followed by a numeral marked as stative, through the prefixation of **ka-** to the base:

- (9.30) maaraka-ka-eaea 'each...one' maaraka-ka-eneme 'each...six' 'each...two' maaraka-ka-dho'a 'each...seven' maaraka-ka-pito maaraka-ka-tolro 'each...three' maaraka-ka-valro 'each...eight' maaraka-ka-'epate 'each...four' maaraka-ka-vangate 'each...nine' maaraka-ka-lrima 'each...five' maaraka-ka-ma-nge-le 'each...ten'
- (9.31) *maaraka-ka-'epate-ine* 'ilo.

 Dyn.Fin:each-Stat.NFin-four-3S.Obl bead/necklace 'Each/both of them has four beads/necklaces.'
- (9.32) makini-ka-eaea 'all...one' 'all...six' makini-ka-eneme 'all...two' 'all...seven' makini-ka-dho'a makini-ka-pito makini-ka-tolro 'all...three' makini-ka-valro 'all...eight' makini-ka-'epate 'all...four' makini-ka-vangate 'all...nine' makini-ka-lrima 'all...five' 'all...ten' makini-ka-ma-nge-le
- (9.33) *makini-ka-tolro-e-ine* navini.

 Dyn.Fin:all-Stat.NFin-three-all-3S.Obl traditional dress 'All of them have three (traditional) dresses.'

The two prefixes ma'a-'...for each (stative reciprocal)' and apa'a-'make/let...for each (stative causative reciprocal)' co-occur with a numeral which further undergoes partial reduplication. These two prefixes refer to a share between different participants, the number of referents shared being expressed through the numeral:

```
'let/make....one for each'
(9.34) ma-e'-ea
                            'one for each' ~ apa-e'-ea
                            'two for each' ~ apa'a-dho-dho'a
                                                                   'let/make...two for each'
       ma'a-dho-dho'a
                            'three for each' ~ apa'a-to-tolro
                                                                   'let/make...three for each'
       ma'a-to-tolro
                                                                   'let/make...four for each'
       ma'a-e-'epate
                            'four for each' ~ apa'a-e-'epate
       ma'a-lri-lrima
                            'five for each' ~ apa'a-lri-lrima
                                                                   'let/make...five for each'
       ma'a-e-eneme
                            'six for each'
                                           ~ apa'a-e-eneme
                                                                   'let/make...six for each'
                                                                   'let/make...seven for each'
       ma'a-pi-pito
                            'seven for each' ~ apa'a-pi-pito
                            'eight for each' ~ apa'a-va-valro
                                                                   'let/make...eight for each'
       ma'a-va-valro
                                                                   'let/make...nine for each'
       ma'a-va-vangate
                            'nine for each' ~ apa'a-va-vangate
       ma'a-ma-ma-nge-le 'ten for each'
                                           ~ apa'a-ma-ma-nge-le 'let/make...ten for each'
```

- (9.35) a. *ma'a-to-tolro*-nai ma'avi votolo.

 Stat.Fin:Rec-Red-three-1PE.Nom Dyn.Subj:share pork

 'We shared the pork among us, three (pieces) for each.'
 - b. *apa'a-to-tolro*-Ira-iline ma'avi votolo.

 Rec:Caus-Red-three-1S.Nom-3P.Obl Dyn.Subj:share pork

 'I shared the pork and gave them three (pieces) each.'

The two prefixes **ma'ohi-** 'split (non-causative)' and **apa'ohi-** 'split (causative)' refer to the division of one referent, the fraction being expressed through the numeral:

```
(9.36) ma'ohi-ngea
                            'split in one'
                                                apa'ohi-ngea
                                                                     'let/make...split in one'
        ma'ohi-dho'a
                            'split in two'
                                               apa'ohi-dho'a
                                                                     'let/make...split in two'
                                                                     'let/make...split in three'
        ma'ohi-tolro
                            'split in three'
                                               apa'ohi-tolro
        ma'ohi-'epate
                            'split in four'
                                               apa'ohi-'epate
                                                                     'let/make...split in four'
                            'split in five'
        ma'ohi-lrima
                                                apa'ohi-Irima
                                                                     'let/make...split in five'
        ma'ohi-eneme
                            'split in six'
                                               apa'ohi-eneme
                                                                     'let/make...split in six'
        ma'ohi-pito
                            'split in seven' ~
                                               apa'ohi-pito
                                                                     'let/make...split in seven'
        ma'ohi-valro
                            'split in eight'
                                               apa'ohi-valro
                                                                     'let/make...split in eight'
                            'split in nine'
                                               apa'ohi-vangate
                                                                     'let/make...split in nine'
        ma'ohi-vangate
        ma'ohi-ma-nge-le 'split in ten'
                                               apa'aohi-ma-nge-le 'let/make...split in ten'
```

- (9.37) a. ma'ohi-dho'a-lrao ana coloko.

 Dyn.Fin:split-two-1S.Nom that glutinous cake 'I split the glutinous cake in two.'
 - b. apa'ohi-dho'a-Ira-ine ana coloko.

 Caus:Dyn.NFin:split-two-1S.Nom-3S.Obl that glutinous cake
 'I made him/her share the glutinous cake in two.'

9.2.2 Affixes referring to time, frequency and measure

A number of affixes occur exclusively with numeral bound forms to refer to time,

frequency and measure.

9.2.2.1 Affixes referring to time and frequency

There are at least four affixes for time and frequency: **o-tara-** ~ **tara-**, **maka-...-le/-lo** ~ **paka-...-le/-lo**, '**o-...-le/-lo**, 'ako-...-le/-lo.

o-tara- (~ tara-) refers to a number of months or years. It can thus be used to refer to the age of a person, to the school grade of a student or to any other time length (e.g. work, marriage etc.).

- (9.38) (o-)tar-ea 'one (month/year)' (o-)tara-eneme 'six (months/years)' 'two (months/years)' 'seven (months/years)' (o-)tara-dho'a (o-)tara-pito 'three (months/years)' 'eight (months/years)' (o-)tara-tolro (o-)tara-valro 'nine (months/years)' (o-)tara-'epate 'four (months/years)' (o-)tara-vangate (o-)tara-lrima 'five (months/years)' (o-)tara-ma-nge-le 'ten (months/years)'
- (9.39) a. o-tara-pito-nga-lrao caili.

 Dyn.Fin-time-seven-already-1S.Nom year
 'I am already seven years old.'
 - b. om-oa-nga m-okela tara-ma-nge-le
 Dyn.Fin-go-already Dyn.Subj-reach time-tens-one-tens
 dhamare lalake-ni dhipolo
 month child-3S.Gen Dhipolo
 'Dhipolo's child is already ten months.'

Compare with:

- a'. *ma-pito*-nga-lrao caili. Stat.Fin-seven-already-1S.Nom year 'I am already seven years old.'
- b'. om-oa-nga m-okela ta-ka-ma-nge-le
 Dyn.Fin-go-already Dyn.Subj-reach SubjNmz-Stat.NFin-tens-one-tens
 dhamare lalake-ni dhipolo.
 month child-3S.Gen Dhipolo
 'Dhipolo's child is already ten months.'
- (9.40) a. o-tara-dho'a-nga caili
 Dyn.Fin-time-two-already year
 ta-sola-solat-ae-ni taka-li.
 LocNmz-Red-Dyn.NFin:study-LocNmz-3S.Gen
 'My older brother/sister is in second grade.'

b. **o-sola-solate-mo'o** tara-tolro caili.

Dyn.Fin-Red-study-2S.Nom Dyn.Subj:time-three year 'You are in third grade.'

Compare with:

a'. *ma-dho'a-nga* caili Stat.Fin-two-already year

ta-sola-solat-ae-ni taka-li.

LocNmz-Red-Dyn.NFin:study-LocNmz-3S.Gen older sibling-1S.Gen 'My older brother/sister is in second grade.'

b'. **o-sola-solate-mo'o ta-ka-tolro caili.**Dyn.Fin-Red-study-2S.Nom SubjNmz-Stat.NFin-three year 'You study in the third grade.'

(9.41) a. *o-tara-vangete-nga-lrao* caili
Dyn.Fin-time-nine-already-1S.Nom year

ta-iki taipake 'adhidhapae.

SubjNmz-Dyn.NFin:be at Taipei work 'I have been working in Taipei for nine years.'

b. 'adhidhapae-nga-lrao tara-vangete caili ta-iki

work-already-1S.Nom Dyn.Subj:time-nine year SubjNmz-Dyn.NFin:be at **taipake.**

Taipei

'I have been working in Taipei for nine years.'

Compare with:

a'. ma-vangete-nga-lrao caili
Stat.Fin-nine-already-1S.Nom year
ta-iki taipake 'adhidhapae.
SubjNmz-Dyn.NFin:be at Taipei work
'I have been working in Taipei for nine years.'

b'. 'adhidhapae-nga-lrao ta-ka-vangete work-already-1S.Nom SubjNmz-Stat.NFin-nine year ta-iki taipake.

SubjNmz-Dyn.NFin:be at Taipei

'I have been working in Taipei for nine years.'

There are two ways to express age: in the first, **o-tara-(ma-)**N(**-le/-lo)** functions as a predicate as in the above examples; in the second, it is preceded by **(om-oa)** mokela

(9.42) a. o-tara-ma-tolro-lo-lrao la ka-valro caili. Dyn.Fin-time-tens-three-tens-1S.Nom and Stat.NFin-eight year 'I am already thirty eight.'

b. m-okela-nga-lrao tara-ma-tolro-lo Dvn.Fin-reach-already-1S.Nom time-tens-three-tens la ka-valro caili. Stat.NFin-eight and vear 'I am already thirty eight.'

Compare with:

a'. ma-ma-tolro-lo-lrao la ka-valro caili. Stat.Fin-tens-three-tens-1S.Nom Stat.NFin-eight and year 'I am already thirty eight.'

b'. m-okela-nga-lrao ta-ka-ma-tolro-lo SubjNmz-Stat.NFin-tens-three-tens Dyn.Fin-reach-already-1S.Nom ka-valro caili. Stat.NFin-eight and year 'I am already thirty eight.'

maka-...-le/-lo (~ paka-...-le/-lo) and 'o-...-le/-lo all indicate time frequency. Note that when attaching to complex numerals (formed by ma-...-le), the sequence X-ma-...-le(/-lo)-le(/-lo) made of a circumfix of the form X-...-le/-lo (where X = firstpart of the circumfix) and ma-...-le 'complex numeral' is reduced to X-ma-...-le/-lo through haplology (cf. §2.9.5).

The circumfixes maka-...-le/-lo ~ paka-...-le/-lo express 'a duration up to N-/for N- days/months/years', 'o-...-le/-lo is used for quantification 'N-times'. These two circumfixes are related to maka- (~paka-) 'up to' (cf. also the formation of makaki ~ pakaki 'to, until').

Note that $ma-(\sim ka-)$ cannot be replaced by any of these affixes.

- maka-eneme-le 'for six (days/months/years)' 'for one (day/month/year)' (9.43) maka-a-le maka-po'a-le 'for two (days/months/years)' maka-pito-lo 'for seven (days/months/years)' maka-tolro-lo 'for three (days/months/years)' maka-valro-lo 'for eight (days/months/years)' maka-'epate-le 'for four (days/months/years)' maka-vangate 'for nine (days/months/years)' maka-lrima-le 'for five (days/months/years)' maka-ma-nge-le 'for ten (days/months/years)'
- (9.44) a. maka- + Num -le/-lo ~ paka- + Num -le/-lo 'up to/for N-days/months/years' (1 to 9) maka-'epate-le-lrao Dyn.Fin:up to N (day)-four-N (day)-1S.Nom

ta-iki-e-li 'oponoho. LocNmz-Dyn.NFin:be at-LocNmz-1S.Gen Wanshan

'I have been in Wanshan for four days.'

b. maka-ma-+ Num -le/-lo paka-ma- +Num -le/-lo 'up to/for days/months/years' (10 to 90) maka-ma-nge-le-lrao

Dyn.Fin:up to N-tens-one-tens:up to N-1S.Nom

caili la o-valrio.

year and Dyn.NFin:to-village

'I come back to the village/home every ten years.'

- 'o-eneme-le 'six (times)' (9.45) **'o-a-le** 'once' 'o-po'a-le 'twice' 'o-pito-lo 'seven (times)' 'o-tolro-lo 'three (times)' 'eight (times)' 'o-valro-lo 'o-epate-le 'four (times)' 'nine (times)' 'o-vangate 'o-lrima-le 'five (times)' 'o-ma-nge-le 'ten (times)'
- (9.46) a. 'o-+ Num -le/-lo 'a number of times' (1 to 9)

'o-pate-le-Irao'oilrim-oadha'ane-ni.times-four-times-1S.NomDyn.Subj:returnDyn.Subj-gohouse-3S.Gen

'I have come back to her house four times.'

b. 'o-ma+ Num -le/-lo 'a number of times' (10 to 90)
'o-ma-po'a-le-nga-lrao 'ano-hikoki.
times-tens-two-times:tens-1S.Nom sit in/take-plane

'I have taken the plane twenty times.'

'ako-...-le/-lo means 'say a number of times' and is, as such, used with verbs of saying. Incidentally 'ako-....(-ae) can be glossed as 'speak', e.g. 'ako-'oponoh-ae ~ 'ako-'oponoho 'speak (in) Mantauran', 'ako-ciokok-ae 'speak (in) Chinese'.

- (9.47) 'ako-a-le 'speak once' 'ako-eneme-le 'speak six times' 'ako-po'a-le 'speak twice' 'ako-pito-lo 'speak seven times' 'ako-tolro-lo 'speak three times' 'ako-valro-lo 'speak eight times' 'ako-'epate-le 'speak four times' 'ako-vangate 'speak nine times' 'ako-lrima-le 'speak five times' 'ako-ma-nge-le 'speak ten times'
- (9.48) 'ako-+ Num -le/-lo 'say a number of times' (1 to 9)
 - a. 'ako-tolro-lo-lra-imia'e 'aovaovaha. say-three-say-1S.Nom-2S.Obl speak 'I have already told you (that) three times.'
 - = a'. 'aovaovaha-lra-imia'e 'ako-tolro-lo. speak-1S.Nom-2S.Obl say-three-say 'I have already told you (that) three times.'

9.2.2.2 Affixes referring to measure

There are two classifiers for measure, **ta'a-...-le/-lo** and **'o-....-le/-lo**. The circumfix **'o-....-le/-lo** appears in co-occurrence with different verbs, *cf.* **dhopadhaple** (< **o-dhapadhapale** 'walk one foot in front of the other') **dhikoace** (< **o-dhikoace** 'stretch one's hand') and **dhepadhepange** (< **o-dhepadhepange** 'measure with a ruler') to express a measure with the two arm's lengths, a measure with the hand or with a ruler.

- (9.49) a. **ta'a-+** Num **-le/-lo** 'measure with two arms' (1 to 9) **ta'a-tolro-lo**measure with arms-three-measure with arms
 that wall

 'That wall is three times two arm's lengths.'
 - = ta'a-tolro-lo lekalekate-ni
 measure with arms-three-measure with arms Dyn.NFin:measure-3S.Gen
 ona'i velrete.
 that wall
 'The wall that is measured is three times two arm's lengths.'
 - b. 'o-+ Num + -le/lo dhopadhapale 'walk one foot in front of the other' (1 to 9)
 'o-epate-le dhopadhapale ana vekenelre.
 measure-four-measure Dyn.Subj:mesure with one's foot that ground 'This ground/place is four feet long.'
 - c. 'o-+ Num + -le/lo dhikoace 'measure with one stretched hand' (1 to 9)
 'o-lrima-le dhikoace ana apoto.

 measure-five-measure Dyn.Subj:stretch hand that stone/table 'That stone/table measures five handbreadths.'
 - d. 'o-+ Num + -le/lo dhepadhepange 'measure with a ruler (30cms)' (1 to 9)
 'o-po'a-le dhepadhepange ana solate.

 measure-two-measure Dyn.Subj:measure with a ruler that paper
 'That (piece of) paper is sixty centimeters.'

A half (referring to one arm extended or to the thumb and the forefinger stretched) is expressed by 'ovecahe (< -vecahe 'middle'), for instance:

(9.50) a. ta'a-+ Num -le/-lo 'measure with two arms' (1 to 9)
ta'a-a-le
measure with arms-one-measure with arms and one half
'one extended arm and a half'

b. 'o-po'a-le dhopadhapale la 'ovecahe.

measure-two-measure Dyn.Subj:measure with foot and one half

'two feet and a half'

c. 'o-tolro-lo dhikoace la 'ovecahe.

measure-three-measure Dyn.Subj:stretch hand and one half
'three handbreadths and a half.'

9.2.3 Ordinal affixes

There is one ordinal prefix 'a- 'the N^{th} ' which further combines with different verbal affixes referring to a state, e.g. 'aka- 'the N^{th} ' or to time/frequency, e.g. 'ao- 'the N^{th} time' and 'apaka-...-le 'the N^{th} day/month/year'.

The ordinal 'aka- 'the Nth' is a bi-morphemic prefix, composed of 'a- 'ordinal' + ka- 'stative':

- (9.51) 'a-ka-eaea 'the first' 'a-ka-eneme 'the sixth' 'a-ka-dho'a 'the second' 'a-ka-pito 'the seventh' 'a-ka-tolro 'the third' 'a-ka-valro 'the eighth' 'a-ka-'epate 'the fourth' 'a-ka-vangate 'the ninth' 'a-ka-lrima 'the fifth' 'a-ka-ma-nge-le 'the tenth'
- (9.52) a. 'aka-+ Num 'the Nth' (1 to 9)

dhona'a-ka-dho'avalrio,kanithatNth-Stat.NFin-twovillagewhypo-alrace-nom-ineta-pangodhal-aem-ia?give-name-2P.Gen-3S.GenLocNmz-pineapple-LocNmzDyn.Subj-so'That second village, why did you call it Tapangodhalae?' (Lin 1999, vol.4:29)

b. 'aka-ma+ Num -le/-lo 'the Nth' (10 to 90)

ma-lrakas-iae solate mani 'a-ka-ma-po'a-le-lrao

Stat.Fin-dislike-1S.Obl Dyn.Subj:study then Ocao topolranae-nai.

person classmate(s)-1PE.Gen
'I hate studying and I am the twentieth in class.'

There are two things to note. First, 'aka- can be preceded by (m-)o- 'to':

(9.53) *m-o-'a-ka-'ea-*lrao mani
Dyn.Fin-to-Nth-Stat.NFin-one-1S.Nom then *o-'a-ka-dho'a*-mo'o.

Dyn.NFin:to-Nth-Stat.NFin:two-2S.Nom
'I will be the first and you will be the second.'

Second, in co-occurrence with koli'i 'sun', 'aka- refers to the hour, e.g. 'aka-ea koli'i 'one o'clock'.

(9.54) a-iki-e-nga-i koli'i?
ObjNmz-Dyn.NFin:exist-ObjNmz-already-3S.Gen sun
om-iki-nga 'a-ka-eneme koli'i.

Dyn.NFin:exist-already Nth-Stat.NFin-six sun
'What time is it? It is six o'clock.' (Lin 1999, vol.2:59)

'ao-...-le/-lo 'the Nth time' is a bi-morphemic affix, composed of 'a- 'ordinal' and the numeral classifier 'o-...-le/-lo 'a number of times':

- (9.55) 'ao-a-le 'the first time' 'ao-eneme-le 'the sixth time' 'ao-po'a-le 'the second time' 'ao-pito-lo 'the seventh time' 'the eighth time' 'ao-tolro-lo 'the third time' 'ao-valro-lo 'ao-'epate-le 'the fourth time' 'the ninth time' 'ao-vangate 'ao-lrima-le 'the fifth time' 'ao-ma-nge-le 'the tenth time'
- (9.56) a. 'ao-+ Num -le/-lo 'the Nth time' (1 to 9)

 'ao-po'a-le-lrao maava'i 'oponoho.

 Nth times-two-Nth times-1S.Nom Dyn.Subj:come Wanshan

 'It is the second time I come to Wanshan.'
 - b. 'ao-ma+ Num -le/-lo 'the Nth (time)' (10 to 90)
 'ao-ma-po'a-le-lrao maava'i 'oponoho.

 Nth times-tens-two-Nth times:tens-1S.Nom Dyn.Subj:come Wanshan
 'It is the twentieth time I come to Wanshan.'

'apaka- +Num -le/-lo 'the Nth day/month/year' is a complex affix, composed of 'a- 'ordinal' and the numeral classifier paka-...-le/-lo 'up to/for N-day/month/year (non-finite form)'.

- (9.57) 'apaka-a-le 'the first (day)' 'apaka-eneme-le 'the sixth (day)' 'apaka-po'a-le 'the second (day)' 'apaka-pito-lo 'the seventh (day)' 'apaka-tolro-lo 'the third (day)' 'apaka-valro-lo 'the eighth (day)' 'apaka-'epate-le 'the fourth (day)' 'apaka-vangate 'the ninth (day)' 'apaka-lrima-le 'the fifth (day)' 'apaka-ma-nge-le 'the tenth (day)'
- (9.58) a. lo 'idha-nae-nga 'apaka-lrima-le, mani up to Nth-five-up to Nth day-TempNmz-Sup then alra-ng-idhe pa-ta'a-dho'a poa Dyn.NFin:take-already-3S.Obl Dyn.Subj:make Caus-with-two pa-'apece. Caus-Dyn.NFin:sleep 'On the fifth day, (we would) let/make the bride and the groom sleep together.'

b. 'apaka-ma+ Num -le/-lo 'the Nth day/month/year' (10 to 90) mani ma-vongovongo sangepare ka-padhoolo, Dyn.Fin:Rec-bump into then Stat.NFin-coma 'apaka-ma-lrima-le mani la ka-'epate up to Nth-tens-five-up to Nth:tens then and Stat.NFin-four la ta'asa paco'ono. men-a-nae day-beyond-TempNmz Dyn.NFin:regain consciousness and iust 'He had a car accident and was in coma. Then on the 54th day, he regained consciousness.'

9.2.4 Sortal classifiers

Sortal classifiers are affixes that collate into the numeral base to form verbs. There are five sets referring to: (i) humans (§9.2.4.1); (ii) the number of (referents) taken or caught (§9.2.4.2); (iii) the number of (referents) contained in a recipient (e.g. a glass or a bowl) (§9.2.4.3); (iv) the number of floors (§9.2.4.4).

Whenever the verbal prefix **ma-** (~**ka-**) can replace any of these sortal classifiers, an example is provided. The occurrence of **ma-** (~**ka-**) usually yields a meaning less precise than that of a specific sortal classifier.

9.2.4.1 Counting human beings

There are at least three affixes referring to humans: ta'a-, 'ano- + Ca-, taro-/tao- and (maa-...)-e.

ta'a- refers to a group of persons; 'ano-Ca- and taro-/tao- both refer to a number of persons (or animate referents) in movement. They occur somehow in complementary distribution: 'ano-Ca- with numeral suffixes below four and taro-/tao- with numeral suffixes above four. 65 Thus, 'ano-ta-tolro 'the three of them' is correct, *taro-tolro/*tao-tolro is ungrammatical; conversely, while taro-lrima/tao-lrima is accurate, *'ano-lra-lrima is inexact. The two prefixes taro/tao- must occur with movement verbs (e.g. o-dhaace 'leave', maava'i 'come'), while there is no such constraint on the occurrence of 'ano-Ca-.

As mentioned in §1.4.2, in co-occurrence with multiples of ten, e.g., 20, 30 etc..., two forms are possible, tao-/taro-ma-N-l-ae or tao-/taro-ma-N-le/-lo, e.g., tao-/taro-ma-nge-l-ae ~ tao/taro-ma-nge-le 'ten (persons)', tao-/taro-ma-po'a-lae ~ taro-ma-po'a-l-ae 'twenty (persons)'. The former is considered to be more archaic.

(9.59) ta'a-ea '(with) one' ta'a-eneme '(with) six' ta'a-dho'a '(with) two' ta'a-pito '(with) seven' ta'a-tolro '(with) three' ta'a-valro '(with) eight' ta'a-epate '(with) four' ta'a-vangate '(with) nine' ta'a-lrima '(with) five' ta'a-ma-nge-le '(with) ten'

(9.60) ta'a-+ Num 'with' (2 to 9)

- a. *ta'a-tolro* ta-'ongolo vavaa.
 with-three with-Dyn.NFin:drink wine
 'Three persons drink/drank wine.'
- a'. **o-'ongolo-nga ta'a-tolro vavaa.**Dyn.Fin-drink-already with-three wine 'Three persons drank wine together.'

Compare with:

- b. *ma-tolro* ocao ta-'ongolo vavaa.
 Stat.Fin-three person SubjNmz-Dyn.NFin:drink wine
 'Three persons drink wine.'
- b'. **o-'ongolo** *ta-ka-tolro* vavaa ocao.

 Dyn.Fin-drink SubjNmz-Stat.NFin-three wine person 'Three persons drink/drank wine together.'

(9.61) **ta'a-ma-**+Num-**le**/-**lo** 'with' (10 to 90)

- a. *ta'a-ma-tolro-lo* ta-'ongolo vavaa. with-tens-three-tens-already 'Thirty persons drink wine.'
- a'. **o-'ongolo ta'a-ma-tolro-lo vavaa.**Dyn.Fin-drink Dyn.Subj:with-tens-three-tens wine 'Thirty persons drink wine.'

Compare with:

- b. *ma-ma-tolro-lo* ocao ta-'ongolo vavaa.
 Stat.Fin-tens-three-tens person SubjNmz-Dyn.NFin:drink wine
 'Thirty persons drink wine.'
- b'. **o-'ongolo ta-ka-ma-tolro-lo vavaa ocao.**Dyn.Fin-drink SubjNmz-Stat.NFin-tens-three-tens wine person 'Thirty persons drink wine together.'
- (9.62) 'ano-nga-ngea 'alone'
 'ano-dha-dho'a '(with) two'
 'ano-ta-tolro '(with) three'
 'ano-'a-epate '(with) four'

(9.63) 'ano-+ Ca- + Num 'with (in mvt)' $(1 \text{ to } 4)^{66}$

a. 'ano-ta-tolro dhoace la-ma'a-ali-ali.
with-Red-three Dyn.Subj:leave plur-Rec-Red-(female) friend
'The three friends left together.'

Compare with:

b. ma-tolro ta-dhaace la-ma'a-ali-ali.
Stat.Fin-three SubjNmz-Dyn.NFin:leave 'The three friends left together.'

(9.64) taro-'epate '(with) four' tao-'epate taro-Irima tao-Irima '(with) five' taro-eneme tao-eneme '(with) six' taro-pito tao-pito '(with) seven' '(with) eight' taro-valro tao-valro '(with) nine' taro-vangate tao-vangate '(with) ten' taro-ma-nge-le tao-ma-nge-le

- (9.65) taro-+ Num ~ taro-/tao- + Num 'a number of persons (in mvt)' (5 to 9)
 - a. *taro-lrima* maava'i/*kone.
 with-five Dyn.Subj:come/*Dyn.Subj:eat
 'Five persons came.'
 - a'. maava'i/*o-kane taro-lrima.

 Dyn.Fin:come/Dyn.Fin-eat with-five
 'Five persons came.'
 - b. *tao-lrima* maava'i/*kone.
 with-five Dyn.Subj:come/*Dyn.Subj:eat
 'Five people came/*ate.'
 - b'. maava'i/*o-kane tao-lrima.

 Dyn.Fin:come/Dyn.Fin-eat with-five

 'Five people came/*ate.'

Compare with:

_

(i) ta'a-tolro kone la-ma'a-ali-ali.
with-three Dyn.Subj:eat plur-Rec-Red-(female) friend
'The three friends ate together.'

(ii) 'ano-ta-tolro kone la-ma'a-ali-ali.
with-Red-three Dyn.Subj:eat plur-Rec-Red-(female) friend
'The three friends went to eat together.'

⁶⁶ In certain contexts, **ta'a-** and **'ano-**Ca- are near synonyms, for example:

c. ma-lrima ocao ta-kaava'i/ta-kane.

Stat.Fin-five person SubjNmz-Dyn.NFin:come/SubjNmz-Dyn.NFin:eat 'Five persons came/ate.'

c'. maava'i/o-kane ta-ka-lrima.

Dyn.Fin:come/Dyn.Fin-eat SubjNmz-Stat.NFin-five

'Five persons came/ate.'

A few nominal and verbal stems referring mostly to quantification can be used in co-occurrence with the numeral classifiers referring to humans. These can attach to bound nominal roots, e.g. **-elre** 'companion' (9.66a), **-palra** 'spouse' (9.66b), and bound stative verb roots, e.g. **-maidhai** 'many (persons)' (< from **idhai** 'hundred'; note that **-maidhai** 'many' involves a higher number (of participants) than **-dhao** 'many') (9.66c), **-dhao** 'many' (9.66d) and **-vekele** 'a few (persons)' (9.66e).

(9.66) a. 'ano-a-elre \sim (o-)ta'a-elre 'with',

b. 'ano-pa-palra 'along with'

c. ta'a-maidhai ~ taro-maidhai 'with many (persons)'

but *taro-maidha-ae

d. **to-dhao** 'make many'

e. (o-)ta'a-vekele 'with a few (persons)'

Illustrative examples are given in (9.67):

(9.67) a. 'ano-pa-palra m-oa 'adhidhapae pasopalra.
with-Red-spouse Dyn.Subj-go work help

'They went together to work.'

b. **olo** *taro-maidhai*-dha maava'i avalrovalro-dha...
if persons in mvt-many-3S.Gen Dyn.Subj:come girlfriend-3S.Gen

'If many of his girlfriends came....'

Co-occurrence restrictions are indicated in table 9.1:

Table 9.1: Co-occurrence restrictions between bound nominal and verbal roots referring to a quantification and numeral classifiers for 'humans'

| Numeral class. | ta'a- | 'ano-Ca- | (o)taro- | tao- |
|-------------------|-------|----------|----------|------|
| Nouns/verbs | | | | |
| -elre 'companion' | + | + | - | - |
| -palra 'spouse' | - | + | - | - |
| -maidhai 'many' | + | - | + | + |
| -dhao 'many' | - | + | + | + |
| -vekele 'a few' | + | - | + | + |

The circumfix maa-...-e (~ paa-...-e) tentatively glossed as 'together' (< maa-'dual reciprocal' prefix for dynamic verbs) is used exclusively with -dho'a 'two', *cf.* maa-dho'a-e to refer to two persons working or owning a field in common. Only three and four can be used in this construction, by adding the suffix to the base -e.

- (9.68) a. *maa*-dhoa'-*e*-mita ooma. together-two-together-1PI.Nom field 'The two of us own/work (the) field together.'
 - b. tolro-e/'epate-e-mita ooma.

 three-together/four-together-1PI.Nom field

 'We three/four own/work (the) field together.'

9.2.4.2 Counting referents being taken/caught

The numeral classifier for things being taken/caught is **matara-** (which alternates with **patara-**). The formation of this prefix is ill-understood at this stage.

- (9.69) matar-ea '(catch) six' '(catch) one' matara-eneme matara-dho'a '(catch) two' matara-pito '(catch) seven' matara-tolro '(catch) three' matara-valro '(catch) eight' matara-'epate '(catch) four' matara-vangate '(catch) nine' matara-Irima '(catch) five' matara-ma-nge-le '(catch) ten'
- (9.70) a. matara-+ Num~patara- +Num 'take a number of' (1 to 9)

 matara-dho'a-lrao malra olopo comai.

 Dyn.Fin:catch-two-1S.Nom Dyn.Subj:take Dyn.Subj:hunt bear 'I have caught two bears through hunting.'
 - b. matara-ma-+ Num -le/-lo~patara-ma- +Num -le/-lo 'take a number of' (10 to 90) matara-ma-nge-le-lrao la ka-eaea omece
 Dyn.Fin:take-tens-one-tens-1S.Nom and Stat.NFin-one:Red Dyn.Subj:bring solate.
 book
 'I carried eleven books.'

9.2.4.3 Counting containers

The numeral classifiers for 'containers/recipients' (usually referring to a bowl or a glass) is **o-ka'a-+** Num **-le/-lo** ~ **ka'a-+** Num **-le/-lo**. They cannot be replaced by **ma-**(~**ka-**).

'one (recipient)' 'six (recipients)' (9.71) **(o)ka'a-a-le** (o)ka'a-eneme-le 'two (recipients)' 'seven (recipients)' (o)ka'a-pito-lo (o)ka'a-po'a-le 'three (recipients)' 'eight (recipients)' (o)ka'a-tolro-lo (o)ka'a-valro-le 'nine (recipients)' (o)ka'a-'epate-le 'four (recipients)' (o)ka'a-vangate (o)ka'a-lrima-le 'five (recipients)' (o)ka'a-ma-nge-le 'ten (recipients)'

(9.72) a. **o-ka'a-**+ Num **-le/-lo** ~ **ka'a-**+ Num **-le/-lo** 'a number of bowls' (1 to 9) **o-ka'a-pito-lo-lrao**'ongolo

vavaa.

Dyn.Fin-container-seven-container-1S.Nom

Dyn.Subj:drink

'I drank seven glasses of wine.'

b. o-ka'a-ma-+ Num -le/-lo ~ ko'a-ma-+ Num -le/-lo ~ ka'a-ma-+ Num -le/-lo 'a number of bowls' (10 to 90)

o-ka'a-ma-nge-le-nga-lraotakopiliDyn.Fin-container-tens-one-tens:container-already-1S.Nombowl

kone va'oro.

Dyn.Subj:eat rice

'I have already eaten ton bowls.

'I have already eaten ten bowls of rice.'

b'. **o-kane-nga-lrao takopili** Dyn.Fin-eat-already-1S.Nom bowl

ko'a-ma-nge-le va'oro.

Dyn.Subj:container-tens-one-tens:container rice
'I have already eaten ten bowls of rice.'

9.2.4.4 Counting floors

The numeral classifiers for 'floor, storey' is maatali-...-le/-lo- ~ paatali-...-le/-lo.

- (9.73) maatali-a-le 'one floor' maatali-eneme-le 'six floors' maatali-po'a-le 'two floors' maatali-pito-lo 'seven floors' 'three floors' 'eight floors' maatali-tolro-lo maatali-valro-le maatali-'epate-le 'four floors' maatali-vangate 'nine floors' maatali-lrima-le 'five floors' maatali-ma-nge-le 'ten floors'
- (9.74) maatali-+ Num -le/-lo ~ paatali- + Num -le/-lo 'a number of floors' (1 to 9)

 a. maatali-valro-lo dhona dha'ane-li. 67

 Dyn.Fin:floor-eight-floor that house-1S.Gen

 'My house is a eight-storeyed (house).'

67 maatali-...le/-lo (~paatali-...-le/-lo) cannot be replaced by ma-/~ka- as the following example shows:

(i) ma-valro dhona dha'ane-li.
Stat.Fin-eight that house-1S.Gen
'I have eight houses.'

a'. 'ina'i mene-nga o-dholro-nga-nai

this now-Sup Dyn.Fin-can-already-1PE.Nom

to-paatali-valro-lo to-dha'ane.

build-Dyn.NFin:N floor-eight-floor build-house 'Nowadays, we can build eight-storeyed houses.'

b. maatali-ma-+ Num -le/-lo ~ paatali-ma- + Num -le/-lo 'a number of floors' (10 to 90) ma-ka'anahalre-nga dhona'i ta-paatali-ma-valro-lo dha'ane.

Stat.Fin-high-already that SubjNmz-floor-tens-eight-floor:tens house 'The highest house is eighty floors.'

9.2.5 Corresponding wh- words of composite numerals

To each composite numeral corresponds an interrogative word form, made up of an affix followed by **-pi** 'how much/how many', for instance, **to-pi** 'make/produce how many?' (9.75), 'apaka-pi 'on which day?' (9.76), 'ao-pi 'how many times' (9.77). To facilitate comparison, the answer providing the corresponding numeral composite verb is also given.

(9.75) Q: to-pi-'o to-coloko?

produce-how many-2S.Gen produce-glutinous cake

'How many glutinous cakes did you make?'

A: to-ma-po'a-le-lrao to-coloko.

produce-tens-two-tens-1S.Nom produce-glutinous cake

'I made twenty glutinous cakes.'

(9.76) Q: 'apaka-pi-li-nga-'o cengele solate-'o? up to Nth-how many-up to Nth-already-2S.Gen Dyn.Subj:see book-2S.Gen

'On which day did you finish your book?'

A: 'apaka-'epate-le-nga-lrao cengele solate-li.

 $\label{eq:continuous} \mbox{up to N^{th}-four-up to N^{th}-already-1S.Nom} \qquad \mbox{Dyn.Subj:see} \qquad \mbox{book-1S.Gen}$

'I finished my book on the fourth day.'

(9.77) Q: 'ao-pi-li-nga-'o maava'i 'oponoho?

Nth times-how many-Nth times-already-2S.Gen Dyn.Subj:come Wanshan

'How many times have you been to Wanshan?'

A: 'ao-lrima-le-nga-lrao maava'i 'oponoho.

Nth times-five-Nth times-already-1S.Nom Dyn.Subj:come Wanshan

'That's the fifth time I have come to Wanshan.'

The list of all the affixes occurring in composite numerals and their interrogative counterparts is given in table 9.2:

Table 9.2: Mantauran affixes occurring in composite numerals and their interrogative counterparts

| | Finite form | Gloss | Interrogative word | | | | |
|--------------------|------------------------------------|---|---|--|--|--|--|
| A. Verbal affixes | | | | | | | |
| 1. | ma- + Num | 'a number of' | ma-pi+-Pro _{Gen} | | | | |
| 2. | to- + Num | 'make a number of' | to-pi+-Pro _{Gen} | | | | |
| 3. | pa-ka- + Num | 'make sb give a number of' | pa-ka-pi+-Pro _{Gen} | | | | |
| 4. | po- + Num | 'bring a number of' | po-pi+-Pro _{Gen} | | | | |
| 5. | maaraka-ka- + Num | 'each has a number of' | maaraka-ka- <i>pi</i> +-Pro _{Gen} | | | | |
| 6. | makini-ka- + Num-(a)e | 'all have a number of' | makini- <i>ka-pi</i> -e+-Pro _{Gen} | | | | |
| 7a. | ma'a- + Num | 'split in a number of' | ma'a-pi-pi+-Pro _{Gen} | | | | |
| 7b. | apa'a- + Num | 'make sb split in a number of' | apa'a-pi+-Pro _{Gen} | | | | |
| В. (| Ordinal affixes | | | | | | |
| 1. | 'aka- + Num | 'the N th ' | 'aka-pi+-Pro _{Gen} | | | | |
| 2. | 'ao- + Num -le/-lo | 'the N th (time)' | 'ao-pi-li+-Pro _{Gen} | | | | |
| 3. | 'apaka- + Num -le/-lo | 'the N th (day)' | 'apaka- <i>pi</i> -li+-Pro _{Gen} | | | | |
| C. <i>A</i> | Affixes referring to time, frequen | ncy and measure | | | | | |
| 1a. | o-tara- + Num | 'N times' | o-tara-pi+-Pro _{Gen} | | | | |
| 1b. | pa- + Num | 'every N times' | pa-pi+-Pro _{Gen} | | | | |
| 1c. | maka- + Num -le/-lo | 'up to/for N-times' | maka- <i>pi-</i> li+-Pro _{Gen} | | | | |
| 1d. | 'o- + Num -le/-lo | 'N times' | 'o-pi-li +-Pro _{Gen} | | | | |
| 1e. | 'ako- + Num -le/-lo | 'say N times' | 'ako-pi-li+-Pro _{Gen} | | | | |
| 2a. | ta'a- + Num -le/-lo | 'measure with N arms extended' | ta'a-pi-li+-Pro _{Gen} | | | | |
| 2b. | o- + Num -le/-lo dhikoace | 'measure with N hands stretched' | o-pi-li+-Pro _{Gen} dhikoace | | | | |
| 2c. | o- + Num -le/-lo dhopadhapale | 'measure by walking one foot in front of the other' | o-pi-li+-Pro _{Gen} dhopadhapale | | | | |
| 2d. | 'o- + Num+-le/lo dhepadhepange | 'measure with a ruler' | o-pi-li+-Pro _{Gen} dhepadhepange | | | | |
| D. S | Sortal classifiers | | | | | | |
| 1a. | ta'a- + Num | 'with (persons)' | ta'a-pi+-Pro _{Gen} | | | | |
| 1b. | ta-ka- + Num | 'with (persons)' | ta-ka-pi+-Pro _{Gen} | | | | |
| 1c. | 'ano-Ca- + Num | 'with (persons in mvt)' | 'ano-pa-pi+-Pro _{Gen} | | | | |
| 1d. | taro-/tao- + Num | 'with (persons in mvt)' | taro-/tao-pi+-Pro _{Gen} | | | | |
| 2. | (maa)- + Num -e | 'work or own a field in | | | | | |
| | | common' | | | | | |
| 3. | matara- + Num | 'take/catch a number of' | matara-pi+-Pro _{Gen} | | | | |
| 4. | o-ka'a- + Num -le/-lo | 'a number of bowls' | o-ka'a- <i>pi-</i> li+-Pro _{Gen} | | | | |
| 5. | maatali- + Num -le/-lo | 'a number of floors' | maatali-pi-li+-Pro _{Gen} | | | | |

9.2.6 Addition and substraction⁶⁸

Addition is expressed by the verb **poopoa** 'add', substraction by the verb '**oalralra** 'decrease':

(9.78) a. **ma-dho'a la poopoa ta-ka-lrima 'a ma-pito.**Stat.Fin-two and Dyn.NFin:add SubjNmz-Stat.NFin-five Top Stat.Fin-seven 'Two plus five equals seven.'

b. ma-pito la 'oalralra ta-ka-dho'a
Stat.Fin-seven and Dyn.NFin:decrease SubjNmz-Stat.NFin-two
'atedha ta-ka-lrima.
left SubjNmz-Stat.Fin-five
'Seven minus two is five.'

For an approximative figure, e.g. 'five or six', two numerals appear in adposition. For instance:

(9.79) a. *ma-Irima*, *ma-eneme* ocao ta-iki dhona. Stat.Fin-five Stat.Fin-six person SubjNmz-Dyn.NFin:be at 'There are five or six persons over there.'

b. o-tara-ma-nge-le-nga-nai la ka-'epate

Dyn.Fin-time-tens-one-tens-already-1PE.Nom and Stat.NFin-four ka-lrima dhona'i vanidho...

Stat.NFin-five that student

'When we students were around fourteen or fifteen...'

9.3 Quantifiers

Mantauran exhibits at least five quantifiers, *cf.* **poelre**, ⁶⁹ (i)**dhopele**~(o)**dhopele**, (o)**cekelae**, **maesale**, and **moelre** which can be glossed by 'all'.

The usage of **poelre** is restricted to non-human referents.

(9.80) a. **lo m-o-valra-valr-ae-mao** [...] *poetre-*mao if Dyn.Subj-to-Red-village-LocNmz-Impers.Gen dhoadhaace.

Dyn.Subj:walk

'If one went to other villages, one had to walk all (the way).'

⁶⁸ I was unable to elicit data on division.

⁶⁹ The word formation of these quantifiers remains opaque.

b. **ma'ati-kane-kane-lrao, ka** *poelre-***ka-li kone.**Dyn.Fin:a little-Red-Dyn.NFin:eat-1S.Nom Neg all-Neg-1S.Gen Dyn.Subj:eat 'I ate very little. I did not eat it all.'

c. **o-alopo-ng-ine poelre ana vekenelre.**Dyn.Fin-hunt-already-3S.Obl all that ground
'All this land has been hunted.'

d. *?*poelre*-nai m-oa taipake.
all-1PE.Nom Dyn.Subj-go Taipei
Only meaning possible: 'We visited every place in Taipei.'

(o)cekelae, **maesale** and **moelre** 'all, everybody', on the other hand, only refer to human participants.

| (9.81) | a. <i>(o-)cekelae-</i> nai (Dyn.Fin-)all-1PE.Nom 'We all went to Taipei.' | m-oa Dyn.Subj-go | taipake. Taipei |
|--------|---|----------------------------|---------------------------|
| = | a'. om-oa-nai Dyn.Fin-go-1PE.Nom 'We all went to Taipei.' | cekelae Dyn.Subj:all | taipake. Taipei |
| | b. maesale-nai Stat.Fin:all-1PE.Nom 'We all went to Taipei.' | m-oa Dyn.Subj-go | taipake. Taipei |
| = | b'. om-oa-nai Dyn.Fin-go-1PE.Nom | maesale Stat.Subj:all | taipake. Taipei |
| | 'We all went to Taipei.' | | 1 |
| | c. <i>moelre</i> -nai Dyn.Fin:all-1PE.Nom 'We all went to Taipei.' | m-oa Dyn.Subj-go | taipake. Taipei |

The distinction between **(o)cekelae/maesale/moelre** and **poelre** is illustrated in the following minimal pairs of examples:

(9.82) a. **o-kane-nga poelre velevele.**Dyn.Fin-eat-already all banana

'The bananas were all eaten.'

a'. * o-kane-nga cekelae/moelre/maesale velevele.

Dyn.Fin-eat-already Dyn.Subj:all/Stat.Subj:all banana

b. **o-kane-nga poelre taotao velevele-ni.**Dyn.Fin-eat-already all Taotao banana-3S.Gen
'Taotao's bananas were all eaten.'

≠ b'. **o-kane-nga** *cekelae/moelre/maesale* **taotao velevele-ni.**Dyn.Fin-eat-already Dyn.Subj:all/Stat.Subj:all Taotao banana-3S.Gen

'Everybody ate Taotao's bananas. 70

It seems that (i)dhopele~(o)dhopele 'all' can refer both to human and non-human participants and can thus replace poelre or cekelae/maesale/moelre. The two words (i)dhopele~(o)dhopele entail a restriction, cf. 'only'. The distinction between (i)dhopele and (o)dhopele remains opaque.

(9.83) a. mani ci'o alra poa Dyn.NFin:take Dyn.Subj:make Dyn.Subj:string then kapa-idhopele maa-tem-idhe, ki-dholro continuously-all and only Dyn.Subj:Rec-obstruct-3S.Obl Neg-Dyn.NFin:can ka ci'o Neg Dyn.Subj:string 'Then she took (the beads), but they were all blocked and she could not string them.'

b. om-iki dhona tamatama idhopele/dhopele

Dyn.Fin-exist that middle-aged man all and only
a'ivivai la-a-lake-dha ma-tolro a-valrovalro.

plur:Red:female child-plur-child-3S.Gen Stat.Subj-three plur-young woman

'There was a father who had three daughters.' (implied: he only had daughters)

(9.84) a. **o-dhopele-ng-iae kone tamatama velevele-li.**Dyn.Fin-all and only-already-1S.Obl Dyn.Subj:eat middle-aged man banana-1S.Gen

'I had all my bananas/my whole banana eaten by the middle-aged man.'

(implied: He only ate my banana(s))⁷¹

(i) makini-kan-ae-nga taotao velevele-ni.

Dyn.Fin:all-eat-all-already Taotao banana-3S.Gen
'They all ate Taotao's bananas.'

(i) kasa-n-iae kone velevele-li tamatama.
only-3S.Gen-3S.Obl Dyn.Subj:eat banana-1S.Gen middle-aged man
'The middle-aged man only ate my banana(s).'

280

This sentence could be paraphrased by:

⁷¹ (i) is an equivalent sentence.

- b. **o-poelre-ng-iae kone tamatama velevele-li.**Dyn.Fin-all-already-1S.Obl Dyn.Subj:eat middle-aged man banana-1S.Gen
 'I had all my bananas/my whole banana eaten by the middle-aged man.'
- (9.85) a. **o-kane-nga dhopele/idhopele taotao velevele-ni.**Dyn.Fin-eat-already all and only Taotao banana-3S.Gen

 'Everybody ate Taotao's bananas.' (implied: nothing else was eaten)
 - a'. **o-kane-nga** *cekelae/moelre/maesale* **taotao velevele-ni.**Dyn.Fin-eat-already Dyn.Subj:all/Stat.Subj:all Taotao banana-3S.Gen
 'Everybody ate Taotao's bananas.'
 - b. *idhopele/*odhopele*-nai m-oa taipake.
 all and only-1PE.Nom Dyn.Subj-go Taipei
 'We all (but only us) went to Taipei.'
 - b'. (o-)cekelae/moelre/maesale-nai m-oa taipake. (Dyn.Fin-)all/Stat.Fin:all-1PE.Nom Dyn.Subj-go Taipei 'We all went to Taipei.'
 - c. *o-dhopele*/**idhopele*-nai to-alake to-a'iivai.

 Dyn.Fin-all and only-1PE.Nom produce-child produce-plur:female 'We have all daughters.' (implied: but no son)
 - c'. *(o-)cekalae/moelre/maesale*-nai to-alake to-a'iivai.

 (Dyn.Fin-)all/Stat.Fin:all-1PE.Nom produce-child produce-plur:female 'We all have daughters.' (implied: this is what we have in common)

Chapter 10: Pronouns and Adnominal Demonstratives

Pronouns and adnominal demonstratives form a distinct closed class of words on the basis of their morphosyntactic properties. Pronouns can be treated as a subcategory of nouns in that they can function as the head of an NP. Adnominal demonstratives cannot head a noun phrase; rather, they modify a noun within an NP. These two categories are discussed together because there is some morphological overlap between demonstratives which can head a noun phrase (i.e. demonstrative pronouns) and those that can modify an NP (i.e. adnominal demonstratives), as exemplified in (10.1). Their distributions vary to some extent, though, as will be shown in the course of this chapter.

(10.1) a. **o-lralrame-nga** ana ocao.

Dyn.Fin-run-already that person 'That person has already run.'

b. **o-lralrame-nga** ana. Dyn.Fin-run-already that 'S/he has already run.'

Section 10.1 provides a morphosyntactic account of three major pronominal sets in Mantauran: personal pronouns, impersonal pronouns and demonstrative pronouns. In §10.2, the behavior of adnominal demonstratives (as opposed to demonstrative pronouns) is further examined.

10.1 Pronouns

Personal pronouns are surveyed first (§10.1.1), followed by impersonal pronouns (§10.1.2) and demonstrative pronouns (§10.1.3).

10.1.1 Personal pronouns

Mantauran personal pronouns include four sets, which are labeled as follows: topic, nominative, oblique and genitive. These four sets are listed in table 10.1.

| Person/Number | | Topic | Nominative | Oblique | Genitive |
|---------------|--------|--------|-------------|---------|----------|
| 1S | | ilrae | -lrao, nao- | -iae | -li |
| 2S | | imia'e | -mo'o/-mi' | -imia'e | -'0, -ko |
| 3S | vis. | | | -ine | -ni, -i |
| | invis. | | | -idhe | -dha |
| | incl. | imite | -mita, ta- | -imite | -ta |
| 1P | | ita | | | |
| | excl. | iname | -nai, nai- | -iname | -nai |
| 2P | | inome | -nomi | -inome | -nomi |
| 3P | vis. | | | -iline | -lini |
| | invis. | | | -ilidhe | -lidha |

Table 10.1: Mantauran personal pronouns

This section outlines major morphosyntactic characteristics of Mantauran personal pronouns ($\S10.1.1.1$), accounts for variants ($\S10.1.1.2$), discusses the status of pronouns in terms of boundedness ($\S10.1.1.3$) and provides an overview of their distribution and function ($\S10.1.1.4$).

10.1.1.1 Major morphosyntactic characteristics

Morphologically, Mantauran personal pronouns exhibit the following characteristics, some of which are common to many Formosan languages (see Huang et al. 1999b, Li 1997a), and some of which are much more peculiar. They include the following:

- 1. **lexical innovations:** compare, for instance, the form **-lrao** instead of **-aku**, found in many Formosan languages (e.g. Saisiyat **y-ako** 'I') and in the other Rukai dialects (e.g. Budai/Tanan **(n-)aku** 'I').
- 2. **case marking:** there is no morphological marking for nominative pronouns; oblique pronouns are marked by **i-...-e**. This observation is not surprising in itself: full nominative NPs are unmarked for case, just like nominative pronouns; oblique nouns referring to a human participant can be marked by an oblique pronoun that can occur on the noun or (more productively) on the verb (*cf.* chapter 14).
- (10.2) a. **ma-'amadhe taota-***ine* Ø **dhipolo.**Stat.Fin-dislike Taotao-3S.Obl Dhipolo
 'Dhipolo dislikes Taotao.'
 - b. ma-'amadhe-lrao taota-ine.
 Stat.Fin-dislike-1S.Nom Taotao-3S.Obl
 'I dislike Taotao.'

3. **gaps:** there is no personal pronoun for third person participants in the nominative and in the topic sets. This gap is filled by the use of demonstrative pronouns:

(10.3) Mantauran

| a. | o-kane-nga | velevele | Ø. | |
|----|------------------------|----------|----|--|
| | Dyn.Fin-eat-already | banana | Ø | |
| | '(S/he) ate a banana.' | | | |

b. **o-kane-nga velevele** *ana*.

Dyn.Fin-eat-already banana that 'S/he ate a banana.'

- 4. **exclusive/non-exclusive distinction**: This distinction is common not only to the Formosan languages but also to most Austronesian languages, **-mita** 'we (you and I)' *vs.* **-nai** 'we (S/he and I but not you)'.
- 5. **visibility distinction**: The distinction with respect to visibility, *cf.* **-ni** 'his (+vis)' *vs.***-dha** 'his (-invis)' is not that common in the Formosan languages (see Huang et al. 1999b) and is not found in all the Rukai dialects (e.g. there is no such distinction in Budai Rukai).
- 6. **number distinction:** The number distinction is made for third person pronouns, *cf.* -ine/-idhe 's/he (Obl)' *vs.* -iline/-ilidhe 'they (Obl)' and -ni/-dha 'his/her' *vs.* -lini 'their'.

The plural formation differs for oblique/genitive pronominal forms and demonstrative pronouns, *cf.* **l(a)-** as in **-iline** 'them' and **lini** 'their' *vs.* **-lo** as in **dhona-lo** 'those, they'.

7. **similar pronominal shapes**: Topic pronouns and oblique pronouns exhibit similar morphological shapes, *cf.* **-imia'e**, **-iname** and **-inome**. These two pronominal sets must be treated as distinct, however, because of the occurrence of **ilrae** *vs.* **-iae**. The formation of **ilrae** leads us to posit that topic pronouns are formed on the following pattern: **i-**+base, the identical vowel **i** being deleted in sequences such as **i-imia'e**. Third person pronouns—actually demonstrative pronouns—do not fit into this paradigm: they are never preceded by **i-** 'topic' even if they occur in initial position, as shown by the ungrammaticality of (10.4c):

(10.4) Mantauran

a. *ilrae*, **o-kane-lrao velevele-ni taotao**. 1S.Top Dyn.Fin-eat-1S.Nom banana-3S.Gen Taotao 'As for me. I ate Taotao's banana.'

- b. ana-lo, o-kane velevele-ni taotao. that-plur Dyn.Fin-eat banana-3S.Gen Taotao 'As for them, they ate Taotao's banana.'
- c. *i-ana-lo o-kane velevele-ni taotao.

 Top-that-plur Dyn.Fin-eat banana-3S.Gen Taotao

10.1.1.2 Occurrence of pronominal variants

There are a number of pronominal variants in Mantauran, cf. -lrao vs. nao-, -'o vs. -ko, -ni vs. -i, -mita vs. ta-, -nai vs. nai- and imite vs. ita.

In the following sections, I show that the pronominal forms -mo'o and -mi' represent phonological allomorphs while syntactic and/or semantic factors account for the complementary distribution of: (i) -lrao vs. nao-, -mita vs. ta- and -nai vs. nai-, (ii) -'o vs. -ko, (iii) imite vs. ita. At this stage, I am unable to account for the distinction between -ni vs. -i.

10.1.1.2.1 -mo'o vs. -mi' '2S.Nom'

The distinction between **-mo'o** and **-mi'** represents one clear-cut case of phonological allomorphy: **-mo'o** attaches to a verb and is never followed by another (oblique) pronoun (10.5a); **-mi'-**, on the other hand, is always followed by another oblique pronoun (10.5b) except **-imite** '1PI.Obl', which merges with **-mo'o** as **-mite** (10.14c).

- (10.5) a. **o-kelrakelrange-mo'o** ana **lroolai.**Dyn.Fin-beat-2S.Nom that child 'You beat that child.'
 - b. o-kelrakelrange-mi'-ine.

Dyn.Fin-beat-2S.Nom-3S.Obl

'You beat him/her.'

c. o-kelrakelrange-*mite*.⁷² Dyn.Fin-beat-2S.Nom:1PI.Obl 'You beat us.'

10.1.1.2.2 -lrao vs. nao- '1S.Nom', -mita vs. ta- '1PI.Nom' and -nai vs. nai- '1PE.Nom'

The distinction between -lrao vs. nao-, -mita vs. ta- and -nai vs. nai- is quite

286

⁷² As opposed to: **o-kelrakelrange-mi'-iname** 'You beat us' (cf. iname '1PE.Obl')

similar to that found in Tona and Maga Rukai. Each form refers to the nominative participant, i.e. the agent, but the latter (nao-, ta- and nai-) carry modal information, while the former (-lrao, -mita and -nai) do not.

(10.6) a. amo-pato'o-lra-imia'e.

Irr-Dyn.NFin:tell-1S.Nom-2S.Obl 'I will tell you (something).'

b. "nao-pato'-imia'e" mani ia lalake-dha omi.

1S.Nom-Dyn.NFin:tell-2S.Obl then Dyn.NFin:so child-3S.Gen like that 'She said to her child: "I want to tell you (something)."'

(10.7) a. amo-dhaace-nga-mita.

Irr-Dyn.NFin:leave-already-1PI.Nom 'We are going to leave.'

b. ta-dhaace!

1PI.Nom-Dyn.NFin:leave 'Let's leave!'

(10.8) a. amo-'apece-nga-nai.

Irr-Dyn.NFin:sleep-already-1PE.Nom 'We are going to sleep.'

b. nai-'apece!

1PE.Nom-Dyn.NFin:sleep 'Let's sleep!'

The main variation between Mantauran and Tona (or Maga) is that while Mantauran exhibits gaps (i.e. there is no prefixal form for the 2nd and 3rd person pronouns), Tona possesses a nearly complete paradigm.

(10.9) Nominative pronouns in Tona Rukai: post-verbal clitics vs. prefixes

| | Pos | t-verbal clitics | prefixe | S | Post-verbal clitics | prefixes |
|------|----------|------------------|--------------------------|------|---------------------|----------|
| Sing | 1^{st} | kake | ko- | Plur | kiname | name- |
| | | | | | kita | ta- |
| | 2^{nd} | koso | so- | | komo | mo- |
| | 3^{rd} | | ni- ⁷³ | | | |

Wang (2003:86) points out that ni- in Tona can also refer to a non-visible referent, but only provides a few examples. Since there is no overt morphological marking, I therefore assume that there is a gap in the third person plural.

10.1.1.2.3 -'o vs. -ko '2S.Gen'

I have shown above that the occurrence of the genitive is compulsory in certain constructions (*cf.* §10.1.1). In counterfactual (10.10) and causal (10.11) clauses introduced by **la**, the second person genitive is not 'o- but -ko. This is the only known occurrence of -ko:

- (10.10) a. la-ko iki paiso dhoona'i,
 if-2S.Gen Dyn.NFin:exist money that:Emph
 ni-langai-nga-mo'o dha'ane.
 Cntrfct-Dyn.NFin:buy-already-2S.Nom house
 'If you had had money at that time, you would have already bought a house.'
 - b. *la-'o iki paiso dhoona'i, if-2S.Gen Dyn.NFin:exist money ni-langai-nga-mo'o dha'ane.
 Cntrfct-Dyn.NFin:buy-already-2S.Nom house
- (10.11) a. **ma-lrapa'a-mo'o la-ko 'o-kipingi.**Stat.Fin-hot-2S.Nom so that-2S.Gen take off-clothes 'You are hot and so you take off your clothes.'
 - a'. *ma-lrapa'a-mo'o la-'o 'o-kipingi.
 Stat.Fin-hot-2S.Nom so that-2S.Gen take off-clothes
 - b. **ma-'ilrao lroolai la-ko pa-kan-ine.**Stat.Fin-hungry child so that-2S.Gen Caus-Dyn.NFin:eat-3S.Obl 'The baby is hungry so you go and feed him.'
 - b'. * ma-'ilrao lroolai la-'o pa-kan-ine. Stat.Fin-hungry child so that-2S.Gen Caus-Dyn.NFin:eat-3S.Obl

10.1.1.2.4 *imite* vs. *ita* '1PI.Top'

The distinction between **imite** as opposed to **ita** is tricky: while **imite** functions as 'topic', **ita** can be treated as the topical counterpart of **ta-** + Verb. Thus, they usually do not substitute for one another. Compare:

- (10.12) a. *imite* 'a 'oponoho-mita.

 1PI.Top Top Mantauran-1PI.Nom
 'As for us, we are Mantauran.'
 - a'. **ita* 'a 'oponoho-mita.

 1PI.Top Top Mantauran-1PI.Nom

b. ita dhaace!

1PI.Top Dyn.NFin:leave

'Let's leave!'

b'. *imite dhaace!

1PI.Top Dyn.NFin:leave

but cf. c. ta-dhaace!

1PI.Nom-Dvn.NFin:leave

'Let's leave!'

and c'. imite, ta-dhaace!

1PI.Top 1PI.Nom-Dvn.NFin:leave

'As for us, let's leave!'

10.1.1.2.5 -ni vs. -i '3S.Gen'

It is more difficult to account for the variation between **-ni** vs. **-i**, either on the phonological or on the morpho-syntactic level. Compare, for instance:

(10.13) a. aanga-i 'who' and not *aanga-ni a'. kana-ni 'what' and not *kana-i

b. **dha'ane-ni** 'his/her house' and not ***dha'ane-i**⁷⁴

b'. kapadha'anenga-i 'all his/her houses' and not *kapadha'anenga-ni

10.1.1.3 The "free" vs. "bound" status of Mantauran pronominal forms

Divergent conclusions have been drawn regarding the status of Mantauran pronominal forms as "free" or "bound".

Li (1996) argues that the nominative forms **-lrao**, **-mo'o** etc. are "free". The underlying assumption that pertains to this claim is that "long" pronominal forms should be treated as "free" forms, and "short" forms as "bound". In Zeitoun (1997b), I raised a number of arguments against Li's (1996) analysis in an attempt to show that Mantauran nominative pronouns should morphologically be treated as "bound". Some of these arguments are repeated below.

Li (1996) proposes two pieces of evidence to support his claim, the first having to do with stress, the second with the sentential position of these pronouns.

Li assumes that nominative pronouns are free because they "receive a primary stress" (1996:212). Though we consulted the same informant, she never confirmed such

Lexical items ending with a vowel /a/ such as ama- 'father' or ina- 'mother' take -ni not -i, cf. ama-ni 'his/her father' (and not *ama-i) and ina-ni 'his/her mother' (and not *ina-i).

a statement, neither did any of the other informants I later worked with. Stress usually falls on the first syllable of the predicate on which the nominative pronoun is attached to. Thus, **ókanè-nga-lrao** 'I have eaten already' is perfectly grammatical while ***ókanè-nga-lráo** is not.

His second argument is that a lexical form may be inserted between the verb and the pronoun. As an illustration, Li (ibid) provides only one example, *cf.* (10.14):

If nominative pronouns were "free", then they should appear either after or before the verb and after the second verb. That is, they should share the same distribution as full lexical NPs. This is not true, however: **lrao** cannot appear between **matara** and **dho'a**. Consider (10.15):

The "fixed" position of **lrao** is confirmed by the fact that (10.16b) and (10.16d)—where **-lrao** is positioned after the second verb of the clause—are also ungrammatical.

- (10.16) a. **amo-(o)a-***lrao* **malra vavoi po-valrio.**Irr-Dyn.NFin:go-1S.Nom Dyn.Subj:take wild pig CausMvt-village 'I will go (and) take the wild pig back home.'
 - b. *amo-(o)a malra-lrao vavoi po-valrio.

 Irr-Dyn.NFin:go Dyn.Subj:take-1S.Nom wild pig CausMvt-village
 - c. 'o-tolro-lo-nga-lrao kone. times-three-times-already-1S.Nom Dyn.Subj:eat 'I have eaten three times already.'
 - d. *'o-tolro-lo-nga kone-lrao. times-three-times-already Dyn.Subj:eat-1S.Nom

Li's claim is based on the assumption that **matara** and **dho'a** are two verbs. In fact, they form a composite predicate (10.17a), with the numeral classifier **matara**- attaching to the bound numeral form **-dho'a** (*cf.* §9.1.2.4.2). This analysis is supported by a number of lexical and morphosyntactic tests.

- 1. The lexical item given in isolated elicitation for 'take, catch' is **om-alra**, not *matara-.
- 2. When **matara-** (10.17a) is replaced by **om-alra** 'take' as in (10.17b) the sentence becomes ungrammatical. The pronoun **-lrao** 'I' must attach to **om-alra**, and the sequence **om-alra-lrao** is followed by **ma-dho'a**, as shown in (10.17c).

(10.17) a. matara-dho'a-lrao.

Dyn.Fin:catch-two-1S.Nom 'I caught two.'

b. *om-alra dho'a-lrao.
 Dyn.Fin-catch two-1S.Nom
 c. om-alra-lrao ma-dho'a.

Dyn.Fin-catch-1S.Nom Stat.Subj-two

'I caught two.'

3. As shown in chapter 9, different numeral forms are used when counting and in that respect, **nosa** 'two' constrasts with **dho'a** 'two'. The first occurs in serial counting, as in *one*, *two*, *three*, *four* etc. (*cf.* **neka**, **nosa**, **tolro**, **pate** etc.); the second set is composed of bound numeral forms which take different verbal or ordinal affixes and numeral classifiers, as further illustrated in (10.18).

| (10.18) | a. | matara-pi-'o | longai | solate? |
|---------|----|-------------------------|--------------|---------|
| | | catch-how many-2S.Gen | Dyn.Subj:buy | book |
| | | 'How many books did you | buy?' | |

a'. matara-dho'a-Irao longai solate. catch-two-1S.Nom Dyn.Subj:buy book 'I bought two books.'

b. o-tara-pi-nga-dha caili lalake-'o?

Dyn.Fin-time-how many-already-3S.Gen year child-2S.Gen
'How old is your child?'

c'. o-tara-dho'a-nga caili lalake-li.

Dyn.Fin-time-two-already year child-1S.Gen
'My child is two (years old).'

4. Mantauran personal pronouns cannot be used independently in answers to questions like 'Who is it? Me!'

- (10.19) a. **aanga-'o?**aanga-2S.Gen
 'Who are you?'
 - b. aanga-li/*aanga-lrao! aanga-1S.Gen/*aanga-1S.Nom 'It's me!'
 - 5. They can never be moved to the sentence-initial position:
- (10.20) a. *Irao 'a 'avai-Irao.
 1S.Nom Top woman-1S.Nom
 b. ilrae 'a 'avai-Irao.
 1S.Top Top woman-1S.Nom
 'As for me, I am a woman!'
- 6. When further comparing Mantauran with other Formosan languages, e.g. Amis (10.21) and Tsou (10.22), we can only conclude that Mantauran nominative pronouns exhibit the characteristics of "bound" pronouns. In Amis, nominative pronouns have been shown to be "free" (*cf.* Huang 1995b, Y. Chang 2000b). They occur before and after locative pronouns. In Tsou, on the contrary, nominative pronouns are treated as "bound" and cannot move around the sentence (*cf.* Tung et al. 1964, Zeitoun 1992, Szakos 1994 and Y. Chang 1997).
- (10.21) Amis (From Huang 1995b:237)
 - a. mi-sti' kaku cingraan.

 MI-beat 1S.Nom 3S.Loc
 'I will beat him.'
 - b. mi-sti' cingraan kaku. MI-beat 3S.Loc 1S.Nom 'I will beat him.'
- (10.22) Tsou (Adapted from Zeitoun 2000d:82)
 - a. mo-'u baito to oko-su.

 AF:Real-1S.Nom AF:see Obl child-2S.Gen
 'I saw your child.'
 - b. *'u mo baito to oko-su.

 1S.Nom AF:Real AF:see Obl child-2S.Gen

Mantauran oblique pronouns also exhibit degrees of "boundedness" in that they tend to phonologically merge with the preceding nominative or genitive pronoun they attach to, yielding either the deletion of the last vowel of the preceding pronominal form (10.23a-b) or its morphological reshaping (10.24).

(10.23) a. o-kelrakelrange-lra-imia'e. (< -lrao-imia'e) Dyn.Fin-beat-1S.Nom-2S.Obl 'I kick you.' b. o-kelrakelrange-ka-l-imia'e. (< -li-imia'e) Dyn.Fin-beat-Neg-1S.Gen-2S.Obl 'I did not kick you.' (10.24) a. o-tipitipi-mi'-iae. (< -mo'o-iae) Dvn.Fin-beat-2S.Nom-1S.Obl 'You beat me.' b. o-tipitipi-mite. (< -mo'o-imite) Dyn.Fin-beat-2S.Nom:1PI.Obl 'You beat us.'

The next issue that needs to be asked and answered concerns the status of Mantauran personal pronouns: should they be treated as "affixes" or "clitics"? In the remaining part of this section, I show that Mantauran personal pronouns should be regarded as clitics.

Clitics are syntactically free, though phonologically bound to their host, while affixes are syntactically and phonologically bound. Two types of arguments have been advanced to distinguish between clitics and affixes, the first being morphological in nature, the second syntactic.

Zwicky & Pullum (1983) argue that clitics usually exhibit a low degree of selection with respect to their hosts, while affixes are highly restrictive in their selection. As far as their distribution is concerned, nominative and oblique pronouns are rather insensitive to their hosts in Mantauran.

(10.25) a. taotao-lrao.

Taotao-1S.Nom 'I am Taotao.'

b. to-ka-oma-omal-ae-lrao.

do-genuine-Red-sing-genuine-1S.Nom 'I sing conscientiously.'

c. ma-vare'e-lrao.

Stat.Fin-tired-1S.Nom 'I am tired.'

d. **o-langai-***lrao* **dha'ane.** Dyn.Fin-buy-1S.Nom house

'I bought a house.'

e. o-'apece-nga-lrao.

Dyn.Fin-sleep-already-1S.Nom 'I have slept already.'

(10.26) a. om-ik-iae paiso.

Dyn.Fin-exist-1S.Obl money 'I have money.'

b. o-tipitipi-mi'-iae.

Dyn.Fin-beat-2S.Nom-1S.Obl 'You beat me.'

c. o-tipitipi-ka-n-iae.

Dyn.Fin-beat-Neg-3S.Gen-1S.Obl 'S/he did not beat me.'

d. **om-iki-ka-***imia'e* lalake valrovalro? Dyn.Fin-exist-Neg-2S.Obl child young woman

'Do you have (grown up) daughters?'

Moore (1994:338) argues that clitics cannot cross over other clitics and that they never move out of a finite clause, if headed by Infl. In Mantauran, nominative and genitive pronouns occur closer to the verb—in that case, they occur in complementary distribution—than oblique pronouns, i.e. the former two never cross over the latter:

(10.27) a. ma-rimoro-lra-imia'e pato'o Stat.Fin-forget-1S.Nom-2S.Obl Dyn.Subj:tell ni-tipitipi-mi'-idhe taotao. Cntfct-Dyn.NFin:beat-2S.Nom-3S.Obl 'I forgot to tell you to beat Taotao.'

b. *ma-rimoro-imia'e-Irao pato'o Stat.Fin-forget-2S.Obl-1S.Nom Dyn.Subj:tell ni-tipitipi-mi'-idhe taotao. Cntfct-Dyn.NFin:beat-2S.Nom-3S.Obl Taotao

c. ma-rimoro-ka-l-imia'e pato'o Stat.Fin-forget-Neg-1S.Gen-2S.Obl Dyn.Subj:tell ni-tipitipi-mi'-idhe taotao. Cntfct-Dyn.NFin:beat-2S.Nom-3S.Obl Taotao 'I did not forget to tell you to beat Taotao.'

d. *ma-rimoro-ka-imia'e-li pato'o
Stat.Fin-forget-Neg-2S.Obl-1S.Gen Dyn.Subj:tell
ni-tipitipi-mi'-idhe taotao.
Cntfct-Dyn.NFin:beat-2S.Nom-3S.Obl Taotao

Besides, nominative and genitive pronouns always occur on the first verb, i.e. they never move out of a finite clause:

(10.28) a. **o-lriho'o-***lrao* **longolangoi.** Dyn.Fin-know-1S.Nom Dyn.Subj:swim

'I know how to swim.'

b. *o-lriho'o longolangoi-lrao.

Dyn.Fin-know Dyn.Subj:swim-1S.Nom

c. **o-lriho'o-ka-***li* **longolangoi.** Dyn.Fin-know-Neg-1S.Gen Dyn.Subj:swim

'I do not know how to swim.'

d. *o-lriho'o-ka longolangoi-li.

Dyn.Fin-know-Neg Dyn.Subj:swim-1S.Gen

Another difference between pronominal clitics vs. pronominal suffixes lies in the fact that the former fill argument positions on the verb while the latter do not play any syntactic function, i.e. they express redundantly the semantic features (person, number and gender) of the NP they co-refer with. Thus, both suffixes and clitics play a role in agreement, but the notion of grammatical (carried out by suffixes) vs. anaphoric/pronominal (played by clitics) agreement must be distinguished. The definition proposed by Bresnan & Mchombo (1987:741) goes as follows: "in grammatical agreement, an NP bears an argument relation to the verb, while the verbal affix expresses redundantly the person, number, and gender of the NP. In anaphoric agreement, the verbal affix is an incorporated pronominal argument of the verb, and the co-referential NP has a nonargument function—it is either an adjunct of the pronominal argument, or as a topic or focus of the clause or discourse structure."

Bresnan & Mchombo (1987) make a number of syntactic predictions concerning the (im)possible occurrence of the S(ubject) M(arker) and O(bject) M(arker) in Chicheŵa, and some of these can account for the distribution of nominative/oblique pronouns in Mantauran.

First, they show that the anaphorically bounded antecedent is a Topic. In Mantauran, free pronouns, which function as Topics, must co-refer with a bound nominative pronoun attached to the verb.

(10.29) a. *ilrae* **o-kane-nga-***lrao* **velevele.**1S.Top Dyn.Fin-eat-already-1S.Nom banana
'As for me, I ate a banana.'

b. *ilrae o-kane-nga-Ø velevele.

1S.Top Dyn.Fin-eat-already banana

Second, anaphoric agreement can be nonlocal. In Mantauran, oblique pronouns may occur on any verb in a series of two.

(10.30) a. ma-rimoro-lra-idhe pato'o taotao
Stat.Fin-forget-1S.Nom-3S.Obl Dyn.Subj:tell Taotao
ni-tipitip-idhe dhipolo.
Cntrfct-Dyn.NFin:beat-3S.Obl Dhipolo
'I forgot to tell Taotao to beat Dhipolo.'

b. ma-rimoro-lrao pato'o-idhe taotao
Stat.Fin-forget-1S.Nom Dyn.Subj:tell-3S.Obl Taotao
ni-tipitipi-idhe dhipolo.
Cntrfct-Dyn.NFin:beat-3S.Obl Dhipolo
'I forgot to tell Taotao to beat Dhipolo.'

Third, they state that it is impossible to question the subject or the object of a clause if it is cross-referenced within the same clause by an SM or an OM. In Mantauran, neither nominative nor oblique pronouns can be questioned.

(10.31) a. *aanga-i who-3S.Gen a-cengel-ae-'-ine?

b. aanga-i who-3S.Gen ObjNmz-Dyn.NFin:see-ObjNmz-2S.Gen-3S.Obl

b. aanga-i who-3S.Gen ObjNmz-Dyn.NFin:see-ObjNmz-2S.Gen

'Whom did you see?'

Fourth, they argue that only agreement affixes carry over the semantic features (e.g. person, number and gender) redundantly expressed on the verb. If it were true that Mantauran nominative pronouns were agreement markers, then example (10.32), whereby **nai** co-refers with **dhipolo**, should be incorrect. It is, however, perfectly grammatical.

(10.32) ma'a-taka-taka-na-ine dhipolo.

Dyn.Fin:Rec-Red-elder sibling-1PE.Nom-3S.Obl

'Dhipolo and I are sisters.'

Finally, such pronominal arguments usually increase the transitivity of the clause.

In Mantauran, the additional occurrence of an oblique pronoun increases the syntactic and semantic transitivity of the verb/sentence. Oblique pronouns must be treated as arguments of the verbs—thus clitics—because their non-occurrence yields either the ungrammaticality of the derived sentence or variations in meaning.

- (10.33) a. **o-tov-ine lroolai taotao.**Dyn.Fin-cry-3S.Obl child Taotao 'Taotao is affected by the child's crying.'
 - b. **o-Iralrame-ng-**ine lalake-ni taotao.

 Dyn.Fin-run-already-3S.Obl child-3S.Gen Taotao

 'Taotao had his child run awav.'
 - c. **o-kane-ng-***iae* tamatama velevele-li poelre.

 Dyn.Fin-eat-already-1S.Obl middle-aged man banana-1S.Gen all

 'I had my whole banana/all my bananas eaten by the middle-aged man.'
 - d. ma-raveraver-ine ina-ni amo-'acakelae lalake-ni.
 Stat.Fin-happy-3S.Obl mother-3S.Gen Irr-marry child-3S.Gen '(Someone is) happy for his/her mother (because) her child is going to marry.'
- (10.34) a. *o-tovi-Ø lroolai taotao.

 Dyn.Fin-cry-Ø child Taotao

 b. o-lralrame-nga-Ø lalake-ni taotao.

