

A GRAMMATICAL DESCRIPTION OF THE TONDANO (*Toundano*) LANGUAGE

Submitted by

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B.A. (Hons.)

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

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Australia.

October 2014

ABSTRACT

This thesis is a grammatical description of Tondano (Toulour dialect), an endangered Austronesian language primarily spoken in the northern tip of the island of Sulawesi, Indonesia. Tondano has a number of typological similarities to indigenous languages spoken in the Philippines, northern Borneo, and Taiwan, with the most prominent being a symmetrical voice marking system.

The data for this research come from extensive *in situ* fieldwork in the Minahasa region of North Sulawesi over a period of approximately eleven months during three fieldtrips. The primary source of data are digital audio and video recordings which comprise a variety of discourse genres.

This thesis contains 10 chapters which cover the phonology, morphology, and syntax of the language, with special attention given to the symmetrical voice marking system and the effects it has on various parts of the grammar. This research represents the sole contemporary grammatical description of this language within a broad framework of Basic Linguistic Theory.

This is to certify that:

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis submitted for the award of any other degree or diploma. No other person's work has been used without due acknowledgement in the main text of the thesis. This thesis has not been submitted for the award for any degree or diploma in any other tertiary institution.

All research procedures reported in this thesis were approved by Faculty Human Ethics Committee (FHEC No. 943-11) at La Trobe University, Bundoora, Victoria, Australia.

Signed (3rd October 2014):

ACKNOWLEDGEMENTS

The nature of any PhD research necessitates that its author must receive assistance from numerous people, and this thesis is no exception. The people who deserve acknowledgement for their assistance come from a diverse range of backgrounds, both here in Melbourne, Australia, and from a number of countries overseas. Some of the people who have helped me most during this period are those who are not within the academic sphere at all. For this reason, my first acknowledgements must go to my mother Carole and my partner Sharon, for their unconditional support throughout during my PhD candidature.

The second group of people who thoroughly deserve my thanks are those who directly made my research possible. They are the numerous people in Minahasa, North Sulawesi who assisted me and welcomed me into their homes and families during my fieldtrips. My first contact in North Sulawesi was project liaison Pak Hendrik Paat. His company, generosity, and support made my first weeks in a strange land less stressful than they otherwise might have been. The hospitality of everyone in the Paat-Gigir family helped me greatly as I adapted to a foreign culture and began my fieldwork in earnest.

During this initial fieldtrip I met the first Tondano speaker I would work with, Vabianus ‘Aby’ Malainkay. His patience and tolerance in answering my constant daily questions about the Tondano language was very much appreciated, as was his assistance in transcribing and translating early recordings. In addition, our various meals together were an enjoyable break from work. As well as language and culture, our discussions would also digress to other shared interests such as music and football. My thanks must also go to a number of other speakers in Tondano who also assisted me during this preliminary period, Ester Mantiri, Helena Lantu, Anni Walangitan, and Emma Rambing.

My second and third fieldtrips were spent living with the Nangin family in the neighbourhood of Rinegetan, in Tondano town. My wholehearted thanks go to Pak Roy and Ibu Ros Nangin for their constant generosity throughout this period. They went out of their way to accommodate me and to ensure that my stay was always comfortable one. My thanks must also go to Ibu Enda for her tasty home cooked meals, despite the fact it may have contributed to a certain amount of unintended weight gain!

The two other people who deserve the most gratitude are Pak Kalo Kojongian and Om Leo Manaris. More than any others, these are the two people without whom this thesis would not have been possible. As well as partaking in numerous recording sessions, Kalo and Leo spent many hours with me as they attempted to patiently and unwearingly explain the intricacies of Tondano grammar. They also taught me many things about Minahasan culture, both as it was in the earlier pre-Christian times, and as it is today. Furthermore, their humour and constant good natured banter made spending time in their company a thoroughly enjoyable experience. I can only hope that they also gained some small measure of enjoyment from my company.

The final group of Minahasans who deserve thanks are those from the *kawanua* ‘compatriot’ Melbourne, the society of Minahasan expatriates here in Melbourne. As well as always welcoming me at Brunswick and Camberwell Uniting Churches for meals and socialising, they provided important assistance by introducing me to people in North Sulawesi. Amongst this group my thanks go primarily to Max and Sisca Komimbin, and also to Lucky and Gerry Kalonta.

At an academic level, the PhD and scholarship program at the Centre for Research in Language Diversity (CRLD) (formerly the Research Centre for Linguistic Typology) at La Trobe University, Melbourne, made my research possible at a practical level with an LTUP scholarship and FHUSS/IRGS grants.

At a supervisory level, my thanks go first and foremost to my primary supervisor, Anthony Jukes. His wide ranging knowledge of Sulawesi and Indonesia gave me valuable insight into various cultural and linguistic aspects of my fieldwork, while his networks in Minahasa made my transition into an unfamiliar place as smooth as it possibly could be. His availability for discussions on any topic, and his constant support, without doubt made the initial stages of my candidature seem less daunting. Finally, thanks to Anthony for always making me welcome in his home, and for the food and drink which were always offered there!

I must also acknowledge my co-supervisor, Stefan Schnell. His presence has been a welcome academic addition to the CRLD, and his guidance during the last 18 months of my candidature is very much appreciated. His feedback on draft chapters of this thesis has proved extremely beneficial. The comments of a linguistic typologist have undoubtedly made this a better thesis than it otherwise might have been. Nonetheless, any remaining

errors are mine alone. Lastly, my work with Stefan on his DECRA project has given me the opportunity to work on another Austronesian language, and has provided a welcome employment opportunity in the absence of others.

The names of other students and scholars at the CRLD (both past and present) also come to mind at this point. They are mentioned here for a variety of reasons - both academic and social. In no particular order thanks go to: Birgit Hellwig, Marija Tabain, Henriette Daudey, and Pavel Ozerov.

The final people to thank within the academic context are two Tondano scholars from North Sulawesi and The Netherlands respectively. Firstly, my discussions with Pak Fendy Parengkuan were always informative and helpful, and my thanks must go to him for this. Secondly, my correspondence with Pak Boeng Dotulong was of assistance for one particularly problematic analytical issue. In addition, his 2010 dictionary was a useful tool during the early days of my research.

TABLE OF CONTENTS

Abstract	ii
Acknowledgements	iv
Table of contents	vii
List of figures	xiii
List of tables	xiii
Abbreviations of grammatical terms	xvi
Notation of sources for example sentences	xvii
1.INTRODUCTION	1
1.1 Geography, districts, and climate	1
1.2 Population and economy	4
1.3 The history and culture of the region	5
<i>1.3.1 Minahasa prior to European contact</i>	5
<i>1.3.2 Minahasa during European contact (1500's onwards)</i>	9
<i>1.3.3 Minahasa in the 20th century</i>	12
<i>1.3.4 Contemporary Minahasan society</i>	15
1.4 Genetic lineage and speaker numbers	15
<i>1.4.1 Classification of Tondano and dialects</i>	15
<i>1.4.2 Speech community numbers</i>	18
1.5 Languages of wider communication	19
<i>1.5.1 Manado Malay</i>	19
<i>1.5.2 Bahasa Indonesia</i>	20
<i>1.5.3 Dutch</i>	20
<i>1.5.4 English</i>	21
1.6 The status and vitality of Tondano in contemporary Minahasa	21
1.7 Previous descriptive work and major sources	22
1.8 Fieldwork methodology	23
2. PHONETICS AND PHONOLOGY	26
2.1 Phoneme inventory	26
<i>2.1.1 Evidence for phoneme inventory</i>	27
<i>2.1.2 Orthography</i>	29

2.2 Description of phonemes_____	30
2.2.1 <i>Oral plosives</i> _____	30
2.2.2 <i>Nasal consonants</i> _____	34
2.2.3 <i>Liquids</i> _____	35
2.2.4 <i>Approximants</i> _____	38
2.2.5 <i>Fricatives</i> _____	41
2.2.6 <i>Vowels</i> _____	42
2.3 Syllable structure_____	45
2.4 Phonotactics_____	46
2.4.1 <i>Consonant clusters across syllable boundaries</i> _____	46
2.4.2 <i>Syllable internal consonant clusters</i> _____	48
2.4.3 <i>Vowel sequences</i> _____	49
2.4.4 <i>Syllable sequences</i> _____	52
2.4.5 <i>Syllables in lexical roots</i> _____	54
2.4.6 <i>Syllables in morphologically complex words (stems)</i> _____	55
2.5 Stress_____	56
2.5.1 <i>Stress placement in lexical roots and stems</i> _____	57
2.6 Morphophonological processes_____	62
2.6.1 <i>Nasal assimilation</i> _____	62
2.6.2 <i>Nasal substitution</i> _____	64
2.6.3 <i>Vowel deletion</i> _____	66
2.6.4 <i>Pseudo nasal substitution</i> _____	69
2.6.5 <i>Consonant deletion</i> _____	70
2.6.6 <i>Reduplication</i> _____	72
2.6.7 <i>Epenthesis</i> _____	74
3. GRAMMAR OVERVIEW _____	77
3.1 Typological overview_____	77
3.2 Lexical categories (word classes)_____	78
3.3 Voice marking_____	83
3.4 Tense marking_____	87
3.5 Aspect marking_____	88
3.6 Mood distinctions_____	90

3.7 Basic constituent order	92
3.8 Basic clause types	95
4. BASIC CLAUSE STRUCTURE	100
4.1 Introduction	100
4.2 Transitivity	100
4.3 Grammatical relations (GRs)	103
4.4 Non-verbal clauses	105
4.4.1 <i>Existential clauses</i>	105
4.4.2 <i>Equational clauses</i>	110
4.5 Verbal clauses	117
4.5.1 <i>Primary verbal affixes pa-, ka-, and ka-</i>	118
4.5.2 <i>Differentiation between STATIVE and POTENTIVE marking</i>	135
4.5.3 <i>Intransitive clauses</i>	137
4.5.4 <i>Transitive clauses</i>	141
4.5.5 <i>Three participant transitive clauses</i>	159
4.6 Semantic roles and grammatical relations	162
4.6.1 <i>Mapping of semantic roles and grammatical relations</i>	162
4.6.2 <i>Unique features of pivot arguments</i>	163
4.7 Topicalisation	170
4.7.1 <i>Left dislocation</i>	171
4.7.2 <i>Right dislocation</i>	173
4.7.3 <i>Oblique fronting</i>	174
5. MORPHOLOGICAL ELEMENTS AND WORD STRUCTURE	177
5.1 The Tondano word	177
5.2 Morphological elements	179
5.2.1 <i>Lexical roots</i>	179
5.2.2 <i>Stems</i>	180
5.3 Affixes and affix ordering	183
5.3.1 <i>Prefixes</i>	186
5.3.2 <i>Infixes</i>	191
5.3.3 <i>Suffixes</i>	195
5.3.4 <i>Circumfixes</i>	195

5.4 Clitics: Features and distribution_____	197
5.4.1 Clitic features_____	197
5.4.2 Distribution and ordering of clitics_____	198
5.5 Proclitics_____	201
5.6 Enclitics_____	201
5.6.1 INCOMPLETIVE =pè'_____	202
5.6.2 COMPLETIVE =mow_____	204
5.6.3 LIMITATIVE =itè_____	206
5.6.4 EPISTEMIC adverb =kè_____	206
5.7 Tondano pronominal clitics: Second position (2P) or verb adjacent?_____	207
5.8 Particles_____	210
6. LEXICAL CATEGORIES (WORD CLASSES) _____	211
6.1 Lexical root class vs word class_____	211
6.2 Nouns_____	217
6.3 Verbs_____	219
6.3.1 Subcategories of verbs_____	219
6.4 Adjectives _____	227
6.5 Adverbs_____	228
6.5.1 Adverbs of degree_____	229
6.5.2 Focussing adverbs_____	232
6.5.3 Evidential and epistemic adverbs_____	239
6.5.4 Temporal adverbs_____	244
6.6 Demonstratives_____	246
6.6.1 Demonstratives as modifiers_____	247
6.4.4 Demonstratives as pronouns_____	251
6.7 Deictic elements_____	254
6.7.1 Absolute and relative locatives_____	255
6.7.2 Directionals =la, =mèè, and =mi_____	258
6.7.3 Deictic adverbs_____	264
6.8 Quantifiers_____	266
6.9 Numerals_____	268
6.9.1 Independent cardinal numerals_____	269
6.9.2 Complex cardinal numerals_____	270

6.9.3 Ordinal numerals	272
6.9.4 Fractions	273
6.9.5 Multiplicatives	274
6.10 Discourse particles: Interjections and exclamatives	274
6.11 Prepositions and prepositional phrases	278
7. OTHER CLAUSE TYPES	284
7.1 Question formation	284
7.1.1 Yes/no questions	284
7.1.2 Content questions	288
7.2 Negation and prohibitives	299
7.2.1 Negators <i>rèi'</i> and <i>so'o</i>	299
7.2.2 Prohibitive <i>tèa'</i>	306
7.3 Imperatives and adhortatives	307
7.3.1 Imperative clauses	307
7.3.2 Adhortative clauses	309
8. NOUNS AND NOUN PHRASES	312
8.1 Structure and typological features of NPs	312
8.2 Definition of a noun	315
8.2.1 Common nouns	315
8.2.2 Proper nouns	317
8.2.3 Simple vs complex nouns	319
8.2.4 Nominalisation	320
8.2.5 Temporal nouns	324
8.3 Pronominals	327
8.3.1 Personal pronouns	327
8.3.2 Independent personal pronouns	328
8.3.3 Pivot proclitics	333
8.3.4 The status of proclitics: pronouns or agreement?	335
8.3.5 Possessive enclitics	337
8.3.6 Non-specific referents <i>anu/ano</i>	342
8.4 Phrase markers	344
8.4.1 Phrase markers <i>si=</i> and <i>sè=</i>	345

8.4.2	Phrase markers <i>ni=</i> and <i>nè=</i>	349
8.4.3	Phrase marker <i>N=</i>	352
9.	VERBAL PREDICATE STRUCTURE AND MORPHOLOGY	358
9.1	Verbal predicate structure	358
9.1.1	AV verbal predicates	359
9.1.2	UV verbal predicates	362
9.2	Voice selection in verbal clauses	366
9.2.1	Definiteness in voice selection	370
9.2.2	Referentiality and discourse continuity in voice selection	373
9.3	Tense, aspect, and mood morphology	376
9.3.1	Tense marking	378
9.3.2	Aspect marking	383
9.3.3	Mood marking	389
9.4	CAUSATIVES, REQUESTIVES, MUTUALS, and REFLEXIVES	396
9.4.1	CAUSATIVE prefix <i>pa-</i>	396
9.4.2	REQUESTIVE prefix <i>paki-</i>	407
9.4.3	MUTUAL suffix <i>-an</i>	411
9.4.4	REFLEXIVE markers: <i>sandiri</i> , <i>nu esa</i> , and <i>nu waya</i>	413
9.5	COMPLETIVE prefix <i>paka-</i> and MANNER prefix <i>kapa-</i>	415
9.5.1	COMPLETIVE prefix <i>paka-</i>	416
9.5.2	MANNER marking prefix <i>kapa-</i>	419
10.	COMPLEX CLAUSES	423
10.1	Complex predicates in monoclausal constructions	423
10.1.1	Serial Verb Constructions (SVCs)	423
10.1.2	Auxiliary verb constructions	427
10.2	Complex clauses: Co-ordination	433
10.2.1	Co-ordinated clauses	433
10.3	Complex clauses: Subordination and juxtaposition	439
10.3.1	Relative clauses	440
10.3.2	Adverbial subordinate clauses	447
10.3.3	Juxtaposition: Complement clauses	457
10.3.4	Juxtaposition: Indirect speech	460
APPENDIX A:	SAMPLE TEXT	464

APPENDIX B: FIELDWORK PHOTOGRAPHS	483
REFERENCES	485

LIST OF FIGURES

FIGURE 1.1: MAP OF THE INDONESIAN ARCHIPELIGO_____	1
FIGURE 1.2: MAP OF SULAWESI_____	2
FIGURE 1.3: MAP OF THE MINAHASA REGION OF NORTH SULAWESI_____	3
FIGURE 1.4: PRE-CHRISTIAN LANGUAGE AND ETHNIC BOUNDARIES_____	7
FIGURE 1.5: MAJOR SUBGROUPS OF THE AN LANGUAGE FAMILY_____	16
FIGURE 1.6: PROTO-MINAHASAN LANGUAGE GROUP_____	17
FIGURE 1.7: COGNATE PERCENTAGES OF NORTH MINAHASAN LANGUAGES____	18
FIGURE 2.1 DOUBLE TAP [ɾ] AND MULTIPLE TAP [ɾ] _____	36
FIGURE 2.2: SYLLABLE STRUCTURE OF LIGHT FINAL SYLLABLE_____	59
FIGURE 2.3: SYLLABLE STRUCTURE OF HEAVY FINAL SYLLABLE_____	60
FIGURE 2.4: HOMORGANIC NASAL ASSIMILATION WITH PHRASE MARKER <i>N</i> =____	62
FIGURE 4.1: STRUCTURE OF EXISTENTIAL CLAUSES_____	105
FIGURE 4.2: STRUCTURE OF EQUATIONAL CLAUSES_____	110
FIGURE 6.1: CONSTITUENT ORDER IN PPs_____	279
FIGURE 8.1: CONSTITUENT ORDER IN NPs_____	312
FIGURE 9.1: STRUCTURE OF AV PREDICATES _____	359
FIGURE 9.2: STRUCTURE OF UV PREDICATES _____	363

LIST OF TABLES

TABLE 1.1: LIST OF RECORDINGS USED FOR GRAMMATICAL ANALYSIS_____	25
TABLE 2.1: CONSONANT PHONEMES_____	26
TABLE 2.2: VOWEL PHONEMES_____	27
TABLE 2.3: VOWEL SEQUENCES_____	49
TABLE 2.4: EXAMPLES OF VOWEL SEQUENCES_____	50
TABLE 2.5: SYLLABLE SEQUENCES_____	52
TABLE 2.6: REDUPLICATION PROCESSES_____	73
TABLE 3.1: VOICE AFFIXES_____	84
TABLE 3.2: VERBAL STEMS DISPLAYING MOOD DISTINCTIONS_____	92
TABLE 3.3: BASIC CLAUSE CONSTITUENT ORDER _____	94
TABLE 4.1: ENCODING OF GRs IN VERBAL CLAUSES_____	104
TABLE 4.2: DYNAMIC VERBAL STEMS_____	119
TABLE 4.3: POTENTIVE VERBAL STEMS_____	122

TABLE 4.4: STATIVE VERBAL STEMS_____	129
TABLE 4.5: PIV AND NPIV.A ARGUMENTS IN STAT. AND POT. MARKED CLAUSES__	137
TABLE 4.6: INTRANSITIVE CLAUSE CONSTITUENT ORDER_____	139
TABLE 4.7: VERBAL MORPHOLOGY IN INTRANSITIVE CLAUSES_____	141
TABLE 4.8: AV TRANSITIVE CLAUSE CONSTITUENT ORDER_____	144
TABLE 4.9: UV TRANSITIVE CLAUSE CONSTITUENT ORDER_____	148
TABLE 4.10: INTERACTION OF GR, SEMANTIC ROLE, AND VOICE MARKING_____	163
TABLE 5.1: STEM FORMATION_____	180
TABLE 5.2: DERIVATIONAL AND INFLECTIONAL FEATURES OF VOICE MARKING__	181
TABLE 5.3: COMPLEX STEMS_____	182
TABLE 5.4: WORDS WHICH ARE BOTH ROOTS AND STEMS_____	183
TABLE 5.5: FORMS AND FUNCTIONS OF MAJOR AFFIXES_____	184
TABLE 5.6: ORDERING OF AFFIXES IN AV MARKED VERBS_____	185
TABLE 5.7: ORDERING OF AFFIXES IN UV MARKED VERBS_____	185
TABLE 5.8: SIMPLE AND COMPLEX PREFIXES_____	187
TABLE 5.9: MONO- AND DISYLLABIC PREFIXES IN STEMS_____	189
TABLE 5.10: FUNCTIONS OF MONOMORPHEMIC PREFIX <i>ka-</i> _____	191
TABLE 5.11: ALLOMORPHS OF < <i>um</i> >, < <i>im</i> >, AND < <i>in</i> >_____	192
TABLE 5.12: LEXICAL ROOTS WITH VARIATIONS OF < <i>um</i> >, < <i>im</i> >, AND < <i>in</i> >__	192
TABLE 5.13: COMPLEX STEMS WITH < <i>um</i> >, < <i>in</i> >, AND < <i>im</i> >_____	193
TABLE 5.14: LIST OF CIRCUMFIXES_____	196
TABLE 5.15: LIST OF CLITICS_____	198
TABLE 5.16: ORDERING OF CLITICS IN AV MARKED VERBAL CLAUSES_____	199
TABLE 5.17: ORDERING OF CLITICS IN UV MARKED VERBAL CLAUSES_____	200
TABLE 6.1: SYNTACTIC FUNCTIONS OF TYPE I LEXICAL ROOTS_____	213
TABLE 6.2: SYNTACTIC FUNCTIONS OF TYPE II LEXICAL ROOTS_____	213
TABLE 6.3: SYNTACTIC FUNCTIONS OF TYPE III LEXICAL ROOTS_____	214
TABLE 6.4: EXAMPLES OF TYPE I, TYPE II, AND TYPE III LEXICAL ROOTS_____	216
TABLE 6.5: VERBAL ROOTS DERIVING DYNAMIC MONOVALENT VERBS_____	221
TABLE 6.6: VERBAL ROOTS DERIVING STATVE MONOVALENT VERBS_____	223
TABLE 6.7: VERBAL ROOTS DERIVING BIVALENT VERBS_____	225
TABLE 6.8: AUXILIARY VERBAL ROOTS_____	227
TABLE 6.9: DEMONSTRATIVES_____	247
TABLE 6.10: CARDINAL DIRECTION POINTS_____	255
TABLE 6.11: RELATIVE LOCATIVES_____	256

TABLE 6.12: INDEPENDENT CARDINAL NUMERALS _____	269
TABLE 6.13: BASE NUMERALS AND COMPLEX COMPOUND NUMERALS _____	272
TABLE 6.14: ORDINAL NUMERALS _____	273
TABLE 6.15: DISCOURSE PARTICLES _____	275
TABLE 6.16: PREPOSITIONS _____	278
TABLE 6.17: FUNCTIONS OF PPs _____	279
TABLE 7.1: QUESTION WORDS _____	288
TABLE 8.1: SEMANTIC CATEGORIES OF COMMON NOUNS _____	316
TABLE 8.2: PERSONAL PRONOUNS _____	328
TABLE 8.3: PHRASE MARKING CLITICS _____	345
TABLE 9.1: MORPHOLOGICAL ELEMENTS WITHIN VERBAL PREDICATES _____	359
TABLE 9.2: AV VERSUS UV MARKING IN TRANSITIVE VERBAL CLAUSES _____	369
TABLE 9.3: REFERENTIAL DISTANCE _____	373
TABLE 9.4: REFERENTIAL DISTANCE IN AV AND UV CLAUSES _____	374
TABLE 9.5: TAM MARKING IN VERBAL PREDICATES _____	377
TABLE 9.6: IRREALIS MARKING MORPHOLOGY _____	391
TABLE 9.7: VERB FORMS WITH CAUSATIVE PREFIX <i>pa-</i> _____	397
TABLE 9.8: SEMANTIC ROLES AND GRs IN DYNAMIC MONOVALENT CAUSATIVES _____	397
TABLE 9.9: CAUSATIVES WITH DYNAMIC MONOVALENT VERBAL ROOTS _____	400
TABLE 9.10: SEMANTIC ROLES AND GRs IN STATIVE MONOVALENT CAUSATIVES _____	400
TABLE 9.11: CAUSATIVES WITH STATIVE MONOVALENT VERBAL ROOTS _____	402
TABLE 9.12: SEMANTIC ROLES AND GRs IN BIVALENT CAUSATIVES _____	403
TABLE 9.13: BIVALENT VERBAL ROOTS IN CAUSATIVE CLAUSES _____	405
TABLE 9.14: VERB FORMS WITH REQUESTIVE PREFIX <i>paki-</i> _____	407
TABLE 9.15: SEMANTIC ROLES AND GRs IN REQUESTIVE CLAUSES _____	408
TABLE 9.16: TONDANO REFLEXIVE PRONOMINAL PARADIGM _____	414
TABLE 9.17: VERB FORMS WITH THE COMPLETIVE PREFIX <i>paka-</i> _____	416
TABLE 9.18: VERB FORMS WITH MANNER PREFIX <i>kapa-</i> _____	420
TABLE 10.1: SUBTYPES OF SUBORDINATE COMPLEX CLAUSES _____	440
TABLE 10.2: ADVERBIAL SUBORDINATING CONJUNCTIONS _____	448
TABLE 10.3: VERBAL ROOTS WHICH ALLOW CLAUSAL COMPLEMENTS _____	460

ABBREVIATIONS OF GRAMMATICAL TERMS

1	first person	NON.SPEC	non-specific
2	second person	NPIV.A	non-pivot actor
3	third person	OBL	oblique
ADV	adverbial	ORD	ordinal
AN	animate	PART	particle
ASSOC	associative	PIV	pivot
AV	actor voice	PL	plural
CAUS	causative	PN	proper noun
CPL	completive	POT	potentive
CV	conveyance voice	PP	prepositional phrase
DIR	directional	PRO	full pronoun
DIST	distal	PROH	prohibitive
DYN	dynamic	PST	past tense
EPIS	epistemic	PROX	proximate
EV	experiencer voice	PV	patient voice
EXIST	existential marker	QNT	quantifier
GR	grammatical relation	REL	relative
HES	hesitation	REAL	realis
INAN	inanimate	RDP	reduplication
INCPL	incompletive	REFL	reflexive
IRR	irrealis	REQ	requestive
LIM	limitative	s.o./s.t.	someone/something
LNK	linker	SG	singular
LV	locative voice	STAT	stative
MANN	manner	#	clause/word boundary
MED	medial	+	morpheme boundary
MOD	modifier	–	before or after element
MULT	multiplicative	→	element becomes
MUT	mutual marker	/	in the environment of
NP	noun phrase	σ	syllable
NR	nominaliser	[...]	constituent

NOTATION OF SOURCES FOR EXAMPLE SENTENCES

The morpheme by morpheme glossing in this work largely adheres to the *Leipzig Glossing Rules* of the Max Plank Institute for Evolutionary Anthropology. These rules are accessible here: <https://www.eva.mpg.de/lingua/pdf/LGR08.02.05.pdf>.

The interlinear example sentences in this thesis are referenced using the following format: TDN_11_EO_00:05:24. These abbreviations refer to:

TDN	Tondano (language documentation project)
11	Recording session number
EO	Speaker's initials (only provided if multiple speakers were recorded in one session)
00:05:24	Timestamp of utterance, i.e. HH:MM:SS

Other sentences may be referenced with the following format: (BBT: 07/01/2012) whereby the following abbreviations apply:

BBT	<i>Belajar bahasa Tondano</i> 'learn the Tondano language' Facebook group (2012).
17:01:2012	Date accessed, i.e. DD:MM:YY

Finally, a number of examples are referenced as either (ELICITED) or (GENESIS 46:5). (ELICITED) references refer to examples from fieldnotes, or sentences which were specifically elicited and then recorded. References such as (GENESIS 46:5) refer to passages from bible translations by the *Pusat Penerjemahan Bahasa* 'Language Translation Centre' at the *Universitas Kristen Indonesia Tomohon* (UKIT) 'Christian University Tomohon Indonesia'. These translations come from the book of Genesis (37, 39-50), the Gospel of Mark, and the book of Jonah.

1.0 INTRODUCTION

The first chapter of this thesis provides background information on the society, people, history, and culture in which the Tondano language is situated. In §1.1 the regional geography, districts, and climate are outlined, while §1.2 and §1.3 describe demographics and a number of relevant aspects of history and culture.

§1.4 then describes the genetic lineage of Tondano within the Austronesian (AN) group, and §1.5 provides information on the languages of wider communication. §1.6 briefly summarises the current linguistic vitality. In §1.7 previous research on the language is provided, before §1.8 presents an overview of fieldwork methodology and data collection procedures.

1.1 Geography, districts, and climate:

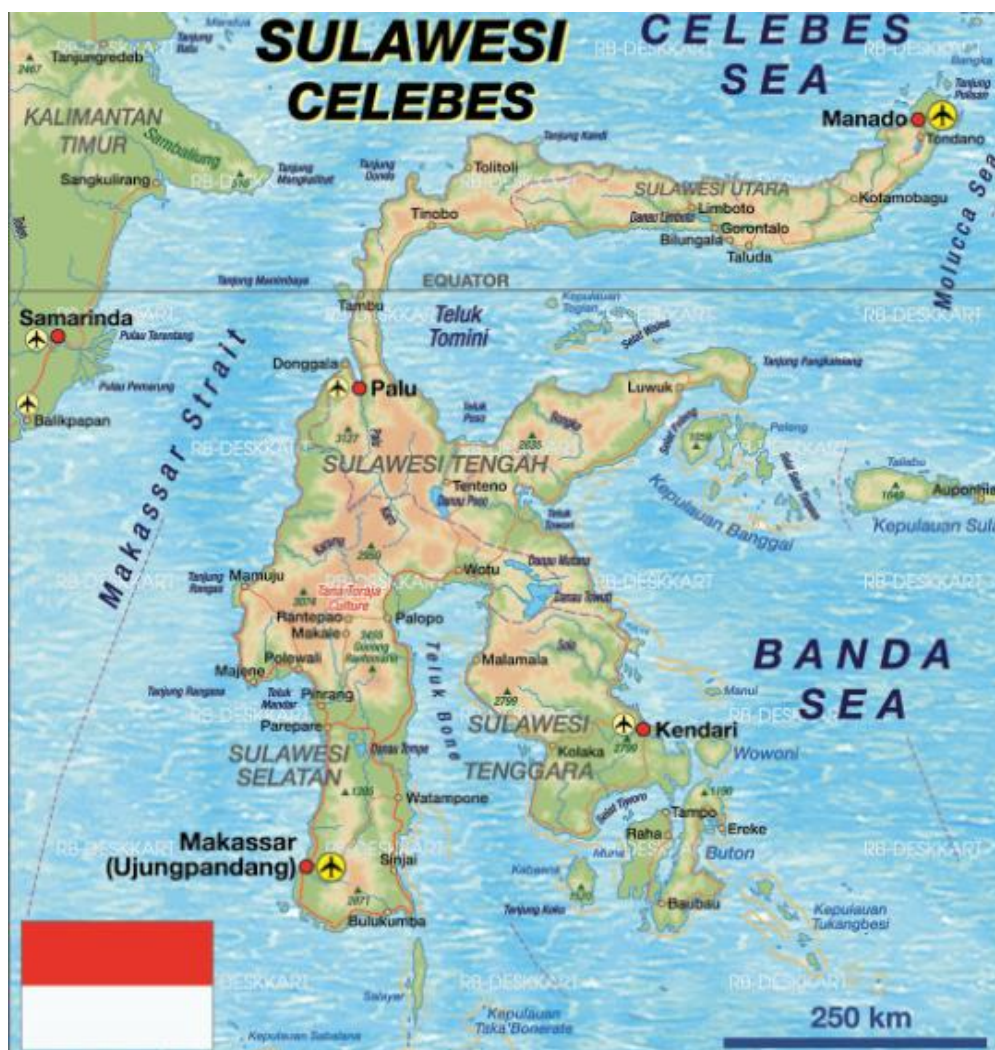
The largest concentration of native speakers of the Tondano language is located in the Minahasa region of the island of Sulawesi. However, there are also small diasporic Minahasan communities as far afield as Japan, the U.S, the Netherlands, Canada, and Australia. Formerly known as *Celebes*, Sulawesi is located in the Indonesian archipelago to the east of Kalimantan (Borneo), to the north of Flores, to the west of Maluku (Moluccas), and to the south of the Philippines.

Figure 1.1: Map of the Indonesian archipelago (Welt Atlas 2012)



The island of Sulawesi is approximately 563 kilometres long, and has a distinctive shape with four separate peninsulas extending in different directions. The island has a land mass of approximately 189,035 square kms and comprises six provinces, or *propinsi*, which are: *Sulawesi Utara* ‘North Sulawesi’, *Sulawesi Tengah* ‘Central Sulawesi’, *Sulawesi Barat* ‘West Sulawesi’, *Sulawesi Tenggara* ‘South East Sulawesi’, *Sulawesi Selatan* ‘South Sulawesi’, and *Gorontalo* (Badan Pusat Statistik 2010). Two of these provinces, *Sulawesi Barat* and *Gorontalo*, have only come into existence in the last 10 years having previously been part of South Sulawesi and North Sulawesi provinces respectively (*ibid*).

Figure 1.2: Map of Sulawesi (Nation master 2012)



The Minahasa region is located in the northernmost tip of the province of *Sulawesi Utara*. The total land mass of northern Sulawesi is 90,000 square kilometres (Henley 2005:13). North Sulawesi itself is further divided into 11 *kabupaten* ‘regency, area’, and below this

regional level geographic areas in Minahasa are divided into the *kecamatan* ‘district’ and *desa* ‘village’. Four regencies make up the Minahasa region: *Minahasa Utara* ‘North Minahasa’, *Minahasa Selatan* ‘South Minahasa’, *Minahasa Tenggara* ‘South East Minahasa’ and *Minahasa*. In addition to Tondano, the primary towns in North Sulawesi are Manado (the regional capital), Tomohon, and Bitung.

Tondano speaking settlements are traditionally located in the *kabupaten* Minahasa around Lake Tondano and the town of the same name (see Figure 1.3). Speakers are therefore mostly located in the higher altitude area that makes up much of the landscape of the region. Smaller speech communities are also found in villages (e.g. Kombi and Watulaney) in an area that stretches eastwards from Lake Tondano towards the east coast.

Figure 1.3: Map of Minahasa region of North Sulawesi (North Sulawesi 2012)



A volcanic plateau runs down the length of the northern tip of the peninsula. This Minahasan plateau has a number of volcanoes, both dormant and active. Mount Lokon, Mount Soputan, and Mount Mahawu are all currently active (and have erupted at various times in the last five years), while Mount Tangkoko and Mount Klabat are now dormant.

Despite being a reasonably narrow peninsula, the region is mainly mountainous with coastal plains rarely being more than a few kilometres wide (Henley 2005:13).

The Minahasa region, together with the rest of Sulawesi, is located in what is known as *Wallacea*,¹ a transitional area between the flora and fauna of Asia and that of Australia and New Guinea (Schouten 1998:13). This area contains a number of unique species and is ecologically quite diverse. Moreover, the soil of the Minahasa region is derived from volcanic rock that renders it some of the most fertile in Sulawesi. This no doubt assists in growing of the cash crops from which many people in the region derive their income (see §1.2).

The climate in the region is tropical, with an obvious distinction between temperatures at sea level (warmer) and those in the plateaus and highlands (cooler). Rainfall levels also vary from area to area in the same way that temperature does (*ibid*:16). To generalise however, it can be said that while heavier rainfalls occur in the months of December, January, and February, certain places (such as Tondano and Tomohon townships) have a steadier and more constant rainfall pattern all year round.

1.2 Population and Economy

The population figure for North Sulawesi as per the *Badan Pusat Statistik* 'Indonesian Centre for Statistics' (2012) is 2,319,916, with the inhabitants of the *kabupaten* Minahasa numbering 316,884.

The *kabupaten* Minahasa is one of the wealthiest in North Sulawesi (Jones 2006:88). The economy of the province, and indeed of northern Sulawesi as a whole, is principally an agriculturally based one with primary production providing around 25% of all income and 90% of all exports (Sondakh & Jones 2003:286). The foremost cash crops in the region are coconuts (specifically copra, i.e. the coconut 'meat' which can be used for coconut oil production) and cloves. However rice, corn, nutmeg, coffee, and cocoa are also grown and sold.

While originally cultivated almost exclusively on the Maluku islands (Schouten 1983: 40), cloves found their way to northern Sulawesi during the times of Dutch expansion in the region. These plantations were an especially rich source of income in the area during the 20th century, with the 1970s or *musim cinkè* (lit. 'clove season') being a period where

¹ After the British naturalist Alfred Russell Wallace (Bellwood 1997: 8).

clove sellers enjoyed high prices due to a great demand for *kretek* cigarettes and a limited supply of cloves. This period lasted until sometime in the early 1980s when supply exceeded demand and prices fell (Sondakh & Jones 2003:289).

In addition to agriculture, other sectors have also augmented the economy of North Sulawesi. In the past fifteen years some of the fastest growing income sectors are those of the mining (primarily gold mining) and tourism industries (*ibid*:293-94). Bunaken National Marine Park is an especially popular destination with western tourists for scuba diving. With regular international flights to and from the regional capital Manado, and a perception of North Sulawesi being a safe holiday destination (*ibid*), the tourism industry is likely to grow in the near future.

1.3 The History and Culture of the region

The following subsections summarise a number of important historical and cultural events of the Minahasan people. These descriptions are divided into pre-colonisation (§1.3.1), colonisation (§1.3.2), 20th Century events (§1.3.3), and the contemporary setting (§1.3.4).

1.3.1 Minahasa prior to European contact

In previous academic literature (Sollheim 1975:155; Blust 1984:56; Bellwood 1995:112-13, 1997:119; Schouten 1995:12; Henley 2005:19) it is generally agreed that North Sulawesi experienced the first wave of Proto-Austronesian (PAN) migration and expansion patterns in the late third or early second millennia BC. The original Austronesians are believed to have come from what is now southern China or Taiwan. These people arrived after colonising the Philippines, before spreading further southwards and eastwards. The evidence for this viewpoint on the expansion patterns comes from linguistic, anthropological, and archaeological studies of Southeast Asian history.

However, recent work by the HUGO (Human Genome Organisation) Pan Asian SNP (Single nucleotide polymorphism) consortium (2009) (as outlined in Donohue & Denham (2011)) has proposed a different theory on the human genetic history of many parts of Southeast Asia, including the island of Sulawesi. Specifically, it puts forward an analysis that the movement of languages and peoples do not match, with DNA evidence showing human movement patterns from west to east and to south to north (*ibid*:536-7). This obviously contrasts with the more widely accepted ‘out of Taiwan’ model. While the exact nature of population movements may not be entirely clear, it will suffice to say that

the current genetic human population in North Sulawesi has been in this region for a number of thousands of years.

In addition to the accepted western academic views on the origin of human habitation in North Sulawesi, the most common creation myth of Minahasans must also be mentioned. This is the story of *Toar and Lumimu'ut* (Schouten 1983:15; Lerissa 1995:107; Jacobson 2002b:12). A full description of this story is available in Lundström-Burghoorn (1981: 35-7). A much abridged version is as follows:

Lumimuut, who is the universal earth mother of the Minahasans, left her place of birth at an early age and met the priestess Kareima. After turning in all four cardinal directions whilst Kareima prayed, Lumimuut became pregnant and gave birth to a son named Toar. When Toar was of appropriate age both he and Lumimuut were given sticks (from different plants) by Kareima before they headed out into the world. The two sticks (from the *tuis* and *assa* plants) were required so that if they were to meet again after many years, they would know if they were related. The sticks could be measured and if they were same size this would prove they were mother and son. After some years apart Toar and Lumimuut met again. When measuring their sticks they discovered they were not the same length as Toar's (*tuis*) stick had grown. They returned to Kareima who declared they were now not mother and son, and should therefore become man and wife. They married and had many score of children who rapidly spread over the earth. When these children themselves had procreated Lumimuut called all her descendants to the *watu pinewetengan* 'dividing rock / rock of division'. Lumimuut then divided the Minahasa region into four pieces and gave one quarter each to the Tombulu(h), Tonsea, Tontemboan, and Totuma-atas.

This division was eventually thought to encompass all eight ethnic groups (Schouten 1983:15)², with each given its own language and region. The names for these ethnic groups often consist of the cognate word *tou* 'people, person' plus an additional attributive word with an optional nasal consonant preceding it. The attributive appears to describe either a characteristic of the ethnic group, or the area they inhabit. The terms for the five ethnic groups with names derived in this way are: *Tondano* ← *tou* + (n)*dano*

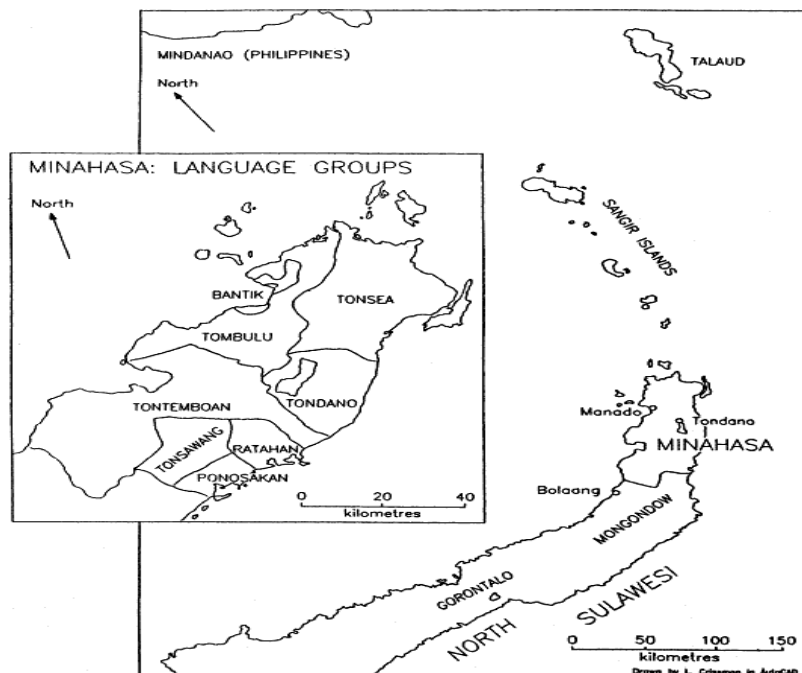
² The group named *Totuma-atas* does not occur in later writing and is problematic. However, it is widely accepted that this geographic area (around Lake Tondano) was inhabited by the Tondano speaking Toulour group at a later date (Lundström-Burghoorn 1981: 36).

‘water’ (water people), *Tombulu* ← *tou* + (*m*)*bulu* ‘mountain’ (mountain people), *Tontemboan* ← *tou* + (*n*)*temboan* ‘look down from above’ (people who look down from the hills), *Tonsawang* ← *tou* + (*n*)*sawang* ‘help’ (people who help), and *Tonsea* < *tou* + *sea* ‘sidetrack, stray’ (those who stray from the path).

In the pre-colonial period a total of eight groups were differentiated culturally, linguistically, and politically (Schouten 1983:13; Henley 1993:94). These eight different groups and languages were; Tondano, Tombulu, Tonsea, Tontemboan, Tonsawang, Bantik, Ratahan (also known as Benetan or Toratán), and Ponosakan³. Of these eight groups only the first five share a common descent. The Bantik and Ratahan peoples are most closely related to the Sangir archipelago further north⁴, while Ponosakan speakers are from the southern part of North Sulawesi.

The different areas traditionally inhabited by these various groups are displayed below (Henley 1993:95):

Figure 1.4: Pre-Christian language and ethnic boundaries



Within these ethnic and linguistic boundaries above, the Minahasans were further divided into “mother villages” (Schouten 1983:19) or *walak* ‘clan, ethnic group’. These *walak*

³ While Henley (*ibid*) states that these eight languages were “mutually unintelligible”, the comparative studies undertaken by the likes of Sneddon (1975: 12-13, 1978: 8-9) appear to show that the ‘T’ languages (see §1.4.1) share common lexical items.

⁴ The small group of islands between present day North Sulawesi and the southernmost part of the Philippines.

were larger political and administrative units which consisted of multiple villages, and which were more or less self-sufficient. Contact with those outside each individual *walak* was rare (*ibid*). All decisions that affected villages within the *walak* were made at this local level, including the founding of any new settlements within it.

The daily life of Minahasan communities in this period revolved around a hunter-gathering and agricultural type subsistence. This was primarily governed by agricultural seasons and the raising of livestock. Crops such as squash, bananas, and root crops were planted on the periphery of fields, while vegetables were planted in the middle (Schouten 1983:20). Rice, and later maize, was also cultivated, while male members of the *walak* fished and hunted various indigenous fauna (*ibid*).⁵ Fruits from the forest were also commonly eaten, while the sugar palm tree (Latin: *Arenga pinnata*) was well utilised and provided *saguer/timpa* 'palm sugar wine' and *watè(r)* 'sago grubs' (which are both still consumed today).

Although the five 'T' groups share a similar ethno-historical and linguistic background, a unified type of state in the modern sense was not present in pre-colonial times. Rather, a sense of belonging was symbolised by what Henley (1993:96) calls "the open vertical tree of descent". People's loyalties were exclusively focused around the primary religion, that of an ancestor cult which was part of the cognatic descent system of the Minahasans (Schouten 1983: 29, 1995:11). This system allowed for certain individuals to be assured of future status as a "deified ancestor" (Schouten 1983:29), perhaps even in their own lifetimes. This status was achieved exclusively by means of extraordinary achievements (and qualities) displayed by people while they were still alive.

One of the primary ways in which these extraordinary achievements were recognised was through the holding of feasts (Schouten 1983:22-4, 1995:12). These feasts allowed an individual's profile to be raised in order to progress towards a future deified status. An additional and more immediate effect was an improvement of the individual's reputation and political influence. These feasts were usually part of a series of nine, with each following feast involving a higher degree of complexity (Schouten 1983:23). Each subsequent feast would equate with a rise in social status until it was at such a level that veneration would be guaranteed for generations to come. The fundamental provisions for

⁵ Animals such as monkeys, deer, bats, mice, and snakes. From colonial times onward this would also have included livestock such as pigs, chickens, and goats.

holding a speech were “courage and wealth” (*ibid*:24)⁶. Courage equated to participation in tribal wars, including headhunting, dismemberment of bodies, and the taking of slaves. Wealth was required to cover not only food and drink, but also the purchase of costly trinkets and objects which would then be destroyed in a ritualistic way during the feast (Schouten 1995:11). While the possibility of achieving demigod status was therefore not limited to people of any specific bloodline or demographic, a large amount of time, wealth, and effort was required for any person to attain this.

1.3.2 Minahasa during European contact (1500’s onwards)

Pre-European contact with outsiders primarily took the form of trading and bartering with peoples from the northern Moluccas (Maluku), as well as sporadic contact with Chinese and Malays from within the Indonesian archipelago (Schouten 1983:39). Occasional contact with outsiders also occurred, primarily due to competition for sovereignty over the region from Ternate, Tidore, and Makassar. However, it is safe to say that this interaction with non-Europeans had nowhere near the impact on Minahasan society and culture as European contact eventually would.

The first of many Europeans to have contact with the indigenous population of North Sulawesi were the Spanish and the Portuguese. The first significant visit by the Portuguese took place in 1563 (Riedel 1869:514, cited in Schouten 1983:40). Ostensibly the motive for expansion by both the Spanish and Portuguese was to spread Christianity as per the Papal Bull of 1514 (Panikkar 1959:299). However, the motives of the Spanish were also economic, with a desire for Minahasan rice supplies to feed the crews of European trade ships (Schouten 1983:41).

In this period neither European power was particularly successful in bringing about any lasting cultural transformation. Moreover, Minahasan discontent with the Spanish reached the level of armed conflict, with the Tombulu and Tonsea peoples often involved in these clashes (*ibid*). The primary European legacy of this period can most clearly be seen in the proliferation of Portuguese and Spanish loan words in the current day language of wider communication in the area, Manado Malay (see §1.5.1).

While early European contact was limited to the Portuguese and Spanish, it was the Dutch who would come to have the greatest impact on the Minahasan people. The Dutch

⁶ In addition to wealth and courage, other characteristics such as eloquence, virility, and fertility were also held in high esteem.

sponsored *Verenigde Oost Indische Compagnie* ‘United East India Company’, or VOC, had already reached the Moluccas (Maluku) some years earlier, and had plans for expansion throughout the eastern archipelago. Seeking to take advantage of Minahasan dissatisfaction of the Spanish⁷, the Dutch successfully constructed a fort after 1655 at a location which would become the regional capital, Manado (*ibid*).

In 1679, and again in 1699, treaties were signed between the VOC and the 19 Minahasan *walak* which placed various obligations on the Minahasans. Primarily, they had to recognise the Dutch as their “overlords”, provide them with the agreed upon amounts of timber and rice, and adhere to regulations on running of local communities that prohibited practices such as headhunting and human sacrifice (Schouten 1983:41-2). The Dutch attempts to regulate daily life, to bring stability to the region, and to extract rice and timber were not particularly successful in this period. Another treaty was signed between the VOC and *walak* leaders in 1790 with similar requirements to those of the earlier treaties. It is in this treaty that the name *Minahasa* ‘be, or become one’ is first recorded (Godee Molsbergan 1928:137, cited in Schouten 1983:44)⁸. This treaty meant that the Minahasa region of North Sulawesi had now been under European rule for 111 years. However, it would not be until the 19th century that Minahasan society would undergo the most intense change.

The early 1800’s would see the bankruptcy of the VOC, further instability in the form of a Tondano *walak* rebellion⁹ (Schouten 1983:50-1), and the British taking control of Manado on two separate occasions between 1797 and 1817 (Henley 2005:42). Finally, in 1817 the Dutch state took total control of the region. And it was the bureaucracy and power of this nation state that finally allowed the colonial administration to transform the cultural and social structure of the region in the manner it had always desired.

The most fundamental changes on Minahasan society were economic, political, and religious. In economic terms it was the growing and cultivation of the coffee bean¹⁰ for export that directly affected many Minahasans. The profound impact of coffee cultivation would lead to a number of social changes. These changes were a result of policies such

⁷ Events involving the VOC further south would also assist their efforts in North Sulawesi. The 1669 defeat of the powerful Gowa city of Makassar in south Sulawesi by VOC troops and mercenaries meant that the Dutch effectively had control of shipping routes in the region, and therefore the spice trade.

⁸ The etymology of which is believed to come from the prefix *ma-* (EV.STAT), the infix *<in>* (PST), and the cardinal numeral *esa* ‘one’ - with the resulting gloss ‘be, become one’.

⁹ This resulted in the destruction of the original Tondano township, built on poles in the lake itself.

¹⁰ This crop had been brought to Java in the 1700’s, and from there on to Minahasa.

as: forced cultivation of coffee crops, relocation of villages in order for easier cultivation, changes in population density in areas of cultivation, improved infrastructure in Minahasa in the forms of bridges and paved roads¹¹, and a slow shift away from the long standing culture of *mapalus* ‘working together’ whereby groups of famers would spend time working on each other’s crops¹².