 Dyn.Fin-run-already-Ø child-3S.Gen Taotao

'Taotao's child ran away.' (≠ 10.33b)

- c. **o-kane-nga-Ø tamatama velevele-li poelre.**Dyn.Fin-eat-already-Ø middle-aged man banana-1S.Gen all

 'The middle-aged man ate all my banana.' (≠ 10.33c)
- d. ma-raveravere-Ø ina-ni amo-'acakelae lalake-ni.
 Stat.Fin-happy-Ø mother-3S.Gen Irr-marry child-3S.Gen
 'His/her mother is happy (because) her child is going to marry.' (≠ 10.33d)

10.1.1.4 Distribution and function

Topic pronouns only occur in sentence-initial position, no matter whether the clause is verbal (10.2) or nominal (10.3). First and second person topic pronouns must be cross-referenced on the verb with a nominative pronoun if the sentence is affirmative (10.35a)-(10.36a), and a genitive pronoun if the sentence is negative (10.35b)-(10.36b).

| (10.35) | a. | ilrae 1S.Top 'As for me | 'a Top e, I beat | o-tipitipi- <i>lra</i> -ine Dyn.Fin-beat-1S.Nom-3S.Obl the child.' | ana that | Iroolai. child |
|---------|-------|--|--------------------------------|---|-------------|--------------------------|
| | a'. * | * <i>ilrae</i> 1S.Top | 'a Top | o-tipitipi-∅-ine Dyn.Fin-beat-∅-3S.Obl | ana that | Iroolai. child |
| | b. | ilrae 1S.Top 'As for me | 'a Top e, I did/o | o-tipitipi-ka- <i>l</i> -ine Dyn.Fin-beat-Neg-1S.Gen-3S.Obl do not beat the child.' | ana that | Iroolai. child |
| | b'. * | * <i>ilrae</i> 1S.Top | 'a Top | o-tipitipi-ka- <i>0</i> -ine Dyn.Fin-beat-Neg-3S.Obl | ana that | Iroolai. child |
| | | | | | | |
| (10.36) | a. | ilrae 1S.Top 'As for me | 'a Top e, I am I | 'oponoho- <i>lrao</i> . Mantauran-1S.Nom Mantauran.' | | |
| (10.36) | | 1S.Top | Top | Mantauran-1S.Nom | | |
| (10.36) | | 1S.Top 'As for me *ilrae 1S.Top ilrae 1S.Top | Top e, I am I a Top a Top Top | Mantauran-1S.Nom Mantauran.' 'oponoho-∅. | | |

There is no cross-referencing for third person nominative participants in affirmative sentences (10.37a). In negative sentences, the occurrence of a genitive pronoun is compulsory. Compare the grammaticality of (10.37b-b').

| (10.37) | a. | ana-lo | 'a | o-tipitip-Ø-ine | ana | lroolai. |
|---------|-------|-------------|----------|--------------------------------|------|----------|
| | | that-plur | Top | Dyn.Fin-beat-Ø-3S.Obl | that | child |
| | | 'As for the | em, they | beat the child.' | | |
| | b. | ana-lo | 'a | o-tipitip- <i>ka-lin</i> -ine | ana | lroolai. |
| | | that-plur | Top | Dyn.Fin-beat-Neg-3P.Gen-3S.Obl | that | child |
| | | 'As for the | em, they | did/do not beat the child.' | | |
| | b'. ' | * ana-lo | 'a | o-tipitip- <i>ka-Ø</i> -ine | ana | lroolai. |
| | | that-plur | Top | Dyn.Fin-beat-Neg-Ø-3S.Obl | that | child |

Nominative pronouns occur in subject position (10.38); oblique pronouns occur in non-subject position (10.39):

(10.38) a. o-langai-mo'o solate.

Dyn.Fin-buy-2S.Nom book 'You buy/bought (a) book(s).'

b. 'aliki-mita ka-'oponoh-ae maava'i.

from-1PI.Nom genuine-Wanshan-genuine Dyn.Subj:come

'We come from the old Wanshan village.'

(10.39) a. o-tipitip-iae taotao.

Dyn.Fin-beat-1S.Obl Taotao

'Taotao beat/beats me.'

b. lo ki-'ongolo-'o amo-omoomo-lra-imia'e.

if Neg-Dyn.NFin:drink-2S.Gen Irr-Dyn.NFin:kiss-1S.Nom-2S.Obl

'If you do not drink, I will kiss you.'

c. [...] kapa-ki-kaava'i-idhe o'i

[...] Dyn.NFin:continuously-Neg-Dyn.NFin:come-3S.Obl that

lamengae-dha.

spouse-3S.Gen

'Her husband never came to her.'

Genitive pronouns express possession when they occur on nouns or lexically derived nominals:

(10.40) a. ma-ca'eme lalake-ni.

Stat.Fin-ill child-3S.Gen

'His/her child is ill.'

b. m-odhipi-na taka-li.

Dyn.Fin-alive-still older sibling-1S.Gen

'My older brother/sister is still alive.'

c. m-olekate ta-'olili-ae-nomi.

Dyn.Fin-enough LocNmz-Dyn.NFin:amuse-LocNmz-2P.Gen

'You've played enough.' (Lit.: 'Your playing is enough.')

Genitive pronouns can also occur in other constructions: most notably, they appear after the negator **-ka** 'not' (10.41), with syntactically derived nominals (10.42) or when a verb is modified by **ka**- 'actually, in fact' (10.43a-a') or **naa**- 'continuously' (10.43b). Note that in all these cases, (i) genitive pronouns are compulsory, and (ii) they do not refer to a possessor but to the subject (usually the agent) of the (verbal/nominalized) sentence.

(10.41) a. mati-lriho'o-ka-i

'ako-'oponoh-ae.

very-Dyn.NFin:know-Neg-3S.Gen speak-Mantauran-speak 'S/he does not speak Mantauran very well.'

b. *ni-*iki-a-n-iae

CncNmz-Dyn.NFin:exist-CncNmz-3S.Gen-1S.Obl

ta-ka-dhalame amo-ka-'acakelae-ka-li SubjNmz-Stat.NFin-like/love Irr-Neg-marry-Neg-1S.Gen

ka dhoace.

Neg Dyn.Subj:leave

'Even if someone loves me, I won't marry and leave (home).'

(10.42) a. kani kapa-'apeece-'o?

why Dyn.NFin:continuously-Dyn.NFin:sleep:Emph-2S.Gen 'Why are you always sleeping?'

b. ona'i a-kaava'i-nga-dha

'aomo...

that ClsNmz-Dyn.NFin:come-already-3S.Gen Japanese 'After the Japanese came...' ~ 'When the Japanese had come...'

(10.43) a. ka-lrakase-li.

in fact-Stat.NFin:dislike-1S.Gen 'In fact, I am lazy.'

a'. ka-ka-poli-li

dhipolo.

in fact-Stat.NFin-white-3S.Gen Dhipolo

'In fact, Dhipolo is white.'

b. *naa-tovi-ni*

dhona'i Iroolai.

continuously-Dyn.NFin:cry-3S.Gen that child

'That child does not stop to cry.'

Figure 10.1 provides an overview of major verbal clause types, verbal alternations and pronominal marking (Nom(inative) and Gen(itive) referring to the subject and oblique to the object).

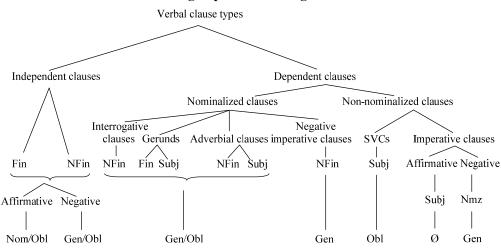


Figure 10.1: Major clause types, verb alternations and marking of pronominal arguments

10.1.2 Impersonal pronouns

Impersonal pronouns have only been reported in Mantauran and Tona Rukai (*cf.* Zeitoun 2003, Wang 2003). They refer to an indefinite entity and only occur in generic contexts but are used quite productively in Mantauran (see Zeitoun & Lin 2003).

There are three impersonal pronouns, **-mao** 'Nom', **-mao** 'Gen' and **-imae** 'Obl'. Their morphological behavior is identical to that of personal nominative, genitive and oblique pronouns.

(10.44) a. om-oa-mao ma-'ano-ngea-ngea dha'an-a-nae Dyn.Fin-go-Impers.Nom Rec:Dyn.Subj-with-Red-one house-beyond-LocNmz mo-lavinahae.

Dyn.Subj:celebrate a ritual-Lavinahae

'One from each family would go to perform the rituals of the Lavinahae household.'

b. lo m-o-valravalrae-mao
 if Dyn.Subj-to-other village(s)-Impers.Gen
 dhoadhaace...
 Dyn.Subj:walk

'If one went to other villages, one had to walk all (the way).'

c. lo maava'i-dh-imae asavasavare-mao if Dyn.Subj:come-3S.Gen-Impers.Obl boyfriend-Impers.Gen maa'a o-poa-mao pa-valrisi dhona'i Stat.Subj:court Dyn.Fin-make-Impers.Nom Caus-Dyn.NFin:change that paca'e lidhalidhao lo dhoma-nae, Dyn.NFin:embroider clipped drawings if other-TempNmz 'i-kipingi-mao. wear-clothes-Impers.Nom

'When one's boyfriend came (to one's house) to court, young women (would) change their clothes and wear embroidered dresses or dresses with designs on them.'

10.1.3 Demonstrative pronouns

This section deals with demonstrative pronouns. They are distinguished in terms of visibility (i.e. visible/invisible) and distance (i.e. near the speaker, near the hearer but far from the speaker, far from both). The same form may (or may not) be preceded by 'i. No semantic variation between demonstratives that have incorporated 'i and those that have not has been detected. They are thus treated here as variants.

```
(10.45) a. 'ina~'ina'i 'this [+vis, -far from the speaker]'
b. ana~ana'i 'that [+vis, + far from the speaker, -far from the hearer]'
c. ona~ona'i 'that [±vis, ±far from the speaker and the hearer]'
d. dhona~dhona'i 'that [-vis, + far from the speaker and the hearer]'
```

Demonstrative pronouns are free forms that are used to refer to third person participants or non-human referents. They can occur in topic position (10.46a), subject position (10.46b) or object position (10.46c).

```
(10.46) a. ana 'a o-omale-na.
that Top Dyn.Fin-sing-still
'As for him/her, he/she is still singing.'
b. o-omale-na ana.
Dyn.Fin-sing-still that
'S/he is still singing.'
c. o-kane-lrao ana.
Dyn.Fin-eat-1S.Nom that
```

'I ate that.'

If they can refer to two (or more human) participants, they are marked for plural through the suffixation of **-lo** to the base:

(10.47) a. 'ina-lo~'ina'i-lo 'these [+vis, -far from the speaker]'
b. ana-lo~ana'i-lo 'those [+vis, + far from the speaker, -far from the hearer]'
c. ona-lo~ona'i-lo 'those [±vis, ±far from the speaker and the hearer]'
d. dhona-lo~dhona'i-lo 'those [-vis, + far from the speaker and the hearer]'

(10.48) a. **aanga-i** ana/ana'i? who-3S.Gen that 'Who is s/he?'

b. aanga-i ana-lo/ana'i-lo? who-3S.Gen that-plur 'Who are they?'

Demonstrative pronouns can also refer to a temporal (10.49a) or spatial location (4.49b), in which case the occurrence of the plural suffix **-lo** is ungrammatical.

(10.49) a. Temporal reference

ona'i/*ona'i-lo a-kaava'i-li 'oponoho that/*that-plur ClsNmz-Dyn.NFin:come-1S.Gen Wanshan Lit.: 'at that time, when I came to Wanshan...'

b. Spatial reference

ta-iki-e-li 'ina'i/*'ina'i-lo.
LocNmz-Dyn.NFin:exist-LocNmz-1S.Gen this/*this-plur
'This is the place where I live.'

10.2 Adnominal demonstratives

Adnominal demonstratives do not replace or head an NP but rather modify a noun:

(10.50) amo-vaa'i-na-inome dhona'i vekenelre...

Irr-Dyn.NFin:give-1PE.Nom-2P.Obl that land

'We will give you that/those land(s)...'

There is some morphological overlap between demonstrative pronouns and adnominal demonstratives, as shown in (10.50).

(10.51) a. 'ina~'ina'i 'this [+vis, -far from the speaker]'
b. ana~ana'i 'that [+vis, + far from the speaker, -far from the hearer]'
c. ona~ona'i 'that [±vis, ±far from the speaker and the hearer]'
d. dhona~dhona'i 'that [-vis, + far from the speaker and the hearer]'
e. o'i (but not *o) 'that [±vis, ±far from the speaker and the hearer]'
f. dho'i (but not *dho) 'that [-vis, + far from the speaker and the hearer]'
g. dhodho'i (but not *dhodho) 'that [-vis, + far from the speaker and the hearer]'

In other words, while some adnominal demonstratives can also function as demonstrative pronouns, others cannot. Compare the grammaticality of (10.52) and (10.53):

- (10.52) a. **o-lralrame-nga** ana ocao.

 Dyn.Fin-run-already that person 'That person has already run.'
 - b. **o-Iralrame-nga** *ana*.

 Dyn.Fin-run-already that 'S/he has already run.'
- (10.53) a. **o-Iralrame-nga o'i ocao.**Dyn.Fin-run-already that person 'That person has already run.'
 - b. *o-lralrame-nga o'i.

 Dyn.Fin-run-already that

Adnominal demonstratives cannot be marked as plural, though younger informants now accept this type of construction for adnominal demonstratives that also function as demonstrative pronouns. The occurrence of the plural suffix -lo on o'i, dho'i and dhodho'i is unheard of. The forms *o'i-lo, *dho'i-lo, *dhodho'i-lo are thus ungrammatical.

- (10.54) a. **o-omale** ana/?*ana-lo a-olrolai.

 Dyn.Fin-sing that/?*that-plur plur-child 'That child is singing.'
 - b. **o-omale** o'i/*o'i-lo a-olrolai.

 Dyn.Fin-sing that/*that-plur plur-child

 'That child is singing.'

Chapter 11: Noun and Verb Phrase Structures

This chapter deals with the structure of noun phrases (§11.1) and that of verb phrases (§11.2).

11.1 Structure of the noun phrase

This section examines in greater detail the structure of noun phrases in Mantauran. Two types of noun phrase structures are discussed: (i) simple noun phrases which contain only a pronoun or a noun and a demonstrative (*cf.* §11.1.1); and (ii) complex noun phrases (*cf.* §11.1.2), which are made up of more complex modifiers with nominal and verbal modifiers, compounds and coordinated NPs.

11.1.1 Simple noun phrases

Simple noun phrases are composed of a noun as in (11.1a-b), a pronoun (11c-e), or a noun which functions as the head of the noun phrase and an adnominal demonstrative (11.2a-d).

- (11.1) a. **om-oa** *tamatama* **ketekete** *'aelrenge*.

 Dyn.Fin-go middle-aged man Dyn.Subj:cut flower

 'The middle-aged man goes/went to cut a flower.'
 - b. ma-ha'aoco *lroolai* ana titina.
 Stat.Fin-scold child that middle-aged woman 'That middle-aged woman scolds/scolded (the) child.'
 - c. **to-sii'i-***lrao* **lriho'o** 'ako-'oponoh-ae. make-a little-1S.Nom Dyn.Subj:know speak-Mantauran-speak 'I speak a little Mantauran.'
 - d. 'a-lrihoa'-e-mo'o.
 a lot-Dyn.NFin:know-a lot-2S.Nom
 'You are (very) famous.'
 - e. om-ii'a ana ma-esale 'oponoho ka-icongan-ae.

 Dyn.Fin-alike that Stat.Subj-all Mantauran genuine-special-genuine 'All the Mantauran people do that; there is no exception.'

- (11.2) a. **ma-raveravere** ['ina'i valrovalro].
 Stat.Fin-happy this young woman 'This young woman is happy.'
 - b. 'i-avongo'o [ana kamosia].
 be infested with-ant that sweet
 'That/those candy/candies are infested with ants.'
 - c. amo-vaa'i-na-inome [dhona'i vekenelre]...
 Irr-Dyn.NFin:give-1PE.Nom-2P.Obl that land
 'We will give you that/those land(s)...'
 - d. dhona'i [o'i]lo dhopele-nai m-alra that if Dyn.Subj:fish by poisoning-1PE.Gen Dvn.Subj-take that ka'ange] mani aka-akame-nai... then Red-Dyn.NFin:roast-1PE.Nom fish 'If we had caught fish, we would roast them...'

In a noun phrase, the demonstrative always precedes the head noun as in (11.3a)-(11.4a). If it follows the noun, it may become part of an equational sentence as in (11.3b); it may also render the sentence ungrammatical as in (11.4b).

- (11.3) a. ana Iroolai that child 'that child'
 - b. **Iroolai ana.** child that 'That is a child.'
- (11.4) a. akaodho ta'avangae dha'ane la paia not exist window house and Dyn.NFin:go through 'ali-lrahalre m-olrehe'e [dhona ta-ka-dhongoso]. from-above Dyn.Subj-enter through a breach that SubjNmz-Stat.NFin-pilfer 'This house has no window, so the burglar broke into it by going in from above.'
 - b. *akaodho ta'avangae dha'ane la paia
 not exist window house and Dyn.NFin:go through
 'ali-lrahalre m-olrehe'e [ta-ka-dhongoso dhona].
 from-above Dyn.Subj-enter through a breach SubjNmz-Stat.NFin-pilfer that

As mentioned in §4.2.2, Mantauran does not have any case markers *per se*. The particle 'i, which might be historically related to the nominative case marker ki in Maga and Tona Rukai, sometimes occurs before a noun without indicating any longer its case relation or its noun class. It precedes the subject in (11.5a) and the object in (11.5b); in

(11.5a), 'i precedes a human common noun and a non-human common noun in (11.5b).

- (11.5) a. lo ma-tolro-dha a'olalai, dhona 'a-ka-tolro Nth-Stat.NFin-three Stat.Subj-three-3S.Gen plur:male that 'aolai "la-padhoma-lrao" om-ia po-alrace. plur-household name-1S.Nom Dyn.Fin-so CausMvt-name 'If there were three men/brothers, the third one would call himself Lapodhoma.'
 - b. mani alra-nai dha'e poa Dyn.NFin:take-1PE.Nom Dyn.Subj:make then mud pi'amadhamalae 'olra lingao Dyn.Subj:wash dishes first Dyn.Subj:take off ta-ka-ecelrang-ae... LocNmz-Stat.NFin-black-LocNmz 'We would use dirt to wash (the dishes) to first take off the dirt.'

In (11.6), it introduces a finite clause that functions as the object of **om-alra** 'take':

(11.6) ...dhona'i aidhi 'a om-alra youngest sibling that Top Dvn.Fin-take 'n "la-ti'ie-lrao" po-alrace. m-ia plur-household name-1S.Nom Dyn.Subj-so CausMvt-name "...the younger brother (would) choose Lati'ie as a family name."

The particle 'i combines very often with adnominal demonstratives as in (11.7) (cf. §10.2):

(11.7) **ki-kane-Irao dhona'i ta-ka-ecelrange.**Neg-Dyn.NFin:eat-1S.Nom that SubjNmz-Stat.NFin-black
'I won't eat the black one.'

A pronoun and a noun referring to the same referent may co-occur side by side as in (11.8a-b) without involving a modifier-modified relationship:

(11.8) a. *iname a'ivivai* **o-dholro-ka-nai ka m-oa**1PE.Top plur:Red:female Dyn.Fin-can-Neg-1PE.Gen Neg Dyn.Subj-go **sakovo.**men's house

'As for us girls, we could not go to the men's house.'

b. *inome* '*oponoho* ma-dhao pelehe'e-nomi. 2P.Top Mantauran Stat.Fin-many taboo-2P.Gen 'As for you Mantauran, you have many taboos.' The type of construction illustrated in (11.8) differs from the one exemplified in (11.9a-b), whereby two nouns are juxtaposed, one modifying the other without any overt marking, and the one shown in (11.10a-b), whereby two nouns are coordinated without any overt coordinator. The construction exemplified in (11.9) is further discussed in §11.1.2.2 and the one given in (11.10) is dealt with in §11.1.2.4.

- (11.9) a. **ma-kocingai** 'oponoho vaha.

 Stat.Fin-difficult Mantauran language is difficult.'
 - b. **ma-dhao pelehe'e 'oponoho ocao.**Stat.Fin-many taboo Mantauran person 'The Mantauran people have many taboos.'
- (11.10) a. mani olo lronge'e-nai poa 'n then if Dyn.Subj:farm-1PE.Gen Dyn.Subj:make vecenge, mairange, pahai, tai m-olekate-ka-nai sweet potato millet rice Dyn.Fin-enough-Neg-1PE.Gen taro ka kone... Neg Dyn.Subj:eat 'If we plant millet, sweet potatoes, rice or taro, we (do not have) enough to eat...'
 - b. lo ma-taadhi'i 'aolai ni-ka-'amalr-a-dha dhona CncNmz-Stat.NFin-self-CncNmz-3S.Gen if Dyn.Subj-good male dhona valrovalro, o-dholro a-itina that plur-middle-aged woman young woman Dyn.Fin-can a-tamatama kaamai poa pa-'acakelae. plur-middle-aged man Stat.NFin:self Dyn.Subj:make Caus-marry 'If the boy was good/kind, the parents could have them marry, even if the girl disliked him.'

11.1.2 Complex noun phrases

More complex noun phrases include verbal and nominal modifying elements—they are discussed in sections 11.1.2.1-11.1.2.2 respectively—or constitute compounds (cf. §11.1.2.3). Coordinated noun phrases are examined in §11.1.2.4.

11.1.2.1 Verbal modifiers

Any type of verbs, whether dynamic verbs (11.11a), stative verbs (11.11b), denumeral verbs (11.11c) or denominal verbs (11.11d), can modify a head noun.

Note that (i) there is no ligature between the head noun and the verbal modifier, i.e.

the verbal modifier and the head noun are juxtaposed; (ii) there is no distinction between the modification of a noun by an action (11.11a)-(11.11d) as opposed to that of a property (11.11b)-(11.11c); (iii) the verb and its nominal arguments (if any) form an attributive (or relative clause) construction, i.e. there is no morphosyntactic distinction between a relative clause and any other verbal modification within a noun phrase in Mantauran.

- (11.11) a. 'ina'i lo toramoro-dha 'i-ange'ange [dhona'i mene-nga very-3S.Gen Pass-Dyn.NFin:hurt that this now-Sup if titina H], ki-dholro [ta-sivarange_M] SubjNmz-Dyn.NFin:pregnant middle-aged woman Neg-Dyn.NFin:can ka po-kavole lroolai... Neg CausMvt-outside child 'Nowadays, when a pregnant woman is having contractions but cannot push her child out...
 - b. ma-dhalame-lrao [dhona'i [ta-ka-ecelrange]_M molrae_H.]
 Stat.Fin-like/love-1S.Nom that SubjNmz-Stat.NFin-black fabric
 'I like the black fabric.'
 - c. om-iki latadhe [ta-ka-ma-nge-le]_M ocao $_{H}$ -]

 Dyn.Fin-exist outside SubjNmz-Stat.NFin-tens-one-tens 'There are ten persons outside.'
 - d. **ma-sekelre-lra-ine** [dhona [ta-to-dha'ane]_M ocao_{H•}]
 Stat.Fin-angry-1S.Nom-3S.Obl that SubjNmz-build-house person
 'I am angry at the person who built the house.'

As shown in (11.12), verbal modifiers are actually nominalized constituents. As such, they undergo different nominalization patterns, depending on the semantic role of the noun they modify, which constitutes in itself one of the nominal arguments of the modifying verb. In (11.12a), the head noun **Iroolai** 'child' is the subject of the verb **kelrakelrange** 'beat' which undergoes subjective nominalization. In (11.12b), the head noun **mairange** 'sweet potato' constitutes the object of the verb **amece** 'bring' which undergoes objective nominalization. In (11.12c), the head noun **tasolasolatae** 'school' represents a locative argument and the verb **om-oa** 'go' that modifies it undergoes locative nominalization.

(11.12) a. ma-'amadhe-lra-ine [dhona'i [ta-kelrakelrange]
Stat.Fin-dislike-1S.Nom-3S.Obl that SubjNmz-Dyn.NFin:beat
ta'olro]_M lroolai_H.]
dog child
'I dislike the child that beat the dog.'

b. o-kane-nga-nai

Dyn.Fin-eat-already-1PE.Nom

[ana [a-amec-ae-nomi]_M mairange_H.] that ObjNmz-Dyn.NFin:bring-ObjNmz-2P.Gen 'We have already eaten the sweet potatoes you brought.'

c. ma-'adhaili ['ina'i ta-oa-(a)e-nai]_M

Stat.Fin-far this LocNmz-Dyn.NFin:go-LocNmz-1PE.Gen

ta-sola-solat-ae_H.]

LocNmz-Red-Dyn.NFin:study-LocNmz

'The school where we go is far.'

There are three things to note.

First, the concord between the verbal modifier and the noun it modifies is compulsory. In other words, any noun in a sentence can be modified (and thus relativized) as long as its semantic role is explicitly marked on the modifying verb. Compare the grammaticality of (11.13a-a') and (11.13b-b'):

| (11.13) | 5 | ta-akame SubjNmz-Dyn.NFin:roast (the person that roasted (fish)) | ocao person | (ka'ange) (fish) | | |
|---------|---|---|-----------------|---------------------|--|--|
| | (| n-akam-ae ObjNmz-Dyn.NFin:roast-ObjNmz (the) person that was roasted' | ocao person | | | |
| | (| a-akam-ae ObjNmz-Dyn.NFin:roast-ObjNmz roasted fish' | ka'ange fish | | | |
| | 5 | ta-akame SubjNmz-Dyn.NFin:roast f(the) fish that roasts' | ka'ange fish | | | |

Second, the word order of the constituents within the noun phrase is relatively free, i.e. the verbal modifier can occur before or after the head noun, as the following pair of examples illustrates:

(11.14) a. [...'ina'i [ta-ovalrisi-nga]_M a-olrolai_H] ka this SubjNmz-Dyn.NFin:change-Sup plur-child Neg o-lriho'o-ka-i ka 'oponoho vaha. Dyn.Fin-know-Neg-3S.Gen Neg Mantauran language "...as for the young generation of children, they do not know (to speak) the Mantauran language.'

b. **ceela** ['ina'i la-a-lake-nai_H [ta-ovalrisi-nga]_M...]
look:Imp this child-Red-child-1PE.Gen SubjNmz-Dyn.NFin:change-Sup
'Look at the young generation of children...'

Third, two distinct verbal modifiers as in (11.15a-b) can be coordinated as in (11.15c), without an overt coordinator in between:

(11.15) a. **dhona ta-ka-kocingai kipingi...** that SubjNmz-Stat.NFin-expensive clothes 'that expensive garment'/'those expensive clothes...'

b. **ki-langalr-ae-nai kipingi...**Neg-Dyn.NFin:buy-ObjNmz-1PE.Gen
'clothes we cannot buy...'

c. dhona ta-ka-kocingai kipingi
that SubjNmz-Stat.NFin-expensive clothes
ki-langalr-ae-nai...
Neg-Dyn.NFin:buy-ObjNmz-1PE.Gen
'those expensive clothes we cannot buy...'

Besides juxtaposition with a head noun as in (11.11)-(11.15), a verbal modifier can occur on its own in an headless NP. In (11.16), an overt subject is missing; in (11.17), it is the object that is omitted.

(11.16) a. [dhona ta-ki-kane va'oro], o-dholro-ka-i
that SubjNmz-Neg-Dyn.NFin:eat rice Dyn.NFin-can-Neg-3S.Gen
m-o-latadhe ka 'olilio.
Dyn.Subj-to-outside Neg play
'Those who haven't eaten cannot go outside to play.'

b. 'irak-iae dhona'i ta-ka-rodhange longai solate.
for-1S.Obl that SubjNmz-Stat.NFin-old Dyn.Subj:buy book
'That old one (i.e. that old person) bought a book for me.'

(11.17) **ma-si'i** *a-kan-ae-ni*.
Stat.Fin-small/a little ObjNmz-Dyn.NFin:eat-ObjNmz-3S.Gen *Lit.*: 'What s/he eats is small/little'

11.1.2.2 Nominal modifiers

Three types of nominal complement constructions must be distinguished. In the first construction, the two nouns are unmarked and juxtaposed without the occurrence of any ligature as in (11.18) and (11.19). One of the two nouns modifies the other one, though it is difficult to determine the status of the two NPs as modifier/modifiee because of the lack of overt morphosyntactic encoding.

(11.18) a. pahai pa'ange

rice one type of glutinous cake 'one type of glutinous rice cake'

b. adhi'i ciare eagle feather 'eagle feather'

(11.19) a 'ina'i ta-ovalrisi-nga a-olrolai ka this SubjNmz-Dyn.NFin:change-Sup plur-child Neg o-lriho'o-ka-i 'oponoho vaha. Dyn.Fin-know-Neg-3S.Gen Mantauran language

'... the young generation does not know how to speak Mantauran.'

b. ma-eaea dhakerale aleve 'oponoho.

Stat.Fin-one:Red river below Wanshan

'There was a river at the foot of the (old) Wanshan village.'

c. ...lo 'i-alrace-dha 'i taka-taka 'aolai....

if get-name-3S.Gen Red-elder sibling male

'...if the eldest brother called himself...'

The ordering of the two nouns is free, as shown by the contrast between (11.19a)-(11.20a) and (11.19b)-(11.20b), for instance:

(11.20) a **o-lriho'o-ka-i** [vaha 'oponoho].

Dyn.Fin-know-Neg-3S.Gen language Mantauran '... (he) does not know how to speak Mantauran.'

b. ma-eaea dhakerale ['oponoho aleve].

Stat.Fin-one:Red river Wanshan below

'There was a river at the foot of the old Wanshan village.'

In the second construction, the particle 'i occurs between the two nouns as in (11.21a). Though very few examples were found in the corpus, the two nouns involve a part-whole relation. As shown in (11.21b), the ordering of the two nouns is fixed, unless the two nouns appear juxtaposed as in (11.22a-b):

- (11.21) a. olo m-oa-nga-nai 'i-nga'ato-'ato mani Dyn.Subj-go-already-1PE.Gen get-brushwood-Red then if cengele-nai dhona'i dha'ane 'n velrete... Dyn.NFin:see-1PE.Nom that house wall 'When we went (there) to gather timber and we saw the ruins (of earlier) houses.'
 - b. *?mani cengele-nai dhona'i velrete 'i dha'ane...
 then Dyn.NFin:see-1PE.Nom that wall house
 'then we saw the ruins (of earlier) houses...'
- (11.22) a. olo m-oa-nga-nai 'i-nga'ato-'ato mani Dyn.Subj-go-already-1PE.Gen get-brushwood-Red then cengele-nai dhona'i dha'ane velrete... Dyn.NFin:see-1PE.Nom that house wall 'When we went (there) to gather timber and we saw the ruins (of earlier) houses.'
 - b. mani cengele-nai dhona'i velrete dha'ane...
 then Dyn.NFin:see-1PE.Nom that wall house
 'then we saw the ruins (of earlier) houses...'

In the third construction, one of the noun functions as a possessor; the other noun represents the possessed referent, cf. (11.23)-(11.24). Mantauran is a head-marking language, i.e. syntactic relations are marked on the modifiee. Thus a genitive pronoun must appear on the possessed entity.

- (11.23) a. **tolropongo-ni** hat-3S.Gen Dhipolo 'Dhipolo's hat'
 - b. vila'a-ni dha'ane besides-3S.Gen house 'the side of the house'
 - c. ta-ve'ek-ae 'adhingi-ni LocNmz-pig-LocNmz inside-3S.Gen 'inside the pigpen'
- (11.24) a. **ma-takolr-iname** 'i 'iidheme-nai ta-ka-a-rodhange.

 Stat.Fin-bad-1PE.Obl heart-1PE.Gen SubjNmz-Stat.NFin-plur-old 'We old people feel sad (about this situation).'
 - b. 'a-ka-ea lalake-li elre-ni vanidho

 Nth-Stat.NFin-one child-1S.Gen companion-3S.Gen student

 a-solate-ni.

 ClsNmz-Dyn.NFin:study-3S.Gen

 'My child is first in class.'

 (Lit.: 'My child is the first (among) his classmates (when) he studies.')

The genitive pronoun that appears on the head noun must agree in visibility (11.25) and number (11.26) with the noun that modifies it. In (11.25), the genitive pronoun that occurs on the noun **lamengae** 'spouse' (the whole NP functions as the subject of the sentence) co-refers with an oblique argument expressed on the verb through the use of a pronoun referring to an invisible participant, *cf.* -idhe. Thus the genitive pronoun must thus also refer to an invisible referent, as in (11.25a). Otherwise, the sentence is ungrammatical as shown in (11.25a'). In (11.26), the possessor noun phrase is composed of two persons, *cf.* Taotao and Elrenge and the head noun must be marked as plural. Compare the grammaticality of (11.26a)-(11.26b).

- (11.25) a. mani kapa-ki-kaava'-idhe o'i then Dyn.NFin:continuously-Neg-Dyn.NFin:come-3S.Obl [-vis] that lamengae-dha dhipolo.

 spouse-3S.Gen [-vis] Dhipolo
 'Dhipolo's husband never came to her.'
 - b. *mani kapa-ki-kaava'-idhe o'i
 then Dyn.NFin:continuously-Neg-Dyn.NFin:come-3S.Obl [-vis] that
 lamengae-ni dhipolo.
 spouse-3S.Gen [+vis] Dhipolo
- (11.26) a. **la-a-lake-***lini* **[taotao la 'elrenge]** child-plur-child-3P.Gen Taotao and Elrenge 'the children of Taotao and Elrenge'
 - b. *la-a-lake-ni [taotao la 'elrenge] child-plur-child-3S.Gen Taotao and Elrenge

Two possessed entities can be coordinated as follows:

- (11.27) a. **a-kan-ae**-ni ObjNmz-Dyn.NFin:eat-ObjNmz-3S.Gen and **taotao**a-'ongo-'ongol-ae-ni taotao
 ObjNmz-Red-Dyn.NFin:drink-ObjNmz-3S.Gen
 'Taotao's food and drink'
 - b. **vila'a-ni la 'adhingi-ni dha'ane** beside-3S.Gen and inside-3S.Gen house 'the side and the inside of the house'

Mantauran exhibits double possessive constructions, with the genitive pronoun co-referring with the possessor occurring on each head noun:

(11.28) [[kipingi-*ni*i vanidho_i]-ni_i taotao_i] clothes-3S.Gen student-3S.Gen Taotao 'the clothes of Taotao's student'

The syntactic contrast between (11.29a), where vaha 'language' and 'oponoho 'Mantauran' are juxtaposed, and (11.29b), where a genitive pronoun, cf. -nai 'our' occurs on the head noun, shows that the same nouns can be involved in two different nominal constructions. The semantic contrast between (11.29a) and (11.29b) can be accounted for as follows: in (11.29a), something is said about Mantauran as a language, whereas in (11.29b), something is said about the language spoken by the Mantauran.

(11.29) a **o-lriho'o-ka-i** [vaha 'oponoho]. Dyn.Fin-know-Neg-3S.Gen Mantauran language '... (he) does not know how to speak Mantauran.'

b. ...la-ni lriho'o, la-ni ...so that-3S.Gen Dyn.NFin:know so that-3S.Gen ki-ka-olro [vaha-nai 'oponoho]. Neg-Stat.NFin-disappear language-1PE.Gen Mantauran

'.... so that (the children might) know the language of the Mantauran/our language so that it won't disappear.'

Other examples follow:

dha'ane (11.30) a. vila'a beside house

'beside the house'

dha'ane a'. vila'a-ni beside-3S.Gen house 'the side of the house'

b. ta-ve'ek-ae 'adhingi LocNmz-pig-LocNmz inside 'inside of pigpen'

b'. ta-ve'ek-ae 'adhingi-ni LocNmz-pig-LocNmz inside-3S.Gen

'the inside of the pigpen'

Multiple verbal and nominal complements can co-occur within the same noun phrase:

(11.31) **dhona'i ta-ka-dho'a ta-ka-si'i**that SubjNmz-Stat.NFin-two SubjNmz-Stat.NFin-small **a-'ilap-ae-ni ta'olro-ni dhipolo**ObjNmz-Dyn.NFin:look for-ObjNmz-3S.Gen dog-3S.Gen Dhipolo
'those two small dogs that Dhipolo looked/looks for'

11.1.2.3 Compounds

Compounds also form complex NPs.

(11.32) a. ovale body hair clothes 'pullover'

b. vanidho student clothes 'uniform'

It was shown in §3.3.4 that (i) the ordering of the two nouns in compounds is free—consider (11.33a-a') and (11.33b-b')—but that (ii) the head of the compound cannot be coordinated while the nouns that do not function as the head (underlined) can (11.33c).

- (11.33) a. ta-se'ese'-ae koli'i
 LocNmz-Dyn.NFin:rise-LocNmz sun
 'east' (Lit.: 'place where the sun rises')
 - a'. koli'i ta-se'ese'-ae

sun LocNmz-Dyn.NFin:rise-LocNmz 'east' (*Lit.*: 'place where the sun rises')

- b. ta-valrilo-e koli'i
 LocNmz-Dyn.NFin:get down-LocNmz sun
 'west' (Lit.: 'place where the sun goes down')
- b'. koli'i ta-valrilo-e sun LocNmz-Dyn.NFin:get down-LocNmz 'west' (*Lit.*: 'place where the sun goes down')

Compounds and nominal complements are rather difficult to distinguish, as in both constructions the ordering of the two constituents can be inverted.

| (11.34) | a. | koli'i | kavale | ~ | kavale | koli'i |
|---------|----|------------------|------------------|---|-------------------------|-----------------|
| | | sun 'sandals' | shoes | | shoes | sun |
| | b. | adhi'i eagle | ciare feather | ~ | ciare feather | adhi'i eagle |
| | | 'eagle feath | ner' | | | |

The only test that seems to distinguish compounding from nominal complementation is the occurrence of a genitive pronoun that attaches to the head noun and co-refers with the possessor in nominal complements (11.35). It is much more difficult to express possession in a compound—compare (11.36a-a')—and totally impossible in a lexicalized compound as in (11.36b-b').

(11.35) a. ana ka-oca-(a)e kipingi-ni that genuine-person-genuine clothes-3S.Gen 'the clothes of that aborigine'

≠ b. ana ka-oca-(a)e kipingi-Ø that genuine-person-genuine clothes-Ø

'those traditional clothes'

(11.36) a. **kipingi-ni vanidho** clothes-3S.Gen student 'his uniform'

a'. **kipingi-ni vanidho-li** clothes-3S.Gen student-1S.Gen 'my student's clothes'

b. **lelepe** mavoroko bean monkey 'green beans'

b'. *lelepe mavoroko-ni bean monkey-3S.Gen

b''. *lelepe-ni mavoroko bean-3S.Gen monkey

11.1.2.4 Coordinated NPs

Coordinated nominal arguments can be juxtaposed as in (11.37a-b). There is usually a short pause between the enumeration of each noun.

- (11.37) a. lo ma-taadhi'i dhona 'aolai ni-ka-'amalr-a-dha Dyn.Subj-good male CncNmz-Stat.NFin-self-CncNmz-3S.Gen dhona valrovalro, o-dholro a-itina that young woman Dyn.Fin-can plur-middle-aged woman a-tamatama kaamai poa pa-'acakelae. plur-middle-aged man Stat.NFin:self Dyn.Subj:make Caus-marry 'If the boy was good/kind, the parents could have them marry, even if the girl disliked him.'
 - b. mani olo longe'e-nai vecenge, poa then if Dyn.Subj:cultivate-1PE.Gen Dyn.Subj:make millet mairange, pahai, tai m-olekate-ka-nai kone. sweet potato Dyn.Fin-enough-Neg-1PE.Gen Neg Dyn.Subj:eat 'If we cultivate millet, sweet potatoes, rice (and) taros, we do not have enough to eat.'

la can also coordinate two nominal phrases, as in (11.36). There is no restriction on the type of noun phrases that can be coordinated, as shown by the permissible coordination of two locative NPs in (11.38a), two common nouns in (11.38b) and two non-common nouns in (11.38c).

- (11.38) a. olo m-o-valravalrae-nai ma-'adhiidhal-iname if Dyn.Subj-to-other village(s)-1PE.Gen Stat.Fin-near-1PE.Obl tongodhae la toladhekae.

 Tona and Maolin

 'If we went to other villages, (the) near(est) were Tona and Maolin.'
 - b. **o-kane-nga-mo'o velevele** *la* **mairange.**Dyn.Fin-eat-already-2S.Nom banana and sweet potato 'You eat (a) banana and (a) sweet potato.'
 - c. **ma-Iroloho-nga taotao** *la* **dhipolo.**Stat.Fin-grown up-already Taotao and Dhipolo 'Taotao and Dhipolo are already grown up.'

11.2 Structure of the verb phrase

This section deals with the structure of the verb phrase. The verb phrase is understood here as (i) the verb and its complement or (ii) the verb followed by pronominal

clitics (there are no free postverbal pronouns).

Two types of verb phrase structures are discussed: (i) simple verb phrases which contain a pronoun, a negator, an aspectual/modal affix (*cf.* §11.2.1) and (ii) complex verb phrases (*cf.* §11.2.2), which are made up of more complex modifiers, including **toramoro** 'very' and coordinated VPs.

11.2.1 Simple verb phrases

A verb phrase consists of the verb, followed by pronominal clitics and/or an object NP.

The verb can be followed by two pronouns at most. The first is always in the nominative (11.39a) or genitive (11.40a) case and the second always in the oblique case. A reverse order (e.g. Obl-Nom) is impossible (11.39b)-(11.40b):

(11.39) a. ma-'amadhe-lra-imia'e.

Stat.Fin-dislike-1S.Nom-2S.Obl 'I dislike you.'

b. * ma-'amadhe-imia'e-lrao.

Stat.Fin-dislike-2S.Obl-1S.Nom

(11.40) a. ma-'amadhe-ka-l-imia'e.

Stat.Fin-dislike-1S.Gen-2S.Obl 'I do not dislike you.'

b. *ma-'amadhe-ka-imia'e-li.

Stat.Fin-dislike-2S.Obl-1S.Gen

The temporal adjunct can occur in sentence-final or in sentence-initial position but not between the verb and its nominal complement. Compare the grammaticality of (11.41a-b):

| (11.41) | a. | o-kane-nga-lrao | va'oro 'idha | | |
|---------|-------|-------------------------------|--------------|-----------|--|
| | | Dyn.Fin-eat-already-1S.Nom | rice | yesterday | |
| | | 'I ate rice yesterday.' | | | |
| | b. 'a | ^{)*} o-kane-nga-lrao | 'idha | va'oro | |
| | | Dyn.Fin-eat-already-1S.Nom | yesterday | rice | |

Within the verb, **-na** 'still' and **-nga** 'already' always precede pronouns (11.42a-b) and/or the negator **-ka** (11.42c-d) and attach immediately to the verb:

(11.42) a. o-kane-nga-lrao.

Dyn.Fin-eat-already-1S.Nom 'I have already eaten.'

b. *o-kane-lrao-nga.

Dyn.Fin-eat-1S.Nom-already

c. o-kane-na-ka-li.

Dyn.Fin-eat-still-Neg-1S.Gen 'I have not eaten yet.'

d. *o-kane-ka-na-li.

Dyn.Fin-eat-Neg-still-1S.Gen

Mantauran puts much more functional load on the verb than on the noun. Thus, the verb phrase carries all kinds of information that is conveyed through affixes. As shown in chapters 3 and 6, different types of prefixes can precede a verb. However, some occur nearest to the root than others. The ordering of prefixes is outlined briefly below:

(i) the plural marker **a-** occurs the closest to the verb root, *cf.* (**ma-/ka-)a-V** '(Stat.(N)Fin-plur-V' (and not ***a-ka-V**):

(11.43) a. ma-a-poli-poli-nai.

Stat.Fin-plur-Red-white-1PE.Nom 'We are all tired.'

b. *a-ma-poli-poli-nai.

Stat.Fin-plur-Red-white-1PE.Nom

(ii) the stative (non-finite) prefix **ka-** always attaches to the verb root/stem. It precedes all other affixes, except the plural marker **a-** (11.43), including:

- the passive 'i-, cf. 'i-ka-V 'Pass-Stat.NFin' (11.44a), and not *ka-'i-V (11.44b):

(11.44) a. 'i-ka-opongo-lra-imia'e.

Stat.NFin-Pass-bother-1S.Nom-2S.Obl 'I am bothered by you.'

b. * ka-'i-opongo-lra-imia'e.

Stat.NFin-Pass-bother-1S.Nom-2S.Obl

- the causative **pa-**, *cf.* **pa-ka-**V 'Caus-Stat.NFin' (11.45a) and not ***ka-pa-**V (11.45b):

(11.45) a. *pa-ka-sekelre(-'o)!*

Caus-Stat.NFin-angry/hate-2S.Gen 'You're nasty/disagreeable.'

b. *ka-pa-sekelre(-'o)!

Stat.NFin-Caus-angry/hate-2S.Gen

- the reciprocal **ma'a-**, *cf.* **ma'a-ka-**V 'Rec-Stat.NFin' (11.46a) and not ***ka-ma'a-**V (11.46b):
- (11.46) a. **ma'a-ka-takolra dhipolo la takanao.**Rec:Stat.Fin-Stat.NFin-bad Dhipolo and Takanao 'Dhipolo and Takanao are on bad terms.'
 - b. **ka-ma'a*-takolra dhipolo la takanao. Stat.NFin-Rec:Stat.Fin-bad Dhipolo and Takanao
 - the negator **ki**-, *cf.* **ki-ka-**V 'Neg-Stat.NFin' (11.47a) and not ***ka-ki-**V (11.47b):
- (11.47) a. mani to-dhi'i piki capa, mani ki-ka-valre. then make-good Dyn.Subj:put at cupboard then Neg-Stat.NFin-smelly '(We would) put (pork) in the cupboard, so that it did not smell.'
 - b. *mani to-dhi'i piki capa, mani ka-ki-valre. then make-good Dyn.Subj:put at cupboard then Stat.NFin-Neg-smelly
- the prefix **kama-** 'continuously', *cf.* **kama-ka-**V (11.48) and not ***ka-kama-**V or ***ma-kama-**:
- (11.48) mani kama-ka-ke'eecenge lrokipi
 then Dyn.NFin:continuously-Stat.NFin-strong Dyn.Subj:stick
 ta-toloholra-nae-ni.
 LocNmz-sit-LocNmz-3S.Gen

'He is continuously glued to his chair.'

- (iii) Other prefixes such as the reflexive prefix 'ini- (11.49a), the reciprocal prefix ma'a- (11.49b) and the distributive/quantifying prefixes maaraka- 'each' and makini- 'all' (11.50a-b) always precede the causative pa- (which is closest to the root/stem):
- (11.49) a. **o-dholro** 'ini-pa-paavanao ana lroolai.

 Dyn.Fin-can self-Red-Dyn.NFin:bathe that child 'That child knows how to bathe himself.'

b. ona lo ma-a'a-mao,

that if Stat.Subj-court-Impers.Gen

ma'a-pa-tamako-mako-mao voa'-ine

Rec-Caus-Dyn.NFin:smoke-Red-Impers.Nom Dyn.Subj:give-3S.Obl

a-sava-savare-dha.

plur-Red-young man-3S.Gen

'When we were courting, we (would) invite one another to smoke (by using the same pipe...).'

- (11.50) a. **maaraka-pa-'ongol-iae vavaa takanao la dhipolo.**Dyn.Fin:each-Caus-Dyn.NFin:drink-1S.Obl wine Takanao and Dhipolo
 - 'Takanao and Dhipolo both invite(d) me to drink.'

b. makini-pa-'ongol-a-iae vavaa dhona ocao. all-Caus-Dyn.NFin:drink-all-1S.Obl wine that person

'All of them invite(d) me to drink wine.'

- (iv) The modal prefixes **amo-** 'will', **ni-** 'if', **ni-...-a** 'even if' occur farthest to the verb root/stem and precede all other affixes, as shown in (11.51)-(11.52):
- (11.51) a. *amo-pa'a-*tina ana-lo.

Irr-Rec:Stat.NFin-mother that-plur

'There will be mother and daughter.'

b. amo-pa-ka-taadhi'i-lra-ine

pa-'i-molramolrae.

Irr-Caus-Stat.NFin-good-1S.Nom-3S.Obl Caus-wear-traditional clothes

'I will make him/her dress beautifully in traditional clothes.'

(11.52) a. mani ia tamatama 'ina'i: "[...]

then Dyn.NFin:so middle-aged man this

ki-pato'o-'-iname ni-pa-picongo-mo'o

Neg-Dyn.NFin:tell-2S.Gen-1PE.Obl Cntrfct-Caus-Dyn.NFin:split-2S.Nom

oha'a" mani ia tamatama.

Dyn.Subj:cook then Dyn.NFin:so middle-aged man

Lit.: 'The middle-aged man said: "[...] Why didn't you tell us and cook (your food) apart?" the middle-aged man said.'

b. ni-pakini-pa-'ongol-a-iae vavaa dhona ocao...

Cnc-all-Caus-Dyn.NFin:drink-all:Cnc-1S.Obl wine that person

'Even if all of them invited me to drink wine...'

The internal verb phrase structure can thus be schematically represented as (11.53a-b), Mantauran allowing only four affixes at most on its verbs at a time. Recall that bound pronominal forms are actually clitics.

```
(11.53) a. (Mod)-(Refl/Rec/Distr/Qnt)-(Caus)-(Neg)-(Stat.NFin)-(Plur)-V-(Asp)-(Neg)-(Pro<sub>Nom/Gen</sub>)-(Pro<sub>Obl</sub>)
            b. (amo-/ni)-('ini-/ma'a-/maaraka-/makini-)-(pa-)-(ki-)(ka-)-(a-)-V-(nga-/na-)-(ka-)-(Pro<sub>Nom/Gen</sub>)-(Pro<sub>Obl</sub>)
Notes:
Mod:
             Modal amo- 'will', ni- 'counterfactual', ni-...-a 'concessive' (cf. §6.3.1.2)
Refl:
             Reflexive 'ini- 'self' (cf. §8.3)
Rec:
            Reciprocal ma(a)-/ma'a- 'each other' (cf. §8.4)
Distr:
            Distributive maaraka- 'each' (cf. §6.6.2)
Ont:
             Quantifier makini-...-ae 'all' (cf. §6.6.3)
            Causative pa- 'make, let' (cf. §8.1.2)
Caus:
Neg:
            (Modal) negation ki- 'will not' (cf. §6.5.2)
Stat.NFin: Stative/Non-Finite ka- (cf. §6.1.1.2)
Plur:
             Plural a- 'all' (marks quantification) (cf. §6.6.1.3)
Asp:
             Aspect -nga 'already', -na 'still' (cf. §6.3.2.2)
Neg:
             (Predicative) negation -ka 'not' (cf. §6.5.1)
```

11.2.2 Complex verb phrases

This section examines more complex verb phrases, that is, verbs modified by **toramoro** 'very' (§11.2.2.1) and coordinated by **la** 'and' (§11.2.2.2).

11.2.2.1 toramoro 'very'

toramoro 'very' may occurs before or after the verb. Most of the verbs that are modified by **toramoro** are stative in nature (11.54a-b), though dynamic verbs can also be modified by **toramoro** (11.54c).

| (11.54) | a. | 'ina'i | vaha-nai | 'i | 'oponoho | toramoro | ka | |
|---------|--|--|-------------------------------|--|--------------|----------|-----|--|
| | | this | language-1PE.Ge | en | Mantauran | very | Lig | |
| | ma-kocingai. | | | | | | | |
| | | Stat.Subj-difficult | | | | | | |
| | | 'Our lang | guage is very diffi | cult (to | learn).' | | | |
| | b. | dhona'i | vaha-lini | | toladhekae | toramoro | ka | |
| | | that | language-3P.0 | Gen | Tona | very | Lig | |
| | | ma-melre'e. | | | | | | |
| | | Stat.Subj-easy | | | | | | |
| | | Lit.: 'That language of them, the Tona (people), is very easy (to learn).' | | | | | | |
| | c. | 'atolo | ro-nga-nai | ki-cen | gele-nga-nai | | ka | |
| | | so-alre | eady-1PE.Nom | y-1PE.Nom Neg-Dyn.NFin:see-already-1PE.Noi | | | Lig | |
| | | toramoro la-a-lake-nai. | | | | | | |
| | | very | very child-plur-child-1PE.Gen | | | | | |
| | "so we do not see our children regularly." | | | | | | | |
| | | | | | | | | |

As shown in (11.54a-c), when **toramoro** occurs before the verb, it is usually followed by the ligature **ka**. When it occurs after the verb, there is no ligature between the verb and **toramoro** 'very', as shown in (11.55a-b)

(11.55) a. **po-timo-lrao to-dhao, mo-timo toramoro.**CausMvt-salt-1S.Nom produce-a lot Anticaus-salt very

'I put on too much salt. (The dishes) are too salty.'

| b. <i>m</i> | a-valre | toramoro | ana | ta-ki-to-dhi'i | |
|--|----------------|----------|---------|-----------------------|--|
| St | tat.Fin-smelly | very | that | SubjNmz-Neg-make-good | |
| pi | iki | capa | votolo. | | |
| D | yn.Subj:put at | cupboard | pork | | |
| 'The pork that was not put (back) on the cupboard is very smelly.' | | | | | |

There is another construction, whereby the verb that follows **toramoro** undergoes manner/instrumental nominalization:

(11.56) a. **toramoro ka** 'a-ka-kocingai. very Lig MnNmz-Stat.NFin-expensive 'It is very difficult/expensive.'

b. toramoro ka 'a-kane.

very Lig InstNmz-Dyn.NFin:eat

'(S/he) eats a lot.'

11.2.2.2 Verbal coordination

In Mantauran, **la** 'and' coordinates verbal phrases (besides coordinating nominal phrases *cf.* §11.1.2.4 and clauses, *cf.* §16.2.2.1). The verb that follows **la** is always in its non-finite form:

(11.57) a. **ana ocao tako-kane-kane** *la lralrame*. that person while-Red-Dyn.NFin:eat and Dyn.NFin:run 'That person is eating and running at the same time.'

| b. | * ana that | tako-kane-kane while-Red-Dyn.NFin:eat | <i>la</i> and | <i>o-Iralrame</i> . Dyn.Fin-run |
|----|---------------|--|------------------|------------------------------------|
| c. | * ana that | tako-kane-kane while-Red-Dyn.NFin:eat | <i>la</i> and | <i>lrolrame.</i> Dyn.Subj:run |

Payne (1985:3) argues that "from a logical point of view, it is possible to distinguish five basic co-ordination types which are realized linguistically both at phrasal and

sentential levels: these are *conjunction* (p and q), *postsection* (p and not q), *presection* (not p and q), *disjunction* (p or q), and *rejection* (not p and not q; not...p or q)." He further notes that languages are likely to analytically treat some of these notions through a combination of conjunction and negation.

When coordinating two verbs (but *a prior*i not when coordinating two sentences), **la** can express various logical notions, most notably conjunction (p and q), postsection (p and not q), and rejection (not q and not q) as shown in (11.58a-c).

- (11.58) a. om-iki men-a-nae ta-ka-eaea Stat.Fin-exist today-beyond-TempNmz SubjNmz-Stat.NFin-one 'ica'oca'o ocao maava'i m-oa 'oponoho Wanshan Dyn.Subj:come Dyn.Subj-go Dyn.Subj:learn person 'itovolro la solate. to'onai (any)thing Dyn.Subj:ask and Dyn.NFin:write 'One day, there was a person that came to Wanshan to do research' (Lit.: 'learn everything, ask and write')
 - b. **dhipolo** 'a *ma-ka'anaralre la* ka-rilai-ka-i.

 Dhipolo Top Stat.Fin-tall and Stat.NFin-slim-Neg-3S.Gen 'Dhipolo is tall and not slim.'
 - c. ana takanao 'a o-'ongo-'ongolo-ka-i la that Takanao Top Dyn.Fin-Red-drink-Neg-3S.Gen and ki-tamako-mako.

Neg-Dyn.NFin:smoke-Red

^{&#}x27;As for that Takanao, he does not drink and does not smoke either.'

Chapter 12: Clause Types

There are two main (basic) clause types in Mantauran. The first is verbal. It is illustrated in (12.1a-c). The second is nominal and is exemplified in (12.2a-b). In both constructions, the predicate—either verbal or nominal—usually occurs clause-initially, i.e. it functions as the head of the clause.

- (12.1) a. om-oa tamatama ketekete 'aelrenge.

 Dyn.Fin-go middle-aged man Dyn.Subj:cut flower

 'The middle-aged man went to cut a flower.'
 - b. **m-olekate ta-'olili-ae-nomi.**Dyn.Fin-enough LocNmz-Dyn.NFin:amuse-LocNmz-2P.Gen
 'You've played enough.'
 - c. ...o-va'ai dhona'i ta-ka-kocingai 'i
 ...Dyn.Fin-give that SubjNmz-Stat.NFin-expensive
 'a-pavalrolo.

 InstNmz-Dyn.NFin:offer
 '...(he [= the groom] had to) offer expensive gifts as dowry.'
- (12.2) a. **lalake-li taotao.** child-1S.Gen Taotao 'Taotao is my child.'
 - b. **dhipolo** ana
 Dhipolo that
 'That/she is Dhipolo.'

A comparison of (12.1a)-(12.1a') and (12.2a)-(12.2a') shows, however, that a noun phrase can only function as a predicate in a nominal/equational clause, whereas a verb phrase may constitute in itself a complete clause/sentence. In other words, there is no 'dummy' subject as in English and noun phrases are often deleted in topic chains (12.3).

(12.1) a'. (o-)ketekete-nga!

(Dyn.Fin-)cut-already. '(I/you/(s)he) cut (it)!'

(12.2) a'. lalake-li

child-1S.Gen 'my child'

(12.3) mani cengele mani polra dhona'i oa-nga then Dyn.NFin:go-already Dyn.Subj:see then Dyn.NFin:touch that a-alop-ae kapa-ka-ateeteleke-nga ObjNmz-Dvn.NFin:hunt-ObjNmz Dvn.NFin:continuously-Stat.NFin-cool-already "ai! ma-'ete-nga lalake-li" mani tovi Ø Stat.Fin-die-already child-1S.Gen then Dyn.Subj:cry Excl Dyn.NFin:so mani dhaace 'ilap-idhe dhona'i votolro'o-dha Ø. Dyn.Subj:look for-3S.Obl body-3S.Gen then Dvn.Fin:leave that 'Then they [father and son] went to see and they touched the game. It was cold. "Ouch! My child is dead" he [the father] said crying and they left and they went to look for his body.'

The present chapter deals with verbal clauses (§12.1), nominal clauses (§12.2) as well as semi-verbal clauses (§12.3) and further examines their similarities/dissimilarities in terms of their internal structure (§12.4). Section 12.5 examines the word order of temporal and locative expressions. Section 12.6 deals with existential, possessive and locative clauses, which form a subtype of verbal clauses. Issues related to the distinction between declarative *vs.* interrogative/pseudo-cleft sentences as well as main clauses and subordinate clauses are discussed in chapter 13 (*cf.* the discussion on interrogative and pseudo-cleft sentences) and chapters 15 and 16 (*cf.* the discussion on complementation, subordination, juxtaposition and coordination).

12.1 Verbal clause types

Verbal clauses can be divided into: (i) ambient clauses (12.4), (ii) intransitive clauses (12.5), (iii) transitive clauses (12.6) and (iv) ditransitive (12.7) clauses.

Ambient clauses involve no argument at all and normally refer to environmental conditions, most typically weather conditions. For instance, **o-koli'i** 'it is sunny', **o-dhamare** 'the moon comes out', **o-dha'olo** 'it rains', **o-dhedhere** 'there is thunder', **o-ve'eve'e** 'it is windy'. It was shown in §7.2.5 that other nouns relating to nature such as **alrehele** 'fly', **avongo'o** 'ant', **atavange** 'cockroach' can also be verbalized as follows: **o-alrehele** 'there are flies', **o-avongo'o** 'there are ants', **o-atavange** 'there are cockroaches'.

The distinction between intransitive and transitive or ditransitive clauses is usually unmarked on the morphological level, although the cross-referencing of oblique arguments on the verb may increase transitivity (*cf.* chapter 14). Both stative and dynamic verbs can head intransitive and transitive clauses as shown in (12.6) and (12.7).

(12.4) Ambient clauses

a. o-dha'olo-nga.

Dyn.Fin-rain-already 'It has rained.'

b. o-koli'i (mene).

Dyn.Fin-sun today 'It is sunny today.'

(12.5) Intransitive clauses

a. o-omale ana Iroolai.

Dyn.Fin-sing that child 'That child is singing.'

b. ma-raveravere 'ina'i valrovalro.
Stat.Fin-happy this young woman 'This young woman is happy.'

(12.6) Transitive clauses

a. o-'ongolo-nga vavaa ama-li.
 Dyn.Fin-drink-already wine father-1S.Gen
 'My father has drunk wine.'

b. ma-ha'aoco lroolai ana tamatama.

Stat.Fin-scold child that middle-aged man 'That middle-aged man scolds/scolded (the) children.'

(12.7) Ditransitive clauses

o-va'ai-lra-ine paiso dhipolo.

Dyn.Fin-give-1S.Nom-3S.Obl money Dhipolo

'I give/gave money to Dhipolo.'

Gerundive constructions (discussed in §7.1.2) are very similar in terms of structure with verbal clauses. The main distinction lies in the occurrence of an argument marked as nominative (12.8a) in (affirmative) verbal clauses and that of an argument marked as genitive (12.8b) in gerundive clauses.

(12.8) a. o-dhaace-nga-mo'o 'idha.

Dyn.Fin-leave-already-2S.Nom yesterday

'You left yesterday.'

b. o-dhaace-nga-'o idhae?

Dyn.Fin-leave-already-2S.Gen when:Real 'When did you leave?'

12.2 Nominal clause types

There is no copula in Mantauran. In other words, nominal clauses are formed through the juxtaposition of two NPs. The predicate noun might be a bare noun—the clause can be defined as "classificational" (12.9)—or be preceded by a demonstrative and form a noun phrase, in which case the clause is "identificational" (12.10) (*cf.* Wang 2004, Reid & Liao 2004).

(12.9) 'avai-lrao.

female-1S.Nom 'I am a woman.'

(12.10) a. ana 'avai 'i dhipolo. that female Dhipolo 'That woman is Dhipolo.'

b. **dhona'i a-olrolai la-a-lake-'o.**that plur-child child-plur-child-2S.Gen
'Those children are your children.'

Nominal predicate clauses include pseudo-cleft (12.11a-b) as well as interrogative (12.12a-b) sentences, which are further discussed in chapter 13.

- (12.11) a. **taotao ta-tipitip-ine ana Iroolai.**Taotao SubjNmz-Dyn.NFin:beat-3S.Obl that child 'It is Taotao that beat that child.'
 - b. ana Iroolai a-tipitip-a-ine taotao.
 that child ObjNmz-Dyn.NFin:beat-ObjNmz-3S.Obl Taotao
 'It is the child that Taotao beat.'
- (12.12) a. **aanga-i ta-tipitipi** ana **lroolai?** who-3S.Gen SubjNmz-Dyn.NFin:beat that child 'Who beat the child?'
 - b. aanga-i a-tipitip-ae taotao?
 who-3S.Gen ObjNmz-Dyn.NFin:beat-ObjNmz taotao
 'Who(m) did Taotao beat?'

As shown in (12.11) and (12.12), both pseudo-cleft and interrogative sentences are composed of a cleft NP—either an NP, e.g. **ana Iroolai** 'that child' or a derived nominal, e.g. **aanga-i** 'who'—which functions as the predicate, followed by a nominalized clause that functions as the subject. The verb that occurs in the nominalized clause undergoes

different nominalization patterns, depending on the semantic role of the noun that is cleft, which constitutes in itself one of the nominal arguments (either the subject or the object) of that verb. In (12.11a) and (12.12a), the subject is the agent of the sentence, and the verb **tipitipi** 'beat' undergoes subjective nominalization. In (12.11b) and (12.12b), the cleft NP constitutes the object and the verb **tipitipi** 'beat' undergoes objective nominalization.

There is another type of nominal clauses, different from those mentioned above, which are introduced by **kasa-** 'only'. The lexical status of this word is difficult to determine, but it can be treated as a nominalized predicate because of the co-occurrence of a genitive pronoun that refers to the subject of the sentence.

kasa- 'only' can be followed by a noun phrase (12.13) and two main types of clauses: a full clause as in (12.14) or a nominalized clause as in (12.15).

- (12.13) **dhona'i 'a** *kasa-dha dhona'i a-kan-ae-nai.*that Top only-3S.Gen that ObjNmz-Dyn.NFin:eat-ObjNmz-1PE.Gen 'That was the only food we had.'
- (12.14) *kasa-dha o'i vo'o*, <u>o-poa</u> **to-vo'o to-lraili** only-3S.Gen that bow Dyn.Fin-make make-bow make-arrow **a-tamatama.**plur-middle-aged man 'There were only the bows and arrows that middle-aged men made [for the boys].'
- (12.15) **kasa-ni lo kone-li va'oro.** only-3S.Gen if Dyn.Subj:eat-1S.Gen rice 'I only eat/ate rice.'

Note that **kasa** 'only' can also be used as a causativized verb (i) — it then takes a nominative-marked subject — or as a noun (ii).

(i) mani poa ma-sola-solate amo-pa-kasa-Irao
then Dyn.NFin:make Stat.Subj-Red-write Irr-Caus-only-1S.Nom
caili dhamare m-ia.
year month Dyn.Subj-so
'Then s/he signs a contract that (stipulates) how long s/he will stay.'

(ii) mani pato'-iname a-talialai pakisa: tell-1PE.Obl plur-chief:Red plain then "amo-leka-lekate-nga-mita 'ina Irr-Red-Dyn.NFin:measure-already-1PI.Nom this ta-kasa-(a)e-ni ooma" ia-ng-iname. LocNmz-only-LocNmz-3S.Gen field Dyn.NFin:so-already-1PE.Obl 'Then the local government told us: "we will measure the fields (to see how) big they are.""

kasa- is followed by a full clause when it modifies a noun (12.16). The full clause does not directly depend on **kasa-**, and the genitive pronoun that occurs after **kasa-** refers to the noun it modifies.

- (12.16) a. kasa-ni lo kala-veceng-ae..., am(o)-oa-nai
 only-3S.Gen if TempNmz-millet-TempNmz Irr-Dyn.NFin:go-1PE.Nom
 m-ore-lehe'e iki ta-sokosokov-ae pelenge.

 Dyn.Subj-hold-ritual Dyn.Subj:be at LocNmz-Dyn.NFin:pray-LocNmz god
 'The only ceremonies we still celebrate are the "millet festival"...; at that time, we go to church.'
 - b. kasa-ta 'oponoho vaha-ta om-ia-nai.
 only-1PI.Gen Mantauran language-1PE.Gen Dyn.Fin-so-1PE.Nom
 'We just knew that our language was Mantauran.'

kasa- is most frequently followed by a nominalized clause that may refer to the past—in that case, the verb is marked by the clausal nominalizer **a-** 'when (past)' (12.17a)—or to a habitual event (12.17b)—in which case the nominalized clause is introduced by **lo** 'if' and the verb occurs in its subjunctive form.

- 'ina'i: "kasa-dha (12.17) a. mani pato'o-idhe m-ia then Dyn.NFin:tell-3S.Obl Dyn.Subj-so this only-3S.Gen a-cengele-nai a-avili-ni ClsNmz-Dyn.NFin:see-1PE.Gen ClsNmz-Dyn.NFin:take (a child) along-3S.Gen lamengae-'o ooma." m-oa spouse-2S.Gen Dvn.Subi-go field. '(They) replied: "We just saw your wife take them along to the fields."
 - b. *kasa-ni lo m-iki-ni* **dha'ane 'apece,**only-3S.Gen if Dyn.Subj:be at-3S.Gen house Dyn.Subj:sleep *lrakape/la-lrakape!*lazybones/plur-lazybones
 'You only (know how to) stay at home and sleep, lazybones!'
 - c. ona'i 'aamadhalae kasa-ni lo 'i-laviti-ni that before only-3S.Gen if wear-skirt-3S.Gen dhona'i a-sava-savare.
 that plur-Red-young man 'Before, young men just wore skirts.'
 - d. kasa-dha olo olopo-dha 'i a-'olalai mani only-3S.Gen if Dyn.Subj:hunt-3S.Gen plur-male then i-valrio-nai a'ivivai.
 at-village-1PE.Nom plur:Red:female
 'Only the men went hunting; we women stay(ed) in the village.'

kasa 'only' can also be followed by a verb that undergoes subjective nominalization (12.18a-b), but the distinction between this type of clauses and the former two types is, at this stage, still not well understood.

(12.18) a. kasa-li ta-ki-kaava'i.

only-1S.Nom SubjNmz-Neg-Dyn.NFin:come 'Only I did not come.'

b. *kasa-*li *ta-'o-ma-nge-le* longai solate.
only-1S.Gen SubjNmz-N times-tens-one-tens Dyn.Subj:buy book
'I have only bought books ten times.'

12.3 Semi-verbal clauses

Mantauran exhibits semi-verbal clauses, which exhibit the characteristics of verbal and nominal clauses. The predicate is nominalized and thus takes a genitive argument rather than a nominative argument as subject. It can be followed by a verb marked as finite, *cf.* (12.19a) or as subjunctive, *cf.* (12.19b).

(12.19) a. to'a-dhaac-ae-li ma-lrakas-iae

ReasNmz-Dyn.NFin:leave-ReasNmz-1S.Gen Stat.Fin-dislike-1S.Obl

m-iki 'ina'i.
Dyn.Subj-be at this

'The reason I am leaving is because I dislike being here.'

b. *arongo-li longai* solate.

just-1S.Gen Dyn.Subj:buy book
'I have just bought a book.'

c. avasae-li ki-to-alake.

a pity-1S.Gen Neg-produce-child

'What a pity I did not give birth to a child!'

Note that for some of these nominalized predicates, a non-nominalized form is available: **arongo** is the nominalized form of **orongo** 'just'. Compare (12.20a-b):

(12.20) a. *arongo-li* **maava'i 'oponoho.** just-1S.Gen Dyn.Subj:come Wanshan

'I have just come to Wanshan'

b. *orongo-lrao* maava'i 'oponoho. just-1S.Nom Dyn.Subj:come Wanshan

'I have just come to Wanshan'

As for avasae, it represents the nominalized form of o-avase 'a pity':

| (12.21) | o-lriho'o-ka-li | ka | dho'oko | dhona |
|---------|-------------------------------|-----------|------------------|------------------|
| | Dyn.Fin-know-Neg-1S.Gen | Neg | Dyn.Subj:press | that |
| | ta-papipi-e | | paiso. | o-avase! |
| | LocNmz-Dyn.NFin:drop-Loc | Nmz | money | Dyn.Fin-a pity |
| | 'I do not know where to press | to let th | e money drop dow | n. What a pity!' |

12.4 Comparison between verbal and nominal clauses

There is a considerable overlap in terms of structure between verbal and nominal clauses. The morphosyntactic distinctions between nouns and verbs were discussed in §4.1. In the present section, the similarities and dissimilarities between verbal and nominal clauses are further examined.

12.4.1 Similarities between verbal and nominal clauses

Similarities between verbal and nominal clauses include (i) the order of nouns and pronouns after and before the verbal/nominal predicate, (ii) the negation of verbal and nominal clauses and (iii) number agreement.

12.4.1.1 Ordering of nouns and pronouns after and before the verbal/nominal predicate

In verbal sentences, the order of full lexical NPs is free in post-verbal position, as shown in (12.22). As nominal clauses are usually composed of two nouns, the order is fixed: N(P)-N(P).

- (12.22) a. **o-kane velevele tamatama.**Dyn.Fin-eat banana middle-aged man 'The middle-aged man is eating/ate a banana.'
 - b. **o-kane tamatama velevele.**Dyn.Fin-eat middle-aged man banana
 'The middle-aged man is eating/ate a banana.'

Note, however, that only (12.22a) can be uttered as an answer to (12.23). This indicates that in terms of discourse, the NP which occurs in sentence-final position is topical and that the relative position of lexical arguments is largely determined by pragmatic factors.

(12.23) **kana-ni pi'a-ni tamatama?** what-3S.Gen Dyn.NFin:do-3S.Gen middle-aged man 'What is/was the middle-aged man doing?'

The ordering of pronouns after verbal and nominal predicates is fixed.

In verbal sentences, the subject always precedes the non-subject. In terms of pronominal coding, nominative (12.24a)-(12.24b) and genitive (12.24a')-(12.24b') pronouns always precede oblique pronouns. As shown in §10.1, a pronoun is marked as nominative in affirmative sentences but as genitive in negative sentences, i.e. nominative and genitive pronouns never co-occur simultaneously. Nominative and genitive pronouns refer to (i) the agent/experiencer in active clauses and to (ii) the patient in passive clauses. Oblique pronouns refer to (i) the patient in active clauses and to (ii) the agent/experiencer in passive clauses.

(12.24) a. o-tipitipi-lra-imia'e.

Act:Dyn.Fin-beat-1S.Nom-2S.Obl 'I beat you.'

a'. o-tipitipi-ka-l-imia'e.

Act:Dyn.Fin-beat-Neg-1S.Gen-2S.Obl 'I do not/did not beat you.'

b. 'i-tipitipi-lra-imia'e.

Pass-Dyn.NFin:beat-1S.Nom-2S.Obl 'I am/was beaten by you.'

b'. 'i-tipitipi-ka-l-imia'e.

Pass-Dyn.NFin:beat-Neg-1S.Gen-2S.Obl 'I am/was not beaten by you.'

If a nominal sentence is composed of a noun and a (nominative) pronoun, the order is fixed: N(P)-Pro_{Nom}.

(12.25) a. 'elrenge-lrao.

Elrenge-1S.Nom 'I am Elrenge.'

b. * lrao-'elrenge.

1S.Nom-Elrenge

If two pronouns co-occur as in (12.26), the genitive pronoun always precedes the oblique pronoun:

- (12.26) a. lalake-l-imia'e. child-1S.Gen-2S.Obl 'You are my child.'
 - a'. lalake-ka-l-imia'e. child-Neg-1S.Gen-2S.Obl 'You are not my child.'
 - a". *lalake-imia'e-li. child-2S.Obl-1S.Gen
 - b. ina-'-iae. mother-2S.Gen-1S.Obl 'I am your mother.'
 - b'. ina-ka-'-iae. mother-Neg-2S.Gen-1S.Obl 'I am not your mother.'

The occurrence of full lexical NPs in clause-initial position is more restricted. Only the agent, or more specifically, the subject of the clause—usually followed by the topic marker 'a—can be raised in initial position. Thus, while (12.27a) is a well-formed sentence, (12.27b) is semantically anomalous.

- (12.27) a. *tamatama* 'a o-kane velevele. middle-aged man Top Dyn.Fin-eat banana 'As for the middle-aged man, (he) eats/ate a banana.'
 - b. *velevele 'a o-kane tamatama.

 banana Top Dyn.Fin-eat middle-aged man

 * 'The banana ate the middle-aged man.'

The object can occur in initial position only if it is definite, as illustrated in (12.27c).

(12.27) c. **dhona'i velevele 'a o-kane tamatama.**that banana Top Dyn.Fin-eat middle-aged man
'As for the banana, the middle-aged man eats/ate it.'

Very few examples similar to the one in (12.17c) were found in the corpus. The following two examples, *cf.* (12.28) and (12.29) are extracted from narratives (Zeitoun & Lin 2003):

(12.29) [dhona'i calre]_{Top} 'a mani 'ongolo-mao a'ivivai.
that dreg Top then Dyn.NFin:drink-Impers.Nom plur:Red:female
Lit.: 'As for the dregs, we the women would drink them.'

If a sentence contains two NPs functioning both as potential agents, the NP occurring in pre-verbal/topic position will obligatorily be interpreted as the agent. This is shown by the semantic contrast between (12.30a-b) on the one hand and (12.31a-b) on the other.

- (12.30) a. **dhona'i ta'olro** 'a o-ka'ace 'ina 'olra'a. that dog Top Dyn.Fin-bite this snake 'As for that dog, it bit this snake.'
 - b. 'ina'i 'olra'a 'a o-ka'ace dhona'i ta'olro.
 this snake Top Dyn.Fin-bite that dog
 'As for this snake, it bit that dog.'
- (12.31) a. *dhipolo* 'a ma-dhalam-ine taotao.

 Dhipolo Top Stat.Fin-like/love-3S.Obl Taotao

 'As for Dhipolo, she likes/loves Taotao.'
 - b. *taotao* 'a ma-dhalam-ine dhipolo.

 Taotao Top Stat.Fin-like/love-3S.Obl Dhipolo

 'As for Taotao, he likes/loves Dhipolo.'

In a nominal clause, the main distinction between the NP occurring after or before the nominal predicate lies in the use of 'i and 'a: 'i precedes post-nominal predicate NPs (12.32a-b), while 'a follows pre-nominal predicate NPs functioning as topics (12.32a'). Their occurrence in a sentence is not obligatory, sometimes blurring the distinction between the nominal predicate and the subject.

- (12.32) a. [lili-li]_{Pred} ['i/Ø dhipolo]_{Subj}. (female) friend-1S.Gen Dhipolo. 'Dhipolo is my friend.'
 - a'. [dhipolo 'a]_{Top} [lili-li]_{Pred}.

 Dhipolo Top (female) friend-1S.Gen
 'As for Dhipolo, (she) is my friend.'
 - b. [ona'i]_{Pred} ['i/Ø a-va'alr-ae-l-ine that ObjNmz-Dyn.NFin:give-ObjNmz-1S.Gen-3S.Obl paiso dhipolo]_{Subj}, money Dhipolo.

^{&#}x27;That is the money that Dhipolo gave me.'

```
b'. [ona'i a-va'alr-ae-l-ine
that ObjNmz-Dyn.NFin:give-ObjNmz-1S.Gen-3S.Obl
paiso Ø]_Pred dhipolo]_Pred.
money Dhipolo.

'As for the money that was given to me, it was Dhipolo (who gave it to me).'
```

Only topic pronouns can occur in clause-initial position, no matter whether the clause is verbal as in (12.33) or nominal as in (12.34). Topic pronouns are usually cross-referenced on the verb with a nominative pronoun if the sentence is affirmative and genitive if the sentence is negative. While the cross-referencing of first and second person participants on the verb is compulsory, as attested by the ungrammaticality of (12.33a') and (12.34a'), there is no cross-referencing of third person nominative participants (12.33c) (cf. also §10.1.1.1.4):

| (12.33) | a. | ilrae 1S.Top 'As for m | 'a Top e, I beat | o-tipitipi- <i>lra</i> -ine Dyn.Fin-beat-1S.Nom-3S.Obl the child.' | ana that | lroolai. child |
|---------|-----|-----------------------------------|-------------------------------|---|--------------------|--------------------------|
| | a'. | * <i>ilrae</i> 1S.Top | 'a Top | o-tipitipi-∅-ine Dyn.Fin-beat-∅-3S.Obl | ana that | Iroolai. child |
| | b. | ilrae 1S.Top 'As for m | 'a Top e, I did/ | o-tipitipi-ka- <i>l</i> -ine Dyn.Fin-beat-Neg-1S.Gen-3S.Obl do not beat the child.' | ana that | Iroolai. child |
| | c. | | | o-tipitip-Ø-ine Dyn.Fin-beat-Ø-3S.Obl y beat the child.' | ana that | lroolai. child |
| | d. | ana-lo that-plur 'As for th | | o-tipitipi- <i>ka-lin</i> -ine Dyn.Fin-beat-Neg-3P.Gen-3S.Obl y did/do not beat the child.' | ana that | Iroolai. child |

(12.34) a. *ilrae* 'a 'avai-*lrao*.