Political changes were primarily related to the manner in which the colonial administration gave *walak* leaders roles as chiefs and intermediaries between the Dutch and the general population. This method of obtaining leadership differed greatly from that of pre-colonial times. From the 1820’s onwards the colonial administration would appoint a chief, and following his death leadership would pass on to his progeny (Schouten 1983: 93). The result of this shift in leadership created what Schouten (*ibid*) calls a “hereditary aristocracy, the *bangsa*”. This Minahasan ‘elite’ was therefore essentially a construct of the Dutch which assisted them in administering the region, and meant the traditionally more egalitarian nature of society slowly disappeared. Moreover, this group of aristocrats with their almost guaranteed line of descent affected the tradition of ancestor worship. This, together with the almost complete conversion of the Minahasans to the Christian (Protestant) faith, would lead towards the end of the ancient ways during the 20th century.

A detailed description of all the complex causes behind the mass conversion of Minahasans to the Christian faith is difficult to provide. However, there are certain factors which are identified as assuredly assisting with this conversion. The majority of Minahasans were converted between 1831 and 1891 by the *Nederlandsch Zendeling Genootschap* ‘Dutch Missionary Society’ or NZG (Henley 1993:96). The appeal of the Protestant church for the average Minahasan should perhaps be seen in the context of the radical societal changes of this time. The traditional culture and spiritual institutions of the region were under enormous pressure due to the policies of the Dutch administration (Schouten 1983:108; Henley 1993:96). Former important spiritual and cultural practices such as headhunting, slave taking, and feasts of strength and merit were no longer deemed acceptable. Consequently, the Protestant church may have offered a means of overcoming what Schouten (1983:107) calls the “cultural disorientation” that many Minahasans may have been feeling at the time.

¹¹ While ostensibly a positive change in the landscape, Minahasans were commonly required to work on these projects. This resulted in some labourers being forced away from home during crucial periods in crop cultivation.

¹² Instead of labour for labour exchanges a labour for money culture developed (Schouten 1983:59-74; Henley 1993:95).

This new Dutch Protestant church was likely perceived as prestigious and superior in much the same way as many other cultural aspects linked to the Dutch administration. This perceived prestige led to Minahasans replicating everything from western fashion to western food (Henley 1993:97), something that is still present today (Lundström-Burghoorn 1981:45). It is therefore probable that the new western religion was an attractive prospect for many Minahasans. Moreover, with the old ways of social advancement now disappearing, anything closely linked to the social elite would be perceived as leading to an improvement of everyday life.

Conversion to Protestantism was also partly driven by desire for a higher social standing through education. The Minahasan view that education was the primary means to material success and advancement would become entrenched towards the end of the 19th century (Schouten 1983:113). This would eventually lead to “western style knowledge” (*ibid*) with Minahasa having (and most likely still having) the reputation as one of the most educated regions in Indonesia (Leirissa 1995:108). Initially, all schools were run by the NZG, meaning the link between religion and education was so close as to be almost indivisible (Schouten 1983:112)¹³. This in turn led to a proselytising environment in the classroom, which obviously increased the rate of conversion of many younger Minahasans.

The desire to gain social advancement in a new era meant that both the religion of the Dutch, and the proselytising schooling provided by the NZG, were attractive options for change. This, together with the constant uncertainty brought about by rapid change in all levels of society, made the job of the NZG missionaries far easier. While relatively few people actually succeeded in gaining a radically better life through the church or formal education (Schouten 1983:125), the shift of people into these institutions undoubtedly assisted in the shift away from indigenous cultures and languages.

1.3.3 Minahasa in the 20th century

Within the 20th century period there are perhaps three events that had the greatest impact on Minahasan society: the invasion and occupation by the Japanese from 1942 - 1945, the years leading up to independence from the Dutch (1946 - 1949), and what is known as the *Permesta* rebellion (1958 - 1961).

¹³ Only In the latter half of the 19th century would state schools be built and managed by the government.

When the Japanese invaded the archipelago, North Sulawesi was one of the first regions that came under Japanese control (Schouten 1983:211). While most Minahasans were unreceptive towards the occupiers, the harsh and violent conditions they imposed meant the populace were too afraid to act against them (*ibid*). Living conditions and quality of life worsened due to the introduction of compulsory cultivation of rice and maize crops, with most of the harvest taken by the Japanese. Eventually the Japanese surrender to the allies on 15th August 1945 would bring an end to the occupation of Minahasa, and begin the complex process of incorporation into the Republic of Indonesia.

The declaration of Indonesian independence was proclaimed in Jakarta on 17th August 1945 under the leadership of Sukarno and Mohammad Hatta (Lundström-Burghoorn 1981:42), while in the Minahasa region Sam Ratulangi was appointed as the first Governor of Sulawesi (Schouten 1983:213). The former Dutch colonial masters were, unsurprisingly, strongly opposed to the idea of independence. The Dutch returned and attempted to re-establish their rule which led to several prominent Minahasans (including Sam Ratulangi) being exiled or detained in 1946 (*ibid*). Despite nationalist sentiment in the region, it is justified to say that many Minahasans felt in two minds as to who they should support during the violent struggle in the years 1946-1949¹⁴.

Many Minahasans (and Moluccans from Ambon) joined with Dutch forces¹⁵ who were attempting to set up a federal state in eastern Indonesia. This was in response to the single state in central and western Indonesia that was the aim of Sukarno's Nationalists (Jacobson 2002b: 2). The truce that was signed between the Dutch and the Nationalists in 1949 did, in theory, signal the end of the struggle for independence, and resulted in Minahasa's integration into the Indonesian unitary state in 1950 (Schouten: 1983:214). However, after the end of the war for independence it appears that the feeling amongst many Minahasans was one of uncertainty and fear of reprisal¹⁶.

In this period there was discontent within a number of ethnic groups in outer Indonesia (including those in central and western Sumatra) who feared they would have little say in their own affairs, and would be dictated to by those in Jakarta (Jacobson 2002b:2). This is

¹⁴ Sentiment against the newly formed (Jakarta based) unitary government was strong however, so much so that a political movement (the *twaalfde provincie* 'twelfth province) even called for the integration of Minahasa into the Kingdom of The Netherlands in 1947.

¹⁵ This gained Minahasans the rather unpleasant moniker (but rarely used today) of *anjing belanda* "Dutch dogs".

¹⁶ This led to the emigration of many Minahasans (and Moluccans) to a number of other countries where diasporic communities still reside today.

precisely what would eventuate. It was this growing unhappiness that Minahasa was becoming one of the regional “political backwaters” (Jacobson 2002b:2-3) that would lead to direct armed confrontation with Jakarta, or more specifically the *Tentara Nasional Indonesia* ‘Indonesian National Army’, or TNI.

The armed conflict known as *Permesta* seems to be the most memorable episode in recent history, especially for older Minahasans. The *Permesta* rebellion, or *Piagam Perjuangan Semesta* ‘Universal Struggle Charter’, was not about any desire for secession from the Indonesian state (*ibid*:2). Rather, it was born out of anger towards the national government and its economic policies¹⁷ (Lundström-Burghoorn 1981:43; Schouten 1983: 215) as well as perceived discrimination by the Java centric leadership in Jakarta (Harvey 1977:v).

Support for this cause was found amongst both the civilian population and the local military commanders. On 15th February 1957 a rebel government was announced in Bukit Tinggi, West Sumatra (Ricklefs 2001:318), and two days later rebels in North Sulawesi also joined this rebellion (*ibid*).

The military response from Jakarta and Sukarno was swift, and within only a few months the TNI had regained control in Sumatra. However, in Minahasa the fighting lasted much longer (Lundström-Burghoorn 1981:43). The bombing of Manado in late February 1958 allowed the TNI a foothold into larger towns in the region, and by July of that year most of these areas were in the hands of government forces (Ricklefs 2001:319). This did not signal the end of the conflict however, as fighting continued in the mountains for approximately another two and a half years. While it seems that most local people supported the *Permesta* rebels, this did not make their time during this period any easier, as it seems both rebels and government troops would take their crops for food (*ibid*). The rebels were eventually defeated in 1961 with the estimated total death tolls for both sides of between 7,000 -14,000 (Harvey 1977:118). Despite the fact that the rebellion undoubtedly reinforced the unity of Minahasa (as a cohesive ethnic group), there are questions as to whether the aims of the movement were ever fulfilled¹⁸.

¹⁷ Although copra crops from North Sulawesi provided a large source of income for the national government, it was felt that very little money was put back into the regional economy which therefore stagnated (Lundström-Burghoorn 1981:43).

¹⁸ An interesting postscript on this matter appears in Schouten’s (1983:215-17) description of *Permesta*, i.e. certain behaviour by the local rebels at this time was similar to that of Minahasans in pre-Christian times. The reputed cutting up slain enemies, eating body parts, and belief in magical powers to protect fighters (by using cloth and charms supposedly imbued with power from the ancestors) seems very similar to the way in which ‘courage’ (and therefore greater prestige) was attained in earlier times.

1.3.4 Contemporary Minahasan society

The three major 20th century events described in §1.3.3 are perhaps the peak of approximately 200 years of rapid societal transformation. Amongst other things these changes have had a strong impact on people's opinions of indigenous culture, and in turn the languages associated with it. Jacobson (2002a:41) notes that for Minahasans, identity markers such as “(local) languages and cultural history, generally described as most pivotal in the anthropological literature on ethnicity” come last from a list of factors when people are asked about characteristics that make up their own identities. In addition, many young people are disconnected from pre-colonial cultures and traditions, and are unable to speak indigenous languages (*ibid*:44-5)¹⁹. It also appears that people sometimes possess a slight sense of shame related to some of the more brutal pre-Christian practices, and that this in turn made all indigenous traditions much less likely to be maintained.

For many Minahasans today a sense of identity comes predominantly from personality traits perceived as distinctive (e.g. tolerance, openness, and helpfulness), as well as their links to Christian faith, westernisation, and education. This sense of identity stemming from a ‘homogenous’ Minahasan culture, which is partially based around the Manado Malay language and Christianity, appears to further weaken links to earlier culture and the traditional indigenous languages.

1.4. Genetic lineage and speaker numbers

This section discusses the genetic lineage and dialects of the Tondano language (§1.4.1), and also the problematic issue of estimating the current number of speakers in the Tondano speech community (§1.4.2).

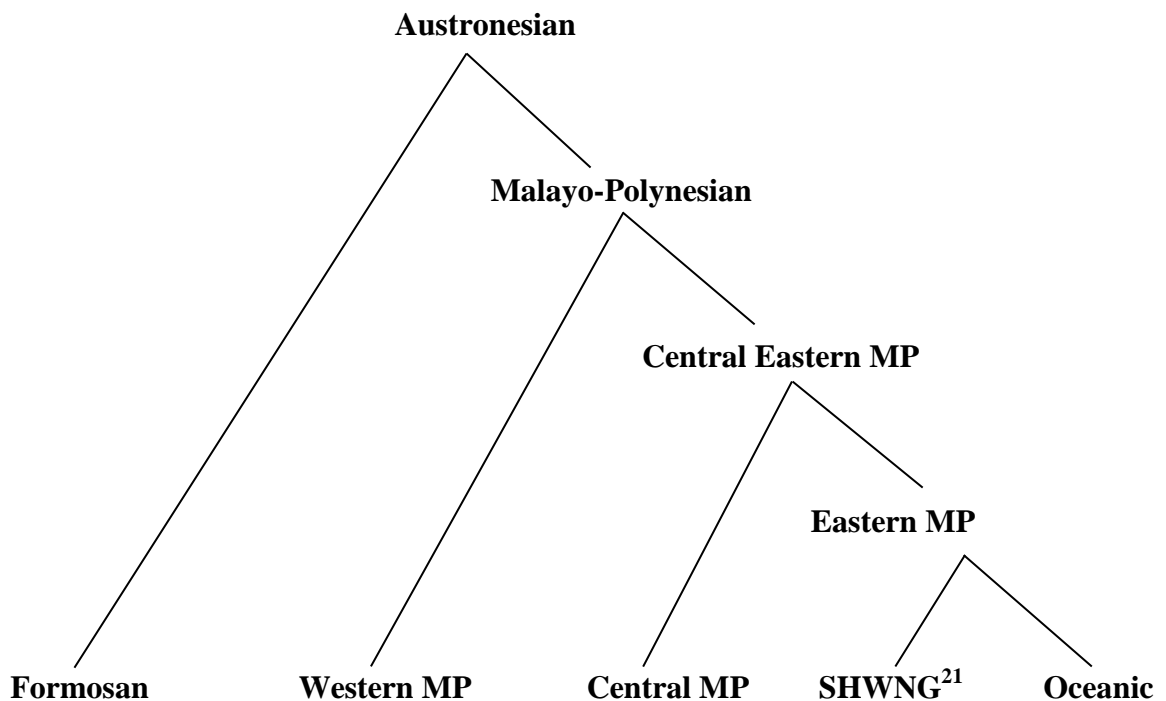
1.4.1 Classification of Tondano and dialects

Tondano is located within the mildly contentious Western Malayo-Polynesian (WMP) subgroup of the Malayo-Polynesian (MP) branch of the Austronesian (AN) family. Although comparative research on Austronesian subgroupings had been undertaken as early as Humboldt (1836-9), modern studies of An classification using the comparative method and lexicostatistical studies are thought to start with Dempwolff (1934, 1937, 1938), and to continue with Dyen (1965) and Dahl (1976).

¹⁹ This is certainly the impression I gained during my approximately eleven months of fieldwork in Minahasa.

Many of the more recent publications seeking to further define both PAN and PMP phonology come from Blust (1990, 1993a, 1993b, 1994), and it is his 1993b work that provides evidence for the Central Malayo-Polynesian (CMP) and Central Eastern Malayo-Polynesian (CEMP) subgroups. Alternatively, the specific WMP subgroup is not well evidenced linguistically²⁰ despite the fact that it is often cited as clearly established (Adelaar 2005:14). An outline of relatively recent problems and developments considered significant to AN comparative linguistics is found in Ross (1995a). With these caveats in mind, the major AN subgroupings based on Blust (1980,1999a) are:

Figure 1.5: Major subgroups of the Austronesian language family



Tondano belongs to northeast branch of the Minahasan group, which in turn is one of the ‘micro-groups’ of the Philippine subgroup of WMP (Blust 2013:740). The Philippine subgroup is thought to include all languages of the Philippine archipelago, the Batan islands, (with the exception of Sama-Bajaw), as well as those of northern Sulawesi and northern Borneo.²² The Philippine subgroup, after work by Blust (1980), Zorc (1986)²³, and Ross (1995a) is widely accepted and fairly uncontroversial.

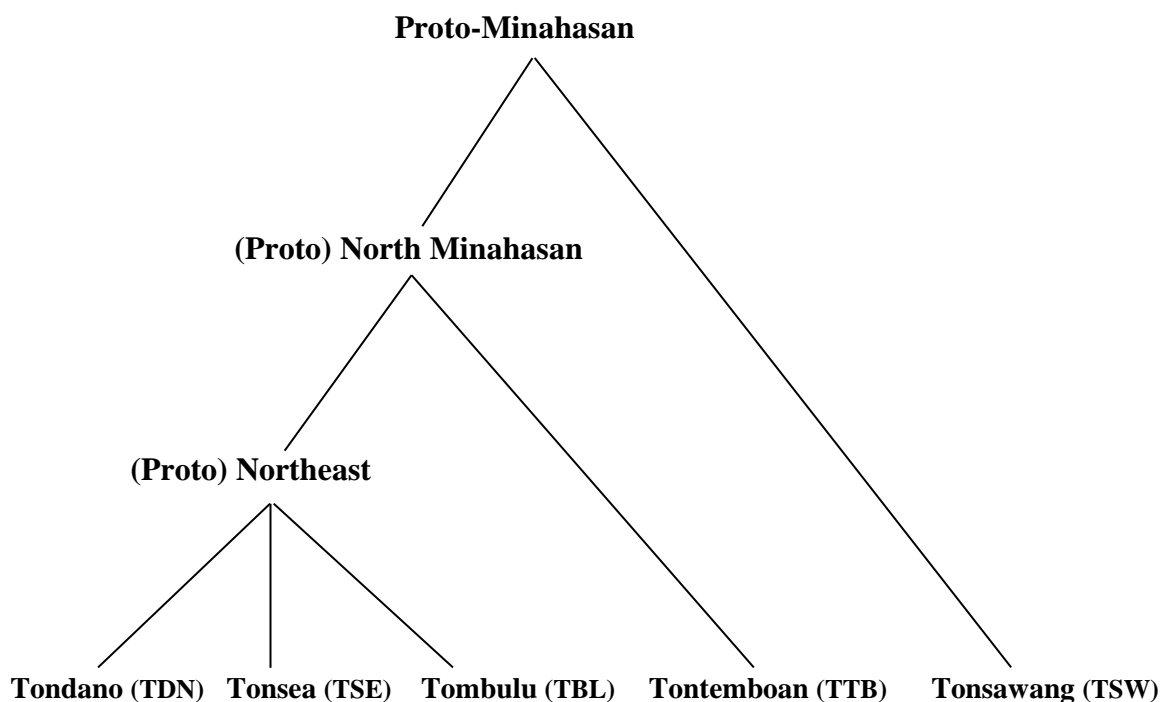
²⁰ So much so that Blust (2013: 740) states of WMP that “there is no phonological evidence for such a group”.

²¹ South Halmehara- West New Guinea.

²² These geographic areas include those which are judged to contain languages belonging to a typological category with structural similarities to Philippine languages, i.e. the so called ‘Philippine-type’.

The placement of Tondano in the Minahasa subgroup is also well established. The most noted recent comparative studies were undertaken by Sneddon (1970, 1978). Prior to this, the only specific comparative study was that of Adriani (1925). The research of Sneddon is based on a lexicostatistical analysis of wordlists, and the results provide the current classification of Minahasan languages (except Toratán, Bantik, and Ponosakan) as (Sneddon 1970:14, 1978:9) shown in Figure 1.6:

Figure 1.6: Proto-Minahasan language group



Based on wordlists comprising approximately 192 (1970) and 800 (1978) words respectively, Sneddon (1970:27,1978:8) puts forward the following estimations of shared lexicon and cognate percentages for the languages within the Northeast branch of Minahasan:

²³ It should be noted that the internal classification of Proto-Philippines as per Blust (1991) differs slightly to that put forward by Zorc (1986).

Figure 1.7: Cognate percentages of North Minahasan languages

	TDN	TSE	TBL	TTB
TSW	41	43	44	44
TTB	58	57	61	
TBL	69	72		
TSE	73			

If accurate, the percentages in Figure 1.7 demonstrate that all three languages from the Northeast branch are closely related, with Tondano and Tonsea most closely related. This is also the conclusion described by Wongkar (2007) in a comparative study (MA thesis) which includes Tondano, Tombulu, and Tonsea. However, although the three languages all appear to be closely related, considering them as dialects of one single language is probably too great a step. Further research is certainly required to confirm this speculation. Personal experience during fieldwork led to the impression that (both phonologically and morphosyntactically) there appears to be distinct differences between Tondano and Tombulu.

Finally, within the Tondano language there are three dialects, with each named after the district in which it is spoken, i.e. *Toulour*, *Kakas*, and *Rembokan* (Watuseke 1956a:3; Sneddon 1975:1; Watupongoh et. al. 1992:1; Dotulong 2010: viii). Traditionally, the Toulour dialect is considered to have the largest group of speakers. There is almost no literature which examines the differences between the three dialects in detail. In the dictionaries and previous published work the differences between the three dialects are posited as primarily phonological, with a small amount of lexical variation also. The lexicostatistical percentages are very high, especially for Toulour and Kakas where a figure of 83% is given by Sneddon (1975:1), and a figure of 85% is given by Dotulong (2010:viii).

1.4.2 Speech community numbers

Ascertaining the exact speaker numbers in any endangered language situation is difficult, and Tondano is no exception. There are a number of specific figures from various sources in the literature, all of which are outdated and refer to different demographics. In the SIL Ethnologue web publication (Lewis et. al. 2014) the population figure given is 92,000 based on Wurm and Hattori (1981). In Sneddon (1975:1) the estimated figure solely for

speakers in Tondano township is 30,000, while the total number of speakers in Sneddon (1983) is 91,000. Going farther back the figure given in Watuseke (1956b:3) is 60,000.

Considering that the total official population figure for the entire *kapupaten* Minahasa is 316,884 (see §1.2), the figure of around 90,000 Tondano speakers appears extremely optimistic²⁴. While any figure given here could only be speculative, there are a number of factors which would indicate a lower figure. Firstly, in the author's fieldwork experience the average age of fluent speakers is approximately 50 years old and above. Secondly, children are not learning the language, and its use in everyday situations has all but disappeared (see §1.6 below). Consequently, the actual number of Tondano speakers is most likely far fewer than 90,000.

1.5. Languages of wider communication:

This section outlines the various languages of wider communication which are spoken alongside Tondano. One of these languages in particular (Manado Malay) is gradually replacing Tondano in almost all domains of use.

1.5.1 Manado Malay

Manado Malay, also known as *bahasa Manado* or *bahasa pasar* 'market language', is a Malay based creole used as the language of wider communication in the regional capital of Manado. In addition, its influence and use extends far outside the metropolitan area to encompass many of the areas where only *bahasa daerah* 'indigenous languages' were traditionally spoken²⁵. In all these speech communities it now appears to be the mother tongue of most people under the age of approximately fifty years old. It is also the language used in all everyday domains (e.g. home, markets, work, and social gatherings).

There has been relatively little description of the language with the exception of Stoel (2005), whose PhD dissertation includes a grammatical description, and Prentice (1994). Manado Malay differs from the indigenous languages in a number of ways. Firstly, in the large number of Portuguese, Spanish, and Dutch loanwords, secondly in its morphological typology (isolating), and thirdly with its rich system of discourse particles.

²⁴ Considering the fact that the geographic area of *kabupaten* Minahasa also includes some areas which contain speakers of other indigenous languages.

²⁵ It is also spoken further south in Sulawesi (Gorontalo province). Ethnologue (Lewis et. al. 2014) gives the speaker numbers as 850,000 with up to 1.5 million having it as a second language.

The first instances of contact the region had with any form of Malay most likely came from traders in pre-colonial times. However, it was during the era of VOC that the language truly became entrenched. Malay (including the Manadonese variety) was the *lingua franca* that the Dutch used to communicate with native peoples of the archipelago (Schouten 1983:101).

Together with Dutch, Manado Malay became the language used by those with a high social standing (and the *bangsa* elite) in the 19th century, and the language which was most important to speak if one wanted to advance in society. Today Manado Malay has become an important marker of Minahasan identity, and with the exception of certain types of mass media (i.e. television²⁶) is the language which all Minahasans interact with in their day to day lives.

1.5.2 Bahasa Indonesia

As the official language of a nation state with approximately 238 million inhabitants *bahasa Indonesia* is also a language of high status in Minahasa. That being said, the main contexts where it is utilised are probably limited to the education system and in the mass media of television, books and newspapers. For most people the use of *bahasa Indonesia* only occurs in the event that they may need to communicate with other Indonesians from outside of North Sulawesi. However, for those who are in any non- professional type of occupation the contexts for *bahasa Indonesia* use are quite limited, and perhaps only their passive skills are utilised. A detailed description of the history and different functions of the language in Indonesian society can be found in Sneddon (2003). However, it is clear that this is another language held in high prestige, and one which indirectly adds in the shift away from indigenous languages (e.g. through its use in domain of popular mass media).

1.5.3 Dutch

In colonial times Dutch had an important place in Minahasan society. Nowadays elderly people (70's and above) still have some knowledge, although it is rarely heard. In contrast, young people have no knowledge of Dutch and are much more interested in practicing English. The main legacy of Dutch is seen in the large amount of loan words in both Manado Malay and standard Indonesian.

²⁶ While there are some newspapers and television shows which use Manado Malay, the most popular shows and soap operas are broadcast in (often Java based) *bahasa Indonesia*.

1.5.4 English

As a region with a history of integration of western culture into their own, a global language like English is held in very high esteem indeed. English is currently taught to some extent at all schools in *kabupaten* Minahasa, although only at the *Sekola Menegah Atas* (SMA) ‘senior high school’ and University level²⁷. While most people are extremely keen to attempt to practice their English, for many this only extends as far as the ubiquitous ‘Hello Mister!’ or ‘what your name’. Amongst younger, internet game playing children the more commonly (and seemingly strange) heard phrases during my time in Minahasa were: ‘the bomb has been planted’, ‘mission fail’, ‘fire in the hole’, and the author’s personal favourite ‘I am stupid boy, you are stupid boy’²⁸. In short, while English does not have a significant role in Minahasan society, it is yet another example of a language that is seen as more prestigious (and for younger people ‘cooler’) than indigenous languages.

1.6 The status and vitality of Tondano in contemporary Minahasa

The current level of vitality of the Tondano language appears rather depressing. This viewpoint comes from both personal observations during fieldwork, and from accepted factors for examining linguistic vitality. As Manado Malay and standard Indonesian come to dominate in almost all domains of use, the status of modern Tondano is that of an archaic language which has only a token role in most people’s daily lives. Its primary function is in performances in the educational and cultural domains (i.e. speech contests and occasionally as part of church rituals), or for occasional communication between elderly people. Perhaps the sole exception to this is in the realm of social media. The *belajar bahasa Tondano* ‘learn Tondano language’ Facebook group has over 1700 members who discuss various topics online. While Tondano is commonly used in this group, Manado Malay is also ever present²⁹.

This generally pessimistic assessment of Tondano linguistic vitality is supported by the small number of studies undertaken. The Minahasan languages as a whole were seen as rapidly shifting to Manado Malay in the survey of Merrifield and Salea (1996, as cited in

²⁷ During my first fieldtrip in the area in 2011 there were rumours that the teaching of English was to be extended into elementary schools or *Sekola Dasar* (SD). However, exactly when or how this was to be implemented was not known. In addition, at least one high school in Tondano town was planning towards eventual bilingual English/Indonesian education curriculum.

²⁸ This phrase was used as a greeting on a number of occasions. It appeared that the young speakers were aware of the meaning of ‘boy’, but not ‘stupid’.

²⁹ Due to the fact that many people cannot speak Tondano and do not want to appear ignorant, they will often use Manado Malay rather than try and use ‘incorrect’ Tondano.

Mead (2013:1)). Furthermore, a survey on Tondano by the Indonesian Survey Team (2006) on behalf of the *Universitas Kristian Indonesia Tomohon* ‘Tomohon Christian University’ (UKIT) essentially confirms my fieldwork experiences, especially with regards to domains of use and intergenerational transmission (or lack thereof)³⁰.

Finally, recent work by Mead (2013) examines the vitality of all indigenous languages in Sulawesi, with the survey using a number of diagnostics. Firstly, the six point “vitality/endangerment” rating of UNESCO (2003:6-16). Secondly, the ten point EGIDS scale from “international” to “extinct” of Lewis and Simons (2010). And thirdly, the personal experiences of fieldworkers. The score given to Tondano on these scales is “definitely endangered” (UNESCO) and “shifting” (EGIDS).

1.7 Previous descriptive work and major sources

The most prominent English language publications are those of James Sneddon, whose phonology and sketch grammar (1975) and comparative study of the Minahasan subgroup (1978) comprise the only sources. Sources in the Indonesian language consist of a number of journal articles by Watuseke (1956a, 1956b, 1957, 1958, 1959, 1977) and a 60 page descriptive piece by Watupongoh et.al. (1992). In addition, there are a number of dictionaries which translate Tondano into Indonesian (Wantalangi et. al.1985; Warokka 2004), and into Indonesian and Manado Malay (Dotulong 2010). Lastly, work has been undertaken in translating sections of the bible into Tondano, (as well as into Tombulu, Tonsea, and Tontemboan). This has been accomplished by the *Pusat Penterjemahan Bahasa* ‘language translation centre’ run by SIL and based in the town of Tomohon, Minahasa.

The descriptive publications in Indonesian mainly represent wordlists, etymologies, and straightforward descriptions of Tondano without attempts to analyse what are seen as the more challenging and controversial aspects of a Philippine-type language, i.e. symmetrical voice marking systems, grammatical relations, and the difficulty in distinguishing major lexical categories. The dictionaries also include rudimentary descriptive information about the language, with the Dotulong (2010) publication providing some of the most useful information as regards phonology and morphology.

³⁰ The language survey report was conducted in the form of distributed self reporting questionnaires to speakers in eight supposedly ‘linguistically strong’ villages in *kabupaten* Minahasa. The results were: that 1) very few children were learning the language, 2) the language is used in very limited domains, and 3) the language is not dominant in any one domain.

1.8 Fieldwork methodology

Fieldwork for this thesis was undertaken on three occasions my during PhD candidature between March 2011 and October 2014. The initial fieldtrip was five months in duration between May and October in 2011. Two further trips of two months in 2012 (September - October) and 2013 (October - November) were also carried out. My initial base for the first few weeks of the initial fieldtrip was the village of Lolah / Tanawangko (approximately 20km from Tondano). For the remainder of my first fieldtrip I lived near the *Universitas Negeri Manado* ‘Manado State University’ (UNIMA) which is located just outside Tondano. During the second and third fieldtrips I resided in the Rinegetan neighbourhood just outside the centre of Tondano town.

Most recordings were taken from native speakers (of the Toulour dialect) from Tondano town. However, a couple were also taken from speakers in a more remote village called Watulaney (situated closer to the eastern coast in the same dialect area). Almost all speakers were between the ages of forty-six and seventy-four, with the exception being two younger speakers from Watulaney village (aged nineteen and twenty years old). The speakers recorded where from both genders and from a number of professions, with the older speakers mostly retired. Recording sessions took place at houses in Tondano town and in a number of locations closer to lake Tondano. A number of semi speakers also assisted in the translating and transcribing of the primary data. A large part of the linguistic analysis was done *in situ* with speakers³¹.

Communicative events were recorded using Zoom H1 and Zoom H4n digital audio recorders. Digital video was also taken using an Olympus LS-20M or a Panasonic HD SD-700. The audio (.WAV) and video (.MOV) files were synchronised and annotated using ELAN (vers.4.1.0). All primary data was also entered into SIL FieldWorks Explorer (vers.7.2.7) for morphological parsing, and to create lexical entries and interlinear texts. Finally, the SIL SayMore program (vers.1.1.119) was used to document all recording session and speaker metadata.

The corpus consists of recordings from the following different genres:

³¹ In addition, contact via social media and with the small Minahasan community in Melbourne also enabled discussion with speakers when I was not in the field.

- 1) Dialogues between two speakers: A topic was agreed upon which was relevant to the speakers (e.g. *Permesta*, culture, family or village history, or activities in daily life), and which they were able to talk about comfortably.
- 2) Monologues (procedural discourse or narratives): A speaker explained the procedure relating to traditional foods, crafts, or farming practices, or narrated his/her family or village history. Occasionally these monologues include describing previous activities which occurred earlier in the same day.
- 3) Monologues (reporting on visual stimulus): Speakers were asked to narrate previously recorded video of culturally relevant activities (e.g. palm sugar collection or preparation of food/crafts).
- 4) Direct elicitation: In order to complete gaps in paradigms relating to specific grammatical topics, responses were sometimes elicited directly from speakers³².

Additionally, a small amount of written data is used here. This data is taken from previously translated bible passages (Gospel of Mark, John, and Joseph), and from some text conversations on the Facebook group *Belajar bahasa Tondano*.

Table 1.1 is a summary of the recordings commonly used for grammatical analysis:

³² In a perfect world of linguistic documentation and description all primary data would be naturally occurring. Unfortunately this would take far more time than the fieldworker generally has on a single project!

Table 1.1: List of recordings used for grammatical analysis

Recording:	Genre:	Length:
TDN_03	Monologue (procedural)	00:26:21
TDN_07	Dialogue	00:21:17
TDN_10	Dialogue	00:25:43
TDN_11_AW_HL	Dialogue	00:16:34
TDN_11_EO	Monologue (reporting)	00:05:02
TDN_12	Monologue (narrative)	00:18:19
TDN_14_DK_NK	Dialogue	00:11:01
TDN_14_HK_DT	Dialogue	00:12:09
TDN_19	Monologue (procedural)	00:06:27
TDN_20	Monologue (narrative)	00:11:05
TDN_21	Monologue (narrative)	00:06:45
TDN_25	Monologue (reporting)	00:09:50
TDN_26	Monologue (reporting)	00:10:12
TDN_28	Dialogue	00:09:30
TDN_29	Dialogue	00:21:38
TDN_31	Dialogue	00:18:32
TDN_32_OL & TDN_32_OL_2	Monologue (reporting)	00:12:36 & 00:08:51
TDN_32_OL_KK	Monologue (reporting)	00:04:48
TDN_32_DT	Monologue (reporting)	00:08:44
TDN_33_KK	Monologue (reporting)	00:08:44

2.0 PHONETICS AND PHONOLOGY

In this chapter the following aspects of the phonology of the Toulour dialect of Tondano are outlined: phonemic inventory, phonemic contrasts, and orthography (§2.1 and §2.2), phonotactics and syllable structure (§2.3, §2.4, and §2.5), and morphophonological processes (§2.6). Issues such as diachronic change are not covered here. For information on this topic readers are advised to refer to Sneddon (1975:30-1) and Wolff (2010).

2.1 Phoneme inventory

The Tondano phoneme inventory is outlined in Tables 2.0 and 2.1. All phonemes are described separately in §2.2.

Table 2.1: Consonant phonemes

	Bilabial:	Labio-dental:	Alveolar:	Palatal:	Velar:	Glottal:
Voiceless plosive:	p		t		k	
Voiced plosive:	b		d		g	ʔ
Nasal:	m		n		ŋ	
Voiceless affricate:				(tʃ)		
Voiced affricate:				(dʒ)		
Voiceless fricative:		(f)	s			(h)
Voiced fricative:		(v)				
Trill:			r			
Lateral:			l			
Approximant (Glides):	w		j		ɰ	

Table 2.2: Vowel phonemes

	Front	Central	Back
High	i		u
Mid	ɛ	ə	o
Low		a	

The Tondano phonemes outlined in Tables 2.1 and 2.2 are fairly typical of those observed in Western AN languages. The velar approximant phoneme /*u*/ is perhaps the most interesting and unexpected. This particular phoneme is quite marginal, and only occurs in archaic words which are possibly closer to earlier PMP or PAN forms.

Other atypical (but not unexpected) phonemes in Table 2.1 are the consonants in parentheses. These result from various loan words which now occur in the language. These phonemes often occur in the European (i.e. Dutch) names that Minahasans have traditionally been given since the conversion of the region to Christianity. In addition, they also appear in words from Manado Malay (some of which also have their etymology in Dutch) and standard Indonesian.

2.1.1 Evidence for phoneme inventory

The following is an outline of minimal pairs, and near minimal pairs, as evidence for the phonemic contrasts indicated in Table 2.1 and Table 2.2. All examples here are presented in narrower orthography. Contrasts (in bold) are displayed between phonemes that share manner and/or place of articulation.

Bilabial plosives /*p*/ and /*b*/ contrast in onset position:

rə**p**ət ‘quick, rapid’

rə**b**ək ‘squeal (like an animal)’

pa:iʔ ‘knife’

baya ‘all, everyone’

Alveolar plosives /*t*/ and /*d*/, and alveolar trill /*r*/ contrast in onset position:

tanu ‘like this’

dano ‘water’

tudeʔ	‘skewer’
turuʔ	‘indicate s.t., teach’
rui	‘bone’
tuis	‘ <i>tuis</i> tree’

Velar plosives /g/ and /k/, and the velar approximant /ɰ/ all contrast in onset position:

koʔkoʔ	‘chicken’
ɰoʔɰoʔ	‘(to) sift’
guru	‘teacher’

Glottal plosive /ʔ/ contrasts with \emptyset ³³:

reʔoʔ	‘thirsty’
reʔa\emptyset	‘order, command’

Nasal consonants /n/, /m/, and /ŋ/ all contrast in onset position:

ŋaran	‘name’
ma:rəm	‘be hungry’
naram	‘normal, customary’
tuama	‘man’
tuana	‘thus, therefore’
tunaŋan	‘fiancée’

The liquid consonants /l/ and /r/ contrast in onset position and coda position:

kalo	‘male friend’
aro	‘rain’
wuʔul	‘rotten’

³³ Glottal plosives which occur word finally can be weakly articulated, thereby making this contrast somewhat difficult to pick up.

ruʔur ‘back’

Certain liquids and plosives that have the same place of articulation are also contrasted:

toro ‘can, be able to’

todo ‘push’

tole ‘boy child’

talun ‘forest’

lalan ‘road’

raarən ‘vegetable’

Contrasts amongst vowel phonemes /i/, /ɛ/, /ə/, /a/, /o/, and /u/ are as follows:

kasi ‘again, more’

kasa ‘very, extremely’

nisia ‘him, her’

nisɛa ‘they, them’

təwəl ‘sharp’

təwɛl ‘to fly’

leʔla ‘crazy’

lilaʔ ‘tongue (say)’

aro ‘rain’

urɛʔ ‘long (duration)’

2.1.2 Orthography

The orthography commonly used by people when writing in Tondano closely mirrors that of standard Indonesian. The following characters demonstrate how non-IPA orthography is represented in this thesis. When examples are written using this orthography it denotes a broad, non-phonetic transcription.

ŋ → *ng*

ʔ → ' ,

ɥ → *gh*

j → *y*

ɛ → *è*

ə → *e*

ɛj → *èi*

ow → *ou*

ʃ → *c*

dʒ → *j*

2.2 Description of phonemes

The various phonemes are now described separately together with any allophonic variation which occurs. Examples of words containing the phonemes are presented in a broad transcription, and then in a narrower phonetic transcription with syllable boundaries indicated. Any allophonic variation of phonemes is displayed in the narrow transcription. These examples also display the distribution of each phoneme at both a word level, and at a syllable level. Following these phoneme descriptions syllable structure is examined in §2.3.

2.2.1 Oral plosives

Oral plosives are primarily comprised of two sets of voiced/voiceless pairs at three different places of articulation. These are: the bilabials /b/, /p/, the alveo-palatals /t/, /d/, and the velars /k/ and /g/. In addition to the voiced/voiceless pairs, the glottal /ʔ/ makes up the last of the seven oral plosives.

/p/ is a voiceless bilabial plosive. The word level distribution of /p/ is word initially, intervocally, and word finally. Examples of /p/ word finally are relatively rare in the data used for this thesis, with words such as *li'lip* 'swim' and *lekep* 'complete' as

exceptions. Loan words from Manado Malay such as *sedap* ‘tasty’ are more likely to display /p/ word finally.

Within the syllable structure /p/ may occur in onset position and in coda position.

#_:	<i>pasu</i>	[pa.suʔ]	‘hot’
V_V:	<i>lepo</i>	[lə.poʔ]	‘wet rice field’
_#:	<i>lekep</i>	[lə.kəp̚]	‘complete, settled’

Allophonic variation for /p/ is limited to the realisation of the unreleased bilabial plosive [p̚] in coda position at word boundaries, or before a pause. The two allophones [p] and [p̚] are in free variation. In contrast to the other voiceless oral plosives /k/ and /t/, examples of aspirated /p/ have not been attested.

/b/ is a voiced bilabial plosive. At word level the distribution of /b/ is word initially or intervocalic. When occurring word initially, /b/ is only realised as an allophone of the phoneme /w/ (see the description of /w/ below). The slightly unusual situation where /b/ is realised as the allophone of two separate phonemes is the result of a restricted phonological process (homorganic nasal assimilation - see §2.6.1).

At a syllabic level, /b/ only occurs as an onset.

#_:	<i>batu</i>	[ba.t̪u]	‘stone’
V_V:	<i>tabelang</i>	[ta.bə.laŋ]	‘hard bamboo’

/t/ is a voiceless alveolar plosive. /t/ occurs word initially, intervocalically, and word finally. When appearing word finally, /t/ is realised as the unreleased allophone [t̚]. [t̚] occurs at a (phonological) word boundary, or if there is a pause between it and the following phone. At a syllabic level /t/ functions as both onset and coda.

#_:	<i>ta’an</i>	[ta.ʔan]	‘but, however’
V_V:	<i>lutu</i>	[lu.t̪uʔ]	‘ripe, cook’

_#: *ka'ampit* [ka.ʔam.pit[˧]] 'friend'

Word initial and intervocalic realisations of /t/ may display aspiration, albeit less frequently and with less duration than that which is observed with /k/. On average the Voice Onset Time (VOT) for /t/ is less than 20 milliseconds.

/d/ is a voiced alveolar plosive. At word level /d/ occurs word initially and intervocalically. When /d/ occurs word initially it is exclusively realised as an allophone of /r/ (see the description of /r/ below). This situation matches that of /b/ above, and is again the result of the restricted phonological process of homorganic nasal assimilation (see §2.6.1).

Within the syllable /d/ exclusively functions as an onset.

#_: *daa'* [da.ʔ] 'blood'

V_V: *tadèy* [ta.dej] 'corn'

/k/ is a voiceless velar plosive. At word level /k/ appears word initially, intervocalically, and word finally. Its distribution within the syllable is either as onset or coda. /k/ is realised as the unreleased allophone [k̚] under the same conditions which condition the [t̚] allophone of /t/.

#_: *kawok* [k^ha.wok̚[˧]] 'mouse'

V_V: *laker* [la.k^hər] 'many, much'

_#: *wèwèk* [wɛ.wɛk̚[˧]] 'duck'

The words [k^ha.wok̚[˧]] and [wɛ.wɛk̚[˧]] demonstrate the unreleased [k̚] allophone word finally. The aspirated [k^h] allophone is also demonstrated by [k^ha.wok̚[˧]]. Aspirated [k^h] may be realised word initially or intervocalically, and is in free variation with non-aspirated [k].

On average the VOT of realisations of /k/ is approximately 20 milliseconds.

/g/ is a voiced velar plosive. This phoneme appears to have originally had a marginal status. It is likely that */g/* originally occurred as an allophone of the phoneme */u/*, but is now attaining full phonemic status (and is replacing */u/* in the process - see description of */u/* below). The slightly problematic issue of */g/* is observed by the lack of agreement on its status in previous literature. While Sneddon (1975:16) accords */g/* full phonemic status, Wolff (2010:312-13) does not³⁴. Notwithstanding any differences in previous analyses, in the data examined for this thesis */g/* occurs as follows:

In loan words, primarily in word initial and syllable onset position.

#_:	<i>gorèng</i>	[go.rɛŋ]	‘to fry’
#_:	<i>gula</i>	[gu.la]	‘sugar’
#_:	<i>gerèja</i>	[gə.rɛ.dʒa]	‘church’

In non-loan words in syllable onset position intervocalically.

V_V:	<i>logo</i>	[lo.gɔ]	‘sweat’
V_V:	<i>legu’</i>	[lə.guʔ]	‘noise, sound’

In addition, in non-loan words */g/* is beginning to replace the velar approximant */u/* word initially³⁵. This is not entirely surprising. The unstable nature of */u/* means some phonological strengthening is expected, especially word initially (as shown with */u/* below). It is likely that */g/* will eventually replace */u/* in all environments.

While non-loan words which include */g/* are still relatively rare, the introduction of loan words with */g/* has perhaps helped it attain full phonemic status. The fact that all Tondano speakers are multi-lingual in other languages (which contain */g/*) can only have helped this process.

³⁴ Wolff states that the original PAN *g → /k/ when functioning as onset of penultimate or earlier syllables, and that *g → /r/ when onset or coda of the final syllable. In contemporary Minahasan languages Wolff states that */g/* occurs as a variant of the marginal phoneme /ɣ (analysed here as */u/*), for which apparently *there is no explanation* (ibid:313).

³⁵ For examples of words in which an initial */u/* is realised as */g/*, see (103) and (803).

/ʔ/ is a glottal plosive. At word level /ʔ/ occurs intervocalically and word finally. Its distribution within the syllable is that of either onset or coda³⁶.

V_V: *se'ut* [sə.ʔut] 'banana'

_#: *timpa'* [tim.paʔ] 'palm sugar sap, wine'³⁷

In rapid speech /ʔ/ may be weakly articulated, especially if it is in word final position with no pause before the next word. Although /ʔ/ has no explicit allophonic variation, it is sensitive to phonological processes such as syncope and epenthesis. If /ʔ/ occurs between two identical vowels within a lexical root it may be deleted (see §2.6.5). Alternatively, /ʔ/ may also be inserted between two identical vowels which occur in separate morphemes (see §2.6.7).

2.2.2 Nasal consonants

The nasal consonants in Tondano demonstrate three different places of articulation. They are the bilabial /m/, the alveolar /n/, and the velar /ŋ/.

/m/ is a voiced bilabial nasal which occurs word initially, intervocalically, and word finally. /m/ frequently appears in word initial position in morphologically complex words (i.e. stems - see §5.2.2)³⁸, mainly due to its function as syllable onset in various prefixes. In addition, /m/ occurs word initially as part of the homorganic nasal consonant cluster which is caused by the addition of a proclitic phrase marker to a lexical root (see §2.4.1). When occurring intervocalically, /m/ is frequently part of the <um> or <im> infixes. Within the syllable /m/ functions as both onset and coda. However, /m/ only appears in coda position in the final syllable of a word.

#_: *marèngi* [ma.rɛ.ŋi] 'will return home'

V_V: *sumiwo* [su.mi.wo] 'will be made, done'

³⁶ The presence of syllable initial glottal plosives in other Philippine-type languages, such as Tagalog and Iloko, has been used to give evidence of mandatory onsets in syllables (Himmelman 2005:117). However, this is not the case in Tondano (see §2.3).

³⁷ The gloss of either 'palm sugar sap' or 'palm sugar wine' is somewhat context dependent. The raw liquid which is extracted from the sugar palm tree (Latin: *Arenga pinnata*) is the sap which can then be boiled to make hard palm sugar (*gula mèa*). If this same liquid is instead allowed to ferment in the tropical heat then an alcoholic beverage is created.

³⁸ Any lexical root which hosts any additional bound elements (verbal or non-verbal) is considered to be morphologically complex. The labels of "morphologically complex word" and "stem" are used interchangeably from this point onwards.

_#: *enem* [ə.nəm] ‘six’

/ŋ/ is a voiced velar nasal. At word level /ŋ/ occurs in word initial, intervocalic, and word final position. As with /m/ and /n/, its appearance word initially in lexical roots is less frequent than in words which contain additional morphology, and it rarely occurs in this position without being part of a homorganic nasal consonant cluster. Its distribution within the syllable is that of onset and coda.

#_: *nga’nga’* [ŋaʔ.ŋaʔ] ‘chew, masticate’

V_V: *wengi* [wə.ŋi] ‘evening’

V_V: *kokongèa* [ko.ko.ŋɛa] ‘their heads’

_#: *labung* [la.buŋ] ‘clothes’

/n/ is a voiced alveolar nasal which occurs word initially, intervocalically, and word finally. Its distribution in the word final position is more frequent than is seen with /m/ and /ŋ/, which is a result of the high productivity of suffixes such as *-an* (LV), and *-en* (PV). Once again, the occurrence of /n/ in word initial position is commonly as part of homorganic nasal consonant clusters. At a syllabic level, /n/ occurs as both onset and coda.

#_: *nanam* [na.nam] ‘taste’

V_V: *kini’kis* [ki.niʔ.kis] ‘grated, shredded’

_#: *talun* [ta.lun] ‘forest’

When /n/ precedes either of the alveolar plosives /t/ or /d/, its place of articulation is closer to dental than alveolar.

2.2.3 Liquids

/r/ is a voiced alveolar trill which occurs word initially, intervocalically, and word finally. In syllable structure it occurs in either onset or coda position.

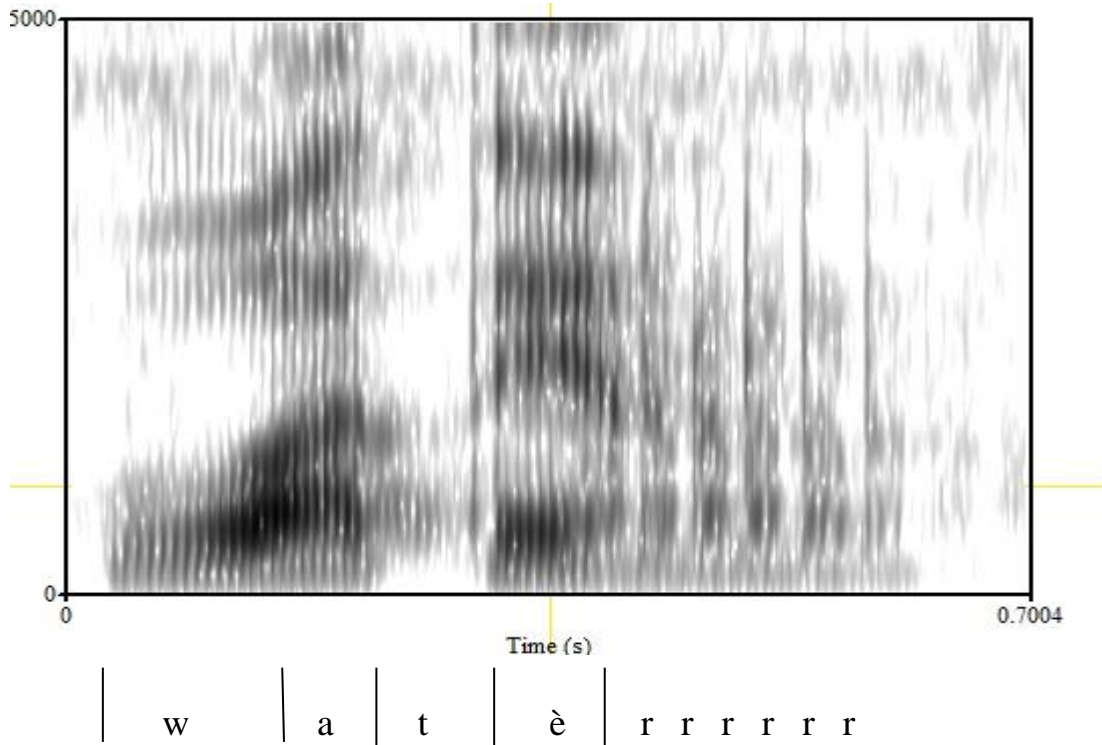
#_: *rior* [ri.ɔr] ‘fast, early’

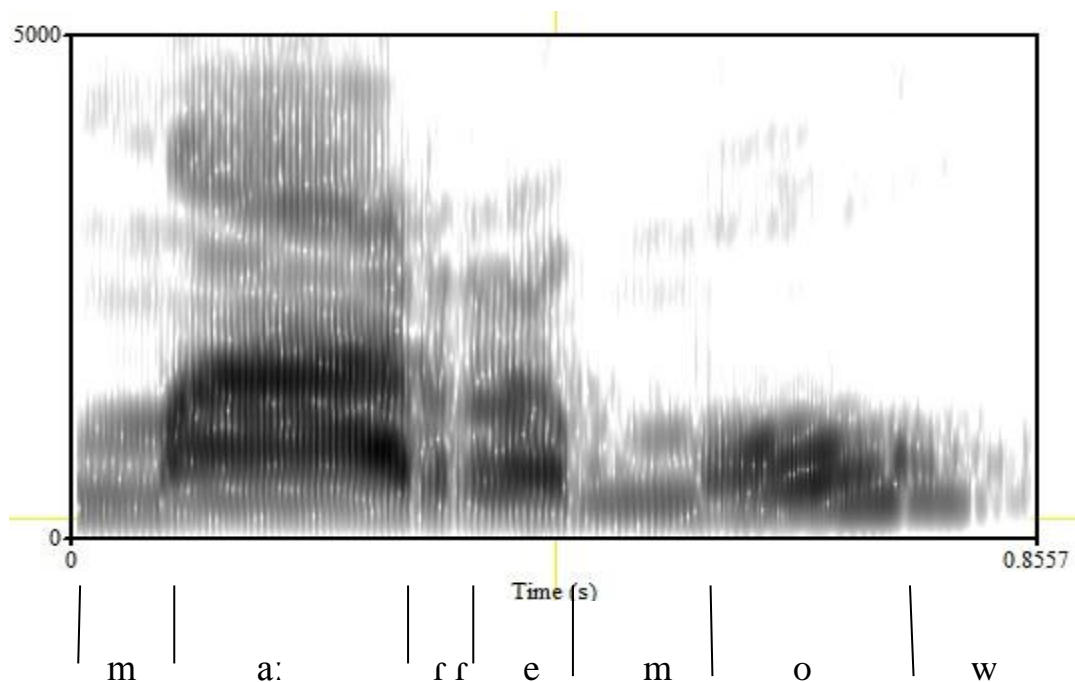
V_V:	<i>marisa</i>	[ma.ri.sa]	‘chilli’
_#:	<i>pa’ar</i>	[pa.ʔar]	‘want, desire’

In rapid natural speech the trill /r/ may be realised as a single or double tap [r]. This free variation may occur in all positions, and is not the result of any specific phonological process. In slower and more careful speech the trill is more pronounced. Sometimes this is done deliberately by the speaker in order to provide a slightly dramatic type of verbal flourish. In these situations realisations of /r/ consisting of up to eight taps have been recorded. This particular variation in the alveolar trills was not only observed in people when speaking Tondano, but also when speakers used Manado Malay or Indonesian. Anecdotal evidence suggests this is a phenomenon associated with people native to North Sulawesi (and more than likely in other parts of Indonesia).