1S.Top Top female-1S.Nom
 'As for me, I am a woman.'

a'.* *ilrae* 'a 'avai-0.

1S.Top Top female-Ø
b. *ilrae* 'a ka 'avai-ka-*li*.
1S.Top Top Neg female-Neg-1S.Gen 'As for me, I am not a woman.'

To summarize briefly, in both types of clauses (i.e. verbal and nominal clauses), the verb or the nominal predicate functions as the head of the clause. Word order is

rather similar in these two types of clauses, with nominal arguments occurring generally after the verbal/nominal predicate. The ordering of full lexical NPs is free; that of pronouns is fixed. Only agents (that is, subjects) or definite objects can be preposed in initial position as topics. This can be schematically represented as follows:

(12.35) Nominal clause

```
A. Post-nominal predicate word order
```

- a. $N(P)_{Pred}$ ('i) N(P) (the occurrence of 'i is optional)
- b. $N(P)_{Pred}$ -Pro_{Nom} or $N(P)_{Pred}$ -Pro_{Gen}-Pro_{Obl}
- B. Pre-nominal predicate word order
- a. N(P) ('a) $N(P)_{Pred}$
- b. Pro_{Top} ('a) $N(P)_{Pred}$ - Pro_{Nom} (except if preposed $NP = 3^{rd}$ person participant)
- b'. Dem ('a) $N(P)_{Pred}$ -Ø (if preposed $NP = 3^{rd}$ person participant)

(12.36) Verbal clause

- A. Post-verbal word order
- a. V N(P)_S N(P)_O or V N(P)_O N(P)_S (if both S and O are full lexical nouns)
- b. V Pro_{Nom/S}-Pro_{Obl/O} but *V Pro_{Obl/O}-Pro_{Nom/S} (if both S and O are pronouns)
- B. Pre-verbal word order
- a. $N(P)_{Agent}$ ('a) V $N(P)_{O}$
- b. Pro_{Top} ('a) V- Pro_{Nom} N(P)_O (except if preposed NP = 3^{rd} person participant)
- b'. Dem ('a) V-Ø $N(P)_0$ (if preposed $NP = 3^{rd}$ person participant)
- c. $N(P)_{definite O}$ ('a) V-Pro_{Nom} $/N(P)_S$

12.4.1.2 Negation of verbal and nominal clauses

Huang (1995:162-163) shows that in Mayrinax Atayal, verbal and nominal clauses are negated differently.⁷⁶ While verbal clauses are negated by **ini** (12.37), nominal clauses are negated by **yakaat** (12.38).

(12.37) Mayrinax Atayal (Huang 1995a:163)

- a. *ini'=*cu usa' cu' hisa'.

 Neg=1S.Nom Dyn.NFin:go Part yesterday
 'I did not go yesterday.'
- b. *ini*' qilaap ku' 'ulaqi'.
 Neg Dyn.NFin:sleep Nom.Rf child
 - 'The child did not sleep.'
 - 'The child is not sleeping.'

⁷⁶ The same is true in other Formosan languages, e.g., Nanwang Puyuma (*cf.* Tan 1997, Huang 2000a, Teng 2007).

(12.38) Mayrinax Atayal (Huang 1995a:162)

a. yakaat=cu ku' tawqi'.

Neg=1S.Nom Nom.Rf chief
'I am not the chief.'

b. yakaat=su' ku' sinsi quw?
Neg=2S.Nom Nom.Rf teacher Qst
'Aren't you the teacher?'

In Mantauran, both verbal (12.39a) and nominal (12.39b) clauses are negated by **-ka** (predicative negation).

(12.39) a. **o-kane-***ka*-i **ka velevele tamatama.**Dyn.Fin-eat-Neg-3S.Gen Neg banana middle-aged man 'The middle-aged man do/did not eat a banana.'

b. **ka vanidho-***ka***-i ka lalake-ni dhipolo.**Neg student-Neg-3S.Gen Neg child-3S.Gen Dhipolo 'Dhipolo's child is not a student.'

12.4.1.3 Subject-predicate agreement

Subject-predicate agreement is found in both nominal and verbal clauses, though not all nominal or verbal clauses allow overt verbal cross-referencing.

Certain nominal and verbal predicates agree in plurality with their plural/quantified subject as in (12.40) and (12.41) respectively:

(12.40) a. 'avai-lrao.

female-1S.Nom

'I am a woman.'

a'. * a'ivivai-lrao.

plur:Red:female-1S.Nom

b. a'ivivai-nai.

plur:Red:female-1PE.Nom

'We are women.'

b'. * 'avai-nai.

female-1PE.Nom

(12.41) a. ma-voti'i dhona ngiao.

Stat.Fin-blind that cat

'That cat is blind.'

a'. * ma-voti-voti'i dhona ngiao. Stat.Fin-Red-blind that cat b. *ma-voti-voti'i* dhona kapa-ngiao-nga. Stat.Fin-Red-blind that all-cat-Sup 'All the cats are blind.' b'. * ma-voti'i kapa-ngiao-nga. dhona

that

This type of plural agreement does not hold if the noun refers to a non-countable entity or to a location in time/space or if the predicate represents a dynamic or a denominal verb

all-cat-Sup

(12.42) a. 'oponoho-nai.

Wanshan-1PE.Nom 'We are Mantauran.'

b. * 'oponoponoho-nai.

Stat.Fin-blind

Red:Wanshan-1PE.Nom

(12.43) a. *o-kane-nga* **dhona kapa-ngiao-nga.** Dyn.Fin-eat-already that all-cat-Sup

'All the cats have eaten.'

b. *o-kane-kane-nga dhona kapa-ngiao-nga.

Dyn.Fin-eat-already that all-cat-Sup

12.4.2 Dissimilarities between verbal and nominal clauses/sentences

Dissimilarities between verbal and nominal clauses include (i) the modification by **toramoro** 'very' of verbs, but not of nominal predicates; and (ii) the negation of verbs (but not of nouns) by the modal negator **ki-**. These two criteria were proposed as tests to contrast verbs and nouns in §4.1.1. They can also be used to show that verbal clauses differ from nominal clauses.

toramoro can occur before (12.44a) or after (12.44a') the verb. It can neither precede nor follow a nominal predicate as the ungrammaticality of (12.44b-b') shows. When it occurs before the verb, **toramoro** is followed by the ligature **ka** as in (12.44a). When it follows the verb, there is no ligature between the verb and **toramoro** (12.44a').

(12.44) a. *toramoro* *(ka) ma-takolra. very Lig Stat.Subj-bad 'very bad'

a'. ma-takolra toramoro. Stat.Fin-bad very 'very bad' b. *toramoro ka 'avai dhipolo. verv Lig woman Dhipolo b'. * 'avai dhipolo. toramoro woman Dhipolo verv

The modal negator **ki**- can be prefixed to the main verb in a verbal sentence (12.45a), but not to a noun functioning as a nominal predicate (12.45b):

(12.45) a. ki-dhaace-lrao.

Neg-Dyn.NFin:leave-1S.Nom 'I won't go.'

b. *ki-'avai dhipolo. Neg-woman Dhipolo

12.5 Temporal and locative expressions

There are two types of temporal expressions: (i) temporal adjuncts which refer to a specific point in time (e.g. **lo menanae** 'one day', **mene** 'now, today', **'idha** 'yesterday', **lo 'idha** 'tomorrow'), which occur in any position in the sentence: initial (12.46a), medial (12.46b-c), final (12.46d-e); (ii) temporal expressions that refer to frequency such as **tokalianae** 'often' **pamenanae** 'every day', **padhamare** 'every month', **pacaili** 'every year', **'oale** 'once' which are verbs and usually occur in sentence initial position. They are usually followed by another embedded verb marked as subjunctive, as in (12.47a-b).

(12.46) a. *lo 'idha-nae-nga* mani va'oro 'aolai if day-TempNmz-Sup then Dyn.NFin:cook rice male dha'an-a-nae-lidha.

house-beyond-LocNmz-3P.Gen

'The day after, the groom's family (would) cook rice.'

b. 'ara-kaava'i-a lo 'idha maelre la
Dyn.Subj:early-come-Imp tomorrow morning and
(a)mo-pa-ka'a-ka-lromalromale solate.

Irr-Caus-Rec-Stat.NFin-compete Dyn.Subj:write
'Come early tomorrow for the written examination.'

c. amo-dhaace-Irao lo 'idha mani
Irr-Dyn.NFin:leave-1S.Nom tomorrow then
talidhaadhaace-nga-Irao 'ina moongo.
Dyn.NFin:pack-already-1S.Nom this evening
'I am leaving tomorrow so I am packing tonight.'

d. *mo-la-pangolai*-ka-nomi mene?

Dyn.Fin:hold-plur-household name-Neg-2P.Gen today

'Are you going to hold the Lapangolai household rituals today?'

e. makini-'ano-pa-palr-ae m-oa taipake 'idha.

Dyn.Fin:all-with-Red-spouse-all Dyn.Subj-go Taipei yesterday

'They all went to Taipei together yesterday.'

(12.47) a. *pa-caili*-nai mo-la-pangolai

every-year-1PE.Nom Dyn.Subj:hold-plur-Pangolai

more-lehe'e valrio-nai.

Dyn.Subj:hold-ritual village-1PE.Gen

'Every year, we would hold the Lapangolai household rituals in our village.'

b. *pa-dhamare*-lrao 'o-lrima-le m-o-valrio.
every-month-1S.Nom N-times-five-N-times Dyn.Subj-to-village
'I come back five times a month.'

Locative expressions usually follow the verb, as shown in (12.48a-c):

(12.48) a. lo m-oa-lini sakovo a'olalai Dyn.Subj-go-3P.Gen plur:Red:male men's house "a-visa-visar-ae-'o to-takolra!" ObjNmz-Red-Dyn.NFin:damage-ObjNmz-2S.Gen make-bad mani i-iline a-tamatama. then Dyn.NFin:so-3P.Obl plur-middle-aged man

'If (young) boys went to the men's house, the middle-aged men (would) warn them: "Don't damage (anything)!"

b. *amo*-paia-lrao 'oponoho.
Irr-Dyn.NFin:go through-1S.Nom
'I will go through Wanshan.'

c. 'aliki-mita ka-'oponoh-ae maava'i.
from-1PI.Nom genuine-Wanshan-genuine Dyn.Subj:come
'We come from the old Wanshan village.'

12.6 Existential, possessive and locative clauses

Existential, possessive and locative clauses are examined together, because they all are locative in nature. It has been shown, however, that existential and possessive constructions may differ from locative constructions syntactically and/or semantically. Freeze (1992:554), for instance, states that formal differences among the three kinds of locative predications cross-linguistically are quite restricted and highly predictable. This is best explained by the hypothesis that they share the same underlying structure, a hypothesis that accounts naturally for languages in which all members of the locative paradigm are identical in structure, as well as languages in which the existential and 'have' forms, as in *There is a book on the bench* and *Lupe has a book*, are alike, but contrast with the locative predicate, as in *The book is on the bench*.

In Mantauran, existential, possessive and locative clauses are verbal in nature. While the same verb, *cf.* **om-iki** 'exist, be at' heads affirmative existential, possessive and locative clauses (*cf.* §12.6.1), the negator that occurs in locative clauses is different from the one that negates existential and possessive clauses (*cf.* §12.6.2). In §12.6.3, two types of *have-*constructions (glossed as: 'Y's X exists' and 'X exists at Y's place') are further investigated. Section 12.6.4 shows that numerals and quantifiers can also function as existential predicates.

12.6.1 Affirmative existential, possessive and locative clauses

In Mantauran, the same verb, **om-iki** 'exist, be at', occurs in affirmative existential (12.49), possessive (12.50) and locative (12.51) constructions.

- (12.49) a. *om-iki* **dha'ane 'adhingi ta'olro.**Dyn.Fin-exist house inside dog

 'There is a dog inside the house.'
 - b. 'ina'i mene-nga ta-iki-ki-ae-nga-nai this now-Sup LocNmz-Dyn.NFin:be at-Red-LocNmz-already-1PE.Gen ma-a'a a-sava-savare la a-valrovalro, Stat.Subj-court plur-Red-young man and plur-young woman om-iki-nga ta'ele [...], om-iki-nga apoto, om-iki Dyn.Fin-exist-already chair Dyn.Fin-exist-already stone Dvn.Fin-exist lingo, om-iki-nga ta-pa-'ototalo-e molrae... mirror Dyn.Fin-exist-already LocNmz-Caus-put away-LocNmz fabric 'Nowadays, in the place where young women and young men court, there are chairs... There (also usually) are a table, a mirror and a cupboard....'

(12.50) a. *om-iki* paiso-li.

Dyn.Fin-exist money-1S.Gen

'I have money.' (Lit.: 'My money exists.')

b. *om-iki* **dhona tamatama idhopele**Dyn.Fin-exist that middle-aged man all and only

a'ivivai la-a-lake-dha...

plur:Red:female child-plur-child-3S.Gen

'There was a father who had three daughters...' (Implied: he only had daughters)

(12.51) a. om-iki latadhe dhona'i titina.

Dyn.Fin-be at outside that middle-aged woman

'That middle-aged woman is outside.'

b. om-iki tongodhae dhona'i ka-dhalam-ae-li

Dyn.Fin-be at Tona that Stat.NFin-like/love-ObjNmz-1S.Gen

ocao.

person

'That person I like/love is in Tona.'

It has been observed that 'existential verbs often tend to lose verbal inflection and become a neutral particle, with neutralized agreement and reduced tense-aspect-modal morphology [...] it is semantically bleached.' (Givón 1990:745). Himmelmann (2005a: 137) states that "the most common existential construction in western Austronesian languages consists of an existential particle or verb which is immediately followed by its complement. Existential particles are unaffixes and thus differ clearly from verbs. Existential verbs usually differ from other verbs by combining only with a small subset of the verbal morphology available in the language." In Mantauran, **om-iki** is a verb in its own right: (i) it displays the same finite, non-finite and subjunctive verbal alternations as other verbs do (cf. §4.3.2.2); it can occur as an imperative (12.52a); it can carry aspectual affixes such as **-nga** 'already' (12.52b) or **-na** 'still, yet' (12.52c); it can be followed by a nominative, genitive or oblique pronoun, depending on the construction (12.52d).

(12.52) a. "'a! ceela! m-iki-a-na 'inai...!"

Ah! look:Imp Dyn.Subj-be at-Imp-still this 'Look! Stay here!'

b. mani *iki-nga* a-olrolai sola-solate then Dyn.NFin:be at-already plur-child Red-Dyn.Subj:study

ma-'adhidhali-nga.

Stat.Fin-near:Red-already

'Then the children could study near (the village).'

c. ona'i a-iki-na-nai ka-'oponoh-ae, ClsNmz-Dyn.NFin:exist-still-1PE.Gen genuine-Wanshan-genuine that koli'i om-iki-nomi ta-se'ese'e Dyn.Fin-exist-1PE.Nom SubjNmz-Dyn.NFin:rise sun om-i-iname lo cengele-n-iname valrevalrae. Dyn.Fin-so-1PE.Obl if Dyn.Subj:see-3S.Gen-1PE.Obl outsider(s) 'When we still were in the old Wanshan village, outsiders (would) tell us that we were located in the east, when they came to see us.'

d. ni-iki-a-n-iae

CncNmz-Dyn.NFin:exist-CncNmz-3S.Gen-1S.Obl

ta-ka-dhalame amo-ka-'acakelae-ka-li ka dhoace.SubjNmz-Stat.NFin-like/love Irr-Neg-marry-Neg-1S.Gen Neg Dyn.Subj:leave 'Even if there is someone who loves me, I won't marry and leave (home).'

Existential and locative constructions are said to differ in terms of (i) subject selection and (ii) word order, these two parameters being interrelated. In terms of subject selection, it is usually assumed that if the theme is definite, it becomes the subject, and the sentence is given a locative interpretation. If the theme is indefinite, the prepositional phrase (locative) is the subject and the sentence is interpreted as an existential sentence. In terms of word order, Freeze (1991:2) shows that in verb-initial languages, the theme precedes the locative phrase if indefinite, but appears in sentence-final position if definite. He proposes the following schema to represent this complementary relationship (subject in boldface):

(12.53) Cop Loc Theme (PL)
$$\leftrightarrow$$
 Cop Theme Loc (EX) +definite -definite

In Mantauran, none of these two assumptions holds. First, word order is quite free. Compare (12.54a-a') and (12.54b-b').

- (12.54) a. om-iki dha'ane 'adhingi ta'olro.

 Dyn.Fin-exist house inside dog

 'There is a dog inside the house.'
 - a'. **om-iki ta'olro dha'ane 'adhingi.**Dyn.Fin-exist dog house inside 'There is a dog inside the house.'
 - b. om-iki latadhe dhona'i titina.

 Dyn.Fin-exist outside that middle-aged woman 'That middle-aged woman is outside.'

b'. **om-iki dhona'i titina latadhe.**Dyn. Fin-exist that middle-aged woman outside

'That middle-aged woman is outside.'

Second, contrary to Freeze's claim, the "definiteness effect" does not play any role in the selection of a nominal argument (the theme or the locative phrase) as subject in existential vs. locative constructions in Mantauran. The subject is unmarked and in all the sentences that were given above and the theme is always the subject.

Existential and locative sentences pattern the same with respect to the omissibility and the properties (in terms of humanness/animacy) of the nominal arguments (the patient or the location). They differ somehow in terms of the specificity/definiteness of the theme.

In both existential (12.55) and locative (12.56) clauses, the location and/or the theme can be omitted if the context allows:

(12.55) a. om-iki-ka-i ta'olro dha'ane 'adhingi?

Dyn.Fin-exist-Neg-3S.Gen dog house inside

'Is there a dog inside the house?'

a'. om-iki.

Dyn.Fin-exist

'There is.'

b. kana-ni ta-iki dha'ane 'adhingi? what-3S.Gen SubjNmz-Dyn.NFin:exist house inside 'What is inside the house?'

b'. **om-iki ta'olro.** Dyn.Fin-exist dog

'There is a dog.'

(12.56) a. om-iki-ka-i dhona'i titina latadhe?

Dyn.Fin-exist-Neg-3S.Gen that middle-aged woman outside

'Is the middle-aged woman outside?'

a'. om-iki.

Dyn.Fin-exist

'There is.'

b. a-iki-e-dha dhona'i titina?

ObjNmz-Dyn.NFin:be at-ObjNmz-3S.Gen that middle-aged woman 'Where is the middle-aged woman?'

b'. om-iki latadhe.

Dyn.Fin-be at outside

'She is outside.'

There is no restriction on the humanness/animacy of the theme and location arguments in existential (12.57) and locative (12.58) sentences:

- (12.57) **om-iki vila'a dha'ane 'angato/tamatama.**Dyn.Fin-exist beside house tree/middle-aged man 'The tree/middle-aged man is beside the house.'
- (12.58) a. om-iki lroolai 'ape'apece cokoi rahare.

 Dyn.Fin-be at baby lay down table above 'The baby is lying on the table.'
 - b. om-ik-ine varange-ni 'ape'apece lroolai.

 Dyn.Fin-be at-3S.Obl belly-3S.Gen lay down baby

 'The baby is lying down on his belly.'

What differs usually is the specificity/definiteness of the theme argument in locative clauses: (i) the theme can be topicalized in initial position as in (12.59b); the clause can be followed by an embedded verb (marked as subjunctive) that refers to the activity of the theme argument (12.60b).

- (12.59) a. **om-iki dhona'i sakovo vecehae-ni valrio.**Dyn.Fin-be at that men's house middle-3S.Gen village 'The men's house was situated in the middle of the village.'
 - b. *dhona'i* sakovo 'a om-iki vecehae-ni valrio. that men's house Top Dyn.Fin-be at middle-3S.Gen village 'As for the men's house, it was situated in the middle of the village.'
- (12.60) a. **om-iki dhona'i titina latadhe.**Dyn.Fin-be at that middle-aged woman outside 'That middle-aged woman is outside.'
 - b. **om-iki dhona'i titina latadhe oha'a.**Dyn.Fin-be at that middle-aged woman outside Dyn.Subj:cook

 'That middle-aged woman is cooking outside.'

That generalization is not always true, though.

In story-telling, existential sentences introducing a new participant in the universe of discourse may include a definite/specific theme as in (12.61)

(12.61)om-iki dhona tamatama la titina, Dvn.Fin-exist that middle-aged man and middle-aged woman to-alake to-dho'a aolrolai... produce-child produce-two plur:child 'There was a man and a woman; they had given birth to two children...'

Both examples in (12.62) are ambiguous and can be interpreted as existential or locative depending on the context, even if the theme is not marked as definite:

(12.62) a. **om-iki sakovo vecehae-ni valrio.**Dyn.Fin-be at men's house middle-3S.Gen village

- i. 'There was a men's house in the middle of the village.'
- ii. 'The men's house was in the middle of the village.'
- b. **om-iki titina latadhe.**Dyn.Fin-exist middle-aged woman outside
 - i. 'There is a middle-aged woman outside.'

ii. 'The middle-aged woman is/was outside.'

Finally, the verb **om-iki** serves to indicate time, as in (12.63):

(12.63) a-iki-e-nga-i koli'i?
ObjNmz-Dyn.NFin:exist-ObjNmz-already-3S.Gen sun
om-iki-nga 'a-ka-eneme koli'i.
Dyn.NFin:exist-already Nth-Stat.NFin-six sun
'What time is it? It is six o'clock.' (Lin 1999, vol.2:59)

12.6.2 Negative existential, possessive and locative clauses

In their negative counterparts, negative existential and possessive clauses are headed by the verb **o-kaodho** (12.64a-b) while in locative sentences, the morpheme **-ka** is used to negate **om-iki** (12.65) The use of a different negative verb in existential/possessive and locative clauses is determined by semantic factors: **-ka** negates the occurrence of an event; **o-kaodho**⁷⁷ negates the existence of a referent.

(12.64) a. *o-kaodho* **ta'olro dha'ane 'adhingi.**Dyn.Fin-not exist dog house inside

'There is no dog inside the house.'

The verb **o-kaodho** has two variants, **ikaodho** and **akaodho**, but the distinction between **o-kaodho**, **ikaodho** (i) and **akaodho** (ii) has not been worked out at this stage.

(i) *ikaodho* **ka dhipape-nai.**not exist Neg work-1PE.Gen
'We did not have (any) work.'

(ii) akaodho ka ta-oa ocao. not exist Neg SubjNmz-Dyn.NFin:go person 'Nobody came.' b. *o-kaodho* **paiso-li.**Dyn.Fin-not exist money-1S.Gen
'I have no money.' (*Lit*.: 'My money does not exist.')

(12.65) *om-iki-ka-i* **ka latadhe dhona'i titina.**Dyn.Fin-exist-Neg-3S.Gen Neg outside that middle-aged woman 'That middle-aged woman is not outside.'

There are two points to note regarding negative locative clauses.

First, **o-kaodho** can be substituted for **om-iki-ka-**(Pro_{Gen}) in locative constructions but this substitution is highly restricted: it is mostly allowed in statements that are answers given to questions concerning the location of a referent (12.66b-c). If **okaodho** appears in other contexts such as (12.66d), it must be interpreted differently (i.e. referring to someone's passing away.).

- (12.66) a. **om-iki-ka-i ana tamatama?**Dyn.Fin-be at-Neg-3S.Gen that middle-aged man 'Is the middle-aged man there?'
 - b. o-kaodho.

Dyn.Fin-not exist

'No.' (Lit.: 'S/he does not exist.')

- c. ka *om-iki-ka-i* (ana).

 Neg Dyn.Fin-be at-Neg-3S.Gen (that)

 '(He) is not there.' (implied: he is elsewhere)
- d. o-kaodho ana tamatama.

 Dyn.Fin-not exist that middle-aged man

 'The middle-aged man (has) passed away.' (Lit.: 'The middle-aged man does not exist.')

Second, only the first verb, **om-iki** 'be at', can be negated (12.67a). The second verb never is (12.67b), unless it belongs to a different clause (12.68c); the meaning is then slightly different:

- (12.67) a. *om-iki-ka-i* **latadhe takanao kone velevele.**Dyn.Fin-be at-Neg-3S.Gen outside Takanao Dyn.Subj:eat banana 'Takanao is not eating a banana outside.'
 - b. *om-iki latadhe takanao kone-ka-i velevele.

 Dyn.Fin-be at outside Takanao Dyn.Subj:eat-Neg-3S.Gen banana
 - ≠ c. *om-iki* latadhe takanao, *o-kane-ka-i* ka velevele.

 Dyn.Fin-be at outside Takanao Dyn.Fin-eat-Neg-3S.Gen Neg banana 'Takanao is outside. He is not eating a banana.'

12.6.3 Two possessive clauses

Mantauran exhibits two possessive clauses. In the first ('Y's X exists'), the possessor is indicated through a genitive pronoun that occurs on the head noun (i.e. the possessed element), the ordering between the two nouns, i.e. the possessor and the possessed, being rather free.

(12.68) a. **om-iki paiso-ni.**

Dyn.Fin-exist money-3S.Gen

'S/he has money.' (*Lit.*: 'His/her money exists.' [implied: it is somewhere, in the bank or in his pocket])

b. **om-iki paiso-***ni* **taotao**.

Dyn.Fin-exist money-3S.Gen Taotao

'Taotao has money.' (*Lit.*: 'Taotao's money exists.' [same implication])

= c. om-iki taotao paiso-ni.

Dyn.Fin-exist Taotao money-3S.Gen

'Taotao has money.' (Lit.: 'Taotao's money exists.' [same implication])

In the second structure ('X exists at Y's place'), the possessor is marked by the oblique case. Though unmarked for case, the theme (that is the possessed) must be treated as the subject of the sentence. This claim is based on co-reference restrictions, illustrated in (12.69b-d), which show that the oblique pronoun occurring on the verb does not co-refer with the possessed entity but with the possessor.

(12.69) a. **om-ik-iae** [**paiso.**]_{Nom}

Dyn.Fin-exist-1S.Obl money

'I have money.' (*Lit.*: 'Money exists to me/at my place.' [implied: here and now, in my pocket])

b. *om-ik-iae [paiso-li.]_{Nom}
Dyn.Fin-exist-1S.Obl money-1S.Gen

c. **om-ik-ine** [paiso.]_{Nom} Dyn.Fin-exist-3S.Obl money

'S/he has money.' (Lit.: 'Money exists to him/her/at his/her place.')

d. om-ik-ine; [paiso-ni taotao.]_{Nom/j}

Dyn.Fin-exist-3S.Obl money-3S.Gen Taotao

'S/he has Taotao's money.' (*Lit.*: 'Taotao's money exists to him/at his place.')

These two possessive clauses differ semantically and structurally, as briefly shown below.

The first structure 'Y's X exists' simply posits the existence of the theme/possessed entity. The second structure, 'X exists at Y's place' indicates, on the other hand, inalienable or inherent possession. It can be treated as equivalent to the construction 'Y has X' that is found in other Formosan languages, e.g. Saisiyat (see Zeitoun 2000a).

The first structure 'Y's X exists' is existential in nature; the second parallels the locative construction. This claim is illustrated by a comparison of (12.70a-b) and (12.71a-b):

- (12.70) a. om-iki paiso ana. Dyn.Fin-exist money there 'There is money there.'
 - b. om-iki paiso-li. money-1S.Gen Dyn.Fin-exist 'I have money.'
- (12.71) a. om-ik-iae paiso. Dyn.Fin-exist-1S.Obl money 'I have money.'

b. om-ik-iae varange-li lroolai 'apece. Dyn.Fin-exist-1S.Obl belly-1S.Gen child Dyn.Subj:sleep 'The baby sleeps on my belly.'

The second structure can be treated as an instance of "external possessor" or "possessor raising", defined as "constructions in which a semantic possessor-possessum relation is expressed (i) by coding the possessor as a core grammatical relation of the verb and (ii) in a constituent separate from that which contains the possessum. (iii) despite being coded as a core argument, the possessor phrase is not licensed by the argument frame of the verb root itself." (Payne & Barshi 1999:3).

The external possessor is typically animate and human. Compare (12.72) and (12.73):

| (12.72) | a. | om-iki Dyn.Fin-exist 'The child has a ball.' | malri-ni ball-3S.Gen | Iroolai. child |
|---------|----|--|--------------------------------|--------------------------|
| | b. | om-ik-ine Dyn.Fin-exist-3S.Obl | malri ball | lroolai. child |
| | | 'The child has a ball ' | | |

(12.73) a. **om-iki malri-ni ta'olro.**Dyn.Fin-exist ball-3S.Gen dog

'The dog has a ball.'

b. ?*om-ik-ine malri ta'olro.

Dyn.Fin-exist-3S.Obl ball dog

Only a few types of predicates allow the raising of the possessor in Mantauran, *cf.* existential, denumeral and quantifying verbs such as: **om-iki** 'exist', **ma-dho'a** 'two', **ma-dhao** 'many, a lot', **ma-si'i** 'a few, a little', as shown in (12.74) and (12.75) below.

12.6.4 Numerals and quantifiers as existential predicates

Numerals (usually those prefixed by **ma-** 'stative') and such quantifiers as **ma-dhao** 'many', **ma-si'i** 'a few, a little' can also function as existential predicates; (12.74) provides an illustration of the predication of existence, and (12.75) of the predication of possession with the two possessive structures outlined above.

- (12.74) a. *ma-dhao* a-amec-ae-li mairange.
 Stat.Fin-many ObjNmz-Dyn.NFin:bring-ObjNmz-1S.Gen sweet potato
 'I brought many sweet potatoes.' (*Lit.*: 'The sweet potatoes I brought are many.')
 - a'. *ma-dhao-*na paa'a-dhidhap-a-nae-li.
 Stat.Fin-a lot-still left-work-beyond-left-1S.Gen
 'I still have a lot of work to do.'
 - b. m-o-'adhaili-nga ki-dha'olo, ma-si'i acilai.

 Dyn.Fin-to-far-already Neg-Dyn.NFin:rain Stat.Fin-a few/a little water

 'It has not rained for a long time; there is little water.'
 - b'. ona'i arongo-nga-nai m-oa 'ina tavale'eve'e that just-already-1PE.Gen Dyn.Subj-go this new Wanshan ma-si'i-na ocao.
 Stat.Fin-few-still person
 'When we first arrived in Tavale'eve'e, there were (still) few people.'
 - c. *ma-dho'a-nga* caili Stat.Fin-two-already year ta-sola-solat-ae-ni

ta-sola-solat-ae-ni taka-li.
LocNmz-Red-Dyn.NFin:study-LocNmz-3S.Gen
'My older brother/sister is in second grade.'

taka-li.
older sibling-1S.Gen

(12.75) a. *ma-dhao* paiso-*li*.
Stat.Fin-a lot money-1S.Gen
'I have a lot of money.'

A Grammar of Mantauran (Rukai)

a'. *ma-dha-iae* paiso. Stat.Fin-a lot-1S.Obl money

'I have a lot of money.'

b. *ma-si'i* paiso-li.
Stat.Fin-a few money-1S.Gen

'I have little money.'

b'. *ma-si'-iae* paiso. Stat.Fin-a few-1S.Obl money

Stat.Fin-a few-1S.Obl 'I have little money.'

c. ma-dho'a la-a-lake-li.

Stat.Fin-two child-plur-child-1S.Gen

'I have two children.'

c'. ma-dho'-iae la-a-lake.

Stat.Fin-two-1S.Obl child-plur-child

'I have two children.'

Chapter 13: Interrogative and Exclamatory Sentences

This chapter examines in more detail interrogative sentences (cf. §13.1), exclamatory sentences (cf. §13.2) as well as greetings and related formulaic expressions, because they share, to some extent, the same structures: (i) polar 'yes-no' questions, typically characterized by the occurrence of the negator -ka on the (nominal/verbal) predicate, are most frequently used in greetings. Compare (13.1a)-(13.1b). Exactly as in information questions, a nominalized predicate is typically followed by a nominalized clause in an exclamatory sentence. Compare (13.1c-d):

(13.1) a. dhipolo-ka-'o?

Dhipolo-Neg-2S.Gen 'Are you Dhipolo?'

b. 'omaca-nga-ka-'o?

Dyn.Fin:wake up-already-Neg-2S.Gen 'Good morning' (*Lit.*: 'Have you waken up already?')

c. 'aanga-i [ta-tipitip-ine taotao]?
who-3S.Gen SubjNmz-Dyn.NFin:beat-3S.Obl Taotao

'Who beat Taotao?'

d. 'akosaae-'o ['a-ka-dhao tomako-mako]!
how much-2S.Gen MnNmz-Stat.NFin-many Dyn.Subj:smoke-Red
'How much you smoke!'

13.1 Interrogative sentences

Three types of interrogative clauses/sentences, polar ('yes-no') questions (cf. §13.1.1), information (wh-) questions (cf. §13.1.2) and alternative (or disjunctive) questions (cf. §13.1.3) are examined in this section. Whenever necessary, answers are provided for the sake of comparison between interrogative as opposed to declarative sentences. The indefinite usage of interrogative words is dealt with in §13.1.4.

13.1.1 Polar ('yes-no') questions

There are two main constructions to form polar ('yes-no') questions. These two constructions are represented schematically in (13.2). Note that both types of constructions are used productively. Variation in meaning, if any, has not been worked out for the time being.

```
(13.2) a. Pred-Neg-Pro<sub>Gen</sub>?
b. aika-Pro<sub>Gen</sub> ka Pred<sub>Dyn/Stat</sub>?
b'. aika-Pro<sub>Gen</sub> ka ka-Pred<sub>Noun</sub>?
```

In the first construction, the nominal as in (13.3a) or the verbal predicate as in (13.3b) is followed by the negator **-ka** and a genitive pronoun.

(13.3) a. 'oponoho-ka-'o?

Mantauran-Neg-2S.Gen 'Are you Mantauran?'

b. o-kane-nga-ka-'o?

Dyn.Fin-eat-already-Neg-2S.Gen 'Have you already eaten?'

The second construction is introduced by the nominalized form of the verb **om-iki** 'exist, be at', *cf.* **aika-** which is followed by a genitive pronoun and the negator **ka** (13.4). While there is no distinction whatsoever between nominal and verbal predicates in the first construction as shown though the comparison of (13.3a) and (13.3b), there is a slight distinction between these two types of predicates in the second: a nominal predicate must be prefixed with **ka-** (13.4a)—the meaning of this prefix is unclear at the present stage—while a verbal predicate is unmarked and appears in its non-finite form (13.4b).

(13.4) a. **a-ik-a-'o**ObjNmz-exist-ObjNmz:Irr-2S.Gen 'Are you Mantauran?' ka ka-'oponoho-'o? ?-Mantauran-2S.Gen

b. **a-ik-a-'o ka kane-nga?**ObjNmz-exist-ObjNmz:Irr Neg Dyn.NFin:eat-already 'Have you already eaten?'

Answers to both constructions are identical, i.e. (13.5) could be uttered as an answer to (13.3a)-(13.4a) and (13.6) as an answer to (13.3b)-(13.4b).

(13.5) a **'oponoho-lrao.**

Mantauran-1S.Nom 'Yes, I am'

b. ka 'oponoho-ka-'o.

Neg Mantauran-Neg-2S.Gen 'No, I am not.'

(13.6) a. ia'e, o-kane-nga-lrao.

Yes Dyn.Fin-eat-1S.Nom 'Yes, I have already eaten.'

b. 'aina, ka o-kane-na-ka-li.

No Neg Dyn.Fin-eat-still-Neg-1S.Gen 'No, I have not eaten yet.'

As shown in (13.7), it does not matter whether the verb has undergone other derivations prior to the questioning (Q stands for 'question', and A for 'answer'):

(13.7) Q: maka-cengele-nga-ka-'o dhona'i solate?

Dyn.Fin:finish-see-already-Neg-2S.Gen that book

'Have you already finished reading that book?'

Q': a-ik-a-'o ka paka-cengele

ObjNmz-Dyn.NFin:exist-ObjNmz-2S.Gen Neg Dyn.NFin:finish-see

dhona'i solate? that book

'Have you already finished reading that book?'

A: maka-cengele-nga-lrao (dhona'i solate).

Dyn.Fin:finish-see-already-1S.Nom that book

'I have already finished reading (that book).'

A': o-cengele-na-ka-li ka (dhona'i solate).

Dyn.Fin-see-still-Neg-1S.Gen Neg that book

'I have not read (that book) yet.'

13.1.2 Information ('wh-') questions

Different information questions can be distinguished, *cf.* 'who' (and related questions such as 'whom', 'with whom' and 'whose') (§13.1.2.1), 'what' (§13.1.2.2), 'what's your name' (§13.1.2.3), 'how much', 'how many' (§13.1.2.4), 'how' (§13.1.2.5), 'how come' (§13.1.2.6), 'why' (§13.1.2.7), 'where' (§13.1.2.8) and 'when' (§13.1.2.9).

As mentioned in §4.6, most interrogative words (except **kani** 'why' (lexical status unknown) and (**lo**) **idhae** 'when' (temporal adjuncts)) represent derived nominals functioning as (nominal) predicates, as part of a cleft sentence. Thus, they always take a genitive pronoun that typically refers to the subject of the sentence.

13.1.2.1 aanga-Pro_{Gen} 'who' and related forms

The word for 'who'/'whom'/'with whom'/'whose' is aanga-. The etymology of

this word is unknown.⁷⁸

When followed by a pronoun (13.8a)-(13.9a) or a demonstrative pronoun (13.8b)-(13.9b), **aanga-** glosses as 'who'.

- (13.8) a. aanga-Pro_{Gen}
 - b. $aanga-Pro_{Gen} + Dem$
- (13.9) a. Q: aanga-'o?

who-2S.Gen

'Who are you?'

A: aanga-li.

who-1S.Gen

'It's me.'

b. Q: aanga-i

ana?

who-3S.Gen that

'Who is s/he?'

(i) a. o-lralrame-nga-lrao.

Dyn.Fin-run-already-1S.Nom

'I have already run.'

b. **o-lralrame-nga ana.** Dyn.Fin-run-already that

'He has already run'

c. *o-lralrame-nga aanga-li/aanga-i.

Dyn.Fin-run-already aanga-1S.Gen/aanga-3S.Gen

It is true that the sequence **aanga-**Pro_{Gen} can be used to answer a question formed on the same pattern as shown in the following examples, though.

(i) Q: aanga-'o?

who-2S.Gen

'Who are you?'

A: aanga-li.

who-1S.Gen

'It's me.'

(ii) Q: aanga-i ka-sekelr-ae-ni?

who-3S.Gen Stat.NFin-angry-ObjNmz-3S.Gen

'With whom is s/he angry?'

A: aanga-i ta-ka-sekelr-ine dhipolo.

who-3S.Gen SubjNmz-Stat.NFin-angry-3S.Obl Dhipolo

'It is Dhipolo that s/he is angry with.'

Li (1977b) treats the forms: aanga-li, aanga-'o, aanga-ni, aanga-dha, aanga-ta, aanga-nai, aanga-nomi, aanga-lini and aanga-lidha as personal pronouns but such analysis must be rejected, as aanga-Pro_{Gen} never substitutes for other pronominal forms:

A: **taotao ana.** Taotao that

'He is Taotao'

If followed by a verb, the meaning of **aanga-** depends on the form of the predicate that follows it.

aanga- translates as 'who' when it is followed by a verb that has undergone subjective nominalization (13.10)-(13.12). Recall that such a verb is never followed by a genitive pronoun, *cf.* (13.10b), though it can be followed by an oblique pronoun (13.11)-(13.12).

$(13.10) \quad a. \quad \text{aanga-} Pro_{Gen} \; \text{ta-}(\text{amo-}/\text{ki-}) V(\text{-}Pro_{Obl})$

b. *aanga-Pro_{Gen} ta-V(-Pro_{Gen})

(13.11) Q: aanga-i ta-kane velevele?

who SubjNmz-Dyn.NFin:eat banana 'Who ate the banana?'

A: **o-kane** (velevele) tamatama.

Dyn.Fin-eat (banana) middle-aged man

'The middle-aged man ate it.'

A': tamatama ta-kane (velevele).

middle-aged man SubjNmz-Dyn.NFin:eat banana

'It is the middle-aged man that ate (it).'

(13.12) Q: aanga-i ta-kelrakelrang-imia'e?

who-3S.Gen SubjNmz-Dyn.NFin:beat-2S.Obl

'Who beat you?'

A: o-kelrakelrang-iae taotao.

Dyn.Fin-beat-1S.Obl Taotao

'Taotao beat me.'

A': taotao ta-kelrakelrang-iae.

Taotao SubjNmz-Dyn.NFin:beat-1S.Obl

'It is Taotao that beat me.'

While the realis is unmarked (13.13), the irrealis is marked by **amo-** (13.14).

(13.13) Q: aanga-i ta-ka-dhalam-imia'e.

who-3S.Gen SubjNmz-Stat.NFin-like/love-2S.Obl

'Who likes/loves you?'

A Grammar of Mantauran (Rukai)

A: ma-dhalam-iae taotao.

Stat.Fin-like/love-1S.Obl Taotao

'Taotao likes/loves me.'

A': taotao ta-ka-dhalam-iae.

Taotao SubjNmz-Stat.NFin-like/love-1S.Obl

'It is Taotao that likes me.'

(13.14) Q: aanga-i ta-(a)mo-kaava'i?

who-3S.Gen SubjNmz-Irr-Dyn.NFin:come

'Who will see you?'

A: amo-kaava'i 'elrenge.

Irr-Dyn.NFin:come Elrenge

'Elrenge will see me.'

A': 'elrenge ta-(a)mo-kaava'i.

Elrenge SubjNmz-Irr-Dyn.NFin:come

'It is Elrenge who will come.'

Negation is indicated through the prefixation of the modal negator **ki**- to the base (13.15).

(13.15) Q: aanga-i ta-ki-kaava'i?

who-3S.Gen SubjNmz-Neg-Dyn.NFin:come

'Who did not come?'

A: maava'i-ka-i takanao.

Dyn.NFin:come-Neg-3S.Gen Takanao

'Takanao did not come.'

A': takanao ta-ki-kaava'i.

Takanao SubjNmz-Neg-Dyn.NFin:come

'It is Takanao who did not come.'

aanga- means 'whom' when followed by a verb having undergone objective nominalization. The distinction between the two types of constructions is illustrated in (13.16). In (13.16a), **aanga-** is followed by a verb having undergone objective nominalization and glosses as 'who(m)'. In (13.16b), it is followed by a verb having undergone subjective nominalization and therefore translates as 'who'.

(13.16) a. Q: aanga-i 'okolodh-ae-'o?

who-3S.Gen afraid-ObjNmz-2S.Gen

'Who(m) are you afraid of?'

A: 'okolodh-ia-ine dhipolo. afraid-1S.Obl.-3S.Obl Dhipolo 'I am afraid of Dhipolo.'

b. Q: **aanga-i ta-'okolodh-imia'e?**who-3S.Gen SubjNmz-afraid-2S.Obl
'Who is afraid of you?'

A: **dhipolo ta-'okolodh-iae**.

Dhipolo SubjNmz-afraid-1S.Obl

'It is Dhipolo who is afraid of me.'

In the objective nominalization process, dynamic verbs are circumfixed with **a-...-ae** (13.17a-i)-(13.18a), while stative verbs are suffixed with **-ae** (13.17a-ii)-(13.18b).

- (13.17) a. Realis:
 - i. **aanga**-Pro_{Gen} **a-V**_{Dyn}-ae-Pro_{Gen}
 - ii. aanga-Pro_{Gen} V_{Stat}-ae-Pro_{Gen}
 - b. Irrealis:

aanga-Pro_{Gen} V_{Dyn/stat}-a-a/-i-Pro_{Gen}

- (13.18) a. Q: **aanga-i a-kelrakelrang-ae-'o**? who-3S.Gen ObjNmz-Dyn.NFin:beat-ObjNmz-2S.Gen 'Whom did you beat?'
 - A: o-kelrakelrange-lra-ine takanao.

 Dyn.Fin-beat-1S.Nom-3S.Obl Takanao

 'I beat Takanao.'
 - A': aanga-li ta-kelrakelrang-ine takanao. who-1S.Gen SubjNmz-Dyn.NFin:beat-3S.Obl Takanao 'It is me who beat Takanao.'
 - b. Q: **aanga-li ka-dhalam-***ae-***'o**? who-3S.Gen Stat.NFin-like/love-ObjNmz-2S.Gen 'Whom do you like/love?'
 - A: ma-dhalame-lra-ine taotao.
 Stat.Fin-like/love-1S.Nom-3S.Obl Taotao
 'I like/love Taotao.'
 - A': aanga-li ta-ka-dhalam-ine taotao.

 who-1S.Gen SubjNmz-Stat.NFin-like/love-3S.Obl Taotao

 'It is me who like/love Taotao.'

The realis is unmarked (13.19a-b); the irrealis is marked by the suffixation of **-a** or **-i** to the derived base (13.19a'-b').

(13.19) a. **aanga-i a-tipitip-ae-'o**?

who-3S.Gen ObjNmz-Dyn.NFin:beat-ObjNmz:Real-2S.Gen

'Whom did you beat?'

a'. aanga-i a-tipitip-a-a-'o?

who-3S.Gen ObjNmz-Dyn.NFin:beat-ObjNmz-Irr-2S.Gen

'Whom will you beat?'

b. aanga-i kadhalam-ae-'o?

who-3S.Gen Stat.NFin:beat-ObjNmz:Real-2S.Gen

'Whom do you like?'

b'. aanga-i kadhalam-a-a-'o?

who-3S.Gen Stat.NFin:beat-Irr-ObjNmz-Irr-2S.Gen

'Whom will you like/love?'

Negation is expressed through the occurrence of ki- on the nominalized verb, as shown in (13.20):

(13.20) a. aanga-i ki-tipitip-ae-'o?

who-3S.Gen Neg-Dyn.NFin:beat-ObjNmz:Real-2S.Gen

'Whom didn't you beat?'

b. aanga-i ki-kadhalam-ae-'o?

who-3S.Gen Neg-Stat.NFin:beat-ObjNmz:Real-2S.Gen

'Whom don't you like?'

When followed by a denominal predicate prefixed by a numeral classifier for 'humans' such as **ta'a-** or **'ano-**, **aanga-** translates as 'with whom' (13.21). The realis is unmarked (13.22), while the irrealis is marked by the suffixation of **-a** to the base (13.23).

(13.21) a. Realis:

aanga-Pro_{Gen} ta'a-/'ano-V_{Denominal}-Pro_{Gen}

b. Irrealis:

aanga-Pro_{Gen} ta'a-/'ano-V_{Denominal}-a-Pro_{Gen}

(13.22) a. **aanga-i ata'aelre-ni pato'o?** who-3S.Gen with-3S.Gen Dyn.Subj:tell

'With whom is he speaking?'

b. aanga-i 'anoaelre-ni longai solate? who-3S.Gen with-3S.Gen Dyn.Subj:buy book 'With whom did he buy books?'

- (13.23) a. **aanga-i ata'aelre-a-ni pato'o?** who-3S.Gen with-Irr-3S.Gen Dyn.Subj:tell 'With whom is he speaking?'
 - b. aanga-i 'anoaelre-a-ni longai solate? who-3S.Gen with-Irr-3S.Gen Dyn.Subj:buy book 'With whom did he buy books?'

Questions on possession, i.e. 'whose X', are rendered by the occurrence of **aanga-**Pro_{Gen} followed by a nominalized verb, circumfixed by **ki-...-ae** to express such a notion. This construction is schematized in (13.24) and further illustrated in (13.25). What is interesting to note is that in that case, the sequence **aanga-**Pro_{Gen} cannot appear in the answer, as shown by the ungrammaticality of (13.25a-A').

- (13.25) a. Q: **aanga-i ki-kiping-ae 'ina'i?** who-3S.Gen whose-clothes-whose this 'Whose clothes are these?'
 - A: **kipingi-li** ana. clothes-1S.Gen that 'They are mine.'
 - A': *aanga-li kipingi. who-3S.Gen clothes-1S.Gen 'They are mine.'
 - b. Q: **aanga-i a-kan-ae-'o ki-va'or-ae?** who-3S.Gen ObjNmz-Dyn.NFin:eat-ObjNmz-2S.Gen whose-rice-whose 'Whose meal did you eat?'
 - A: ina-li a-aha'a-e-ni.

 Mother-1S.Gen ObjNmz-Dyn.NFin:cook-ObjNmz-3S.Gen

 '(The rice) my mother cooked.'
 - c. Q: aanga-i ka-dhalam-ae-'o 'i ki-kiping-ae? who-3S.Gen Stat.NFin-like/love-ObjNmz-2S.Gen whose-clothes-whose 'Whose clothes do you like?'

A: **dhipolo** '**i kipingi-ni.**Dhipolo clothes-3S.Gen
'Dhipolo's clothes.'

In passing, note that not only common nouns can be marked by **ki-...-ae** but that non-common nouns such as 'father', 'mother' etc. can also undergo the same derivational process. Compare (13.25) and (13.26):

(13.26) a. **aanga-i ki-am-ae** 'ina'i? who-3S.Gen whose-father-whose this 'Whose father is he?'

b. **aanga-i ki-in-ae 'ina'i?** who-3S.Gen whose-mother-whose this 'Whose mother is she?'

c. **aanga-i ki-lin-ae 'ina-lo?** who-3S.Gen whose-parent-whose this-plur 'Whose parents are they?'

13.1.2.2 kana-ProGen 'what'

'What?' is rendered by **kana-** followed by a genitive pronoun. The sequence **kana-** Pro_{Gen} can be followed by a demonstrative pronoun (13.27i)-(13.28) or by a verb (13.27ii)-(13.29).

- (13.27) i. kana-Pro_{Gen} Dem
 - ii. a. Realis:

kani-Pro_{Gen} V-Pro_{Gen}

b. Irrealis:

kani-Pro_{Gen} V-a-Pro_{Gen}

- (13.28) Q: kana-ni 'ina? what-3S.Gen 'What is this?'
 - A: **solate-li 'ina.** book-1S.Gen this 'This is my book.'
- (13.29) Q: inake, kana-ni pi'a-ni ama-li/aamae?

 Mother what-3S.Gen Dyn.NFin:do-3S.Gen father-1S.Gen/own father
 'Mother, what is my father/Father doing?'

A: 'adhidhapae ama-'o.
work father-2S.Gen
'Your father is working.'

The different morphosyntactic characteristics outlined in §13.1.2.1 remain true. The realis is unmarked (13.30a-b), and irrealis can be marked by -a or -i (13.30a'-b').

(13.30) a. kana-ni 'ongolo-'o?

what-3S.Gen Dyn.NFin:drink-2S.Gen

'What did you drink?'

a'. kana-ni 'ongol-a-'o?

what-3S.Gen Dyn.NFin:drink-Irr-2S.Gen

'What will you drink?'

b. kana-ni kane-'o?

what-3S.Gen Dyn.NFin:eat-2S.Gen

'What did you eat?'

b'. kana-ni kan-a-'o?

what-3S.Gen Dyn.NFin:eat-Irr-2S.Gen

'What will you eat?'

Negation is conveyed through the prefixation of **ki**- to the nominalized verb base.

(13.31) a. kana-ni ki-kane-'o?

what-3S.Gen Neg-Dyn.NFin:eat-2S.Gen

'What didn't you eat?'

b'. kana-ni ki-kan-a-'o?

what-3S.Gen Neg-Dyn.NFin:eat-Irr-2S.Gen

'What won't you eat?'

13.1.2.3 omi-Pro_{Gen}-Pro_{Obl} (N) 'what is your name?'

The construction 'what is (your) name?' is singled out for its complexity. The clause is headed by the verb **omi**-followed by a genitive pronoun that co-refers with **alrace** 'name', and an oblique pronoun that co-indexes with the possessor, itself co-referred on **alrace** 'name' through the occurrence of a genitive pronoun. This structure is schematized in (13.32) and further illustrated in (13.33), with co-references indicated through indexes:

(13.32) omi-Pro_{Gen}-Pro_{Obl}(N)

(13.33) a. omi-n_i-imia'e_j alrace_i-'o_j?
call-3S.Gen-2S.Obl
'What is your name?'

b. omi-n_i-ine_j alrace_i-ni_j lalake_i-'o? call-3S.Gen-3S.Obl name-3S.Gen child-2S.Gen 'What is your child's name?'

c. omi-n_i-ine_j alrace_i-ni_j ta'olro_j-'o? call-3S.Gen-3S.Obl name-3S.Gen dog-2S.Gen 'What is your dog's name?'

13.1.2.4 pi- and saino- 'how much, how many'

There are two different interrogative words to express 'how much, how many', the first is **pi-** and the second is **saino-**. These two interrogative words occur with various verbal/ordinal affixes and numeral classifiers that were discussed in chapter 9, though the distribution of **pi-** is much broader than **saino-**, in that it can co-occur with nearly any verbal or ordinal prefixes and numeral classifiers (*cf.* table 9.2). The constructions in which they appear are schematized in (13.34a-b) and (13.35a-c).

- (13.34) a. Verbal prefix/Ordinal/Num Class-pi-Pro_{Gen} (N)
 - b. Verbal prefix/Ordinal Num Class-pi-Pro_{Gen} V_{Subi}-Pro_{Gen}
- (13.35) a. ma-/to-saino-Pro_{Gen} (N)
 - b. ma-/to-saino-Pro_{Gen} V_{Subi}-Pro_{Gen}
 - c. 'ako-saino-nga-Pro $_{Gen}$ V_{Nmz} -Pro $_{Gen}$

The examples given in (13.36)-(13.50) provides the full range of the distribution of **pi-** 'how much'.

In (13.36), **pi-** co-occurs with the stative prefix **ma-**. It can express different meanings. If followed by a noun, it expresses a possessive relation. The possessor can be marked on the noun (13.36a-c) through the occurrence of a genitive pronoun or raised on the interrogative word as an oblique pronoun (13.36a'-c').

(13.36) a. ma-pi-ni paiso-'o?
Stat.Fin-how much-3S.Gen money-2S.Gen

'How much money do you have?'

a'. ma-pi-n-imia'e paiso?
Stat.Fin-how much-3S.Gen-2S.Obl money
'How much money do you have?'

child-plur-child

b. ma-pi-ni la-a-lake-'o?

Stat.Fin-how many-3S.Gen child-plur-child-2S.Gen

'How many children do you have?'

b'. ma-pi-n-imia'e la-a-lake?

Stat.Fin-how many-3S.Gen-2S.Obl

'How many children do you have?'

b". to-pi-'o to-alake?

produce-how many-2S.Gen produce-child

'How many children do you have?'

(Lit.: 'How many children did you give birth to?')

c. ma-pi-ni dha'ane-'o?

Stat.Fin-how many-3S.Gen house-2S.Gen

'How many houses do you have?'

c'. **ma-pi-n-imia'e dha'ane**? Stat.Fin-how many-3S.Gen-2S.Obl house

'How many houses do you have?'

When the question deals with an action, the verb can occur as a gerund (13.37a-b) if the question concerns the object of the sentence; it undergoes subjective nominalization if the question concerns the subject of the sentence as in (13.37c).

(13.37) a. ma-pi-ni ta-iki-ki-ae-ni

Stat.Fin-how many-3S.Gen LocNmz-Dyn.NFin:be at-Red-LocNmz-3S.Gen

dha'ane-'o?

house-2S.Gen

'How many rooms are there in your house?'

b. ma-pi-ni langai-'o solate?

Stat.Fin-how many-3S.Gen Dyn.NFin:buy-2S.Gen book

'How many books did you buy?'

= b'. ma-pi-ni 'i a-langalr-ae-'o

Stat.Fin-how many-3S.Gen ObjNmz-Dyn.NFin:buy-ObjNmz-2S.Gen

solate?

book

'How many books did you buy?' (Lit.: 'The books you bought are how many?')

c. **ma-pi-ni ocao ta-langai solate**? Stat.Fin-how many-3S.Gen person SubjNmz-Dyn.NFin:buy book

'How many people bought books?'

In (13.38), **pi-** co-occurs with the prefix **to-**, as part of prefix harmony, i.e. the second verb is a denominal verb formed through the prefixation of **to-** to the base.

(13.38) a. Q: to-pi-'o to-coloko?

make-how many-2S.Gen make-glutinous cake 'How many glutinous cakes did you make?'

A: to-ma-po'a-le-lrao to-coloko.

make-tens-two-tens-1S.Nom make-glutinous cake 'I made twenty glutinous cakes.'

b. Q: to-pi-'o to-dha'ane? do-how much-2S.Gen build-house 'How many houses did you build?'

= Q': **ma-pi-ni to-dha'ane-'o**? do-how much-3S.Gen build-house-2S.Gen

'How many houses did you build?'

A: **to-dho'a-lrao to-dha'ane.** do-two-1S.Nom build-house

'I built two houses.'

A': *ma-dho'a-lrao to-dha'ane.
Stat.Fin-two-1S.Nom build-house

Examples (13.39)-(13.41) illustrate the co-occurrence of **pi-** with ordinal prefixes such as **'aka-** 'the Nth' (13.39), **'ao-** 'Nth times' (13.40), **'apaka-** 'up to Nth (day)' (13.41). The interrogative word can be either followed by a noun as in (13.39) or by a verb marked as subjunctive (i.e. part of a serial verb construction) as in (13.40)-(13.41).

(13.39) Q: 'aka-pi-'o lalake-ni la-pangolai?

Nth:Stat.NFin-how many-2S.Gen child-3S.Gen plur-household name 'What is your rank (as a child) in the Lapangolai household?'

A: 'aka-dho'a lalake-ni la-pangolai.

Nth:Stat.NFin-two child-3S.Gen plur-household name
'I am the second of the family.'

(13.40) Q: 'ao-pi-li-nga-'o maava'i 'oponoho?

Nth times-how many-Nth times-already-2S.Gen Dyn.Subj:come 'How many times have you been to Wanshan?'

A: 'ao-lrima-le-nga-lrao maava'i 'oponoho.

Nth times-how many-Nth times-already-1S.Nom Dyn.Subj:come 'That's the fifth time I come to Wanshan.'

(13.41) Q: 'apaka-pi-li-nga-'o cengele solate-'o?
up to Nth-how many-up to Nth-already-2S.Gen Dyn.Subj:see book-2S.Gen
'On which day did you finish reading your book?

A: 'apaka-'epate-le-nga-lrao cengele solate-li.
up to Nth-how many-up to Nth-already-1S.Nom Dyn.Subj:see book-1S.Gen
'I finished reading my book on the fourth day.'

(13.42)-(13.45) exemplify the co-occurrence of **pi**- with affixes referring to time and frequency such as **o-tara-** 'N- of (months/years)' (13.42), **maka-...-le** 'up to N-/for N- days/months/years' (13.43), '**o-...-le** 'N-times' (13.44), '**ako-...-le** 'say N-times' (13.45):

(13.42) a. Q: **o-tara-pi-nga-i caili-ni lalake-'o?**Dyn.Fin-time-how many-already-3S.Gen year-3S.Gen 'How old is your child?'

A: o-tara-lrima-nga caili-ni lalake-li.

Dyn.Fin-time-five-already year-3S.Gen child-1S.Gen
'My child is five years old.'

= a'. Q: ma-pi-nga-i caili-ni lalake-'o?
Stat.Fin-how many-already-3S.Gen year-3S.Gen child-2S.Gen
'How old is your child?'

A: ma-lrima-nga caili-ni lalake-li.
Stat.Fin-five-already year-3S.Gen child-1S.Gen
'My child is five years old.'

b. Q: o-tara-ma-pi-li-ni caili ta-'acakelae-nae-'o.

Dyn.Fin-time-tens-three-tens-3S.Gen year TempNmz-marry-TempNmz-2S.Gen 'How many years have you been married?'

A: o-tara-ma-tolro-lo caili ta-'acakelae-nae-li.

Dyn.Fin-time-tens-three-tens year TempNmz-marry-TempNmz-1S.Gen 'I have been married for thirty years.'

(13.43) Q: maka-pi-li-'o

Dyn.Fin:up to N-how many-up to N-2S.Gen

ta-iki-e-'o 'oponoho?

LocNmz-Dyn.NFin:be at-LocNmz-2S.Gen Wanshan
'How long/how many (days) have you been staying in Wanshan?'

A: maka-'epate-le-lrao

Dyn.Fin:up to N-four-up to N-1S.Nom

ta-iki-e-li '**oponoho.**LocNmz-Dyn.NFin:be at-LocNmz-1S.Gen Wanshan
'I have been staying in Wanshan for four days.'

'oilri (13.44) a. Q: 'o-pi-li-'o m-oa

> Dyn.Subj-go times-how much-times-2S.Gen Dyn.Subj:return

m-o-valrio?

Dvn.Subj-to-village

'How many times do you come back home?'

A: pa-caili-lrao 'o-a-le m-o-valrio.

every-year-1S.Nom times-one-times Dyn.Subj-to-village

'I come back once a year.'

b. O: 'o-pi-li-'o kone?

> times-how much-times-2S.Gen Dyn.Subj:eat

'How many times did you eat?'

A: 'o-po'a-le-lrao kone.

times-two-times-1S.Nom Dyn.Subj:eat

'I ate twice.'

(13.45) Q: 'ako-pi-li-'-iae lamolai? pato'o dhona

say-how many-say-2S.Gen-1S.Obl Dyn.Subj:tell that story

'How many times did you tell me that story?'

A: 'ako-tolro-lo-lra-imia'e pato'o dhona lamolai. say-three-say-1S.Nom-2S.Obl Dyn.Subj:tell that story

'I have told you that story three times.'

Below, **pi-** is circumfixed with affixes (co-occurring or not with an embedded verb) that express measurement, cf. ta'a-...-le 'measure with two arms' in (13.46a) and **o-...le** 'measure' in (13.46b).

(13.46) a. ta'a-pi-li-ni

measure with arms-how much-measure with arms-3S.Gen

lekalekate-ni velrete? ana

Dyn.NFin:measure-3S.Gen ActNmz:Dyn.NFin:pile up that

'How long is this wall?'

b. o-pi-li-ni

measure with hands-how much-measure with hand-3S.Gen

apoto? dhikoace ana stone/table Dyn.Subj:stretch hands that

'How long is this stone/table?'

The examples in (13.47)-(13.50) illustrate the co-occurrence of **pi**- with the sortal classifiers used to count human beings (13.47), containers (13.48), referents being taken or caught (13.49) and to count floors (13.50):

- (13.47) a. Q: **ta'a-pi-lini ta-iki latadhe?** with-how many-3P.Gen SubjNmz-Dyn.NFin:be at 'How many people are outside?'
 - = Q': ma-pi-ni ocao ta-iki latadhe?
 Stat.Fin-how many-3S.Gen person SubjNmz-Dyn.NFin:be at outside
 'How many people are there outside?'
 - A: ta'a-lrima ta-iki latadhe.
 with-five SubjNmz-Dyn.NFin:be at outside
 'There are five persons outside.'
 - = A': ma-lrima ocao ta-iki latadhe.

 Stat.Fin-five person SubjNmz-Dyn.NFin:be at outside

 'The are five persons outside.'
 - b. Q: 'ano-pa-pi-lini dhoace?
 with-Red-how many-3P.Gen Dyn.Subj:leave
 'How many left?'
 - A: 'ano-dha-dho'a dhoace.

 with-Red-how many Dyn.Subj:come
 'Two left.'
 - c. Q: taro-pi-lini maava'i 'oponoho? with-how much-3P.Gen Dyn.Subj:come 'How many came to Wanshan?'
 - Q': tao-pi-lini maava'i 'oponoho? with-how much-3P.Gen Dyn.Subj:come Wanshan 'How many came to Wanshan?'
 - A: taro-maidhai maava'i.
 with-many Dyn.Subj:come
 'Many came.'
 - A': tao-maidhai maava'i.
 with-many Dyn.Subj:come
 'Many came.'
- (13.48) a. Q: o-ka'a-pi-li-ni takopili

 Dyn.Fin-container-how much-container-3S.Gen bowl

 kone va'oro taotao?

 Dyn.Subj:eat rice Taotao

 'How many bowls of rice did Taotao eat?'

A: o-ka'a-tolro-lo kone va'oro takopili 'i

Dyn.Fin-container-three-container Dyn.Subj.eat rice bowl

taotao.

Taotao

'Taotao ate three bowls of rice.'

b. Q: o-ka'a-pi-li-'o vavaa to'araki

Dyn.Fin-container-how much-container-2S.Gen wine use

oha'a?

Dyn.Subj:cook

'How many bowls of wine did you use to cook?

A: to'araki-lrao ta-ka'a-a-le

Dyn.Fin:use-1S.Nom SubjNmz-container-one-container

vavaa oha'a.

wine Dyn.Subj:cook

'I used one glass of wine to cook.'

(13.49) Q: matara-pi-ni polra ta-ka-dhongoso?

Dyn.Fin:take-how many-3S.Gen Dyn.Subj:catch SubjNmz-Stat.NFin-steal

'How many thieves did he catch?'

A: matara-dho'a polra ta-ka-dhongoso.

Dyn.Fin:take-two Dyn.Subj:catch SubjNmz-Stat.NFin-steal

'He caught two thieves.'

(13.50) O: maatali-pi-li-ni dha'ane-'o?

Dyn.Fin:floor-how much-floor-3S.Gen house-2S.Gen

'How many floors is your house?'

A: maatali-a-le dha'ane-li.

Dyn.Fin:floor-one-floor house-1S.Gen

'My house is a one-storey house/one floor.'

The interrogative word **saino-** typically concerns the questioning of the size of a referent and not so much its quantity. As mentioned above, its distribution is much more restricted than that of **pi-**. It usually occurs with the two verbal prefixes **ma**-'stative' (13.51), **to-** 'produce' (13.52) and the circumfix '**ako-...-nga** 'more' (13.53). When prefixed by **ma-**, **saino-** is followed by a nominal argument (13.51). When prefixed by **to-**, it is followed by a verb that is marked as subjunctive (13.52d-e), unless it has undergone other derivations (13.52a-c). When circumfixed by '**ako-...-nga**, **saino-** is followed by a nominalized verb (13.53).

In (13.51), the interrogative word **ma-saino-**Pro_{Gen} cannot be replaced by **ma-pi-**Pro_{Gen}. Its substitution would either produce a semantic change in the interpretation

of the clause in question—compare (13.51a-a')—or the ungrammaticality of the derived sentence (13.51c-c'). In (13.52), **saino**- can, to some extent, be replaced by **pi**-.

(13.51) a. ma-(sa-)saino-nga-i la(a-)lake-'o?

Stat.Fin-(Red-)how big-already-3S.Gen child(plur-)child-2S.Gen 'How big is/are your child(ren)?'

 \neq a'. ma-pi-ni la(a-)lake-'o?

Stat.Fin-how many-3S.Gen child(plur-)child-2S.Gen 'How many children do you have?'

b. ma-saino-n-imia'e vekenelre?

Stat.Fin-how big-3S.Gen-2S.Obl land

'How big is your land?'

c. ma-saino-nga-i acilai ta-iki

Stat.Fin-how much-already-3S.Gen water SubjNmz-Dyn.NFin:be at

 ${\bf 'adhingi?}$

inside

'How much water is there (in the cup/bucket)?'

c'. *ma-pi-ni acilai ta-iki 'adhingi?

Stat.Fin-how much-3S.Gen water SubjNmz-Dyn.NFin:be at inside

d. ma-saino-nga-i lalake-'o

Stat.Fin-how much-already-3S.Gen child-2S.Gen

ta-ka-oloh-ae-ni?

LocNmz-Stat.NFin-grow up-LocNmz-3S.Gen

'How tall is your child?'

(13.52) a. to-saino-'-ine 'aovaovaha?

produce-how much-2S.Gen-3S.Obl speak

'How much did you tell him?'

b. to-saino-'-ine pasolria paiso?

produce-how much-2S.Gen-3S.Obl lend money

'How much money did you lend?'

= b'. ma-pi-ni pasolria-'o paiso?

Stat.Fin-how much-3S.Gen lend-2S.Gen money

'How much money did you lend?'

but cf. b". *ma-pi-n-ine pasolria paiso?

Stat.Fin-how much-3S.Gen-3S.Obl lend money

'How many money did you lend?'

| c. | to-saino-'o | 'i-pasolria | paiso? |
|----|----------------------------|-------------|--------|
| | produce-how much-2S.Gen | Pass-lend | money |
| | 'How much money did you bo | rrow?' | |

- d. **to-saino-'-ine voa'i paiso?** produce-how much-2S.Gen-3S.Obl Dyn.Subj:give money 'How much money did you give him?'
- = d'. **to-pi-'-ine voa'i paiso?**produce-how much-2S.Gen-3S.Obl Dyn.Subj:give money
 'How much money did you give him?'
 - e. **to-saino-'o kone icivi**?
 produce-how much Dyn.Subj:eat Dyn.NFin:bake in stones
 'How many baked (potatoes) did you eat?'
 - e'. **to-pi-'o kone icivi?**produce-how much Dyn.Subj:eat Dyn.NFin:bake in stones
 'How many baked (potatoes) did you eat?'
- (13.53) a. 'ako-saino-nga-i ta-ka-lrapa'a acilai?
 more-how much-Sup-3S.Gen SubjNmz-Stat.NFin-hot water
 'How hot is the water?'
 - b. 'ako-saino-nga-i 'a-ka-lrapa'a acilai?
 more-how much-Sup-3S.Gen MnNmz-Stat.NFin-hot water
 'How hot is the water?'

The examples given in (13.54) show that **saino-** does not occur with sortal classifiers; as shown above, **pi-** does. Compare (13.54a-a') and (13.54b-b').

| (13.54) | a. | to-saino-'o | takopili | kone | va'oro? |
|---------|----|-------------------------------|----------|--------------|---------|
| | | produce-how much-2S.Gen | bowl | Dyn.Subj:eat | rice |
| | | 'How many bowls of rice did y | ou eat?' | | |

a'. o-ka'a-pi-li-'o takopili

Dyn.Fin-container-how much-container-2S.Gen bowl

kone va'oro?

Dyn.Subj:eat rice

'How many bowls of rice did you eat?'

b. to-saino-'o 'ongolo vavaa?

produce-how much-2S.Gen Dyn.Subj:drink wine
'How much wine did you drink?'

b'. **o-ka'a-pi-li-'o**Dyn.Fin-container-how much-container-2S.Gen

'How much wine did you drink?'

'ongolo

Dyn.Subj:drink

wine

13.1.2.5 amokoa, apokoa and pikoa 'how'

There are three different (though etymologically related) words for 'how'. The first, **amokoa**, refers to a degree/quality, i.e. 'how (fast/good/cold)'. The interrogative word is followed by a verb having undergone manner nominalization (13.55a)-(13.56a-e). The second and the third occur in complementary distribution, and express a means. The form **apokoa** refers to the realis (13.57a)-(13.58a), and **pikoa** to the irrealis (13.57b)-(13.58b). The verbs that follow **apokoa** and **pikoa** are marked differently to reflect this modal distinction. After **apokoa**, the verb undergoes clausal nominalization; it is prefixed by **a-** 'when (past)'. When following **pikoa**, the verb is introduced by **lo** 'if' and marked as subjunctive.

- (13.55) a. Realis
 - amokoa-Pro_{Gen} ['a-V]_{MnNmz} (degree/quality)
 - b. Realis
 - apokoa-Pro_{Gen} [a-V-Pro_{Gen}]
 - b'. Irrealis
 - pikoa-Pro_{Gen} lo V_{Subi}
- (13.56) a. **amokoa-ni 'a-ka-ridhare-ni lo dhoadhaace-ni?**how-3S.Gen MnNmz-Stat.NFin-fast-3S.Gen if Dyn.Subj:walk-3S.Gen
 'How fast does s/he walk?'
 - a'. ma-ridhare lo dhoadhaace-ni.

Stat.Fin-fast if Dyn.Subj:walk-3S.Gen

'S/he runs fast.'

a''. **ma-ridhare dhoadhaace**. Stat.Fin-fast Dyn.Subj:run

'S/he runs fast.'

- b. amokoa-ni 'a-ka-Irihili-ni omale?
 how-3S.Gen MnNmz-Stat.NFin-clever-3S.Gen Dyn.Subj:sing
 'How well does s/he sing?'
- c. amokoa-ni 'a-ka-taadhi'i-ni

how-3S.Gen MnNmz-Stat.NFin-good-3S.Gen

ta-ka-oca-e-ni?

LocNmz-Stat.NFin-person-LocNmz-3S.Gen 'How good is s/he?'

d. amokoa-ni 'a-ka-kecelre-ni?

how-3S.Gen MnNmz-Stat.NFin-cold-3S.Gen

'How cold is (the weather)?'

- e. amokoa-ni 'a-ka-tee-teleke-ni ana acilai? how-3S.Gen MnNmz-Stat.Fin-Red-cold-3S.Gen that water 'How cool is the water?'
- (13.57) a. apokoa-'o a-oa-'o 'oponoho? how-2S.Gen ClsNmz-Dyn.NFin:go-2S.Gen Wanshan 'How did you go to Wanshan?'
 - b. **pikoa-'o lo m-oa 'oponoho**? how-2S.Gen if Dyn.Subj-go Wanshan 'How will you go to Wanshan?'
- (13.58) a. apokoa-'o a-kaava'i-'o? how-2S.Gen ClsNmz-Dyn.NFin:come-2S.Gen 'How did you come?'
 - b. **pikoa-'o lo maava'i**? how-2S.Gen if Dyn.Subj:come 'How will you come?'

There is another construction to express capability—it is illustrated in (13.59)-(13.60)—but the meaning of 'a-...-a(e) has not been retrieved yet. The realis is unmarked (13.59) and the irrealis is marked by the suffixation of -a to the derived base (13.60).

- (13.59) a. 'a-amec-ae-nai 'ina mairange? ?-Dyn.NFin:bring-?-1PE.Gen this sweet potato 'How can we bring sweet potatoes?'
 - b. 'a-kan-ae-li 'ina va'oro? ?-Dyn.NFin:bring-?-1S.Gen this rice

'How can I eat the rice?'

- (13.60) a. 'a-amec-a-a-nai 'ina mairange? ?-Dyn.NFin:bring-?-Irr-1PE.Gen this sweet potato 'Will we be able to bring sweet potatoes?'
 - b. 'a-kan-a-a-li 'ina va'oro?
 ?-Dyn.NFin:bring-?-Irr-1S.Gen this rice
 'Will I be able to eat the rice?'

13.1.2.6 ama-ProGen 'how come'

ama- when followed by a genitive pronoun translates as 'how come'. The genitive

pronoun actually refers to a dummy subject. This interrogative word differs from the others in that it is followed by a full/finite clause. The subject (and object, if any) can be marked on the verb through pronominal clitics.

(13.61) a. amaa-dha ki-tipiitipi-mi'-ine?

how come:Emph-3S.Gen Neg-Dyn.NFin:beat:Emph-2S.Nom-3S.Obl 'How come you did not beat him/her?'

b. **o-kane-ka-'o va'oro?** *ama*-dha ki-kanee!

Dyn.Fin-eat-Neg-2S.Gen rice how come-3S.Gen Neg-Dyn.NFin:eat:Emph 'Have you already eaten? How come (I) did not eat? (implied: 'Of course, I ate!')

13.1.2.7 kani 'why'

kani translates as 'why'. It differs from the above-mentioned interrogative words in that it is never followed by a genitive pronoun (13.62). It is usually followed by a gerundive verb marked as non-finite (13.63)-(13.64).

- (13.62) kani V_{NFin} -Pro_{Gen}
- (13.63) Q: kani 'amene-'o m-iki valrio?
 why have time-2S.Gen Dyn.Subj:be at village
 'How come you have time to stay at home?'
 - A: ma-vahe'-iae mani iki valrio i-valrio.
 Stat.Fin-tired-1S.Obl then Dyn.NFin:be at village at-village 'I am tired so I am resting at home.'
- (13.64) a. **kani tovi-'o?**

why Dyn.NFin:cry-2S.Gen 'Why did you cry?'

why did you cry!

b. kani tipitipi-'-idhe?

why Dyn.NFin:beat-2S.Gen-3S.Obl

'Why did you beat her?'

c. kani ka-lrakase-ni omale?
why Stat.NFin-lazy-3S.Gen Dyn.Subj:sing
Lit.: 'Why is he lazy at singing?'

Negation is marked by the prefixation of **ki-** to the verb:

(13.65) a. kani ki-cengele-'-idhe?

why Neg-Dyn.NFin:see-2S.Gen-3S.Obl 'Why didn't you look at her?'

a'. * kani cengele-ka-'-idhe?

why Dyn.NFin:see-Neg-2S.Gen-3S.Obl

'Why didn't you look at her?'

b. kani ki-kane-'o?

why Neg-Dyn.NFin:eat-2S.Gen

'Why didn't you eat?'

b'. * kani kane-ka-'o?

why Dyn.NFin:eat-Neg-2S.Gen

c. kani ki-kaava'i-'o?

why Neg-Dyn.NFin:come-2S.Gen

'Why didn't you come?'

c'. *kani kaava'i-ka-'o?

why Dyn.NFin:come-Neg-2S.Gen

13.1.2.8 'Where'

Unlike other information interrogative clause types, there is no specific interrogative word that translates as 'where'. It is the (main) verb that undergoes objective nominalization to convey such a meaning (13.66). Realis is unmarked (13.67) and irrealis is marked by the suffixation of -a or -i to the derived base (13.68).

- (13.66) Realis
 - a. $_{ObjNmz}$ -V- $_{ObjNmz}$ -Pro $_{Gen}$ Irrealis
 - b. ObjNmz-V-ObjNmz-a/-i-ProGen

(13.67) a. a-iki-e-'o?

ObjNmz-Dyn.NFin:be at-ObjNmz-2S.Gen

'Where are you?'

b. 'alik-ae-'o maava'i?

from-ObjNmz-2S.Gen Dyn.Subj:come

'Where do you come from?'

(13.68) ik-a-i-'o?

Dyn.NFin:be at-ObjNmz-Irr-2S.Gen

'Where will you be?'

13.1.2.9 (lo) idhae 'when'

There are two main constructions for asking a question about time 'when' (13.69). The first makes use of two interrogative words, **lo idhae** 'when (irealis)' (13.70a)-(13.73a) vs. **idhae** 'when (realis)' (13.69a)-(13.73b) that occur as temporal adjuncts (as counterparts of the non-interrogative temporal words **lo 'idhae** 'tomorrow' and **'idhae** 'yesterday'). The main verb is marked as a gerund. There is a counterpart to **lo idhae** (but such a counterpart has not been found for **idhae**), whereby a nominalized word **kala'omae**- 'when'⁷⁹ (13.69a')-(13.73a') occurs in initial position followed by a temporal/hypothetical clause introduced by **lo** 'if'.