The spectrograms in figure 2.1 contrast the trill [r] in the word *watèr* ‘sago grub’, with the double tap [r] in the word *ma-arem=mow* ‘be hungry’.

Figure 2.1: Double tap [r] and multiple tap [r]





The difference between the trill [r], and the tap [ɾ] can be measured in the duration of the two separate phonetic realisations. The trill has a length of approximately 217 milliseconds compared with only 55 milliseconds for the tap.

In addition to this free variation, /r/ may also be realised as [d] when it follows the homorganic nasal phrase marker $N=$. This allomorphy is conditioned by the same process that causes /w/ → [b] (see below), that is, the presence of $N=$ in a word initial consonant cluster causes both the nasal and the root initial consonant to change, with the result that /r/ → [d].

The phonologically conditioned allophonic variation of /r/ is therefore:

$$\begin{aligned} /r/ &\rightarrow [d] / \# \text{ nasal_} \\ &\rightarrow [r] / \text{ elsewhere} \end{aligned}$$

However, it should also be stated that /r/ may also be realised as [d] word initially without the nasal consonant $N=$ being present. In this situation it appears that the homorganic nasal $N=$ has been deleted³⁹. This is the only environment in which [d] can occur word

³⁹ It is possible that the now non-obligatory nasal marker $N=$ was once obligatory. The speculation here is that as $N=$ has fallen out of use, the resulting occurrence of [d] and [b] as root initial consonants has become lexicalised. While only speculative, this explanation is certainly plausible due to the preference in Tondano for non-complex onsets. See §2.4.2 for further information.

initially in lexical roots, and is the same (unpredictable) situation in which /w/ → [b] in a word initial position (see below).

An example of the different possible realisations of initial /r/ in lexical roots can be demonstrated with the word for ‘rural area’, *ro’ong*. In *ro’ong*, the word initial consonant(s) may be realised in three different ways. The first is as an initial [r] without an *N=* phrase marker, the second is as [d] and as part of a complex consonant cluster which includes *N=*, and the third is as [d] but without the phrase marker *N=*, e.g.:

<i>ro’ong</i>	[roʔ.oŋ]	‘rural area’
<i>ndo’ong</i>	[ndoʔ.oŋ]	‘(the) rural area’
<i>do’ong</i>	[doʔ.oŋ]	‘rural area’

Examples such as *do’ong* are one of a restricted number of situations where voiced plosives occur word initially in lexical roots (see §2.3).

/l/ is a voiced alveolar lateral. /l/ may occur word initially, intervocalically, and word finally, and may function as both onset and coda in syllables.

#_:	<i>logo</i>	[lo.go]	‘sweat’
V_V:	<i>telu</i>	[tə.lu]	‘three’
_#:	<i>wu’ul</i>	[wu.ʔul]	‘rotten’

There is minimal allophonic variation of /l/. There is no evidence of lateralisation or velarisation, and the frequency of F2 in words with /l/ displays minimal variation regardless of whether it precedes high, mid, or low vowels. The only difference in the manifestations of /l/ is displayed by its duration. In word initial and word final position it may be realised with a longer duration than when it occurs intervocalically. Furthermore, in intervocalic position, or when simply adjacent to only a vowel, /l/ displays stronger formant structure due to the closeness of the vowel formants.

2.2.4 Approximants

/w/ is a voiced labio-velar approximant which may occur word initially, intervocalically, or word finally. Within the syllable it occurs in either onset or coda position.

#_:	<i>wolè</i>	[wo.lɛ]	‘row (i.e. a boat)’
#_:	<i>wiir</i>	[vi:r]	‘(uncoked) rice’
V_V:	<i>lawas</i>	[la.was]	‘hand, arm’
_ #:	<i>tow</i>	[tɔw]	‘person’

The primary allophonic variation of /w/ occurs when it precedes the high front vowel /i/. In this situation /w/ is realised as the labio-dental fricative [v]. The secondary variation is when /w/ follows the homorganic nasal phrase marker *N=*. The presence of *N=* in a word initial consonant cluster causes both the nasal and the root initial consonant to change, with the result that /w/ → [b].

The phonologically conditioned allophonic variation of /w/ is summarised as:

/w/	→	[v] / _ vowel [+ high front]
	→	[b] / # nasal _
	→	[w] elsewhere

It must be noted, however, that /w/ may still be realised as [b] word initially without the preceding nasal. In this situation it appears that the homorganic nasal *N=* has been deleted. It is exclusively in this restricted environment that [b] can occur word initially in lexical roots, with this being the same (unpredictable) situation in which /r/ → [d] in word initial position (see above).

An example of the variation of initial /w/ in lexical roots is observed in the word for ‘house’, which has the underlying form of *walè*. Here /w/ may be realised in three different ways. The first is as [w] without a preceding *N=* phrase marker, the second is as [b] and as part of a complex consonant cluster which includes *N=*, and the third is a [b] but without the phrase marker *N=*, e.g.:

<i>walè</i>	[wa.lɛ]	‘house’
<i>mbalè</i>	[mba.lɛ]	‘(the) house’
<i>balè</i>	[ba.lɛ]	‘house’

In addition to this specific allophonic realisation, /w/ may also have a different realisation in other environments. When occurring before any of the other front and central vowels /ε/, /ə/, or /a/, the realisation of /w/ may be closer to that of the voiced bilabial fricative [β]. In these situations the forms of [β] and [w] are in free variation.

Finally, /w/ also occurs as a non-phonemic glide between certain vowel sequences, with this is detailed in §2.4.3.

/ɰ/ is a velar approximant. This is the least stable phoneme in the language, and it appears likely to be replaced by /g/. This particular phoneme has previously been described by both Wolff (2010:300) and Sneddon (1975:17) as the voiced velar fricative /ɣ/. While the phonological description presented here disputes this analysis, there is agreement on the marginal nature of this phoneme. As stated by Wolff (*ibid*), it is a rarely occurring and peripheral phoneme only appearing in archaic words which are probably closer to earlier PMP or PAN forms.

The form /ɣ/ has not been attested in any of the data used here, regardless of whether the environment was slow elicited speech or fast natural conversation. Instead, it is the velar approximant /ɰ/⁴⁰ which occurs. The distribution of /ɰ/ is word initially and intervocally at word level, and as an onset at syllable level.

#_:	<i>ghegher</i>	[ɰə.ɰər]	‘cold’
#_:	<i>ghumorem</i>	[ɰu.mo.rəm]	‘will enter s.t.’
V_V:	<i>magho’gho’</i>	[ma. ɰoʔ.ɰoʔ]	‘sifts, sorts’
V_V:	<i>ghumogho’</i>	[ɰu.mo. ɰoʔ]	‘will sift, sort’

It must be stated that the realisations of /ɰ/ above only consistently occur during slow, elicited speech. That is, due to its unstable nature, /ɰ/ displays a number of variations in rapid natural speech. Firstly, when occurring word initially it is strengthened to the velar plosive [g]. Secondly, when /ɰ/ occurs intervocally it may be realised as the labio-velar approximant [w].

⁴⁰ The analysis of this phoneme as /ɰ/, rather than /ɣ/, comes from both spectrographic analysis and from the assistance of an experienced phonetician.

2.2.6 Vowels

The vowel phonemes, including any allophonic variation, are as follows:

#_:	<i>èdo</i>	[ɛ.do]	‘to take’
C_C:	<i>pè'an</i>	[pɛ.ʔan]	‘to try, taste’
C_C:	<i>tadèy</i>	[ta.dej]	‘corn’
_#:	<i>walè</i>	[wa.lɛ]	‘house’

Therefore:

/ɛ/	→	[e] / _ {/i/ or /j/}
	→	[ɛ] / elsewhere

42

#_:	<i>epat</i>	[ə.pat]	‘four’
C_C:	<i>sewok</i>	[sə.wok]	‘to mix or stir s.t.’

There are no additional allophonic realisations of /ə/. However, it may occur as an allophone of /a/ in certain environments (see the description of /a/ phoneme below). An additional feature of /ə/ is that it is the only vowel which does not occur in sequences with other vowels (see §2.4.3).

/a/ is a low front unrounded vowel. /a/ occurs word initially, between consonants, and word finally.

#_:	<i>awes</i>	[a.wəs]	‘add’
C_C:	<i>maali</i>	[ma.li]	‘brings’
C_C:	<i>matèwèl</i>	[ma.tɛ.wɛl]	‘flies’
_#:	<i>pira</i>	[pi.ra]	‘how much, how many’

There are a number of allophonic realisations for /a/, and all occur across syllable boundaries. These situations occur when /a/ is the nucleus of one of a number of prefixes encoding verbal morphology. Firstly, /a/ is realised as [ə] when the syllable it precedes is the reduplicative prefix *Ce-* (see §2.6.6). Secondly, /a/ is also realised as [ə] when it is the nucleus of open prefixes like *ma-*, *pa-*, and *ka-* (see §4.5.1, and §5.3.1), and when these prefixes occur before the initial syllable of a root which also has /a/ as its nucleus. Finally, /a/ is realised as the high-mid front unrounded vowel [e] when it occurs before the high front vowel /i/⁴².

Therefore:	/a/	→	[ə] / _ + Cə-
		→	[ə] / _ + Ca
		→	[e] / _ /i/
		→	[a] / elsewhere

⁴² For examples of where /a/ → [ə] see (533) and (643) - (644). For examples of where /a/ → [e] see (217) and (265).

/i/ is a high front unrounded vowel. **/i/** may occur word initially, between consonants, and word finally.

#_:	<i>item</i>	[i.təm]	‘black’
C_C:	<i>kirong</i>	[ki.rɔŋ]	‘to hide, conceal’
_#:	<i>waki</i>	[wa.ki]	‘in, at, with’

There are no additional realisations of /i/ as it does not display any consistent variation in its surface forms.

/o/ is a high-mid back rounded vowel. /o/ can occur word initially, between consonants, and word finally.

#_:	<i>opo'</i>	[o.poʔ]	‘elder’
C_C:	<i>sobor</i>	[so.bɔr]	‘young’ (i.e. not yet ripe)
_#:	<i>wangko</i>	[waŋ.ko]	‘big’

When occurring word finally or before glides or liquids, /o/ is realised as the low-mid back rounded vowel [ɔ].

Therefore:

- /o/ → [ɔ] / _ #
- [ɔ] / _ {+ glide, + liquid}
- [o] / elsewhere

/u/ is a high back rounded vowel. /u/ occurs word initially, between consonants, and word finally.

#_:	<i>ulit</i>	[u.lit]	‘correct, honest, true’
C_C:	<i>turu</i> ’	[tu.ruʔ]	‘to indicate, teach’
_#:	<i>wedu</i>	[wə.du]	‘tired, worn out’

As with the other high vowel phoneme /i/, /u/ has minimal variation at a surface level and lacks phonologically conditioned allophones.

2.3 Syllable structure

This section examines the variations and possibilities for specific consonant phonemes to function as either onset or coda within the syllable. Following on from this, the possibilities for consonant, vowel, and syllable sequences are described in §2.4.

The syllable structure in Tondano is best summarised as:

$$\sigma \rightarrow (C_1)V(C_2)$$

Syllables in Tondano consist of an obligatory vowel nucleus, an optional consonant onset, and an optional consonant coda. While syllables consisting solely of a vowel occur, these are relatively infrequent and generally occur only in lexical roots. Further to the (C)V(C) sequence, under certain conditions the structure (N)(C)V(C) is also observed. This is due to a consonant cluster sequence across morpheme boundaries. This construction is the result of the homorganic nasal assimilation processes. The standard Tondano syllable structure is therefore taken to be (C)V(C) with the most common pattern being CV or CVC. The exact consonants which appear in onset or coda position vary somewhat, meaning the standard syllable structure is best described as (C₁)V(C₂).

The distribution of different consonants within the syllable can be summarised as:

C₁ = All consonants may occur as syllable onset. Nonetheless, there are restrictions on certain voiced obstruents as onset. That is, /b/ and /d/ only occur under certain phonological conditions.

C₂ = All consonants with the exception of /b/, /d/, and /ɲ/ may appear in syllable coda position.

The different categories of consonants given above for C₂ are not always possible in every syllable within a word. That is, their exact distribution is dependent upon whether the syllable they are part of is initial, antepenultimate, penultimate, or ultimate⁴³.

⁴³ Restrictions such as this on coda position in Western AN languages is not uncommon (Himmelman 2005:115).

2.4 Phonotactics

In this section the different sequences of consonants and vowels are described. For consonants a distinction is made between phoneme sequences which occur within the syllable, and those which occur across syllable boundaries. Consonant sequences are described in §2.4.1 and §2.4.2. Following on from this, vowel sequences are described in §2.4.3. The possible sequences of syllables are then presented in §2.4.4, before the differences between syllable sequences within lexical roots and morphologically complex words are explained in §2.4.5 and §2.4.6.

2.4.1 Consonant clusters across syllable boundaries

There are three different situations in which sequences of consonants occur across syllable boundaries. The first situation is when there is a combination of a homorganic nasal *N=* followed by a plosive. These consonant clusters occur word medially and are internal to a lexical root, for example:

- Bilabial nasal and bilabial plosive: *am.pit* ‘spouse’
- Velar nasal and velar plosive: *lang.koy* ‘through, via’
- Alveolar nasal and alveolar plosive: *mèn.tè’* ‘breakfast’
- Alveolar nasal and alveolar fricative: *lan.sa* ‘dance’

These examples demonstrate that in clusters across syllable boundaries there is a strong tendency for the place of articulation of *N=* to match that of the subsequent plosive.

The second instance of a root internal consonant cluster is when a glottal plosive is followed by a voiceless plosive or a liquid. This often occurs within words where the lexical root consists of the reduplication (or partial reduplication) of one syllable, for example:

- Glottal and voiceless bilabial plosive: *po’.po’* ‘coconut’
- Glottal and voiceless velar plosive: *ki’.kis* ‘grate, shred’
- Glottal and liquid /l/:
li’.lik ‘beside’
li’.lip ‘swim’
- Glottal and liquid /r/: *ri’.ris* ‘be disgusted’

It must be noted that while the word internal consonant clusters in the preceding examples are possible, these clusters do not always surface during rapid speech. Sequences consisting of a glottal followed by another consonant are sometimes broken up with the insertion of vowel. This vowel will be identical to the vowel which occurs in the following syllable, e.g. *li'.lik* → *li.ɪ.lik*. As well as turning a CC cluster into the seemingly preferred (C)V(C) structure, this process also results in an extra syllable. This particular process of vowel insertion is described further in §2.6.7.

The third consonant cluster sequence occurs across both syllable and morpheme boundaries. These sequences consist of a C2 followed by a nasal, a plosive, or lateral /l/. These consonant clusters do not occur within a lexical root. Rather, they occur when bound morphological elements are attached to lexical roots, e.g.:

<i>wu. 'uk.na</i>	← <i>wu'uk=na</i> (hair=3.SG.POSS)	‘his/her hair’
<i>am.pit.ku</i>	← <i>ampit=ku</i> (spouse=1.SG.POSS)	‘my spouse’
<i>ku.mè'èt.la</i>	← <i>kumè'èt=la</i> (extract sap=DIR.PROX)	‘will extract sap’
<i>maa.li.mow.mi</i>	← <i>ma-ali=mow=mi</i> (AV.DYN-bring=CPL=DIR.DIST)	‘brings s.t. (from there to here)’
<i>rèy'.mow</i>	← <i>rèy'=mow</i> (not =CPL)	‘no longer, finished’
<i>kèy.mèa</i>	← <i>kèy=mèa</i> (1.PL.EX= <AV> go)	‘We will go’

In truth, while these sequences are possible they are also quite limited, and rarely surface in this way. These consonant clusters are restricted not only by the forms of the enclitics or suffixes, but also by certain morphophonological patterns. For instance, with glottal stops being weakly articulated (especially at the end of a lexical root) words like *rèy'.mow* will almost always surface as *rèy.mow*, thereby avoiding a CCC sequence. Furthermore, clusters in words such as *wu. 'uk.na* and *am.pit.ku* are frequently broken up by one of the two types of vowel insertion outlined in §2.6.7. As such, these words often surface as *wu. 'u.ke.na* and *am.pi.te.ku*, whereby a CV.CV sequence is maintained.

2.4.2 Syllable internal consonant clusters

Consonant clusters occurring within the syllable are confined to word initial and onset position. These are sequences whereby certain obstruents follow a nasal $N=$. These consonant clusters occur across morphemes boundaries, and all occur due to the hosting of the phrase marking clitic $N=$ (see §8.4.3).

As stated in §2.4.1, the exact place of articulation of $N=$ is dependent upon features of the subsequent consonant, i.e. it is a homorganic nasal and is realised phonetically through an assimilation process (see §2.6.1). This process results in the nasal having the same place of articulation as the consonant which follows it. This allows the following syllable internal consonant clusters to occur:

<i>mb</i>	<i>mbaa'</i>	‘(the) ember, hot coal’
<i>mp</i>	<i>mpepatil</i>	‘(the) machete’
<i>nt</i>	<i>ntabelang</i>	‘(the) hard bamboo’
<i>ns</i>	<i>nse'ut</i>	‘(the) banana’
<i>nd</i>	<i>ndui</i>	‘(the) bone’
<i>ngk</i>	<i>ngkarati</i>	‘(the) water lily’
<i>ngg</i>	<i>nggula</i>	‘(the) sugar’

In two of these consonant clusters there is a situation whereby the form of both the nasal and the second consonant undergo change. This phenomenon occurs when certain consonants which follow the nasal are not obstruents, i.e. in this case when they are /w/ or /r/⁴⁴ (see also §2.2.3 and §2.2.4). These two consonant phonemes change their manner of articulation when the nasal $N=$ precedes them. They strengthen and become a plosive which has the same place of articulation as the original approximant or trill (i.e. [b] and [d]). The nasal will then match the place of articulation of the plosive. This results in complex onsets whereby $N= + /w/ \rightarrow mb$ and $N= + /r/ \rightarrow nd$. As an example, the lexical roots of *mbaa'* and *ndui* above are *waa'* and *rui* respectively. The resulting change in the manner of articulation from approximant and trill to plosive, is most likely for ease of

⁴⁴ There is also variation if the second consonant is the liquid /l/ - see §2.6.1.

articulation. In addition, the N + C sequence now consists of a nasal plus an obstruent, as it does in all the other clusters above.

As previously mentioned in §2.2.3 and §2.2.4, the consonants /b/, and /d/ may also occur word initially without the preceding nasal N=. A possible explanation for this is that words with the normally disallowed syllable onsets of /d/ and /b/ have lexicalised as the use of the non-obligatory N= phrase marker declines. The result is that the voiceless plosives /d/ and /b/ can occur as word initial syllable onsets, as do the corresponding voiceless plosives /t/ and /p/. This distribution of /d/ and /b/ also avoids complex syllable onsets, and maintains the preferred CV syllable structure.

2.4.3 Vowel sequences

Vowel sequences are limited to two consecutive vowels. While sequences of three vowels are theoretically possible, at a phonetic level they are broken up by glide insertion (as are some two vowel sequences). Vowel sequences can be either intramorphemic or intermorphemic.

Table 2.3 displays all the attested vowel sequences from the possible total of thirty six.

Table 2.3: Vowel sequences

	<i>a</i>	<i>i</i>	<i>ε</i>	<i>ə</i>	<i>o</i>	<i>u</i>
<i>a</i>	✓	✓	✓	N/A	✓	✓
<i>i</i>	✓	✓	✓	N/A	✓	✓
<i>ε</i>	✓	✓	✓	N/A	✓	✓
<i>ə</i>	N/A	N/A	N/A	N/A	N/A	N/A
<i>o</i>	✓	✓	✓	N/A	✓	✓
<i>u</i>	✓	✓	✓	N/A	✓	✓

Of the thirty six possible vowel combinations only twenty four are attested. This is due to the fact that the schwa vowel /ə/ does not occur in sequence with other vowels. In the situation where sequences of identical vowels occur, they are realised phonetically as long vowels. In addition, in sequences where the front vowels /i/, /ε/, and /a/ occur in combination there is often (in normal rapid speech) a non-phonemic glide /j/ inserted between the vowels. The same pattern also results in the glide /w/ being inserted between

vowel sequences which include the back vowels /o/ and /u/ in combination with /i/ and /a/.

Table 2.4 gives examples of the vowel sequences in words. A narrower transcription is also provided in order to highlight long vowel sequences and glide insertion.

Table 2.4: Examples of vowel sequences

Vowel sequence:	Example:	Gloss:
<i>aa</i>	<i>kaan</i> [ka:n]	‘rice’
<i>ii</i>	<i>wiir</i> [vi:r]	‘uncooked rice’
<i>oo</i>	<i>tikoo</i> [tikɔ:]	‘throat’
<i>uu</i>	<i>ruu</i> [ru:]	‘hook’
<i>èè</i>	<i>mèè</i> [mɛ:]	‘directional marker’
<i>ai</i>	<i>sairi</i> [se.i.ri]	‘witness’
<i>aè</i>	<i>saèr</i> [sa.ɛr]	‘touch’
<i>ao</i>	<i>maoas</i> [ma.ɔ.was]	‘wash s.t.’
<i>au</i>	<i>sau</i> [sa.u]	‘example’
<i>ia</i>	<i>sia</i> [si.ja]	‘he, she’
<i>iè</i>	<i>ièdo</i> [i.jɛ.do]	‘put, take s.t.’
<i>io</i>	<i>rior</i> [ri.jɔr]	‘fast, early’
<i>iu</i>	<i>liur</i> [li.jur]	‘forget’
<i>èa</i>	<i>sèa</i> [sɛ.ja]	‘they’
<i>èi</i>	<i>lèikit</i> [le.i.kit]	‘Leikit (proper noun)’
<i>èo</i>	<i>mèong</i> [mɛ.joŋ]	‘cat’
<i>oa</i>	<i>oat</i> [ɔ.wat]	‘daylight, midday’
<i>oi</i>	<i>leloi’</i> [lə.lo.iʔ]	‘snake’
<i>oè</i>	<i>maèdoèdo</i> [ma.ɛ.dɔ.ɛ.dɔ]	‘is taking (RDP)’
<i>ou</i>	<i>lour</i> [lo.ur]	‘lake’
<i>ua</i>	<i>rua</i> [ru.wa]	‘two’
<i>ui</i>	<i>rui</i> [ru.wi]	‘bone’
<i>uo</i>	<i>kuow</i> [ku.ɔw]	‘bird (specific species)’
<i>uè</i>	<i>luè’</i> [lu.ɛʔ]	‘tear’

The appearance of non-phonemic glides /w/ and /j/ between certain vowel sequences is unsurprising as it makes for easier articulation⁴⁵. These glides are non-phonemic because they do not occur if the word is syllabified during slower, elicited speech. Furthermore, they are not considered to be present by speakers, nor are they present in any written data. The insertion of these glides also helps to explain why three vowel sequences do not occur. In the instance of a possible three vowel sequence the same insertion pattern is displayed, e.g.:

<i>aoa</i>	<i>ka- + oat + -an</i>	→	[ka.ɔ.wa.tan] ‘world’
<i>ioa</i>	<i>maki- + oas</i>	→	[ma.ki.ɔ.was] ‘ask s.t. to wash s.t.’