- (13.69) Irrealis
 - a. V_{Gerund} -Pro_{Gen} lo idhae
 - a'. kala'omae-dha/-ni lo V_{Subj}-Pro_{Gen}

Realis

b. V_{Gerund}Pro_{Gen} idhae

- (13.70) a. **m-oa-a-'o lo idhae 'oponoho**?

 Dyn.Subj-go-Irr-2S.Gen when:Irr Wanshan

 'When are you coming to Wanshan?'
 - a'. kala'omae-dha/-ni lo m-oa-'o 'oponoho? when-3S.Gen if Dyn.Subj-go-2S.Gen Wanshan 'When will you come to Wanshan?'
 - b. om-oa-'o idhae 'oponoho?

 Dyn.Fin-go-2S.Gen when:Real Wanshan
 'When did you come to Wanshan?'
- (13.71) a. **kon-a-'o lo idhae?**Dyn.Subj:eat-Irr-2S.Gen when:Irr
 'When are you going to eat?'
 - a'. kala'omae-dha lo kone-'o? when-3S.Gen if Dyn.Subj:eat-2S.Gen 'When will you eat?'
 - b. o-kane-'o idhae?

 Dyn.Fin-eat-2S.Gen when:Real

 'When did you eat?'

79 The main distinction between **lo idhae** 'when' and **kala'omae-dha/-ni** 'when' lies in the fact that while the former can only refer to an irrealis situation, the latter can also refer to a habitual situation.

(13.72) a. dhoac-a-'o lo idhae?

Dyn.Subj:leave-Irr-2S.Gen when:Irr

'When are you leaving?'

a'. kala'omae-dha lo dhoace-'o?

when-3S.Gen if Dyn.Subj:leave-2S.Gen

'When will you leave?'

b. o-dhaace-'o idhae?

Dyn.Fin-leave-2S.Gen when:Real

'When did you leave?'

(13.73) a. maavi'i-a-'o lo idhae?

Dyn.Subj:come-Irr-2S.Gen when:Irr

'When are you coming?'

a'. kala'omae-dha lo maava'i-'o?

when-3S.Gen if Dyn.Subj:leave-2S.Gen

'When will you come?'

b. maava'i-'o idhae?

Dyn.Fin-leave-2S.Gen when:Real

'When did you come?'

13.1.3 Alternative (or disjunctive) questions

From a syntactic and semantic perspective, alternative (or disjunctive) questions represent a subclass of polar questions. Thus, disjunctive questions are formed on the same model as polar questions, with two strategies available, *cf.* the use of the negator **-ka** after the questioned predicate or the occurrence of the formula **aika-**Pro_{Gen} **ka...**, as schematized in (13.2). These two types of constructions are illustrated in (13.74).

(13.74) a. amo-o-latadhe-ka-'o, amo-i-dha'ane-ka-'o?

Irr-Dyn.NFin:to-outside-Neg-2S.Gen Irr-at-house-Neg-2S.Gen

'Will you go out or stay at home?'

a'. a-ik-a-'o ka (a)mo-i-latadhe,

ObjNmz-Dyn.NFin:exist-2S.Gen Neg Irr-at-outside

amo-i-dha'ane-ka-'o?

Irr-at-house-Neg-2S.Gen

'Will you go out or stay at home?'

b. dhona'i taka-'o 'a 'api-kane-ka-i

that older sibling-2S.Gen Top like-Dyn.NFin:eat-Neg-3S.Gen

votolo, 'api-kane-ka-i ka'ange?

pork like-Dyn.NFin:eat-Neg-3S.Gen fish

'As for your older brother/sister, does s/he like to eat pork or fish?'

b'. dhona'i taka-'o a-ik-a-i 'a ka older sibling-2S.Gen Top ObjNmz-Dyn.NFin:exist-3S.Gen that Neg 'api-kane votolo, a-ik-a-i ka like-Dyn.NFin:eat ObjNmz-Dyn.NFin:exist-3S.Gen pork Neg 'api-kane ka'ange? like-Dyn.NFin:eat fish 'Will you go out or stay at home?'

Even if the predicate is identical in the two parts of the alternative question, it cannot be deleted. This constraint is illustrated in (13.75a-b), as opposed to (13.75a'-b'):

| (13.75) | a. | ma-dhaa-dhalame-ka-'-ine | dhipolo, |
|---------|----|--|----------|
| | | Stat.Fin-Red-like/love-Neg-2S.Gen-3S.Obl | Dhipolo |
| | | ma-dhaa-dhalame-ka-'-ine | taotao? |
| | | Stat.Fin-Red-like/love-Neg-2S.Gen-3S.Obl | Taotao |
| | | 'Do you prefer Dhipolo or Taotao?' | |

a'. *ma-dhaa-dhalame-ka-'-ine dhipolo Ø taotao?
Stat.Fin-Red-like/love-Neg-2S.Gen-3S.Obl Dhipolo Taotao

| b. | aanga-i who-3S.Gen | ka-dhaa-dhalam-ae-'o Stat.NFin-Red-like/love-ObjN | Vmz-2S. | Gen | |
|----|---|---|---------|--------------|----------|
| | a-ik-a-i | | ka | kamai | dhipolo, |
| | ObjNmz-Dyn.NFin:exist-ObjNmz:Irr-3S.Gen | | Neg | Stat.NFin:be | Dhipolo |
| | a-ik-a-i | | ka | kamai | taotao? |
| | ObjNmz-Dyn.1 | NFin:exist-ObjNmz:Irr-3S.Gen | Neg | Stat.NFin:be | Taotao |
| | 'Whom do you | prefer? Dhipolo or Taotao?' | _ | | |

| b'. * aanga-i | ka-dhaa-dhalam-ae-'o | | | | | |
|----------------------|------------------------------|---------------------------------------|--------------|----------|--|--|
| who-3S.Gen | Stat.NFin-Red-like/love-ObjN | Stat.NFin-Red-like/love-ObjNmz-2S.Gen | | | | |
| a-ik-a-i | | ka | kamai | dhipolo, | | |
| ObjNmz-Dyn.N | NFin:exist-ObjNmz:Irr-3S.Gen | Neg | Stat.NFin:be | Dhipolo | | |
| a-ik-a-i | | Ø | | taotao? | | |
| ObjNmz-Dyn.N | NFin:exist-ObjNmz:Irr-3S.Gen | | | Taotao | | |

Any type of information questions can also combine with disjunctive questions, though these two types of interrogative clauses are juxtaposed, as exemplified in (13.76)-(13.77).

(13.76) a. aanga-i ta-kane velevele?
who-3S.Gen SubjNmz-Dyn.NFin:eat banana
takanao-ka-i, dhipolo-ka-i?
Takanao-Neg-3S.Gen Dhipolo-Neg-3S.Gen
'Who ate the banana? Takanao or Dhipolo?'

b. aanga-i ta-ka-dhaa-dhalam-imia'e?

who-3S.Gen SubjNmz-Stat.NFin-Red-like/love-2S.Obl

dhipolo-ka-i, taotao-ka-i?Dhipolo-Neg-3S.Gen Taotato-Neg-3S.Gen

'Who prefers you? Dhipolo or Taotao?'

c. aanga-i ka-dhaa-dhalam-ae-'o?

who-3S.Gen Stat.NFin-Red-like/love-ObjNmz-2S.Gen

dhipolo-ka-i?Dhipolo-Neg-3S.Gen
'Whom do you prefer? Dhipolo or Taotao?'

(13.77) kana-ni ka-dhaa-dhalame-'o kone,

what-3S.Gen Stat.NFin-Red-like/love-2S.Gen Dyn.Subj:eat

va'oro-ka-i,mintiao-ka-i?rice-Neg-3S.Gennoddles-Neg-3S.Gen'What do you prefer to eat? Rice or noodles?'

13.1.4 Indefinite usage of question words

As shown in the following two examples (13.78)-(13.79), an interrogative word can be used as indefinite, usually in a negative context:

(13.78) a. mapi-n-imia'e paiso?
how much-3S.Gen-2S.Obl money
'How much money do you have?'

b. la 'ina'i lo m-oa-mao dhona tolrai sangepare and this if Dyn.Subj-go-Impers.Gen that big car ma-a-pi-nga-ka-i ka ta-oa [...]

Stat.Fin-plur-how much-already-Neg-3S.Gen Neg SubjNmz-Dyn.NFin:go

'Nowadays, not many people take the bus [...]'

(13.79) a. 'o-pi-li-'o kone?

N times-how much-N times-2S.Gen Dyn.Subj:eat

'How many times did you eat?'

b. lo 'i-paiso-ni la-a-lake-nai

if make-money-3S.Gen child-plur-child-1PE.Gen

ki-cenge-cengele-nga-nai ka 'o-pi-li

Neg-Red-Dyn.NFin:see-already-1PE.Nom Neg N times-how much-N times

la-a-lake-nai.

child-plur-child-1PE.Gen

'(But) if our children make money (by working outside), then we can't see them very often.'

More examples are provided below:

(13.80) a. to-pi-ka-li to-alake.

produce-how much-Neg-1S.Gen produce-child 'I did not give birth to many children.'

b. maka-pi-li-ka-li

ka m-oa. for N times-how many-for N times-Neg-1S.Gen Neg Dyn.Subj-go

'I did not go many times.'

'aoyaoyaha. c. 'ako-pi-li-ka-li ka

Neg say N times-how much-say N times-Neg-1S.Gen speak 'I did not say much.'

d. o-ka'a-pi-li-ka-li

kone va'oro. Dyn.Fin-container-how many-container-Neg-1S.Gen Dyn.Subj:eat rice 'I did not eat many bowls of rice.'

e. maatali-pi-li-ka-i

ka dha'ane-li. house-1S.Gen Neg

floor-how many-floor-Neg-3S.Gen 'My house does not have many floors.'

f. ma-saino-na-ka-i

caili-'o.

Stat.Fin-how much-still-Neg-3S.Gen year-2S.Gen

'You are not very old yet.'

f'. ma-pi-na-ka-i

caili-'o.

Stat.Fin-how much-still-Neg-3S.Gen year-2S.Gen

'You are not very old yet.'

13.2 Exclamatory sentences

The most common exclamatory word is 'akosaae-, which translates as 'how much'. It is usually followed by a genitive pronoun which refers to the subject of the clause, cf. (13.81a-b) and (13.82a-b).

(13.81) a. "'ai! 'akosaae-'o tovi-c-ae!"

how come-2S.Gen Dyn.NFin:cry-snivel-ObjNmz

"Ah, you are always crying!"

b. 'akosaae-'o/-nomi

lrakap-ae!

lazy-ObjNmz how-2S.Gen/-2P.Gen

'How lazy you (sg./pl.) are!'

(13.82) a. 'akosaae-'o 'a-ka-si'i kone!

MnNmz-Stat.NFin-a little how much-2S.Gen Dyn.Subj:eat

'How little you eat!'

b. 'akosaae-'o 'a-ka-dhao tomako-mako! how much-2S.Gen MnNmz-Stat.NFin-many Dyn.Subj:smoke-Red 'How much you smoke!'

There is an emphatic exclamation expressed through the prefixation of ka- 'indeed, in fact' to the verb that takes a genitive-marked subject. The speaker does not expect any reply but rather expects to draw the attention to his/her propositional content.

(13.83) **ka-kane-nga-'o!**

in fact-Dyn.NFin:eat-already-2S.Gen Lit.: 'Indeed, you have eaten!'

13.3 Greetings and related formulaic expressions

As shown below, Mantauran greetings share the syntactic characteristics of polar ('yes-no') and information interrogative sentences as well as those of the emphatic exclamatory ka-V-Pro_{Gen} clauses.

Examples (13.84) and (13.85) illustrate two common polar questions, used as greeting words. The first (13.84a) is usually pronounced early in the morning, when someone wakes up. Its exclamatory counterpart is given in (13.84b). The second (13.85) is uttered if someone has encountered difficulties.

(13.84) a. 'omaca-nga-ka-'o?

Dyn.Fin:wake up-already-Neg-2S.Gen

'Good morning' (Lit.: 'Have you awakened already?')

b. ka-'omaca-nga-'o?

in fact-Dyn.NFin:wake up-already-2S.Gen 'Good morning' (Lit.: 'You are indeed awake!')

(13.85) Q: ki-polringao-mo'o?

Neg-matter-2S.Nom 'How are you?'

O': a-ik-a-'o

polringao? ka ObjNmz-Dyn.NFin:exist-ObjNmz:Irr-2S.Gen Neg matter

'How are you?'

A: ka polringao-ka-li.

Neg matter-Neg-1S.Gen

'I am fine.'

As pointed out by Blust (forthcoming), the most common greeting of encounters

over much of the Austronesian world is literally 'Where are you going?'. This formula is only used in Mantauran when two persons meet on the road. Reference to the past as in (13.86a) is more likely than to the future as in (13.86b):

(13.86) a. a-o-a-'o?

ObjNmz-Dyn.NFin:go-ObjNmz:Real-2S.Gen 'Where did you go?'

b. o-a-i-'o?

Dyn.Fin-go-ObjNmz-Irr-2S.Gen 'Where are you going?'

Other types of greeting words—expressed through an interrogative or exclamatory sentence—include the following, which are uttered when/if:

- coming back to the village (after a long absence):

(13.87) ka-kaava'i-nga-'o!

in fact-Dyn.NFin:come-already-2S.Gen *Lit*.: 'Indeed, you have come!'

- that person is not responding or did not hear what his/her interlocutor earlier said:

(13.88) 'oidhai-lra-imia'e!

say hello-1S.Nom-2.Obl *Lit*.: 'I say hello to you!'

- someone is seriously ill:

(13.89) o-dhalrimi-nga-ka-'o?

Dyn.Fin-endure-already-Neg-2S.Gen 'How are you?' (*Lit.:* 'Can you endure? Are you gonna make it?')

- someone is staying at home:

(13.90) kani 'amene-'o m-iki valrio?

why have time-2S.Gen Dyn.Subj-be at village

'Why have you time to stay at home? (implied: 'You are seldom at home!')

- someone is troubled:

(13.91) kani a-koa-e-'o?

why ObjNmz-matter-ObjNmz-2S.Gen 'What's the matter with you?'

Other formulaic expressions for welcomes, goodbyes, farewells and thanks are given below for reference:

- when someone has not been seen for a long time:

(13.92) a. sarivo-nga-'o

miss-already-2S.Gen 'Miss you/Long time no see.'

b. ma-sarivo-lra-imia'e.

Stat.Fin-miss-1S.Nom-2S.Obl 'I miss you.'

- at night:

(13.93) a. ta-'apece-nga!

1PI.Nom-Dyn.NFin:sleep-already 'Let's go to sleep!'

b. maongo-nga, kai 'apece-a-nga!

late-already should Dyn.Subj:sleep-Imp-already

'It's late already. You should sleep!'

- when leaving:

(13.94) a. oaramac-a!

Dyn.Subj:be careful-Imp 'Be careful!'

b. langa'o-ng-imia'e!

goodbye-already-2S.Obl 'Goodbye to you.'

b'. olanga'o-nga'o-nga-lra-imia'e!

goodbye-Red-already-1S.Nom-2S.Obl 'Goodbye to you.'

- to thank someone:

(13.95) a. icongo-nga-'o!

hopefully-already-2S.Gen 'Thank you!'

b. icongo-nga-'-iae!

hopefully-already-2S.Gen-1S.Obl 'I thank you.'

Chapter 14: Coding of Grammatical Relations

This chapter examines the coding and behavioral properties of subjects and objects in active (*cf.* §14.1) and passive (*cf.* §14.2) sentences. In §14.3, I show that Mantauran is an accusative language and discuss the viability of the notion of "subject" in this dialect. Section 14.4 deals with instances of "split intransitivity".

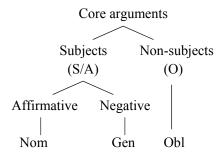
I follow Dixon (1979) in assuming that in Mantauran, clauses contain three core grammatical categories, A, O and S. A is the core argument of a transitive clause and typically denotes the agent, the controller or the initiator of the activity described by the verb. O is also the core argument of a transitive clause. It prototypically refers to a participant that is being affected by the activity described by the verb. S represents the sole and unique core argument of an intransitive clause.

14.1 Coding and behavioral properties of subjects and objects in active sentences

14.1.1 Covert/overt morphological marking of subjects and objects

As shown in chapter 10, in declarative affirmative sentences, pronominal subjects are marked as nominative. In negative sentences—but only in cases where the verb is negated by **-ka**—subjects are marked as genitive. Non-subject (core) arguments are oblique-case marked.

Figure 14.1: Coding of core arguments (subjects and non-subjects) in Mantauran



Unlike pronouns, full lexical nouns in subject position are unmarked for *case* in Mantauran, no matter whether they refer to a human (14.1a-b) or non-human participant (14.1c).

(14.1) a. o-cengele ta-ka-dho'a ta-ka-'ete ta'olro Dyn.Fin-see SubjNmz-Stat.Fin-two SubjNmz-Stat.NFin-dead dog ana tamatama. that middle-aged man 'The middle-aged man saw two dead dogs.'

- b. o-langai-nga taotao dha'ane. Dyn.Fin-buy-already Taotao house 'Taotao has bought a house.'
- c. o-ka'ace ta'olro 'olra'a. Dyn.Fin-bite dog snake i. 'The dog bit(es) the snake.' ii. 'The snake bit(es) the dog.'

As shown in (14.1c), an ambiguous interpretation may result if two potential agents occur in postverbal position. This ambiguity is raised if (i) the agent is preceded by 'i (14.2a-a') or if (ii) it occurs in pre-verbal position as a topic, as shown in (14.2b-b').

- 'i ta'olro 'olra'a. (14.2) a. o-ka'ace Dyn.Fin-bite dog snake 'The dog bit(es) the snake.'
 - ii. * 'The snake bit(es) the dog.'
 - a'. o-ka'ace ta'olro 'n 'olra'a. Dyn.Fin-bite dog snake i. * 'The dog bit(es) the snake.'

ii. 'The snake bit(es) the dog.'

b. (dhona) ta'olro 'a o-ka'ace Top (that) Dyn.Fin-bite snake dog

'As for that dog, it bit(es) the snake.'

b'. (dhona) 'olra'a o-ka'ace ta'olro. (that) snake Dyn.Fin-bite dog 'As for that snake, it bit(es) the dog.'

While non-human objects are also unmarked (see the examples given above), human objects are marked through the cliticization of -ine on the noun or on the verb, as in (14.3a-b).

'olra'a.

(14.3) a. o-langai-nga dha'ane taotao-ine. Dyn.Fin-buy-already house Taotao-Obl 'Someone bought a house for Taotao.'

b. *o-langai-ng-ine* **dha'ane taotao.**Dyn.Fin-buy-already-3S.Obl house Taotao

'Someone bought a house for Taotao.'

A few notes are in order.

1) the marking of human objects cannot simultaneously occur on the noun and on the verb:

(14.4) *o-langai-ng-ine dha'ane taotao-ine.

Dyn.Fin-buy-already-3S.Obl house Taotao-3S.Obl

- 2) in a serial verb construction, verbal marking occurs only once on either verb but not simultaneously on each verb:
- (14.5) a. **dhipolo** 'a pasopalr-ine 'ilape apoto taotao.

 Dhipolo Top help-3S.Obl Dyn.Subj:look for stone Taotao 'As for Dhipolo, she helped Taotao look for (the) stones.'
 - b. **dhipolo** 'a pasopalra 'ilap-ine apoto taotao.

 Dhipolo Top help Dyn.Subj:look for-3S.Obl stone Taotao 'As for Dhipolo, she helped Taotao look for (the) stones.'
 - c. *dhipolo 'a pasopalr-ine 'ilap-ine apoto taotao.

 Dhipolo Top help-3S.Obl Dyn.Subj:look for-3S.Obl stone Taotao
- 3) the marking of oblique arguments is sensitive to the categorial nature of the "object": it is obligatory if the object NP refers to a human (14.6) but optional if only indirectly related to a human (14.7).
- (14.6) a. **takanao 'a o-tipitip-ine taotao.**Takanao Top Dyn.Fin-beat-3S.Obl Taotao 'As for Takanao, he beat(s) Taotao.'
 - b. *takanao 'a o-tipitipi-Ø taotao.

 Takanao Top Dyn.Fin-beat-Ø Taotao

 'As for Takanao, he beat(s) Taotao.'
- (14.7) a. **dhona'i 'aolai 'a (o-)'ilape-Ø apoto-ni.**that male Top (Dyn.Fin-)look for-Ø stone-3S.Gen
 'As for that boy, he is looking for his stones.'

- b. **dhona'i 'aolai 'a (o-)'ilap-ine apoto-ni.**that male Top Dyn.Fin-look for-3S.Obl stone-3S.Gen
 'As for that boy, he is looking for his stones.'
- 4) the marking/non-marking of the oblique argument on the verb might result in different interpretations. Compare (14.8a-b').
- (14.8) a. **o-kane-nga-Ø tamatama velevele/velevele-ni.**Dyn.Fin-eat-already middle-aged man

 'The middle-aged man ate a/his banana.'
 - b. *o-kane-ng-ine tamatama velevele.

 Dyn.Fin-eat-already-3S.Obl middle-aged man

 *'The banana ate the middle-aged man.'
 - b'. **o-kane-ng-ine tamatama velevele-ni.**Dyn.Fin-eat-already-3S.Obl middle-aged man 'Someone ate the banana of the middle-aged man.'
- 5) if two potential agents occur in the sentence, the utterance will be interpreted ambiguously if the clitic **-ine** occurs on the verb (14.9a), because the marking of the object on the verb is not cross-referenced on the noun. No such ambiguity arises if the clitic **-ine** occurs on the noun (14.9b-b'), because only non-subjects/oblique arguments are marked.
- (14.9) a. *ma-dhalam-ine* **taotao dhipolo.** Stat.Fin-like/love-3S.Obl Taotao Dhipolo
 - i. 'Taotao likes/loves Dhipolo.'
 - ii. 'Dhipolo likes/loves Taotao.'
 - b. **ma-dhalame taotao** *dhipol-ine*.
 Stat.Fin-like/love Taotao Dhipolo-3S.Obl
 - i. 'Taotao likes/loves Dhipolo.'
 - ii. * 'Dhipolo likes/loves Taotao.'
 - b'. **ma-dhalame taotao-***ine dhipolo*. Stat.Fin-like/love Taotao-3S.Obl Dhipolo
 - i. 'Dhipolo likes/loves Taotao.'
 - ii. * 'Taotao likes/loves Dhipolo.'

As in the case of subjects, if the clitic **-ine** occurs on the verb and the potential agent is preceded by 'i (14.10a-a') or occurs in initial position (14.10b-b'), no such ambiguity arises:

- (14.10) a. *ma-dhalam-ine*; 'i taotao dhipolo_j.

 Stat.Fin-like/love-3S.Obl Taotao Dhipolo
 'Taotao likes/loves Dhipolo.'
 - a'. *ma-dhalam-ine*; taotao; 'i dhipolo. Stat.Fin-like/love-3S.Obl Taotao Dhipolo 'Dhipolo likes/loves Taotao.'
 - taotao 'a ma-dhalam-ine_j dhipolo_j.
 Taotao Top Stat.Fin-like/love-3S.Obl Dhipolo
 'Taotao likes/loves Dhipolo.'
 - b'. **dhipolo** 'a *ma-dhalam-ine*_j taotao_j.

 Dhipolo Top Stat.Fin-like/love-3S.Obl Taotao
 'Dhipolo likes/loves Taotao.'
- 6) the cliticization of **-ine** on the noun is rare and subject to various restrictions that are enumerated below:
- (i) If two nouns are coordinated, the clitic can only occur on the verb (14.11a); it cannot appear on each noun (14.11b), as in Tona Rukai, for instance:
- (14.11) a. *o-langai-ng-iline*; dha'ane [taotao la dhipolo]; Dyn.Fin-buy-already-3P.Obl house Taotao and Dhipolo 'Someone bought a house for Taotao and Dhipolo.'
 - b. *o-langai-nga dha'ane *taotao-ine* la *dhipol-ine*.

 Dyn.Fin-buy-already house Taotao-3S.Obl and Dhipolo-3S.Obl
- (ii) If the noun is a complex NP, the clitic only occurs on the verb (14.12a), not on the noun (14.12b-c):
- (14.12) a. **o-kane-ng-ine (taotao [velevele-ni) tamatama].**Dyn.Fin-eat-already-3S.Obl Taotao banana-3S.Gen middle-aged man
 - i. 'Taotao ate the middle-aged man's banana.'
 - ii. 'The middle-aged man ate Taotao's banana.'
 - b. *o-kane-nga [taotao-ine velevele-ni] tamatama.

 Dyn.Fin-eat-already Taotao-3S.Obl banana-3S.Gen middle-aged man
 - c. *o-kane-nga taotao [velevele-ni *tamatama-ine*].

 Dyn.Fin-eat-already Taotao banana-3S.Gen middle-aged man-3S.Obl

(iii) The clitic is invariable when it occurs on the noun (14.13). When it occurs on the verb, there is an agreement in visibility (*cf.* -ine vs. -idhe) (14.14) and plurality (*cf.* -iline vs. -ilidhe) (14.15) between the verb and the NP marked as oblique:

- (14.13) a. **ma-dhalame taotao** *dhipol-ine*.
 Stat.Fin-like/love Taotao Dhipolo-3S.Obl 'Taotao likes/loves Dhipolo.'
 - b. *ma-dhalame taotao *dhipol-idhe*. Stat.Fin-like/love Taotao Dhipolo-3S.Obl
- (14.14) a. mani dhaace 'ilap-idhe votolro'o-dha.
 then Dyn.NFin:leave Dyn.Subj:look for-3S.Obl body-3S.Gen
 'Then they looked for his body.'
 - b. *mani dhaace 'ilap-ine votolro'o-dha.
 then Dyn.NFin:leave Dyn.Subj:look for-3S.Obl body-3S.Gen
- (14.15) a. **ma-dhalam-***iline*_j **[taotao la takanao**]_j **dhipolo.**Stat.Fin-like/love-3P.Obl Taotao and Takanao Dhipolo
 'Dhipolo likes/loves Taotao and Takanao.'
 - b. *?dhipolo 'a ma-dhalam-ine_j [taotao la takanao]_j.

 Dhipolo Top Stat.Fin-like/love-3S.Obl Taotao and Takanao
 - c. ma-dhalam-ine [taotao la takanao]_i dhipolo_j.

 Stat.Fin-like/love-3S.Obl Taotao and Takanao Dhipolo

 'Taotao and Takanao like/love Dhipolo.'
- 6) the third person oblique pronouns **-ine/-idhe/-iline/-ilidhe** can occur on the first verb, even if they co-refer with an argument of the second clause (*cf.* §15.1):
- (14.16) **o-lriho'o-lra-ine m-okela-nga m-ia ana 'avai.**Dyn.Fin-know-1S.Nom-3S.Obl Dyn.Subj-reach-already Dyn.Subj-so that woman 'I know that the woman has arrived.'

14.1.2 Syntactic functions, semantic roles and semantic properties

Mantauran makes a distinction between dynamic and stative verbs. In active clauses, the agent is always the subject of the clause if the verb is dynamic (14.17a). If the verb is stative, the subject might be an agent (14.17b) or an experiencer (14.17c):

Examples such as those proposed in Payne (1997:131), e.g., The key opened the door and The door opened, whereby the subject is either the instrument or the patient (as opposed to I

(14.17) a. o-'ongolo vavaa titina.

Dyn.Fin-drink wine middle-aged woman

'The middle-aged woman drinks/drank wine.'

b. ma-'amadh-ine dhipolo titina.

Stat.Fin-dislike-3S.Obl Dhipolo middle-aged woman

'The middle-aged woman dislikes Dhipolo.'

c. ma-ca'eme dhona titina.

Stat.Fin-ill that middle-aged woman

'The middle-aged woman is ill.'

There is an unrestricted neutralization in non-subject position: the non-subject is an oblique (core) argument. If the oblique NP refers to a human participant, it must be marked through the occurrence of an oblique pronoun on the verb, whatever the semantic role (patient, beneficiary, goal, locative) or the syntactic function (direct object, indirect object or oblique) of the NP.

(14.18) a. mani dhaace m-o-valrio, mani ka-ha'aoc-idhe then Dyn.NFin:leave Dyn.Subj-to-village then Stat.NFin-scold-3S.Obl titina mani pa-dhaac-idhe middle-aged woman Caus-Dyn.NFin:leave-3S.Obl then titina poa dha'ane-lidha. middle-aged woman Dyn.Subj:make house-3P.Gen

'Then (they) went back home and (they) scolded the mother and made her leave and return to their (=her own family's) home.'

opened the door with the key) are highly marked in Mantauran. Though they can be elicited, they sound unnatural, if not ungrammatical:

(i) a. to'araki-lrao saosi 'oecece.

use-1S.Nom key Dyn.Subj:open door

'I used a key to open the door.'

b. ? o-'oecece dhona saosi.

Dyn.Fin-open door that key

'The key open(ed) the door.'

vs. b'. o-'oecece-lrao.

Dyn.Fin-open door-1S.Nom

'I opened the door.'

c. *o-'oecece dhona 'elevae.

Dyn.Fin-open door that door

vs. c'. o-'oecece.

Dyn.Fin-open door

'(The door) opened.'

b. dhona'i titina amo-'irak-ine lroolai oha'a that middle-aged woman Irr-for-3S.Obl child Dyn.Subj:cook pa-kane.

Caus-Dvn.NFin:eat

'The middle-aged woman will cook for the child.'

- c. o-va'a-ine taotao paiso 'i dhipolo.

 Dyn.Fin-give-3S.Obl Taotao money Dhipolo 'Dhipolo gave money to Taotao.'
- d. o-lralrame-ng-ine lalake-dha (tamatama).

 Dyn.Fin-run-already-3S.Obl child-3S.Gen (middle-aged man)

 '(The middle-aged man) had his child run away.'
- e. **om-ik-**Dyn.Fin-exist-3S.Obl fly child-3S.Gen body-3S.Gen 'There is a fly on the child's body.'

In terms of semantic properties, subjects (of active sentences) are characterized not only by a higher degree of agency, but also of volitionality and control (14.19a-b). Subjects of dynamic verbs are thus [+agent, +volitional, +control]; subjects of stative verbs are marked as [±agent, ±volitional, ±control] (14.20a-b). Oblique NPs, on the other hand, are neither agentive nor volitional and they do not have any control of the action being performed. They can be defined as [-agent, -volitional, -control], *cf.* (14.19a'-b') and (14.20a'-b').

| (14.19) | a. o-kane-nga-Ø | tamatama | velevele/velevele-ni. |
|---------|--------------------------|-----------------|-----------------------|
| | Dyn.Fin-eat-already-Ø | middle-aged man | banana/banana-3S.Gen |
| | 'The middle-aged man ate | a/his banana.' | |

- a'. **o-kane-ng-ine tamatama velevele-ni.**Dyn.Fin-eat-already-3S.Obl middle-aged man banana-3S.Gen 'Someone ate the middle-aged man's banana.'
- b. **o-lralrame-nga-Ø lalake-dha tamatama.**Dyn.Fin-run-already-Ø child-3S.Gen middle-aged man 'The middle-aged man's child ran.'
- b'. **o-Iralrame-ng-***ine* **lalake-dha tamatama.**Dyn.Fin-run-already-3S.Obl child-3S.Gen middle-aged man 'The middle-aged man had his child run away.'
- (14.20) a. **ma-dhalame-Ø ta'olro-dha tamatama.**Stat.Fin-like/love-Ø dog-3S.Gen middle-aged man likes/loves his dog.'

- a'. ma-dhalam-ine ta'olro-dha tamatama.

 Stat.Fin-like/love-3S.Obl dog-3S.Gen middle-aged man 'Someone likes the middle-aged man's dog.'
- b. ma-raveravere-Ø ina-li amo-'acakelae taka-li.
 Stat.Fin-happy-Ø mother-1S.Gen Irr-marry older sibling-1S.Gen
 'My mother is happy that my older brother/sister is going to marry.'
- b'. ma-raveraver-ine ina-li amo-'acakelae taka-li.

 Stat.Fin-happy-3S.Obl mother-1S.Gen Irr-marry older sibling-1S.Gen 'Someone is happy for my mother that my older brother/sister is going to marry.'

The above examples (14.19)-(14.20) show that while there is no overt morphological distinction in Mantauran between intransitive and transitive clauses, syntactically, an intransitive verb can become transitive by means of the cliticization of a co-referential oblique pronoun on the verb.

14.1.3 Summary

The behavioral properties of subjects and objects in Mantauran are summarized as follows in a tabular form:

Properties Subject Object dynamic verbs stative verbs +human -human 1. case marking no overt case marking oblique case on the verb no overt case marking or the noun agreement in visibility and 2. verbal agreement no agreement no agreement no agreement unless the subject plurality is quantified/plural 3. word order free (VOS/VSO) free (VOS/VSO) 4. degrees of +agent ±agent agent agency, volitionality, +volitional ±volitional -volitional control +control ±control -control

Table 14.1: Behavioral properties of subjects and objects in active clauses

14.2 Coding and behavioral properties of subjects and objects in passive sentences

The passive voice exhibits a mirror image of the active voice with the functions of S and O reversed. The subject is the agent/controller in the active voice (14.21a). It is the patient/non-controller in the passive voice (14.21b). The same is true for the object, which becomes the agent of the sentence. What has been said in the above section about case marking, verbal agreement and word order remains true and unchanged.

(14.21) a. o-tipitipi-mi'-iae.

Act:Dyn.Fin-beat-2S.Nom-1S.Obl 'You beat me.'

b. 'i-tipitipi-lra-imia'e.

Pass-Dyn.NFin:beat-1S.Nom-2S.Obl 'I am/was beaten by you.'

14.3 Mantauran as an accusative language and the validity of the notion of subject

While most Formosan languages have been characterized as being ergative languages (*cf.* Starosta 1988, Huang 1993, Liao 2004, Wang, 2004, Ross & Teng 2005 among others) or exhibit split ergative characteristics (*cf.* Y. Chang 1997, Liao 2002), Mantauran can be viewed as an accusative language, in that the single argument (S) of an intransitive sentence (14.22a-b) corresponds to the A(gent) of a transitive sentence (14.22a'-b').

(14.22) a. **o-lralrame** ana lroolai. Dyn.Fin-run that child

'That child runs/ran.'

a'. **o-kane velevele ana Iroolai.**Dyn.Fin-eat banana that child 'That child eats/ate a banana.'

b. **ma-vare'e** 'i dhipolo.
Stat.Fin-tired Dhipolo

'Dhipolo is tired.'

b'. ma-dhalam-ine taotao 'i dhipolo. Stat.Fin-like/love-3S.Obl Taotao Dhipolo 'Dhipolo likes/loves Taotao.'

Van Valin & LaPolla (1997) and Ross (2004b), among others, have shown that grammatical relations are not found universally and that they exist only in languages where "the behavioral patterns [...] give evidence of a syntactic relation independent of semantic and pragmatic relations" (Van Valin & LaPolla 1997:274).

Some evidence shows that subjects are not reducible to semantic roles and that the notion of subject is viable in Mantauran.

1. Only the subject can typically be raised in initial position.

(14.23) ana Iroolai o-kane velevele. that child Dyn.Fin-eat banana 'As for that child, he eats/ate a banana.'

2. There is a subject-verb agreement in number if the verb is stative and the subject is quantified or in the plural form.

(14.24) a. *ma-voti'i* dhona ngiao.
Stat.Fin-blind that cat
'That cat is blind.'

b. *ma-voti-voti'i* dhona kapa-ngiao-nga. Stat.Fin-Red-blind that all-cat-Sup 'All the cats are blind.'

c. *o-tovi* **dhona'i lroolai/a-olrolai.**Dyn.Fin-cry that child/plur-child

'The child(ren) is/are crying.'

d. *makini-tovi-e* **dhona'i a-olrolai/*lroolai.** all-Dyn.NFin:cry-all that plur-child 'All the children are crying.'

- 3. Two independent clauses as in (14.25)
- (14.25) a. **o-tipitip-ine** 'i taotao takanao.

 Dyn.Fin-beat-3S.Obl Taotao Takanao

 'Taotao beat Takanao.'
 - b. o-lralrame (ana).

 Dyn.Fin-run that

 'He run/ran.'

can combine as follows, cf. (14.26):

- - d. o-tipitip-ine; 'i taotao; takanao; mani lralrame ana_{i/j}.

 Dyn.Fin-beat-3S.Obl Taotao Takanao then Dyn.NFin-run that 'Taotao beat Takanao and then he ran.'

If there is no overt subject in the second clause, then the subject is understood as the same as in the first clause (coordination reduction). If the subject is overtly marked

(through the presence of a demonstrative pronoun), then the sentence is ambiguous: the subject of the second clause might refer to either Taotao or Takanao.

- 4. Van Valin & LaPolla (1997:260) show that in English, "a semantic argument appearing in two conjoined active-voice transitive clauses can be represented by a zero pronoun in the second clause only if it is the actor in both clauses". They provide the following examples:
- (14.27) Van Valin & LaPolla (1997:260)
 - a. The man_i went downhill and *pro*_i saw the dog.
 - b. *The dog, went downhill and saw the man pro.
 - c. The dog, went downhill and *pro*, was seen by the man.

The same is true in Mantauran, as the following examples illustrate:

- (14.28) a. m-o-lraodho ana ocao; mani cengele Dyn.Fin-to-down(wards) then Dyn.NFin:see that person ta-ka-eaea ta'olro. SubjNmz-Stat.NFin-one dog 'The man went downhill and then pro; saw one dog.' b. ?*m-o-lraodho ta'olro ta-ka-eaea Dyn.Fin-to-down(wards) SubjNmz-Stat.NFin-one dog ana mani cengele ocao then Dvn.NFin:see that person * 'The dog went downhill and then the man saw pro_i.' m-o-lraodho ta-ka-eaea ta'olro Dyn.Fin-to-down(wards) SubjNmz-Stat.NFin-one dog 'i-cengele mani ana ocao Pass-Dyn.NFin:see that person 'The dog went downhill and then pro; was seen by the man.'
- 5. If two potential actors occur in the second clause, the occurrence of **-ine** on the verb in the second clause obligatorily refers to the oblique argument representing the subject of the first sentence:
- (14.29) olravele taotao lalake-ni, mani pasopalra-ine,
 Dyn.Fin:fall down Taotao child-3S.Gen then help-3S.Obl
 cekale takanao,
 Dyn.Subj:support with one hand Takanao
 'Taotao's child fell down and Takanao helped him to get up.'

14.4 Split intransitivity

It has been shown in different places of this grammar that Mantauran makes a distinction between dynamic and stative verbs (see Chapter 7). For a relatively low number of stative verbs—they are listed in table 14.2—the (sole) argument can/must be marked as oblique. As mentioned in Saillard (1995) for Maga Rukai, which shares the same pattern, the nominal argument (i.e. the theme) "is understood to have been caused to be in this state by an unexpressed agent: what is emphasized is not the present state, but rather the fact that a process has taken place, by which the argument came to experience the given state."

Table 14.2: Co-occurrence restrictions between a stative verb and a nominative/oblique argument

| Stem | Gloss | Verb + Nom | Verb + Obl |
|------------|--------------------|------------|------------|
| ma-rilai | 'be slim' | + | - |
| ma-eleme | '(be) poor' | + | |
| ma-ca'eme | 'be ill' | + | + |
| ma-elreme | 'be dizzy, faint' | + | + |
| ma-lrakase | 'be lazy, dislike' | + | + |
| ma-lrapa'a | 'be hot' | + | + |
| ma-pilai | 'be tired' | + | + |
| ma-hamelre | 'ache' | | + |
| ma-taipi | 'be flattened' | - | + |
| ma-kolidhi | 'be scratched' | - | + |
| 'ovalrake | 'be swollen' | - | + |

| (14.30) | a. | ma-kolidh-iae Stat.Fin-scratch-1S.Obl 'My foot is scratched.' | dhapale-li. foot-1S.Gen |
|---------|-----|--|------------------------------------|
| | a'. | * ma-kolidhi-lrao Stat.Fin-scratch-1S.Nom | dhapale-li. foot-1S.Gen |
| | b. | ma-taip-iae Stat.Fin-flatten-1S.Obl 'I have a flattened nose.' | ngongo'o-li. nose-1S.Gen |
| | b'. | *ma-taipi-lrao Stat.Fin-flatten-1S.Nom | ngongo'o-li. nose-1S.Gen |
| | c. | 'ovalrak-iae swollen-1S.Obl 'I have a swollen hand.' | alrima-li. hand-1S.Gen |

A Grammar of Mantauran (Rukai)

c'.*'**ovalrake-lrao alrima-li.** swollen-1S.Nom hand-1S.Gen

d. ma-lrakas-iae solate.

Stat.Fin-lazy/dislike-1S.Obl Dyn.Subj:study

'I dislike to study.'

d'. ma-lrakase-lrao solate.

Stat.Fin-lazy/dislike-1S.Nom Dyn.Subj:study

'I dislike to study.'

Note that this construction is different from the one illustrated in (14.31), whereby the oblique pronoun marks an oblique argument, i.e. a non-subject, and from the one exemplified in (14.32), whereby the possessor is raised onto the verb $(cf. \S 12.6.3)$.

(14.31) a. ma-lrakas-iae/-imia'e/-ine.

Stat. Fin-lazy/dislike-1S. Obl/-2S. Obl/-3S. Obl

'Someone dislikes me/you/him/her.'

b. ma-sariv-iae.

Stat.Fin-miss-1S.Obl

'Someone misses me.'

c. ma-rimor-iae.

Stat.Fin-forget-1S.Obl

'Someone forgot me.'

(14.32) a. ma-si'-iae odha'e.

Stat.Fin-a little/a few-1S.Obl white hair

'I have few white hair.'

b. ma-si'i odha'e-li.

Stat.Fin-a little/a few white hair-1S.Gen

'I have few white hair.' (Lit.: 'My white hair are few.')

Saillard (1995:65) notes the occurrence of "double accusatives" (i.e. referred as "oblique" in the present study) in Maga Rukai.

(14.33) Maga Rukai (Saillard 1995:65)

a. ma-berbere ngkua nia.

Stat.Fin-happy 1S.Acc 3S.Acc

'I am happy about him/her/it.'

b. ma-ngic-ngici ngkua nia vakav-a.

Stat.Fin-Red-angry 1S.Acc 3S.Acc Vakao-Acc

'Vakao makes me angry.' ('I am angry about Vakao.')

Such a construction is also found in Mantauran. The examples given in (14.34a-b) illustrating such a clause type are not as typical as those given in (14.34a'-b'), though.

(14.34) a. ma-lrakas-ia-ine.

Stat.Fin-dislike-1S.Obl-3S.Obl 'I dislike him/her.'

a'. ma-lrakase-lra-ine.

Stat.Fin-dislike-1S.Nom-3S.Obl 'I dislike him/her.

b. ma-sekelr-ia-imia'e.

Stat.Fin-angry-1S.Obl-2S.Obl 'I am angry at you.'

b'. ma-sekelre-lra-imia'e.

Stat.Fin-angry-1S.Nom-2S.Obl 'I am angry at you.'

Chapter 15: Serialization and Complementation

This chapter deals with verbal serialization (§15.1) and sentential complementation in Mantauran (§15.2). Though these two types of constructions are different, they are dealt with together, as verbal serialization represents one of the most productive complementation strategies in Mantauran.

15.1 Serial verb constructions

15.1.1 Definition and illustration

Serial verb constructions (henceforth SVCs) are defined as two or more verbs sharing the same grammatical subject and being juxtaposed in a single clause, i.e. there is no connector between the two (or more) verbs. Tense, aspect and modality as well as negative polarity are only marked on one of the verbs.

In Mantauran, two or more verbs can be serialized without the occurrence of any ligature between them, as shown in (15.1):

| (15.1) | a. | om-oa-nga-lrao Dyn.Fin-go-already-1S.Nom 'I went to see my mother.' | cengel-ine Dyn.Subj:see-3S.Obl | iinae. own mother |
|--------|----|---|-----------------------------------|----------------------|
| | b. | ma-lrakase-lrao Stat.Fin-lazy/dislike-1S.Nom 'I dislike to eat banana.' | kone Dyn.Subj:eat | velevele. banana |
| | c. | poveelai-lra-ine lightly-1S.Nom-3S.Obl 'I beat him lightly.' | kelrakelrange. Dyn.Subj:beat | |

The two verbs are syntactically independent, though they share at least one argument, usually the subject, as in (15.1). The sharing of an object, as in (15.2a-b), is rare in Mantauran.

| (15.2) | a. | dhona'i | titina | 'ivaha-ka-idhe | ka | m-oa | ooma. |
|--------|----|-----------|------------------------|----------------------|-------|----------------|-------|
| | | that | middle-aged woman | allow-Neg-3S.Obl | Neg | Dyn.Subj-go | field |
| | | 'The midd | lle-aged woman did not | allow (her daughter) | to go | to the field.' | |
| | | | | | | | |

| b. ma-rimoro-lra-idhe | pato'o | takanao |
|-------------------------------------|---------------|---------|
| Stat.Fin-forget-1S.Nom-3S.Obl | Dyn.Subj:tell | Takanao |
| ni-tipitip-idhe | dhipolo. | |
| Cntrfct-Dyn.NFin:beat-3S.Obl | Dhipolo | |
| 'I forgot to tell Takanao to beat I | Ohipolo.' | |

The two (or more) verbs occurring in a serial verb construction are usually in the active voice. Though they are not found in the corpus, verbs in the passive form occurring in the first or second position or in both positions can be elicited, *cf.* (15.3). They represent marked constructions.

(15.3) a. *om-oa-*lrao *'i-ra'opo 'i-vorovoro.*Dyn.Fin-go-1S.Nom Pass-Dyn.NFin:make injection Pass-Dyn.NFin:operate 'I went to be given an injection and be operated on.'

b. 'i-alra-iae ana lroolai 'i-paavanao.

Pass-Dyn.NFin:take-1S.Obl that child Pass-Dyn.NFin:bathe 'The child was taken by me to be bathed.'

The first verb may occur in its nominalized form, as shown in (15.4):

(15.4) a. **avasae-li dhoace!**pity-1S.Gen Dyn.Subj:leave
'What a pity I (need to) go!'

b. *arongo-li* oakame ana mairange.

just-1S.Gen Dyn.Subj:bake in stones that sweet potato
'I have just baked that sweet potato.'

15.1.2 Morphosyntactic tests used to detect verbal serialization

The morphosyntactic tests which show that the two (or more) verbs constitute an SVC include the following ones.

1. The first verb usually occurs in its finite form (unless it follows a conjunction like **mani** 'then' or **omi** 'like that'). The verbs that follow all occur in their subjunctive form (see §6.1.2 for a discussion on verb alternations). Compare the grammaticality of (15.5a-b):

| (15.5) a. | ma-lrakase-lrao | kone | velevele. |
|-----------|---|--------------------------|-----------|
| | Stat.Fin-lazy/dislike-1S.Nom 'I dislike to eat banana.' | Dyn.Subj:eat | banana |
| b. | * ma-lrakase-lrao | o-kane/kane | velevele. |
| | Stat.Fin-lazy/dislike-1S.Nom | Dyn.Fin:eat/Dyn.NFin:eat | banana |

2. The first verb attracts the nominative pronoun. Compare (15.6a-b) and (15.7a-b):

(15.6) a. 'ako-sisa'i-*lrao* 'aovaovaha.

speak-a little-1S.Nom speak

'I speak in a low voice.'

b. *'ako-sisa'i 'aovaovaha-lrao. speak-a little speak-1S.Nom

(15.7) a. **pasopalr-***lra***-ine**` **'ilape apoto taotao.** help-1S.Nom-3S.Obl Dyn.Subj:look for stone Taotao

'I help(ed) Taotao to look for (the) stones.'

b. *pasopalr-ine 'ilape-lrao apoto taotao.
help-3S.Obl Dyn.Subj:look for-1S.Nom stone Taotao

An oblique pronoun, on the other hand, can occur on the first (15.8a) or the second verb (15.8b), but not on both simultaneously (15.8c):

(15.8) a. **om-oa-nga-lrao cengel-***ine* **iinae.**Dyn.Fin-go-already-1S.Nom Dyn.Subj:see-3S.Obl own mother

'I went to see my mother.'

b. **om-oa-nga-lra-ine cengele iinae.**Dyn.Fin-go-already-1S.Nom-3S.Obl Dyn.Subj:see own mother

'I went to see my mother.'

c. * om-oa-nga-lra-ine cengel-ine iinae.

Dyn.Fin-go-already-1S.Nom-3S.Obl Dyn.Subj:see-3S.Obl own mother

3. The first verb attracts also the aspectual suffixes **-na** 'still', **-nga** 'already' (15.9a); the second verb never does (15.9b).

(15.9) a. o-dholro-na-ka-li dhoadhaace.

Dyn.Fin-can-still-Neg-1S.Gen Dyn.Subj:walk

'I still cannot walk.'

b. *o-dholro-ka-li dhoadaace-na.

Dyn.Fin-can-Neg-1S.Gen Dyn.Subj:walk-still

There is no restriction, on the other hand, on the reduplication of the second verb to convey a habitual meaning. For instance:

(15.10) a. mani dhapele-nai to-ka'a-ka'ange

then Dyn.NFin:fish by poisoning-1PE.Nom produce-Red-fish

lroikiikisi...

Dyn.Subj:Red:fishhook

'Then we would go fishing...'

- b. ...m-oa dhakerale 'ena-'enao...
 ...Dyn.Fin-go river Dyn.Subj:Red-wash (clothes)
 '...(we) would go to the river to wash clothes...'
- 4. Only the first verb can be negated (15.11a). The second verb never is (15.11b), unless it belongs to a different clause. If that is so, then the meaning is slightly different (15.11c):
- (15.11) a. **om-iki-ka-i latadhe takanao kone velevele.**Dyn.Fin-be at-Neg-3S.Gen outside Takanao Dyn.Subj:eat banana 'Takanao is not eating a banana outside.'
 - b. *om-iki latadhe takanao kone-ka-i velevele.

 Dyn.Fin-be at outside Takanao Dyn.Subj:eat-Neg-3S.Gen banana
 - ≠ c. om-iki latadhe takanao, o-kane-ka-i ka velevele.

 Dyn.Fin-be at outside Takanao Dyn.Fin-eat-Neg-3S.Gen Neg banana
 'Takanao is outside. He is not eating a banana.'

The relations expressed by serial verbs include phase (e.g. inception, termination), purpose, manner, frequency (*cf.* §15.1.3) but exclude consecutive or simultaneous temporal relations. In that case, the conjunctions **mani** 'then' (consecutive actions) (15.12a) or **la** 'and' (simultaneous actions) (15.12b) must occur between the two (or more) verbs.

- (15.12) a. ma-celekere-lrao mani solate-lrao.
 Stat.Fin-ponder-1S.Nom then Dyn.NFin:write-1S.Nom
 Lit.: 'I think and then I write.'
 - b. ana takanao o-'ongo-'ongolo-ka-i ka vavaa that Takanao Top Dyn.Fin-Red-drink-Neg-3S.Gen Neg wine la ka o-tamako-mako-ka-i. and Neg Dyn.Fin-smoke-Red-Neg-3S.Gen 'As for Takanao, he does not drink and does not smoke.'
- 5. No temporal adjunct can intervene between the two verbs occurring in series as shown in (15.13a-b):
- (15.13) a. **makini-'ano-pa-palr-ae m-oa taipake 'idha.**Dyn.Fin:all-with-Red-spouse-all Dyn.Subj-go Taipei yesterday 'They all went to Taipei together yesterday.'
 - b. *makini-'ano-pa-palr-ae 'idha m-oa taipake.

 Dyn.Fin:all-with-Red-spouse-all yesterday Dyn.Subj-go Taipei

15.1.3 Types of verbs followed by another subjunctive verb in an SVC

This section proposes a classification of verbs followed by another verb marked as subjunctive and forming an SVC. They include: (i) phasal verbs (*cf.* §15.1.3.1), (ii) modal verbs (*cf.* §15.1.3.2), (iii) verbs expressing adverbial concepts (*cf.* §15.1.3.3), (iv) locational and directional verbs (*cf.* §15.1.3.4), and purposive verbs (*cf.* §15.1.3.5).

15.1.3.1 Phasal verbs

Noonan (1985:129) defines phasal verbs as predicates that "refer to the phase of an act or state: its inception, continuation, or termination." In Mantauran, phasal verbs include: **topatilai** 'start' (15.14) and **o-lropenge** 'finish' (15.15). Both verbs are followed by another verb marked as subjunctive and form an SVC.

- (15.14) a. **toparadhaolae-Irao mo-dha'ane, topatilai dho'olo.** at once-1S.Nom Dyn.Subj:to-house Dyn.Fin:start Dyn.Subj:rain 'As soon as I entered the house, it start(ed) to rain.'
 - b. *topatilai*-lrao solate.

 Dyn.Fin:start-1S.Nom Dyn.Subj:write 'I have started to write.'
 - c. a-topatilai-li sivarange,
 ClsNmz-Dyn.NFin:start-1S.Gen Dyn.Subj:pregnant
 ma'ati-kane-kane-lrao 'api-'oo'adh-iae.
 Dyn.Subj:a little-Red-eat-1S.Nom like-Dyn.NFin:vomit-1S.Obl
 'When I started to be pregnant, I would eat very little, I (often) wanted to vomit.'
- (15.15) a. *o-lropenge*-nga-lrao kone velevele-li.

 Dyn.Fin-finish-already-1S.Nom Dyn.Subj:eat banana-1S.Gen
 'I have finished eating my banana.'
 - b. a-'ano-lropeng-ae-nga-dha
 ClsNmz-entirely-Dyn.NFin:finish-entirely-already-3S.Gen
 mani cengele-nai dhona'i dha'ane
 then Dyn.NFin:see-1PE.Nom that house
 velrete...
 ActNmz:Dyn.NFin:pile up

'When (the wasteground) had completely finished burning [...] we saw the ruins of (earlier) houses...'

The verbs **ta'asa**, **ta'okamai** and **arongo**, which all translate as 'just', can also be included in this category (15.16). Note that **arongo** is the nominalized form of **orongo**

'just' and is always followed by a genitive pronoun, *cf.* (§12.3). While the two forms are used (15.17), the first seems to be more frequent than the second.

| (15.16) | a. | ta'okamai-lrao | longai | solate. |
|---------|----|-------------------|--------------|---------|
| | | just-1S.Nom | Dyn.Subj:buy | book |
| | | 'I have just boug | ht a book.' | |

- b. *ta'asa-Irao* **longai** solate. just-1S.Nom Dyn.Subj:buy book 'I have just bought a book.'
- c. *arongo-li* **longai** solate. just-1S.Gen Dyn.Subj:buy book 'I have just bought a book.'
- (15.17) a. *arongo-li* **maava'i 'oponoho.** just-1S.Gen Dyn.Subj:come Wanshan 'I have just come to Wanshan'
 - b. *orongo-lrao* maava'i 'oponoho.
 just-1S.Nom Dyn.Subj:come Wanshan
 'I have just come to Wanshan'

15.1.3.2 Modal verbs

Two verbs, **o-dholro** 'can' (15.18), **o-lriho'o** 'know how to' (15.19) convey deontic meanings. They take an embedded verb marked as subjunctive and display a co-referent subject that is overtly expressed on the first verb.

| (15.18) | a. | o-dholro-ka-dha | kone | to'onai. |
|---------|----|----------------------------|--------------|----------|
| | | Dyn.Fin-can-Neg-3S.Gen | Dyn.Subj:eat | anything |
| | | 'She cannot eat anything.' | | |

b. ma-'amadh-iae iinae [...]
Stat.Fin-dislike-1S.Obl own mother

amo-ka-dholro-nga-ka-li m-o-valrio,

Irr-Neg-Dyn.NFin:can-already-Neg-1S.Gen Dyn.Subj-to-village

amo-'aa-lrikolao-nga-lrao.

Irr-become-leopard-already-1S.Nom

'Mother does not like me [...] I cannot come back home. I will become a leopard.'

| c. | dhona | ta-ki-kane | | va'oro, | <i>o-dholro</i> -ka-i |
|----|---|---------------------|---------------|-------------|------------------------|
| | that | SubjNmz-Neg-Dy | yn:NFin:eat | rice | Dyn.Fin-can-Neg-3S.Gen |
| | ka | m-o-latadhe | 'olilio. | | |
| | Neg | Dyn.Subj-to-outside | Dyn.Subj:play | //amuse one | eself |
| | 'Those who have not eaten cannot go outside to play.' | | | | |

(15.19) a. *o-lriho'o-*lrao *polripalrici* sangepare.

Dyn.Fin-know-1S.Nom Dyn.Subj:turn car

Dyn.Fin-know-1S.Nom I 'I know how to drive a car.'

b. *o-lriho'o-*lrao *longolangoi*.

Dyn.Fin-know-1S.Nom Dyn.Subj:swim

'I know how to swim.'

c. o-lriho'o-ka-li dho'oko dhona

Dyn.Fin-know-Neg-1S.Gen Dyn.Subj:press that
ta-papipi-e paiso, o-avase!

LocNmz-Dyn.NFin:drop-LocNmz money, Dyn.Fin-pity
'I do not know where to press to let the money drop down. What a pity.'

Note that if the two actors are different, a verb like **o-lriho'o** 'know' takes a full clause as complement (*cf.* §15.2.2.2).

15.1.3.3 Verbs expressing adverbial concepts

Verbs expressing adverbial concepts (adverbial verbs for short) include manner expressions such as 'iniaveelai 'slowly' (15.20a), poveelai 'lightly' (15.20b), maridhare 'fast' (15.20c), pakono ~ 'inikookono 'quickly' (15.20d-e), ohangate 'in advance' (15.20f), padholro'o 'straight away' (15.20g), i'amadhalae ~ pi'amadhalae 'first' (15.20h), ohanae 'intentionally' (15.20i), poke'ecengae 'violently' (15.20j), paoli 'wrongly' (15.20k), tolromao 'suddenly' (15.20l) as well as temporal and numeral expressions referring to frequency such as tokalianae 'often' (15.21a), pamenanae 'every day' (15.21b), padhamare 'every month' (15.21c), pacaili 'every year' (15.21d), 'oale 'once' (15.21e) etc. These verbs are usually followed by another verb which is marked as subjunctive:

(15.20) a. 'iniaveelai-Irao kone.

slowly-1S.Nom Dyn.Subj:eat

'I eat slowly.'

b. *poveelai*-lra-ine kelrakelrange.
CauMvt:lightly-1S.Nom-3S.Obl Dyn.Subj:beat
'I beat him lightly.'

c. *ma-ridhare* Irolrame.
Stat.Fin-fast/quickly Dyn.Subj:run
'S/he runs fast/quickly.'

d. *pakono-*lrao 'ongolo. fast/quickly-1S.Nom Dyn.Subj:drink

'I drink quickly.'

e. (amo-)'inikookono-lrao m-o-valrio.

(Irr-)fast/quickly-1S.Nom Dyn.Subj-to-village

'I (will) come back/go back home quickly.'

f. o-hangate-lrao kone savo'oe.

Dyn.Fin-early-1S.Nom Dyn.Subj:eat medicine

'I took the medicine earlier than due/in advance.'

g. padhalro'o-nga-lrao maava'i.

Dyn.Fin:at once-already-1S.Nom Dyn.Subi:come.

'I came at once.'

h. i'amadhalae-Irao m-o-kavole.

first-1S.Nom Dyn.Subj-to-out

'I came out first.'

i. ohanae-ka-li paoli.

intentionally-Neg-1S.Gen wrong

'I did not do it wrong intentionally.'

j. po-ke'eceng-ae kelrakelrange.

CausMvt-strong-StatNmz Dyn.Subj:beat

'S/he beat (him/her) violently.'

k. paoli-lrao kone ana taotao velevele-ni.

wrongly-1S.Nom Dyn.Subj:eat that Taotao banana-3S.Gen

'I wrongly eat Taotao's banana.'

1. tolromao ma-valrovalro dhona lroolai.

suddenly Stat.Subj-young woman that child

'The child became suddenly a young woman.'

(15.21) a. tokalianae-Irao maava'i 'oponoho.

often-1S.Nom Dyn.Subj:come Wanshan

'I often go to Wanshan.'

b. pa-men-a-nae-lrao dhoadhaace.

every-(to)day-beyond-TempNmz-1S.Nom Dyn.Subj:walk

'I walk every day.'

c. pa-dhamare-lrao cengele ta-ka-eaea solate. book

SubjNmz-Stat.NFin-one:Red every-month-1S.Nom Dyn.Subj:see

'I read a book every month.'

d. *pa-caili-*lrao m-o-valrio.

every-year-1S.Nom Dyn.Subj-to-village

'I come back home (once) a year.'

e. 'o-a-le-lrao kone.

times-one-times-1S.Nom Dyn.Subj:eat

'I have eaten once.'

Note in passing that:

1) verbs conveying manner expressions can also be followed by a nominalized clause, though this type of construction does not seem as productive as the SVC strategy. Compare (15.20a)-(15.22a-a'), (15.20b)-(15.22b') and (15.20c)-(15.22c'):

(15.22) a. 'iniaveelai-Irao lo kone-li.

slowly-1S.Nom if Dyn.Subj:eat-1S.Gen

'I eat slowly.'

a'. 'iniaveelai-lrao a-kane-li.

slowly-1S.Nom ClsNmz-Dyn.NFin:eat-1S.Gen

'I ate slowly.'

b. poveelai-lra-ine lo kelrakelrange-li.

CauMvt:lightly-1S.Nom-3S.Obl if Dyn.Subj:beat-1S.Gen

'I beat him lightly.'

b'. poveelai-lra-ine a-kelrakelrange-li.

CauMvt:lightly-1S.Nom-3S.Obl ClsNmz-Dyn.NFin:beat-1S.Gen

'I beat him lightly.'

c. ma-ridhare lo lrolrame-ni.

Stat.Fin-fast/quickly if Dyn.Subj:run-3S.Gen

'S/he runs fast/quickly.'

c'. ma-ridhare a-lralrame-ni.

Stat.Fin-fast/quickly ClsNmz-Dyn.NFin:run-3S.Gen

'S/he ran fast/quickly.'

2) Verbs referring to frequency usually do not take a nominalized clause as their complements—compare the grammaticality of (15.21a) and (15.23a-a')—or if they do, the meaning of the utterance is different. Compare (15.21b) and (15.23b).

(15.23) a. *tokalianae-lrao lo maava'i-li 'oponoho.
often-1S.Nom if Dyn.Subj;come-1S.Gen Wanshan

a'. *tokalianae-lrao a-kaava'i-li 'oponoho.

often-1S.Nom ClsNmz-Dyn.Subj:come-1S.Gen Wanshan

b. **pa-men-a-nae-Irao** *lo dhoadhaace-li.*every-day-beyond-TempNmz-1S.Nom if Dyn.Subj:walk-1S.Gen
'It takes a day of walking.'

3) A few verbs, *cf.* **ta'asoki** 'attentively/diligently', **o-ahamaca** 'carefully', **'anomaelae** 'especially' are followed by a noun (15.24a), a derived nominal (15.24b) or a derived nominal clause (15.24c).

- (15.24) a. *ta'asoki-*a dhidhape-'o! diligently-Imp work-2S.Gen 'Work diligently!'
 - b. **taotao 'a 'anomaela-idhe 'a-ka-'amadhe dhona valrovalro.**Taotao Top especially-3S.Obl MnNmz-Stat.NFin-dislike that young woman 'As for Taotao, he dislikes especially this young woman.'
 - c. *o-ahamaca* **lo dhoadhaace-ni.**Dyn.Fin-careful if Dyn.Subj:walk-3S.Gen
 'He walks carefully.'

15.1.3.4 Directional verbs

Directional verbs include: **om-iki** 'exist, be at' (15.27a), **'aliki** 'from'—in space (15.25b) and time (15.25c), **m-okela** 'up to, reach'—as well as all the denominal verbs derived through the prefixation of **m-o-** 'to, go' to the root, e.g. **m-o-latadhe** 'go outside', **o-valrio** 'go back, return' etc. (15.26). These verbs are usually followed by another verb marked as subjunctive.

- (15.25) a. *om-iki* **latadhe 'olilio ana a-olrolai.**Dyn.Fin-be at outside Dyn.Subj:play that plur-child 'The children are playing outside.'
 - b. 'aliki-mita ka-'oponoh-ae maava'i.
 from-1PI.Nom genuine-Wanshan-genuine Dyn.Subj:come
 'We come from the old Wanshan village.'
 - c. 'aliki-nai maelre m-okela moongo omale.

 from-1PE.Nom morning Dyn.Subj-reach evening Dyn.Subj:sing
 'We sing from morning to evening.'
- (15.26) a. **dhona aidhi 'a tako-tovi-tovi**that youngest sibling Top while-Red-Dyn.NFin:cry **dhoace** *m-o-valrio*.

 Dyn.Subj:leave Dyn.Subj-to-village
 'As for the youngest brother, he left and went back to the village crying.'
 - b. ma-'ino toparadhaolae m-o-dha'ane...

 Stat.Fin-embarrassed at once Dyn.Subj-to-house

 '(They would feel too) embarrassed to go into the house at once...'

I have shown in 4.3.2.2 that the verbs conveying prepositional concepts such as **om-iki** and **'aliki** can appear in sentence-initial or sentence-medial position with no further semantic modification. Denominal verbs such as **m-o-valrio** appear as embedded

verbs in SVCs. If they appear in sentence-initial position, the meaning of the sentence is slightly altered and conveys a purposive meaning.⁸¹ Compare (15.27a-b) and (15.28a-b):

- (15.27) a. *om-iki* latadhe kone velevele ana Iroolai.

 Dyn.Fin-be at outside Dyn.Subj:eat banana that child 'That child is eating a banana outside.'
 - = b. o-kane velevele *m-iki* latadhe ana lroolai.

 Dyn.Fin-eat banana Dyn.Subj:be at outside that child 'That child is eating a banana outside.'
- (15.28) a. mani dhaace m-o-valrio. then Dyn.NFin:leave Dyn.Subj-to-village 'Then s/he/they left and went back home.'
 - ≠ b. mani o-valrio pato'o dhona titina... then Dyn.NFin:to-village Dyn.Subj:tell that middle-aged woman 'Then s/he/they went home to tell that middle-aged woman....'

15.1.3.5 Purposive verbs

There are two types of purposive verbs: (i) motion verbs, e.g. **om-oa** 'go' (15.29a-b) as well as all the denominal verbs derived through the prefixation of **m-o-** 'to, go' to the root, e.g. **m-o-latadhe** 'go outside', **m-o-valrio** 'go back, return' etc. (15.29c); (ii) the verb **om-alra** 'take' (15.30a-b) as well as purpose and instrumental verbs such as **'iraki** 'do for' (15.31a-b), **to'araki** 'use for' (15.32a-b). All these verbs are followed by another verb marked as subjunctive:

(15.29) a. *om-oa*-mao *ma-'ano-ngea-ngea* dha'an-a-nae Dyn.Fin-go-Impers.Nom Rec:Dyn.Subj-with-Red-one house-beyond-LocNmz mo-lavinahae.

Dyn.Subj:celebrate a ritual-Lavinahae

'One from each family would go to perform the rituals of the Lavinahae household.'

b. tila, (o)m-oa-mita ooma m-alra mairange leave:Imp Dyn.Fin-go-1PI.Nom field Dvn.Subj-take sweet potato mani la-a-lake-dha. ia then Dvn.NFin:so child-plur-child-3S.Gen "Come on, we are going to the field to gather sweet potatoes" she said to her children.'

_

⁸¹ This was first noticed by Teng for Puyuma (see Teng 2007).

- c. *m-o-latadh-a kone* ana kamosia!

 Dyn.Subj-to-outside-Imp Dyn.Subj:eat that sweet

 'Go out to eat that candy!'
- (15.30) a. mani *alr*-iname pato'o dhona lamolai. then Dyn.Fin:take-1PE.Obl Dyn.Subj:tell that story.
 - b olo 'olrovo'o-mao dhona'i vecenge la pahai Dyn.Subj:pound-Impers.Gen that millet and rice om-alra-mao topo'o. Dyn.Subj:winnow big rounded bamboo dish Dyn.Fin-take-Impers.Nom 'When we pounded millet and rice, we (would) take a big rounded bamboo dish to winnow (the grains).'
- (15.31) a. 'iraki-nai mene-nga longai sangepare...
 do for-1PE.Nom now-Sup Dyn.Subj:buy car
 'Today, we do (that) to buy cars...'
 - b. 'iraki-Ira-ine ina-li oakame votolo.
 do for-1S.Nom-3S.Obl mother-1S.Gen Dyn.Subj:roast pork
 'I roasted pork for my mother.'
- (15.32) a. mani to'araki-nai kaolo korokoro to-aeaea dha'ane. then use-1PE.Nom hoe Dyn.Subj:dig do-Red:one house 'We used hoes to dig (the foundations) of each house.'
 - b. lo m-alra-nai dhona'i 'angato, to'araki-nai lridhoko
 If Dyn.Subj-take-1PE.Gen that wood use-1PE.Nom ax copi.
 Dyn.Subj:chop

'When we (had) gathered wood, we (would) use an ax to chop.'

15.2 Complementation

Complementation is defined as "the syntactic situation that arises when a notional sentence or predication is an argument of a predicate." (Noonan 1985:42).

Mantauran exhibits four types of complement strategies: (i) zero strategy (i.e. paratactic complements) as in (15.33); (ii) serial verb constructions, as in (15.34); (iii) nominalization as in (15.35); and (iv) causativization as in (15.36). The form of the verb that occurs in the complement clause differs depending on the strategy that is used: it is marked as finite in paratactic complements but as subjunctive in a serial verb construction; it undergoes nominalization in the third type of complements, and causativization in the fourth.

(15.33) **o-lriho'o-lrao** [o-kelrakelrange-mi'-ine takanao 'idha].

Dyn.Fin-know-1S.Nom Dyn.Fin-beat-2S.Nom-3S.Obl Takanao yesterday
'I know that you beat Takanao yesterday.'

(15.34)dhona'i aidhi [o-dholro-na-ka-dha ka that youngest sibling Dyn.Fin-can-still-Neg-3S.Gen Neg dhoadhaace]. [ta'okamai holrolaholai]. Dyn.Subj:walk Dyn.Subj:crawl just 'Her youngest sister could not walk yet; she was just starting to crawl.'

(15.35) a. **o-cengele-Ira-ine** [a-kane-ni va'oro].

Dyn.Fin-see-1S.Nom-3S.Obl ClsNmz-Dyn.NFin:eat-3S.Gen rice

'I saw him/her when s/he ate rice.'

b. **o-cengele-Ira-ine** [*lo kone-ni* va'oro].

Dyn.Fin-see-1S.Nom-3S.Obl if Dyn.Subj:eat-3S.Gen rice

'I see him/her when s/he eats rice.'

(15.36) **'ooho-Ira-ine [pa-oa] taipake].**Dyn.Fin:order-1S.Nom-3S.Obl Caus-Dyn.NFin:go Taipei

'I ordered him to go to Taipei.'

These different complementation strategies are examined in §15.2.1, in terms of the morphosyntactic and semantic characteristics they exhibit. Section 15.2.2 provides a discussion of different complement-taking verbs.

An example of an utterance clause is given in (15.37). Utterance clauses share the same structure as paratactic complements, i.e. there is no overt marker between the first verb and the quote but differ in that they are usually followed by **mani ia** 'then so', **m-ia** 'so' or **omi** 'like that'. They are discussed in §15.2.3.

(15.37) lo 'a-lrihoa'-e-nga-dha [o-sivarange]
if a lot-Dyn.NFin:know-a lot-already-3S.Gen Dyn.Fin-pregnant
m-ia] to'onai pelehe'e.

Dyn.Subj-so everything taboo
'If someone knew she was pregnant, everything was taboo.'
(Lit.: 'If it was already obvious 'pregnant' (he/she) said, everything was taboo.')

15.2.1 Complementation strategies

Noonan (1985:44) argues that "a complement type is identified basically by (1) the morphology of the predicate; (2) the sorts of syntactic relations it has with its arguments; and (3) the external syntactic relations of the complement construction as a whole." In

this section, four types of complementation strategies are examined in Mantauran along these lines.

15.2.1.1 Zero strategy or paratactic complements

The zero strategy refers to a complement clause (referred to as a 'paratactic' complement) which is not introduced by any complementizer. The two clauses (i.e. the main clause and the complement clause) consist of at least a subject NP (and an object, if any) and a verb that is marked as finite, as in (15.38).

(15.38) **o-Iriho'o-Irao o-'ongolo-nga-nomi vavaa.**Dyn.Fin-know-1S.Nom Dyn.Fin-drink-2P.Nom wine
'I know that you drank wine.'

There is no restriction regarding the voice of the verb in the complement clause. It can be marked as active, as in (15.39a), or passive, as in (15.39b).

(15.39) a. o-lriho'o-lrao o-avil-ine lalake-ni dhona
Dyn.Fin-know-1S.Nom Dyn.Fin-carry-3S.Obl child-3S.Gen that
titina.
middle-aged woman

'I know that the middle-aged woman carries/carried her child.'

b. o-lriho'o-lrao 'i-avil-ine lalake-ni
Dyn.Fin-see-1S.Nom Pass-Dyn.NFin:carry-3S.Obl child-3S.Gen
dhona titina.
that middle-aged woman
'I know the child is/was carried by the middle-aged woman.'

There is no restriction regarding either mood or aspect. The verb can refer to a past (realis) (15.40a) or future (irrealis) (15.40b) event. It can also refer to a perfective/completed (15.41a) or an on-going action (15.41b).

(15.40) a. o-lriho'o-lrao o-dha'olo 'idha.

Dyn.Fin-know-1S.Nom Dyn.NFin:rain yesterday
'I know it rained yesterday.'

b. o-lriho'o-lrao amo-dha'olo lo 'idha.

Dyn.Fin-know-1S.Nom Irr-Dyn.NFin:rain-already
'I know it is going to rain tomorrow.'

- (15.41) a. **o-lriho'o-lrao o-kane-**nga-mo'o **velevele-ni taotao.**Dyn.Fin-know-1S.Nom Dyn.Fin-eat-already-2P.Nom banana-3S.Gen Taotao 'I know that you ate Taotao's banana.'
 - b. o-lriho'o-lrao o-kane-na-mo'o velevele-ni taotao.

 Dyn.Fin-know-1S.Nom Dyn.Fin-eat-still-2P.Nom banana-3S.Gen Taotao 'I know that you are still eating Taotao's banana.'

If the nominal argument of the second verbal clause is a full lexical noun, it can be raised before the verb contained in the complement clause if it represents the subject of the (second) clause. The verb can be in the active voice as in (15.42a-b) or in the passive voice as in (15.42c-d).

- (15.42) a. **o-lriho'-ine maava'i-nga dhona 'avai.**Dyn.Fin-know-3S.Obl Dyn.Fin:come-already that woman 'S/he knew that woman had arrived.'
 - a'. **o-lriho'-ine dhona 'avai maava'i-nga.**Dyn.Fin-know-3S.Obl that woman Dyn.Fin:come-already 'S/he knew that woman had arrived.'
 - b. **o-lriho'-ine 'i-tipitipi-nga dhona 'avai.**Dyn.Fin-know-3S.Obl Pass-Dyn.NFin:beat-already that woman 'S/he knew that woman had been beaten.'
 - b'. **o-Iriho'-ine dhona 'avai 'i-tipitipi-nga.**Dyn.Fin-know-3S.Obl that woman Pass-Dyn.NFin:beat-already 'S/he knew that woman had been beaten.'

If the subject of the verb in the complement clause is a pronoun, it can also be raised in the first clause (15.43), although a co-referent pronoun—there is none for third person participants, *cf.* (15.42)—must occur in the second clause:

| (15.43) | a. | o-lriho'o-lrao | o-'ongolo-nga- <i>nomi</i> | vavaa. |
|---------|----|-------------------------------|------------------------------|--------|
| | | Dyn.Fin-know-1S.Nom | Dyn.Fin-drink-already-2P.Nom | wine |
| | | 'I know that you drank wine.' | | |
| | b. | o-lriho'o-lra <i>-inome</i> | o-'ongolo-nga- <i>nomi</i> | vavaa. |
| | | Dyn.Fin-know-1S.Nom-2P.Obl | Dyn.Fin-drink-already-2P.Nom | wine |
| | | 'I know that you drank wine.' | | |
| | c. | * o-lriho'o-lra <i>-inome</i> | o-'ongolo-nga- ${\cal O}$ | vavaa. |
| | | Dyn.Fin-know-1S.Nom-2P.Obl | Dyn.Fin-drink-already-Ø | wine |

The object of the complement clause such as (15.44a) cannot be raised in the first

clause (15.44b), even if it is definite as in (15.44c), as in other independent clauses:

| (15.44) | a. | o-lriho'o | o-kane-nga | mairange | dhona | 'avai. |
|---------|----|--|----------------------|--------------|-------|--------|
| | | Dyn.Fin-know | Dyn.NFin:eat-already | sweet potato | that | woman |
| | | 'S/he knew that woman ate sweet potatoes.' | | | | |

- b. *o-lriho'o *mairange* o-kane-nga dhona 'avai.

 Dyn.Fin-know sweet potato Dyn.Fin-eat-already that woman
- c. *o-Iriho'o dhona mairange o-kane-nga dhona 'avai.

 Dyn.Fin-know that sweet potato Dyn.NFin-eat-already that woman 'S/he knew that as for that sweet potato, that woman ate it.'

Temporal adjuncts can occur at the end of the first clause as in (15.45a) or the second clause (15.45b).

- (15.45) a. [o-lriho'o-lrao] ['idha o-kelrakelrange-mi'-ine takanao].

 Dyn.Fin-know-1S.Nom yesterday Dyn.Fin-beat-2S.Nom-3S.Obl Takanao

 'I know that yesterday you beat Takanao.'
 - b. [o-lriho'o-lrao] [o-kelrakelrange-mi'-ine takanao 'idha].

 Dyn.Fin-know-1S.Nom Dyn.Fin-beat-2S.Nom-3S.Obl Takanao yesterday 'I know that you beat Takanao yesterday.'

15.2.1.2 Serial verb constructions as a complementation strategy

Serial verb constructions (discussed in §15.1) as a complementation strategy is very productive in Mantauran.