A related matter to the vowel sequences described above is the status of sequences which are written as /èi/ and /ou/. That is, whether or not phonemic diphthongs are present in the language⁴⁶. The minimal amount of previous literature on Tondano phonology puts forward differing views. Sneddon’s (1975:18-19) Tondano description does not contain diphthongs, while a more recent AN phonology publication by Wolff (2010:300) attests two diphthong phonemes to Tondano.

The sequences which are analysed as the diphthongs /èi/ and /ou/ in Wolff (2010:300) are analysed here as vowel plus glide sequences, i.e. /ɛj/ and /ow/. The analysis of these sequences as V + C matches that of Clynes (1997:358) for PAN (and a number of contemporary Formosan and Philippine languages)⁴⁷.

An in-depth discussion on this long standing debate is not entered into here. Instead, the following brief points are put forward in defence of the V + C analysis:

- Despite the large number of possibilities for vowel sequences demonstrated in Table 2.4, all the resulting words maintain the basic (and fairly strict) (C)V(C) syllable structure. The presence of phonemic diphthongs would result in syllable structures which are seemingly disallowed, i.e. (C)VV sequences.

⁴⁵ It can be said that in rapid speech it is quite difficult to articulate vowel sequences such as /u/ + /a/ without an intervening /w/.

⁴⁶ There has been much debate on whether or not PAN historically contained diphthongs. This debate has led to analyses that essentially deny the presence of diphthongs in PAN, i.e. Clynes (1997). This contrasts with perhaps more orthodox descriptions which include diphthongs for PAN (Blust 1990, Ross 1995a). The differing viewpoints in Clynes (*ibid*) and Blust (*ibid*) also seek to define diphthongs in contrast to how they are defined in the analyses of earlier linguists, i.e. Dempwolff (1934 - 38) and Dyen (1947).

⁴⁷ Clynes (1997:358) states that “the diachronic evidence does not support the reconstruction of a separate series of phonemic diphthongs in PAN”, and that a V + C description is preferred.

- The common occurrence of non-phonemic glides /w/ and /j/ between vowel sequences works against the presence of underlying V + V diphthongs. That is, when the sequence of /ε/ + /i/ → ε.ji the analysis of an underlying /εi/ diphthong is unlikely.

2.4.4 Syllable sequences

Table 2.5 below presents examples of words which display the different patterns of (C1)V(C2) structure. These examples display the possibilities from the minimum to the maximum number of syllable sequences, as well as the consonant and vowel structure within them. The maximum number of syllables within lexical roots is four. However, most lexical roots have between one and three syllables. In contrast, stems consisting of lexical roots together with various bound morphological elements (including reduplication) may have up to nine syllables.

The following examples are in broad transcription without linear morpheme glossing. Examples with a ‘*’ indicate a morphologically complex form (i.e. stem).

Table 2.5: Syllable sequences

Syllables:	Word:	Gloss:	Syllable structure:
One:	<i>ko</i>	‘you’	CV
	<i>sa</i>	‘if, when’	CV
Two:	<i>tim.pa’</i>	‘palm sugar sap, wine’	CVC.CVC
	<i>e.ros</i>	‘descend’	V.CVC
	<i>o.ki’</i>	‘child/small’	V.CVC
	<i>lu.lut</i>	‘bamboo’	CV.CVC
Three:	<i>ka.ra.ti</i>	‘lily’	CV.CV.CV
	<i>lan.su.na</i>	‘onion’	CVC.CV.CV
	<i>ma.ri.sa</i>	‘chilli’	CV.CV.CV
	<i>ka.li.bong</i>	‘mango’	CV.CV.CVC
Four:	<i>ta.bu.lè.lèng</i>	‘round,sphere’	CV.CV.CV.CVC

	<i>sa.ri.ba.ta</i>	‘lemongrass’	CV.CV.CV.CV
	<i>*su.mi.wo.mow</i>	‘will be made’	CV.CV.CV.CVC
	<i>*mi.na.ting.kas</i>	‘had run’	CV.CV.CVC.CVC
Five:	<i>*me.te.to.ko.lan</i>	‘will fight each other’	CV.CV.CV.CV.CVC
	<i>*pe.se.si.won.ta</i>	‘will be made by us’	CV.CV.CV.CVC.CV
	<i>*ki.ne.to.ra.now</i>	‘was just cut off’	CV.CV.CV.CV.CVC
Six:	<i>*pe.te.le.seng.ku.la</i>	‘is sold by me’	CV.CV.CV.CVC.CV.CV
	<i>*mi.na.se.wo.ka.now</i>	‘to already be mixed’	CV.CV.CV.CV.CV.CVC
	<i>*si.mi.na.pa.’a .yang</i>	‘He/she had worked’	CV.CV.CV.CV.CV.CVC
Seven:	<i>*pa.ka.wang.kè.re.na.mo w</i>	‘after he/she sells it’	CV.CV.CVC.CV.CV.CV.CVC
	<i>*ki.na.li.ju.rang.ku.mow</i>	‘already forgotten by me’	CV.CV.CV.CV.CVC.CV.CVC
Eight:	<i>*pi.na.pa.loo.’ang.ku.mo w.mi</i>	‘was made to watch (s.t.) by me’	CV.CV.CV.CV.CVC.CV.CVC .CV
Nine:	<i>*ko.pa.to.ko.to.ko.leng.k u.mow</i>	‘I am definitely fighting you’	CV.CV.CV.CV.CV.CV.CVC. CV.CVC

The examples from Table 2.5 all display the (C1)V(C2) structure. Despite this, there is a small amount of variation in syllable structure between lexical roots and morphologically complex words. This variation is examined in the following subsections.

In situations where syllable sequences could be analysed as either CV.CV or CVC.V, the analysis of CV.CV is always preferred. This is due to what the fact there is a common preference for this pattern in Western AN languages (Himmelman 2005:115), and also because it adheres to accepted cross linguistic patterns, i.e. the *Maximal Onset Principle* (Blevins 1996:230).

2.4.5 Syllables in lexical roots

Syllable sequences within lexical roots are usually part of minimally disyllabic words, a feature which is consistent with widespread AN syllable patterns (Himmelman 2005:116). Exceptions to this pattern are limited to grammatical, function class lexical roots such as the proclitic pronoun *ko*= ‘you’, or the subordinating conjunction *sa* ‘if/when’⁴⁸. While these monosyllabic roots can be either bound or independent morphological elements, they are almost always function words.

In addition to disyllabic lexical roots, there are also trisyllabic roots such as *ke.ku.ru* ‘basil’, or even polysyllabic roots such as *sa.ri.ba.ta* ‘lemongrass’. As regards syllable structure, any combination of the (C1)V(C2) structure is possible in lexical roots. Lexical roots more commonly contain syllables consisting solely of a nucleus (complex words rarely do), e.g. *o.ki* ‘little, child’, *a.su* ‘dog’, *a.li* ‘bring’, and *u.rè* ‘long’⁴⁹. When syllables in lexical roots contain codas, there are a number of consonants (three) which cannot have this function (i.e. ‘C2’ - see §2.3).

Despite the fact that most consonants can occur in coda position, their distribution is dependent on whether the syllable they occur in is initial, penultimate, or ultimate. In initial or penultimate syllables the coda is often restricted to being the first consonant in clusters such as those described in §2.4.1. These patterns are exemplified in words such as *kun.tung* ‘summit’, *kang.ka.si* ‘also’, *tem.pok* ‘tip, high point’, *kè’.kè* ‘laugh’, and *po’.po* ‘coconut’. Codas occurring in final syllables are less restricted, and can be laterals, glides, nasals, and trills, as well as certain obstruents. This patterning is displayed in words such as; *wu.’ul* ‘rotten’, *la.lan* ‘road’, *lo.dèy* ‘boat’, *so.bor* ‘dry, arid’, *e.tut* ‘fart’, and *e.ris* ‘sand’.

⁴⁸ There can be examples where a word consists only of a vowel nucleus, for example when the co-ordinating conjunction *wo* ‘and’ is shortened to *o* in rapid speech.

⁴⁹ These examples show that the nucleus only syllable is always word initial. Although lexical roots such as *tuama* ‘man’ could be seen as an exception to this pattern., as stated in §2.5.3, words with vowel sequences like this often have them broken up by non-phonemic semi vowels. Thus, in rapid speech *tuama* often have the syllable pattern of *tu.(w)a.ma*.

The distribution of open vs closed syllables in lexical roots therefore displays a preference for closed syllables to be word final. The one exception to this rule is when lexical roots contain consonant clusters which demonstrate homorganic nasal assimilation and occur across syllable boundaries. These consonant clusters result in non-final syllables which are closed.

2.4.6 Syllables in morphologically complex words (stems)

Syllable sequences in complex words allow for all those previously described in §2.4.5, with certain minor variations. The first variation is that nucleus only syllables rarely occur within morphologically complex words, and the second is that syllables with codas are less common, especially in the first two to three syllables.

These variations in syllable sequences are a result of the augmentation of words via additional morphology. In Tondano the morphology hosted by lexical roots may be prefixes, suffixes, infixes, circumfixes, and clitics (see §5.3). The extra syllables within stems are a mixture of mono- and disyllabic prefixes or clitics, monosyllabic infixes, and monosyllabic suffixes. Almost all of these elements adhere to the CV.CV pattern.

As a result of the morphological form of bound elements, all polysyllabic stems must adhere to a CV pattern for at least the first two syllables. Certain sequences of affixes within these stems could possibly be analysed as following a CVC.V pattern (e.g. *mina-* and *kina-* in a number of examples in Table 2.5 - see also §5.3.1). This would derive syllable sequences such as *kin.a.li.ju.rang.ku.mow*, a plausible scenario as nasal consonants such as /n/ commonly occur as codas in penultimate and final syllables (e.g. *pe.se.si.won*). However, analysing the syllable structure of complex words in such a way is problematic. More specifically, this would violate the widespread preference in languages for VCV strings to syllabify into V.CV (Jacobson & Halle 1956:20-1), and it would also violate the Maximal Onset Principle (Blevins 1996:230).

In morphologically complex words the distribution of open vs closed syllables is affected by the addition of affixes and clitics. More specifically, it is the occurrence of certain suffixes and/or enclitics that gives rise to a CVC.(C)VC structure in the penultimate and/or final syllables. These suffixes are always closed syllables, e.g. *-en* (PV) and *-an* (LV), while enclitics are also often closed, e.g. *=mow* (CPL), *=pè'* (INCPL). Thus, words such as *ke.to.ren.ow* (slice-PV-CPL) 'cut it', *se.sa.da.ran* (NR-lean.on -LV) 'supporting frame', and

si.ki. 'i.ten (3.SG-follow-PV) ‘he/she would be followed’ all contain closed penultimate and/or final syllables as a result of bound morphology.

Alternatively, stems which consist of lexical roots hosting infixes do not display word internal closed syllables, regardless of whether closed syllables were present before the additionally morphology was added. Infixes are always closed syllables due to their VC structure, e.g. *<in>* (PST), *<um>* (AV) and *<im>* (AV.PST), and their default position is following the consonant in word initial CV syllables. This always results in a CV.CV sequence, and not a CVC.V sequence. For instance, *si.wo + <im> → si.mi.wo*, and not **sim.i.wo*, while *kè.rèt + <in> → ki.nè rèt*, and not **kin.è.rèt*.

2.5 Stress

Stress within words is manifested by way of syllables that are usually louder, of a longer duration, and sometimes of a higher pitch⁵⁰. In this section the basic stress patterns of both lexical roots and morphologically complex words are presented, together with the environments which condition any stress placement which varies from the ‘default’.

Describing rules that govern the assignment of syllable stress in the language is not unproblematic. Philippine-type languages generally do not have predictable systems of syllable stress placement, and stress is therefore normally considered non-distinctive (Himmelman 2005:177). While the previous descriptive work of Sneddon (1975:10-11) states that default stress placement is on the penultimate syllable, there are no explicit conditioning factors outlined. A more rule based approach is that of Ball (2005), whose optimality theory analysis of Sneddon’s data also labours to pinpoint invariable rules to describe stress patterns.

In contrast to these previous approaches, the analysis here simply seeks to describe situations of stress placement variation and provide a minimum of one conditioning factor in each instance. While no specific phonological theory is utilised, the notion of syllable weight is taken from the onset rhyme theory of Blevins (1996:212-15). In this framework syllables with a branching nucleus and/or rhyme are considered to be heavy, while codaless syllables are considered light.

⁵⁰ A minor caveat must be given here as this assertion is based on impressions from the data and discussion with speakers, rather than specific acoustic analysis in recordings.

In Tondano stress is non-contrastive⁵¹. Although there is some unpredictability in stress placement, there are certain environments that will always affect stress assignment. These are:

- Vowel length
- Syllable structure and syllable weight, specifically whether syllables are open or closed.
- Occurrence of schwa /ə/ as nucleus in a penultimate syllable.

2.5.1 Stress placement in lexical roots and stems

Stress placement on the penultimate syllable appears to be the default stress assignment. This holds true for both lexical roots and stems. However, this is not to say that the addition of morphological elements to lexical roots does not affect stress placement. Rather, the specific syllabic features of affixes and clitics will often effect stress placement in morphologically complex words.

The assignment of penultimate stress is most easily observed in lexical roots of up to four syllables, e.g.:

<i>asu</i>	[á.su]	‘dog’
<i>wangko</i>	[wáŋ.kɔ]	‘big’
<i>lansuna</i>	[lan.sú.na]	‘onion’
<i>kangkasi</i>	[kaŋ.ká.si]	‘also’
<i>saribata</i>	[sa.ri.bá.ta]	‘lemongrass’

These examples demonstrate penultimate stress assignment regardless of whether words are mono-, di-, or polysyllabic, and regardless of whether the penultimate syllable is open or closed. This pattern is not restricted to lexical roots, and also commonly occurs in morphologically complex words, for example:

<i>minarutou</i>	[mi.ná.ru.tɔw]	‘had sown seed’
<i>patoto’an</i>	[pa.to.tó.ʔan]	‘is breastfed’

⁵¹ In that it does not distinguish lexical words from one another.

<i>sewokanou</i>	[sə.wó.ka.nɔw]	‘is mixed’
<i>pesesiwon</i>	[pə.sə.sí.won]	‘will be made, done’

Enclitics such as =*mow* (and the allomorph =*ow*) which occurs in two of the examples above are not counted for stress. This also holds true for any bound elements which are proclitics.

In contrast to these examples, there are a number of situations where stress will move from the penultimate syllable to the final syllable. When the penultimate syllable has a schwa as its nucleus, stress placement appears to move to the syllable final position. This occurs in lexical roots, for example:

<i>sera’</i>	[sə.ráʔ]	‘meat, fish’
<i>repet</i>	[rə.pót]	‘fast, late’
<i>te’un</i>	[tə.ʔún]	‘year’
<i>penar</i>	[pə.nár]	‘buttocks’

This process also occurs in morphologically complex words which contain a penultimate syllable with a schwa nucleus, e.g.:

<i>marebèk</i>	[ma.rə.bék]	‘squeals’
<i>lumelè’</i>	[lu.mə.léʔ]	‘will bathe’
<i>peranou</i>	[pə.rá.now]	‘dry’

The lexical roots for the three stems above are *rebèk* ‘squeal’, *lelè* ‘bathe’, and *pera* ‘dry’. In these examples the stress shifts to the penultimate syllable regardless of which particular bound element is hosted by the root (i.e. the prefix *ma-*, the infix <*um*>, or the suffix *-en*). The conditioning factor is always the schwa in the penultimate syllable.

Conversely, examples exist where stress shifts to the final syllable without schwa occurring in the penultimate syllable, as in the following lexical roots, e.g.:

<i>oki’</i>	[o.kíʔ]	‘small’
<i>tetura’</i>	[tə.tu.ráʔ]	‘spear’

<i>lodèy</i>	[lo.déj]	‘ship, boat’
<i>wu’ul</i>	[wu.ʔúl]	‘rotten’

Therefore, the occurrence of schwa within penultimate syllables is not the only factor causing a change in default stress assignment. Instead, the four examples above all have another feature in common, i.e. the syllable which takes stress is a closed (heavy) syllable. The difference in structure between open and closed final syllables can be represented schematically as follows (with final syllables taken from the lexical roots *wang.ko* ‘big’ and *ke.ter* ‘power, energy’):

Figure 2.2: Syllable structure of light final syllable

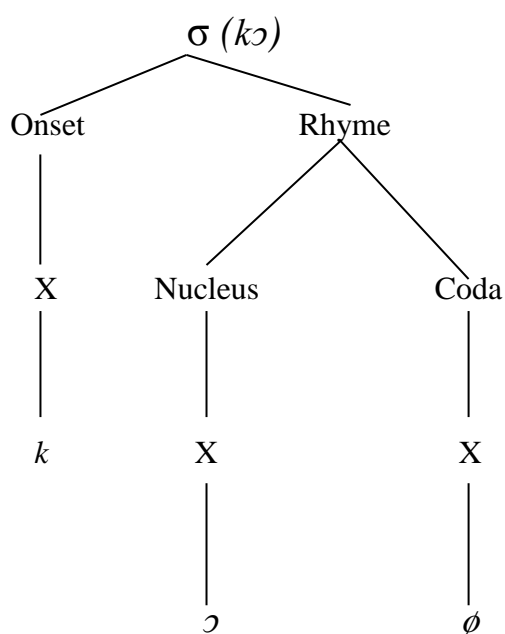
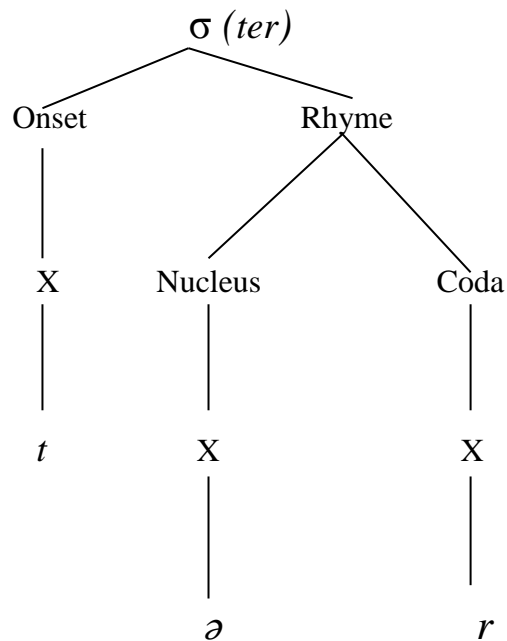


Figure 2.3: Syllable structure of heavy final syllable



It appears that syllable weight is a key factor in the assignment of stress in the non-default position. Moreover, syllable weight may override other factors which affect non-default stress assignment. There are examples of morphologically complex words which contain a schwa in the penultimate syllable, but where the stress is not assigned to the final syllable. In this situation the stress remains on the closed (heavy) penultimate syllable, e.g.:

<i>lumentut</i>	[lu.món.tut]	‘will float to the surface’
<i>kime’ketla</i>	[ki.móʔ.kət.la]	‘has chewed on s.t.’

In contrast, if an open penultimate syllable contains schwa, then the stress once again is re-assigned to the final syllable, e.g.:

<i>meteteles</i>	[mə.tə.tə.ləs]	‘will buy s.t.’
<i>keteran</i>	[kə.tə.rán]	‘powerfully’
<i>makeoki’</i>	[ma.kə.o.kíʔ]	‘has a child’

Therefore, syllables which have a branching nucleus and are considered heavy have a notable effect on stress assignment.

Open syllables with long vowels are also considered heavy. This factor will also cause stress to move to final syllable, regardless of the features of the penultimate syllable, e.g.:

kumelaamou [ku.mə.lá:.mow] ‘I definitely go.’

mekaan [mə.ká:n] ‘eats s.t.’

Examples such as [ku.mə.lá:.mow] and [mə.ká:n] (the clitics =*ku* and =*mow* are not counted for stress) demonstrate that a heavy syllable resulting from a long vowel will override the change in stress placement pattern caused by a schwa in penultimate syllables. Heavy syllables comprised of long vowels are less common than heavy syllables which are closed, nevertheless the effect on stress placement is the same in both instances.

In this section it has been demonstrated that the three features of syllable weight, whether syllables are open or closed, and whether or not the nucleus is schwa, are the primary conditioning factors of stress placement.

In addition to the stress assignment described above, there is one exception which does not appear to be conditioned by prosody. In rapid speech some disyllabic words may have final syllables which are neither closed nor heavy, but which still take stress. This occurs when words contain an open final syllable which precedes a word boundary or a slight pause in the discourse. In these situations speakers may choose to lengthen the duration of the vowel in the final syllable. This lengthening then functions as a hesitation or pause before the next utterance. This is obviously a pragmatic choice rather than a prosodic constraint, nonetheless it still affects stress placement.

The three examples below all have open final syllables with a nucleus whose duration is longer than normal. This means that in effect they are heavy syllables and therefore attract stress assignment, e.g.:

kasi [ka.sí: _#] ‘again, more’

waki [wa.kí: _#] ‘to, from, at’

nendo [nən.dó: _#] ‘day’

2.6 Morphophonological processes

The major morphophonological processes in Tondano are labelled here as: nasal assimilation and nasal substitution (including pseudo nasal substitution), reduplication, epenthesis, and deletion.

2.6.1 Nasal assimilation

Examples of the nasal assimilation process have already appeared in §2.4.2. This is a commonly occurring morphophonological process in AN languages. To summarise, nasal assimilation is a process which occurs when morphological elements in a language have certain elements ending in a nasal consonant. These elements are primarily affixes with a (CVN) structure, or simply nasal consonants which occur before lexical roots (Tondano has both types). The exact form of the nasal is dependent upon, and will match exactly, the place of articulation of the following consonant (i.e. the onset of the first syllable of the lexical root). In addition, the consonant following the nasal may also undergo change in some way. This occurs when the consonant following the nasal is not an obstruent.

One of the two morphological elements which trigger nasal assimilation is the clitic phrase marker *N=* (see §8.4.3). This phrase marking may also occur with a preceding non-phonemic schwa vowel (i.e. *(e)N=*)⁵², especially if the preceding word has a closed final syllable. The addition of this phrase marker can lead to the consonant clusters previously mentioned in §2.4.2. The various forms of *N=* resulting from this process are displayed in Figure 2.4.

Figure 2.4: Homorganic nasal assimilation with phrase marker *N=*

<i>N=</i>	→ [m] / _ [+ bilabial], i.e. /p/ and /w/
	→ [n] / _ [+alveolar] or [+vowel], i.e. /t/, /s/, or V
	→ [ŋ] / _ [+velar], i.e. /k/, /g/
	→ [l] / _ /l/
	→ ∅ elsewhere

⁵² The fact that the phrase marker *N=* is often preceded by the schwa /ə/ is not surprising for a number of reasons. Firstly, if the previous word has a final closed syllable then inserting a schwa between it and the onset of the next word makes articulation easier. Secondly, the *(e)+N+=C* sequence will usually result in the preferred syllable structure of CV.CV.

Examples of the different forms of $N=$ are as follows: the bilabial nasal /m/ occurs with words such as *pati* ‘axe’, where $N= + pati \rightarrow (e)m=pati$ (INAN= axe). Alveolar nasal /n/ occurs with words such as *tadèy* ‘corn’ where $N= + tadèy \rightarrow (e)n= tadèy$ (INAN= corn). While velar /ŋ/ occurs with words like *kalibong* ‘mango’ where $N= + kalibong \rightarrow (e)ŋ= kalibong$ (INAN= mango).

When the consonants following $N=$ are not obstruents there is slight variation. In all cases this is likely to be for ease of articulation. Before the liquid /l/, $N=$ appears to assimilate to it. However, the schwa vowel /ə/ still occurs (i.e. $eN= + /l/ \rightarrow e=/l/$) resulting in forms such as: $e=lèpèr$ (INAN=spoon) ‘(the) spoon’ and $e=lalan$ (INAN=road) ‘(the) road’. Furthermore, when the consonants following $N=$ are /r/ or /w/, these consonants will also change form. This results in the previously mentioned /r/ \rightarrow /d/ and /w/ \rightarrow /b/ alternations. Thus, words such as *rano* ‘water’ will become $(e)n=dano$ (INAN= water) and *walè* ‘house’ becomes $(e)m=balè$ (INAN= house). In each case the form of $N=$ matches the place of articulation of both the original and the new consonant. The change of /r/ and /w/ to plosives /d/ and /b/ maintains the seemingly preferred sequence of nasal plus obstruent.

As mentioned in §2.2 above, there is another situation whereby /r/ \rightarrow /d/ and /w/ \rightarrow /b/ in free variation. That is, in certain (non-predictable) instances a lexical root which has an initial /r/ or /w/ may occur without $N=$, but still have forms which are /d/ or /b/ initial, e.g.: *dano* and *balè*. To speculate somewhat, it seems that as the use of the phrase marker $N=$ declines⁵³, lexical roots with onsets which have changed as part of nasal substitution have lexicalised. This results in bare roots which have initial syllables with /d/ and /b/ onsets, something which does not normally occur. This pattern is presumably allowed as it avoids complex syllable onsets and conforms to the preference for a CV.CV structure.

In addition to nasal assimilation with the phrase marker $N=$, there is another pattern of nasal assimilation which occurs in a slightly more restricted environment. Specifically, this is when nasals function as coda for the suffixes *-en* or *-an*. Verbal predicates which are marked with these suffixes often have a following enclitic encoding a pronominal NP_{IV.A} clausal argument (see §4.5.4). In the event this is the 1st person singular =*ku*, the syllable final /n/ will assimilate to the place of articulation and become [ŋ], e.g. *lila’+*

⁵³ It is never obligatory, and its use is especially limited amongst younger speakers.