What is important to note is that serial verb constructions are used as a complementation strategy whenever the predicates occurring in the main clause and in the independent clause share the same subject.⁸² Thus, the same verb, e.g. **marimoro** 'forget' can occur as part of a paratactic complement (15.46a) and an SVC (15.46b). In (15.46a), the subject of the main clause is different from the complement clause; in (15.46b), the subject in the main clause and in the complement clause is the same.

| (15.46) | a. r | na-rimoro <i>-lrao</i> | [<i>o-</i> langai- <i>mo'o</i> | dhona | solate]. |
|---------|------|----------------------------------|---------------------------------|-------|----------|
| | S | Stat.Fin-forget-1S.Nom | Dyn.Fin-buy-2S.Nom | that | book |
| | 6 | 'I forgot you bought that book.' | | | |
| | b. r | na-rimoro-lrao _i | [longai-Ø _i | dhona | solate]. |
| | S | Stat.Fin-forget-1S.Nom | Dyn.Subj:buy | that | book |
| | 6 | I forgot to buy that book.' | | | |

⁸² The same restriction has been reported before in Puyuma (Teng 2007).

٠

The meanings of some verbs might be slightly different depending on the kind of complement they take: **(o-)lriho'o** means 'know (something)' when it takes a paratactic complement (15.47a). It conveys the meaning 'know how to, be able to, can' when it is followed by another verb marked as subjunctive to form an SVC (15.47b), (cf. §15.1.3.2). In that latter case, the verb **(o-)lriho'o** and the verb that follows share the same subject. 'ivaha-ka-Pro_{Gen} 'accept, give (one's) word' means 'promise' (15.48a) if it is followed by another embedded verb (the subject is the same in the main clause and in the complement clause), but it serves as a manipulative verb and translates as 'allow' if it is followed by a causative verb (15.48b). In that latter case, the two subjects are different.

- (15.47) a. *o-lriho'o* mati-'aovaovaha 'ako-'oponoh-ae dhipolo.

 Dyn.Fin-know Dyn.Fin:well-speak speak-Mantauran-speak Dhipolo 'I know that Dhipolo speaks Mantauran well.'
 - b. *mati-lriho'o-lrao* 'aovaovaha 'ako-'oponoh-ae.

 Dyn.Fin:well-know-1S.Nom speak speak-Mantauran-speak
 'I can speak Mantauran well.'
- (15.48) a. 'ivaha-ka-l-ine m-oa 'oponoho.

 accept-Neg-1S.Gen-3S.Obl Dyn.Subj-go Wanshan
 'I did not promise him I (would) go to Wanshan.'
 - b. 'ivaha-ka-l-ine pa-oa 'oponoho.

 accept-Neg-1S.Gen-3S.Obl Caus-Dyn.NFin:go Wanshan
 'I did not allow him to go to Wanshan.'

15.2.1.3 Nominalization as a complementation strategy

As a complementation strategy, nominalization is not as much productive as SVCs. It is found with many verbs that also take SVCs such as perception and knowledge verbs, *cf.* **o-lriho'o** 'know' (15.49a), **o-cengele** 'see' (15.49b) as well as verbs conveying (manner and time) adverbial notions such as **ma-ridhare** 'fast' (1549c) and **pa-dhamare** 'each month' (15.49d).

- (15.49) a. *o-lriho'o-*lra-imia'e *lo kone-'o.*
 - Dyn.Fin-see-1S.Nom-2S.Obl if Dyn.Subj:eat-2S.Gen
 - 'I know when you were eating.'
 - b. o-cengele-lra-ine lo mali-molramolrae-ni.
 - Dyn.Fin-see-1S.Nom-3S.Obl if Dyn.Subj:along-traditional clothes-3S.Gen
 - 'I saw him wear traditional clothes.'

c. ma-ridhare lo lrolrame-ni.

fast if Dyn.Subj:run-3S.Gen

'He runs fast.'

d. poveelai-lra-ine lo kelrakelrange-li.

lightly-1S.Nom-3S.Obl if Dyn.Subj:beat-1S.Gen

'I beat him lightly.'

There are three points to note. First, two clausal nominalization processes are found: the first refers to a past (realis) event (15.50a), and the second to a habitual (irrealis) event (15.50b).

(15.50) a. pakono-lrao a-'ongolo-li.

> fast/quickly-1S.Nom ClsNmz-Dyn.NFin:drink-1S.Gen

'I drank quickly.'

b. pakono-lrao 'ongolo-li. lo

Dyn.Subj:drink-1S.Gen fast/quickly-1S.Nom if

'I drink quickly.'

Second, not all types of verbs allow these two nominalization processes. pa-dhamare 'each month' can take a nominalized clause introduced by lo as its complement (15.51a). It cannot take a clause where the verb is nominalized by a-'when' (15.51b).

(15.51) a. pa-dhamare-lrao lo cengele-li ta-ka-eaea

> every-month-1S.Nom if Dyn.Subj:see-1S.Gen SubjNmz-Stat.NFin-one:Red solate.

book

'I spent a month reading a book.'

b. *pa-dhamare-lrao a-cengele-li ta-ka-eaea

every-month-1S.Nom ClsNmz-Dyn.NFin:see-1S.Gen SubjNmz-Stat.NFin-one:Red solate.

book

Third, the type of complement strategy used (i.e. SVCs as opposed to nominalization) yields a different interpretation. Thus, pamenanae can either be translated as 'every day' or 'in one day' depending on whether it is followed by an SVC (15.52a) or a nominalized clause (15.52b).

(15.52) a. **pa-men-a-nae-lrao dhoadhaace.** every-day-beyond-TempNmz-1S.Nom Dyn.Subj:walk

'I walk every day.'

b. **pa-men-a-nae-lrao** *lo dhoadhaace-li.*every-day-beyond-TempNmz-1S.Nom if Dyn.Subj:walk-1S.Gen
'It takes me a day of walking.'

The major distinction between nominalized adverbial clauses (§16.1.1) and nominalized complement clauses is that the former occur most frequently in initial position (15.53a-a') while nominalized complement clauses occur after the verb (15.53b-b').

- (15.53) a. *ona'i a-paavanao-li*, **maava'i-nga 'i taotao.** that ClsNmz-Dyn.NFin:bathe-1S.Gen Dyn.Fin:come-already Taotao 'Taotao came when I was taking a bath.'
 - a'. *maava'i-nga 'i taotao, ona'i a-paavanao-li.

 Dyn.Fin:come-already Taotao that ClsNmz-Dyn.NFin:bathe-1S.Gen
 - b. *lo ma-taadhi'i-ni*, amo-'acakelae-lra-ine. if Stat.Subj-good-3S.Gen Irr-marry-1S.Nom-3S.Obl 'If he is good, I will marry him.'
 - b'. amo-'acakelae-lra-ine, lo ma-taadhi'i-ni.
 Irr-marry-1S.Nom-3S.Obl if Stat.Subj-good-3S.Gen
 'I will marry him if he is good.'
- (15.54) a. **o-cengele-Ira-ine a-kane-ni va'oro.**Dyn.Fin-see-1S.Nom-3S.Obl ClsNmz-Dyn.NFin:eat-3S.Gen rice

 'I saw him eating rice.'
 - ≠ a'. a-kane-ni va'oro, o-cengele-lra-ine.

 ClsNmz-Dyn.NFin:eat-3S.Gen rice Dyn.Fin-see-1S.Nom-3S.Obl

 'When he was eating rice, I saw him.'
 - b. **amokoa-ni 'a-ka-ridhare-ni lo dhoadhaace-ni.**how much-3S.Gen MnNmz-Stat.NFin-fast-3S.Gen if Dyn.Subj:walk-3S.Gen
 'How fast does he walk?'
 - b'. *?lo dhoadhaace-ni, amokoa-ni 'a-ka-ridhare-ni.
 if Dyn.Subj:walk-3S.Gen how much-3S.Gen MnNmz-Stat.NFin-fast-3S.Gen

15.2.1.4 Causativization as a complementation strategy

Verbs following manipulative verbs such as 'ia'ohodho 'promise', 'ooho 'order',

pa'adhi'adhili 'force' must occur in their causative form, i.e. prefixed by **pa-** 'causative', if the subject of the main clause is different from the subject of the complement clause. Consider for instance:

- (15.55) a. 'ooho-lra-ine pa-oa taipake.

 Dyn.Fin:order-1S.Nom-3S.Obl Caus-Dyn.NFin:go Taipei

 'I ordered him to go to Taipei.'
 - b. *pa-'adhi'adhili*-Ira-ine *pa-tipitip*-ine dhipolo.

 Caus-Dyn.NFin:force-1S.Nom-3S.Obl Caus-Dyn.NFin:beat-3S.Obl Dhipolo

 'I forced him/her to beat Dhipolo.'

15.2.1.5 **Summary**

Table 15.1 provides a summary of these different complement strategies with respect to the occurrence of the agent/actor of the sentence (same or different) in a tabular form.

| Strategies | Zero | SVC | Nominalization | Causativization |
|-----------------|----------|----------|----------------|-----------------|
| Actor | strategy | strategy | strategy | strategy |
| different actor | + | _ | + | + |
| same actor | + | + | + | _ |

Table 15.1: Types of complement strategies

15.2.2 Types of complement-taking verbs

This section proposes a classification of complement-taking predicates based on Noonan (1985) and Teng (2007). It includes: (i) perception verbs such as 'see' and 'hear' (cf. §15.2.2.1), (ii) knowledge verbs such as 'know', 'remember', forget' (cf. §15.2.2.2), (iii) commentative verbs such as 'like', 'hate', 'dislike' (cf. §15.2.2.3), (iv) manipulative verbs such as 'force', 'persuade' (cf. §15.2.2.4) and one modal verb, cf. kai (cf. §15.2.2.5). A short summary is given in section 15.2.2.6.

Other types of verbs such as propositional attitude verbs such as 'believe', 'think', 'suppose' etc. or desiderative verbs such as 'hope', 'wish', 'want' etc. described in Noonan (1985) as taking clausal complements are either found in other constructions—that's the case for propositional attitude verbs in Mantauran—or are rendered through morphological affixation on the verb, cf. 'api- 'like V-ing', as in: 'api-kane 'like eating'.

15.2.2.1 Perception verbs

Verbs of perception include o-cengele 'see' and o-sialalra 'hear' followed by

another clause. Verbs of perception allow three types of complements: (i) a full clause (zero-strategy) (15.56a)-(15.57a); (ii) a nominalized verb (15.56b-c)-(15.57b-c); (iii) a verb marked as subjunctive (15.56d)-(15.57d). These three constructions have been described in sections 15.2.1.1-15.2.1.3.

- - b. *o-cengele-*Ira-ine *a-kane-ni* va'oro.

 Dyn.Fin-see-1S.Nom-3S.Obl ClsNmz-Dyn.NFin:eat-3S.Gen rice

 'I saw him/her when s/he ate rice.'
 - c. *o-cengele-*lra-ine *lo kone-ni* va'oro.

 Dyn.Fin-see-1S.Nom-3S.Obl if Dyn.Subj:eat-3S.Gen rice

 'I see him/her when s/he eats rice.'
 - d. *o-cengele*-lra-ine *kone* va'oro.

 Dyn.Fin-see-1S.Nom-3S.Obl Dyn.Subj:eat rice
 'I saw him/her eating rice.'
- (15.57) a. *o-sialalra*-lrao *o-tovi* ana lroolai.

 Dyn.Fin-hear-1S.Nom Dyn.Fin-cry that child 'I heard the child cry.'
 - b. *o-sialalra*-lrao *a-tovi-ni* ana lroolai.

 Dyn.Fin-hear-1S.Nom ClsNmz-Dyn.NFin:cry-3S.Gen that child 'I heard the child cry.'
 - c. *o-sialalra-*lrao *lo tovi-ni* ana lroolai.

 Dyn.Fin-hear-1S.Nom if Dyn.Subj:cry-3S.Gen that child 'I hear the child cry.'
 - d. o-poa koange pa-sialalra dhona'i
 Dyn.Fin-make Dyn.Subj:shoot with a gun Caus-Dyn.NFin:hear that
 'oponoho posao.

 Mantauran Dyn.Subj:shoot
 'They (would) fire out to let the Mantauran hear the shot'

As mentioned in §15.2.1, when the verb of the second clause occurs in its finite form, the subject of that verb can be raised as the object of the first clause. A co-referent pronoun must appear in the second clause:

(15.58) a. **o-cengele-lrao o-kane-***mo'o* **mairange.**Dyn.Fin-see-1S.Nom Dyn.Fin-eat-2S.Nom sweet potato
'I saw you eat sweet potatoes.'

| b. | o-cengele-lra <i>-imia'e</i> | o-kane <i>-mo'o</i> | mairange. |
|----|---------------------------------|---------------------|--------------|
| | Dyn.Fin-see-1S.Nom-2S.Obl | Dyn.Fin-eat-2S.Nom | sweet potato |
| | 'I saw you eat sweet potatoes.' | | |

c. *o-cengele-lra-imia'e o-kane-Ø mairange.

Dyn.Fin-see-1S.Nom-2S.Obl Dyn.Fin-eat-Ø sweet potato

(15.59) a. **o-cengele-lra-ine o-kane va'oro** (*taotao*).

Dyn.Fin-see-1S.Nom-3S.Obl Dyn.Fin-eat rice Taotao

'I saw Taotao eat rice.'

b. o-cengele-lra-ine (taotao) o-kane va'oro.
Dyn.Fin-see-1S.Nom-3S.Obl Taotao Dyn.Fin-eat rice
'I saw (Taotao) eat rice.'

15.2.2.2 Knowledge verbs

Noonan (1985:118) defines verbs of knowledge as predicates that "take experiencer subjects and describe the state or the manner of acquisition of knowledge" such as *know*, *discover*, *realize*, *find out*, *recall* and *forget*, but draws the attention to the point that cross-linguistically the type of complements they take might differ.

In Mantauran, knowledge verbs such as **o-lriho'o** 'know', **'aico'ono** 'recall, remember', **marimoro** 'forget' are usually followed by a full clause as shown in (15.60)-(15.62):

(15.60) a. *o-lriho'o-*lrao *o-kelrakelrange-mi'-ine* takanao 'idha.

Dyn.Fin-know-1S.Nom Dyn.Fin-beat-2S.Nom-3S.Obl Takanao yesterday 'I know that you beat Takanao yesterday.'

b. mani a-ka-a-olrolai-nai, o-lriho'o-ka-nai
then ClsNmz-Stat.NFin-plur-child-1PE.Gen Dyn.Fin-know-Neg-1PE.Gen
om-iki valrinae dha'ane m-ia.
Dyn.Fin-exist Valrinae house Dyn.Subj-so
'When we were children, we did not know that there were houses in Valrinae.'

c. olo pa-'aela-'o to-dha'ane, if Caus-Dyn.NFin:move-2S.Gen build-house colo mata-po-ae Dyn.Fin:certainly-make-certainly Dyn.Subj:kill pig 'aela-nga-mo'o... pa-lriho'o cinekelae Caus-Dyn.NFin:know villager(s) Dyn.Fin:move-already-2S.Nom... 'If you move out and build a house (of your own), you must kill a pig for the house warming to let the villagers know that you have already moved.'

- (15.61) a. 'aico'ono-Irao o-langai-mo'o dhona solate.
 remember-1S.Nom Dyn.Fin-buy-2S.Nom that book
 'I remember you bought that book.'
 - b. 'aico'ono-lrao toramoro ka ma-kocingai ca'em-ae-ni.
 remember-1S.Nom very Lig Stat.Fin-important ill-StatNmz-3S.Gen
 'I remember he is seriously ill.'
- (15.62) a. *ma-rimoro-*lrao *ma-dhalame*-mi'-ine dhipolo.

 Stat.Fin-forget-1S.Nom Stat.Fin-like/love-2S.Nom-3S.Obl Dhipolo
 'I forgot that you like/love Dhipolo.'
 - b. *ma-rimoro*-lrao *ma-esenge* kipingi-li.
 Stat.Fin-forget-1S.Nom Stat.Fin-soak clothes-1S.Gen
 'I forgot my clothes are soaked.'

These three verbs can also take a nominalized clause as complements, though **ma-rimoro** cannot be followed by a clause introduced by **lo** 'if'.

- (15.63) a. **o-lriho'o-lrao a-kelrakelrange-'-ine takanao.**Dyn.Fin-know-1S.Nom ClsNmz-Dyn.NFin:beat-2S.Gen-3S.Obl Takanao 'I know when you beat Takanao (past).'
 - b. *o-lriho'o-*lrao *lo kelrakelrange-'-ine* takanao.

 Dyn.Fin-know-1S.Nom if Dyn.Subj:beat-2S.Gen-3S.Obl Takanao 'I know when you beat Takanao (habitual).'
- (15.64) a. 'aico'ono-Irao a-kelrakelrange-'-ine takanao.
 remember-1S.Nom ClsNmz-Dyn.NFin:beat-2S.Gen-3S.Obl Takanao
 'I remember when you beat Takanao (past).'
 - b. 'aico'ono-lrao lo kelrakelrange-'-ine takanao.

 Dyn.Fin-remember-1S.Nom if Dyn.Subj:beat-2S.Gen-3S.Obl Takanao
 'I remember when you beat Takanao (habitual).'
- (15.65) a. **ma-rimoro-lrao** *a-kelrakelrange-'-ine* **takanao.** Stat.Fin-forget-1S.Nom ClsNmz-Dyn.NFin:beat-2S.Gen-3S.Obl Takanao 'I forgot you beat Takanao (past).'
 - b. **ma-rimoro-*lrao *lo kelrakelrange-'-ine* takanao. Stat.Fin-forget-1S.Nom if Dyn.Subj:beat-2S.Gen-3S.Obl Takanao

Note finally that these three verbs can also be followed by another verb marked as subjunctive (they form an SVC) if the subject of the main clause and that of the complement clause is the same (15.66a-c) but that the meaning of **lriho'o** changes. In the latter case, it means 'know how, can' (*cf.* §15.2.1.3).

(15.66) a. o-lriho'o solate.

Dyn.Fin-know Dyn.Subj:write

'I know how to write.'

b. 'aico'ono longai dhona solate. remember Dyn.Subj:buy that book

'I remember I bought that book.'

c. ma-rimoro kone velevele-ni taotao. Stat.Fin-forget Dyn.Subj:eat banana-3S.Gen Taotao

'I forgot I ate Taotao's banana.'

15.2.2.3 Commentative verbs

Commentative verbs include verbs such as **madhalame** 'like/love' (15.48), **malrakase** 'dislike/hate' (15.67), '**okolodho** 'be afraid of' (15.68). They exhibit the same distribution as knowledge verbs, i.e. they can be followed by a full clause (zero strategy) or a nominalized clause if the subject in the main clause and that in the complement clause are different, or by an embedded verb marked as subjunctive (they form an SVC) if the subject is identical. As an illustration, consider the following examples:

(15.67) a. *ma-dhalame-*lra-imia'e

o-cengele-mi'-iae.

Stat.Fin-like/love-1S.Nom-2S.Obl 'I like you (when) you look at me.'

Dyn.Fin-see-2S.Nom-1S.Obl

b. ma-dhalame-lra-imia'e

a-cengele-'-iae.

Stat.Fin-like/love-1S.Nom-2S.Obl 'I like you (when) you look at me.'

ClsNmz-Dyn.NFin:see-2S.Gen-1S.Obl

c. ma-dhalame-lra-imia'e lo cengele-'-iae.

Stat.Fin-like/love-1S.Nom-2S.Obl if Dyn.Subj:see-2S.Gen-1S.Obl

'I like you (when) you look at me.'

d. ma-dhalame-ka-li ka kone velevele.

Stat.Fin-like/love-Neg-1S.Gen Neg Dyn.Subj:eat banana

'I do not like eating bananas.'

(15.68) a. ma-lrakase-lra-ine o-'ongolo vavaa.

Stat.Fin-hate-1S.Nom-3S.Obl Dyn.Fin-drink wine.

'I hate him/her (when) s/he drinks wine.'

b. ma-lrakase-lra-ine a-'ongolo-ni vavaa.

Stat.Fin-hate-1S.Nom-3S.Obl ClsNmz-Dyn.NFin:drink-3S.Gen wine.

'I hate him/her (when) s/he drank wine.'

- c. *ma-Irakase*-Ira-ine *lo 'ongolo* vavaa. Stat.Fin-hate-1S.Nom-3S.Obl if Dyn.Subj:drink wine. 'I hate him/her (when) s/he drinks wine.'
- d. *ma-lrakase-*lrao *'ongolo* vavaa. Stat.Fin-hate-1S.Nom Dyn.Subj:drink wine. 'I hate to drink wine.'
- (15.69) a. 'okolodho-lrao amo-roake-mo'o vavoi.
 afraid-1S.Nom Irr-Dyn.NFin:pierce-2S.Nom wild pig
 'I am afraid you will kill a wild pig.'
 - b. 'okolodho-Irao a-roake-'o vavoi.
 afraid-1S.Nom ClsNmz-Dyn.NFin:pierce-2S.Gen wild pig
 'I am afraid (when) you killed a pig.'
 - c. 'okolodho-lrao lo roake-'o vavoi.
 afraid-1S.Nom if Dyn.Subj:pierce-2S.Gen wild pig
 'I am afraid to kill a wild pig.'
 - d. 'okolodho-lrao roake vavoi.
 afraid-1S.Nom Dyn.Subj:pierce wild pig
 'I am afraid to kill a wild pig.'

15.2.2.4 Manipulative verbs

Manipulative verbs include verbs such as 'io'ohodho 'promise' (15.70a), 'ooho 'order' (15.70b), 'itovi 'request, supplicate' (15.70c), pa'adhi'adhili 'force' (15.70d), 'ivaha-ka-Pro_{Gen} 'not accept' (15.70e), napi'ee 'regret' etc.... The second verb is always marked as causative. The subject of the main clause and that of the complement clause are obligatorily different.

- (15.70) a. 'ia'ohodho-Ira-ine pa-langai dhona solate.

 promise-1S.Nom-3S.Obl Caus-Dyn.NFin:buy that book
 'I promised him/her to let him/her buy that book.'
 - b. 'ooho-Ira-ine pa-kane dhona velevele. force-1S.Nom-3S.Obl Caus-Dyn.NFin:eat that banana 'I ordered him/her to eat that banana.'
 - c. *pa-'adhi'adhili*-lra-ine *pa-langolangoi*.
 Caus-Dyn.NFin:force-1S.Nom-3S.Obl Caus-Dyn.NFin:swim
 'I forced him/her to swim.'
 - d. 'itovi-lra-imia'e pa-dhaac-ine.
 request-1S.Nom-2S.Obl Caus-Dyn.NFin:leave-3S.Obl
 'I request/supplicate you to let him/her leave.'

e. 'ivaha-ka-l-ine pa-'acakela-ine dhipolo.

accept-Neg-1S.Gen-3S.Obl Caus-marry-3S.Obl Dhipolo

'I did not allow him to marry Dhipolo.'

There are two things to note. First, the order can be given through an imperative sentence enunciated as direct speech clause. The clause is followed by the verb of saying **mia** 'so', as in (15.71):

(15.71) **'ooho-Ira-ine "kon-a dhona velevele" m-ia.**order-1S.Nom-3S.Obl Dyn.Subj:eat-Imp that banana Dyn.Subj-so
'I ordered him/her: "Eat that banana!"

If the subject of the main clause and that of the complement clause are identical, then the manipulative verb is followed by another verb marked as subjunctive (SVC). For instance:

(15.72) a. *o-'adhi'adhili-*lrao *longolangoi*.

Dyn.Fin-force-1S.Nom Dyn.Subj:swim 'I forced myself to swim.'

b. 'ivaha-ka-l-ine 'acakela-ine dhipolo. accept-Neg-1S.Gen-3S.Obl Caus-marry-3S.Obl Dhipolo 'I did not agree to marry Dhipolo.'

c. napi'ee-nga-li m-oa maava'i 'oponoho.
regret-already-1S.Gen Dyn.Subj-go Dyn.Subj:come Wanshan
'I regret I came to Wanshan.'

15.2.2.5 The modal verb *kai*

Modal verbs include predicates expressing epistemic and deontic modality. I have found only one modal verb form⁸³ in Mantauran, *cf.* **kai** 'may, must, should'. The three types of complements it allows depend on the interpretation given to the whole utterance:

- (i) It may be followed by a nominalized verb prefixed by **a-** 'ClsNmz' to convey an hypothetical reading (15.73)
- (ii) It may be followed by a non-finite verb prefixed as **(a)mo-** 'irrealis' to convey an epistemic interpretation (15.74).
- (iii) It may be followed by an imperative verb, the verb being in the subjunctive form and suffixed with **-a** 'imperative' to convey a strong request (15.75).

428

I use the notion of 'verb form' for the sake of convenience. The form **kai** does not correspond to any other type of verb in Mantauran: it does not take any pronoun or aspectual marker and the verb forms that follow it do not resemble any other verb forms in the language.

(15.73) a. *kai a*-kelrakelrange-nga lalake-ni.

Mod ClsNmz-Dyn.NFin:beat-already child-3S.Gen

Mod ClsNmz-Dyn.NFin:beat-already child-'He may have beaten his child.'

The may have beaten ms emia.

b. kai a-dhaace-nga-lini.

Mod ClsNmz-Dyn.NFin:leave-already-3P.Gen

'They may have left already.'

(15.74) a. 'ara-okela-ka-lini, kai (a)mo-dhaace-nga ana-lo. early-Dyn.NFin:reach-Neg-3P.Gen Mod Irr-Dyn.NFin:leave-already that-plur

'They will be late (so) they must leave.'

b. kai (a)mo-kii-kane-na.

Mod Irr-Neg-Dyn.NFin:eat-yet

'He need not/he must not eat.'

(15.75) a. o-kane 'eat' kai kon-a! '(You should) eat!'

b. maava'i 'come' kai maava'i-a! '(You should) come!'

c. maavanao 'bathe' kai maavanalr-a! '(You should) bathe!'

d. ma-raveravere 'happy' kai ma-raveraver-a! '(You should) be happy!'

15.2.2.6 Summary

Table 15.2 provides a summary of these different types of predicates and their complementation strategies in a tabular form.

Table 15.2: Types of complement-taking verbs and complementation strategies in Mantauran

| | Strategies | Zero | SVC | Nominalization | Causativization |
|--------------------------|-----------------|----------|----------|----------------|-----------------|
| Type of predicates | | strategy | strategy | strategy | strategy |
| Perception verbs | | | | | |
| ocengele 'see' | | + | + | + | _ |
| osialalra 'hear' | | | | | |
| Knowledge verbs | | | | | |
| olriho'o 'know' | different actor | + | _ | + | _ |
| 'aico'ono 'remember' | same actor | + | + | _ | |
| marimoro 'see' | | | | | |
| Commentative verbs | | | | | |
| madhalame 'like/love' | different actor | + | | + | _ |
| malrakase 'dislike/hate' | same actor | _ | + | _ | |
| 'okolodho 'be afraid of' | | | | | |
| Manipulative verbs | | | | | |
| 'ooho 'order' etc | different actor | + | _ | _ | + |
| | same actor | _ | + | _ | _ |
| kai | | _ | _ | + | _ |

15.2.3 Utterance clauses and related discourse markers

Utterance clauses are full clauses: the verb is finite and it can subcategorize for a subject NP. There are two (related) ways to introduce a direct quote complement in Mantauran: in the first, the verb of saying **om-ia** (\sim **m-ia**) 'so' follows the direct quote complement (15.76); in the second, the conjunction **mani** 'then', followed by the non-finite form of the verb **om-ia**, *cf.* **ia** 'so', follows the direct quote complement (15.77).

- (15.76) a. "'aliki-mita vavangelae" om-ia dhoma, "'aliki-mita from-1PI.Nom Vavangelae Dyn.Fin-so other from-1PI.Nom talingae m-ia.

 Talingae Dyn.Subj-so 'Some say: "We come from Vavangelae". Others say: "We come from Talingae.""
 - b. "imia! ta-kane" m-ia...

 come:Imp 1PI.Nom-Dyn.NFin:eat Dyn.Subj-so
 "'Come on! Let's eat" (she would) say.'
 - c. mani alra siave nga'ato "nao-silisiliti"
 then Dyn.NFin:take Dyn.Subj:chop wood 1S.Nom-Dyn.NFin:chop
 m-ia.

 Dyn.Subj-so
 'I am going to chop (a piece of) wood.'
- (15.77) a. mani "alopo-nai" mani ia dhona'i then Dyn.NFin:hunt-1PE.Nom then Dyn.NFin:so that lalake-dha.
 child-3S.Gen

'Then their children said: "we are going to hunt."

b. mani "po-iname to-'aodholro'o" mani ia then Dyn.NFin:make-1PE.Obl make-lunch box then Dyn.NFin:so ina-lidha.

mother-3P.Gen

'Then they said to their mother: "prepare lunch boxes for us."

c. ona a-oa-nga-lidha m-okela dhona 'adha. that ClsNmz-Dyn.NFin:go-already-3P.Gen Dyn.Subj-reach that resting area "ma-'ilrao-ng-imite, kane-nga ita Stat.Fin-hungry-already-1PI.Obl Dyn.NFin:eat-already 1PI.Top 'aodholro'o-ta" mani lunch box-1PI.Gen Dvn.NFin:so then 'When they had arrived at the resting area, they said: "We are already hungry; let's eat our lunch boxes.""

d. "ita pi'amadhalae kone 'aodholro'o-'o"

1PI.Top first Dyn.Subj:eat lunch box-2S.Gen

mani ia taka-dha.

then Dyn.NFin:so older sibling-3S.Gen

"Let's first eat your lunch box" said the older brother.'

If **mani ia** occurs at the beginning of the quote, it most often occurs also at the end of it (15.78).

(15.78) a. mani tamatama 'ina'i: ia middle-aged man this then Dyn.NFin:so "alaka-nai ma-a-rilai, laka o-pi'a-mi'-iname because-1PE.Gen Stat.Fin-all-slim Dvn.Fin-do-2S.Nom-1PE.Obl because 'olra'a po'ivo icivi. iname 'a snake Dyn.Subj:bake in stones 1PE.Top Top Dyn.Subj:mix o-kane-kane-ka-nai ka 'olra'a. kani Dyn.Fin-Red-eat-Neg-1PE.Gen Neg snake why ki-pato'o-'-iname ni-pa-picongo-mo'o Neg-Dvn.NFin:tell-2S.Gen-1PE.Obl Cntrfct-Caus-Dyn.NFin:split-2S.Nom oha'a" mani tamatama. ia Dyn.Subj:cook then Dyn.NFin:so middle-aged man Lit.: 'The middle-aged man said: "(the reason why) we are all getting slim (is) because you've done that to us, (you've) mixed up the snakes with (the) bake(d) food. As for us, we have never eaten snakes. Why didn't you tell us and cook (your food) apart?" the middle-aged man said.'

- b. dhona 'olra'a "lo mani ia 'ina'i: that snake then Dyn.NFin:so this if m-iki-dh-imia'e lalake valrovalro, vo'alr-iae Dyn.Subj-exist-3S.Gen-2S.Obl child young woman Dyn.Subj:give-1S.Obl pa-'acakelae, ki-'ange'ang-imia'e la-ni Caus-marry so that-3S.Gen Neg-Dyn.NFin:hurt-2S.Obl ta-ka'ac-ae-l-imi'ae" mani LocNmz-Dyn.NFin:bite-LocNmz-1S.Gen-2S.Obl then Dyn.NFin:so dhona 'olra'a. that snake Lit.: 'That snake said: "If you have daughters, give me (one) to marry so that the place where I bit you does not hurt you." the snake said.'
- "'aliki-mita 'n c. mani ia 'ina'i: ta-teme then Dyn.NFin:so this from-1PI.Nom SubjNmz-Dyn.NFin:obstruct opalrae" mani i-iae. Dyn.NFin:so-1S.Obl grindstone then 'He said to me: "We come from a hole obstructed by a grindstone."

Within the boundaries of the utterance clause (marked by the quotation marks), there is no restriction whatsoever in terms of voice, mood/aspect and raising, as shown in (15.79).

(15.79)mani ia tamatama 'ina'i: then Dyn.NFin:so middle-aged man this "alaka-nai o-pi'a-mi'-iname ma-a-rilai. because-1PE.Gen Stat.Fin-all-slim because Dyn.Fin-do-2S.Nom-1PE.Obl po'ivo 'olra'a icivi. iname 'n Dvn.Subj:mix snake Dyn.Subj:bake in stones 1PE.Top Top 'olra'a. o-kane-kane-ka-nai ka kani Dyn.Fin-Red-eat-Neg-1PE.Gen Neg snake why ki-pato'o-'-iname ni-pa-picongo-mo'o Neg-Dyn.NFin:tell-2S.Gen-1PE.Obl Cntrfct-Caus-Dyn.NFin:split-2S.Nom oha'a" mani tamatama. ia Dyn.Subj:cook then Dvn.NFin:so middle-aged man Lit.: 'The middle-aged man said: "(The reason why) we are all getting slim (is) because you've done that to us, (you've) mixed up the snakes with (the) bake(d) food. As for us, we have never eaten snakes. Why didn't you tell us and cook (your food) apart?" the middle-aged man said.'

The verb **om-ia** (or its subjunctive form **m-ia**) can also occur as such to convey one's/someone's impression or (after-)thought:

(15.80) a. la olo ma-celekere-li 'a "topodhaolae" om-ia-lrao
and if Stat.Subj-ponder-1S.Gen Top true Dyn.Fin-so-1S.Nom
dhona'i omo-li.
that grandparent-1S.Gen
'And if I (come to) think about it, I say: "My grandfather is right.""

b. mani oa m-alra "nao-amece then Dyn.NFin:go Dyn.Subj-take 1S.Nom-Dyn.NFin:bring lalake-li" m-ia. child-1S.Gen Dyn.Subj-go 'He went to take [the flower] thinking: "I am to bring (it back) to my children."

c. "nao-aha'a-nga" lo *m-ia*-mao...

1S.Nom-Dyn.NFin:cook-already if Dyn.Subj-so-Impers.Gen
'If someone thought: "I am going to cook"...'

(o)m-ia is usually used in co-occurrence with verbs of propositional attitude verbs such as **tovalre** 'believe' (15.81a), **o-lriho'o** 'know' (15.81b) which Noonan (1985:113) defines as predicates expressing "an attitude regarding the truth value of the proposition

expressed as their complement" as well as verbs of saying such as **pato'o** 'tell' (15.81c), **o-'iase** 'call' (15.81d), **'akovilri** 'answer' (15.81e).

- (15.81) a. *tovalre*-lra-imia'e amo-ka-taadhi'i-mo'o *m-ia*.

 believe-1S.Nom-2S.Obl Irr-Stat.NFin-good-2S.Nom Dyn.Subj-so
 'I believe that you will be fine.'
 - b. mani *lriho'o*-nai 'ina 'oponoho
 then Dyn.NFin:know-1PE.Nom this Mantauran
 "ka-i'a-ta aanai" (o)m-ia-nai.
 in fact-Dyn.NFin:alike-1PI.Gen that Dyn.Fin-so-1PE.Nom
 '(That's how) we, Mantauran, learnt that "actually we are Rukai."
 - c. mani alr-iname pato'o: "ma'a-takataka-nomi"
 then Dyn.NFin:take-1PE.Obl Dyn.Subj:tell Rec:Stat.Fin-relative-2P.Nom
 m-ia.

 Dyn.Subj-so
 - 'Then they took us and told us: "You are relatives."
 - d. o-'ias-ine lalake-ni titina: "imia child-3S.Gen middle-aged woman come:Imp Dyn.Fin-call-3S.Obl m-o-a ta-colo vavoi." topoi la wild pig Dyn.Subj-go-Imp make fire and 1PI.Nom-Dyn.NFin:kill m-ia. Dvn.Subj-so

'The middle-aged woman called her child to tell him: "Come and go light a fire, we are going to kill a wild pig."

e. taotao 'a "maavi'i-a-'o lo idhae?" Taotao Top Dyn.Subj:come-Irr-2S.Gen when:Irr i-idhe dhipolo 'akovilr-idhe 'n mani mani Dyn.NFin:so-3S.Obl Dhipolo then answer-3S.Obl then dhipolo "lo 'idha" m-ia. Dvn.Subj-so Dhipolo tomorrow 'Taotao asked Dhipolo: "When are you coming?" and she replied to him: "Tomorrow".

Mantauran is undergoing major syntactic changes in the rise of **omi** 'like that', which is replacing **mani** 'then'.

The use of **mani** 'then' used to be very productive in the speech of my older informant (Lü Yu-zhi) and still proves to be quite productive in the speech of younger informants. However, **ia** is often used alone without **mani**, and **omi** (tentatively glossed as 'like that') has a tendency to replace the sequence **mani ia**. I never heard that form in the conversations I had with Lü Yu-zhi and I have had no instance of it in my fieldnotes. As mentioned in the introduction, she passed away in 2000, before I had become aware

of this ongoing syntactic change, so I never had the chance to confirm with her whether she used this form or not, or whether this latter usage belongs to a newer register. In any case, only **mani** (but not **omi**) is found in Ogawa & Asai's (1935) texts (pp.390-393).

mani and omi can be distinguished in at least two respects. (i) Unlike mani 'then', omi does not have any lexical content. It occurs in any position, not just in sentence-initial or sentence-final position. In final position, it serves to link two clauses (cf. §16.2.2.2). In any other position, it usually serves to indicate "hearsay" as in (15.83). In a few examples, it is also used as a verb of saying. (ii) Unlike mani which is a conjunction, omi must be analyzed as a verb because (a) it shares (at least to some extent) the same inflections as other verbs, cf. om-i and (b) it can be followed by a pronoun, usually in the oblique case. Omi differs from verbs and behaves like mani in that (a) it cannot be followed by an aspectual suffix (cf. omi-nga 'like that-already') and (b) it must be followed by a non-finite verb—this is shown by the alternation between kama- and kapa- in (16.82), cf. (cf. §3.3.1). Note that omi always precedes mani, but never follows it.

(15.82) kama-kilakili

like that-3P.Obl Dyn.Fin:continuously-dance the valiant soldiers' dance omi. polidhao ka*p*a-oa like that Dyn.NFin:continuously-Dyn.NFin:go Dyn.Subj:watch omi-idhei dhona'i titina_i omi. like that-3S.Obl middle-aged woman like that that kapa-oa "ananee! omi-idhe_i Dyn.NFin:continuously-Dyn.NFin:go like that-3S.Obl Ouch maava'i-lraao" l-ahanee, (o)m-ia omi plur-grandchild Dyn.Fin:come-1S.Nom:Emph Dyn.Fin-so like that

omi-ilidhei

mani ka-havehavehe omi-ilidhe; dhona-lo mavohoko;...
then Stat.NFin-happy like that-3P.Obl that-plur monkey

'They [=Monkeys] were dancing the dance of the valiant soldiers. The woman was watching (them). She told them: "Ah, my grandchildren, I am coming!" And the monkeys were very happy.'

(15.83) "kani kapa-oa-'-iname

why Dyn.NFin:continuously-Dyn.NFin:go-2S.Gen-1PE.Obl

'akoela?" <u>mi</u>-idhe mani. laugh like that-3S.Obl then

'(They) asked him/her (again): "Why did you laugh at us?""

_

In most examples, **omi** does not follow the agreement rules with the oblique pronoun cliticized to it, and sometimes co-refers quite unexpectedly with the subject in visibility and plurality. I have no explanation for such a syntactic change.

Historically, **omi** might be derived from **om-ia** '(say) so'. **om-ia** usually occurs in initial or final position as a verb of saying; it can follow **mani** (and be suffixed with pronouns and aspectual suffixes) but never occurs after (though it can precede) **omi**. By way of illustration, consider (15.84).

(15.84) a. mani "la ka-ia-'-iae ana then in fact-Dyn.NFin:so-2S.Gen-1S.Obl and this lamae." "ia'e, om-ia-lrao ana" Ø (female) friend Dyn.Fin-so-1S.Nom yes that om(i)-idhe. Dyn.NFin:so like that-3S.Obl "(But) you indeed told me so". "Yes, this is what I said" (she) said." "'ai! b. mani 'ina omi: ita <u>ia</u> then Dvn.NFin:so this like that Ouch 1PI.Top 'i-nga'ato 'n lamae" Ø gather-brushwood Ah voc:(female) friend <u>ia</u> omi. Dyn.NFin:so like that '(One of them) said: "Ouch! My friend, let's go gather brushwood."" c. "ia'e, [amo-]lrange'e-mita" omi mani... [Irr-]Dyn.Fin-cultivate-1PI.Nom Dyn.NFin:so like that then "All right, (let's start) to cultivate" (she) said."

The distinction between **omi** and **om-ia** is sometimes difficult to make, as in the following example, for instance. **mani** follows the sequential form **i-idhe**, and though **i-** is analyzed as the alternation of **om-ia** '(say) so', it could be also treated as deriving from **omi** 'like that'.

(15.85) "m-o-a dhoace!" Ø <u>i-idhe</u> mani....

Dyn.Subj-go-Imp Dyn.Subj:leave Dyn.NFin:so-3S.Obl then

"Go and leave!" (they) said to her and then....'

In (15.86), a non-finite verb should occur after the interrogative word **kani**. **omi** (rather than **i**) is used instead.

(15.86) a. kani kane-'o ana velevele-li?

why Dyn.NFin:eat-2S.Gen that banana-1S.Gen

Lit.: 'Why did you eat that banana of mine?'

b. kani oomi/*i-dh-iae lili-li?

why like that-3S.Gen-1S.Obl (female) friend-1S.Gen

'Why did my friend tell me that?'

The distribution of **mani** 'then' vs. that of **omi** 'like that' is summarized in table 15.3.

Table 15.3: Distribution of mani 'then' vs. omi 'like that'

| mani | omi |
|----------------------------|-----------|
| *mani-idhe but mani i-idhe | omi-idhe |
| *mani omi | omi mani |
| mani ia | *omi ia |
| *om-ia mani | om-ia omi |

The semantically empty verb **ani'ia** (which is tentatively glossed as 'as pointed out') is another form that never appeared in the speech of my late informant, Lü Yu-zhi, but is used quite frequently (though not so productively as **omi**) by my other informant, Guan Yue-ying, when she narrates a story and wants to refer to what has been said earlier. This form is treated as a verb because the subjunctive form **oni'ia** has been found in the corpus. I have not been able to uncover occurrences of **ani'ia** followed by aspectual suffixes or pronominal clitics, though. It can also function as a noun.

- (15.87) a. **tolromaao oni'ia**, **maineke...** suddenly as pointed out Dyn.Fin:breathe 'Suddenly, (s/he started to) breathe...'
 - b. "ita dhaace-nga oni'ia ia omi."

 1PI.Top Dyn.NFin:leave-already as pointed out Dyn.NFin:so like that "Let's go" she said.'
- (15.88) a. lamae, om-iki dhona-lo 'i ani'ia
 (female) friend (voc) Dyn.Fin-exist that-plur as pointed out
 mavohoko...
 monkey
 "Friends, there are monkeys over there...""
 - b. olo "tina-kasoo⁸⁵" m-ia-dha om-i'a 'asahovo mother-2S. Dyn.Subj-so-3S.Gen if Dyn.Subj-look like gather dhona'i ani'ia pangolro omi. as pointed out like that that bone '[When he asked:] "Are you my mother?" the bones reunited."

_

⁸⁵ kaso(o) is a borrowed pronominal form, perhaps from Isbukun Bunun.

Chapter 16: Subordination and Coordination

This chapter examines clause combinations in Mantauran. More specifically, it is concerned with the study of clausal subordination, and in particular, adverbial clauses (§16.1), juxtaposition and coordination (§16.2).

Following Lehman (1988:182), the notion of subordination is defined as follows: "If syntagms (clauses) X and Y are in a relation of clause linkage, then X is subordinate to Y if X and Y form an endocentric construction Z with Y as head." Coordination refers to the conjoining of two clauses through the occurrence of a coordination conjunction. If such a conjunction does not occur between the two clauses, then they occur in juxtaposition.

Lehman (1988) proposes six syntactic and semantic parameters viewed as a continuum to make a distinction between subordinate and juxtaposed clauses:

- (i) the "hierarchical downgrading of the subordinate clause", i.e. the degree of affectedness of the adverbial clause.
- (ii) the "syntactic level of the subordinate clause", that is, the degree of syntactic tightness with respect to the main clause.
- (iii) the "desententialization of the subordinate clause", i.e. the degree to which a clause is expanded or reduced through the elimination of tense/aspect/mood or the elimination of subject-verb agreement.
- (iv) the "grammaticalization of the main verb", the subordinate verb becoming the main verb.
- (v) the "interlacing of the two clauses" yielding NP deletion, or the occurrence of a zero pronoun in pronominal co-reference.
- (vi) the "explicitness of linking", that is, the occurrence/non-occurrence of a subordinating morpheme.

Based on these parameters, adverbial clauses in Mantauran are treated as subordinate clauses, while juxtaposed/coordinated clauses are regarded as co-ranking clauses. The main distinction between adverbial clauses and juxtaposed/coordinated clauses lies in the fact that in the former type of clauses, the verb is nominalized while in the latter, it occurs as the main/matrix verb. Another distinction lies in the (non-)permissible occurrence of the topic marker 'a: it can occur between a subordinate and a main clause, but does not occur between two coordinate clauses. The conjunction mani 'then' can occur in the two types of clauses.

There are few clause-linking elements in Mantauran, as subordination is usually expressed on the morphological level through nominalization. There are two main subordinating conjunctions, *cf.* **lo** '(hypothetical) if' and **la** '(counterfactual) if'.

The occurrence of coordinating conjunctions such as **la** 'and, but', **la-**Pro_{Gen} 'so that', **mani** 'then' and **ara'eve** 'but, however' as well as verbs such as **'atoloro** 'so, therefore' and **ora'eve** 'but, however' allow a distinction to be made between the coordination of two (or more) clauses, as opposed to two (or more) juxtaposed clauses.

Adverbial clauses do not undergo desententialization—although the marking as mood/aspect depends on the relation established in the two clauses—or the deletion of a co-referential pronoun, as the occurrence of a genitive pronoun is compulsory after most nominalized verbs.

16.1 Adverbial clauses

Thompson & Longacre (1985:172) distinguish three types of subordinate clauses: "those which function as noun phrases (called complements), those which function as modifiers of nouns (called relative clauses), and those which function as modifiers of verb phrases or entire propositions (called adverbial clauses)." Thompson & Longacre (1985:177) further divide adverbial clauses into two groups, according to whether they are substitutable for by a single word (including time, location and manner) or not (including purpose, reason, simultaneous, conditional, concessive clauses, and the like).

Thompson & Longacre (1985) note that adverbial clauses can modify a verb phrase or a sentence through the following means:

- a subordinating morpheme, which may or may not have a lexical content, occurs clause-initially,
- (ii) a special verb form (e.g. the verb is in the infinitive),
- (iii) word order variations (i.e. different position of the predicate; precedence of the adverbial clause, its position being usually determined by its role in linking the main clause which it modifies in the preceding discourse).

In this section, four types of adverbial clauses subordinated to a main clause are examined. The first four types include temporal (§16.1.1), conditional/hypothetical (§16.1.2), counterfactual (§16.1.3), concessive clauses (§16.1.4), which share a number of morphological, syntactic and semantic similarities. On the morphological level, they all represent nominalized clauses—the form (either non-finite or subjunctive) of the verb that occurs in the subordinate clause depends on the type of nominalization it undergoes. On the syntactic level, adverbial clauses tend to occur before the main clause. On the semantic level, the two (subordinate and main) clauses are in a relation whereby the semantic content of one clause is dependent on the assertion made in the other. A short summary is given in §16.1.5.

16.1.1 Temporal clauses: 'before', 'when' and 'after'

Temporal clauses include three main types of temporal relations: posteriority (*before*-clauses), concomitance (*when*-clauses) and anteriority (*after*-clauses). These three types of temporal relations are expressed through the same morphosyntactic device in Mantauran, i.e. the nominalization of the adverbial clause, *cf.* the occurrence of the clausal nominalizer **a-**. Consider (16.1):

- (16.1) a. ona'i a-ki-kane-na-li, maava'i 'i dhipolo. that ClsNmz-Neg-Dyn.NFin:eat-still-1S.Gen Dyn.Fin:come Dhipolo came before I had eaten.'

 (Lit.: 'When I had not eaten yet, Dhipolo came.')
 - b. **ona'i** *a-paka*-kane-*nga*-li, that ClsNmz-finish-Dyn.NFin:eat-already-1S.Gen Dyn.Fin:come 'Dhipolo came after I had finished eating.'

 (*Lit.*: 'When I had finished eating, Dhipolo came.')
 - b'. ona'i a-lrepenge-nga-li kone,
 that ClsNmz-Dyn.NFin:finish-already-1S.Gen Dyn.Subj:eat
 maava'i 'i dhipolo.
 Dyn.Fin:come Dhipolo
 'Dhipolo came after I had finished eating.'
 (Lit.: 'When I had finished eating, Dhipolo came.')
 - b''. ona'i a-kane-nga-li, maava'i 'i dhipolo.
 that ClsNmz-Dyn.NFin:eat-already-1S.Gen Dyn.Fin:come 'Dhipolo came after I had finished eating.'

 (Lit.: 'When I finished eating already, Dhipolo came.')
 - c. ona'i a-kane-li, maava'i-nga 'i dhipolo.
 that ClsNmz-Dyn.NFin:eat-1S.Gen Dyn.Fin:come-already
 'Dhipolo came while I was eating.'
 (Lit.: 'When I ate, Dhipolo came.')
 - c'. ona'i a-kane-na-li, maava'i-nga 'i dhipolo.
 that ClsNmz-Dyn.NFin:eat-still-1S.Gen Dyn.Fin:come-already Dhipolo
 'Dhipolo came while I was still eating.'
 (Lit.: 'When I was still eating, Dhipolo came.')

The marking of the temporal relation is the same in these three types of clauses. What differs is:

1. The occurrence of the negator **ki-**, usually in co-occurrence with **-na** 'still, yet', to indicate posteriority, as in (16.1a). Thus, *before*-clauses can be literally glossed as:

'when...had/did not...'. The occurrence of a negator in the subordinate clause is not typologically surprising. Thompson & Longacre (1985:182) note that before-clauses "are conceptually negative from the point of view of the event in the main clause", as they refer to events that have not happened yet by the time of the event mentioned in the main clause.

- 2. The occurrence of the prefix maka- 'finish' or the verb o-lrepenge 'finish', usually in co-occurrence with -nga 'already', to express anteriority, as after-clauses refer to events that must be finished at the time the event mentioned in the main clause happens, cf. (16.1b-b'). Thus, after-clauses can be literally glossed as: 'when...had finished...'. As shown in (16.1b''), -nga 'already' can also appear without the prefix maka- or the verb o-lrepenge.
- 3. In Mantauran, adverbial clauses marked by a-85 only refer to a concomitant event, in the absence of any other phrasal or sentential constituents and can thus be glossed as: 'when...(still)...'. The event referred to in the subordinate clause must refer to the past (realis); further modal restrictions in the main clause are discussed below. Aspect, on the other hand, can be marked in the subordinate and/or the main clause, as in (16.1c-c'), although in the subordinate clause, a verb can only be suffixed with -na 'still'. If the verb is suffixed with -nga, the temporal sequence it signals would be 'succession' rather than 'concomitance'.

These three types of subordinate clauses can be schematized and glossed as follows:

Dyn.Subj-to-village

'As for the youngest brother, he left and went back to the village crying.'

Red-Dyn.Subj:waddle

'As for my friend, she is singing while waddling.'

Concomitant relations can also be expressed by the occurrence of tako- on the first verb, which usually undergoes reduplication, followed by a second verb in the subjunctive form as in (i)-(ii) below:

⁽i) dhona aidhi tako-tovi-tovi dhoace youngest sibling while-Red-Dyn.NFin:cry Dyn.Subj:leave that Top m-o-valrio.

⁽ii) dhona lili-li 'n tako-oma-omale (female) friend-1S.Gen while-Red-Dyn.NFin:sing that Top nehe-nehenehe.

Other examples extracted from texts illustrating these three types of temporal relations—*cf. before*-clause in (16.3a), *after*-clauses in (16.3b-c) and (past) *when*-clause in (16.3d)—are given below:

- 'iidheme-nai (16.3) a. a-ki-kaava'i-na-dha 'aomo olo ClsNmz-Neg-Dyn.NFin:come-still-3S.Gen Japanese if towards-1PE.Gen toramoro ka ma-kelese dhona'i valrevalre'ae. tangiacae, Dagin Lig Stat.Subj-narrow that road very 'Before the Japanese came, if we went towards Daqin, the roads were very narrow.'
 - b. a-Irepenge-nga-dha (o)poa pataloere
 ClsNmz-Dyn.NFin:finish-already-3S.Gen Dyn.Fin:make completely
 poca'e dhona'i lrenehe.

 Dyn.Subj:embroider that stone
 'When she had finished, the stone was completely embroidered (i.e. covered with designs).'
 - c. a-okela-nga-dha 'adha, mani
 ClsNmz-Dyn.NFin:reach-already-3S.Gen resting area then
 cengele 'aelrenge.
 Dyn.NFin:see flower
 'When he reached the resting area, he saw the flower.'
 - d. "dhona a-alra-li ketekekete 'ina 'aelrenge, that ClsNmz-Dyn.NFin:take-1S.Gen Dyn.Subj:cut this flower o-ka'ac-iae 'olra'a."

 Dyn.Fin-bite-1S.Obl snake "When I cut this flower, the snake bit me."

There are a few points to note regarding (i) the marking of mood in the main clause, (ii) the ordering of the subordinate and main clauses and (iii) the occurrence (or non-occurrence) of an intervening (inter-)clausal element.

While *before*- and *after*-clauses refer to two events occurring in a sequential order, *when*-clauses signal the temporal overlapping/concomitance *in the past* of two events. The fact that temporal relations are different has an incidence on the marking of mood

in the main clause.

Main clauses following a subordinate *before*- or *after*-clause only refer to a "past" (realis), as shown in (16.4a) and (16.5a). To refer to a "future" (irrealis) event, the verb in the subordinate clause must be zero-marked, i.e. it cannot be preceded by the nominalizer **a-** 'when (past)' (16.4b)-(16.5b).

- (16.4) a *a-ki-'acakelae-na-*li *om-iki-*lrao **taipake 'adhidhapae.** ClsNmz-Neg-marry-still-1S.Gen Dyn.Fin-be at-1S.Nom Taipei work 'Before I married, I was working in Taipei.'
 - b **ki-'acakelae-na-li amo-oa-lrao taipake 'adhidhapae.**Neg-marry-still-1S.Gen Dyn.Fin-be at-1S.Nom Taipei work
 'Before I marry, I will go to Taipei to work.'
 - b'.**a-ki-'acakelae-na-*li *amo-*oa-lrao taipake 'adhidhapae. ClsNmz-Neg-marry-still-1S.Gen Dyn.Fin-be at-1S.Nom Taipei work
- (16.5) a. a-lrepenge-nga-dha 'i-angato
 ClsNmz-Dyn.NFin:finish-already-3S.Gen gather-brushwood
 m-o-valrio ana 'avai.
 Dyn.Fin-to-village that female
 'When the woman had finished gathering brushwood, she went back home.'
 - b. *paka-tamako-nga-li*, *amo-*dhaace-lrao.

 Dyn.NFin:finish-Dyn.NFin:smoke-already-1S.Gen 'After I have finished smoking, I will leave.'
 - b'.**a-paka-tamako-nga-li*, *amo-*dhaace-lrao.

 ClsNmz-finish-Dyn.NFin:smoke-already-1S.Gen

 Irr-Dyn.NFin:leave-1S.Nom

The main clause following a subordinate *when*-clause can only refer to a "past" event (realis), whether it is realized as in (16.6a) or unrealized as in (16.6b):

- (16.6) a. ona'i ka-'oponoh-ae a-iki-na-nai that ClsNmz-Dyn.NFin:be at-still-1PE.Gen genuine-Wanshan-genuine "om-iki-nomi ta-se'ese'-ae koli'i" Dvn.Fin-be at-2P.Nom LocNmz-Dyn.NFin:rise-LocNmz lo cengele-n-iname om-i-iname valravalrae. Dyn.Fin-so-1PE.Obl if Dyn.Subj:see-3S.Gen-1PE.Obl outsider(s) 'When we still lived in the old village, when people from other tribes came to see us, they (used to) tell us: "You live in the east.""
 - b. a-kane-li va'oro, ni-'oelre'e-nga-lrao.

 ClsNmz-Dyn.NFin:eat-1S.Gen rice Cntrfct-choke-already-1S.Nom

 'When I was eating rice, I nearly choked.'

As the grammatical contrast between (16.7a) and (16.7b) illustrates, the marking of the main clause as irrealis renders the sentence incorrect because of the temporal conflict between the anchoring of the *when*-clause in the past and the reference to the future of the main clause. A main clause marked as irrealis must be preceded by a conditional *if*-clause introduced by **lo** 'if' as in (16.7c), i.e. there is a distinction between (past) *when*-clauses and (conditional) *if*-clauses in Mantauran.

| (16.7) a. | <i>a-</i> dhaace-li | m-oa | ooma, |
|-----------|--------------------------------------|---------------|-------|
| | ClsNmz-Dyn.NFin:leave-1S.Gen | Dyn.Subj-go | field |
| | <i>o-amece-nga-</i> lrao | 'aodholro'o. | |
| | Dyn.Fin-bring-already1S.Nom | lunch box | |
| | 'When I went to the field, I brought | a lunch box.' | |
| | | | |

| b. | * a-dhaace-li | m-oa | ooma, |
|----|------------------------------|--------------|-------|
| | ClsNmz-Dyn.NFin:leave-1S.Gen | Dyn.Subj-go | field |
| | amo-amece-lrao | 'aodholro'o. | |
| | Irr-Dyn.NFin-bring-1S.Nom | lunch box | |

| c. | lo | dhoace-li | m-oa | ooma, |
|----|---|-----------------------|--------------|-------|
| | if | Dyn.Subj:leave-1S.Gen | Dyn.Subj-go | field |
| | amo-amece-lrao Irr-Dyn.NFin:bring-1S.Nom | | 'aodholro'o. | |
| | | | lunch box | |
| | CTCT | | 1.1. | |

'If I go to the field, I will take a lunch box.'

As shown in the above examples, temporal clauses usually occur in sentence initial position. They can be followed by a main clause without any intervening (inter)clausal element as in (16.8) and (16.9). They can also be followed by the topic marker 'a as in (16.8) or the conjunction **mani** 'then' (16.9):

(16.8) a-topatilai-li sivarange 'a
ClsNmz-Dyn.NFin:start-1S.Gen Dyn.Subj:pregnant Top
ma'ati-kane-kane-lrao 'api-'oo'adh-iae.
Dyn.Fin:a little-Red-Dyn.NFin:eat-1S.Nom like-Dyn.NFin:vomit-1S.Obl
'When I first became pregnant, I would eat very little. I (often) wanted to vomit.'

(16.9) dhona'i a-kaava'i-nga-dha 'aomo, mani that ClsNmz-Dyn.NFin:come-already-3S.Gen Japanese then 'ica'oca'o 'ina vaha-nai 'oponoho alra Dyn.NFin:take Dyn.Subj:learn this language-1PE.Gen Mantauran tali-lrao-lraodho. part of-Red-down(wards) 'When the Japanese came, they (started to) study our language as well as (the languages spoken by the people living in) Pingtung county.'

16.1.2 Conditional/hypothetical clauses 'if'

Conditional/hypothetical clauses refer to events that may occur if the condition stated in the subordinate clause is fulfilled. In Mantauran, conditional/hypothetical clauses are also nominalized clauses: they are introduced by **lo** 'if' (or **alo**, **olo**);⁸⁶ the verb is usually in the subjunctive form and is followed by a genitive pronoun:

(16.10) *lo m-ore-lehe'e-lidha* taka-palra if Dyn.Subj-hold-ritual-3P.Gen with-companion m-i'a-nga dhona a-itina

Dyn.Subj-alike-already that plur-middle-aged woman

ta-ka-oca-(a)e-dha.

LocNmz-Stat.NFin-person-LocNmz-3S.Gen

'If (we) recited the right prayers, then (s/he) could become a real person like her/his parents.'

If the verb following (o)lo 'if' is preceded by a prefix (e.g. the negator ki-), then it occurs in its non-finite form, as shown in (16.11a-b):

(16.11) a. olo dhona'i aidhi pa-'aela-dha Caus-Dyn.NFin:move-3S.Gen youngest sibling that to-dha'ane. mata-po-ae colo build-house Dyn.Fin:certainly-make-certainly Dyn.Subj:kill pig pa-lriho'o 'i cinekelae 'aela-nga... Caus-Dyn.NFin:know villager(s) Dyn.Subj:move-already... 'If (one of the) younger brother(s) built (his own) house, he (would) kill a pig for the house warming to let the villagers know that he had moved.'

b. *olo ki-lriho'o-dha* solate ka if Neg-Dyn.NFin:know-3S.Gen Dyn.Subj:write Neg polringao-ka-dha.

matter-Neg-3S.Gen

'If he did/does not know how to write, it did/does not matter.'

There is neutralization between conditional/hypothetical clauses and habitual temporal clauses, the main distinction lying in the occurrence of a verb marked as realis or irrealis in the main clause. In the first case (realis), the meaning conveyed is habitual, as in (16.12), in the second (irrealis) conditional/hypothetical, as in (6.13).

-

⁸⁶ The semantic differences between **lo**, **alo** and **olo** 'if' require further investigation.

(16.12) a. lo maka-kane-nga-dha mani 'iase palrapalra-dha if Dyn.Subj:finish-eat-already-3S.Gen then Dyn.NFin:call relative-3S.Gen "imia m-o-a kone!" m-ia.

come:Imp Dyn.Subj-go-Imp Dyn.Subj:eat Dyn.Subj-so "When she had finished eating, she would call her relatives and say: "Come and eat!""

b. dhona'i lo dhopele-nai m-alra o'i that if Dyn.Subj:fish by poisoning-1PE.Gen Dyn.Subj-take that ka'ange aka-akame-nai... mani Red-Dyn.NFin:roast-1PE.Nom fish then 'If we had caught fish, we would roast them...'

c. olo m-o-valravalrae-nai, ma-'adhiidhal-iname if Dyn.Subj-to-other village(s)-1PE.Gen Stat.Fin-near:Red-1PE.Obl tongodhae la toladhekae.

Maolin and Tona.

'If we went to other villages, the nearest to us were Maolin and Tona.'

(16.13) a. "Io m-oa-ta dhona, amo-ka-'ete-mita"
if Dyn.Subj-go-1PI.Gen that Irr-Stat.NFin-die-1PI.Nom
mani ia.
then Dyn.NFin:so
"'If we go there, we shall die" they said.'

b. *lo dhoace-li* m-oa ooma, if Dyn.Subj:leave-1S.Gen Dyn.Subj-go field *amo*-amece-lrao 'aodholro'o.

Irr-Dyn.NFin:bring-1S.Nom lunch box 'If I go to the field, I will take a lunch box.'

c. "alo m-oa-ta dhoona'i, alo ovelre-ni ma-dhao acilai, if Dyn.Subj-go-1PI.Gen that if typhoon-3S.Gen Stat.Fin-a lot water amo-dhako'is-imite olodho" mani ia.

Irr-Dyn.NFin:sweep away-1PI.Obl sweep away then Dyn.NFin:so ""If we go there, during the typhoon (season), there (will be) floods and (our village) will be swept away" they said."

Conditional/hypothetical clauses exhibit the same syntactic characteristics as temporal clauses: (i) they usually occur in sentence-initial position; (ii) the occurrence of an intervening (inter)clausal element such as **mani** 'then' or '**a** is optional. Conditional/hypothetical clauses can be schematized as in (16.14a-b):

(16.14) a. Habitual temporal clauses:

 $[lo\ V_{Subj}-Pro_{Gen}]_{Sq}\ (mani'a)\ [V\]S_{p(realis)}$

b. Hypothetical clauses:

 $[lo V_{Subj}-Pro_{Gen}]S_q (mani/a) [amo-V]S_{p(irrealis)}$

Examples of conditional/hypothetical clauses occurring after the main clauses are given in (16.15).

(16.15) a. lo ma-'angenge-nga-dha, ma-alapai lo

f Stat.Subj-dry-already-3S.Gen Stat.Fin-light if

omece-mao po-valrio.

Dyn.Subj:bring-Impers.Gen CausMvt-village

'When (they were dried), they (felt) light(er) when we brought them back to the village.'

b. ...poa-mao po-salodhiri mani po-cihoe-mao

Dyn.Fin-Impers.Nom CausMvt-cradle then CausMvt-net bag-Impers.Nom

lo m-oa-mao ooma...

if Dyn.Subj-go-Impers.Gen field

'We (would) put them in their cradle, then put the cradle in a net bag when we went to the fields.'

Note that two (or more) conditional clauses can be juxtaposed as in (16.16) or coordinated by **mani** as shown in (16.17a-b). The verb following **mani** occurs in its non-finite form, even if it belongs to the conditional clause.

- (16.16) "lo 'oelaa-nga-nomi maava'i lo polra-nomi
 - if Dyn.Subj:again:Emph-already-2P.Gen Dyn.Subj:come if Dyn.Subj:touch-2P.Gen

o ma-ateleke-nga-dha, ma-'ete-nga-lrao" mani

if Stat.Fin-cold-already-3S.Gen Stat.Fin-die-already-1S.Nom then

i-idhe 'adhi-dha.

Dyn.NFin:so-3S.Obl younger sibling-3S.Gen

"If you come again and if it is cold when you touch it (then it means that) I am already dead." he said to his younger brother.'

(16.17) a. lo ma-a'a-mao mani ka-'amadhe-mao

if Stat.Subj-court-Impers.Gen then Stat.NFin-dislike-Impers.Nom *dhona'i a-sava-savare*, *'ini-topongaa'-e* ma-kataotodho'o [...] that plur-Red-young man pretend-cheat-pretend Stat.Subj-doze off

'(In the old days), if we (were) courted by young men we disliked, we (would)

pretend to be dozing off [...]' ('(In the old days), if we (were) courted and we disliked those young men, we

('(In the old days), if we (were) courted and we disliked those young men, we (would) pretend to be dozing off [...]')

b. *lo* to-alake-nai mani ki-ore-lehe'e produce-child-1PE.Gen if then Neg-Dyn.NFin:hold-ritual ki-colo-n-idhe to-ocao lroolai... ka Neg-Dyn.NFin:kill a pig-3S.Gen-3S.Obl Neg produce-person child 'If we had a baby who died before we had been able to recite prayers and kill a pig to make a man out of him...' ('If we had a baby and if we had not made the prayers and killed a pig...')

16.1.3 Counterfactual clauses

Counterfactual clauses, which designate events that might have happened but actually did not, are introduced by la- Pro_{Gen} 'if' followed by a non-finite verb. The verb can be marked as affirmative as in (16.18a) or negative as in (16.18b). In the main clause, the verb is prefixed with the counterfactual prefix ni- and cliticized with a nominative pronoun. There is usually no intervening (inter)clausal element between the subordinate and the main clause.

- (16.18) a. *la*-ni *'ongolo* vavaa, *ni*-ki-omoomo-*lra*-ine.

 if-3S.Gen Dyn.NFin:drink wine Cntrfct-Neg-Dyn.NFin:kiss-1S.Nom-3S.Obl

 'If s/he had drunk wine, I would not have kissed him/her.'
 - b. *la*-ni *ki*-'ongolo vavaa, *ni*-omoomo-*lra*-ine. if-3S.Gen Neg-Dyn.NFin:drink wine Cntrfct-Dyn.NFin:kiss-1S.Nom-3S.Obl 'If s/he had not drunk wine, I would have kissed him/her.'

There are two restrictions to note about the occurrence of bound pronouns after **la** 'if' in the subordinate clause:

- 1. Any pronoun except **-li** '1S.Gen' can cliticize to **la**. The first person genitive pronoun must attach to the verb following **la**. Compare (16.19a) and (16.19b):
- (16.19) a. *la-li cengel-ine dhoona'i...
 if-1S.Gen Dyn.NFin:see-3S.Obl that

 ni-pato'o-nga-lra-ine.
 Cntrfct-Dyn.NFin:tell-already-1S.Nom-3S.Obl
 - b. *la cengele-l-ine* dhoona'i
 if Dyn.NFin:see-1S.Gen-3S.Obl that *ni*-pato'o-nga-lra-ine.
 Cntrfct-Dyn.NFin:tell-already-1S.Nom-3S.Obl
 'If I had seen him/her at that time. I would have told him/her.'

In possessive clauses, -ni '3S.Gen' follows la 'if' and the oblique bound pronoun -iae

'to me' occurs on the existential verb **iki** 'exist' (*cf.* §12.6). Any other pronoun referring to the possessor follows **la**. Compare (16.20a-b):

(16.20) a. *la-ni* ik-*iae* paiso dhoona'i if-3S.Gen Dyn.NFin:exist-1S.Obl money that ni-langai-nga-lrao dha'ane.

Cntrfct-Dyn.NFin:buy-already-1S.Nom house 'If I had had money at that time, I would have bought a house.'

b. *la-nomi* iki paiso dhoona'i if-2P.Gen Dyn.NFin:exist money that ni-langai-nga-nomi dha'ane.

Cntrfct-Dyn.NFin:buy-already-2P.Nom house 'If you had had money at that time, you would have bought a house.'

- 2. The second person singular pronoun following la is -ko not -'o:
- (16.21) a. **la-ko langai dha'ane, ni-ka-lavahe-lra-imia'e.** and-2S.Gen Dyn.NFin:buy house Cntrfct-Stat.NFin-envy-1S.Nom-2S.Obl 'If you had bought a house, I would have envied you.'
 - b. *la-'o langai dha'ane, ni-ka-lavahe-lra-imia'e.
 and-2S.Gen Dyn.NFin:buy house Cntrfct-Stat.Nfin-envy-1S.Nom-2S.Obl

Counterfactual clauses can be schematized as follows:

- (16.22) Counterfactual clauses:
 - a. $[\textbf{la}\text{-Pro}_{Gen} \ (\textbf{ki-})V_{NFin}]_{Sq}$ $[\textbf{ni-V-}(Pro_{Nom})...]S_p$ (except for first person pronoun) b. $[\textbf{la} \ (\textbf{ki-})V_{NFin}\text{-Pro}_{Gen}]_{Sq} \ [\textbf{ni-V-}(Pro_{Nom})...]S_p$ (if first person pronoun)

The following examples provide an illustration of counterfactual clauses, in comparison with conditional *if*- and temporal clauses:

(16.23) a. *la-ni ik-iae* paiso dhoona'i if-3S.Gen Dyn.NFin:exist-1S.Obl money that:Emph *ni*-langai-nga-lrao dha'ane.

Cntrfct-Dyn.NFin:buy-already-1S.Nom house 'If I had had money at that time, I would have bought a house.'

a'. *lo m-iki-nga-iae paiso*, *amo-*langai-lrao if Dyn.Subj-exist-already-1S.Obl money Irr-Dyn.NFin:buy-1S.Nom dha'ane. house

'If I have money, I will buy a house.'

a''. a-iki-nga-iae paiso, o-langai-lrao

ClsNmz-Dyn.NFin:exist-already-1S.Obl money Dyn.Fin:buy-1S.Nom dha'ane.

house

'When (= After) I had money, I bought a house.'

b. *la-ko ka-taadhi'i*, *ni-*oa-lra-imia'e

if-2S.Gen Stat.NFin-good Cntrfct-Dyn.NFin:go-1S.Nom-2S.Obl

'acakelae.

marry

'If you had been good, I would have married you.'

b'. *lo ma-taadhi'i-'o*, *amo-*oa-lra-imia'e 'acakelae. if Stat.Subj-good-2S.Gen Irr-Dyn.NFin:go-1S.Nom-2S.Obl marry

'If you are good, I will marry you.'

c. **la-ni** *ka-esenge* **kipingi-li**, **ni-pa-ka-'angenge-lrao**. if-3S.Gen Stat.NFin-soaked clothes-1S.Gen Cntrfct-Caus-Stat.NFin-dry-1S.Nom

'If my clothes had been soaked, I would have dried them.'

c'. lo *ma-esenge-ni* kipingi-li,

if Stat.Subj-soaked-3S.Gen clothes-1S.Gen

amo-pa-ka-'angenge-lrao.

Cntrfct-Caus-Stat.NFin-dry-1S.Nom

'If my clothes were soaked, I will dry them.'

d. *la-ni ki-kaava'i* 'ina'i 'aomo if-3S.Gen Neg-Dyn.NFin:come this Japanese

m-o-iname 'oponoho, ni-kaodh-iname

Dyn.Subj-go-1PE.Obl Wanshan Cntrfct-Dyn.NFin:not exist-1PE.Obl

ta-sola-solat-ae.

LocNmz-Red-Dyn.NFIn:study-LocNmz

'If the Japanese had not come to Wanshan, we would not have a school.'

d'. *lo ki-kaava'i-dha* 'aomo m-o-iname

if Neg-Dyn.NFin:come-3S.Gen Japanese Dyn.Subj-go-1PE.Obl

'oponoho, amo-kaodh-iname

Wanshan Irr-Dyn.NFin:not exist-1PE.Obl

ta-sola-solat-ae.

LocNmz-Red-Dyn.NFin:study-LocNmz

'If the Japanese do not come to Wanshan, we will not have a school.'

d''. a-ki-kaava'i-na-dha 'aomo m-o-iname

ClsNmz-Neg-Dyn.NFin:come-still-3S.Gen Japanese Dyn.Subj-go-1PE.Obl

'oponoho, o-kaodh-iname ta-sola-solat-ae.

Wanshan Dyn.Fin-not exist-1PE.Obl LocNmz-Red-Dyn.NFin:study-LocNmz

'Before the Japanese came to Wanshan, we did not have a school'

Counterfactual clauses introduced by **la-**Pro_{Gen} 'if' usually occur in sentence-initial position. They must be distinguished from reason clauses (further discussed in section 16.2.2.1) introduced by **la-**Pro_{Gen} 'so that' that follows, rather than precedes, the main clause. Compare (16.23) and (16.24).

(16.24) [...] 'atoloro-lra-iline 'ina'i la-lini mani pi'a then so-1S.Nom-3P.Obl Dyn.Subj:do this so that-3P.Gen la-lini kaamai pa-solate, vaa'i Stat.NFin:self Caus-Dyn.NFin:study so that-3P.Gen Dyn.NFin:give 'ina'i pato'o-to'o a-olrolai, la-ni lriho'o that Dyn.Subj:tell-Red plur-child so that-3S.Gen Dyn.NFin:know la-ni ki-ka-olro vaha-nai 'oponoho. so that-3S.Gen Neg-Stat.NFin-disappear language-1PE.Gen Mantauran '[...] I am therefore (collaborating) on this book so that they [the authors] might teach themselves (our language) to teach (it in turn to our) children so that (the children might) know (our language and) so that it won't disappear.

16.1.4 Concessive clauses

In terms of structure and word order, concessive clauses resemble temporal, conditional/hypothetical and counterfactual clauses in that (i) they usually occur in initial position and (ii) they are nominalized clauses. The subordinate verb—in the affirmative (16.26a-b) or in the negative (16.26c)—is circumfixed by **ni-...-a**. The verb occurring in the main clause can be marked as realis (16.26) or irrealis (16.27). There is usually no intervening (inter)clausal element between the subordinate and the main clause.

Concessive clauses can be schematized as follows:

- $\begin{array}{ccc} \text{(16.25)} & \text{Concessive clauses} \\ & & & & & & & \\ [\textbf{ni-(ki-)V-a-Pro}_{Gen}]_{Sq} & & S_p \end{array}$
- (16.26) a. *ni-pato'o-a-li*CncNmz-Dyn.NFin:tell-CncNmz-1S.Gen Stat.Subj-scold-3S.Obl

 o-sialrala-ka-i ka lalake-li 'aolai.

 Dyn.Fin-hear-Neg-3S.Gen Neg child-1S.Gen male

 'Even if I scold him, my son does not listen.'
 - b. lo ma-taadhi'i-dha dhona 'aolai,
 if Stat.Subj-good-3S.Gen that male
 ni-ka-'amadh-a-dha dhona valrovalro,
 CncNmz-Stat.NFin-dislike-CncNmz-3S.Gen that young woman

o-dholro a-itina a-tamatama ka-mai

Dyn.Fin-can plur-middle-aged woman plur-middle-aged man Stat.NFin-be

poa pa-'acekelae.

Dyn.Subj:make Caus-marry

'If (the elders thought that) the groom was good/kind, they could have them marry even if the girl disliked him.'

c. *ni-ki-dha'olo-a-ni*, ma-lrakas-iae

CncNmz-Neg-Dyn.NFin:rain-CncNmz-3S.Gen Stat.Fin-lazy/dislike-1S.Obl **m-o-latadhe.**

Dyn.Subj-to-outside

'Even if it does not rain, I do not want to go outside.'

(16.27) a. *ni-*iki-*a-*n-iae

CncNmz-Dyn.NFin:exist-CncNmz-3S.Gen-1S.Obl

ta-ka-dhalame amo-ka-'acakelae-ka-li SubjNmz-Stat.NFin-like/love Irr-Neg-marry-Neg-1S.Gen

ka dhoace.

Neg Dyn.Subj:leave

'Even if someone loves me, I will not marry and leave (home).'

b. ni-'i-tipitipi-a-l-imia'e,

CncNmz-Pass-Dyn.NFin:beat-CncNmz-1S.Gen-2S.Obl

amo-iki-lra-imia'e 'asengelae.

Irr-Dyn.NFin:be at-1S.Nom-2S.Obl stick together

'Even if you beat me, I will still stay with you.'

16.1.5 Summary

It has been shown that temporal, conditional/hypothetical, counterfactual and concessive clauses share a number of morphosyntactic and semantic similarities:

- 1. On the morphosyntactic level, they are nominalized sentences which usually occur in sentence-initial position.
- 2. On the semantic level, Mantauran makes a clear distinction between (past) temporal clauses and habitual temporal clauses/hypothetical clauses, i.e. between "factual" vs. "non-factual" clauses.

16.2 Clausal juxtaposition and coordination

There are two major strategies to coordinate clauses in Mantauran: (i) the 'zero strategy' (Payne 1985:25), whereby two clauses are simply juxtaposed (*cf.* §16.2.1), (ii) the use of a specific conjunction or verb to indicate the logical succession of two (or

more) clauses (cf. §16.2.2). A brief summary is given in section 16.2.3.