-en + *=ku* → *lila'ngku* (tongue-PV=1.SG.NPIV.A) ‘said by me’ or *k<in>a-* + *liur* + *-an* + *=ku* → *kinaliurangku* (POT.PST-forget-LV=1.SG.NPIV.A) ‘was forgotten by me’.

2.6.2 Nasal substitution

Nasal substitution (NS) is also extremely common in AN (Blust 2004) and symmetrical voice languages (Himmelman 2005:118), although the specific consonants affected differ (Blust 2013:242). NS involves the replacement of certain root initial consonants with a nasal consonant. This nasal consonant will match the place of articulation of the consonant which it replaces (as observed in nasal assimilation). The nasal is commonly the coda of a prefix⁵⁴, and in Tondano may be any one of the three nasal plosives: /m/, /ng/, or /n/.

The prefixes involved in NS are *meN-* and *peN-*⁵⁵. When the root initial consonant is a voiceless obstruent, NS will occur with the coda segment of *meN-/peN-*. If the lexical root has an initial /p/ consonant, then *meN-/peN-* are realised as *mem-/pem-*, e.g.:

meN- + *pèlèng* ‘choose’ → *mem-* *èlèng*

peN- + *putar* ‘roll, turn’ → *pem-* *utar*

If the lexical root has an initial /t/, then *meN-/peN-* is realised as *men-/pen-*, e.g.:

meN- + *teles* ‘buy’ → *men-* *eles*

peN- + *ta'atak* ‘hit (bamboo)’ → *pen-* *a'atak*

If the lexical root has an initial /s/, then *meN-/peN-* is again realised as *men-/pen-*, e.g.:

meN- + *siwo* ‘make, do’ → *men-* *iwo*

peN- + *sèro* ‘search’ → *pen-* *èro*

Finally, if the lexical root has an initial /k/, then *meN-/peN-* is realised as *meng-/peng-*, e.g.:

⁵⁴ The infixes <um> and <im> are also involved in a more restricted phonological process labelled as pseudo nasal substitution - see §2.6.4.

⁵⁵ These prefixes are part of the paradigm of primary verbal affixation, and occur in free variation with the DYNAMIC prefixes *ma-* and *pa-* (see §3.8, §4.5.1 and §5.3.1). The exact difference between *ma-/pa-* and *meN-/peN-* is not entirely clear. However, the *meN-/peN-* prefixes are commonly used with CVCV- reduplication of the lexical root. This encodes imperfective aspect - see §9.3.2.

meN- + *kantar* ‘sing’ → *meng-* *antar*

peN- + *ketor* ‘cut, slice’ → *peng-* *etor*

NS only occurs in lexical roots which have initial voiceless obstruents. Voiced obstruents are most likely not involved in this process because they only rarely occur as root initial consonants (see §2.4). When lexical roots have any of the other consonants (i.e. nasals, liquids, glides, or the velar approximate) as initial, then the nasal coda of the *meN-/peN-* prefix is deleted, e.g.:

peN- + *nanam* ‘taste’ → *pe-* *nanam*

meN- + *muali* ‘be, become’ → *me-* *muali*

peN- + *nga’nga* ‘chew’ → *pe-* *nga’nga*

meN- + *lèbèt* ‘cross a bridge’ → *me-* *lèbèt*

meN- + *ramba* ‘stamp (feet)’ → *me-* *ramba*

meN- + *ghenang* ‘thing, remember’ → *me-* *ghenang*

Also, in the event that a lexical root is vowel initial, then *meN-/peN-* are realised as *meng-/peng-*, e.g.:

meN- + *èdo* ‘take’ → *meng-* *èdo*

peN- + *ali* ‘bring’ → *peng-* *ali*

peN- + *iwu* ‘cut, slice’ → *peng-* *iwu*

meN- + *esa* ‘one (i.e. be alone)’ → *meng-* *esa*

meN- + *untep* ‘enter (a church)’ → *meng-* *untep*

The process of NS demonstrates a clear dispreference in the language against clusters consisting of a nasal followed by a voiceless obstruent. Explaining the exact motivation behind this is not attempted here. However, it is worth noting that it has been proposed that NS may not even be linguistically motivated at all (Blust 2004:136).

2.6.3 Vowel deletion

Vowel deletion occurs in a number of environments all of which are the result of the addition of bound morphological elements to lexical roots. Firstly, when lexical roots which end in a vowel host the PATIENT voice suffix *-en*, the resulting form is realised as VC rather than VVC. That is, the weak schwa vowel is deleted, for example:

<i>siwo</i>	‘make, do’	+	<i>-en</i>	→	<i>siwo-n</i> (* <i>siwo -en</i>)
<i>èdo</i>	‘take’	+	<i>-en</i>	→	<i>èdo-n</i> (* <i>èdo -en</i>)
<i>wèè</i>	‘give, offer’	+	<i>-en</i>	→	<i>wèè-n</i> (* <i>wèè -en</i>)

In comparison with the *-en* suffix, the LOCATIVE voice suffix *-an* does not undergo the same change. The ‘stronger’ low front vowel /a/ is not deleted, which leads to the following VV sequences:

<i>siwo</i>	‘make, do’	+	<i>-an</i>	→	<i>siwo-an</i>
<i>èdo</i>	‘take’	+	<i>-an</i>	→	<i>èdo-an</i>
<i>wèè</i>	‘give, offer’	+	<i>-an</i>	→	<i>wèè-an</i>

The second process of vowel deletion involves the infixes <um> (AV) and <im> (AV.PST). The AV infix occurs as <um> in most consonant initial lexical roots, where it follows the initial consonant. However, <um> also has the allomorph *m-* if the lexical root is vowel initial, or if either of the labials /p/ or /w/ are root initial, e.g. (see also §5.3.2):

<um> +	<i>kirong</i>	‘hide’	→	<i>k<um>irong</i>
<um> +	<i>èdo</i>	‘take’	→	<i>m-èdo</i>
<um> +	<i>ali</i>	‘bring’	→	<i>m-ali</i>
<um> +	<i>wulèng</i>	‘carry s.t.’	→	<i>m-ulèng</i>
<um> +	<i>pa’ayang</i>	‘work’	→	<i>m-a’ayang</i>

The affix <im> (AV.PST) also displays allomorphy conditioned by the features of the initial consonant of the lexical root. These features match those which condition the <um> → *m-* allomorphy. The allomorph of <im> is *min-*, e.g.:

<im> +	<i>kirong</i> ‘hide’	→ <i>k<im>irong</i>
<im> +	<i>èdo</i> ‘take’	→ <i>min-èdo</i>
<im> +	<i>ali</i> ‘bring’	→ <i>min-ali</i>
<im> +	<i>wulèng</i> ‘carry s.t.’	→ <i>min-ulèng</i>
<im> +	<i>pa’ayang</i> ‘work’	→ <i>min-a’ayang</i>

The process which conditions the allomorphs *m-* and *min-* before the labial consonants /p/ or /w/ is labelled here as “pseudo nasal substitution (PNS)”. This process is explained in §2.6.4. Also, while the allomorph *m-* before vowel initial roots is easily explained as vowel deletion, the process which conditions the allomorph *min-* before vowels is less clear cut. However, it can be speculated that this is also a form of vowel deletion which relates to restrictions on consonant clusters and syllable structure (see below).

The process whereby <um> → *m-* before vowel initial roots is common in a number of AN languages (Blust 2013:384). The inability of Tondano <um> to occur as an infix within vowel initial lexical roots appears primarily related to restrictions on consonant clusters, e.g.:

<um> +	<i>èdo</i> ‘take’	→ * <i>è<um>do</i>
<um> +	<i>ali</i> ‘bring’	→ * <i>a<um>li</i>
<um> +	<i>urè</i> ‘expel, drive out’	→ * <i>u<um>rè</i>
<um> +	<i>iwu</i> ‘cut, slice’	→ * <i>i<um>wu</i>

These examples all violate both the preferred (C)V(C) syllable structure (see §2.4), and the restrictions on consonant clusters (see §2.4.1 - §2.4.2). To avoid this, the infix <um> is realised as a prefix. However, this realisation also appears to be problematic as it results in a syllable structure of V(C).V.(C)V, which does not occur in the language. This also violates the dispreference for nucleus only syllables in morphologically complex words, e.g.:

<um> +	<i>èdo</i> ‘take’	→ * <i>um-èdo</i> (<i>um.è.do</i>)
<um> +	<i>ali</i> ‘bring’	→ * <i>um-ali</i> (<i>um.a.li</i>)

<um> + urè 'expel, drive out' → *um-urè (um.u.rè')

<um> + iwu 'cut, slice' → *um-iwu (um.i.wu)

To avoid the form <um> appearing as a prefix, the initial vowel is deleted resulting in the prefix *m-*. When *m-* attaches to vowel initial roots both the (C)V(C) syllable structure and the restrictions on consonant clusters are not violated, e.g.:

<um> + èdo 'take' → m-èdo (mè.do)

<um> + ali 'bring' → m-ali (ma.li)

<um> + urè 'expel, drive out' → m-urè (mu.rè')

<um> + iwu 'cut, slice' → m-iwu (mi.wu)

A specific synchronic explanation of the process whereby <im> → *min-* in the same environment as <um> → *m-* is problematic, and is something which cannot be provided here. Instead, the following two paragraphs attempt to very briefly offer a diachronic explanation for the <im> → *min-* alternation, but with the caveat that this explanation is purely speculative.

Historically, the <im> infix is considered derived from the bimorphemic PAN and PMP complex infix *<umin> (Ross 1995, 2002:33, 49, 2009:296)⁵⁶. This complex infix had essentially the same function as Tondano <im> and *min-* (i.e. AV.PST/PERF). To hypothesise somewhat, it is possible that an earlier stage of Tondano (and Proto-Minahasan) may have had the form *<umin> for vowel initial roots.

Assuming that the earlier stages of Tondano had similar phonotactic restrictions, the occurrence of *<umin> as an infix would lead to the same issues as observed with <um> above. This would result in a vowel only syllable occurring word medially, a pattern which is dispreferred (see §2.4.5)⁵⁷, e.g.:

<im> + èdo 'take' → *umin- èdo (um.in.è.do)

<im> + ali 'bring' → *umin- ali (um.in.a.li)

⁵⁶ A full discussion of the various phonological stages for these derivations in Philippine languages is found in Reid (1992).

⁵⁷ An alternative analysis of the syllable structure yields a vowel only syllable word initially, e.g. *u.mi.n-a.li. However, vowel only syllables exclusively occur word initially in lexical roots, and not in stems which include additional morphological elements - see §2.4.5.

<im> + urè' 'expel, drive out' → *um.in-u.rè' (um.in.u.rè')

<im> + iwu 'cut, slice' → *um.in-i.wu (um.in.i.wu)

However, this particular problem is solved if the initial vowel of the complex prefix is deleted in later and current stages of Tondano. As well as resulting in the expected *min-* prefix, this vowel deletion means that the syllable structure avoids vowel only syllables. Instead, the preferred (C)V(C) structure is adhered to, e.g.:

<im> + èdo 'take' → min- èdo (mi.nè.do)

<im> + ali 'bring' → min- ali (mi.na.li)

<im> + urè' 'expel, drive out' → min- urè' (mi.nu.rè')

<im> + iwu 'cut, slice' → min- iwu (mi.ni.wu)

2.6.4 Pseudo nasal substitution

<um> and <im> also have the allomorphs *m-* and *min-* if the lexical root contains either of the labial consonants /p/ or /w/ word initially. However, the process that produces these allomorphs differs from what was observed in §2.6.3.

As was the case with NS, this particular process also results in the initial labial /p/ or /w/ consonant being replaced by the nasal consonant of the prefix, e.g.:

<um> + wangkèr 'sell' → m-angkèr (mang.kèr)

<um> + pèlèng 'choose' → m-èlèng (mè.lèng)

<im> + wangkèr 'sell' → min-angkèr (mi.nang.kèr)

<im> + pèlèng 'choose' → min-èlèng (mi.nè.lèng)

This process is clearly similar to that of the NS described earlier. Despite this, the use of the term to describe this process is not correct. Instead, the label of “pseudo nasal substitution” (PNS) is used following that of Blust (2004:76, 2013:244). The difference between these two substitution processes is as follows: in contrast to true NS, PNS occurs in a much more restricted environment (*ibid*). That is, only roots with initial labial consonants undergo the process of PNS, while true NS displays no such restriction.

The motivation for infixes such as <um> and <im> triggering PNS appears to come from a restriction in PAN and PMP on non-identical labial consonants in consecutive syllables

(*ibid*). If <um> and <im> were to occur as infixes in labial initial Tondano lexical roots, a pattern of consecutive non-identical labials would be the result, e.g.:

<um> +	wangkèr	‘sell’	→ *w<um>angkèr (wu.mang.kèr)
<um> +	pèlèng	‘choose’	→ *p<um>èlèng (pu.mè.lèng)
<im> +	wangkèr	‘sell’	→ *w<im>angkèr (wi.mang.kèr)
<im> +	pèlèng	‘choose’	→ *p<im>èlèng (pi.mè.lèng)

The process of PNS avoids this dispreferred syllable structure. If the lexical roots instead host the allomorphs *m-* and *min-*, then there are never non-identical labials in consecutive syllables.

The way in which PNS is reflected varies between <um> and <im>. In order for ungrammatical words like *w<um>angkèr to become *m-angkèr*, the entire initial CV syllable (i.e. *wu*) must be deleted. However, if the same syllable deletion occurred for labial initial roots hosting <im>, then the result would be an identical (homophonous) *m-* allomorph. Instead, the form *min-* occurs. As with its use in vowel initial lexical roots, *min-* could possibly be derived from the earlier *<umin> minus the initial vowel. Regardless of any difference in the type of deletion which derives *m-* and *min-*, the resulting form always avoids non-identical labials in consecutive syllables.

2.6.5 Consonant deletion

Consonant deletion occurs in a number of environments, and the consonants which are deleted are commonly nasals. One of the most common situations where this happens is when the enclitics =*na* (3.SG) and =*nèa* (3.PL)⁵⁸ occur directly after suffixes such as *-en* and *-an*, or simply after lexical roots which end with a nasal. This leads to the possibility of nasal clusters (commonly *nn* or *mn*). However, due to the fact that nasal clusters are not permitted in the language, a number processes occur in order to avoid this.

Diachronically, it appears that the type of process used to avoid nasal clusters differed depending upon which particular enclitic occurred (Sneddon 1975:238). Specifically, if the 3.SG clitic =*na* occurred directly after another nasal then a schwa vowel was inserted to break up the cluster. For example, *lawanan* ‘beach’ + =*na* (3.SG.POSS) → *lawananena*

⁵⁸ These enclitics are not limited to expressing possessor entities within an NP. They also function as arguments within verbal clauses – see §4.5.4 and §8.3.5.

‘his/her beach’. This is an example of a wider processes of vowel insertion which is outlined below in §2.6.6.

However, the case with the 3.PL enclitic *=nèa* is different. When *=nèa* occurs following another nasal consonant, a nasal cluster is avoided via the deletion of one of these nasals, e.g.:

<i>ngaran</i>	‘name’	+ <i>=nèa</i>	→	<i>ngaranèa</i>
<i>ali</i>	‘bring’	+ <i>-en</i> + <i>=nèa</i>	→	<i>alinèa</i>
<i>sodo</i>	‘ladle’	+ <i>-an</i> + <i>=nèa</i>	→	<i>sodoanèa</i>

These two separate processes for avoiding nasal clusters are previously described in Sneddon (*ibid*). Furthermore, this pattern is maintained with older speakers in the data utilised for this thesis. However, in younger speakers this is not always the case. More frequently it appears the process of consonant deletion occurring with *=nèa* has spread by analogy to *=na*. As such, the following sorts of examples are attested:

<i>ngaran</i>	‘name’	+ <i>=na</i>	→	<i>ngarana</i>
<i>lawanana</i>	‘beach’	+ <i>=na</i>	→	<i>lawanana</i>
<i>siwo</i>	‘make, do’	+ <i>-en</i> + <i>=na</i>	→	<i>siwona</i>

The second situation where deletion occurs is with the enclitics such as *=mow* (CPL), *=pè* (INCPL), *=mèè* (DIR.MED), or *=mi* (DIR.DIST). When these enclitics occur directly after morphological elements such as *-en*, *-an*, or any consonant which is the final segment of a lexical root or stem, the consonant onset of the enclitic is deleted, e.g.:

<i>sewok</i>	‘cold’	+ <i>ma-</i> + <i>=mow</i>	→	<i>masewokow</i>
<i>wewèan</i>	‘there is/are’	+ <i>-an</i> + <i>=pè</i>	→	<i>wewèanè</i>
<i>èdo</i>	‘take’	+ <i>-en</i> + <i>=mi</i>	→	<i>èdoni</i>
<i>wèè</i>	‘give, offer’	+ <i>-en</i> + <i>=mèè</i>	→	<i>wèènèè</i>

The final situation where a consonant may be deleted is when the glottal plosive /ʔ/ occurs between two identical vowels. In slower elicited speech the glottal is articulated.

However, in rapid speech it is often deleted, and the two remaining identical vowels are realised as a phonetically long vowel, e.g.:

<i>ta'an</i>	'but, however'	→	<i>taan</i>
<i>ka'apa</i>	'or'	→	<i>kaapa</i>
<i>ki'it</i>	'follow'	→	<i>kiiit</i>
<i>keri'it</i>	'itch'	→	<i>keriit</i>
<i>tu'ur</i>	'origin, source'	→	<i>tuur</i>
<i>kè'èt</i>	'extract sap'	→	<i>kèèt</i>

2.6.6 Reduplication

There are four different types of reduplication process which encode various morphosyntactic constructions. Reduplication can be monosyllabic, disyllabic, or a repetition of the entire lexical root. A summary of the four different types of reduplication and the corresponding function is outlined in Table 2.6.

Table 2.6: Reduplication processes

Form:	Function encoded:	Examples:
<i>Ce-</i> (monosyllabic)	Mood (irrealis - see §9.3.3)	<i>masiwo</i> ‘makes s.t.’ → <i>mesesiwo</i> ‘will make’ <i>mawui</i> ‘asks’ → <i>mewewui</i> ‘will ask’
<i>Ce-</i> (monosyllabic)	Nominaliser (instrument - see §8.2.4)	<i>wolè</i> ‘row’ → <i>wewolè</i> ‘oar’ <i>palen</i> ‘close s.t.’ → <i>pepalen</i> ‘door’
<i>CVCV-</i> (disyllabic)	Aspect (imperfective - see §9.3.2)	<i>pasèron</i> ‘search for’ → <i>pasèro-sèron</i> ‘is being searched for’ <i>malè’os</i> ‘be good’ → <i>malè’o- lè’os</i> ‘being good to s.o./s.t.’
Full root reduplication (disyllabic)	Plurality	<i>tou</i> ‘person, man’ > <i>tou tou</i> ‘people’ <i>tabulèlèng</i> ‘round spherical’ > <i>tabulèlèng tabulèlèng</i> ‘balls’

The forms and functions for the reduplication processes outlined in Table 2.6 are reasonably self-explanatory. However, there are some idiosyncrasies within each type which should be explained further.

The multifunctional monosyllabic prefix *Ce-* (IRR and NR) exemplifies partial root reduplication. This particular process contrasts with other two types of reduplication in that the vowel segment of the prefix is fixed. Therefore, while the consonant (onset) of prefix will match that of the root, the vowel will exclusively be the mid central schwa /ə/. It is for this reason that *ma-siwo* → *me-se-siwo* not **ma-si-siwo*, and *ma-wui* → *me-we-wui* not **ma-wu-wui*. These examples demonstrate that the prefix which occurs before the reduplicated prefix *Ce-* also changes its vowel to schwa. For example, the prefixes *ma-*, *pa-*, *(i-)pa-* are commonly hosted by lexical roots, and all will occur with a schwa vowel nucleus when they occur before *Ce-*. This results in the forms *me-Ce-*, *pe-Ce-*, and *(i-)pe-Ce-*.

In contrast to *Ce-* reduplication, disyllabic *CVCV-* reduplication does not result in any change in vowel form within the reduplicated portion⁵⁹. Furthermore, *CVCV-* reduplication has its own unique features. Firstly, reduplication is limited to a maximum of two syllables⁶⁰, and secondly, if the second syllable of the lexical root contains a coda it does not appear in the reduplicated portion. The syllables which make up the reduplicated portion can only be *CVCV-*. In Table 2.6 this is demonstrated by derived examples such as *malè'os* → *malè'o- lè'os*, not **malè'os- lè'os*.

Finally, the occurrence of full root reduplication is primarily used when nouns refer to inanimate/non-human entities. Alternatively, the number value of animate or human entities represented by nouns is usually encoded via different phrase markers (see §8.4).

2.6.7 Epenthesis

Epenthesis in Tondano consists of a vowel insertion process which is only attested in older speakers, (those approximately sixty years old and above), and a consonant insertion rule which is limited to situations where certain prefixes attach to lexical roots which contain an initial /a/ vowel.

Vowel insertion occurs in two specific environments. The first is within consonant clusters consisting of a glottal plosive followed by any other plosive (as described in §2.4.1). These consonant clusters almost always occur in lexical roots which consist of repeated syllables. The vowel which is inserted will be identical to the vowel which is the nucleus of the repeated syllables, for instance with /o/:

<i>po'po'</i> 'coconut'	→	<i>po'opo'</i>
<i>ko'ko'</i> 'chicken'	→	<i>ko'oko'</i>
<i>wo'do</i> 'morning'	→	<i>wo'odo</i>
<i>to'tok</i> 'chop, hack'	→	<i>to'otok</i>

This process has also been attested when the vowel in the repeated syllable root is /i/, /ε/, or /ə/, e.g.:

<i>ki'kis</i> 'scrape, grate'	→	<i>ki'ikis</i>
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⁵⁹ However, there can be changes to the consonant which is the onset of the reduplicated lexical root. This comes from the *meN-/peN-* process of nasal substitution as described in §2.6.2.

⁶⁰ Most lexical roots which function as verbs and take *CVCV-* reduplication are disyllabic.

<i>ke'ket</i> 'bite, gnaw'	→	<i>ke'eket</i>
<i>kè'kè</i> 'laugh'	→	<i>kè'èkè'</i>
<i>wè'wèl</i> 'tap (a sugar palm branch)'	→	<i>wè'èwèl</i>

It appears that this process assists in maintaining the preferred CV.CV syllable pattern in the language.

The second environment where this type of vowel insertion occurs is when the addition of bound morphological elements results in consonant clusters within morphologically complex words (as seen in §2.4.1). This leads to a consonant cluster which consists of a C₂ followed by a plosive, a nasal, or a liquid. When these sequences occur, epenthesis often results in the insertion of a schwa vowel /ə/, e.g.:

<i>tombak</i> 'spear'	+ = <i>ta</i>	→	<i>tombaketa</i>
<i>tunangan</i> 'finance'	+ = <i>ku</i>	→	<i>tunanganeku</i>
<i>lawas</i> 'hand'	+ = <i>na</i>	→	<i>lawasena</i>
<i>lèpèr</i> 'spoon'	+ = <i>nèa</i>	→	<i>lèpèrenèa</i>

It is again older speakers whose speech displays this process more frequently, while younger speakers often allow these consonant clusters.

When the second consonant in the cluster is a liquid (/l/ or /r/), the vowel inserted may be either the mid central schwa /ə/ or the low-mid front /ɛ/, as often occurs when the enclitic =*la* follows a lexical root:

<i>sèrèt</i> 'mount, ride'	+ < <i>um</i> >	+ = <i>la</i>	→	<i>sumèrètela</i>
<i>goreng</i> 'fry'	+ - <i>en</i>	+ = <i>la</i>	→	<i>gorèngenela</i>
<i>kantar</i> 'sing'	+ < <i>um</i> >	+ = <i>la</i>	→	<i>kumantarèla</i>
<i>wèè</i> 'give, offer'	+ - <i>en</i>	+ = <i>la</i>	→	<i>wèènèla</i>

The second process of epenthesis occurs when prefixes such as *ma-*, *pa-*, *maka-*, or *paka-* occur before /a/ initial lexical roots. In these situations the glottal plosive /ʔ/ may be inserted between the two identical /a/ vowels, e.g.:

<i>ali</i> ‘bring’	+ <i>ma-</i>		→ <i>ma’ali</i>
<i>ana</i> ’ ‘wait, stay’	+ <i>pa-</i>	+ <i>-en</i>	→ <i>pa’ana’n</i>
<i>arut</i> ‘spread, scatter’	+ <i>ma-</i>		→ <i>ma’arut</i>
<i>awes</i> ‘add’	+ <i>pa-</i>	+ <i>-an</i>	→ <i>pa’awesan</i>

This particular process of epenthesis can be observed in both older and younger speakers. In this situation the two /a/ vowels may also be realised as one phonetically long vowel [a:]. The different realisations of [a.ʔa] or [a:] are not predictable.

3.0 GRAMMAR OVERVIEW

Prior to a detailed examination of the separate components of Tondano grammar, an overview of the basic morphosyntax is presented. It is hoped that this approach will allow for the reader to have an understanding of various subcomponents of the language at an early stage. Furthermore, basic terminology can now be introduced together with simple data examples which outline commonly occurring clause constructions.

In this short overview a typological description of Tondano will first be outlined in §3.1. Subsequently, brief descriptions of lexical categories (§3.2), voice marking (§3.3), TAM marking (§3.4, §3.5, and §3.6), basic constituent order (§3.7), and basic clause types (§3.8) are presented.