16.2.1 Juxtaposed clauses: no overt conjunction

Two (or more) clauses can be juxtaposed, with no additional (inter)clausal markers to conjoin them. Each clause includes a verb with specific but distinct indication for person/number and mood/aspect. Consider (16.28a-b):

(16.28) a. m-o-dha'ane dhona 'olra'a, 'aa-ocao-nga, Dyn.Fin-to-house that snake become-person-already toramoro ka ma-taadhi'i, ma-savare. Stat.Subj-good Stat.Fin-young man very Lig 'The snake entered the house and turned into a person. He was a very handsome young man.'

b. toka-kana-kan-ae-nai va'oro, ma-eleme-nai, use for-Red-Dyn.NFin:eat-use for-1PE.Nom rice Stat.Fin-poor-1PE.Nom ki-langai 'adhamai.

Neg-Dyn.NFin:buy side dish

'We are used to/used to eating rice, because we are/were poor and we do/did not buy any dishes.' ('We are used to/used to eating rice. We are/were poor. We do/did not buy any dishes.')

16.2.2 Coordinated clauses: occurrence of an overt conjunction

Two (or more) clauses can be conjoined by different conjunctions or verbs that indicate the logical succession between two (or more) events. These include: **la** to express conjunction (p and q), (cf. §16.2.2.1), **mani** 'then'—which is being replaced by **omi** 'like that'—to convey a sequential relation (temporal or causal) between two events (cf. §16.2.2.2), **alaka**-Pro_{Gen}, **la**-Pro_{Gen} and 'atoloro on the other to express notions of reason and result (cf. §16.2.2.3), **ara'eve~ora'eve** 'but, however' to indicate a contrast (cf. §16.2.2.4) and **paoriki** 'in order to' to refer to a purpose (cf. §16.2.2.5).

16.2.2.1 Coordination with la 'and'

In Mantauran, the conjunction **la** 'and'—which can coordinate two noun phrases (*cf.* §11.1.2.4) and two verb phrases (*cf.* §11.2.2)—is used to conjoin two clauses (16.29). Note that the examples given in (16.29a-b) form a whole paragraph.

(16.29) a. 'ina'i ta-oa-e-nai 'ina tavale'eve'e LocNmz-Dyn.NFin:go-LocNmz-1PE.Gen new Wanshan this this vekenelre 'i toladhekae la ta-ve'e-ve'eve'-ae LocNmz-Red-Dyn.NFin:windy-LocNmz land Maolin and 'ina'i om-i-ine la 'atoloro-nai this Dyn.Fin-so-3S.Obl and so-1S.Nom po-alrace tavale'eve'e m-ia. new Wanshan Dvn.Subj-so give-name 'The land (where) we later moved belongs to Maolin and we (usually) say that this is a windy place; that's the reason why it was called: "the place which is windy."

b. *la* 'ina'i a-oa-nga-nai tavale'eve'e, this ClsNmz-Dyn.NFin:go-already-1PE.Gen new Wanshan and o-lriho'o-ka-nai ka 'ina'i alrace-ni 'ina'i holrolo. Dyn.Fin-know-Neg-1PE.Gen Neg this name-3S.Gen this mountain

'And now that we've moved to the new Wanshan village, we do not know the name of this mountain.'

If the two clauses happen to occur in a sequential order, **la** can also convey a notion of contrast 'but' (p *but* q), as in (16.30a), purpose, as in (16.30b) or result/consequence, as in (16.30c).

- (16.30) a. **o-kane-***na* **ana-lo** *la (a)mo-***padhalro'o dhoace.**Dyn.Fin-eat-still that-plur and Irr-Dyn.NFin:at once 'They are still eating and/but they are going to leave at once.'
 - b. 'ara-kaava'i-a lo 'idha maelre la

 Dyn.Subj:early-come-Imp tomorrow morning and

 (a)mo-pa-ka'a-ka-lromalromale solate.

 Irr-Caus-Rec-Stat.NFin-compete Dyn.Subj:write

 'Come early tomorrow for the written examination.'

 (Lit.: 'Come early tomorrow and you will have a written examination.')
 - c. 'okolodh-iae m-odhokace la 'ini-vahevahe-lrao.
 afraid-1S.Obl Dyn.Subj-step on dirt and cross-bridge-1S.Nom
 'I am afraid to step on dirt, and/so I am walking on the planks that form a bridge.'

The major distinction between the coordination of two verb phrases as opposed to that of two clauses lies in the verbal morphology of the verb following **la**: when two verbs are coordinated by **la**, the second must occur in its non-finite form (16.31a-b). There is no such restriction when two clauses are conjoined by **la**. Compare (16.32) and (16.33).

(16.31) a. om-iki men-a-nae ta-ka-eaea today-beyond-TempNmz SubjNmz-Stat.NFin-one Stat.Fin-exist 'oponoho 'ica'oca'o maava'i ocao m-oa person Dvn.Subj:come Dvn.Subi-go Wanshan Dvn.Subi:learn to'onai 'itovolro la solate. Dvn.Subj:ask and Dyn.NFin:write (any)thing 'One day, there was a person that came to Wanshan to do research.' (Lit.: 'learn everything, ask and write')

b. *om-iki men-a-nae ta-ka-eaea today-beyond-TempNmz Stat.Fin-exist SubjNmz-Stat.NFin-one:Red 'ica'oca'o ocao maava'i m-oa 'oponoho Dvn.Subj:come Dyn.Subj-go Wanshan Dvn.Subi:learn person to'onai 'itovolro la o-solate. Dvn.Subj:ask Dyn.Fin:write (any)thing and

(16.32) **olo** m-o-valravalrae-nai, ma-'adhiidhal-iname DynSubj-to-other village(s)-1PE.Gen Stat.Fin-near:Red-1PE.Obl tongodhae toladhekae. songao mani Tona and Maolin then Dyn.NFin:go Bunun valrisanae la 'n tasololro'o tavangere... Valrisanae and Dyn.NFin:go Tasololro'o **Taitung** 'If we went to other villages, the nearest to us were Maolin and Tona. Then, it was the Bunun village (called) Valrisanae, and (if we) went to Tasololro'o or Taitung...'

(16.33) a. *la* **dhona'i holrolo** *om-*iki **o'i 'adha...** and that mountain Dyn.Fin-exist that resting area 'And in that mountain, there was a resting area...'

b. ...mani tosa-nga-nai la ka
then Dyn.NFin:stop-already-1PE.Nom and Neg
o-poa-ka-dh-iname ka pa-solate...

Dyn.Fin-make-Neg-3S.Gen-1PE.Obl Neg Caus-Dyn.NFin:study
'We would stop (= we graduated) and (they would not) let us study...'

16.2.2.2 Coordination with *mani* 'then'

The coordination of two clauses is also rendered through the occurrence of **mani** 'then' in clause-final or clause-initial position to encode sequential (16.34) and/or causal (16.35) relations. The verb that follows **mani** is in its non-finite form. There seems to be no exception to this rule.

(16.34) a. ona'i lo 'aliki-nga-dha a-alop-ae if from-already-3S.Gen ObjNmz-Dyn.NFin:hunt-ObjNmz that to-dhao, o-poa pa-sialalra koange make-many Dyn.Fin-make Dvn.Subj:fire Caus-Dyn.NFin:hear dhona'i 'oponoho mani lriho'o dhona'i posao, that Dyn.Subj:shoot Dyn.NFin:know that Mantauran then ta-alopo..." 'oponoho "maava'i-nga mani ia. Mantauran Dyn.Fin:come-already SubjNmz-Dyn.NFin:hunt then Dyn.NFin:so 'If they had gone back from hunting and had caught many game animals, they (would) fire to let the villagers hear the shot then they knew the hunters had come (back)...'

- b. lo m-iki-dha a-kane-kan-ae
 if Dyn.Subj-exist-3S.Gen ObjNmz-Red-Dyn.NFin:eat-ObjNmz
 mani oa voa'i la-a-lake-dha...
 then Dyn.NFin:go Dyn.Subj:give child-plur-child-3S.Gen
 'If he had food, then he would give some to his children...'
- (16.35) a. 'ina'i dhakerale alrace-ni o-lriho'o-ka-nai. ka this river name-3S.Gen Neg Dyn.Fin-know-Neg-1PE.Gen to'onai mani poa-nai po-alrace. then Dyn.NFin:make-1PE.Nom anything give-name 'As for the name of this river, we do not know it so we refer to it as we like.' (Lit.: 'we call it any name')
 - b. lo paoli-ni mani poa-ma-ine
 if wrong-3S.Gen then Dyn.NFin:make-Impers.Nom-3S.Obl
 madhipolane m-ia po-alrace.
 Madhipolane Dyn.Subj-so give-name
 'If she did something wrong, then we would call her Madhipolane.'
 - c. ma-takolra valrevalre'ae-nai, mani
 Stat.Fin-bad road-1PE.Gen then
 ara-'ano-'otobai-ta dholro dhoace.

 Dyn.Fin:just-ride-motorcycle-1PI.Gen Dyn.Subj:can Dyn.Subj:leave
 'Our roads are bad so we can just ride motorcycles.'

Although **mani** can be followed by another verb, it must be treated as a conjunction because unlike verbs it never attracts pronouns (*cf.* *mani-lrao *'then-1S.Nom'), aspectual suffixes (*cf.* *mani-nga *'then-already') or negators (*cf.* *mani-ka-i *'then-Neg-3S.Gen') and it must be followed by a non-finite verb. The examples given in (16.36a-d) form a whole paragraph. Clauses are numbered as C_1 , C_2 , C_3 etc...to show the discourse flow:

(16.36) a. [dhona'i a-kaava'i-nga-dha 'aomo]C1 that ClsNmz-Dyn.NFin:come-already-3S.Gen Japanese mani 'ica'oca'o alra 'ina vaha-nai then Dvn.NFin:take Dvn.Subi:learn this language-1PE.Gen 'oponoho la tali-lrao-lraodho.]_{C2} Mantauran belong to-Red-below and 'When the Japanese came, they started to learn our language as well as (the languages spoken by the people living in) Pingtung county.'

b. [mani apa-rama-ramao]_{C3} Ø poa Caus:Rec-Red-Dyn.NFin:identical then Dyn.NFin:make [kapa-ka-dhao-dhao ta-'inilrao 'n Dyn.NFin:continuously-Stat.NFin-Red-many SubjNmz-Dvn.NFin:resemble tali-drekai 'ina vaha-nai.]_{C4} belong to-Rukai language-1PE.Gen this 'Then they compared (our) languages and (discovered that) they were many resemblances between Rukai and our (own) language.'

c. mani [alr-iname pato'o]_{C5}:
then Dyn.NFin:take-1PE.Obl Dyn.Subj:tell
["ma'-itolo-tololro-nomi" m-ia.]_{C6}
Dyn.Fin:Rec-Red-origin-2P.Nom Dyn.Subj-so
'Then they told us: "You share the same ancestry".'

d. mani [lriho'o-nai 'ina 'oponoho]_{C7}:
then Dyn.NFin:know-1PE.Nom this Mantauran
["ka-i'a-ta aanai"]_{C8} [(o)m-ia-nai.]_{C9}
in fact-Dyn.NFin:(a)like-1PE.Gen this Dyn.Fin-so-1PE.Nom
'(That's how) we Mantauran learnt that actually we were (Rukai).'

Recall that unlike **mani** 'then', **omi** does not have any lexical content (§15.2.3). It occurs in any position, not just in sentence-initial or sentence-final position. When it occurs in final position, it serves to link two clauses, as in (16.37).

(16.37) a. mani omi: "ai! 'i-nga'ato 'ina ita then Dvn.NFin:so this like that Excl 1PI.Top gather-brushwood 'a lamae" Ø ia omi. voc:(female) friend Ø Dyn.NFin:so "(One of them) said: "Ayayay! My friend, let's go gather brushwood."

b. "kani akoa-'o ivokoo?" Ø i-idhe.

why matter-2S.Gen (male) friend Ø Dyn.NFin:so-3S.Obl

"How do you feel, (my) friend?" he (asked) him.'

c. "avase-ni o-'ange'ang-iae vahange-li" 'a
a pity-3S.Gen Dyn.Fin-hurt-1S.Obl belly-1S.Gen Top
'ini-'ange'ang-ae omi-idhe omi...
pretend-Dyn.NFin:hurt-pretend like that-3S.Obl like that
""What a pity (that) my stomach is hurting" he said pretending to suffer.'

16.2.2.3 Reason and result clauses

Reason and result clauses can be introduced by different markers, viz. **alaka**-Pro_{Gen} 'because', '**atoloro**-Pro_{Nom} 'so, therefore' and **la**-Pro_{Gen} 'so that'. These three types of markers (and the clauses they introduce) are examined in turn below.

The ambiguous status of reason clauses introduced by **alaka-**Pro_{Gen}⁸⁷ 'because' as cosubordinate or coordinate clauses is due to the distribution of this marker. Note that **alaka-**Pro_{Gen} can occur before or after the main clause, but:

(i) When **alaka-** 'because' occurs in sentence-initial position as in (16.38), it is followed by a genitive pronoun that refers to the subject of the sentence and by a verb in the subjunctive form. The sequence **alaka-** $Pro_{Gen}+V_{Subj}$ thus forms an SVC and is in a relation of cosubordination⁸⁸ (Olson 1981, Foley & Van Valin 1984, Van Valin 2005) with the main clause

(16.38) a. mani 'ina'i: tamatama then Dyn.NFin:so middle-aged man this "alaka-nai ma-a-rilai, laka o-pi'a-mi'-iname because-1PE.Gen Stat.Subj-all-slim because Dyn.Fin-do-2S.Nom-1PE.Obl 'olra'a po'ivo icivi.... Dyn.Subj:mix snake Dyn.Subj:bake in stones Lit.: 'The middle-aged man said: "(the reason why) we are all getting slim (is) because you have done that to us...."

b. *alaka-li* m-oa cengel-ine asavasavare-li,
because-1S.Gen Dyn.Subj-go Dyn.Subj:see-3S.Gen boyfriend-1S.Gen
mani valrovalroe-lrao.
then Dyn.NFin:dress well-1S.Nom
'I am going to see my boyfriend, so I dress well.'

The formation of alaka- has become opaque, but it seems — based on dialectal comparison — that it represents the fusion of la 'and' and the ligature ka.

Cosubordination shares morphosyntactic similarities with both coordinate and subordinate structures. The relationship between the two clauses (main and dependent) resembles that of a coordinate sentence, but the verb following **alaka-** is marked as subjunctive, as in subordinate adverbial clauses introduced by **lo** 'if'.

(ii) When it occurs mid-sentence as in (16.39), it is followed by a 'dummy' third person pronoun and by a verb in its finite form (to which is attached a nominative bound pronoun referring to the subject of the sentence). The two sentences are in a relation of co-ranking rather than subordination.

(16.39) a. **toramoro-nga-nai ka ma-rikoco** *alaka-i* very-already-1PE.Nom Lig Stat.Subj-busy because-3S.Gen **to-dha'ane-***nai*...

build-house-1PE.Nom

'We are very busy because we build houses...'

b. la 'ina'i ta-oa-(a)e-nai 'ina'i this LocNmz-Dyn.NFin:go-LocNmz-1PE.Gen and this tavale'eve'e, o-kaodh-iname lehe'e, alaka-i new Wanshan Dyn.Fin-not exist-1PE.Obl ritual because-3S.Gen o-kaodh-iname vekenelre ta-oa Dyn.Fin-not exist-1PE.Obl land SubjNmz-Dyn.NFin:go m-ore-lehe'e.

Dyn.Subj-hold-ritual

were narrow.'

'(Since) we've moved to the new Wanshan village, we've held no more rituals because we do not have any place to perform our ceremonies.'

c. 'okolodh-iname alaka-i o-lriho'o-ka-nai ka
afraid-1PE.Obl because-3S.Gen Dyn.Fin-know-Neg-1PE.Gen Neg
'aomo vaha.

Japanese language
'We were afraid because we did not understand the Japanese language.'

d. ma-dhalremedheme ana alaka-dha ka-dha'an-ae-nai, Stat.Fin-dark that genuine-house-genuine-1PE.Gen because-3S.Gen ma-kelese ta'avangae la 'n aasae. dormer window Stat.Fin-narrow window and 'Our traditional houses were very dark because the windows and the dormer window

The two structures of reason clauses (*cf.* cosubordination as opposed to coordination) can be schematized as follows:

b. Reason clauses—coordinate structure $[V...]S_p \qquad \qquad [\textbf{alaka-Pro}_{Gen(dummv)} \ V_{Fin}\textbf{-Pro}_{Nom}]S_p$

The status of **la-**Pro_{Gen} is also ambiguous. It translates as 'if' and introduces counterfactual (adverbial) clauses when it occurs in the first part of the complex sentence as in (16.41), (§16.1.3). It translates as 'so that' and introduces result clauses when it appears in the second part of the complex sentence, as in (16.42). There is otherwise no distinction between the morphosyntactic behaviour of **la-**Pro_{Gen}: it is usually followed by a non-finite verb; the second person genitive pronoun is **-ko** (and not **-'0**).

- (16.41) *la*-ni '*ongolo* vavaa, *ni*-ki-omoomo-*lra*-ine.

 if-3S.Gen Dyn.NFin:drink wine Cntrfct-Neg-Dyn.NFin:kiss-1S.Nom-3S.Obl

 'If s/he had drunk wine, I would not have kissed him/her.'
- (16.42) a. 'edhe'edhek-a 'asika'olo la-ko 'i-paiso!

 Dyn.Subj:diligently-Imp work so that-2S.Gen get-money
 'Work diligently and you will earn money!'
 - b. m-o-a maavanao, la-ko 'ara-'apece,
 Dyn.Subj-go-Imp Dyn.Subj:bathe if-2S.Gen early-Dyn.NFin:sleep
 la-ko 'ara-'omaca, la-ko ka-somikace.
 if-2S.Gen early-Dyn.NFin:wake up if-2S.Gen Stat.NFin-healthy
 'Go take a shower, sleep early, rise early and you will feel refreshed.'
 - c. dhona 'olra'a 'ina'i: "lo mani that snake then Dyn.NFin:so this if m-iki-dh-imia'e lalake valrovalro, vo'alr-iae Dyn.Subj-exist-3S.Gen-2S.Obl child young woman Dyn.Subj:give-1S.Obl pa-'acakelae, la-ni ki-'ange'ang-imia'e Caus-marry so that-3S.Gen Neg-Dyn.NFin:hurt-2S.Obl ta-ka'ac-ae-l-imi'ae" mani LocNmz-Dyn.NFin:bite-LocNmz-1S.Gen-2S.Obl then Dyn.NFin:so dhona 'olra'a. that snake Lit.: 'That snake said: "If you have daughters, give me (one) to marry so that the

place where I bit you does not hurt you.", the snake said.'

Counterfactual vs. result clauses introduced by la-Pro_{Gen} can be schematized as in (16.43):

(16.43) Counterfactual clauses:

```
a. [\mathbf{la}\text{-Pro}_{Gen} \ (\mathbf{ki}\text{-})V_{NFin}]_{Sq} [\mathbf{ni}\text{-}V\text{-}(Pro_{Nom})\dots]S_p \ (except \ for \ first \ person \ pronoun)
```

b. [la $(ki-)V_{NFin}-Pro_{Gen}]_{Sq}$ [ni-V- $(Pro_{Nom})...$] S_p (if first person pronoun)

Result clauses:

```
a. [V-(Pro_{Nom})...]S_p[la-Pro_{Gen} (ki-)V_{NFin}]_{Sq} (except for first person pronoun)
b. [V-(Pro_{Nom})...]S_p[la (ki-)V_{NFin}-Pro_{Gen}]_{Sq} (if first person pronoun)
```

Result clauses can also be introduced by 'atoloro-Pro_{Nom} 'so, therefore' (16.44):

- (16.44) a. **o-kelrakelrang-ine ina-ni** *'atoloro* **tovi ana lroolai.**Dyn.Fin-beat-3S.Obl mother-3S.Gen so Dyn.Subj-cry that child 'The mother beat(s) the child so he crie(d/s).'
 - b. la ta-ve'e-ve'eve'-ae 'ina om-i-ine, la 'atoloro-nai and LocNmz-Red-windy-LocNmz this Dyn.Fin-so-3S.Obl and so-1PE.Nom po-alrace tavale'eve'e m-ia.

 give-name Tavale'eve'e Dyn.Subj-so

 'We say that it is very windy here, so we called (this place) Tavale'eve'e.'

'atoloro can be treated as a verb as it can attract nominative and oblique pronouns (16.45a-b)—rather than genitive pronouns (as oppposed to to'a-tolor-ae which functions as a derived nominal followed by genitive pronouns)—and aspectual markers such as -nga 'already' as in (16.45c):

- (16.45) a. mani 'atoloro-Ira-ine pi'a 'ina'i
 then so-1S.Nom-3S.Obl Dyn.Subj:do this
 la-ni ki-ka-'ino dhipolo.
 so that-3S.Gen Neg-Stat.NFin-embarrassed Dhipolo
 'I am therefore doing this so that Dhipolo is not embarrassed.'
 - b. ma-vo'oko 'atolor-ine ma-dhiliange maca-ni.
 Stat.Fin-drunk so-3S.Obl Stat.Fin-red eye-3S.Gen
 'He is drunk so his eyes are red.'
 - c. ...'atoloro-nga-nai ki-cengele-nga-nai ka
 ...so-already-1PE.Nom Neg-Dyn.NFin:see-already-1PE.Nom Lig
 toramoro la-a-lake-nai.
 very child-plur-child-1PE.Gen
 '...so we do not see our children regularly'

16.2.2.4 Contrast clauses

Contrast clauses contain the verb **ara'eve~ora'eve** 'but, however, on the other hand'—the contrast between these two forms is ill-understood—followed by a verb in its finite form as shown in (16.46). Although **ara'eve~ora'eve** is treated as verb, it never co-occurs with any pronoun in our corpus. Usually, it is followed by a pause as in

(16.47), or by a conjunction, e.g. **la** 'and' in (16.46a) and **lo** 'if' in (16.46b), and should perhaps be treated as a discourse connector.

(16.46) a. *ara'eve ma-taadhi'i* toramoro. but Stat.Fin-good very 'But it is/was good.'

b. ara'eve 'i ka-taadhia'-e-ni ma-melre'e
but Stat.NFin-good-ObjNmz-3S.Gen Stat.Fin-cheap
toramoro paiso.
very money

'But its advantage is that it is very cheap.'

- (16.47) a. *ara'eve la o-kane*-ka-i ka iki 'i sakovo.

 but and Dyn.Fin-eat-Neg-3S.Gen Neg Dyn.Subj:be at men's house 'But they did not eat in the men's house.'
 - b. lo 'i-ra'opo-dha 'a-pa-ka-'ete-'ete if Pass-Dyn.NFin:make an injection-3S.Gen InstNmz-Caus-Stat.NFin-die-Red mani 'i-vorovoro-dha o-dholro-ka-nai ka Pass-Dyn.NFin:operate-3S.Gen Dyn.Fin-can-Neg-1PE.Gen Neg then 'ini-ka-ka-ma-mai pi'a [....] ara'eve lo if self-Red-Stat.NFin-Red-be Dyn.Subj:do but ma-lradhi'i-ng-idhe dhona'i

Stat.Fin-heal-already-3S.Obl that

ta-cikip-ae-n-idhe (o)m-alra-nga-nai

LocNmz-Dyn.NFin:sew-LocNmz-3S.Gen-3S.Obl Dyn.Fin-take-already-1PE.Nom

'ini-ka-ka-ma-mai 'o-cikipi.

self-Red-Stat.NFin-Red-be take off-Dyn.NFin:sew

'If (we) had to give (him) an anaesthetic and operate, then we could not do it ourselves; [...] but, if the wound had healed and (we had to) remove the stitches, then we could do it by ourselves.'

16.2.2.5 Purpose clauses

Purpose clauses are introduced by the verb **paoriki** 'in order to' and usually precede the main clause. The occurrence of **mani** 'then' is optional.

(16.48) a. paoriki-Irao kiame, (mani) amo-dhaace-Irao m-oa in order to-1S.Nom reimburse loan (then) Irr-leave-1S.Nom Dyn.Subj-go pakisa 'asika'olo. plains work 'In order to reimburse (my) loan, I will go to the plains to work.'

b. paorikik-iline in order to:Red-3P.Obl this-plur SubjNmz-Irr-Dyn.NFin:go 'i-dho'oko caha'e.
 Pass-Dyn.NFin:press (with a finger/seal) chief/official 'They are (doing this) in order to be elected as chiefs/officials.'

16.2.3 Summary

Mantauran exhibits two major strategies to coordinate two (or more) clauses: (i) the 'zero strategy' and (ii) the use of a specific conjunction or verb to indicate the logical succession of two (or more) clauses.

Chapter 17: Conclusion

This grammar provides an in-depth study of the Mantauran dialect of Rukai, as spoken in Wanshan (Maolin Township, Kaohsiung) through the late XX^{th} century and earlier XXI^{st} century based on a large corpus that includes folktales and narratives as well as vocabulary and elicited sentences.

The work is not circumscribed in any formal theory, as I personally totally agree with Dixon (1997:144) when he states that: "The most important task in linguistics today—indeed, the only really important task—is to get out in the field and describe languages, while this can still be done. Self admiration in the looking glass of formalist theory can wait; that will always be possible."

Nonetheless, it is hoped that the grammar will prove to be useful not only to the Rukai people but also to Formosanists, Austronesianists, typologists and linguists in general.

Appendix 1: List of Affixes in Mantauran (Rukai)

All the Mantauran affixes recovered are listed below. They appear in an alphatetical order and are further illustrated with examples. Reference to sections where some of these affixes are discussed in more detail is also mentioned. This list draws on earlier work by Zeitoun & Lin (2003) but has been revised and corrected; new affixes have been recovered and some of the meanings that were opaque have been elucidated.

1) a- 'when'—used to form clausal nominalization (cf. §7.1.5 and §16.1.1).

```
a-kane'when...ate'<</th>o-kane'eat'a-kaava'i'when...came'<</th>maava'i'come'a-ka-lrapa'a'when...hot'<</th>ma-lrapa'a'hot'a-ka-valrovalro'when a young woman'<</th>ma-valrovalro'be a young woman'
```

2) **a**—used to form action/state nominalization (*cf.* §7.1.1).

3) **a-** 'plural'—attaches to common human nouns, including derived nominals (*cf.* §5.4.2).

```
a-valrovalro 'young women'< valrovalro 'young woman'</th>a-tamatama 'middle-aged men'< tamatama 'middle-aged man'</th>a-sava-savare 'young men'< savare 'young man'</th>ta-a-'acekelae-nga 'those who were married'< 'acekelae 'marry'</th>ta-ka-a-rodhange 'those who are old, old persons'< ma-rodhange 'old'</th>a-ka-a-valrovalro 'as young women'< ma-valrovalro 'be a young woman'</th>
```

4) **a-** 'plural'—occurs on stative and denominal verb/predicates to refer to a plurality of participants, as an equivalent to **makini-...-ae** 'all' (*cf.* §6.6.1 and §6.6.3).

```
ma-a-vo'o-vo'oko 'be all drunk' < ma-vo'oko 'be drunk'
ma-a-sii-sisihi 'be all torn' < ma-sisihi (~ ma-sisiri) 'be torn'
ma-a-vahe-vahe'e 'be all tired' < ma-vahe'e 'be tired'
ma-a-sava-savare 'be all young men' < savare 'young man'
```

5) -a 'beyond (in time or space)'—occurs with derived nominals (cf. §5.8):

```
'house'
    dha'an-a-nae '(one) household'
                                                         dha'ane
                    '(one) day'
                                                                           'now, today'
    men-a-nae
                                                         mene
6) -a 'irrealis'—attaches to nominalized verbs (cf. §7.1.3.2 and §13.1.2):
                                '(will) drink'
                                                                           'drink'
    'ongol-a(-Pro<sub>Gen</sub>)
                                                         o-'ongolo
    dhaac-a~dhoac-a(-Pro<sub>Gen</sub>)
                                '(will) leave'
                                                     <
                                                         o-dhaace
                                                                           'leave'
    kane-a~kon-a(-Pro<sub>Gen</sub>)
                                'will eat'
                                                         o-kane
                                                                           'eat'
7) -a 'imperative' (cf. §6.4.1):
    kon-a!
                     'Eat!'
                                                         o-kane
                                                                           'eat'
                     'Drink!'
                                                                           'drink'
    'ongol-a!
                                                         o-'ongolo
    tipitip-a!
                     'Slap, beat!'
                                                         o-tipitipi
                                                                           'slap, beat'
    maava'i-a!
                     'Come!'
                                                         maava'i
                                                                           'come'
    maavanalr-a!
                     'Take a bath!'
                                                         maavanao
                                                                           'take a bath, bathe'
    to-dhao-a!
                     'More!'
                                                         to-dhao
                                                                           'make many'
    to-alalak-a!
                     'Give birth to more children!'
                                                    <
                                                         to-lalake
                                                                           'give birth'
    maraveraver-a 'Be happy!'
                                                         maraveravere
                                                                          '(be) happy'
8) -ae—used to form state nominalization (cf. §7.1.1).
    ca'em-ae
                 'illness'
                                                         ma-ca'eme
                                                                           'be ill'
                                                                           'like/love'
    dhalam-ae 'affection, love'
                                                         ma-dhalame
                 'business'
                                                         ma-rikoco
                                                                           'be busy'
    rikoc-ae
                                                     <
                 'badness, evilness'
                                                                           'be bad'
    takolr-ae
                                                         ma-takolra
9) a-...-ae (allomorph: ...-ae)—used to form objective nominalization (cf. §7.1.3.2).
    a-amec-ae
                     '(which is) brought'
                                                     <
                                                         amece
                                                                           'bring'
    a-visa-visar-ae
                     '(which is) damaged'
                                                     <
                                                         o-visare
                                                                           'damage'
    a-kan-ae
                      '(which is) eaten'
                                                         o-kane
                                                                           'eat'
    ka-dhalam-ae
                     '(which/who is) liked/loved'
                                                         ma-dhalame
                                                                           'like/love'
10) a-...-ae (allomorph: ...-ae)—used in negative imperative (cf. §6.5.3).
                       'don't damage!'
    a-visa-visar-ae
                                                         o-visare
                                                                           'damage'
                                                                           'eat'
    a-kan-ae
                       'don't eat!'
                                                         o-kane
    ka-dhalam-ae
                       'don't like/love!'
                                                                           'like/love'
                                                         ma-dhalame
```

ma-raveravere 'be happy'

ka-raveraver-ae 'don't be happy!'

11) **amo-** 'will'—is used to express irrealis (cf. §6.1.3.2):

```
amo-dhaace'will go'< o-dhaace</th>'go'amo-paia'will go through'< maia</th>'go, pass through'amo-ka-vale'eve'e'will be windy'< ma-vale'eve'e</th>'be windy'
```

12) **-ane** (meaning unknown) is a suffix of restricted usage—occurs on one dynamic and a few stative verb roots and is used to insult someone (*cf.* §6.8.3).

```
'olrong-ane'stupid!'< ma-'olrongo</th>'(be) stupid'ponga'-ane'liar!'< ma-ponga'a</th>'lie, cheat'vo'ok-ane'drunkard!'< ma-vo'oko</th>'(be) drunk'
```

13) -a-nga 'imperative'—used for (mild) request (cf. §6.4.2).

```
kon-a-nga 'Eat (please)!' < o-kane 'eat'
to-dhao-a-nga 'More (please)!' < to-dhao 'make many'
```

14) **apaa-** 'reciprocal causative'—attaches to dynamic verbs (cf. §8.1.4):

```
apaa-ke'ete
                   'cut in half'
                                                  o-ke'ete
                                                                'cut'
                   'reconcile'
apaa-'oilri
                                                  'oilri
                                                                'return'
apaa-poa
                   'put together'
                                                  o-poa
                                                                'make, do, put'
apaa-dhe'enge
                   'introduce'
                                                  o-dhe'enge
                                                                'meet'
```

15) **apano-** 'like to, prone to, have a tendency to'—attaches to dynamic verb roots and derived nominals (if the verb is stative) (*cf.* §6.8.2).

```
apano-kane 'like eating' < o-kane 'eat' 
apano-ca'em-ae 'prone to be ill' < ma-ca'eme 'be ill'
```

16) apa'a- 'reciprocal causative'—attaches to stative verbs (cf. §8.1.4):

```
apa'a-ka-dhalame 'make...like/love each other' < ma'a-ka-dhalame 'like, love each other' apa'a-ka-sekelre 'make... angry at each other' < ma'a-ka-sekelre 'be angry at each other' apa'a-ka-'amadhe 'make...dislike each other' < ma'a-ka-'amadhe 'dislike each other'
```

17) **apa'ohi-** 'split (causative form)'—co-occurs with numerals and the stative verb root **-maidhai** 'many' (*cf.* §9.2.6).

```
apa'ohi-dho'a 'make split in two' < -dho'a 'two'
apa'ohi-'epate 'make split in four' < -'epate 'four'
apa'ohi-maidhai 'make split in many (parts)' < -maidhai 'many'
```

18) **-ci** 'snivel'—prefix of very restricted usage, usually used as a reprimand towards children. It occurs with only one verb, *cf.* **tovi** 'cry' and one proper name, *cf.*, **leeve**.

```
tovi-ci 'snivelling (child)' < tovi 'cry' 
livici 'snivelling Leeve' < leeve 'Leeve'
```

When it attaches to **tovi** 'cry', **-ci** can further appear in combination with **-ae** and **-ane**:

```
tovi-c-ae 'snivelling (child)'
tovi-c-ane 'snivelling (child)'
```

19) **dh-** 'invisible'—prefix of very restricted usage, which indicates non-visibility on pronouns, as opposed to **n-** which marks visibility (*cf.* §10.1.1.1).

```
-dh-a 'his/hers [-vis]' ~ -l-i-dh-a 'their [-vis]' 
-i-dh-e 'him/her [-vis]' ~ -i-l-idh-e 'them [-vis]'
```

20) **i-** 'at'—locative prefix used as a verbalizer (cf. §7.2.1):

```
i-valrio
             'rest' (Lit.: 'be in the village')
                                                     valrio
                                                               'village'
i-aleve
             'be below'
                                              <
                                                               'below'
                                                     aleve
             'be down(wards)'
                                              <
                                                     lraodho 'down(wards)'
i-lraodho
             'be outside'
i-latadhe
                                                     latadhe 'outside'
```

21) -i 'irrealis'—attaches to nominalized verbs; it is much less productive than the irrealis prefix -a (§7.1.3.2 and §13.1.2):

22) **-i-...-e**—marking of the oblique case on personal and impersonal pronouns (*cf.* §10.1.1).

```
-i-mia'-e 'you'

-i-dh-e 'him/her (-vis)'

-i-ma-e '(some)one'
```

23) -ka 'predicative negation'—always followed by a genitive pronoun (cf. §6.5.1).

```
ka o-kane-ka-li 'I did not eat.' < o-kane 'eat' 
ka o-'ongolo-ka-i 'He did not drink.' < o-'ongolo 'drink'
```

24) **ka-** 'in fact, indeed, actually'—the verb it attaches to is always followed by a genitive pronoun (*cf.* §10.1.1.4 and §13.2).

```
ka-kaava'i-'o 'Indeed, you have come.' < maava'i 'come' ka-lrakase-li 'In fact, I dislike/am lazy.' < ma-lrakase 'dislike, be lazy'
```

25) **ka-...-ae** 'genuine, original, real'—attaches to nouns (cf. §5.8):

26) **kala-...-ae** 'temporal nominalization'—attaches to both verbal and nominal bases (cf. §7.1.3.6 and §7.1.4.2).

```
kala-kecelr-ae
                'winter'
                                                 ma-kecelre
                                                              'cold'
kala-lrapa'ae
                'summer'
                                           <
                                                 ma-lrapa'a
                                                              'hot'
                                           <
                                                 'aomo
kala-'aom-ae
                'Japanese occupation'
                                                               'Japanese'
kala-pahalr-ae 'rice harvest'
                                                 pahai
                                                               'rice'
```

27) **kapa~kama-** 'continuously'—attaches to verbs (*cf.* §3.3.1):

```
kapa-to(o)vi ~ kama-to(o)vi 'cry continuously' < o-tovi 'cry' kapa-'o(o)ngolo ~ kama-'o(o)ngolo 'drink continuously' < o-'ongolo 'drink'
```

28) **kapa...-nga** 'all, every'—attaches to nouns (cf. §5.5):

```
kapa-lrana-nga'all the streams'<</th>lrana'stream'kapa-dha'ane-nga'all the houses'<</th>dha'ane'house'kapa-a-valrovalro-nga'all the young women'<</th>valrovalro'young woman'
```

29) **ki-** 'modal negation'—attaches to verbs and syntactically derived nominals (*cf.* §6.5.2):

```
ki-kane'do not (want to) eat'< o-kane</th>'eat'ki-kaava'i'do not (want to) come'< maava'i</th>'come'ki-tipititi'do not (want to) slap/beat'< o-tipitipi</th>'slap, beat'
```

30) **ki-...-ae** 'whose'—expresses possession through nominalization and attaches to common nouns in interrogative sentences (*cf.* §13.1.2.1).

```
ki-tolropong-ae 'whose hat?' < tolropongo 'hat' 
ki-lalak-ae 'whose child?' < lalake 'child' 
ki-va'or-ae 'whose rice?' < va'oro 'rice'
```

31) **k<in>-a-...-ae-** 'more and more'—attaches to dynamic and stative verbs to express a comparative degree (*cf.* §6.7.2.2).

32) **la-** 'plural'—attaches to non-common nouns (including kin terms, family names, derived nominals that constitute insults) as well as personal pronouns (*cf.* §5.4 and §10.1.1.1).

```
l-oomo
               'grandparents'
                                            omo-
                                                         'grandparent'
               '(male) friends'
                                                         'friend'
la-'ivoko
                                      <
                                            ivoko-
la-kadhaalae 'household name'
                                            kadhaalae
                                                         'household name'
-l-i-ni
               'their'
                                            -ni
                                                         'his/her'
```

33) **la-ma'a-** 'reciprocal' — expresses a converse relationship (*cf.* §5.6.2). In co-occurrence with a base that is not reduplicated, **la-ma'a-** marks a 'dual' reciprocal (two persons are involved), e.g. **la-ma'a-tama** 'father and child (daughter or son)'; when followed by a reduplicated base, e.g. **la-ma'a-tama-tama** 'father and children', it indicates a plural reciprocal (three persons at least involved).

```
la-ma'a-tomo 'grandparent and grandchild' | comparent and grandchildren' | comparent and grandchild' | comparent and grandchildren' | c
```

34) **-lo** 'plural'—attaches only to demonstrative pronouns (cf. §10.1.3).

```
'ina-lo 'these, they' < 'ina 'this, s/he' dhona-lo 'those, they' < dhona 'that, they'
```

35) **m**-—attaches to dynamic (finite and subjunctive) verbs and alternates with **k**- in its non-finite form (*cf.* §6.1.2).

```
maava'i ~ kaava'i 'come'
```

36) **m**-—attaches to dynamic (finite and subjunctive) verbs and alternates with **p**- in non-finite forms (*cf.* §6.1.2).

```
'bathe'
maavanao
                        paavanao
maaki
                        paaki
                                       '(go) to'
mahadhaolo
                        pahadhaolo
                                       'directly'
malimeemece
                        palimeemece
                                       'close one's eves'
                        paramao
                                       'resemble, be identical'
maramao
masilrio
                                       'gesture back and forth'
                        pasilrio
```

37) **m**-—attaches to verbal roots (finite and subjunctive forms) and alternates with \emptyset in its non-finite form (*cf.* §6.1.2).

```
'draw water'
                                         'draw water'
m-o'alro
                                o'alro
m-odhipi 'alive'
                          <
                                odhipi
                                         'alive'
                          <
                                okela
                                         'reach'
m-okela
           'reach'
m-olekate 'enough'
                          <
                                olekate 'enough'
```

38) **ma**—attaches to stative (finite and subjunctive) verbs and alternates with **ka**- in non-finite forms (*cf.* §6.1.2).

```
ma-kocingai
                'be difficult, expensive'
                                                  -kocingai
                                                               'difficult, expensive'
ma-olripi
                'disappear'
                                            <
                                                  -olripi
                                                               'disappear'
ma-rilai
                'be slim'
                                            <
                                                  -rilai
                                                               'slim'
ma-'adhidhali 'be near'
                                            <
                                                  -'adhidhali 'near'
ma-rave
                'be wicked'
                                            <
                                                  -rave
                                                               'wicked'
                'be embarrassed'
ma-'ino
                                                  -'ino
                                                               'embarrassed'
```

It also attaches to bound numeral forms to express 'a number of' (*cf.* §9.2.1), and to denominal verbs (*cf.* §7.2.3.1).

```
ma-dho'a 'be two' < -dho'a 'two'
ma-valrovalro 'be a young woman' < valrovalro 'young woman'
```

39) **ma-...-le**—attaches to bound numeral forms to form 'tens' (cf. §9.1.2). The derived base is usually preceded by the stative marker **ma-**, though it can also be preceded by

any other numeral affix.

```
ma-ma-nge-le 'ten' < ma-nge-le 'ten'
ma-ma-tolro-lo 'thirty' < tolro 'three'
ma-ma-lrima-le 'fifty' < lrima 'five'
```

40) **ma-Ca-** (where Ca- refers to the reduplication of the first consonant (if) any followed by -a)—attaches to dynamic (finite and subjunctive) verbs to express reciprocity and alternates with **pa-Ca-** in non-finite forms (*cf.* §8.4.1). It is not as productive as the prefix **maa-**.

```
ma-ra-raa'e 'snatch from each other' < o-raa'e 'snatch'
```

41) **maa**—attaches to dynamic (finite and subjunctive) verbs to express reciprocity; it alternates with **paa** in non-finite forms (*cf.* §8.4.2). **maa**— is always followed by a non-reduplicated base ('dual' reciprocal); if followed by a reduplicated base ('plural' reciprocal), it has an allomorph, *cf.* **ma**—.

```
maa-cengele'see each other'< o-cengele</th>'see'maa-pana'shoot at each other'< o-pana</th>'shoot'ma-pana-pana'shoot at one another'< o-pana</th>'shoot'
```

42) maa-...-e (~ paa-...-e)—represents the combination of the prefix maa- (dual reciprocal) and the suffix -e (meaning unknown). maa-...-e is used exclusively with -dho'a 'two'. If the root is reduplicated, then the sequence ma-dho'a-dho'a-e designates 'three (or more) groups of two persons.' The other two numerals that can be used in this construction are -tolro 'three' and -'epate 'four' in co-occurrence with the suffix -e (cf. §9.1.2.4.1).

```
maa-dhoa'-e 'be two working or owning a field in common' < -dho'a 'two'
```

43) **maaraka** 'each/both'—attaches to dynamic and stative (finite and subjunctive) verbs as well as denominal verbs and alternates with **paaraka** in its non-finite form (*cf.* §6.6.2).

```
maaraka-tovi 'each/both cry' < tovi 'cry'
maaraka-ka-ca'eme 'each/both...ill' < ma-ca'eme 'ill'
maaraka-ka-savare 'each/both...a young man' < ma-savare 'be a young man'
```

44) **maatali-...-le/-lo** '(a number of) floors'—attaches to bound numeral forms to form dynamic verbs (finite and subjunctive); it alternates with **paatali-...-le/-lo** in its non-finite form (*cf.* §9.2.4.4).

```
maatali-a-le 'one floor' < (e)a 'one' maatali-po'a-le 'two floors' < -dho'a 'two' maatali-valro-lo 'eight floors' < valro 'eight'
```

45) **maka-** 'finish'—attaches to dynamic verbs (finite and subjunctive) to express a completed action; it alternates with **paka-** in its non-finite form.

```
maka-kane 'finish eating' < o-kane 'eat'
maka-'ongolo 'finish drinking' < o-'ongolo 'drink'
maka-pi'a 'finish doing' < o-pi'a 'do'
```

46) **maka-...-le/-lo** (~ **paka-...-le/-lo**) attaches to bound numerals to express a duration 'up to N-/for N- days/months/years' (*cf.* §9.2.2.1).

```
maka-lrima-le '(up to/for) five (days)' < lrima 'five' maka-ma-po'a-le '(up to/for) twenty (days)' < ma-po'a-le 'twenty'
```

47) maka'an—attaches to only two bases, cf. aleve 'below' and lrahalre 'above'.

48) **makini-...-(a)e** (~**pakini-...-(a)e**) 'all'—attaches to dynamic and stative verbs as well as common (human) nouns to refer to a collective action/state (*cf.* §6.6.3).

```
makini-tovi-e'all cry'< o-tovi</th>'cry'makini-ka-takolr-ae'be all bad'< ma-takolra</th>'be bad'makini-ka-a-valrovalro-e'be all young women'< valrovalro</th>'young woman'
```

49) mali (~ pali-) 'along'—attaches to both nouns (to form verbs) and verbs.

```
mali-molramolrae'wear traditional clothes'< molramolrae</th>'traditional clothes'mali-(koa-)koape'wear socks'< koape</th>'sock'mali-'odho'carry on head'< o-'odho</th>'carry on head'mali-amece'bring along'< o-amece</th>'bring'
```

50) mata'- (~ pata'-)—only found in co-occurrence with one verb, *cf.* icivi 'bake in stones'.

```
mata'-icivi 'prepare stone heath' < icivi 'bake (in stones)'
```

51) mata-...-(a)e (~ pata-...-(a)e) 'must, certainly'—attaches to dynamic and stative verbs (cf. §6.8.1).

```
mata-dhaac-ae 'must leave' < o-dhaace 'leave' mata-ringiring-ae 'must fry' < o-ringiringi 'fry' mata-ka-'amadh-ae 'must dislike' < ma-'amadhe 'dislike'
```

52) **matara-** (~**patara-**) 'take, catch (a number of)'—attaches to bound numerals and form dynamic verbs (*cf.* §9.2.4.2).

```
matar-ea 'take/catch one' < (e)a 'one'
matara-dho'a 'take/catch two' < dho'a 'two'
```

53) mata'oo- (~pata'oo-) 'wash'—attaches to body parts to form dynamic verbs.

```
mata'oo-maca 'wash one's face' < maca 'eye'
mata'oo-lrima 'wash one's hand' < alrima 'hand'
mata'oo-dhapale 'wash one's foot, leg' < dhapale 'foot, leg'
```

54) **mati-** (\sim **pati-**) 'well, very' attaches to dynamic verbs (cf. §6.7.3 and §6.8.1).

```
mati-lriho'o 'know well' < o-lriho'o 'know' mati-ka-taadhi'i 'better, very good' < ma-taadhi'i 'good'
```

55) **ma'a-** (~ **pa'a-**) 'reciprocal'—attaches to stative and causative dynamic verbs to express reciprocity (*cf.* §8.4.3). It might be followed by a non-reduplicated base ('dual' reciprocal) or by a reduplicated base ('plural' reciprocal).

```
      ma'a-ka-dhalame
      'like/love each other'

      ma-dhalame 'like/love'

      ma'a-ka-dhala-dhalame
      'like/love one another'

      ma-dhalame 'like/love'

      ma'a-ka-'amadhe
      'dislike each other'

      ma-'amadhe 'dislike'

      ma'a-pa-tamako
      'invite each other to smoke'

      o-tamako 'smoke'

      ma'a-pa-tamako-mako
      'invite one another to smoke'

      o-tamako 'smoke'
```

ma'a- (~pa'a-) also attaches to kinship terms that function as predicates to express

a converse relationship (cf. §8.4.3).

```
ma'a-tama 'father and child'
ma'a-tama-tama 'father and children'
ma'a-lili 'two (female) friends'
ma'a-lii-lili 'three (or more female) friends'

**Tama 'father'

**Initial 'father'

**
```

ma'a- also attaches to partially reduplicated bound numeral roots to express a share between different participants, each receiving the amount indicated by the numeral (*cf.* §9.2.1):

```
ma'a-e-'ea 'one for each' < -ea 'one'
ma'a-dho-dho'a 'two for each' < -dho'a 'two'
```

56) ma'a- (~pa'a-) 'until'—attaches to stative verbs.

```
ma'a-kalere 'until daybreak' < kalere 'daybreak'
```

57) ma'akala- (~pa'akala-) 'until' attaches to temporal nouns to form dynamic verbs.

```
ma'akala-ongo 'until (late at) night' < -ongo 'night' ma'akala-'aane 'until noon' < 'aane 'noon'
```

58) **ma'ati-** 'a little'—attaches to verbs (*cf.* §6.8.1).

```
ma'ati-kane 'eat a little' < o-kane 'eat' ma'ati-'ongolo 'drink a little' < o-'ongolo 'drink'
```

59) **ma'o-** (\sim **pa'o-**) means 'look'—attaches to orientation/directional nouns (*cf.* §7.2.1.1)

```
ma'o-aleve 'look down' < aleve 'below'
ma'o-lrahalre 'look up' < lrahalre 'up'
```

60) ma'oa- (~ pa'oa-) 'sloping'—attaches to orientation/directional nouns (cf. §7.2.1.1)

```
ma'oa-dhalra 'sloping (from the standpoint of sb being down)' < dhalra 'up(wards)' ma'oa-lrodho 'sloping (from the standpoint of sb being up)' < lraodho 'down(wards)'
```

61) **ma'ohi-** (~**pa'aohi-**) 'split'—occurs with numerals and the stative verb root -**maidhai** (*cf.* §9.2.1)

```
ma'ohi-dho'a 'split in two' < -dho'a 'two'
ma'ohi-'epate 'split in four' < -'epate 'four'
ma'ohi-maidhai 'split in many (parts)' < -maidhai 'many'
```

62) **m-o-** (\sim **o-**) 'hold X's ritual (where X = household name)'—attaches to household names to form dynamic verbs (*cf.* §7.2.3.2)

```
mo-la-pangolai 'hold the Lapangolai household rituals' <la-pangolai 'household name'
```

63) **m-o-** (\sim **o-**) 'to(ward)'—attaches to nominal bases to form dynamic verbs (*cf.* §7.2.1.1).

```
mo-valrio 'go back home, return' (Lit.: 'go to the village') < valrio 'village' mo-valravalrae 'go to other villages' < valravalrae 'other villages'
```

64) **mo-** 'anticausative'—attaches to nouns and verbs (cf. §8.2).

```
mo-dhamare 'have one's menstruation' < dhamare 'moon/month' mo-dhaolo 'mix' < o-dhaolo 'mix'
```

65) **m-ore-** (~**ore-**) 'perform' (?) — prefix of very restricted usage, found in co-occurrence with the noun **lehe'e** 'ritual' to form a dynamic verb.

```
more-lehe'e 'hold rituals' < lehe'e 'ritual'
```

66) **mota'a-** (~**ota'a-**) 'raise'—attaches to nominal/locative bases to form dynamic verbs (*cf.* §7.2.1.1)

```
mota'-aleve 'get down, fall down, drop' < aleve 'down, below' mota'a-mao 'get up' < *-mao (cf. *mota'a-dhalra < dhalra 'up(wards)')
```

67) **n-** 'visible'—a prefix of very restricted usage that indicates visibility on pronouns, as opposed to **dh-** which expresses non-visibility (*cf.* §10.1.1.1).

```
-ni 'his/her [+vis]' \sim -l-i-ni 'their [+vis]'
-i-n-e 'him/her [+vis]' \sim -l-i-n-e 'them [+vis]'
```

68) -na 'still'—attaches to any type of verbs (cf. §6.3.2.2).

```
o-kane-na '(be) still eating' < o-kane 'eat'
ma-si'i-na 'still few' < ma-si'i 'few'
ma-valrovalro-na 'be still a young woman' < ma-valrovalro 'be a young woman'
```

69) **naa-** 'continuously'—prefix of restricted usage which attaches to verbs (the verb is always followed by a genitive pronoun).

```
naa-to(o)vi 'cry continuously' < o-tovi 'cry'
naa-kaane 'eat continuously' < o-kane 'eat'
```

70) **-nae** 'place where'—attaches to common nouns to form locative nominalization (*cf.* §7.1.4.1).

```
'avai-nae 'bride's family' < 'avai 'female, girl, woman'
'aolalr-a-nae 'groom's family' < 'aolai 'male, boy, man'
```

71) **-nae** 'time when'—attaches to common nouns to form temporal nominalization (*cf.* §7.1.4.2).

```
men-a-nae '(one) day' < mene 'now, today'
'idha-nae 'the day after, the next day' < 'idha 'tomorrow/yesterday'
```

72) **-nga** 'already'—attaches to any type of verbs (cf. §6.4.2.2).

```
o-dhaace-nga 'already left' < dhaace 'leave' ma-dho'o-nga 'already cooked' < ma-dho'o 'cooked'
```

73) -nga attaches to nouns or verbs to express the superlative (cf. §6.7.3).

```
mene-nga 'nowadays' < mene 'now, today'
ma-lrihili-nga '(be) the cleverest' < ma-lrihili '(be) clever'
o-lriho'o-nga 'know the most, be the most intelligent' < o-lriho'o 'know',90
```

74) **ni**—attaches to verbs to express counterfactuality (irrealis) (*cf.* §6.3.1.2).

⁹⁰ In this example, **-nga** is ambiguous: it can either refer to a completed action, *cf.* 'know already' or express a superlative 'know the most, be the most intelligent'.

75) **ni-...-a** 'concessive'—attaches to verbs to form derived nominals (cf. §6.3.1.2).

```
ni-iki-a 'even if ...have...' < om-iki 'have'
ni-ka-'amadh-a 'even if ...dislike...' < ma-'amadhe 'dislike'
```

76) **o-** 'dynamic/finite/realis/active'—one of the most productive prefixes; it attaches to dynamic or denominal verbs (cf. §6.1); it has three allomorphs **om-**, **m-** and \emptyset -.

```
o-amece
            'bring'
                                           <
                                                 amece
                                                             'bring'
            'break (by pulling)'
                                           <
                                                 lrokoto
                                                             'break (by pulling)'
o-lrokoto
            'kiss'
                                           <
                                                            'kiss'
o-omoomo
                                                 omoomo
o-koli'i
            'be sunny, come out (sun)'
                                           <
                                                 koli'i
                                                             'sun'
o-dhamare 'come out (moon)'
                                                 dhamare
                                                           'moon'
```

77) **o-...-e** 'dress well'—derives verbs from nouns (*cf.* §7.2.3.1).

```
o-sava-savar-ae 'dress well (as of a young man)' < savare 'young man'
o-valrovalro-e 'dress well (as of a young woman)' < valrovalro 'young woman'</pre>
```

78) **o-ara-** 'only'—attaches to verbs (cf. §6.8.1)

```
o-ara-'apece 'sleep only' < 'apece 'sleep'
o-ara-'i-laviti 'wear only (a short/men's) skirt' < 'i-laviti 'wear (short/men's) skirt'
```

79) **o-ka'a-...-le/-lo** (~ **ko'a-...-le/-lo**) 'a number of (recipients)'—attaches to bound numeral forms to form dynamic verbs (*cf.* §9.2.4.3).

```
o-ka'a-a-le 'one (recipient/bowl)' < -ae 'one'
o-ka'a-tolro-lo 'three (recipients/bowls)' < -tolro 'three'
```

80) **om-** (\sim **m-**/ \sim **Ø**) 'dynamic/finite/realis/active'—attaches to verbs; it constitutes one of the allomorphs of **o-**, of a more restricted usage (it occurs only with five verbs) (*cf.* §6.1).

```
oma-alra 'take' < alra 'take'
om-iki 'exist, be at' < iki 'exist, be at'
```

81) o-tali- (~tali-/~toli)—attaches to nominal and verbal bases to form dynamic verbs

meaning 'wrap up, pack up'; antonym form: 'o-tali- 'unwrap, unpack'.

82) **o-tali** (~tali-) 'made of' attaches to common nouns to derive dynamic verbs.

```
(o-)tali-angato 'made of wood' < 'angato 'wood'
(o-)tali-alivi 'made of slates' < alivi 'slate'
(o-)tali-aovo 'made of hay' < aovo 'hay'
```

83) **o-tara-** (~ **tara-**) 'a number of months/years'—attaches to bound numeral forms to derive dynamic verbs (*cf.* §9.2.2.1).

```
o-tara-dho'a 'two (months/years)' < -dho'a 'two'
o-tara-ma-nge-le 'ten (months/years)' < -ma-nge-le 'ten'
```

84) **taro-** (doublet form: **tao-**) 'group of persons in movement'—attaches to bound numeral forms above 'five' and certain kinship terms, e.g. **palra-** 'spouse' and a few stative verbs, e.g. **-maidhai** 'many'; it must co-occur with a verb of movement (*cf.* §9.2.4.1)

85) **o-ta'i-** (~ta'i-) 'precede'—attaches to nouns to form dynamic verbs.

```
    o-ta'i-palra 'follow (up)'
    o-ta'i-lrahalre 'be a little more above'
    o-ta'i-aleve 'be a little more below'
    palra- 'spouse'
    lrahalre 'above'
    aleve 'below'
```

86) **o-'ara-** (~'**ara-**)'early'—attaches to verb bases and can be used as an equivalent to **o-hangate** 'in advance, early'.

```
o-'ara-kaava'i 'come early' < maava'i 'come'
o-'ara-kane 'eat early' < o-kane 'eat'
o-'ara-'ongolo 'drink early' < o-'ongolo 'drink'
```

87) **pa-** 'causative'—attaches to verb roots/stems (*cf.* §8.1.2).

```
pa-'acekelae'make...marry'< 'acekelae</th>'marry'pa-kovokovo'make...keep warm, incubate'< o-kovokovo</th>'keep warm, incubate'pa-ta'a-dho'a'make...(the) two...'< ta'a-dho'a</th>'two (together)'pa-ka-taadhi'i'make...good/beautiful'< ma-taadhi'i</th>'good, beautiful'
```

88) **pa-** 'every N-times' and attaches to temporal nouns to form verbs (cf. §15.2.2.7)

```
pa-men-a-nae'every day'<</th>mene'now, today', cf. men-a-nae '(one) day'pa-dhamare'every month'<</th>dhamare'month'pa-caili'every year'<</th>caili'year'
```

89) **paori** 'stick to, think about'—derived from the verb **paoriki** 'stick to, think about'; attaches to verbs and nouns (*cf.* §7.2.3.2).

```
paori-kane'like eating'< o-kane</th>'eat'paori-ama-ama'stick to (one's) father'< ama-</th>'father'paori-ina-ina'stick to (one's) mother'< ina-</th>'mother'
```

90) pa'a-..-ae '(what is) left' attaches to verbal roots to form nouns.

```
pa'a-kan-ae 'left over, garbage' < o-kane 'eat'
pa'a-tedh-ae '(what is) left' < 'atedha 'left'
paa'a-dhidhap-a-nae 'remaining work' < dhidhape 'work'
```

91) **pe-** 'forbiddance (?)'—found in only one occurrence:

```
pe-lehe'e 'taboo' < lehe'e 'ritual'
```

92) **pi-** 'locative causative'—attaches to location/orientation/directional nouns (*cf.* §8.1.3).

93) **po-** 'causative of movement'—attaches to nouns and bound numeral forms to form causative verbs (*cf.* §8.1.3).

```
po-timo'salt, put on salt'< timo</th>'salt'po-valrio'bring back'< valrio</th>'village'po-dho'a'bring two'< -dho'a</th>'two'
```

94) po- 'bear, grow N'—attaches to nouns.

```
po-madho 'bear, grow fruit' < madho 'fruit'
```

95) **saka-** 'external'—attaches to nouns; it may co-occur with the suffixes **-ae**, **-nae** or **-a-nae** that indicate a location in space or time (*cf.* §5.8).

```
saka-dha'ane 'sister/brother-in-law'
saka-dha'an-a-nae 'another household'
saka-valr-ae 'other village(s)' < valrio 'village' (cf. valra-valr-ae 'outsider(s), guest(s)')
saka-holrol-a-nae '(an)other mountain(s)' < holrolo 'mountain'
saka-cail-a-nae 'another year' < cailai 'year'</pre>
```

96) **samori-** 'keep on ...-ing'—attaches to only one root, cf. kane.

```
samori-kane-kane 'who keeps on eating, eats a lot' < o-kane 'eat'.
```

97) sa'api- 'prone to, inclined to'—attaches to verbal roots/stems (cf. §6.8.2).

```
sa'api-kane 'eat a lot, be inclined to eat' < o-kane 'eat'
sa'api-apo'o 'chew betel nuts a lot' < o-apo'o 'chew betel nut'
sa'api-ka-takolra 'be inclined to act badly, to feel bad' < ma-takolra 'be bad'
```

98) **so-** 'tribute'—prefix of very restricted usage, which occurs with only two words, *cf.* **alopo** 'hunt(ing)', as in **so-alopo** 'tribute to the chief(tain)' and **palra-** 'spouse' (*cf.* \$8.4.4).

99) **ta**—attaches to verbal roots/stems and serves for subjective nominalization (*cf.* §7.1.3.1).

```
ta-lriho'o
                '(who) knows'
                                                         o-lriho'o
                                                                      'know'
ta-po-savo'oe '(who) cures, doctor, nurse'
                                                         po-savo'oe 'cure'
                                                  <
                '(who) is being lifted'
                                                                      'lift'
ta-'i-alroho
                                                  <
                                                         o-alroho
ta-ka-lrihili
                '(who is) clever'
                                                         ma-Irihili
                                                                      '(be) clever'
```

100) **ta**—attaches to two kinship and color terms to refer to inalienability (Sagart, p.c.). While kinship terms preceded by **ta**- represent bound roots, e.g. **-t-ama** 'father', which

only occur in reciprocal constructions, as in **la-ma'a-tama** 'father and child' (*cf.* §5.4.3), color terms preceded by **ta-** form free nouns (*cf.* §4.1.2).

```
-t-ina 'mother' < ina- 'mother' ta-poli 'white(ness), white color' < -poli 'white'
```

101) **ta-...-(a)e** 'place where' attaches to nominal and verbal roots to locative nominals (*cf.* §7.1.3.5 and §7.1.4.1):

```
ta-ve'ek-ae
            'pigpen'
                                          ove'eke 'pig'
ta-oa-e
             'place where .... go'
                                    <
                                          om-oa
                                                   'go'
ta-lalak-ae
            'womb'
                                    <
                                          lalake
                                                   'child'
ta-lateng-ae 'vegetable garden'
                                    <
                                          latenge 'garden'
```

102) **ta-...-ae** 'time when' also attaches to verbs to form temporal nouns (*cf.* §7.1.3.6).

```
ta-i-valri-valri-ae 'time to rest, week-end' < i-valrio 'stay in the village/at home, rest' ta-to-alak-ae 'birthday' < to-alake 'give birth'
```

103) **ta-...-n-ae** co-occurs with verbal roots to form a derived locative nominal (*cf.* §7.1.3.5).

```
ta-po-savo'o-vo'o-n-ae 'clinic, hospital' < po-savo'oe 'cure' ta-'acakelae-n-ae 'marriage' < 'acakelae 'marry'
```

104) **taka-** 'a number of persons'—equivalent to **ta'a-**; attaches to bound numeral forms and a few human common nouns to form dynamic verbs (*cf.* §9.2.4.1). The occurrence of **o-** before **taka-** is controversial among informants.

```
-dho'a
taka-dho'a
             'two (persons)'
                                                  'two'
                                   <
              'three (persons)'
                                   <
                                         -tolro
taka-tolro
                                                   'three'
taka-elre
              'together'
                                   <
                                         elree-
                                                   'companion'
taka-palra
             'together'
                                         palra-
                                                   'spouse'
```

105) tako- 'while'—attaches to verbs.

```
tako-(tovi-)tovi 'while crying' < o-tovi 'cry' tako-(oma-)omale 'while singing' < o-omale 'sing'
```

106) **tala-** 'container' (?)—found with only one root, *cf.* **ove'eke**.

tala-ve'eke 'wood receptacle where salted meat was kept, pork container' < ove'eke 'pork'

```
107) tali- 'belong to'—attaches to nouns (cf. §5.4.4 and §7.2.1.2).
```

```
tali-lrao-lraodho'be from Pingtung county'Iraodho 'down(wards)'tali-a-takataka'elder generation'takataka 'older (cousin/relative)'tali-dhipolo'(group of girls bearing the name) Dhipolo'
```

108) **ta'a-** 'with (a group of persons)'—attaches to bound numeral forms to form dynamic verbs (*cf.* §9.2.4.1).

```
ta'a-dho'a 'two (persons)' < -dho'a 'two'
ta'a-tolro 'three (persons)' < -tolro 'three'
```

109) **ta'a-...-le/-lo** 'measure with an extended arm'—attaches to bound numeral (*cf.* §9.2.2.2).

```
ta'a-tolro-lo 'three (times) two (extended) arms' < -tolro 'three' ta'a-lrima-le 'five (times) two (extended) arms' < -lrima 'five'
```

110) **to-** 'do, make, produce, build'—attaches to bound numeral forms, bound stative roots and nouns to form dynamic verbs (*cf.* §7.2.6 and §9.2.1).

```
to-ae(ae) '(make) one' < -ae(ae) 'one'
to-dhao '(do/make) many (things)' < -dhao 'many'
to-coloko 'make glutinous cakes' < coloko 'glutinous cakes'
to-ta'onae 'build a hut' < ta'onae 'hut'
```

111) **toka-...-(a)e** 'use... for, by ...-ing'—attaches to verbs (*cf.* §6.8.1).

```
toka-kane-kan-ae'use (sth) for eating'o-kane'eat'toka-lralram-ae'by running'o-lralrame'run'toka-dhaadhaac-ae'by walking'o-dhaadhaace'walk'
```

112) **to'a-** 'use... to, for'—prefix derived from the verb **to'araki** 'use', attaches to verbal and nominal bases.

```
to'a-solate 'use... to study' < o-solate 'study'
to'a-dhisidhisi 'use... to dip, wipe' < o-dhisidhisi 'dip, wipe'
to'a-omale 'use... to sing' < o-omale 'sing'
```

113) 'a- 'instrument/manner nominalizer'—attaches to dynamic verbs to form instrumental nominals and to stative verbs to form manner nominals (*cf.* §71.3.3).

```
'a-osarisario 'toy' < o-sario 'play'
'a-to-va'ali-'ali '(any) instrument that serves to lay plank' < to-va'ali 'lay planks'
'a-ka-lrihili '(how) clever' < ma-lrihili 'clever'
'a-ka-takolra '(how) bad' < ma-takolra 'bad'
```

114) 'a-...-e 'have a lot of'—attaches to nominal stems to form verbs or to verbal bases.

```
'a-paisoiso-e ~ 'a-paisiiso-e 'have a lot of money, rich' < paiso
                                                                        'money'
'a-taetelek-ae
                             'have a lot of food'
                                                         < taleke
                                                                        'food, crop'
'a-lehelehe-a'e
                             'have a lot of taboos'
                                                         < lehe'e
                                                                        'taboo'
'a-caca'eca'em-ae
                             'have a lot of diseases'
                                                         < ma-ca'eme 'be ill'
                                                         < o-lriho'o
'a-lrihoa'-e
                             'be famous'
                                                                        'know'
```

115) 'aa- 'turn into'—attaches to nouns to form verbs.

```
'aa-lrikolao 'become a leopard' < lrikolao 'leopard'
'aa-ta'olro 'become a dog' < ta'olro 'dog'
'aa-ocao 'become a person' < ocao 'person'
```

116) 'aka- 'Nth'—bimorphemic prefix made up of the ordinal prefix 'a- and the stative marker ka- (non-finite form); it attaches to bound numeral forms (*cf.* §9.2.3).

```
'aka-ea 'first' < -ea 'one'
'aka-dho'a 'the second' < dho'a 'two'
'aka-tolro 'the third' < tolro 'three'
```

117) **'ako-** (doublet form: **'ako-...-ae**) 'speak (out)'—attaches to nominal or verbal roots to form verbs (*cf.* §6.8.1 and §7.2.1.2).

118) 'ako- 'barely, a little'—attaches to verbs (cf. §6.8.1).

```
'barely eat'
'ako-kane
                                               o-kane
                                                                'eat'
'ako-'onoro
                    'cut s.o's hair a little'
                                                                'cut s.o's hair'
                                          <
                                               o-'onoro
                                               ma-raveravere 'happy'
'ako-ka-raveravere 'barely happy'
                                           <
                    'barely like/love'
                                                                'like/love'
'ako-ka-dhalame
                                               ma-dhalame
```

119) 'ako-...-le 'say a number of times'—attaches to bound numeral forms and is used in co-occurrence with verbs of saying (cf. §9.2.2.1).

```
'ako-tolro-lo 'say three times' < -tolro 'three'
'ako-'epate-le 'say four times' < -'epate 'four'
```

120) 'ako-...-nga 'more'—attaches to verb bases (cf. §6.7.2.1).

```
'ako-ka-taadhi'i-nga 'better, more beautiful (than before)' < ma-taadhi'i 'good' 
'ako-kane-nga 'eat more (than before)' < o-kane 'eat'
```

121) 'ali- 'from (in time or in space)' is a prefix derived from the verb 'aliki '(come) from' that attaches to nouns.

```
'ali-'aamadhalae 'from the beginning' < 'aamadhalae 'before, a long time ago'
'ali-lraodho 'from down(wards)' < lraodho 'down(wards)'
'ali-aleve 'from below' < aleve 'below'
'ali-takataka 'from the eldest sibling' < takataka 'eldest sibling'
```

122) 'ano- 'walk, ride, take' derive verbs from nouns.

```
'ano-vahevahe 'walk on a bridge' < vahevahe 'overpass, bridge (made of a few planks)'
'ano-lrahalrahalre 'walk to and fro at a certain height' < mo-lrahalrahalre 'climb'
'ano-'otobai 'ride a motorcycle' < 'otobai 'motorcycle'
'ano-rihi 'ride a horse' < rihi 'horse'
'ano-hikoki 'take a plane' < hikoki 'plane'
```

123) 'ano- 'unknown meaning'; it only attaches to stative roots.

```
'anoalreme 'fragrant, aromatic' < -alreme 'fragrant, aromatic' 
'anolake'e 'early in the morning' < -lake'e 'early in the morning'
```

124) 'ano-Ca- 'along/with a number of persons (in movement)'—attaches to bound numeral forms from 1 to 4 to form a dynamic verb; it can also co-occur with palra- 'spouse' and elree- 'companion' and with the stative verb root -dhao 'many' (cf. §9.2.4.1).

```
'two (persons)'
'ano-dha-dho'a
                                       < -dho'a 'two'
'ano-ta-tolro
                 'three (persons)'
                                       < -tolro
                                                    'three'
                 'together'
'ano-a-elre
                                       <
                                           elree-
                                                    'companion'
                 'together'
'ano-pa-palra
                                           palra-
                                                    'spouse'
```

125) 'ano-...ae 'entirely, completely, cease, allievate'—attaches to verb roots.

```
'ano-lropeng-ae 'entirely finished' < o-lropenge 'entirely finished' 
'ano-vahe'-ae 'allievate sufferings' < ma-vahe'e 'tired'
```

126) 'ao-...-le/-lo 'the Nth time' — complex affix composed of 'a- 'ordinal' and 'o-...-le/-lo 'a number of times'; it attaches to bound numeral forms to form verbs (cf. §9.2.3).

```
'ao-po'a-le 'the second time' < -dho'a 'two'
'ao-'epate-le 'the fourth time' < -'epate 'four'
'ao-eneme-le 'the sixth time' < -eneme 'six'
```

127) **'apaka-...-le/-lo** 'the Nth day'—complex affix, composed of **'a-** 'ordinal' and **paka-...-le/-lo** 'up to/for a number of days/months/years'; it attaches to bound numeral forms to form verbs, (*cf.* §9.2.3).

```
'apaka-a-le 'on the first (day/month/year)' < -ea 'one'
'apaka-lrima-le 'on the fifth (day/month/year)' < -lrima 'five'
'apaka-vangate 'on the ninth (day/month/year)' < -vangate 'nine'
```

128) **'api-** 'like...-ing' attaches to verbs (*cf.* §6.8.2).

```
'api-oa 'like going' < om-oa 'go'
'api-kane 'like eating' < o-kane 'eat'
'api-tovi 'like crying' < o-tovi 'cry'
'api-omale 'like singing' < o-omale 'sing'
```

129) **'a-po-** 'as a result of' — bimorphemic prefix made up of 'a- 'instrument nominalization' and **po-** 'causative of movement') that serves to express 'result nominalization'; found only in one example (*cf.* §7.1.3.3).

```
'a-po-timo 'as a result of salting' < timo 'salt'
```

130) 'apo- 'come out' derives verbs from nouns (cf. §7.2.4).

```
'apo-li'ange 'come out (leaves)' < li'ange 'leaf'
'apo-nga'ato 'grow (a lot of) brushwood' < nga'ato 'brushwood'
'apo-erai 'bleed' < erai 'blood'
```

131) 'asa-...-ae 'what's the use of'—attaches to verbs to form nominalized predicates.

```
'asa-kan-ae 'what's the use of eating (so little)?' < o-kane 'eat'
'asa-dhamat-ae 'what's the use of preparing dishes?' < o-dhamate 'prepare dishes'
'asa-kaava'i-e 'what's the use of coming?' < maava'i 'come'
'asa-vahe'-ae 'what's the use of being (so) tired?' < ma-vahe'e 'be tired'
```

132) 'asi- (meaning unknown)—only found in one occurrence.

```
'asi-ka'olo 'work' < ka'olo 'commoner'
```

133) 'i- 'passive' attaches to dynamic and stative verbal bases to form the passive voice.

```
'i-ra'opo
                'be given an injection'
                                              o-ra'opo
                                                             'give an injection'
                'be hurt'
                                                             'be hurt'
'i-ange'ange
                                              o-'ange'ange
'i-ka-ha'aoco
                'be scolded'
                                          <
                                              ma-ha'aoco
                                                             'scold'
'i-ka-dhalame 'be liked/loved'
                                              ma-dhalame
                                                             'like/love'
```

134) 'i- derives verbs from nouns. 'i- is a polysemous prefix, which can be glossed as 'get, harvest, gather, look after, bear, have for, kill etc.' but the semantic core of 'i-N can be equated with 'get, obtain-N' (cf. §7.2).

```
'i-vecenge 'harvest millet'
                                                    < vecenge 'millet'
'i-alrace
            'hear a name'
                                                    < alrace
                                                                  'name'
'i-lroolai
            'bear, take care of a child'
                                                    < lroolai
                                                                  'child (gen.)'
'i-ama
            'have for a father/recognize as a father' < ama-
                                                                  'father'
'i-dha'ane 'inherit (a house)'
                                                    < dha'ane 'house'
'i-valra
            'kill an enemy'
                                                    < valra
                                                                  'enemy'
```

135) 'i- 'wear, put on' derives verbs from nouns.

```
'i-kipingi 'wear/put on clothes' < kipingi 'clothes' 
'i-tovese 'wear head ornament' < tovese 'head ornament'
```

136) 'ia-...-ae 'because of, out of'—attaches to verb roots.

```
'(die) out of hunger'
                                                                  'be hungry'
'ia-'ilra-e
                                                   ma-'ilrae
                     'out of fatigue'
                                                                  'be tired'
'ia-vahe'-ae
                                                   ma-vahe'e
                     'through/by studying'
                                              <
                                                                  'study'
'ia-solat-ae
                                                   o-solate
                     'by forcing (onself)'
                                                   po-ke'ecenge 'use force'
'ia-po-ke'eceng-ae
```

137) 'ini- 'movement toward'—occurs with nominal and verbal roots.

```
'ini-(toli-)toli'i
                  'swing'
                                              toli'i
                                                           '(a) swing'
'ini-palai
                  'flv'
                                              *-palai
'ini-cekale
                  'get up, stand up'
                                              o-cekale
                                                           'support with the hand'
'ini-palio
                  'fall down'
                                          < *-palio
'ini-kookono
                  'fast, quickly'
                                               *-kono
'ini-dha-dhao
                 'a lot (come out)'
                                          <
                                              ma-dhao 'a lot, many'
'ini-sasi'i
                  'a little (come out)'
                                          <
                                              ma-sasi'i 'a little, a few'
```

138) 'ini- 'cross'—attaches to nouns to form verbs.

```
'ini-talodho 'cross a bridge' < talodho 'bridge'
'ini-vahevahe 'cross a bridge' < vahevahe 'overpass, bridge (made of a few planks)'
```

139) 'ini- 'consume' derives verbs from nouns—prefix of restricted usage which only occurs with nouns of consumption, e.g. vavaa 'wine', taleke 'food, crop'.

```
'ini-vavaa 'consume wine/drink wine' < vavaa 'wine'
'ini-to-taleke 'consume food' < to-taleke 'treat, invite sb to eat'
```

140) 'ini-Ca- '(one)self' (reflexive)—attaches to dynamic and stative verbs (cf. §8.3).

```
'ini-a-aha'a'cook oneself'< o-aha'a</th>'cook''ini-ca-colo'kill (a pig) oneself'< o-colo</th>'kill (a pig)''ini-ka-ka-dhalame'like/love oneself'< ma-dhalame</th>'like/love''ini-ka-ka-mamai'(do) oneself'< ma-(ma)mai</th>'be'
```

141) 'ini-...-ae 'pretend'—attaches to verbs.

```
'ini-kana-kan-ae 'pretend to eat' < o-kane 'eat'
'ini-too-tovi-e 'pretend to cry' < o-tovi 'cry'
'ini-to-pongaa'-e 'pretend' < to-ponga'a 'cheat, lie'
```

142) 'ini-...(-ae) 'behave like, look like'—derived from the verb 'inilrao 'resemble'; it attaches to nouns to form verbs (cf. §7.2.3.1).

```
'ini-titina 'behave like a mother' < titina 'middle-aged woman'
'ini-tamatama 'behave like a father' < tamatama 'middle-aged man'
'ini-lroolalr-ae 'behave like a child' < lroolai 'child'
```

143) **'ira-** 'for'—derived from **'iraki** '(do) for'; it attaches to nouns to form verbs (*cf.* §7.2.6).

```
'ira-'iidheme 'in order to think, worry' < 'iidheme 'think(ing)'
'ira-'ilrae 'out of hunger' < ma-'ilrae 'hungry'
'ira-ca'emae 'out of sickness' < ma-ca'eme '(be) ill'
```

144) 'o- 'take off' attaches both to nouns and verbs (cf. §7.2.6).

```
'blanket'
'o-avoko
           'take off (a) blanket'
                                           avoko
                                                       'above'
'o-kavole 'take off (what is) above'
                                           kavole
'o-loka
           'trim one's nails'
                                                       'nail'
                                           loka
'o-cikipi
           'take off seams'
                                       <
                                            o-cikipi
                                                       'sew'
                                           o-caleve
'o-caleve 'open (a box)'
                                                       'close (a box)'
```

145) 'o-...-le/-lo 'a number of times'—attaches to bound numeral forms to form verbs (cf. §9.2.2.1).

```
'o-po'a-le 'two times' < -dho'a 'two'
'o-pate-le 'four times' < -'epate 'four'
'o-ma-nge-le 'ten times' < -ma-nge-le 'ten'
'o-ma-po'a-le 'twenty times' < -ma-po'a-le 'twenty'
```

146) **'o-...-le/-lo** 'measure'—must be followed by **dhopadhapale** 'walk one foot in front of the other' to express a measure with the foot, **dhikoace** 'stretch one's hand' to express a measure with the hand, or **dhepadhepange** 'measure with a ruler' (*cf.* §9.2.2.2).

```
'o-po'a-le dhopadhapale 'two feet long' < -dho'a 'two'
'o-tolro-lo dhikoace 'three handbreadths long' < -tolro 'three'
'o-lrima-le dhepadhepange 'one meter and fifty centimeters' < -lrima 'five'
```

147) 'o-tali 'unpack'—bimorphemic prefix composed of 'o- 'take off' and tali- 'wrap up, pack', which attaches to nouns and verbs. The derived stem is a verb whose meaning has to do with unpacking or unwraping.

```
'o-tali-dhaadhaace '(put down and) unpack' < o-dhaadhaace 'walk' 'o-tali-vee'ao 'unwrap a glutinous rice dumpling' < vee'ao 'husked rice'
```

Appendix 2: Mantauran (Rukai) Texts

In this appendix, four stories are provided. There were recorded and transcribed ten years apart. The first two stories were told by Lü Yu-zhi in August 1992, and the last two were narrated by Gui-ying Guan in April 2002. The language they use is perceptibly different and reflects some of the grammatical changes that Mantauran is undergoing.

Texts 1 and 2 were respectively collected on August 11 and 27, 1992, and recounted by Yu-zhi Lü ('elrenge lapangolai).

Text 1. 'aa-lrikolao '(The boy that) turn(ed) into a leopard'

- (1.1)om-iki dhona'i tamatama la titina Dyn.Fin-exist that middle-aged man and middle-aged woman to-alake to-dho'a a'ololai. produce-child produce-two male:plur:Red 'There was a man and a woman, who had two sons.'
- (1.2) "mani alopo-nai" mani ia dhona'i lalake-dha.
 then Dyn.NFin:hunt-1PE.Nom then Dyn.NFin:so that child-3S.Gen
 'Then, the children said: "We are going hunting.""
- (1.3) "mani po-iname to-'adhoodholro'o" mani ia then Dyn.NFin:make-1PE.Obl produce-snack:Red then Dyn.NFin:so ina-lidha.

 mother-3P.Gen
 "Prepare snacks for us" (they) said to their mother.'
- (1.4) mani poa titina tali-vee'ao.
 then Dyn.NFin:make middle-aged woman Dyn.NFin:wrap-rice
 'Then the mother prepared rice dumplings.'
- (1.5) **dhona'i titina ma-'amadh-idhe dhona taka-taka.**that middle-aged woman Stat.Fin-dislike-3S.Obl that Red-elder sibling 'As for that mother, she disliked the elder brother.'
- (1.6) mani po-idhe asepenge po'ivo
 then Dyn.NFin:make-3S.Obl excrement of cockroach Dyn.Subj:mix
 lipongoe poa lripoco.
 taro leaves Dyn.Subj:make Dyn.Subj:wrap
 'So she wrapped cockroach excrement with taro leaves.'

- (1.7)dhona'i aidhi 'aodholro'o-dha mani valitoro, youngest sibling snack-3S.Gen Dyn.NFin:make that then glutinous rice Iripoco votolo, mani oha'a. poa poa Dyn.NFin:make Dyn.Subj:wrap pork then Dvn.NFin:make Dvn.Subj:cook 'As for the younger brother's snack, she mixed glutinous rice with pork and cooked the dumpling.'
- (1.8)dhona'i maelre-nae-nga 'a mani va'alr-idhe that morning-TempNmz-Sup Top then Dyn.NFin:give-3S.Obl 'ina'i 'aodholro'o-'o taka-taka, dhona snack-2S.Gen Red-elder sibling that this vaa'-idhe aidhi. ta-ka-eaea mani Dyn.NFin:give-3S.Obl SubjNmz-Stat.NFin-one:Red then youngest sibling 'The next morning, she gave (the dumplings), one to the elder brother and another to the younger brother.'
- (1.9) mani dhaace pa'-ivoko-lidha.
 then Dyn.NFin:leave Rec:Stat.NFin-(male) friend-3P.Gen
 'The two brothers left together.'
- (1.10) ona a-oa-nga-lidha m-okela dhona 'adha, ClsNmz-Dyn.NFin:go-already-3P.Gen Dyn.Subj-reach that that resting area "ma-'ilrao-ng-imite. kane-nga 'aodholro'o-ta." ita Stat.Fin-hungry-already-1PI.Obl 1PI.Top Dyn.NFin:eat-already snack-1PI.Gen mani Dvn.NFin:so then "When they reached the resting area, they said: "We are hungry. Let's eat our snacks."
- (1.11) mani ia: "ita pi'amadhalae kone 'aodholro'o-'o then Dyn.NFin:so 1PI.Top first Dyn.Subj:eat snack-2S.Gen mani i-idhe taka-dha. then Dyn.NFin:so-3S.Obl elder sibling-3S.Gen 'The younger brother said to his elder brother: "Let's first eat your snack."
- (1.12) mani ke'ete. asepenge 'n la Dyn.NFin:take Dyn.Subj:cut then cockroach excrement and ta-kavole, ma-ngasisi. lingopoe taro leaves SubjNmz-out Stat.Fin-stinking 'Then they cut the dumpling. The cockroach excrement and the taro leaves came out; it stank.'
- (1.13) **"kani pi'a-ni 'ina'i?" mani ia.**why Dyn.NFin:do-3S.Gen this then Dyn.NFin:so ""Why did she do this?" they said."

(1.14) mani "imia ta-cengele 'aodholro'o-'o" then Dyn.NFin:so 1PI.Nom-Dyn.NFin:see snack-2S.Gen come:Imp i-idhe mani 'adhi-dha. then Dyn.NFin:so-3S.Obl younger sibling-3S.Gen 'Then the elder brother said to his younger brother: "Let's have a look at your snack."

- (1.15) **valitoro pa-lripoc-ae votolo, 'anoalreme.**glutinous rice Caus-Dyn.NFin:wrap-ObjNmz pork fragrant
 'The pork was wrapped with glutinous rice; it smelled delicious.'
- (1.16) "mani kani pi'a-dh-imite 'ina'i then why Dyn.NFin:make-3S.Obl-1PI.Obl this a-pa'a-ka-ela?"

 Caus:Rec-Stat.NFin-distinguish "Why is she making such a distinction (between the two of us)?""
- (1.17) "ma-'amadh-iae iinae, (a)mo-ka-'oili-nga-ka-li"
 Stat.Fin-dislike-1S.Obl own mother Irr-Neg-Dyn.NFin:return-already-Neg-1S.Gen mani ia.
 then Dyn.NFin:so
 "Mother dislikes me; I cannot go back home." (said the elder brother).'
- "'aina! (1.18) **dhona'i** 'adhi-dha: amo-'oili-mita, Irr-Dyn.NFin:return-1PI.Nom that young sibling-3S.Gen No m-o-valrio-mita" mani i-idhe aidhi. Dyn.Fin-to-village-1PI.Nom then Dyn.NFin:so-3S.Obl youngest sibling 'The younger brother replied: "No, we will go back, we will go back home."
- (1.19) dhona'i taka-taka "amo-ka-dholro-nga-ka-li
 that Red-elder sibling Irr-Neg-Dyn.NFin:can-already-Neg-1S.Gen
 m-o-valrio."

 Dyn.Subj-to-village
 'The elder sibling said: "I cannot go back home.""
- (1.20) "amo-'aa-lrikolao-nga-lrao" mani ia.

 Irr-turn into-leopard-already-1S.Nom then Dyn.NFin:so
 "I will turn into a leopard.""
- (1.21) mani 'aovaovaha mani ia: then Dyn.NFin:make Dyn.NFin:so speak then "amo-'aa-lrikolao-ka-li?" mani ia. Irr-turn into-leopard-Neg-1S.Gen then Dyn.NFin:so 'Then he said: "Will I turn into a leopard?"

- (1.22) mani tolromao m-o-kavole dhapale-dha ovale. then Dyn.NFin:suddenly Dyn.Subj-to-out leg-3S.Gen body hair 'Then, suddenly, body hair started to grow on his legs.'
- (1.23) mani i-idhe 'adhi-dha: "m-o-a-nga then Dyn.NFin:so-3S.Obl younger sibling-3S.Gen Dyn.Subj-go-Imp-already m-o-valrio" m-o-valrio! amo-ka-dholro-nga-ka-li Dyn.Subj-to-village Irr-Neg-Dyn.NFin:can-already-Neg-1S.Gen Dyn.Subj-to-village mani i-dhe 'adhi-dha. then Dyn.NFin:so-3S.Obl vounger sibling-3S.Gen "Then he said to his younger brother: "Go back home! I cannot go back home."
- (1.24) mani dhona aidhi mani tovi pakono then Dyn.NFin:cry that youngest sibling then quickly o'i'aipi 'aeheman-iae "pakon-iae taka-taka Dyn.Subj:recite incantations Red-elder sibling preserve-1S.Obl quickly-1S.Obl 'apo-ovale." mani taka-taka. lropenge ia Dyn.Subj:finish grow-body hair then Dvn.NFin:so Red-elder sibling 'Then the younger brother (started to cry). The elder brother recited incantations: "Preserve me and let my hair grow quickly."
- (1.25) mani a-lropeng-idhe 'apo-ovale mani then ClsNmz-Dyn.NFin:finish-3S.Obl come out-body hair then "loa-n-iae sialralrala amokoa-n-iae Dvn.Subj:try:Imp-3S.Gen-1S.Obl Dvn.Subj:Red:hear Irr:how-3S.Gen-1S.Obl vaha-li, ma-taadhi'i-ka-iae?" mani ia. sound-1S.Gen Stat.Fin-good-Neg-1S.Obl then Dvn.NFin:so 'When his hair had finished growing out, he said: "Let me hear whether my roar is pleasant to hear."
- (1.26) mani iki ta-ka-eaea lrenehe toalrai-nga. then Dyn.NFin:exist SubjNmz-Stat.NFin-one:Red rock big-Sup 'There was a big rock.'
- (1.27) mani lrokedhalre "kolaao" mani ดล Dyn.Subj:jump then Dyn.NFin:go kolaao then Dyn.NFin:so dhona'i **Irenehe** makaki lrokedhalre. Dyn.Subj:to that rock Dyn.Subj:jump 'He jumped onto that rock and roared: "Kolaao".'
- (1.28) **"ma-taadhi'i-ka-iae?" mani i-idhe 'adhi-dha.**Stat.Fin-good-Neg-1S.Obl then Dyn.NFin:so-3S.Obl younger sibling-3S.Gen
 ""Isn't my (roar) nice?" he asked his younger brother.'

- mani pato'-idhe (1.29) "m-oa-nga dhoace." 'adhi-dha. Dyn.Fin-go-already Dyn.Subj:leave then Dyn.NFin:tell-3S.Obl younger sibling-3S.Gen "I am leaving." he said to his younger brother.'
- (1.30) mani "m-oa-nga dhoace. pato'o-a aamae Dyn.Fin-go-already Dyn.Subj:leave Dyn.Subj:tell-Imp own father "'aa-lrikolao-nga taka-li, turn into-leopard-already elder sibling-1S.Gen (a)mo-ka-dholro-nga-ka-li ka m-o-valrio," Irr-Neg-Dyn.NFin:can-already-Neg-1S.Gen Neg Dyn.Subj-to-village 'Then he added: "I am leaving. Tell my father: 'My elder brother has turned into a leopard." (He said:) "I cannot return home."
- (1.31) "lo pato'o-a m-o-valrio-nga-'o, la aamae Dyn.Subj-to-village-already-2S.Gen Dyn.Subj:tell-Imp own father and maava'i-nga-nomi toalrai-nga 'angato m-okela Dvn.Fin:come-already-2S.Nom Dvn.Subj-reach big-Sup tree dhona'i lokolokoco. o-cengele-mao rahare above type of tree Dyn.Fin-see-Impers.Nom that "If you go back home, tell my father: 'When you come to (that) big tree, look above.""
- (1.32) "amo-piki-lrao dhona'i alra-li Irr-Dyn.NFin:put-1S.Nom Dyn.NFin:take-1S.Gen that a-alop-ae." ObjNmz-Dyn.NFin:hunt-ObjNmz-1S.Gen "I will put the game I have caught (there)."
- (1.33) "mani polra-mao. lo ma-lrapa'a-na-dha, Dyn.NFin:touch-Impers.Nom if Stat.Subj-hot-still-3S.Gen then om-iki-na-lrao m-odhipi. Dyn.Fin-exist Dyn.Subj-alive "You will touch it. If it is still hot, (then it means that) I am still alive."
- (1.34) "mani dhona'i a-alop-ae." alra-mao Dyn.NFin:take-Impers.Nom ObjNmz-Dyn.NFin:hunt-ObjNmz then that "You (can) take that game (back home)."
- (1.35) "lo 'oelaa-nga-nomi maava'i lo polra-nomi Dyn.Subj:again:Emph-already-2P.Gen Dyn.Subj:come if Dyn.Subj:touch-2P.Gen ma-'ete-nga-lrao" ma-ateleke-nga-dha, mani Stat.Fin-cold-already-3S.Gen Stat.Fin-die-already-1S.Nom then if 'adhi-dha. i-idhe Dyn.NFin:so-3S.Obl younger sibling-3S.Gen "If you come again and if it is cold when you touch it (then it means that) I am already

dead." he said to his younger brother.'

"kolaao, kolaao" (1.36) mani dhaace taka-taka m-oa then Dyn.NFin:leave Red-elder sibling Dyn.Subj-go Kolaao Kolaao mani dhoace. then Dvn.NFin:so Dyn.Subj:leave 'Then the elder brother left, roaring: "Kolaao, kolaao"'

(1.37) ona'i aidhi mani dhaace tako-tovi-tovi
that youngest sibling then Dyn.NFin:leave while-Red-Dyn.NFin:cry
m-o-valrio.

Dyn.Subj-to-village
'Then the younger brother left and returned home crying.'

- (1.38) dhona'i 'idha-nae-nga 'a mani dhaace pa'a-tama-lidha that day-TempNmz-Sup Top then Dyn.NFin:leave Rec:Stat.NFin-father-3P.Gen m-oa o'i ta-iki-e-dha 'angato.

 Dyn.Subj-go that LocNmz-Dyn.NFin:be at-LocNmz-3S.Gen tree 'After some while, father and son went to the place where the tree was.'
- o'i (1.39) mani cengele kapa-iki then Dyn.NFin:go Dyn.Subj:see Dyn.NFin:continuously-Dyn.NFin:exist that a-alop-ae polra, alra-dha mani Dyn.NFin:take-3S.Gen ObjNmz-Dyn.NFin:hunt-ObjNmz Dyn.NFin:touch then ma-lrapa'a. Stat.Fin-hot 'Then they went to see. The game animal (the elder brother had caught) was there. They touched (it). It was hot.'
- (1.40) "'ai, m-odhipi-na lalake-li." mani ia tovi

 Excl Dyn.Fin-alive-still child-1S.Gen then Dyn.NFin:so Dyn.Subj:cry tamatama.

 middle-aged man

 'The middle-aged man said crying: "Ayayay, my child is still alive.""
- (1.41) mani dhaace m-o-valrio. then Dyn.NFin:leave Dyn.Subj-to-village 'Then they went back to the village.'
- (1.42) mani oa-nga cengele mani polra dhona'i then Dyn.NFin:go-already Dyn.Subj:see then Dyn.NFin:touch that a-alop-ae, kapa-ka-ateteleke-nga.

 ObjNmz-Dyn.NFin:hunt-ObjNmz Dyn.NFin:continuously-Stat.NFin-cold:Red-already 'They went to see (again) and touched the game. It was cold.'

- (1.43) "'ai! ma-'ete-nga lalake-li." mani ia tovi.

 Excl Stat.Fin-die-already child-1S.Gen then Dyn.NFin:so Dyn.Subj:cry

 "'Oh! My child is dead." said (the father) crying.'
- (1.44) mani dhaace 'ilap-idhe dhona'i votolro'o-dha.
 then Dyn.NFin:leave Dyn.Subj:look for-3S.Obl that body-3S.Gen
 'Then they went to look for his corpse.'
- (1.45) mani kapa-ka-'ete-nga mani tovi
 then Dyn.NFin:continuously-Stat.NFin-die-already then Dyn.NFin:cry
 pa'a-tama-lidha.
 Rec:Stat.NFin-father-3P.Gen
 '(His corpse) was cold. Father and son cried.'
- (1.46) mani alra 'i 'olrao po-idhe 'ovo'ovo.
 then Dyn.NFin:take grass Dyn.Subj:make-3S.Obl Dyn.Subj:cover
 'Then they took vegetation to cover (his corpse).'
- (1.47) mani dhaace m-o-valrio. then Dyn.NFin:leave Dyn.Subj-to-village 'Then they went back home.'
- (1.48) mani ka-ha'aoc-idhe titina.
 then Stat.NFin-scold-3S.Obl middle-aged woman
 'They scolded the mother.'
- (1.49) mani pa-dhaac-idhe titina poa then Caus-Dyn.NFin:leave-3S.Obl middle-aged woman Dyn.Subj:make dha'ane-lidha.
 house-3P.Gen
 'Then they made her leave.'
- (1.50) "kani pi'a-'o la-a-lake-ta apa'a-ka-ela, why Dyn.NFin:do-2S.Gen child-plur-child-1PI.Gen Caus:Rec-Stat.NFin-different ma-dhalame ma-'amadhe?" mani tamatama. Stat.Fin-like/love Stat.NFin-dislike/hate then Dyn.NFin:so middle-aged man "Why did you make (that) distinction between our children, loving (one) and hating (the other)?" the father asked.'
- (1.51) mani dhaace titina.
 then Dyn.NFin:leave middle-aged woman
 'Then the mother left.'

Text 2. kanekane 'olra'a ta-iki kopaca'e 'Eating snakes in Kopaca'e'

- (2.1) **om-iki dhona la-tavelenga 'i 'aolai lalake-lidha.**Dyn.Fin-exist that plur-household name male child-3P.Gen 'There was the son of the Latavelenga.'
- 'n (2.2)mani siriri songao takilolong then Dyn.NFin:Red:take as wife Bunun place name dhona 'avai valrio-dha. that female village-3S.Gen 'He had taken as wife a Bunun girl from Takilolong.'
- (2.3) ona'i siriri-dha poa 'i 'oponoho.
 that Dyn.NFin:Red:take as wife-3S.Gen Dyn.Fin:make
 'He had brought back his wife to Wanshan.'
- (2.4) mani a-ii'a-nga-dha mani dhaace
 then ClsNmz-Dyn.NFin:look like-already-3S.Gen then Dyn.NFin:leave
 m-oa ooma.

 Dyn.Subj-go field
 'After a while, she went (along) to the field.'
- (2.5) mani dhaace m-oa ooma to-ta-veceng-ae then Dyn.NFin:leave Dyn.Subj-go field produce-LocNmz-millet-LocNmz lronge'e.

 Dyn.Subj:cultivate 'She went (along) to the field to cultivate a millet field.'
- (2.6)lo icivi-lidha mani ka-mamai dhona if Dyn.Subj:bake in stones-3P.Gen then Stat.NFin-self that siriri-lidha ici-icivi. Dyn.NFin:Red:take as wife-3P.Gen Dvn.Subj:Red-bake in stones 'If (it was time to) bake (food) in stones, the woman he had taken as wife would prepare the stone hearth.'
- (2.7)lo kolradhe-nga-dha icivi mani Dyn.Subj:separate stones-already-3S.Gen Dyn.Subj:bake in stones if then poa mairange la tai taramonahe po-vecahae. Dyn.NFin:put sweet potato and taro pumpkin CausMvt-middle 'When she had separated the stones, she would put sweet potatoes, taros and pumpkins in the middle.'
- (2.8) mani silrame dhona 'olra'a.
 then Dyn.NFin:whistle that snake
 'Then she would whistle for snakes.'

- (2.9) mani o-kavole 'olra'a. then Dyn.NFin:to-out snake 'And snakes would come out.'
- (2.10) mani alra pilri dhona'i tepange then Dyn.NFin:take Dyn.Subj:choose that one-hundred-pace snake mani alra pa-salriko mani poa Dyn.NFin:take Dvn.Subj:make Caus-Dyn.NFin:circle around then then poa 'ovolo. Dyn.NFin:make Dvn.Subj:bury 'She would choose one-hundred-pace snakes and put them around (the food) and put stones on top.'
- (2.11) mani lo ma-dho'o-nga-dha mani alra then if Stat.Subj-cooked-already-3S.Gen then Dyn.NFin:take 'ocivi mani alra 'olra'a pa-picongo. Dyn.Subj:unbake then Dvn.NFin:take snake Caus-Dyn.NFin:split. 'Then, when the food was cooked, she would take off the stones, and take the snakes apart.'
- (2.12) mani pa-picongo 'i tai la mairange.
 then Caus-Dyn.NFin:separate taro and sweet potatoe
 'Then she would take apart the taros and the sweet potatoes.'
- (2.13) mani kane pi'amadhalae o'i 'olra'a.
 then Dyn.NFin:eat first that snake
 'Then she would eat the snakes first.'
- (2.14) lo maka-kane-nga-dha mani 'iase Dyn.Subj:finish-Dyn.NFin:eat-already-3S.Gen Dyn.NFin:call then palrapalra-dha: "imia m-o-a kone!" m-ia. come:Imp relative-3S.Gen Dyn.Subj-go-Imp Dyn.Subj:eat Dyn.Subj-so 'When she had finished eating, she would call her relatives: "Come to eat!"
- (2.15) mani kaava'i m-oa kone dhona dha'an-a-nae.
 then Dyn.NFin:come Dyn.Subj-go Dyn.Subj:eat that house-beyond-LocNmz
 'Then the household would come and eat.'
- (2.16) ona'i 'ao-maidhai-nga-dha kone, mani ka-a-rilai
 that Nth time-many-already-3S.Gen Dyn.Subj:eat then Stat.NFin-plur-slim
 dhona dha'an-a-nae.
 that house-beyond-LocNmz
 'After they had eaten her meals for a while, the whole family (started) get slim.'

- (2.17) mani tamatama 'ina'i: "kani amokoa-ta Dyn.NFin:so middle-aged man this why Irr:how-1PI.Gen then 'ina'i ma-a-rilai?" dhona 'akosae mani ia how much this Stat.Subj-plur-slim then Dvn.NFin:so that tamatama 'aovaovaha dhona la-a-lake-dha. middle-aged man that child-plur-child-3S.Gen speak 'The father asked his children: "Why are we all getting slim?""
- (2.18) "lo-ine matolradhame 'apokoa-ni icivi-ni,
 Dyn.Subj:try:Imp-3S.Obl Dyn.Subj:spy how-3S.Gen Dyn.NFin:bake in stones-3S.Gen kana-ni a-poa-n-imite po'ivo"
 what-3S.Gen ObjNmz-Dyn.NFin:make:ObjNmz-3S.Gen-1PI.Obl Dyn.Subj:mix mani ia tamatama.
 then Dyn.NFin:so middle-aged man
 'Then he said: "Try to spy (on her) and see what she is cooking.""
- (2.19) dhona'i aidhi-nga 'aolai mani iki 'ilrepenge youngest sibling-Sup male Dyn.NFin:be at Dyn.Subj:hide that then cengele polidhao dhona'i dhoma mani dhaace Dyn.NFin:leave Dyn.Subj:see Dyn.Subj:watch that other then m-oa lronge'e. Dyn.Subj-go Dyn.Subj:cultivate 'Then the youngest brother stayed (there) and hid to watch (the woman) while the others went to cultivate the fields.'
- (2.20) dhona'i siriri-lidha mani that Dyn.NFin:Red:take as wife-3P.Gen then Dyn.NFin:make mata'icivi, ona a-kalradhe-nga-dha Dyn.Subj:prepare stone heath that ClsNmz-Dyn.NFin:separate stone-already-3S.Gen mani poa o'i tai la mairange. then that Dyn.NFin:make taro and sweet potato 'The daughter-in-law went to prepare the stone heath. When she had separated the stones, then she added the taros and the sweet potatoes.'
- (2.21) mani silrame mani kaava'i o'i 'olra'a. then Dyn.NFin:whistle then Dyn.NFin:come that snake 'Then she whistled and the snakes came.'
- (2.22) mani alra pilri dhona'i tepange.
 then Dyn.NFin:take Dyn.Subj:choose that one-hundred-pace snake 'Then she chose the one-hundred-pace snakes.'
- (2.23) mani alra matar-ea poa pa-salriko. then Dyn.NFin:take Dyn.Subj:catch-one Dyn.Subj:make Caus-Dyn.NFin:circle around

dhona'ita-iki-e-dhamairangemanithatLocNmz-Dyn.NFin:exist-LocNmz-3S.Gensweet potatothenpoa'ovolo.

Dyn.NFin:make Dyn.Subi:bury

'Then she took one and she put it around the sweet potatoes and she put stones on top of it.'

- (2.24) mani dhaace m-oa m-alra tavolrolo.
 then Dyn.NFin:leave Dyn.Subj-go Dyn.Subj-take bucket
 'Then she left and took the bucket.'
- (2.25) dhona'i lroolai 'n dhona'i a-dhaace-nga-dha ClsNmz-Dyn.NFin:leave-already-3S.Gen that child Top that saka-dha'ane-dha m-oa m-o'alro mani oa external-house-3S.Gen Dyn.Subj-go Dyn.Subj-draw water then Dyn.NFin:go 'inikookono 'ocivi. Dyn.Subj:unbake quickly 'When the sister-in-law had gone to draw water, the child quickly uncovered the food.'
- (2.26) ni-alra-a-dha! ta-po-ilidhe 'olra'a
 CncNmz-Dyn.NFin:take-CncNmz-3S.Gen SubjNmz-Dyn.NFin:make-3P.Obl snake
 po'ivo mani 'adha'adha-idhe dhona'i saka-dha'ane-dha
 Dyn.Subj:mix then Dyn.NFin:wait-3S.Obl that external-house-3S.Gen
 ta-o'olrao.
 SubjNmz-Dyn.NFin:wait-3S.Obl that

SubjNmz-Dyn.NFin:draw water

'He had not thought that snakes were mixed with the food. Then he waited for his sister-in-law, who had gone to draw water.'

(2.27) a-o-valrio-nga-dha, kapa-iki dhona ClsNmz-Dyn.NFin:to-village-already-3S.Gen Dyn.NFin:continuously-be at that toloholae o'i 'adhi-dha cengele dhona that younger sibling-3S.Gen Dyn.Subj:see that sit icivi-lidha.

Dyn.NFin:bake in stones-3S.Gen

'When she came back, the younger brother was seated, looking at the food she had baked.'

(2.28) mani a-o-valrio-dha, kapa-ka-alria'e then ClsNmz-Dyn.NFin:to-village-3S.Gen Dyn.NFin:continuously-Stat.NFin-startle 'okolodho, ma-'ino dhona saka-dha'ane-dha.

afraid Stat.Fin-embarrassed that external-house-3S.Gen 'When she came back, she was startled and afraid. The daughter-in-law was embarrassed.'

- "imia (2.29) dhona 'aolai mani 'iase-nga-dha: that male then Dyn.NFin:call-already-3S.Gen come:Imp ta'onae! imia kone!" m-o-a m-ia. m-0-a Dyn.Subj-go-Imp hut come:Imp Dyn.Subj-go-Imp Dyn.Subj:eat Dyn.Subj-so 'The boy called his family: "Come to the hut! Come to eat!""
- (2.30) mani kaava'i dhona-lo. then Dyn.NFin:come that-plur 'Then they came.'
- (2.31) "m-o-a m-o-ta'onae!"

 Dyn.Subj-go-Imp Dyn.Subj-to-hut
 "Come to the hut."
- (2.32) mani pato'o 'aolai: "m-o-a cengele Dyn.Subj-go-Imp Dyn.Subj:see then Dyn.NFin:tell male icivi-ni saka-dha'ane-nai." m-ia. Dyn.NFin:bake in stones-3S.Gen external-house-1PE.Gen Dyn.Subj-so 'Then the boy said: "Go and look at what our daughter-in-law has baked.""
- (2.33) mani oa cengele dhona-lo. then Dyn.NFin:go Dyn.Subj:see that-plur 'They went to see.'
- (2.34) mani 'ina'i: ia tamatama then Dyn.NFin:so middle-aged man this "alaka-nai ma-a-rilai, laka o-pi'a-mi'-iname because-1PE.Gen Stat.Subj-all-slim because Dyn.Fin-do-2S.Nom-1PE.Obl po'ivo 'olra'a icivi. iname 'n 1PE.Top Dyn.Subj:mix snake Dyn.Subj:bake in stones Top o-kane-kane-ka-nai 'olra'a. kani ka Dyn.Fin-Red-eat-Neg-1PE.Gen Neg snake whv ki-pato'o-'-iname ni-pa-picongo-mo'o Neg-Dyn.NFin:tell-2S.Gen-1PE.Obl Cntrfct-Caus-Dyn.NFin:split-2S.Nom oha'a" mani tamatama. Dyn.Subj:cook then Dyn.NFin:so middle-aged man 'The father said: "(the reason why) we are all getting slim (is) because you've done that to us, (you've) mixed up the snakes with (the) bake(d) food. As for us, we have never eaten snakes. Why didn't you tell us and cook (your food) apart?" the father said.'
- (2.35) **kapa-icelreve dhona** 'avai.

 Dyn.NFin:continuously-shut up that female 'The woman remained silent.'

(2.36) mani ki-kane dhona-lo mani dhaace m-oa then Neg-Dyn.NFin:eat that-plur then Dyn.NFin:leave Dyn.Subj-go longe'e.

Dyn.Subj:cultivate

'They did not eat and left and went to cultivate (their fields).'

- (2.37) dhona a-dhaace-nga-lidha mani alra
 that ClsNmz-Dyn.NFin:leave-already-3P.Gen then Dyn.NFin:take
 dhona 'olra'a tenge.
 that snake Dyn.Subj:roll up one's clothes to carry something
 'When they had left, (the woman) took snakes and put them in her clothes she had rolled
 up to carry them.'
- (2.38) mani pato'o lamengae-dha: "a-ik-a-'-iae
 then Dyn.NFin:tell spouse-3S.Gen ObjNmz-Dyn.NFin:exist-ObjNmz-2S.Gen-1S.Obl
 ka amo-oa 'anopapalra?" mani i-dhe lamengae-dha.
 Neg Irr-Dyn.NFin:go together then Dyn.NFin:so-3S.Obl spouse-3S.Gen
 'Then she asked her husband: "Will you come with me?"'
- (2.39) mani kapa-icelreve ki-vilr-idhe 'aovaovaha. then Dyn.NFin:continuously-shut up Neg-respond-3S.Obl speak '(But her husband) remained silent and did not respond to her.'
- (2.40) mani dhaace dhona 'avai tako-kane-kane Dyn.NFin:leave female while-Red-Dyn.NFin:eat then that ci'iki. tako-'apo'o dhona'i om-iki-nga 'olra'a. while-Dyn.NFin:spit that poison Dyn.Fin-exist-already snake tako-'adha'adha-idhe lamengae-dha, m-oa m-okela while-Dyn.NFin:wait-3S.Obl spouse-3S.Gen Dyn.Subj-go Dyn.Subj-reach kopaca'e. place name

'The woman left; she was eating while spitting out the poison—there were snakes—and waiting for her husband. (Finally) she reached Kopaca'e.'

- (2.41) mani dhona'i 'a iki toalrai-nga **Irenehe** Dyn.NFin:exist then that big-Sup rock Top om-oa dhona 'avai tolova'avava. Dyn.Fin-go that female lie down 'There was a big rock, and she went to lie down there.'
- (2.42) **om-i'a 'i coloko, ma-melre'e.**Dyn.Fin-look like glutinous cake Stat.Fin-soft 'It was soft like a glutinous cake.'

- (2.43) **lo 'inicekale-nga-dha mani ka-solate dhona'i Irenehe.** if get up-already-3S.Gen then Stat.NFin-write that rock 'When she got up, the rock had been imprinted.'
- (2.44) mani to'araki alrima-dha solate hoahoae
 then Dyn.NFin:use hand-3S.Gen Dyn.Subj:write Dyn.Subj:draw
 to-(o)cao-cao to-dhama-dhamare to-koli-koli'i to'onai solate.
 produce-person-Red produce-Red-moon produce-Red-sun anything Dyn.Subj:write
 'She used her hand to draw personages, the moon, the sun, anything.'
- (2.45) dhona a-lrepenge-nga-dha poa that ClsNmz-Dyn.NFin:finish-already-3S.Gen Dyn.Subj:make pataloere poca'e dhona'i lrenehe.

 all Dyn.Subj:embroider that rock 'When she had finished, the rock was completely covered with drawings.'
- (2.46) mani kapa-ki-kaava'-idhe o'i lamengae-dha. then Dyn.NFin:continuously-Neg-Dyn.NFin:come-3S.Obl that spouse-3S.Gen 'Her husband never came to her.'
- (2.47) mani alra kone 'olra'a amece-dha.
 then Dyn.NFin:take Dyn.Subj:eat snake Dyn.NFin:bring-3S.Gen
 'She took the snakes she had brought and ate them.'
- (2.48) dhona'i ta-iki-e-dha kopaca'e kone, that LocNmz-Dyn.NFin:be at-LocNmz-3S.Gen place name Dyn.Subj:eat dhona'i ci'iki-dha 'olra'a ta-'apo-ae-dha that poison-3S.Gen snake LocNmz-Dyn.NFin:spit-LocNmz-3S.Gen ta-'apo'o idhopele 'olra'a tepange. SubjNmz-Dyn.NFin:spit a11 snake one hundred-pace snake 'She was eating them at Kopaca'e; when she spat out the poison, it turned into a snake.'
- (2.49) la 'ina'i mene-nga, ta-'apo-ae-dha ma-dhao
 and this now-Sup LocNmz-Dyn.NFin:spit-LocNmz-3S.Gen Stat.Fin-many
 dhona 'olra'a.
 that snake
 'Nowadays, the place where she spat out the poison is full of snakes.'
- (2.50) lo iki-ni ta-oa dhona cengele, Dyn.Subj:be at-3S.Gen SubjNmz-Dyn.NFin:go Dyn.Subj:see that o-aramaca tako-'okolokolodho dhona'i 'olra'a. Dyn.Fin-careful while-Red:afraid that snake 'If (someone) goes to have a look, s/he is careful and afraid of those snakes.'

(2.51) dhona'i 'avai kapa-kaava'i-idhe that female Dyn.NFin:continuously-Dyn.NFin:come-3S.Obl spouse-3S.Gen a-'adha'adhao-e-dha.

ObjNmz-Dyn.NFin:wait-ObjNmz-3S.Gen

'As for that woman, her husband never came to her.'

(2.52) mani lrongai-nga dhoace tako-kane-kane
then Dyn.NFin:better-already Dyn.Subj:leave while-Red-Dyn.NFin:eat
o'i 'olra'a.
that snake
'She had better leave while eating the snakes.'

- (2.53) **dhona kapa-ci'iki-lidha 'anopapalra-lidha 'apo-'olra'a.**that Dyn.NFin:continuously-poison-3P.Gen 'When she spat, the poison turned into a snake.'

 come out-snake
- (2.54) mani dhaace-nga m-oa dha'ane-lidha takilolong then Dyn.NFin:leave-already Dyn.Subj-go house-3P.Gen place name dha'ane-lidha m-o-valrio.
 house-3P.Gen Dyn.Subj-to-village
 'Then she left and she went back to her village in Takilolong.'

Texts 3 and 4 were collected on April 2, 2002 with Gui-ying Guan (leheane taolingi).

Text 3. aisihoka 'Sour mandarins'

- (3.1)kama-iiki-nga omi-ilidhe peelrengae Dyn.Fin:continuously-exist:Emph-already like that-3P.Obl Peelrengae tainengehao mani 'acakelae omi-ilidhe paa-oa and Tainengehao then Rec:Dyn.NFin-go marry like that-3P.Obl pa-'acakel-ilidhe omi. Caus-marry-3P.Obl like that 'Peelrengae and Tainengehao got married.'
- (3.2) mani kapaa-poo(a)-nga-lidha sivahange omi.
 then Dyn.NFin:continuously-make-already-3P.Gen Dyn.Subj:pregnant like that
 'Then (Tainengehao) got pregnant.'
- (3.3)ona'i a-ilekete-nga-dhaa om-i'a that ClsNmz-Dyn.NFin:deliver soon-already-3S.Gen Dyn.Fin-look like iki men-a-nae om-i-idhe Dyn.NFin:exist (to)day-beyond-TempNmz Dyn.Fin-so-3S.Obl peelrengae dhona'i 'a "amo-dhaace-lrao alopoo." Top Irr-Dyn.NFin:leave-1S.Nom Dyn.Subj:hunt:Emph that Peelrengae ia omi-idhe. Dyn.NFin:so like that-3S.Obl 'One day, as (Tainengehao's) delivery was approaching, Peelrengae said: "I am going to hunt."
- (3.4) mani dhaace omi-idhe olopo dhona peelrengae.
 then Dyn.NFin:leave like that-3S.Obl Dyn.Subj:hunt that Peelrengae
 'Peelrengae went hunting.'
- "nao-o-valrio" (3.5)ona'i a-ia-dha 1S.Nom-Dyn.NFin:to-village ClsNmz-Dyn.NFin:so-3S.Gen that om-ia ma-dhao-nga alra-dha Dyn.Fin-so Stat.Fin-many-already Dyn.NFin:take-3S.Gen a-lop-ae om-i'aa ObjNmz-Dyn.NFin:hunt-ObjNmz Dyn.Fin-look like kapa-ceengele omi-idhe 'ii aisihoka omi. continuously-Dyn.NFin:see:Emph like that-3S.Obl sour mandarin like that 'As he was coming back home, he saw sour mandarins.'

- (3.6)'[a]ina'i aisihoka nao-alra omece this 1S.Nom-Dyn.NFin:take Excl sour mandarin Dyn.Subj:take lamenae-li" omi mani alra spouse-1S.Gen Dvn.NFin:so like that then Dvn.NFin:take ma-dhe'elreh-idhe to-sii'i omece omi-idhe like that-3S.Obl produce-a little Dyn.Subj:bring Stat.Fin-heavy-3S.Obl 'odho-dha o'i omi. Dyn.NFin:carry on head-3S.Gen like that that 'He thought: "Ah, I would like to bring back sour mandarins for my wife." He brought back a few (but) his load was very heavy.'
- (3.7) mani o-valrio omii m-oa lamengae-dha omi. then Dyn.NFin:to-village like that Dyn.Subj-go spouse-3S.Gen like that 'And he went back home.'
- (3.8)lamengae-dha mani alra 'o-talidhaadhaace 0 spouse-3S.Gen Dvn.NFin:take take off-pack that then 'odho-dha omi mani tako-alra cengele Dyn.NFin:carry on head-3S.Gen like that then while-Dvn.NFin:take Dvn.Subj:see dhona aisihoka. that sour mandarin 'His wife helped him to unpack his load and saw the sour mandarins.'
- (3.9)"kana-ni 'ina'i peelrengaee" omi-idhe ia what-3S.Gen this Peelrengae: Emph Dyn.NFin:so like that-3S.Gen dhona'i tainengehao. that Tainengehao 'Tainengehao asked: "Peelrengae, what is this?""
- (3.10) "aisihoka alra-li nao-la(a)-idhe sour mandarin Dyn.NFin:take-1S.Gen 1S.Nom-Dyn.NFin:try-3S.Obl amo-ka-dhalame-ka-'o omece m-ia Dyn.Subj:bring Dyn.Subj-so Irr-Stat.NFin-like/love-Neg-2S.Gen kone?" ia omi. Dyn.Subj:eat Dyn.NFin:so like that '(Her husband) replied: "These are sour mandarins I brought back to see whether you like them or not.""
- (3.11) mani kane omi-idhe dhona'i tainengehao then Dyn.NFin:eat like that-3S.Obl Tainengehao that "'ah 'akoseee-ni ka ma-taadhi'ii 'amalra-idhee Excl how much: Emph-3S.Gen Lig Dyn.Subj-good had known-3S.Obl ki-to-dhaao-'o omece" kani why Neg-do-many:Emph-2S.Gen Dyn.Subj:bring Dyn.NFin:so

omi-idhe.

like that-3S.Obl

'After Tainengehao had tried some, she said: "How delicious it is, why didn't you bring back some more?"

- (3.12) "ma-dhalame-ka-'oo?" ia omi.
 Stat.Fin-love-Neg-2S.Gen Dyn.NFin:so like that '(Her husband asked her:) "Do you like them?""
- (3.13) "ia'e, ma-dhalame-lraoo" ia omi-idhe
 yes Stat.Fin-love-1S.Nom:Emph Dyn.NFin:so like that-3S.Obl
 dhona'ii tainengehao.
 that Tainengehao
 'Tainengehao replied: "Yes, I like them (very much).""
- (3.14) "loo 'a ma-dhalame-'o ka-i if Stat.Subj-like/love-2S.Gen Top Neg-3S.Gen nao-avil-imia'e dhona m-oaa 1S.Nom-Dyn.NFin:bring-2S.Obl Dyn.Subj:go:Emph that ma-dhaoo" ta-iki-e-ni, ia LocNmz-Dyn.NFin:exist-LocNmz-3S.Gen Stat.Fin-many:Emph Dyn.NFin:so omi-idhe peelrengae. like that-3S.Obl Peelrengae 'Peelrengae said: "If you like them, I can bring you to a place where sour mandarins grow, there are a lot there."
- (3.15) "kani akoa-nii tila lo-iae ovili"
 why matter-3S.Gen leave Dyn.Subj:try-1S.Obl Dyn.Subj:bring
 ia omi.
 Dyn.NFin:so like that
 '(Tainengehao) replied: "Well, let's go! Take me there.""
- (3.16) mani dhaace m-oaa ['lovil-idhe omi, then Dyn.NFin:leave Dyn.Subj-go:Emph Dyn.Subj:bring-3S.Obl like that omi. dhooace m-oa Dyn.Subj:leave Dyn.Subj-go like that 'They left and (he) brought (her) there.'
- (3.17) mani 'ina'i lamengae-dha omi ia then Dyn.NFin:so this spouse-3S.Gen like that "imia. nao-po-imia'e piki-na iinaii Dyn.Subj:put-still come:Imp 1S.Nom-Dyn.NFin:make-2S.Obl this la nao-dhaace-na mo-kaavaa'i-lrao" 1S.Nom-Dyn.NFin:leave-still Irr-Dyn.NFin:come-1S.Nom and and

ia lamengae-dha omi "ia'e" ia.

Dyn.NFin:so spouse-3S.Gen like that all right Dyn.NFin:so

(After they had reached the place in question), her husband said: "Come on, I will leave you here; I want to go back, I will be back (to fetch you) later."

- (3.18) mani lamengae-dha kehenge dhona poa piki Dyn.NFin:make spouse-3S.Gen Dyn.Subj:tie Dyn.Subj:put then that tangadhae aisihoka omi. sour mandarin like that 'Her husband tied her to the trunk of the tree.'
- (3.19) kapa-ki-kaava'i-nga 'oilri
 Dyn.NFin:continuously-Neg-Dyn.NFin:come-already Dyn.Subj:go back
 omi-idhe dhona'i peelrengae omi.
 like that-3S.Obl that Peelrengae like that
 '(But) Peelrengae left and never came back.'
- (3.20) "a-iki-e-dha lamengae-li" ObjNmz-Dyn.NFin:be at-ObjNmz-3S.Gen spouse-1S.Gen omi-idhe dhona kap(a)-ia omi koone Dyn.NFin:-Dyn.NFin:so like that Dyn.Subj:eat like that-3S.Obl that aisihoka dhona'i titina ki-ka-'ete omi. sour mandarin that middle-aged woman like that Neg-Stat.NFin-die like that 'That woman thought: "Where is my husband?" She lived on sour mandarins and did not die.'
- (3.21) mani icodhaalra'a-nga omi-idhe moo then anyway-already like that-3S.Obl Dyn.Subj:go dholi-nga to-alake omi.

 Dyn.Subj:near-already produce-child like that 'Anyway, she was about to have her baby...'
- (3.22) manii ki-'ivaha maava'i lamengae-dha. then Neg-accept Dyn.Subj:come spouse-3S.Gen '(but) her husband would not come.'
- (3.23) toomaao-nga ma-'ete omi-idhe dhona titina. suddenly-already Stat.Subj-die like that-3S.Obl that middle-aged woman ma-'ilrao-nga omi ikaadho-nga ka Stat.Fin-hungry-already like that not exist-already Lig kaane-nga-dha omi. Dyn.NFin:eat-already-3S.Gen like that 'The woman suddenly died of hunger (because) she did not have anything (left) to eat.'

- (3.24) ona'i a-ka'ete-nga-dha om-i'aa dhona that ClsNmz-Stat.NFin-die-already-3S.Gen Dyn.Fin-look like that omi-idhe lroolai om-i'a o-kavoole omi. child Dvn.Fin-look like Dyn.NFin:to-out:Emph like that-3S.Obl like that 'After she had died, her child went into the world.'
- (3.25) ona'i Iroolai omi-idhe 'a kaana-ni ka kane-dha child like that-3S.Obl Top what-3S.Gen Lig Dvn.NFin:eat-3S.Gen this kapaa-'ona kolamo'o omi-idhe 'n Dyn.NFin:continuously that dewdrop like that-3S.Obl Top kama-dhiilra dhona lroolai to'a-ka-oloho Dyn.Fin:continuously-Dyn.NFin:lick that child use for-Stat.NFin-grow dhona to'a-odhipi. kolamo'o that dewdrop use for-Dyn.Fin:alive 'The child licked dewdrops to grow and stay alive.'
- (3.26) toomae dhona lroolai omi-idhe like that-3S.Obl suddenly that child kama-ka-oloho omi-idhee ma-Dyn.Fin:continuously-Stat.NFin-grow like that-3S.Obl:Emph Stat.Finma-savahe-nga dhona lroolai omi child like that Stat.Fin-young man-already that 'The child suddenly became a young man.'
- (3.27) ma-oloho-nga omi "kani iiki-li iinai Stat.Fin-grow-already like that why Dyn.NFin:be at-1S.Gen this ta'angea kani..."
 alone why
 '(As a) grown-up, (he thought): "Why am I alone, why...?"
- (3.28) apokoa-li pi'a-li 'ina" ka kani iiki-li why-1S.Gen Lig Dyn.NFin:do-1S.Gen why Dyn.NFin:be at-1S.Gen this omi-idhe dhona'ii lroolai Dyn.NFin:so like that-3S.Obl that child kama-ka-celekehe omi. Dyn.Subj:continuously-Stat.NFin-thorough like that 'The child would meditate: "Why am I alone here, what did I do to be here?""
- (3.29) kapa-cengele omi-idhe pangolro-dha ina-dha

 Dyn.NFin:continuously-Dyn.NFin:see like that-3S.Obl bone-3S.Gen mother-3S.Gen

 omi ta-kapa-idhomolo omi.

 like that SubjNmz-Dyn.NFin:continuously-Dyn.NFin:pile like that 'He saw a stack of bones (that were actually) his mother's.'

- pangolro (3.30) "kani iiki-ni 'iinaii kaanae-ni bone what:Emph-3S.Gen why Dyn.NFin:exist-3S.Gen this 'in(a) amo-koa-li ta-i'a-e-li" this Irr-matter-1S.Gen Lig LocNmz-Dvn.NFin:look like-LocNmz-1S.Gen ia omi-idhe dhona'i lroolai. Dvn.NFin:so like that-3S.Obl that child 'The child thought: "Why are there bones here? What did I do?""
- (3.31) "ceva, nao-lee o'ia'ipi, kani wait:Imp 1S.Nom-Dyn.NFin:try Dyn.Subj:recite incantations why tolohee-li lriho'oo ina-ka-l-ine aanga-i reason-1S.Gen Dvn.Subj:know who-3S.Gen mother-Neg-1S.Gen-3S.Obl omi-idhe ama-ka-l-ine" dhona'i lroolai omi. ia father-Neg-1S.Gen-3S.Obl Dyn.NFin:so like that-3S.Obl that child like that "Wait, I should try to recite incantations, otherwise how will I know who are my mother and father?""
- "tama-kasoo" (3.32) oloo mani omi-idhe poa father-2S if then Dyn.NFin:make like that-3S.Obl m-ia-dha om-i'aa ma-'osahave dhonai Dyn.Subj-so-3S.Gen Dyn.Fin-look like that Stat.Fin-split apart pangolro omi. like that bone 'When he asked: "Are you father?", the bones separated.'
- (3.33) olo "tina-kasoo" m-ia-dha om-i'a 'asahovo mother-2S. if Dyn.Subj-so-3S.Gen Dvn.Fin-look like gather dhona'i 'ani'ia pangolro omi. that as pointed out bone like that 'When he asked: "Are you mother?" the bones joined together.'
- (3.34) 'a, ina-lii 'ina'i kani 'asahovo alaka-i because-3S.Gen mother-1S.Gen Excl whv gather this ta-to-alak-iae ka-iki-nai iinai la mani. SubjNmz-produce-child-1S.Obl and in fact-Dyn.NFin:be at-1PE.Gen this 'Ah, why did the bones join together? That's because my mother gave birth to me here, and we actually live here.'
- (3.35) ka-'ete ina-li la odhipi-lrao mani ia Stat.NFin-die mother-1S.Gen and Dyn.NFin:alive-1S.Nom Dyn.NFin:so then om-idhe to'aa-lriho'o omi-idhe. like that-3S.Obl use for-Dyn.NFin:know like that-3S.Obl 'My mother died and I am alive; I (need) to use (the bones) to understand (what happened).'

- "ina-li" (3.36) mani ana omi-idhe mani like that-3S.Obl mother-1S.Gen then Dyn.NFin:so that then "ina-ka-l-imia'ee, omi-idhe 'aovaovaha ia like that-3S.Obl mother-Neg-1S.Gen-2S.Obl Dvn.NFin:so speak ina-ka-l-imia'ee" om-iia omi-idhe 'aovaovaha. mother-Neg-1S.Gen-2S.Obl Dyn.Fin-so like that-3S.Obl speak 'He asked: "Are you my mother? Are you my mother?""
- (3.37) mani oa omi-idhe dhona pangolro lo then Dvn.NFin:go like that-3S.Obl that bone if "ina-ka-l-imia'ee" om-i'a m-ia-dha mother-Neg-1S.Gen-2S.Obl Dyn.Subj-so-3S.Gen Dvn.Fin-look like pangolro. omi-idhe ma-congo-congolo dhona o-poa Dyn.Fin-make like that-3S.Obl Rec:Dyn.Subj-Red-join that bone 'As he was asking: "Are you my mother?", the bones joined together.'
- (3.38) toomaao 'i pangolro ma-ocao omii suddenly bone Stat.Fin-person like that ma-coŋo-coŋolo omi.

 Rec:Dyn.Fin-Red-join like that 'Suddenly, they formed a person.'
- (3.39) a-'a-lropenge-nga-dha m-i'a dhona ClsNmz-be-Dyn.NFin:finish-already-3S.Gen Dyn.Subj-look like that om-i'aa a'ia'ipi 'a-lrepenge mani be-Dyn.NFin:finish Dyn.Fin-look like then Dyn.NFin:recite incantations omi-idhe dhona'ii ani'ia dhona Iroolai child like that-3S.Obl that as pointed out that "'aeehemana amo-iki painekee 'iinaii, Irr-Dyn.NFin:exist Dyn.NFin:breathe:Emph preserve:Imp this o-lriho'o-nai ma'olio" m-ia. Dyn.Fin-know-1PE.Nom Dyn.Subj:discuss Dyn.Subj-so 'When he had finished, he recited incantations and said: "Make (her) breathe so that we know and discuss.""
- (3.40) tolromaao oni'ia maineke. (o)-lriho'o-nga, suddenly Dyn.Subj:as pointed out Dyn.Subj:breathe Dyn.Fin:know-already ma'olio dhona'ii titina dhona. Dyn.Subj:discuss that middle-aged woman that 'The woman suddenly (started) to breathe so that they could discuss (together).'

- titina (3.41) mani tovi omi-idhe dhona then Dyn.NFin:cry like that-3S.Obl that middle-aged woman omi-idhe lroolai omi la tooovi dhona omi Dyn.NFin:cry:Emph like that like that and like that-3S.Obl that child 'The woman cried, and her child cried (too).'
- (3.42) maa-tovi 'ina'i omi mani ia Rec:Dvn.Fin-crv then Dvn.NFin:so like that this nao-'itovolr-imia'e" "a-tovi-e-'oo, ceva, ObjNmz-Dyn.NFin:cry-ObjNmz-2S.Gen wait 1S.Nom-ask-2S.Obl dhona'i Iroolai omi. Dvn.NFin:so that child like that 'They cried together, and then the child said: "Do not cry! Wait! I want you to ask you (a few questions).""
- (3.43) mani ia 'ina omi "kani amoo-koa-ta kani then Dyn.NFin:so like that why Irr-matter-1PI.Gen why 'iinaii iiki-ta Dyn.NFin:exist-1PI.Gen this:Emph "Why are we here?"
- (3.44) "mani om-ia-lrao aanaii" then Dyn.NFin-so-1S.Nom this:Emph "Then I said that..."
- (3.45) mani tolromao-mo'oo m-i'a 'inai ma-ocao then suddenly-2S.Nom Dyn.Subj-look like this Stat.Subj-person inakee" m-ia omi. Mother Dyn.Subj-so like that "Then, Mother, you suddenly became a person."
- (3.46) mani 'ina omi-idhe dhona titina like that-3S.Obl then Dyn.NFin:so this that middle-aged woman "ai, o-sivahange-lra-imia'e ma'a-tiina la." Dyn.Fin-pregnant-1S.Nom-2S.Obl Rec:Stat.Subj-middle-aged woman and Excl 'Then the mother narrated: "Oh, I was pregnant with you."
- (3.47) "o'i ama-'o 'a alopo mani omec-iae
 that father-2S.Gen Top Dyn.NFin:hunt then Dyn.NFin:bring-1S.Obl
 aisihoka."
 sour mandarin
 "One day, your father went hunting and brought me back sour mandarins.""

(3.48) **"mani alra-lrao konee."**then Dyn.NFin:take-1S.Nom Dyn.Subj:eat:Emph

"I took (some) and ate them."

(3.49) "kani 'akoseee-ni taadhia'-e ki-to-dhee-iae so much: Emph-3S.Gen good-StatNmz Neg-do-many-1S.Obl why omece ia-lrao la ma-dhao m-iki dhona Dyn.Subj:bring Dyn.NFin:so-1S.Nom Stat.Fin-many Dyn.Subj-exist that and amo-ka-i (a)mo-avili-lra-imia'e Irr-Neg-3S.Gen Irr-Dyn.NFin:bring-1S.Nom-2S.Obl Dyn.Subj:make i-iae."

Dyn.NFin:so-1S.Obl

"I (thought) that it was very good and that it was (a pity) he had not brought back more, (so your father said:) There are a lot (over) there, I can bring you there."

- (3.50) "avil-iae 'ina la pik-iae poa Dyn.NFin:bring-1S.Obl Dyn.Subj:make this Dyn.NFin:put-1S.Obl and 'iinai kehenge ama-'o la." Dvn.Subj:tie this father-2S.Gen and "Your father brought me here and attached me (to this tree)."
- (3.51) "ki-oa-ng-iae ka malramalra la

 Neg-Dyn.NFin:go-already-1S.Obl Lig Dyn.Subj:fetch and

 pahadhaolo-lra-imia'e to-alake."

 Dyn.NFin:at once-1S.Nom-2S.Obl produce-child

 "Your father did not come (back) to fetch me and (as a result) I gave birth to you here."
- (3.52) "kai kaa-'etee-li mahadhaolo should Stat.NFin:Emph-die-1S.Gen Dyn.Subj:at once ikaodh-iae kane, ma-'ilrao-lrao."
 not exist-1S.Obl Dyn.NFin:eat Stat.Fin-hungry-1S.Nom "I died out of hunger (because) there was nothing to eat."'
- (3.53) "la icongongaa-'o ta-odhipi" iia lalake-dha
 and thank-2S.Gen SubjNmz-Dyn.NFin:alive Dyn.NFin:so:Emph child-3S.Gen
 omi.
 like that
 '(Finally, the woman) told her child: "Thanks (to God), you are (still) alive."'
- (3.54) manii ia omi ana ma'olio-nga; pi'a
 then Dyn.NFin:so like that that Dyn.Subj:discuss-already Dyn.Fin:do
 anai omi.
 that like that
 'They discussed like that; they did that.'

(3.55) o-lriho'o-ng(a)-ka-li ka dhona
Dyn.Fin-know-already-Neg-1S.Gen Neg that
ta-pi'a-e-lidha vilrilae-nga
LocNmz-Dyn.NFin:do-LocNmz-3P.Gen afterwards-already
apokoa-nga-dha.
how come-already-3S.Gen
'I do not know what happened to them.'

(3.56) **kasa-nga-i** ana pata'asa-lrao ana lriho'o.
only-already-3S.Gen that until-1S.Nom that Dyn.Subj:know
'That is all what I know.'

Text 4. mavohoko la tomotomo 'The monkeys and the old women'

(4.1) kama-iiki-nga omi-ilidhe
Dyn.Fin:continuously-Dyn.NFin:exist-already pa'a-lili-lidha omii...
Rec-female friend-3P.Gen like that
'There were two friends...'

- (4.2)mani ia 'ina omi "ai, ita 'i-nga'ato 'a then Dyn.NFin:so this like that 1PI.Top gather-brushwood Excl Excl lamae" omi. ia voc:female friend Dyn.NFin:so like that "(One of them) said: "My friend, let's go gather brushwood."
- (4.3) mani dhaace omi-ilidhe 'i-nga'ato
 then Dyn.NFin:leave like that-3P.Obl gather-brushwood
 pa'a-lili-dha m-oa omii ma-ngee'ato.
 Rec-female friend-3S.Gen Dyn.Subj-go like that Stat.Subj-chop brushwood:Emph
 'The two friends went to gather brushwood.'
- (4.4)a-to-'odho-nga-lidha om-i'a ona mani that ClsNmz-do-Dyn.NFin:carry on head-already-3P.Gen Dyn.Fin-look like then ia 'ina omi-idhe dhona ta-ka-hodhange Dyn.NFin:so this like that-3S.Obl that SubjNmz-Stat.NFin-old "lamae om-iki dhona-lo 'n ani'ia voc:female friend Dyn.Fin-exist that-plur as pointed out mavohoko mo'elange omi-idhe om-oa monkey Dyn.Fin-go like that-3S.Obl Dyn.Subj:come across dhoodhoa'i ta-ka-eaea omi. SubjNmz-Stat.NFin-one:Red like that that 'When they had finished arranging their load, one of the old women said: "Friend, there are monkeys over there, I met them."
- (4.5)om-oa 'i-nga'ato-'ato omi Dyn.Fin-go gather-brushwood-Red like that kapa-iiki dhona-lo mavohoko. omi Dyn.NFin:continuously-Dyn.NFin:exist like that that-plur monkey '(She) had gone to chop brushwood and there were monkeys.'
- (4.6)kapa-oa omi-idhe mo'elange Dyn.NFin:continuously-Dyn.NFin:go Dyn.Subj:come across like that-3S.Obl dhona'i titina ta-ka-eaea. omi middle-aged woman like that SubjNmz-Stat.NFin-one:Red that '(They) came across the old woman.'

- (4.7) "mah! 'ananee" m-oa sialalara omi-idhe.

 Excl Excl Dyn.Subj-so Dyn.Subj:Red:hear like that-3S.Obl

 '(The old woman) heard (them) and uttered: "Oh, ayayay."
- (4.8)kapahanana omi-ilidhe dhona-lo mavohoko omi everywhere like that-3P.Obl that-plur monkey like that ma-a-vo'o-vo'okoo omii. Stat.Fin-plur-Red-drunk like that 'All those monkeys were drunk.'
- (4.9)'i-pocinga'a 'ina'i lrailraili 'ini-vava, Pass-Dyn.NFin:insert consume-wine this silver grass stem 'ina 'i-tovese kahanaae omi. wear-head ornament this silver grass like that 'They were drinking wine, and had silver grass stems inserted in their head ornaments made of silver grass.'
- (4.10) **kama-kilakili omi-ilidhe omi.**Dyn.Fin:continuously-Dyn.NFin:dance the valiant soldiers' dance like that-3P.Obl like that 'They were dancing the dance of the valiant soldiers.'
- (4.11) kapa-polidhao omi-idhe dhona'i
 Dyn.NFin:continuously-Dyn.NFin:watch like that-3S.Obl that
 titina omi.
 middle-aged woman like that
 'The old woman was watching them.'
- "ananee, (4.12) kapa-oa omi-idhe l-ahanee, Dyn.NFin:continuously-go like that-3S.Obl Excl plur-grandchild maava'i-lraao" m-ia ka-havehavehe omi mani Dyn.Fin:come-1S.Nom:Emph Dyn.Subj:so like that then Stat.NFin-happy omi-ilidhe mavohoko "maava'i-ka-'o dhona-lo like that-3P.Obl that-plur monkey Dyn.Fin:come-Neg-2S.Gen omokoo?", "ia'e" ia omi. Grandma Dyn.NFin:so like that yes 'She told them: "Oh, my grandchildren, I have come!". The monkeys were very happy and asked her: "Grandma, you've come, haven't you?" And the old woman replied: "Yes!"
- (4.13) "'ananee, ma-dhalame-lra-inome l-ahane cengele, Excl Stat.Fin-like-1S.Nom-2P.Obl plur-grandchild Dyn.Subj:see kani ka 'akosaae-nomi taadhia'-e." whv Lig so much-2P.Gen good-StatNmz "Oh, my grandchildren, I like to see you, how handsome you are!"

- (4.14) "'ananee, kani pa'apaalra-ni 'ina 'a-pocinga'a-nomi, why Excl great-3S.Gen this InstNmz-Dyn.NFin:insert-2P.Gen 'ina tovese-nomi." kani pa'apaalra-ni head ornament-2P.Gen why great-3S.Gen this "Oh, what you have inserted is great! Your head ornaments are (also) very beautiful!"
- (4.15) "'ina laviti-nomi 'akosaae-nomi ka taadhia'-ee!"
 this man's short skirt-2P.Gen so much-2P.Gen Lig good:Stat.Nmz:Emph
 ia omi.

 Dyn.NFin:so like that
 "How beautiful your skirts are!"
- omi-ilidhe mavohoko (4.16) ka-havehavehe dhona-lo kamahananae Stat.NFin-happy like that-3P.Obl that-plur monkey everywhere kilakili coho-cohoko omi Dyn.Subj:dance the valiant soldiers'dance Dyn.Subj:Red-jump like that 'The monkeys were very happy; they danced and jumped everywhere.'
- (4.17) **ma-a-vo'o-vo'oko omi.**Stat.Fin-plur-Red-drunk
 'They were all drunk.'
- (4.18) mani ona'i a-ka-toko'o-nga-dha o'i then that ClsNmz-Stat.NFin-tired-already-3S.Gen that titina om-ia "'ai" mani 'ina middle-aged woman Dyn.Fin-look like Excl then Dyn.NFin:so this omi "'ai l-ahane mo-dheeace-nga-lrao, like that Excl plur-grandchild Irr-Dyn.NFin:leave-already-1S.Nom ma'adhaili dha'ane-li amo-kavee'i-nga-lrao l-ahane, Stat.Fin:far house-1S.Gen Irr-Dyn.NFin:come-already-1S.Nom plur-grandchild o-dhamate-ma-iae" omi. ia Dyn.Fin-prepare dishes-Imprs.Nom-1S.Obl Dyn.NFin:so like that 'When the old woman was tired, she told them: "Oh, my grandchildren, I am leaving. My house is (very) far (but) I will come back (so) prepare something for me."
- (4.19) "'ai, ia'e omoko" ia omi.

 Excl all right grandma Dyn.NFin:so like that '(The monkeys) replied: "All right, grandma.""
- (4.20) "omoko (a)mo-vaa'i-na-imia'e" kapahanana-idhe
 grandma Irr-Dyn.NFin:give-1PE.Nom-2S.Obl
 voa'i omii voa'-idhe molrae

 Dyn.Subj:give like that Dyn.Subj:give-3S.Obl clothes

voa'-idhe taleke omi pa-amec-idhe Dyn.Subj:give-3S.Obl food like that Caus-Dyn.NFin:bring-3S.Obl omi-idhe. omi dhona titina mani dhaace middle-aged woman like that that then Dvn.NFin:leave like that-3S.Obl "Grandma, we want to offer you (a few things)" and they gave her clothes and food to bring back; then she left.'

- (4.21) mani omi-idhe lili-dha omi "lamae oa female friend like that voc:female friend then Dvn.NFin:go like that-3S.Obl kani patoliae 'inai'i 'i from:ObjNmz this why a-'odho-e-'o, kani, aanga-i ObjNmz-Dyn.NFin:carry on head-ObjNmz-2S.Gen who-3S.Gen why ta-vaa'-imia'ee" ma-lavahe SubjNmz-Dyn.NFin:give-2S.Obl Dyn.NFin:so Stat.Subj-envy lili-dha omi-idhe. female friend-3S.Gen like that-3S.Obl 'She went to her friend, who envied her and asked her: "Friend, where do the things you carry come from, why, who gave them to you?""
- (4.22) "lamae, 'a-va'ai-lidha, iimia ceela voc:female friend InstNmz-Dyn.NFin:give-3P.Gen see:Imp come:Imp kone, iimia m-alra m-oa m-ia Dyn.Subj:eat Dyn.Subj-so Dyn.Subj-go come:Imp Dyn.Subj:take dhona" mani lili-dha omi. ia that then Dvn.NFin:so female friend-3S.Gen like that 'The old woman said to her friend: "Friend, have a look! This is what they gave me, come on and eat, come on and take some.""
- (4.23) mani ia 'ina omi-idhe dhona'i ta-ka-eaea Dyn.NFin:so this then like that-3S.Obl that SubjNmz-Stat.NFin-one:Red "lamae. iimia ovil-iae oaa" ita voc:female friend come:Imp Dyn.Subj:bring-1S.Obl 1PI.Top Dyn.NFin:go m-ia omi. Dyn.Subj-so like that 'The other old woman asked: "Friend, take me there, let's go!""
- (4.24) "'a, ama-l-imia'e ovili moeea? om-oa-lrao Excl how-1S.Gen-2S.Obl Dyn.Subj:bring Dyn.Subj:go Dyn.Fin-go-1S.Nom kapa-sihaoovo-ine lamae la mavohoko. voc:female friend and Dyn.NFin:continuously-Dyn.NFin:dance-3S.Obl monkey oa-lrao 'ananee (a)mo-ceengele-nga-mo'o Dyn.NFin:go-1S.Nom Excl Irr-Dyn.NFin:see-already-2S.Nom

molrae-lidha 'a lamae."

clothes-3P.Gen Excl voc:female friend

"Ah, how could I bring you there! When I went there, they were dancing, and well, (if) you saw their clothes, my friend."

- (4.25) "'i-ciahe 'ina lrailraili 'i-tovose kahanae wear-feather this silver grass stem wear-head ornament silver grass 'n a-sehasehaa'-e." 'i-laviti velevele wear-male short skirt banana ObjNmz-Dyn.NFin:cut odd pieces-ObjNmz "They had silver grass stems on their heads and wore head ornaments made of silver grass as well as short skirts made of odd pieces of banana skin."
- (4.26) mani "ananee, pii'a-nomi oa-lrao kani do-2P.Gen then Dyn.NFin:go-1S.Nom Excl why ta-'i-molra-e" om-ia-lrao LocNmz-wear-clothes-LocNmz Dyn.Subj-so-1S.Nom 'a lamae ka-'alrehe'ehe to-kolra-lrao ma-'omao la. do-bad-1S.Nom voc:female friend Stat.NFin-excited Stat.Subj-laugh and "I laughed at them and teased them: Ah, how are you dressed?"
- a-dhaace-nga-li (4.27) mani vaa'-iae ClsNmz-Dyn.NFin:leave-already-1S.Gen then Dyn.NFin:give-1S.Obl 'inaii ani'ia molrae" pa-amece kane 'ina Caus-Dyn.NFin:bring this as pointed out Dyn.NFin:eat this clothes lili-dha toponga'a omi-idhe Dyn.NFin:so female friend-3S.Gen Dyn.Subj:cheat like that-3S.Obl lili-dha m-ia ana. female friend-3S.Gen Dyn.Subj:so that "When I left, they gave me food and clothes" said the old woman to trick her friend."
- (4.28) "'a nao-laa m-oa" ia Excl 1S.Nom-Dyn.NFin:try Dvn.NFin-go Dvn.NFin:so dhona omi-idhe ta-ka-eaea mani dhaace that SubjNmz-Stat.NFin-one:Red then Dyn.NFin:leave like that-3S.Obl omi. ta-ka-eaea m-oa SubjNmz-Stat.NFin-one:Red Dyn.Subj-so like that 'The (other friend) said: "Ah, I want to go (too)."
- (4.29) la pa-ooa omi ni-alra-a-dha Caus-Dyn.NFin:go CncNmz-Dyn.NFin:take-CncNmz-3S.Gen and like that mavohoko omi ta-kapa-siaovo SubjNmz-Dyn.NFin:continuously-Dyn.NFin:dance monkey like that omi. pii'a-nga Dyn.Subj:do-already like that 'She went there and the monkeys were indeed dancing.'

- (4.30) mani oa omi. then Dyn.NFin:go like that 'She went there.'
- (4.31) "'ananee, maava'i-lrao l-ahanee" omi m-ia Excl Dyn.Fin:come-1S.Nom plur-grandchild Dvn.Subj-so like that "'ah. 'inaai-nga oomoe" ia omi-idhe ka this-already like that-3S.Obl Excl grandma Dyn.NFin:so Neg o-lriho'o-ka-lidha dhona mavohoko ka iconganae-nga m-ia. Dyn.Fin-know-Neg-3P.Gen that monkey another-already Dvn.Subj-so 'She told them: "Oh, my grandchildren, I am back!" and the monkeys replied: "Ah, here is Grandma." They did not know she was a different old woman.'
- (4.32) oa omokoo! omi-idhe "imia imia omokoo!" Dyn.NFin:go like that-3S.Obl come:Imp grandma come:Imp grandma m-ia omi-ilidhe mavohoko mani ia omi. Dyn.Subj-so like that-3P.Obl monkey Dyn.NFin:so like that then 'The monkeys enticed her: "Grandma, come on! Grandma, come on!""
- (4.33) "omokoo, maava'i-nga-ka-'o" m-ia omi.
 grandma Dyn.Fin:come-already-Neg-2S.Gen Dyn.Subj-so like that
 "ia'e, maava'i-lrao."
 yes Dyn.Fin:come-1S.Nom
 "Grandma, you have come." "Yes, I have come."
- (4.34) "'ananee, 'ina'i molrae-nomi kani 'i-ciaahe-nomi Excl this clothes-2P.Gen why wear-feather-2P.Gen lrailraili, 'i-tovese kani amo-koaa-nomi kahanae, silver grass stem why Irr-matter-2P.Gen wear-head ornament silver grass amo-koa-nomi 'i-laviti valevale velevele" iia Irr-matter-2P.Gen wear-male short skirt bamboo shoot banana Dyn.NFin:so omi-idhe dhona'i 'akoela omi-idhe tomotomo Dyn.Subj:laugh at like that-3S.Obl like that-3S.Obl that old person (omi). (like that)

'The old woman laughed at them: "(Look at) your clothes, why have you inserted silver grass stems in the head ornaments made of silver grass you are wearing? Why are you wearing skirts made of bananas and bamboo?"

(4.35) sohoto-idhe polra omi

Dyn.NFin:grasp-3S.Obl Dyn.Subj:grab like that

a-'akoela-dha omi ma-sekelr-idhe omi.

ClsNmz-Dyn.NFin:laugh at-3S.Gen like that Stat.Fin:angry-3S.Obl like that 'As (the old woman) was laughing at them, the monkeys grabbed her angrily.'

(4.36) "kani kapa-kaava'-iname 'akoela"
why Dyn.NFin:continuously-Dyn.NFin:come-1PE.Obl Dyn.Subj:laugh at
m-ia omi-idhe.
Dyn.Subj-so like that-3S.Obl
'They said: "Why did you come to laugh at us?""

- (4.37) mani alr-idhe ma-eceeceecenge mani then Dyn.NFin:take-3S.Obl Rec:Dyn.Subj:grasp:Red then po-idhe po-av-idhe omi.

 Dyn.NFin:make-3S.Obl Dyn.Subj:make-ashes-3S.Obl like that 'Then, they grabbed her and put ashes.'
- (4.38) mani po-idhe dhekedheke o'i na-mani'ia-nga-dha then Dyn.NFin:make-3S.Obl Dyn.Subj:put in that ?-sexual organ-Sup-3S.Gen pa-so'ete po-av-idhe omi.

 Caus-Dyn.NFin:full Dyn.Subj:make-ashes-3S.Obl like that 'They put ashes into her vagina.'
- (4.39) "kani kapa-oa-'-iname 'akoela?"
 why Dyn.NFin:continuously-Dyn.NFin:go-2S.Gen-1PE.Obl Dyn.Subj:laugh at
 (o)mi-idhe.
 like that-3S.Obl
 'They asked (again): "Why did you laugh at us?"'
- (4.40) mani ki-dhopaange-nga na-maca-nga-dha avo then Neg-Dyn.NFin:see-already ?-eye-Sup-3S.Gen ashes so'ete-ng-idhe mani'ia-dha avo kamahanana-idhe Dyn.Subj:full-already-3S.Obl and sexual organ-3S.Gen ashes everywhere-3S.Obl po-avo vii-vivihi-ng-idhe o'i molrae-dha CausMvt-ashes Dyn.Subj:Red-tear-already-3S.Obl that clothes-3S.Gen sii-sisihi omi ma-sekelr-idhe omi mani. Dyn.Subj:Red-tear like that Stat.Fin-angry-3S.Obl like that then 'She could not see because she had ashes in her eyes, as well as in her vagina. The monkeys were so angry that they put ashes everywhere and tore her clothes.'
- pa-dhaace dhoace" (4.41) **po-idhe** "m-oa Dyn.NFin:make-3S.Obl Caus-Dyn.NFin:go Dyn.Subj-go:Imp Dyn.Subj:leave omi-idhe mani dhaace 'ope'ape Dyn.NFin:so-3S.Obl then Dyn.NFin:leave like that-3S.Obl Dyn.Subj:grope along omi tako-tovi-tovi omi. like that while-Dyn.NFin:cry-Red like that 'At last, the monkeys threw the old woman out and she walked back blindly while crying.'

- (4.42) **"kani oomi-dh-iae lili-li" m-ia omi.**why like that-3S.Gen-1S.Obl female friend Dyn.Subj-so like that '(She thought:) "Why did my friend tell me that?"
- (4.43) mani dhaace m-oa m-okela lili-dha
 then Dyn.NFin:leave Dyn.Subj-go Dyn.Subj-to female friend-3S.Gen
 omi.
 like that
 'Then she went to her friend.'
- (4.44) "lamae, ma-'ete-nga-lrao" m-ia voc:female friend Stat.Fin-die-already-1S.Nom Dyn.Subj-so lili-dha omi mani dhona alraalra female friend-3S.Gen like that then Dyn.NFin:greet that lili-dha "kani apokoa-'o lamae female friend-3S.Gen whv how-2S.Gen voc:female friend pi'a 'ina" kani apokoa-dh-imia'e m-ia omi. why how-3S.Gen-2S.Obl Dyn.Subj:do this Dyn.Subj-so like that "Friend, I am dead!" Her friend asked: "Friend, are you OK? What did they do to you?"
- (4.45) mani alra lili-dha omi tako-ka-'omao then Dyn.NFin:take female friend-3S.Gen like that while-Stat.NFin-laugh omi.
 like that 'Her friend was laughing as she was greeting her.'
- (4.46) a-paavanao-nga lili-dha 'olra ClsNmz-Dyn.NFin:bathe-already female friend-3S.Gen Dyn.Subj:take off taaso'et-idhe mani'ia-dha avo Dyn.Subj:full-3S.Obl sexual organ-3S.Gen SubjNmzashes-3S.Gen maca-dha o'i votolro'o-dha omi. that eye-3S.Gen body-3S.Gen like that 'When her friend had washed herself, she took off the ashes that were in her vagina, her eyes, and on her body.'
- (4.47) **kamahanana-idhe molrae-dha ma-sii-sisihi omi.**everywhere-3S.Obl clothes-3S.Gen Rec:Dyn.Subj-Red-tear like that 'Her clothes were all torn.'
- (4.48) o-si-sisih-idhe omi-idhe mani poa Dyn.Fin-Red-tear-3S.Obl then Dyn.NFin:make like that-3S.Obl pa-valrisi lili-dha omi mani ka-'alrehee'ehe Caus-Dyn.NFin:change female friend-3S.Gen like that then Stat.NFin-excited

omi-idhe lili-dha.

like that-3S.Obl female friend-3S.Gen

'Her friend helped her to tear (off the rest) and change her clothes.'

(4.49) "omi-'oo?" i-idhe omi "om-ia-lrao ana like that-2S.Gen Dyn.NFin:so-3S.Obl like that Dyn.Fin-so-1S.Nom that lamae" ma-'omao omi-idhe lili-dha kapahana voc:female friend everywhere Stat.Subj-laugh like that-3S.Obl female friend polrialriale.

Dyn.Subj:laugh

'The old woman asked her friend: "What do you say?""

- (4.50) mani "la ia-'-iae ana lamae".
 then and Dyn.NFin:so-2S.Gen-1S.Obl that voc:female friend
 "Friend, you told me so.""
- (4.51) "ia'e, la om-ia-lrao ana" iia om-idhe yes Dyn.Fin-so-1S.Nom Dyn.NFin:so like that-3S.Obl and that o-tanange lili-dha omi. Dyn.Fin-cheat female friend-3S.Gen like that 'Her friend (went on) cheating her: "Yes, that is what I said.""
- (4.52) la ka ki-ia dhona ta-ia-e-dha.

 and Lig Neg-Dyn.NFin:so that LocNmz-Dyn.NFin:so-LocNmz-3S.Gen

 'In fact, what she had said was not what she had done.'

References

- Adelaar, Sander. 1997. Grammar notes on Siraya, an extinct Formosan language. *Oceanic Linguistics* 36.2:362-397.
- Adelaar, Sander. 2000. Siraya reduplication. Oceanic Linguistics 39.1:33-52.
- Adelaar, Sander. 2004. The coming and going of "lexical prefixes" in Siraya. *Language and Linguistics* 5.1:333-361.
- Anderson, Stephen R. 1992. *A-morphous morphology*. Cambridge: Cambridge University Press.
- Aronoff, Mark. 1994. *Morphology by Itself: Stems and Inflectional Classes*. Linguistic Inquiry Monograph, 22. Cambridge: MIT Press.
- Beard, Robert. 1995. Lexeme-morpheme Base Morphology: A General Theory of Inflection and Word Formation. Albany: SUNY Press.
- Bender, Byron W. 1996. Distinguishing between inflection and derivation. *Reconstruction, Classification, Description: Festschrift in Honor of I. Dyen*, ed. by B. Nothofer, 199-207. Hamburg: Abera Verlag.
- Bender, Byron W. 1998. The sign gravitates to the word. *Productivity and Creativity: Studies in General and Descriptive Linguistics in Honor of E. M. Uhlenbeck*, ed. by Mark Janse, with the assistance of Ann Verlinden, 14-25. Berlin and New York: Mouton de Gruyter.
- Berg, René Van den. 1989. *A Grammar of the Muna Language*. Dordrecht & Providence: Foris.
- Bisetto, Antonietta, and Sergio Scalise. 1999. Compounding: morphology and/or syntax. *Boundaries of Morphology and Syntax*, ed. by Lunella Mereu, 31-48. Amsterdam Studies in the Theory and History of Linguistic Science, Series IV-Current Issues on Linguistic Theory. Amsterdam & Philadelphia: John Benjamins.
- Bloomfield, Leonard. 1933. Language. New York: Holt and Co.
- Blust, Robert. 1977. The Proto Austronesian pronouns and Austronesian subgrouping: a preliminary report. *Working papers in Linguistics* 9.2:1-15.
- Blust, Robert. 1995a. Sibilant assimilation in Formosan languages and the Proto-Austronesian word for 'nine'. *Oceanic Linguistics* 34.2:443-453.
- Blust, Robert. 1995b. The position of the Formosan languages: method and theory in Austronesian comparative linguistics. *Austronesian Studies Relating to Taiwan*, ed. by Paul Jen-kuei Li, Cheng-hwa Tsang, Ying-kuei Huang, Dah-an Ho and Chiu-yu Tseng, 585-650. Taipei: Institute of History and Philology, Academia Sinica.
- Blust, Robert. 1998. *Ca*-reduplication and Proto-Austronesian grammar. *Oceanic Linguistics* 37.1:29-64.

- Blust, Robert. 1999a. Subgrouping, circularity and extinction: some issues in Austronesian comparative linguistics. *Selected Papers from the Eighth International Conference on Austronesian Linguistics*, ed. by Elizabeth Zeitoun and Paul Jen-kuei Li, 31-94. Taipei: Institute of Linguistics, Academia Sinica.
- Blust, Robert. 1999b. Notes on Pazeh phonology and morphology. *Oceanic Linguistics* 38.2:321-365.
- Blust, Robert. 2001. Squib: Thao triplication. *Oceanic Linguistics* 40.2:324-335.
- Blust, Robert. 2002. Notes on the history of 'focus' in Austronesian languages. *The History and Typology of Western Austronesian Voice Systems*, ed. by Fay Wouk and Malcolm Ross, 63-78. Pacific Linguistics 518. Canberra: Australian National University.
- Blust, Robert. 2003a. Three notes on early Austronesian morphology. *Oceanic Linguistics* 42.2:438-478.
- Blust, Robert. 2003b. *Thao Dictionary*. Language and Linguistics Monograph Series, A5. Taipei: Institute of Linguistics, Academia Sinica.
- Blust, Robert. (forthcoming). The Austronesian Languages. Manuscript.
- Bolinger, Dwight L. 1963. The uniqueness of the word. *Lingua* 12:113-136.
- Bowden, John. 2001. *Taba: Description of a South Halmahera Austronesian Language*. Pacific Linguistics 521. Canberra: Australian National University.
- Bresnan, Joan, and Sam A. Mchombo. 1987. Topic, pronoun, and agreement in Chicheŵa. *Language* 63.4:741-782.
- Bybee, Joan L. 1985. *Morphology: A Study of the Relation between Meaning and Form.* Amsterdam: John Benjamins.
- Cauquelin, Josiane. 1991a. *Dictionnaire puyuma-français*. Textes et Documents Nousantariens IX. Paris: EFEO.
- Cauquelin, Josiane. 1991b. The Puyuma language. *Bijdragen tot de Taal-en-Land-en Volkenkunde* 147.1:17-60.
- Chang, Anna H. 1992. *Causative Constructions in Paiwan*. Hsinchu: National Tsing Hua University MA thesis.
- Chang, Anna H. 2000. *A Reference Grammar of Paiwan*. Series on Formosan Languages, 9. Taipei: Yuanliou. (In Chinese)
- Chang, Anna H. 2006. *A Grammar of Paiwan*. Canberra: Australian National University dissertation.
- Chang, Anna H., and Feng-fu Tsao. 1995. A syntactic comparison of the cause between Paiwan and Tagalog. *Proceedings of the First International Symposium on Languages in Taiwan*, ed. by Feng-fu Tsao and Mei-hui Tsai, 99-126. Taipei: Crane.
- Chang, Laura M. 1998. Thao reduplication. *Oceanic Linguistics* 37.1:277-297.

- Chang, Melody Y. 1998. *Wh-constructions and the Problem of Wh-movement in Tsou*. Hsinchu: National Tsing Hua University MA thesis.
- Chang, Melody Y. 2000. On Tsou *Wh*-questions: movement or in situ? *Language and Linguistics* 1.2:1-18.
- Chang, Yung-li. 1997. *Voice, Case and Agreement in Seediq and Kavalan*. Hsinchu: National Tsing Hua University dissertation.
- Chang, Yung-li. 2000a. *A Reference Grammar of Seediq*. Series on the Formosan Languages, 6. Taipei: Yuanliou. (In Chinese)
- Chang, Yung-li. 2000b. *A Reference Grammar of Kavalan*. Series on the Formosan Languages, 12. Taipei: Yuanliou. (In Chinese)
- Chang, Yung-li. 2001. On the referential properties of noun phrases in Tsou. Paper presented at the International Symposium on Austronesian Cultures: Issues Relating to Taiwan. Taipei: Academia Sinica.
- Chang, Yung-li. 2003. Distributivity, plurality, and reduplication in Tsou. *Tsing Hua Journal of Chinese Studies*, New Series 32.2:1-30.
- Chang, Yung-li. 2006. The guest playing host: adverbial modifiers as matrix verbs in Kavalan. *Adjuncts and Clause Structure in Austronesian Languages*, ed. by Hans-Martin Gaertner, Paul Law, and Joachim Sabel, 43-82, Berlin: Mouton de Gruyter.
- Chang, Yung-li, Chih-Chen Jane Tang, and Dah-an Ho. 1998. A study of noun-class markers in Kavalan. *Tsing Hua Journal of Chinese Studies*, New Series 28.3: 275-298.
- Chang, Yung-li, and Pei-rong Lee. 2002. Nominalization in Kavalan. *Language and Linguistics* 3.2:349-368.
- Chen, Cheng-Fu. 1999. *Wh-words as Interrogatives and Indefinites in Rukai*. Taipei: National Taiwan University MA thesis.
- Chen, Jie-rui. 1996. *A Preliminary Study on Negation in Seediq*. Hsinchu: National Tsing Hua University MA thesis. (In Chinese)
- Chung, Sandra, and Alan Timberlake. 1985. Tense, aspect, and mood. *Language Typology and Syntactic Description: Grammatical Categories and the Lexicon*, Vol. 3, ed. by Timothy Shopen, 202-258. Cambridge: Cambridge University Press.
- Chuo, Fred P. L. 1998. A comparative study of interrogatives in Tsou and Yami. *Fu Jen Studies* 31:1-18.
- Clark, Eve. 1978. Locationals: existential, locative, and possessive constructions. *Universals of Human Language*, Vol. 4: *Syntax*, ed. by Joseph Greenberg, 85-126. Stanford: Stanford University Press.
- Comrie, Bernard. 1985. Causative verb formation and other verb-deriving morphology. Language Typology and Syntactic Description, Vol. 3: Grammatical Categories

- and the Lexicon, ed. by Timothy Shopen, 309-348. Cambridge: Cambridge University Press.
- Comrie, Bernard. 1986a. Aspect. Cambridge: Cambridge University Press.
- Comrie, Bernard. 1986b. Conditionals: a typology. *On Conditionals*, ed. by Elizabeth Closs Traugott, Alice Ter Meulen, Judy Snitzer Reilly, and Charles A. Ferguson, 77-101. Cambridge: Cambridge University Press.
- Comrie, Bernard, and Sandra A. Thompson. 1985. Lexical nominalization. *Language Typology and Syntactic Description*, Vol. 3: *Grammatical Categories and the Lexicon*, ed. by Timothy Shopen, 349-398. Cambridge & New York: Cambridge University Press.
- Corbett, Greville. 2000. *Number*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press.
- Croft, William. 1990. A conceptual framework for grammatical categories. *Journal of Semantics* 7:245-280.
- Crowley, Terry. 1987. Serial verbs in Paamese. Studies in Language 11:35-84.
- Diessel, Holger. 1999. *Demonstratives: Form, Function, and Grammaticalization*. Typological Studies in Language, 42. Amsterdam: John Benjamins.
- Diessel, Holger. 2003. The relationship between demonstratives and interrogatives. *Studies in Language* 27.3:635-655.
- Dixon, R. M. W. 1972. *The Dyirbal Language of North Queensland*. Cambridge Studies in Linguistics, 9. Cambridge: Cambridge University Press.
- Dixon, R. M. W. 1977. Where have all the adjectives gone? *Studies in Language* 1: 19-80.
- Dixon, R. M. W. 1979. Ergativity. *Language* 55.1:59-138.
- Dixon, R. M. W. 1982. Where Have All the Adjectives Gone? And Other Essays in Semantics and Syntax. Janua Linguarum, Series Major, 107. Berlin: Mouton de Gruyter.
- Dixon, R. M. W. 1995. Complement clauses and complementation strategies. *Grammar and Meaning: Essays in Honor of Sir John Lyons*, ed. by F. R. Palmer, 175-220. Cambridge: Cambridge University Press.
- Dixon, R. M. W. 1997. *The Rise and Fall of Languages*. Cambridge: Cambridge University Press.
- Dixon, R. M. W. 2000. Typology of causatives: form, grammar and meaning. *Changing Valency: Case Studies in Transitivity*, ed. by R. M. W. Dixon and Alexandra Y. Aikhenvald, 30-82. Cambridge: Cambridge University Press.
- Dixon, R. M. W. 2003. Demonstratives: a cross-linguistic typology. *Studies in Language* 27.1:61-112.

- Ferrell, Raleigh. 1969. *Taiwan Aboriginal Groups: Problems in Cultural and Linguistic Classification*. Taipei: Institute of Ethnology, Academia Sinica.
- Ferrell, Raleigh. 1970. The Pazeh-Kahabbu language. *Bulletin of the Department of Archaeology and Anthropology* 31-32:73-97.
- Ferrell, Raleigh. 1982. *Paiwan Dictionary*. Pacific Linguistics C-73. Canberra: Australian National University.
- Foley, William, and Robert Van Valin Jr. 1984. *Functional Syntax and Universal Grammar*. Cambridge: Cambridge University Press.
- Ford, Alan, Rajendra Singh, and Gita Martohardjono. 1997. *Pace Pāṇini: Towards A Word-Based Theory of Morphology*. American University Studies Series XIII, Linguistics; Vol. 34. New York: Peter Lang.
- Fradin, Bernard. 2003. *Nouvelles approches en morphologie*. Paris: Presses Universitaires de France.
- Frajzyngier, Zygmunt. 1997. Grammaticalization of number: from demonstratives to nominal and verbal plural. *Linguistic Typology* 1:193-242.
- Freeze, Ray. 1991. Existentials in Austronesian. Paper presented at the Sixth International Conference on Austronesian Linguistics. Honolulu, May 21-24.
- Freeze, Ray. 1992. Existentials and other locatives. Language 68.3:553-595.
- Geniušiené, Emma. 1987. The Typology of Reflexives. Berlin: Mouton de Gruyter.
- Givón, Talmy. 1990. Syntax: An Introduction, Vol. 2. Amsterdam: John Benjamins.
- Gordon, Raymond G., Jr. (ed.) 2005. *Ethnologue: Languages of the World* (15th edition). Dallas: SIL International. Online version: http://www.ethnologue.com/.
- Haiman, John. 1978. Conditionals are topics. Language 54.3:564-589.
- Haudricourt, André. 1979. Importance de la relation équative en linguistique générale (avec des exemples de langues austronésiennes). *Lacito-documents*, *Eurasie*, 3, ed. by Catherine Paris, 11-14. Paris: SELAF.
- Himmelmann, Nikolaus P. 2005a. The Austronesian languages of Asia and Madagascar: typological characteristics. *The Austronesian Languages of Asia and Madagascar*, ed. by Sander Adelaar and Nikolaus Himmelmann, 110-181. Routledge Language Family Series. London & New York: Routledge.
- Himmelmann, Nikolaus P. 2005b. The Tagalog. *The Austronesian Languages of Asia and Madagascar*, ed. by Sander Adelaar and Nikolaus Himmelmann, 350-376. Routledge Language Family Series. London & New York: Routledge.
- Ho, Dah-an. 1977. The phonological system of the Butanglu dialect of Paiwan. *Bulletin of the Institute of History and Philology* 48.4:595-618.
- Ho, Dah-an. 1983. The position of Rukai in the Formosan languages. *Bulletin of the Institute of History and Philology* 47.2:243-274. (In Chinese)
- Hockett, Charles F. 1954. Two models of grammatical description. Word 10:210-234.

- Holmer, Arthur. 1996. *A Parametric Grammar of Seediq*. Travaux de l'Institut de Linguistique de Lund, 30. Lund: Lund University Press.
- Hopper, Paul, and Sandra A. Thompson. 1980. Transitivity in grammar and discourse. *Language* 56.1:251-299.
- Hopper, Paul, and Sandra A. Thompson. 1984. The discourse basis for lexical categories in universal grammar. *Language* 60.4:703-752.
- Hsin, Tien-hsin. 2000. Aspects of Maga Rukai phonology. Baltimore: University of Connecticut dissertation.
- Hsin, Tien-hsin. 2002. Maga (Rukai) texts, under the supervision of E. Zeitoun. Manuscript. (Texts and sound files available on the Formosan Language Archive web site at: formosan.sinica.edu.tw)
- Huang, Lillian M. 1993. A Study of Atayal Syntax. Taipei: Crane.
- Huang, Lillian M. 1995a. A Study of Mayrinax Syntax. Taipei: Crane.
- Huang, Lillian M. 1995b. The case markers and pronominal system in Amis. *The National Chengchi University Journal* 70:217-257.
- Huang, Lillian M. 1997. Serial verb constructions in some Formosan languages: a typological view. Paper presented at the Eighth International Conference on Austronesian Linguistics, Dec. 28-30. Taipei: Academia Sinica.
- Huang, Lillian M. 2000a. *A Reference Grammar of Puyuma*. Series on Formosan Languages, 10. Taipei: Yuanliou. (In Chinese)
- Huang, Lillian M. 2000b. Verb classification in Atayal. *Oceanic Linguistics* 39.2: 364-390.
- Huang, Lillian M., Elizabeth Zeitoun, Marie M. Yeh, Joy J. Wu, and Anna H. Chang. 1998. A typological overview of nominal case marking of the Formosan languages. *Proceedings of the Second International Symposium on Languages in Taiwan*, 21-48, Taipei: Crane.
- Huang, Lillian M., Elizabeth Zeitoun, Marie M. Yeh, Joy J. Wu and Anna H. Chang. 1999a. Interrogative constructions in some Formosan languages. *Chinese Languages and Linguistics*, Vol. 5: *Interactions in Language*, ed. by Yuen-mei Yin, I-li Yang, Hui-chen Chan, 639-680. Taipei: Institute of Linguistics, Academia Sinica.
- Huang, Lillian M., Elizabeth Zeitoun, Marie M. Yeh, Joy J. Wu, and Anna H. Chang. 1999b. A typological study of pronouns in the Formosan languages. *Selected Papers from the 5th International Conference on Chinese Linguistics*, ed. by Samuel H. Wang, Feng-fu Tsao, and Chinfa Lien, 165-198. Taipei: Crane.
- Kaneko, Erika, and Tsuchida Shigeru. 2005. Stories and language of the Mantauran. *Asian Folklore Studies* 64:147-154.
- Katamba, Francis. 1993. *Morphology*. Modern Linguistics Series. London: Macmillan Press.

- Kiyomi, Setsuko. 1995. A new approach to reduplication: a semantic study of noun and verb reduplication in the Malayo-Polynesian languages. *Linguistics* 33:1145-1167.
- Kroeger, Paul. 1993. *Phrase Structure and Grammatical Relations in Tagalog*. Stanford: CSLI.
- Kroeger, Paul. 2005. *Analyzing Grammar: An Introduction*. Cambridge: Cambridge University Press.
- Kuo, Ching-hua. 1979. *Budai Complementation*. Taipei: Fu-jen Catholic University MA thesis.
- Lee, Amy P. 2005. Rightward reduplication in Formosan languages revisited. Paper presented at AFLA XII. April 30-May 2. Los Angeles: University of California.
- Lee, Amy P. 2007. *A Typological Study of Reduplication in Formosan Languages*. Colchester: University of Essex dissertation.
- Lehman, Christian. 1985. Grammaticalization: synchronic variation and diachronic change. *Lingua e Stile* 20:303-318.
- Lehman, Christian. 1988. Towards a typology of clause linkage. *Clause Combining in Grammar and Discourse*, ed. by John Haiman and Sandra A. Thompson, 181-225. Amsterdam & Philadelphia: John Benjamins.
- Lemaréchal, Alain. 2004. (Pré)histoires d'articles et grammaire comparée des langues austronésiennes. *Bulletin de la Société de Linguistique de Paris*, XCIX.1: 395-456.
- Li, Hao-de. 1998. *A Semantically Oriented Synthesis of Vudai Grammar*. Taipei: National Taiwan University MA thesis.
- Li, Paul J. 1973. *Rukai Structure*. Taipei: Institute of History and Philology, Academia Sinica.
- Li, Paul J. 1977a. Morphophonemic alternations in Formosan languages. *Bulletin of the Institute of History and Philology* 48.3:375-413.
- Li, Paul J. 1977b. The internal relationships of Rukai. *Bulletin of the Institute of History and Philology* 48.1:1-92.
- Li, Paul J. 1978. The case-marking systems of the four less known Formosan languages. *Proceedings of the Second International Conference on Austronesian Linguistics*, Fascicle 1, 569-615. Pacific Linguistics C-61. Canberra: Australian National University.
- Li, Paul J. 1990. Classification of Formosan languages: lexical evidence. *Bulletin of the Institute of History and Philology* 61.2:811-837.
- Li, Paul J. 1992. Orthographic systems for Formosan languages (in Chinese). Taipei: Ministry of Education.
- Li, Paul J. 1995. Distribution of the Formosan languages and migration of the tribes. *Proceedings of the First International Symposium on Languages in Taiwan*, ed. by Feng-fu Tsao and Mei-hui Tsai, 1-16. Taipei: Crane.

- Li, Paul J. 1996. The pronominal systems in Rukai. *Reconstruction, Classification, Description: Festschrift in Honor of Professor Isidore Dyen*, ed. by Bernd Nothofer, 209-230. Hamburg: Abera Verlag.
- Li, Paul J. 1997a. A syntactic typology of Formosan languages—case markers on nouns and pronouns. *Chinese Languages and Linguistics*, Vol. 4: *Typological Studies of Languages in China*, ed. by Chiu-yu Tseng, 343-378. Taipei: Institute of History and Philology, Academia Sinica.
- Li, Paul J. 1997b. Formosa Folkways. Taipei: Chang-ming. (In Chinese)
- Li, Paul J. 2001. The dispersal of the Formosan aborigines in Taiwan. *Language and Linguistics* 2.1:271-278.
- Li, Paul J. 2006. Numerals in Formosan languages. Oceanic Linguistics 45.1:133-152.
- Li, Paul J. (ed.) 1997c. *The Austronesian Languages of Kaoshiung County*. Series on the materials regarding Kaoshiung county, 7. Fengshan: Kaoshiung County Government. (In Chinese)
- Li, Paul J., and Shigeru Tsuchida. 2001. *Pazih Dictionary*. Language and Linguistics Monograph Series, A2. Taipei: Institute of Linguistics, Academia Sinica.
- Li, Paul J., and Shigeru Tsuchida. 2006. *Kavalan Dictionary*. Language and Linguistics Monograph Series, A14. Taipei: Institute of Linguistics, Academia Sinica.
- Liao, Hsiu-chuan. 2002. The interpretation of tu and Kavalan ergativity. *Oceanic Linguistics* 41.1:140-158.
- Liao, Hsiu-chuan. 2004. *Transitivity and Ergativity in Formosan and Philippine Languages*. Honolulu: University of Hawai'i at Mānoa dissertation.
- Lichtenberk, Frantisek. 1983. *A Grammar of Manam*. Oceanic Linguistics Special Publication, 18. Honolulu: University of Hawai'i Press.
- Lichtenberk, Frantisek. 1985a. Multiple uses of reciprocal constructions. *Australian Journal of Linguistics* 5:19-41.
- Lichtenberk, Frantisek. 1991a. On the gradualness of grammaticalization. *Approaches to Grammaticalization*, Vol. 1: *Focus on Theoretical and Methodological Issues*, ed. by Elizabeth Closs Traugott and Bernd Heine, 37-80. Amsterdam & Philadelphia: John Benjamins.
- Lichtenberk, Frantisek. 1991b. Reciprocals and depatientives in Toabaita. *Currents in Pacific Linguistics: Papers on Austronesian Languages and Ethnolinguistics in Honour of George W. Grace*, ed. by Robert Blust, 171-183. Pacific Linguistics C-117. Canberra: Australian National University.
- Lichtenberk, Frantisek. 1999. Reciprocals without reflexives. *Reciprocals: Forms and functions*, ed. by Zygmunt Frajzyngier and Traci S. Curl, 31-62. Amsterdam & Philadelphia: John Benjamins.

- Lin, Ching-rong. 1992. *The Paiwan Imperative*. Hsinchu: National Tsing Hua University MA thesis.
- Lin, Hui-chuan. 1999. Let's Talk Mantauran, Vols. 1-6. Taipei: Crane. (In Chinese)
- Lin, Hui-chuan, and Elizabeth Zeitoun. 1997. *A Thematic Dictionary of Mantauran*. Manuscript. (In Chinese & English)
- Lin, Hsiu-hsu. 1995. Syllable structure of Bunun: an example from Isbukun dialect. *Papers on Formosan Languages*, ed. by Paul Jen-kuei Li and Ying-chin Lin, 333-346. Taipei: Education Research Committee, Ministry of Education. (In Chinese)
- Lin, Hsiu-hsu. 1996. *Isbukun Phonology: A Study of its Segments, Syllable Structure and Phonological Process.* Hsinchu: National Tsing Hua University MA thesis.
- Lin, Ying-chin. 1999. On Pazeh morphology. Paper presented at the Ninth Annual Meeting of the Southeast Asian Linguistics Society (SEALS-IX). May 22-23. Berkeley: University of California.
- Lin, Ying-chin. 2000. *The Pazeh Language*. Series on the Formosan languages, 4. Taipei: Yuanliou. (In Chinese)
- Lin, Wan-Ying. 2004. *Vowel Epenthesis and Reduplication in Squliq and C'Auli? Atayal Dialects*. Hsinchu: National Tsing Hua University MA thesis.
- Lombardi Vallauri, Edouardo. 1997. Clause linkage in Japanese. *Linguistics* 35:481-512.
- Lu, Shun-chieh. 2003. An Optimality Theory Approach to Reduplication in Formosan Languages. Taipei: National Chengchi University MA thesis.
- Lyons, John. 1967. A note on possessive, existential, and locative sentences. *Foundations of Language* 3:390-396.
- Mabuchi, Tōichi. 1974. Shuzokushi: Rukai-zoku [Ethnohistory: the Rukai tribe]. *Mabuchi Tōichi Chosakushū* [*Anthology of T. Mabuchi's Work*], Vol. 2, 348-354. Tokyo: Shakai Shisosha (In Japanese)
- Marantz, Alec. 1982. Re reduplication. *Linguistic Inquiry* 13.3:435-482.
- Martin, Steven Andrew. 2006. Ethnohistorical Perspectives of the Bunun: A Case Study of Laipunuk, Taiwan. Taipei: National Chengchi University.
- Matthews, Peter H. 1991. *Morphology* (2nd edition). Cambridge: Cambridge University Press.
- Mithun, Marianne. 1984. How to avoid subordination. *BLS* 10:493-509. Berkeley: Berkeley Linguistics Society.
- Moore, John. 1994. Romance cliticization and relativized minimality. *Linguistic Inquiry* 25:335-344.
- Moravcsik, Edith A. 1978. Reduplicative constructions. *Universals of Human Languages*, Vol. 3: *Word Structure*, ed. by Joseph H. Greenberg, 297-334. Stanford: Stanford University Press.

- Nedjalkov, Vladimir P., Galina A. Otaina, and A. A. Xolodovic. 1995. Morphological and lexical causatives in Nivkh. *Subject, Voice, and Ergativity: Selected Essays*, ed. by Theodora Bynon, David C. Bennett, and B. George Hewitt, 60-80. London: School of Oriental and African Studies, University of London.
- Neuvel, Sylvain, and Rajendra Singh. 2002. Vive la différence! What morphology is about. *Folia Linguistica* 35.3-4:313-320.
- Newman, Paul. 1990. Nominal and Verbal Plurality in Chadic. Dordrecht: Foris.
- Nichols, Johanna. 1986. Head-marking and dependent-marking grammar. *Language* 62.1:59-119.
- Nojima, Motoyasu. 1996. Lexical prefixes of Bunun verbs. *Journal of the Linguistic Society of Japan* 110:1-27.
- Noonan, Michael. 1985. Complementation. *Language Typology and Syntactic Description*, Vol. 2: *Complex Constructions*, ed. by Timothy Shopen, 42-140. Cambridge: Cambridge University Press.
- Noonan, Michael. 2006. Grammar writing for a grammar-reading audience. *Studies in Language* 30.2:351-365. (Special Issue: *Perspective on Grammar Writing*, ed. by Thomas E. Payne and David J. Weber.)
- O'Dowd, Elizabeth. 1992. The syntactic metaphor of subordination: a typological study. *Lingua* 86:47-80.
- Ogawa, Naoyoshi, and Erin Asai. 1935. *The Myths and Traditions of the Formosan native Tribes*. Taipei: Taipei Imperial University.
- Olson, Michael. 1981. Barai Clause Junctures: Toward a Functional Theory of Interclausal Relations. Canberra: Australian National University dissertation.
- Ossart, Nicolas. 2004. Les systèmes de numération dans les langues austronésiennes et leur fonctionnement. *Faits de Langues—Les langues austronésiennes*, No. 23-24, ed. by Elizabeth Zeitoun, 107-121. Gap: Ophrys.
- Osumi, Midori. 1995. *Tinrin Grammar*. Oceanic Linguistics, Special Publication No. 25. Honolulu: University of Hawai'i Press.
- Payne, Doris L., and Immanuel Barshi. (eds.) 1999. *The Grammar of External Possession*. Amsterdam: John Benjamins.
- Payne, Thomas E. 1985. Complex phrases and complex sentences. *Language Typology and Syntactic Description*, Vol. 2: *Complex Constructions*, ed. by Timothy Shopen, 3-41. Cambridge: Cambridge University Press.
- Payne, Thomas E. 1997. *Describing Morphosyntax: A Guide for Field Linguists*. Cambridge: Cambridge University Press.
- Pecoraro, Ferdinando. 1977. Eléments de grammaire Taroko, Précédés de la présentation de la vie et de la culture des taroko. Paris: Association Archipel.
- Pecoraro, Ferdinando. 1979. Essai de Dictionnaire Taroko-Français. Cahier d'Archipel

- 7. Paris: S.E.C.M.I. (Société pour l'Etude de la Connaissance du Monde Insulindien).
- Plank, Frans. 1999. Split morphology: how agglutination and flexion mix. *Linguistic Typology* 3:279-340.
- Reid, Lawrence, and Hsiu-chuan Liao. 2004. A brief syntactic typology of Philippine languages. *Language and Linguistics* 5.2:433-490.
- Robins, Robert. 1959. In defence of WP. *Transactions of the Philological Society*, 116-144.
- Ross, Malcolm. 1995. Reconstructing Proto-Austronesian verbal morphology: evidence from Taiwan. *Austronesian Studies Relating to Taiwan*, ed. by Jen-kuei Li, Cheng-hwa Tsang, Ying-kuei Huang, Dah-an Ho, and Chiu-yu Tseng, 727-791. Taipei: Institute of History and Philology, Academia Sinica.
- Ross, Malcolm. 1998. Proto-Oceanic adjectival categories and their morphosyntax. *Oceanic Linguistics* 37.1:85-119.
- Ross, Malcolm. 2002. The history and transitivity of western Austronesian voice and voice-marking. *The History and Typology of Western Austronesian Voice Systems*, ed. by Fay Wouk and Malcolm Ross, 17-62. Pacific Linguistics PL-518. Canberra: Australian National University.
- Ross, Malcolm. 2003. Verb classes in Formosan languages. Manuscript.
- Ross, Malcolm. 2004a. Notes on anticausatives in Formosan languages. Manuscript.
- Ross, Malcolm. 2004b. The morphosyntactic typology of Oceanic languages. *Language and Linguistics* 5.2:491-541.
- Ross, Malcolm, and Stacy F. Teng. 2005. Formosan languages and linguistic typology. *Language and Linguistics* 6.4:739-781.
- Saillard, Claire. 1995. Is Maga accusative or ergative? Evidence from case marking. *Proceedings of the First International Symposium on Languages in Taiwan*, ed. by Feng-fu Tsao and Mei-hui Tsai, 59-72. Taipei: Crane.
- Sagart, Laurent. 2004. The higher phylogeny of Austronesian and the position of Tai-Kadai. *Oceanic Linguistics* 43:411-444.
- Sasse, Hans-Jürgen. 1993. Syntactic categories and subcategories. *Syntax: Ein internationals Handbuch zeitgenössischer Forschung/An international handbook of contemporary research*, ed. by Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld, and Theo Vennemann, 645-686. Berlin: Mouton de Gruyter.
- Sebba, Mark. 1987. *The Syntax of Serial Verbs*. Creole Language Library, 2. Amsterdam: John Benjamins.
- Selkirk, Elizabeth. 1982. *The Syntax of Words*. Linguistic Inquiry Monograph, 7. Cambridge: MIT Press.
- Sgall, Peter. 1998. Word, sentence, and discourse. Productivity and Creativity: Studies

- *in General and Descriptive Linguistics in Honor of E. M. Uhlenbeck*, ed. by Mark Janse with the assistance of Ann Verlinden, 243-249. Berlin & New York: Mouton de Gruyter.
- Shelley, George. 1979. Wudai Dukai, the Language, the Context and its Relationships. Hatford: Hatford University.
- Shibatani, Masayoshi. 1985. Passives and related constructions: a prototype analysis. *Language* 61.4:821-848.
- Shih, Louise. 1996. Yami Word Structure. Taichung: Providence University MA thesis.
- Shultink, Henk. 1998. Morphology and meaning: from Bopp to Bob, before and after. Productivity and Creativity: Studies in General and Descriptive Linguistics in Honor of E. M. Uhlenbeck, ed. by Mark Janse with the assistance of Ann Verlinden, 211-230. Berlin & New York: Mouton de Gruyter.
- Sohn, Ho-min. 1975. Woleaian Reference Grammar. Honolulu: University Press of Hawai'i.
- Song, Jae Jung. 1996. *Causatives and Causation: A Universal-typological Perspective*. New York: Longman.
- Starosta, Stanley. 1974. Causative verbs in Formosan languages. *Oceanic Linguistics* 12: 279-369.
- Starosta, Stanley. 1985. Verbal inflection versus deverbal nominalization in PAn: the evidence from Tsou. *Austronesian Linguistics at the 15th Pacific Science Congress*, ed. by Andrew Pawley and Lois Carrington, 282-312. Pacific Linguistics C-88. Canberra: Australian National University.
- Starosta, Stanley. 1988. A grammatical typology of Formosan languages. *Bulletin of the Institute of History and Philology* 59.2:541-576.
- Starosta, Stanley. 1994. Proto-Rukai-Tsouic: subgroup or treetop? Paper presented at the Seventh International Conference on Austronesian Linguistics. August 22-27. Leiden, the Netherlands.
- Starosta, Stanley. 1995. A grammatical subgrouping of Formosan languages. *Austronesian Studies Relating to Taiwan*, ed. by Jen-kuei Li, Cheng-hwa Tsang, Ying-kuei Huang, Dah-an Ho and Chiu-yu Tseng, 683-726. Taipei: Institute of History and Philology, Academia Sinica.
- Starosta, Stanley. 1997. Formosan clause structure: transitivity, ergativity, and case marking. *Chinese Languages and Linguistics*, Vol. 4: *Typological Studies of Languages in China*, ed. by Chiu-yu Tseng, 125-154. Taipei: Institute of History and Philology, Academia Sinica.
- Starosta, Stanley, Andrew Pawley, and Lawrence Reid. 1982. The evolution of focus in Austronesian. *Papers from the Third International Conference on Austronesian Linguistics*, Vol. 2: *Tracking the Travelers*, ed. by Amran Halim, Lois Carrington,

- and S. A. Wurm, 145-170. Pacific Linguistics C-75. Canberra: Australian National University.
- Swiggers, Pierre. 1998. The morpheme in Bloomfield's Language. Productivity and Creativity: Studies in General and Descriptive Linguistics in Honor of E. M. Uhlenbeck, ed. by Mark Janse with the assistance of Ann Verlinden, 251-263. Berlin & New York: Mouton de Gruyter.
- Szakos, Józseph. 1994. Die Sprache der Cou: Untersuchungen zur Synchronie einer Austronesischen Sprache auf Taiwan. Bonn: University of Bonn dissertation.
- Talmy, Leonard. 1978. Relations between subordination and coordination. *Universals of Human Language*, Vol. 4: *Syntax*, ed. by Joseph Greenberg, 487-513. Stanford: Stanford University Press.
- Tan, Cindy Ro-lan. 1997. *A Study of Puyuma Simple Sentences*. Taipei: National Taiwan Normal University MA thesis.
- Tang, Chih-Chen Jane. 1999. On clausal complements in Paiwan. Selected Papers from the Eighth International Conference on Austronesian Linguistics, ed. by Elizabeth Zeitoun and Paul Jen-kuei Li, 529-578. Taipei: Institute of Linguistics, Academia Sinica.
- Tang, Chih-Chen Jane. 2002. On nominalizations in Paiwan. *Language and Linguistics* 3.2:283-333.
- Tang, Chih-Chen Jane. 2004. Two types of classifier languages. *Language and Linguistics* 5.2:377-407.
- Teng, Stacy F. 1997. *Complex Sentences in Puyuma*. Taipei: National Taiwan Normal University MA thesis.
- Teng, Stacy F. 2000. Nominalization in Puyuma. Paper presented at the Workshop on Nominalization in Formosan Languages. Oct. 21-22. Taipei: Academia Sinica.
- Teng, Stacy F. 2007. A Grammar of Puyuma, an Austronesian Language of Taiwan. Canberra: Australian National University dissertation.
- Thompson, Sandra A., and Robert Longacre. 1985. Adverbial clauses. *Language Typology and Syntactic Description*, Vol. 2: *Complex Constructions*, ed. by Timothy Shopen, 171-234. Cambridge: Cambridge University Press.
- Tomlin, Russell S. (ed.) 1987. *Coherence and Grounding in Discourse*. Amsterdam: John Benjamins.
- Traugott, Elizabeth Closs et al. (eds.) 1986. *On Conditionals*. Cambridge: Cambridge University Press.
- Tseng, Meylysa. 2003. *Reduplication as Affixation in Paiwan*. Chiayi: National Chung Cheng University MA thesis.
- Tsuchida, Shigeru. 1970. Fieldnotes. Manuscript.
- Tsuchida, Shigeru. 1976. Reconstruction of Proto-Tsouic Phonology. Study of Languages

- and Cultures of Asia and Africa, Monograph Series, 5. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies.
- Tsuchida, Shigeru. 1990. Classificatory study of Tsou verbs. *Tokyo University Linguistics Papers*' 89:17-52.
- Tsuchida, Shigeru. 1998. Lacunae in lexical studies on Formosan languages. Paper presented at the Conference on Linguistic research methodology. May 2. Taipei: National Chengchi University.
- Tsuchida, Shigeru. 2000. Lexical prefixes and prefixes harmony in Siraya. *Grammatical Analysis: Morphology, Syntax and Semantics*, ed. by Videa DeGuzman and Byron W. Bender, 90-109. Oceanic Linguistics Special Publication, 29. Honolulu: University of Hawai'i Press.
- Tsukida, Naomi. 1999. Locative, existential, and possessive clauses in Seediq. *Selected Papers from the Eighth International Conference on Austronesian Linguistics*, ed. by Elizabeth Zeitoun and Paul Jen-kuei Li, 31-94. Taipei: Institute of Linguistics, Academia Sinica.
- Tsukida, Naomi. 2005. Seediq. *The Austronesian Languages of Asia and Madagascar*, ed. by Nikolaus Himmelmann and Sander Adelaar, 291-325. Routledge Language Family Series. London & New York: Routledge.
- Tu, Wen-chiu, and Chin-chuan Cheng 1991. A linguistic classification of Rukai Formosan. Paper presented at the Sixth International Conference on Austronesian Linguistics. Honolulu: University of Hawai'i at Mānoa.
- Tu, Wen-chiu. 1994. A Synchronic Classification of Rukai Dialects in Taiwan: A Quantative Study of Mutual Intelligibility. Urbana: University of Illinois dissertation.
- Tung, Tung-ho, S. Wang, T. Kuan, T. Cheng and M. Yan. 1964. A Descriptive Study of the Tsou Language, Formosa. Taipei: Institute of History and Philology, Academia Sinica.
- Uhlenbeck, E. M. 1992a. Words. *International Encyclopedia of Linguistics*, Vol. 4, ed. by William Bright, 246-248. New York: Oxford University Press.
- Uhlenbeck, E. M. 1992b. General linguistics and the study of morphological processes. *Oceanic Linguistics* 31:1-11.
- Uhlenbeck, E. M. 1996. About cran and cranberry. *Reconstruction, Classification, Description: Festschrift in Honor of Professor Isidore Dyen*, ed. by Bernd Nothofer, 250-259. Hamburg: Abera Verlag.
- Utsurikawa, Nenozō, Nobuto Miyamoto, and Tōichi Mabuchi. 1935. *Taiwan Takasagozoku keitōshozoku no kenkyū*. Tokyo: Tōei Shoin. (In Japanese)
- Van Valin, Robert Jr. 1984. A typology of syntactic relations in clause linkage. *BLS* 10: 542-558. Berkeley: Berkeley Linguistics Society.

- Van Valin, Robert Jr. 2005. *Exploring the Syntax-Semantics Interface*. Cambridge: Cambridge University Press.
- Van Valin, Robert Jr., and Randy J. LaPolla. 1997. *Syntax, Structure, Meaning, and Function*. Cambridge Textbooks in Linguistics Series. Cambridge: Cambridge University Press.
- Wang, Hsiu-mei. 2003. *Morphosyntactic Manifestation of Participants in Tona (Rukai)*. Taipei: National Taiwan Normal University MA thesis.
- Wang, Shan-shan. 2004. *An Ergative View of Thao Syntax*. Honolulu: University of Hawai'i at Mānoa dissertation.
- Wash, Suzanne. 1995. *Productive Reduplication in Barbareño Chumash*. Santa Barbara: University of California MA thesis.
- Williams, Edwin. 1981a. On the notions 'lexically related' and 'head of a word'. Linguistic Inquiry 12.2:245-274.
- Williams, Edwin. 1981b. Argument structure and morphology. *The Linguistic Review* 1.1: 81-108.
- Wu, Joy J. 1995. *Complex Sentences in Amis*. Taipei: National Taiwan Normal University MA thesis.
- Wu, Chun-min. 2004. *A Study of Lexical Categories in Paiwan*. Chiayi: National Chung Cheng University MA thesis.
- Wu, Chun-min, and Yung-li Chang. 2005. Noun incorporation in Paiwan. Paper presented at the Taiwan-Japan Joint Workshop on Austronesian Languages. June 23-24. Taipei: National Taiwan University.
- Wurm, S. A., and Shiro Hattori (eds). 1983. *Language Atlas of the Pacific Area*, part II: Japan area, Taiwan (Formosa), Philippines, mainland and insular south-east Asia. Pacific Linguistics C-66/67. Canberra: Australian National University.
- Yeh, Mei-li. 1991. *Saisiyat Structure*. Hsinchu: National Tsing Hua University MA thesis.
- Yeh, Mei-li. 2000a. *A Reference Grammar of Saisiyat*. Series on the Formosan Languages, 2. Taipei: Yuanliou. (In Chinese)
- Yeh, Mei-li. 2000b. Reduplication in Bunun and Saisiyat. *Taiwan Humanity* 5:359-84. Taipei: Center of Human Education and Research, National Taiwan Normal University. (In Chinese)
- Yeh, Mei-li. 2000c. Nominalization in Saisiyat. Paper presented at the Workshop on Nominalization in Formosan Languages. October 21-22. Taipei: Academia Sinica.
- Yeh, Mei-li. 2003. *A Syntactic and Semantic Study of Saisiyat Verbs*. Taipei: National Taiwan Normal University dissertation.
- Yeh, Marie M., Lillian M. Huang, Elizabeth Zeitoun, Anna H. Chang, and Joy J. Wu. 1998. A preliminary study on the negative constructions in some Formosan

- languages. Proceedings of the Second International Symposium on Languages in Taiwan, 79-110. Taipei: Crane.
- Zeitoun, Elizabeth. 1992. A Syntactic and Semantic Study of the Tsou Focus System. Hsinchu: National Tsing Hua University MA thesis.
- Zeitoun, Elizabeth. 1993a. Degrees of grammaticalization in the Rukai dialects: synchronic and diachronic considerations. Paper presented at the 2nd International Association on Chinese Languages (IACL-2). Paris.
- Zeitoun, Elizabeth. 1993b. When et la temporalité. *Cahiers de recherche en linguistique anglaise*, T. 6, ed. by Janine Bouscaren, 87-110. Gap: Ophrys.
- Zeitoun, Elizabeth. 1993c. A semantic study of Tsou case markers. *Bulletin of the Institute of History and Philology* 64.4:969-989.
- Zeitoun, Elizabeth. 1995a. *Problèmes de linguistique dans les langues aborigènes de Taiwan [Issues on Formosan Linguistics*]. Paris: Université René Diderot Paris 7 dissertation.
- Zeitoun, Elizabeth. 1995b. A comparative study of the pronominal systems of the Rukai dialects. Paper presented at the bi-monthly seminar of the Institute of History and Philology, Academia Sinica. Taipei: Academia Sinica.
- Zeitoun, Elizabeth. 1997a. Coding of grammatical relations in Mantauran. *Bulletin of the Institute of History and Philology* 68.1:249-281.
- Zeitoun, Elizabeth. 1997b. The pronominal system of Mantauran (Rukai). *Oceanic Linguistics* 36.2:114-148.
- Zeitoun, Elizabeth. 2000a. Notes on a possessive construction in the Formosan languages. *Grammatical Analysis: Morphology, Syntax and Semantics*, ed. by Videa DeGuzman and Byron W. Bender, 241-257. Oceanic Linguistics Special Publication, 29. Honolulu: University of Hawai'i Press.
- Zeitoun, Elizabeth. 2000b. Dynamic vs. stative verbs in Mantauran (Rukai). *Oceanic Linguistics* 39.2:415-427.
- Zeitoun, Elizabeth. 2000c. *A Reference Grammar of Rukai*. Series on Formosan Languages, 8. Taipei: Yuanliou. (In Chinese)
- Zeitoun, Elizabeth. 2000d. *A Reference Grammar of Tsou*. Series on Formosan Languages, 7. Taipei: Yuanliou. (In Chinese)
- Zeitoun, Elizabeth. 2000e. Nominalization in Mantauran (Rukai). Paper presented at the Workshop on Nominalization in Formosan Languages. October 21-22. Taipei: Academia Sinica.
- Zeitoun, Elizabeth. 2001a. Plurality in Mantauran (Rukai). Paper presented at the Tenth International Conference on Chinese Linguistics. June 22-24. Irvine: University of California.
- Zeitoun, Elizabeth. 2001b. Negation in Saisiyat: another perspective. Oceanic Linguistics

- 40.1:125-134.
- Zeitoun, Elizabeth. 2002a. Reciprocals in Formosan languages: a preliminary study. Paper presented at the International Conference Austronesian Linguistics 9. January 8-11. Canberra.
- Zeitoun, Elizabeth. 2002b. Nominalization in Mantauran (Rukai). *Language and Linguistics* 3.2:241-282.
- Zeitoun, Elizabeth. 2003. Toward a reconstruction of Proto-Rukai morpho-syntax. Keynote address at AFLA X. March 28-30. Honolulu: University of Hawai'i at Mānoa.
- Zeitoun, Elizabeth. 2005. Tsou. *The Austronesian Languages of Asia and Madagascar*, ed. by Nikolaus Himmelmann and Sander Adelaar, 259-290. Routledge Language Family Series. London & New York: Routledge.
- Zeitoun, Elizabeth. (in preparation). A comparative study of Rukai. Manuscript.
- Zeitoun, Elizabeth, and Lillian M. Huang. 1997. Toward a typology of tense, aspect and modality in the Formosan languages: a preliminary study. *Chinese Languages and Linguistics*, Vol. 4: *Typological Studies of Languages in China*, ed. by Chiu-yu Tseng, 595-618. Taipei: Institute of History and Philology, Academia Sinica.
- Zeitoun, Elizabeth, and Lillian M. Huang. 2000. Concerning *ka*-, an overlooked marker of verbal derivation in Formosan languages. *Oceanic Linguistics* 39.2:391-414.
- Zeitoun, Elizabeth, and Lillian M. Huang. 2006. Nominalization in the Formosan languages. Paper presented at AFLA 13. March 24-26. Hsinchu: National Tsing Hua National University.
- Zeitoun, Elizabeth, Lillian M. Huang, Marie M. Yeh, Joy J. Wu, and Anna H. Chang. 1996. The temporal/aspectual and modal systems of the Formosan languages: a typological perspective. *Oceanic Linguistics* 35.1:21-56.
- Zeitoun, Elizabeth, Lillian M. Huang, Marie M. Yeh, and Anna H. Chang. 1999. Existential, possessive and locative constructions in the Formosan languages. *Oceanic Linguistics* 38.1:1-42.
- Zeitoun, Elizabeth, and Tien-hsin Hsin. 2002. Glottal hopping in Mantauran (Rukai). Paper presented at IsCCL-8. November 8-10. Taipei: Academia Sinica.
- Zeitoun, Elizabeth, and Hui-chuan Lin. 2003. We should not Forget the Stories of the Mantauran: Memories of the Past. Language and Linguistics Monograph Series, No. A4. Taipei: Institute of Linguistics, Academia Sinica.
- Zeitoun, Elizabeth, and Chen-huei Wu. 2006. An overview of reduplication in Formosan languages. *Streams Converging Into An Ocean: Festschrift in Honor of Prof. Paul Jen-kuei Li on His 70th Birthday*, ed. by Yung-li Chang, Lillian M. Huang, and Dah-an Ho, 97-142. Language and Linguistics Monograph Series W-5. Taipei: Institute of Linguistics, Academia Sinica.

Zwicky, Arnold M. 1985. Clitics and particles. *Language* 61.2:283-305. Zwicky, Arnold M., and Geoffrey K. Pullum. 1983. Cliticization vs. inflection: English *n't. Language* 59.3:502-513.

Index

| action/state nominal, 192-193, 216, 464 | 448, 451, see also clausal | | | |
|---|---|--|--|--|
| action nominal, 217 | nominalization | | | |
| state nominal , 186, 200, 465 | affix , 10, 13-14, 24, 28, 31, 36, 38, 43, | | | |
| active | 46-48, 50-59, 62, 67, 68, 70-71, 73, | | | |
| active clause/sentence, 13-15, 45, 52, | 75-76, 79, 91-92, 101, 115, 128-129, | | | |
| 79, 90, 97, 131, 135, 137, 143, 151, | 131-133, 143, 150-152, 155-156, 158, | | | |
| 157-159, 165, 167, 213, 244, 246, | 170, 180, 184, 221, 223-224, 226-227, | | | |
| 290, 294-297, 301, 307, 309, | 229, 233, 254, 255, 259, 262-263, 365, | | | |
| 327-328, 330-332, 336, 338-339, | 267-270, 276-277, 291, 293, 295-296, | | | |
| 348, 350, 355, 365, 373, 377-379, | 319-320, 322, 345, 366, 369, 422, | | | |
| 383, 387, 392, 394, 397-398, 401, | 465ff | | | |
| 403, 406, 409, 411, 416-420, 422, | combination of affixes, 51-53, 467, | | | |
| 423-428, 437, 438-444, 446-447, | 471 | | | |
| 450, 452, 454, 457, 461 | nominal affix, 202, 128 | | | |
| active voice, 2, 14, 46, 131-132, | verbal affix, 13, 156, 184, 259, 268 | | | |
| 143-144, 148-150, 152, 185, 235, | agent, 14, 16, 131, 143-144, 146, 148, | | | |
| 395, 398, 404-405, 416-417, 432, | 164, 197, 244-246, 287, 299, 331, | | | |
| 483, 486 | 335-337, 339, 387-388, 390, 392, 394, | | | |
| addition, 278 | 395, 399, 422 | | | |
| adjective , 14, 67, 76, 131 | agreement , 5, 16, 148-149, 170-171, 177, | | | |
| adverb, 67, 92-93 | 191, 252, 295-296, 334, 340-341, 345, | | | |
| manner adverb 67 | 392, 395-397, 434, 437 | | | |
| temporal adverb 67, 92 | allomorph , 46-47, 255, 466, 472, 478 | | | |
| adverbial clauses, 15, 158, 421, 437-438, | grammatical, 47 | | | |
| 440, 457 | lexical, 47 | | | |
| concessive clauses, 153, 158, 168, | phonological, 286 | | | |
| 212-213, 215-216, 323, 438, | alternative questions, 355, 380-381 | | | |
| 450-451, 478 | anticausative, 232, 244-245, 276 | | | |
| conditional/hypothetical clauses, 16, | anticipatory copying process, 29 | | | |
| 139-140, 168, 212-213, 444-446, | aspect(ual), 14, 154-156, 158, 200, 218, | | | |
| 451 | 221, 224, 319, 323, 345, 403, 405, 416, | | | |
| counterfactual clauses, 16, 152, 158, | 432, 434-438, 440, 452, 455, 460 | | | |
| 323, 438, 447-448, 450-451, 459, | assimilation, 253 | | | |
| 477 | auxiliary, 14, 67, 90, see also supporting | | | |
| temporal clauses, 16, 212, 443-446, | verb | | | |

```
basic clause 327
                                             coalescence, 28, 30, 143
case marker/marking, 5, 11, 14, 67,
                                             color terms, 48, 67, 70-73, 481
  73-74, 81, 143, 284, 306, 387,
                                              commentative verbs, 422, 426
  395-396
                                             common noun see noun
causative, 58, 67, 73, 77, 90, 131, 135,
                                             comparative (construction/degree), 61,
  137, 163, 197, 225, 235, 237-238,
                                                80, 176, 179, 182, 470
  240-244, 247, 250, 259, 260-262,
                                             complement clause, 15, 414, 416, 417,
  320-321, 419, 422, 427, 466, 473,
                                                418, 419, 421, 422, 425, 426, 427, 428
  478-479, 485
                                             complementation, 14, 92, 317, 328, 403,
                                                414-416, 418-419, 421, 429; see also
  causative construction, 64, 94, 107,
      125, 126, 143, 176, 177, 180, 182,
                                                zero strategy/paratactic complement,
      219, 227, 234, 244, 245, 250, 274,
                                                serial verb construction, nominalization,
      304, 308, 309, 311, 312, 313, 324,
                                                complement clause
      344, 345, 352, 356, 363, 365, 376,
                                             complement-taking verbs: see
      400, 401, 411, 414, 415, 437, 471
                                                perception verbs, knowledge verbs,
                                                commentative verbs, manipulative
  general causative, 238
  lexical causative, 235, 237-238
                                                verbs, modal verb
  locative causative, 225, 236, 280
                                             compounds/compounding, 10, 13, 43,
  morphological causative, 235
                                                54, 62, 64-65, 215, 305, 308, 316-317
  movement causative, 225, 236,
                                                see also nominal head
      259-260, 480, 486
                                                simplex, 62
  periphrastic causative, 90, 235,
                                                complex, 62-63
                                             conjunction, 15, 97, 135, 137, 163, 325,
      237-238
  reciprocal causative, 58, 235-236,
                                                404, 430, 434, 437-438, 443, 452, 455,
      238, 242, 247, 267
                                                461, 462
circumfix, 8, 31, 34-37, 47, 51, 53, 116,
                                             continuative, 60
   122, 129, 153, 169, 175, 180, 190-191,
                                             continuous, 156, 175, 299, 321, 469
  200, 203-204, 207-208, 210-211, 213,
                                             coordination, 15-16, 65, 97, 318, 324,
  255-256, 265, 267, 274, 361, 363, 370,
                                                328, 397, 437-438, 451-454, 458
  372, 450
                                             core argument, 244, 352, 387, 393
clausal elements, 15, 67, 97
                                             counting, 252, 254, 274-275, 270, 291
clausal nominalization, 16, 79, 154, 212,
                                                serial, 48, 96, 251, 252-254
  219, 375, 420, 464
                                             degree adverb, see adverb
                                             demonstrative, 14, 67, 70-71, 305-307,
clause see basic, complement, equational,
  existential, locative, nominal,
  possessive, relative, semi-verbal,
                                                pronoun, 47, 94-95, 101, 283, 285,
  verbal, utterance
                                                   302-304, 358, 364, 398, 470
clitic, 45, 390-392
                                                adnominal, 47, 68, 94-95, 283,
```

| 303-305, 307 | 414, 416, 423, 430, 458, 460, 470-472, |
|---|---|
| denominal verb, see verb | 477 |
| denumeral verb, see verb | frequency, 342 |
| deverbal noun, see nominalization | gender, 103, 295 |
| direction/directional, 81, 103, 122, | genitive, 14, 48, 50, 71, 94-95, 107, 111, |
| 224-226, 228, 240, 407, 412, 475, 480 | 126-127, 156, 164, 167, 169, 177, 187, |
| discourse markers, 430 | 189-190, 217, 219, 221, 244, 250, |
| distributivity, 131, 170, 173 | 283-285, 288, 292, 294-295, 297-299, |
| doublets, 7-8, 60, 110, 115, 205, 207, | 301, 313-315, 317, 319, 329, 331-333, |
| 209, 211 | 335, 338, 345, 351, 356-357, 359, |
| dynamic, 34-35, 46-47, 56, 60-61, 71, | 364-366, 376-377, 384-384, 387, 408, |
| 75-76, 79-81, 108, 119, 125, 131-133, | 408, 438, 444, 447, 457, 459-460, |
| 135, 140-144, 149, 152, 160, 163, | 468-469, 477 |
| 169-170, 172-176, 179-180, 183, 187, | gerund, 168, 192-193, 196, 216, 221, |
| 193, 197, 199, 201, 204, 235-236, 238, | 219, 367, 379 |
| 242, 244, 246, 248-250, 274, 308, 323, | glottal hopping , 11, 28, 31-39, 138 |
| 328, 341, 361, 392, 394, 395, 399, 466, | grammatical relations, 14, 74, 131, 396 |
| 469-475, 477-478, 481-487 | grammaticalization, 67, 81, 90, 237, |
| dynamicization, 141-142, 149, 160 | 437 |
| morphological properties, 76 | greetings, 355, 384 see also word |
| syntactic distribution, 76 | habitual , 61, 150, 155, 332, 405, 420, |
| embedded, 83-84, 90, 107, 135, 139, | 425, 444, 446, 451 |
| 167, 237, 250-251, 342, 348, 370, 408, | haplology , 28, 31, 265 |
| 412, 419, 426 | hortative, 162 |
| emphatic, 246 | household, see name |
| epenthesis, 38 | human, see noun |
| epenthetic vowel, 39, 40 | imperative , 27, 29, 30, 37, 75, 76, 89, |
| equational clause/sentence, 306, 327 | 139-140, 159-162, 169, 222, 345, 428, |
| equative construction, 176 | 466, 467, 471 |
| exclamations , 14, 26, 67, 99, 384 | suffix, 160-161 |
| exclamatory sentences, 355, 383-385 | imperfective, 151, 155 |
| existential clause/sentence, 162, 253, | impersonal, see pronoun |
| 328, 344, 345-349 | infix(ation) , 51, 57, 84, 200 |
| existential verb/predicate, see verb | information questions, 355, 357, 381 |
| experiencer , 335, 392, 424 | instrumental nominal , 60, 201-202, 216, |
| finite, 14, 16, 35, 36-37, 46, 55-56, 85, | |
| | 220, 324, 483 |
| 131-137, 140-141, 163, 167, 196, 237, | interclausal elements, 14, 67, 97, 99 |
| | |

```
interrogative sentences, see polar
                                             locative nominal(ization), 34, 37, 60, 72,
  questions, information questions,
                                                79, 104, 204-205, 208, 216, 309, 479,
  alternative questions
                                                482
intransitive, 80, 142, 146, 235, 328, 387,
                                             manipulative verbs, 16, 240, 419,
                                                421-422, 427-429
  395, 396
  intransitive clause/sentence, 14,
                                             manner adverb, see adverb
      238-239, 387, 396
                                             manner nominal(ization), 201, 203, 375,
  intransitivity, 387, 399
                                                484
  split intransitivity, 2, 5, 243, 244,
                                             metathesis, 38-39
      251, 255, 259, 262, 277, 322, 387,
                                             modal 200, 375, 440
      396, 431, 432, 466, 475, 497, 500,
                                                modal affixes, 14, 71, 75, 221, 224,
      509
                                                   319, 322-323
irrealis, 68, 75-76, 95, 131-132, 149-154,
                                                modal verb, 408, 422, 428-429
   158, 166, 196, 200, 213, 359, 362, 365,
                                                see also negation
  375-376, 378-379, 416, 420, 428,
                                             modifier, 14, 305, 307, 319
  442-444, 446, 450, 465, 467, 476
                                                nominal modifier, 311-312
juxtaposition, 311-312, 315, 318, 328,
                                                verbal modifier, 308-311, 439
  330, 381, 403, 437-438, 446, 451-452
                                             mood, 76, 131-132, 144, 148-150, 158,
kinship terms, 48, 58, 74, 101, 105-107,
                                                416, 432, 437-438, 441, 452
   111, 117-120, 122, 124-128, 230,
                                             morpheme, 13, 28, 34, 35, 38, 43-46, 48,
  249-259, 473, 479, 480
                                                57, 67, 74, 76, 81, 148, 164, 235, 247,
knowledge verbs, 419, 422, 424, 426,
                                                349, 437, 438
  429
                                                bound morpheme, 51
lexical base, 58, 70
                                                lexical morpheme, 46
lexical category, 13, 70, 190
                                                grammatical morpheme, 46-47
ligature, 24, 94, 97, 308, 312, 324, 341,
                                             morphology, 6, 13, 35, 43, 44, 67, 73, 76,
  403, 457
                                                101, 131, 155, 158, 345, 415, 453
loan, 4, 9-10, 17, 22, 24, 26, 215, 253
                                             morphophonemic alternation, 17,
  loan phoneme, 17, 26, 42
                                                27-28, 39
locative clause/sentence, 13-14, 56,
                                             name, see also self-designation
  84-85, 97-98, 100, 107, 131, 135, 137,
                                                household name, 101, 105-106, 113,
  151, 154-155, 164, 177, 224, 244-245,
                                                    117-118, 120-121, 128, 230-231,
  250, 254, 280, 291, 292, 297, 299, 306,
                                                   470, 476
  310, 314, 319, 327-328, 331, 334-338,
                                                insult name, 101, 104-106, 114-115,
  342, 344, 346, 348-351, 355, 357, 367,
                                                    117-118, 121-122, 128, 184, 470
  373, 385, 390, 395, 396, 398, 412, 414,
                                                personal name, 26, 74, 101, 105, 112,
  422, 428, 434, 438, 443, 445, 450-451,
                                                    128, 230-231
  456-459
                                                proper name, 468
```

```
negation
imperative, 162, 169, 466
modal negation, 16, 69-70, 75, 137,
137, 162, 224, 341-342, 360, 461
predicative, 14, 16, 75, 162-163, 340,
467
nominal clause, 93, 328, 330-331,
333-334, 337-339, 341, 411; see also
equational clause/sentence
```

nominal head, 65
nominalization, 11, 14, 16, 27, 34, 47, 60, 63, 70, 72-73, 95, 101, 103, 116, 118, 119, 129, 189, 192, 193, 201, 208, 212, 215, 216, 219, 222, 309, 331, 360, 414, 419, 420, 437, 438, 439, 469-470; see also action/state nominal, instrumental nominal, locative nominal, manner nominal, reason nominal, result nominal, objective nominal, subjective nominal, temporal nominal, clausal nominalization, complement clause nominalization

nominative, 45, 74, 93-94, 137, 164, 167, 190, 224, 245, 283-285, 287, 289, 290, 292, 293-298, 301, 306, 319, 329, 331, 333, 335, 338, 345, 387, 399, 404, 447, 458, 460

non-common noun, *see* noun **non-finite**, 14, 35, 36-37, 47, 55-56, 85, 125, 131-132, 135-137, 139-141, 162, 196, 197, 237, 247, 250, 256, 269, 320, 323-324, 345, 356, 377, 428, 430, 434, 435, 438, 444, 446, 447, 453, 454, 455, 459, 471, 472, 473, 484

non-human, see noun non-vocative, 47, 106-107, 109-110, 117, 119- 120, 122 noun phrase, 14, 73, 283, 304, 305, 306, 308, 309, 310, 314, 315, 318, 327, 330, 331, 438, 452 simple, 305, 319 complex, 1, 2, 39, 40, 41, 47, 62, 64, 97, 98, 110, 163, 180, 254, 257, 258, 265, 269, 305, 308, 316, 319, 323, 391, 459, 485

noun/verb distinction, 67, 70; see also lexical category

noun, 14, 16, 33, 45, 48, 63, 65, 67, 71, 72, 73, 74, 80, 91, 93, 95, 97, 101, 122, 125, 143, 171, 189, 191, 192, 197, 203, 208, 211, 223, 250, 252, 283, 284, 303, 304, 305, 306, 307, 308, 309, 310, 311, 313, 314, 315, 317, 318, 320, 327, 330, 331, 332, 335, 341, 342, 351, 366, 368, 388, 389, 390, 391, 392, 395, 411, 417, 436, 438, 452, 475; class, 4, 13, 51, 52, 76, 81, 140, 247, 268, 273, 283, 306, 313

common noun, 15, 32, 38, 41, 47, 73-74, 76, 90, 99, 101, 103-105, 111, 115-119, 122, 171-172, 190, 208, 223-224, 229-232, 274, 277, 281, 284-285, 307, 318, 345, 364, 383-385, 464, 469, 471-472, 476, 478, 481

non-common noun, 73, 101, 105-106, 118, 122, 124, 229, 230, 318, 364, 469

human noun, 32, 47, 58, 74, 91, 101, 103, 115, 116, 118-119, 122, 128, 170-172, 190-192, 208-209, 217, 229-230, 252-254, 270, 273, 278-280, 302, 307, 352, 362, 387, 395, 465, 472, 482

non-human noun, 74, 101, 103, 115-116, 118, 128, 170-171, 191,

```
208, 253, 278, 280, 302, 307, 387,
                                              passive, 2, 14, 24, 32-33, 132, 143-144,
      388
                                                 146, 148- 149, 151-152, 215, 245, 320,
   locative noun, 40, 73, 103, 118,
                                                 335, 387, 395, 404, 416-417, 486
      122-124, 128, 207, 223-225, 240
                                                 agentive, 148
   temporal noun, 73, 75, 101, 103, 105,
                                                 agentless, 148
      116, 118, 122-123, 124, 128,
                                              patient, 119, 143-144, 146, 187, 197,
      207-210, 228-229, 474, 480, 482
                                                 218, 221, 245, 335, 347, 393, 395
   noun phrase, 14, 73-74, 283, 304-306,
                                              perception verbs, 422, 429
      308-310, 314-315, 318, 327,
                                              perfective, 150-151, 155, 200, 416
      330-331, 338, 452
                                              personal, see pronoun
numeral/number, 5, 6, 8, 14, 38-39, 44,
                                              phonemes, 19, 41- 42 see also loan
   48, 55, 59, 81, 88, 96, 119, 131, 143,
                                                 inventory, 17
   159, 170-171, 178, 184, 192, 223, 244,
                                                 distribution, 17, 19, 21-22
   252, 254-257, 259-263, 265-366,
                                              phonology, 6, 10, 11, 13, 17
   269-270, 272-277, 285-286, 289-291,
                                              phrasal element, 97
   295-296, 314, 334, 362, 366, 397, 399,
                                              plural, 11, 16, 28, 32, 40, 45-47, 51, 58,
   409, 438, 451-452, 470, 472-474,
                                                 73-74, 94-95, 101, 103, 106, 109-110,
   477-479, 481-485, 488
                                                 113, 115-122, 124-126, 128, 131, 160,
                                                 170-173, 175, 177, 190, 219, 247, 252,
   composite numerals, 91, 251, 252,
      276, 277
                                                 285, 302, 303, 304, 314, 320, 340, 341,
   numeral classifiers, 8, 48, 254, 255,
                                                 395, 397, 465, 470, 472, 474
      256, 269, 273-275, 277, 290-291,
                                              polar questions, 380, 384
      363, 366
                                              possession/possessive (clause/construction),
   ordinal affixes, 259, 291, 366
                                                 14, 48, 73, 94, 109, 110, 299, 328, 344,
   sortal classifiers, 14, 259, 270, 370,
                                                 349, 351-352, 364, 447
      374
                                              prefix, 28, 32, 33, 34, 45, 46, 47, 48, 49,
   verbal affixes, 13, 156, 184, 259, 268
                                                 50, 54, 55, 58, 68, 69, 79, 106, 108,
objective nominal(ization), 27, 29, 34,
                                                 119, 120, 122, 125, 127, 129, 130, 132,
   36, 47, 60, 63, 148, 168, 199-200,
                                                 133, 135, 137, 141, 142, 143, 149, 157,
                                                 164, 174, 183, 185, 186, 190, 200, 215,
   216-217, 309, 331, 360-361, 378, 465
oblique, 5, 80, 89, 93-94, 101, 115, 146,
                                                 226, 228, 243, 244, 246, 249, 250, 256,
   164, 244, 283-286, 292-298, 300-301,
                                                 257, 259, 260, 268, 270, 274, 320, 321,
   314, 319, 328, 335, 345, 351, 359,
                                                 356, 366, 367, 440, 444, 447, 467, 471,
   365-366, 387, 389-390, 392-393, 395,
                                                 475, 476, 480, 482, 483, 484, 485, 486,
   398-399, 400, 405, 434, 447, 460, 467
                                                 487, 488
orthography, 82
                                              preposition, 14, 67, 76, 81, 83-85
paratactic complement, 14, 16, 414-416,
                                              progressive, 60, 150, 155
   418-419
                                              pronominal clitic, see bound pronoun
```

```
lexicalized, 32, 45, 57, 58, 62, 111,
pronoun, 5, 14, 45, 48, 71, 80, 95, 107,
   111, 126, 127, 156, 164, 167, 169, 177,
                                                     118, 122, 317
   184, 187, 189, 190, 217, 224, 250, 284,
                                                 CV-, 14, 57, 58
   285, 286, 290, 291, 292, 295, 297, 298,
                                                 Ca-, 14, 34, 57, 58, 59, 124, 201, 246,
   305, 307, 313, 314, 315, 317, 319, 331,
                                                    247, 248, 249, 253, 254, 270, 272,
   332, 335, 338, 345, 351, 356, 357, 358,
                                                    273, 277, 471, 484, 487
   359, 364, 365, 366, 376, 377, 383, 393,
                                                 CVCV-, 14, 57, 58, 59, 60
   395, 398, 400, 404, 405, 408, 417, 423,
                                                 CV.V-, 14, 29, 57, 59, 61
   428, 434, 437, 438, 444, 447, 448, 457,
                                                 rightward, 14, 57, 61
   458, 459, 460, 467, 468, 476
                                                 serial, 61
   bound pronoun, 5, 447, 458
                                              reflexive, 78, 131, 246, 321, 323, 487
   dummy third person
                                              relative clause, 14, 222, 309, 438
      pronoun/subject, 327, 377, 458
                                              repetitive, 60, 155, 175, 255
   impersonal pronoun, 52, 94, 101,
                                              result nominal, 201, 203, 485
      283, 301, 467
                                              root, 13, 27-28, 32, 37, 38, 46-53, 56,
                                                 58-59, 61, 63, 108-111, 118-119,
   personal pronoun, 83, 283-285, 291,
      293, 358, 470
                                                 121-122, 125-126, 134-136, 138, 140,
      see also clitic, demonstrative
                                                 144, 152, 167, 170, 185, 187, 193, 200,
                                                 226-227, 231, 245, 248, 249-250, 273,
quantifiers/quantification, 67, 73, 91,
   97, 101, 104, 115-116, 188, 122, 128,
                                                 320, 321-324, 412-413, 462, 471-472,
                                                 475-476, 479-480, 486, 489
   131, 170, 172, 174, 191, 251, 252, 265,
   273, 278, 321, 323, 340, 344, 353
                                                 precategorial, 67, 70-71
realis, 16, 46, 95, 131, 132, 133, 135,
                                              Rukai dialects, 2-6, 10-11, 13, 21, 45,
   150, 151, 158, 196, 200, 213, 359, 362,
                                                 51, 101, 143-144, 148-149, 159, 200,
   365, 375, 376, 379, 416, 420, 440, 442,
                                                 284-285
   444, 446, 450, 477
                                              self-designation, 3
reason nominal(ization), 203, 208, 211
                                              semi-verbal clause, 328, 333
reciprocity/reciprocal, 10, 48, 58-60, 73,
                                              singular, 47, 74, 94, 110, 116, 118,
   101, 106-110, 123-128, 131, 142, 170,
                                                  119-120, 160, 177, 448
   172, 230, 235-236, 238, 241, 243,
                                              sound changes, 18, 24, 32, 46
   247-250, 254, 261, 274, 321, 323, 467,
                                              special registers, 7
   470, 472, 474, 482
                                              stative, 34-35, 47-49, 55-56, 59-61, 68,
reduplication, 8, 10, 13, 29, 32, 34, 37,
                                                 70-71, 73, 75-76, 79-81, 119, 125,
   43, 45, 47, 51, 54, 57, 58, 59, 60, 61,
                                                 131-132, 134-135, 137, 140-144,
   80, 94, 115, 116, 118, 119, 122, 124,
                                                 151-152, 160, 163, 169, 170-176,
   151, 155, 158, 170, 171, 172, 173, 175,
                                                 179-180, 182-183, 185-187, 193, 197,
   182, 183, 201, 208, 220, 246, 247, 248,
                                                 199, 200-201, 204, 226, 229, 236,
                                                 238-239, 243, 246, 249, 250, 254,
   253, 261, 405, 440, 471
```

```
256-257, 259, 260-261, 268, 273, 308,
                                              temporal adjunct, 15, 95, 150-153, 211,
  320, 323, 328, 353, 361, 366, 372, 392,
                                                 319, 342, 357, 379, 406, 418
  394-395, 397, 399, 464, 466, 469-475,
                                              temporal adverb, see adverb
  478, 482-484, 486-487
                                              temporal nominal(ization), 105, 207,
  morphological properties, 76
                                                 210-211, 468-469, 477
  syntactic distribution, 76, 192
                                              topic(alization), 14, 16, 24, 27, 94, 97,
  stativization, 141
                                                264, 190, 283-285, 288, 295, 297, 304,
stem, 5, 13, 28-29, 33, 35, 38, 43, 46-47,
                                                327, 334, 336-337, 339, 348, 388, 437,
  49, 53-54, 56-57, 71-72, 84, 122,
                                                443
   131-132, 140, 151-152, 155, 158, 163,
                                              triplication, 57, 61-62, 255
   167, 170, 182, 190, 193, 194-195, 197,
                                              utterance clause, 14, 415, 430, 432
   199, 202-203, 205, 207, 209, 211,
                                              verb, 5, 11, 14-16, 33-35, 37, 45-49,
  214-215, 219, 242, 320-322, 488, 507,
                                                 54-55, 58-59, 67-68, 73, 75, 79-80, 84,
                                                87-92, 94-95, 97, 101, 107, 125,
  515, 518-519
stress, 13, 17, 26, 47, 51, 53, 62,
                                                 131-140, 142-144, 146, 148-149,
  289-290
                                                 151-157, 159-167, 169-172, 176-177,
                                                 179-180, 182-187, 189-190, 192-193,
subjective nominal(ization), 16, 72, 119,
  168, 190, 197, 216, 221, 252, 309, 331,
                                                 197, 201, 203-204, 207, 212-213, 216,
  333, 359, 360, 367, 481
                                                223, 228-229, 235-237, 240, 244,
subjunctive, 14, 30, 35, 37, 56, 76, 83,
                                                245-250, 253, 273, 276, 278, 284, 286,
  89, 94, 131-132, 135, 138-140, 153,
                                                290, 294-297, 299, 301, 304, 309-310,
  160-161, 196, 213, 332-333, 342, 345,
                                                314, 318-320, 322-324, 327-328,
  348, 368, 372, 375, 404, 407, 408-
                                                330-333, 338, 341-346, 348-352, 356,
  409, 412-414, 419, 423, 425-426, 428,
                                                357, 359-360, 362-365, 367-368, 370,
  432, 436, 438, 440, 444, 457, 470-472
                                                372, 375, 377-379, 384, 387-393, 395,
subordinate (clause/verb)/subordination,
                                                 397, 398-400, 403-409, 412-428, 430,
   15-16, 97, 222, 328, 437-438, 440,
                                                432, 434-438, 440, 442, 444, 446-448,
  444, 447, 450, 457-458
                                                450, 452-455, 457-462, 466-468, 473,
substraction, 253, 278
                                                475, 476, 478-479, 482, 484-488
suffix(ixation), 25, 28-30, 34, 37-40,
                                                denominal verb, 54, 55, 132, 135,
  47-48, 50-51, 53, 74, 93, 95-96, 118,
                                                    172-176, 197, 238-239, 245-246,
                                                    260, 308, 341, 362, 367, 412-413,
  130, 153, 156, 158-161, 183-184,
   187-188, 195, 204, 208, 211, 218, 254,
                                                    465, 471, 472, 478
  256-257, 260, 270, 274, 298, 302-304,
                                                denumeral verb, 54, 96, 132, 163,
  361-362, 376, 378, 405, 428, 434-436,
                                                    308, 353
  440, 455, 466, 472, 481
                                                existential verb/predicate, 253,
superlative construction, 176, 183, 477
                                                    344-345, 353, 448
syntax, 11, 13, 67
                                                verbal class(ification), 11, 88,
```

```
131-133, 407
  verb phrase, 13, 14, 46, 50, 52, 73,
      74, 101, 189, 283, 305, 318, 319,
      320, 322, 327, 346, 347, 352, 438
  serial verb (construction), 92, 94,
      165, 237, 368, 389, 403-4-4, 406,
      414
  supporting verb, 90, 237
verbal clause/sentence, 68, 300,
  328-329, 333-335, 339-342, 417
verbalization, 70, 189, 219, 223-232
vocative, 47, 108-110, 117, 119-122, 128
voice, see also active, passive
vowel deletion, 28
word order, 14, 310, 328, 338-339, 346,
  395, 396, 438, 450
word, 13-14, 21-22, 25-26, 28, 31-36,
  38-39, 43-45, 47, 50-53, 58-59, 64, 85,
  92, 106, 108, 200, 227, 253, 256, 257,
  276, 277, 278, 310, 331, 357-358, 438
  exclamatory word, 383
  greeting words, 384, 385
  interrogative word, 95, 276-277, 355,
      466, 375, 377-379, 382, 435
  grammatical word, 27
  nursery word, 7, 8
  word class(es), 14, 67, 76, 81, 283
  word formation, 85
zero strategy, 14, 16, 414, 416, 426, 451,
  462
```

LANGUAGE AND LINGUISTICS

LANGUAGE AND LINGUISTICS is a department of the INSTITUTE OF LINGUISTICS, ACADEMIA SINICA. It furthers the Institute's objective of excellence in research, scholarship, and education by publishing pioneering articles and monographs in Linguistics and other related fields. All publications have been reviewed rigorously according to academic standards.

Copyright © 2007 by INSTITUTE OF LINGUISTICS, ACADEMIA SINICA 128, Sec. 2, Academia Road, Nankang, Taipei 11529, Taiwan, R.O.C. http://www.ling.sinica.edu.tw

All rights reserved.

LANGUAGE AND LINGUISTICS MONOGRAPH SERIES NUMBER A4-2

Elizabeth Zeitoun

A Grammar of Mantauran (Rukai)

《語言暨語言學》

《語言暨語言學》隸屬於中央研究院語言學研究所,以出版語言學及相關領域之最新 研究成果爲宗旨。所有出版品均經過嚴格學術審查。

《語言暨語言學》專刊甲種四之二

萬山魯凱語語法

齊莉莎 著

出版:中央研究院語言學研究所發行:中央研究院語言學研究所 115 台北市 南港區 研究院路 2 段 128 號 http://www.ling.sinica.edu.tw 版權所有 翻印必究

印刷:文盛彩藝事業有限公司 初版:中華民國九十六年十一月 [2007] 定價:新台幣 900 元/US\$50

ISBN-13: 978-986-01-1219-1 (精裝)

GPN: 1009602841