3.1 Typological overview

It is hoped that the following assertions will provide a concise typological picture. Specific interlinear examples with morphological glossing are not presented here. Rather, these examples will be presented in the following subsections, as well as in the following chapters.

Tondano is defined typologically by the following features:

- (i) The language has structural features which identify it as *Philippine-type* as per descriptions in Ross (2002:20), Himmelmann (2005:112), Arka & Ross (2005:7), and Blust (2013:55). In terms of morphosyntactic alignment it is neither Ergative nor Accusative, rather it displays a *symmetrical voice system* as described in Himmelmann (2005:112-13) and Foley (2008:43).
- (ii) Morphologically, the language is agglutinative. The morphological elements attested are: *roots, stems, proclitics, enclitics, prefixes, infixes, circumfixes, and suffixes*.
- (iii) The major lexical categories are divided into the classes of content and function words. Content words can further be divided into nouns, verbs, adjectives, and adverbs. However, a caveat must be given as these categories do not always appear completely grammaticalised. The lexical category of a word is ultimately judged solely by its syntactic function.
- (iv) There are four different voices; one ACTOR voice (AV), and three UNDERGOER voices (UV). These voices are labelled: ACTOR (AV), PATIENT (PV), LOCATIVE

(LV), and CONVEYANCE (CV). Voice affixation morphology is present in all verbal clauses.

- (v) There are two tenses (past and non-past), two aspects (perfect and imperfect), and two moods (realis and irrealis).
- (vi) There are three basic clause types: verbal, equational, and existential. Both existential and equational clauses contain non-verbal predicates.
- (vii) Transitivity is a feature of clauses rather than verbs. Although verbal clauses may have up to three participants, all clauses are either intransitive or (mono)transitive (see §4.2 and §4.5.5).
- (viii) Verbal clauses are further differentiated by the type of primary affixation which occurs (in combination with voice marking) within the verbal predicate. This verbal morphology is divided into three categories and labelled: DYNAMIC, POTENTIVE, and STATIVE (see §4.5.1).
- (ix) Grammatical Relations (GRs) in any clause revolve around the argument which is the syntactic pivot (as per Dixon 1979 and Foley 2007:389, 2008:42). The encoding of GRs is achieved primarily through word order and the specific form of pronominal elements.
- (x) The syntactic pivot is labelled here as the *Pivot* (PIV). Other GRs are the *Non-pivot UNDERGOER* (NPIV.UN), the *Non-pivot ACTOR* (NPIV.A) and the *Oblique* (OBL)⁶¹.
- (xi) Basic constituent order in AV clauses is PIV-PRED. PRED -PIV is also possible, although only in intransitive clauses. UV clauses are more flexible and commonly display the order of PIV-PRED or PRED -PIV.
- (xii) NPs, PPs, and verbal predicates⁶² are head initial and head marking.
- (xiii) Deixis is encoded by various morphological elements.

3.2. Lexical categories (word classes)

Tondano demonstrates the cross linguistically common differentiation between content words and function words⁶³. However, making further distinctions within the class of content words can be problematic. This is most obvious when attempting to clearly delineate between nouns, verbs, and adjectives. Overall, evidence for stringent morphological and lexical sub-categorisation is minimal. The word class of a particular

⁶¹ See §4.3 for more information on these terms.

⁶² The term 'verbal predicate' is preferred to 'verb phrase' - see the explanation in §3.8.

⁶³ As per the definitions found in Crystal (2008).

word may be dependent upon whether it occurs independently (i.e. as a lexical root), or together with additional morphological elements (i.e. as a stem). As a result, the only true diagnostic of word class is the syntactic function of a word within a clause. This is exemplified in (1) - (2) where a lexical root which appears inherently nominal may function as either the head of an NP (argument), or as the head of a verbal predicate, e.g.:

(1) *padahal paèdongku empèra*

padahal pa- èdo -en =ku N= pèra'

although DYN take PV 1.SG.NPIV.A INAN roe

'Although I take all the fish eggs'

(TDN_28_00:01:07)

(2) *taan siso'o mapèra'*

ta'an si= so'o ma- pèra'

but 3.SG.PIV don't.want AV.DYN roe

'But he doesn't want to lay eggs (i.e. procreate)⁶⁴,

(TDN_28_00:01:17)

In (1) the nominal lexical root *pèra'* 'roe' is the head of an NP which functions as the syntactic pivot of a verbal clause. In (2) the same lexical root is the head of the verbal predicate of a clause. The PIV argument in this instance is the proclitic *si=* 'he/she'. The same flexibility displayed by nominal lexical roots like *pèra'* is also possible with inherently verbal lexical roots (see §6.1).

The following list summarises the word classes. The common functions of each category are listed together with the relevant section where they are explained in more detail.

a. Content words

Nouns may be morphologically simple (i.e. a lexical root), or more complex forms. Semantically they tend to refer to entities (both concrete and abstract), for example:

talun 'forest', *luka* 'guard, attendant', *se-sepun-an* (NR-mucus-LV) 'nose'

FUNCTION: Heads of NPs which function as arguments in all clauses, and as predicates in some non-verbal clauses. NPs typically function as the PIV argument (i.e. syntactic pivot),

⁶⁴ Round brackets are sometimes used in the free translations throughout this thesis. These are used primarily to express arguments which are commonly omitted in the data. They are also used to provide a small amount of extra contextual information, or to occasionally demonstrate non-literal meanings of words.

any non-PIV argument, complements of verbs or prepositions, or as the head or modifier in a possessive phrase (see §8.1). In addition, nouns may also function as the head of an NP which has an adverbial function (e.g. temporal nouns - see §8.2.5) and which modifies entire clauses.

Verb forms consist of a lexical root and various morphological elements. All lexical roots require further morphology before they can function as verbs at a clausal level. Certain verbal lexical roots (Type II/STATIVE verbal roots - see §6.3) which denote states or qualities may also function as adjectives when they occur without additional verbal morphology.

Verbs typically refer to events, processes, actions or states (these states may be physical, emotional, or psychological), e.g.:

lutam ‘shoot’, *tingkas* ‘run, escape’, *susui* ‘speak, talk’, *irang* ‘ashamed, embarrassed’, *senso* ‘bored’, *upi* ‘angry’

FUNCTION: Verbal roots which are marked with various additional morphological elements function as both predicates and arguments in almost all clause types (see §4.4 and §6.3).

Adjectives come from the same class of the lexical roots which form STATIVE verbs (see §6.3.1). However, adjectives are differentiated both morphologically, and in terms of syntactic function. Adjectives denote features such as size, colour, age, value, physical appearance, and human character.

Examples of lexical roots which function as adjectives are:

weru ‘new, fresh’, *tu’a* ‘old’, *emis* ‘sweet’, *rebur* ‘chubby’, *mèa* ‘red’ *wangun* ‘good, fine’, *lewo* ‘bad, nasty’

FUNCTION: Without further affixation adjectival lexical roots act as modifiers to nouns in NPs (see §6.4 and §8.1), or as adjectival predicates in equational clauses (see §4.4.2).

When adjectival roots host verbal affixation they exclusively operate as STATIVE verbs. In this function they are the heads of predicates within verbal clauses (see §4.5.1).

Adverbs encode various information relating to everything from degrees of frequency, certainty, intensity, through to evidentiality and temporality.

Common examples are:

kasi ‘again, more’ *kasa* ‘very’ *sumoup* ‘frequently’ *tarè* ‘recently, just now’

todong ‘directly, immediately’, *mèmang* ‘truly, absolutely’

FUNCTION: The function that all adverbs have in common is that of modification.

Furthermore, all items in this lexical category can never function as predicates.

Depending on which particular adverb is used, the element modified may be a lexical root, a phrase, a predicate, or an entire clause. See §6.5 and §10.3.2.

b. Function words

Prepositions represent the smallest class of function words. These words display a three way deictic division based on distance from the speaker at the time of utterance. The four prepositions are:

wia (proximate) *witu* (medial) *waki* (distal) *mana* (medial/distal)

FUNCTION: As heads of PPs which generally function as markers of locative and spatial relations, or as markers of the source and origin of certain entities. In this function they take NPs as complements. These NPs express semantic roles such as LOCATION, SOURCE, GOAL, RECIPIENT, and BENEFICIARY (i.e. dative function). PPs are explained in further detail in §6.11. These same forms above also occur without NP complements where they function as deictic elements (i.e. deictic adverbs). This function is explained in §6.7.3.

Pronouns are a class of function words with a reasonably large number of lexical items. In terms of morphological form, pronouns may be either independent or bound. Pronouns are further categorised into personal pronouns (which include PIV and NPIV.A clitics) and non-specific referents e.g.:

niaku ‘I’ (1.SG), *kèy*= ‘we’ (1.PL.EX), *sèa* ‘they’ (3.PL), *=na* ‘his/her/he/she
(3.SG.NPIV.A), *=nèa* ‘they/their’, *anu/ano* ‘thingummy, who’s it, what’s it’

FUNCTION: All pronouns have an anaphoric reference. Personal pronouns frequently function as arguments in both verbal and non-verbal clauses (see §8.3). Non-pivot ACTOR (NP_{IV}.A) pronouns function as both possessors of nouns (see §8.3.5) and arguments in verbal clauses (see §4.5.4). Non-specific referents have a number of functions (including pragmatic) within a clause (see §8.3.6).

Demonstratives comprise a small number of independent lexical items. These items are primarily categorised with regards to distance (of the referent from the speaker), and to a lesser extent (in the medial forms) animacy, e.g.:

ye 'i 'this' (PROX) *iti 'i / ni 'tu* that (MED) *iti 'ila* 'that' (DIST)

FUNCTION: Demonstratives may function as either a modifier to the head of an NP, or as a demonstrative pronoun which acts as an argument within a clause. Demonstratives assist in locating a specific participant within a discourse situation. Referents may be anaphoric or cataphoric. See §6.6.

Conjunctions (co-ordinating and subordinating) consist of a number of independent lexical items which link together various syntactic units. Some common conjunctions are:

sa 'if, when', *tu* 'after, then', *ka 'a* 'because' *wo* 'and, then',
ma 'an 'although' *ka 'apa* 'or'

FUNCTION: Conjunctions are used to link syntactic units. Co-ordinating conjunctions link independent units (both phrases and clauses), while subordinating conjunctions link dependent clauses to a (main) independent clause. See §8.1 and §10.2 - §10.3.

Numerals are elements which denote a precise numeral value of whatever entity is being described in discourse. Numerals are a fairly large closed class, and may be simple or complex lexical items, e.g.:

esa 'one' *lima* 'five' *walu* 'eight' *lima-nga-pulu wo ualu* '(five-LNK-ten and eight) 'fifty eight'

FUNCTION: Numerals function primarily as modifiers to heads within NPs (see §6.9). In addition, they may function as predicates in certain non-verbal (i.e. equational) clauses (see §4.4.2).

Quantifiers are independent lexical items which give a non-specific indication of the amount of an entity, or entities, which are being spoken about, e.g.:

waya ‘all, everyone’ *laker* ‘many, much’ *susur* ‘every’

FUNCTION: Quantifiers function as modifiers to the heads of NPs (see §6.8). Quantifiers may sometimes be non-adjacent to the head noun which they modify (i.e. ‘quantifier floating’ see §4.6.2), when this occurs the head noun will always be part of an argument which functions as the syntactic pivot.

Exclamatives / interjections are discourse particles which often do not have any specific lexical meaning, and which frequently occur (in various positions) clause externally. These particles are independent lexical items, e.g.:

o kala! ‘wow’, ‘gosh’ *wèlow* ‘heaven forbid’ *kiok* ‘poor thing’ *matè* ‘dear me’
(lit. ‘die’)

FUNCTION: Exclamatives express attitudinal or emotive information, and are utilised to express the speaker’s opinion (in a positive or negative way) on matters, or their emotional state of mind as regards the current discourse. These elements are extremely common in Tondano discourse, although a number are loan words from the language of wider communication, Manado Malay (see §6.10).

3.3 Voice marking

Voice marking is an integral part of all verbal clauses. Almost all lexical roots may be marked for voice, with the resulting forms then having a number of possible syntactic functions within both verbal and non-verbal clauses.

The following points are a concise outline of the features and functions of the symmetrical voice marking system:

- Voice marking on verbs always indicates the semantic role of a particular argument, and this argument is exclusively the syntactic pivot (PIV) of the clause.
- Unlike many languages, there is not one particular type of clausal argument (i.e. prototypical ACTOR or PATIENT) which is preferred to have the function of pivot in a ‘basic’ verbal clause.

- None of the multiple verb forms with voice marking are considered the ‘basic’ form, i.e. with the other forms derived from it. This system therefore cannot be described as demonstrating an active/passive or antipassive type split.

The four voice marking affixes are outlined in Table 3.1. Together with the primary verbal affixes (see §4.5.1) these attach to lexical roots to form stems (see §5.2.2)

Table 3.1: Voice affixes

Voice marking encoded:	Form:
ACTOR VOICE:	<i><um></i>
PATIENT VOICE:	<i>-en</i>
LOCATIVE VOICE:	<i>-an</i>
CONVEYANCE VOICE:	<i>i-</i> ⁶⁵

With one exception (see the section on CV in §4.5.4) all verbal roots must be marked with an overt voice affix in order to function as the head of a verbal predicate. When verbal clauses contain lexical roots which are only overtly marked with a voice affix (i.e. the primary verbal affixation (see §4.5.1) is zero marked), the clause is limited to expressing irrealis situations. In order to denote realis situations additional verbal morphology is required⁶⁶.

The selection of a particular voice affix in a clause is conditioned by factors such as the semantic role of participants in a clause, as well as things like definiteness, referentiality, and discourse continuity. It is therefore not simply the case that every verbal clause allows speakers to ‘choose’ any one of the four voices⁶⁷. Rather, the way in which voices are selected is closely linked to the discourse properties of the referent which functions as the PIV argument (see §9.2).

There are certain similarities which are shared between clauses marked for PV, LV, and CV, for example all the semantic roles of the PIV arguments they refer to can be subsumed under the macrorole of UNDERGOER. Furthermore, the constituent order and encoding of

⁶⁵ As will be demonstrated in §4.5.2 and throughout this thesis, the CV prefix *i-* has been lost in almost all environments. Despite this, the function it encodes and the instances where it marks lexical roots are still evident.

⁶⁶ This additional morphology comes in the form of the past tense marker *<in>* (and its various allomorphs - see §5.3.2), or one of the three primary verbal affixes -see §4.5.1

⁶⁷ In some descriptions of Philippine-type languages this point is not always made explicitly clear.

the NP_{IV.A} argument is identical in all UV marked clauses (see §4.5.4). Despite this, these three voices are still differentiated from one another (and from the AV) by the specific semantic features of the participant they refer to, e.g.:

- (i) **ACTOR VOICE:** The pivot of the verbal clause expresses the participant which instigates, controls, and performs the action or event denoted by the predicate.
- (ii) **PATIENT VOICE:** The pivot of the verbal clause expresses the participant which is directly affected by the action or event denoted by the predicate.
- (iii) **LOCATIVE VOICE:** The pivot of the verbal clause is the location (in a broad sense), or the participant which is at the location, where the event or action denoted by the predicate is realised. Locative may also mark the place towards which, or from which, the event or action is realised.
- (iv) **CONVEYANCE VOICE:** Also traditionally known as “instrument voice”. The pivot of the verbal clause is the participant which is utilised or conveyed from one place to another for some specific reason.

The following verbal clauses demonstrate the characteristics of the four voices described above. Elicited examples are used so as to show the different voice marking on the same lexical root (with the caveat that these clauses are slightly unnatural sounding):

ACTOR VOICE:

(3) *sioki'ku tumeles raaren*

si= oki' =ku t<um>eles raaren

AN.SG small 1.SG.POSS <AV> buy vegetable

‘My child would buy some⁶⁸ vegetables (i.e. ‘the person buying vegetables would be my child’)

(ELICITED)

⁶⁸ The use of ‘some’ (or ‘a’ for singular) in the glossing here indicates the indefinite nature of this particular NP. Levels of definiteness differ depending upon the GR of the NP and voice marking on the verb (see §9.2.1). Generally speaking, non-pivot arguments in AV marked clauses are always indefinite. The glossing of this feature demonstrated in (3) is maintained throughout this thesis.

PATIENT VOICE:

(4) *raaren teles nioki'ku*

raaren teles -en ni= oki' =ku

vegetable buy PV AN.SG.NPIV.A small 1.SG.POSS

'The vegetables would be bought by my child ('the vegetables are the thing bought by my child')

(ELICITED)

LOCATIVE VOICE:

(5) *empasar telesan nioki'ku*

N= pasar teles -an ni= oki' =ku

INAN market buy LV AN.SG.NPIV.A small 1.SG.POSS

'At the market my child would buy s.t. (i.e. some vegetables)⁶⁹ (the market is the buying place of my child)

(ELICITED)

CONVEYANCE VOICE:

(6) *eloit iteles nioki'ku*

N= loit i- teles ni= oki' =ku

INAN money CV buy AN.SG.NPIV.A small 1.SG.POSS

'With the money my child would buy (some vegetables)' ('the money is the buying thing of my child')

(ELICITED)

The somewhat awkward glossing in (3) - (6) gives an idea of the difference in clause structure between a symmetrical voice language, and an asymmetrical (i.e. syntactically accusative) language like English. In order to present a standardised glossing practice, in almost all subsequent English translations⁷⁰ the difference between AV and UV in Tondano will not be demonstrated using the English passive, as was done in example (4). While it is tempting to use the passive in translations of UV examples, the major

⁶⁹ The question could be asked if example (5) means 'The market would be bought by the child'? It is true that PIV arguments in LV marked verbal clauses may have the same semantic roles as those in PV marked clauses (see §4.5.4). However, in the case that the PIV expresses an argument with a prototypical THEME or PATIENT role, PV will more often than not be used. For this reason PV marked clauses are more numerous than those with LV marking.

⁷⁰ The two minor exceptions are content questions (see §7.1.2) and a small number of causative constructions (see §9.4.1).

morphosyntactic differences between UV marking and standard passives make this an unsuitable choice for glossing.

These examples demonstrate that, unlike syntactically Accusative or Ergative languages, there is an obvious lack of restriction in the semantic role of the syntactic pivot in all of the basic (underived) clauses in (3) - (6). That is, the syntactic pivot is not restricted to expressing a prototypical ACTOR or PATIENT, and instead the pivot may refer to a participant with a more peripheral semantic role. As a result of this, discerning certain aspects of the grammar (such as morphosyntactic transitivity or the core status of certain non-pivot arguments) is somewhat more problematic than in asymmetrical languages. Essentially, it can be stated that the voice marking system has a significant effect on the overall structure of the language.

3.4 Tense marking

Verbal clauses are always in one of two absolute tenses; non-past and past (see §9.3.1). Non-past tense is unmarked, while past tense is marked morphologically with the infix *<in>* (or one of a number of allomorphs - see §5.3.2).

The Tondano past tense is an absolute tense which expresses that the action, process, or state denoted by the verb begins at some stage prior to the moment of utterance. The examples in (7) - (10) display past tense marking in clauses marked for each of the four different voices:

ACTOR VOICE past tense:

(7) *kita kimawèng te'un enam pulu enam*

kita k<im>awèng te'un enam pulu enam

1.PL.IN <AV.PST> marry year six ten six

'We married in 1966'

(TDN_14_HK_DT_00:00:18)

PATIENT VOICE past tense:

(8) *taan nièdomutèla waya empèra'*

ta'an <in> èdo -Ø⁷¹ =mu =itè =la waya N= pèra'
but <PST> take PV 2.SG.NPIV.A LIM DIR.PROX all INAN roe
'But you just took all the fish eggs'
(TDN_28_00:00:58)

LOCATIVE VOICE past tense:

(9) *daripada kusunusuianèamou*

daripada ku= s<in>usui -an =nèa =mow
rather 1.SG.PIV <PST> speak LV 3.PL.NPIV.A CPL
'Rather, they had spoken to me'
(TDN_21_00:02:44)

CONVEYANCE VOICE past tense:

(10) *nèi tele'u ngkartu penduduk*

nèy tele'u N= kartu penduduk
CV.PST remain INAN card inhabitant
'(I) left the identity card (in the fields)'
(TDN_21_00:04:25)

The examples (1) - (10) all contain verbal clauses which display the encoding of distinctions relating to both voice and tense values. A further point related to tense marking is that, as well as locating the situation in time relative to the utterance, the addition of the infix <in> to the verbal predicates in (7) - (10) gives a realis reading to the event or action. This contrasts to the irrealis reading of examples (3) - (6).

3.5 Aspect marking

There are two aspects distinguished in Tondano, perfective and imperfective, with imperfective aspect further categorised as either habitual or iterative (see §9.3.2). Perfective aspect is unmarked, while imperfective aspect is morphologically marked via CVCV- reduplication (see §2.6.6). Verbs which are unmarked (and perfective) have the

⁷¹ Note that the PATIENT voice affix *-en* does not co-occur together with the past tense infix <in>. This appears to be a very well attested phenomenon within Philippine-type languages (Kroeger 1993:16). More information on this is provided in §5.3.2.

reading of a situation which is viewed as a whole, without any reference to different stages or continuity within the action or event.

An example of a verbal predicate which is morphologically unmarked for aspect, and is therefore perfective, is as follows:

ACTOR VOICE perfective:

(11) *sèmekantar*

sè= ma- kantar

3.PL.PIV AV.DYN sing

‘They sing’

(TDN_31_00:09:57)

The verb in (11) *kantar* ‘sing’ hosts no reduplicative morphology. The interpretation of this action or event is that it expresses a single, whole, and complete situation, with no reference to internal stages, continuity, or to any other action or event.

In contrast, verbs marked with imperfective aspect express the internal progression of the action or event. This is marked with the reduplication of the first two syllables of the lexical root⁷², such as in (12):

ACTOR VOICE imperfective:

(12) *komengantangantar rè’è*

ko= meN- CVCV- kantar rè’èn

2.SG.PIV AV.DYN RDP sing PART

‘You are singing (while picking fruit) then’

(TDN_11_AW_HL_00:10:26)

In (12) the *CVCV-* reduplication on the same verbal root marks the fact that this action is in imperfective (iterative) aspect. The action or event is therefore viewed as an ongoing process which occurs with reference to some another situation, in this instance that of picking fruit. In addition, imperfective aspect expresses that the act of singing occurs repeatedly.

Examples (13) - (14) demonstrate the same perfective and imperfective distinction in verbal clauses which are marked for one of the UVs (i.e. PV):

⁷² In (12) the forms of the lexical root and the verbal affix are both affected by the process of nasal substitution - see §2.6.2.

PATIENT VOICE perfective:

(13) *kaa pasiwonèa balè kaapa sabua*

ka'a pa- siwo -en =nèa walè ka'apa sabua
because DYN make PV 3.PL.NPIV.A house or hut

‘Because they make the houses or the huts’

(TDN_31_KK_00:00:55)

PATIENT VOICE imperfective:

(14) *o pmutamutaren nasi jaha*

wo peN- CVCV- putar -en nasi jaha
then DYN RDP roll PV rice glutinous

‘And (they) are turning the glutinous rice (repeatedly, as the fire below cooks it)’

(TDN_11_AW_HL_00:02:00)

3.6 Mood distinctions

Tondano distinguishes two moods, realis and irrealis. Unsurprisingly, there is a certain amount of overlap between mood marking, and the tense and aspect marking systems. Namely, verbal predicates which contain verbs marked as past tense are also considered realis by default (as the situation or event is considered to have already happened). In contrast, verbs which are overtly marked solely with one of the basic voice affixes (e.g. (3) - (6)) are irrealis by default.

Disregarding any ‘default’ mood marking, the distinction between realis and irrealis moods is encoded via the same distinction utilised to encode tense and aspect. That is, realis mood is unmarked, while irrealis mood is marked morphologically (via another reduplication process). This morphological marking consists of *Ce-* reduplication of the first syllable of the lexical root (see §2.6.6) which functions as the head of the verbal predicate.

Verbal clauses which have predicates marked for irrealis mood denote actions or events which are deemed by the speaker to be non-factual in some way. As such, irrealis marking is often used to encode imperatives, commands, future or conditional actions, as well as possibilities or desires. This contrasts with realis mood which denotes a situation which the speaker believes is happening, or has happened. Because stems which are only overtly marked with voice affixation are already considered irrealis, they do not host this

reduplication process. Only complex stems such as those in (11) - (14) can display *Ce*-reduplication.

The distinction between realis and irrealis mood is demonstrated by the following two AVmarked clauses:

ACTOR VOICE realis:

(15) *sèmasèro tou waki luar*

sè= ma- sèro tow waki luar
3.PL.PIV AV.DYN search person from.DIST outside

‘They search for people from outside (the village)’

(TDN_12_00:04:42)

ACTOR VOICE irrealis:

(16) *sisoo rèèn mesesèrola*

si= so’o rè’èn ma- Ce- sèro =mow =la
3.SG.PIV don’t.want PART AV.DYN IRR search CPL DIR.PROX

sè= walina

AN.PL other

‘He doesn’t want to go searching for others (women) then’

(TDN_28_00:03:06)

The lexical root in (15) *sèro* ‘search’ expresses a situation which is judged to hold true, and which occurs at some time in the present (i.e. non-past). Consequently, the verb does not host any specific mood marking morphology and the clause is in realis mood. In (16) the same verbal root is marked with *Ce*-reduplication, and the resulting form is *se-sèro* (IRR- search). The action or event denoted by this verbal predicate represents a hypothetical situation, i.e. it is neither happening nor has it happened. This clause is therefore in irrealis mood.

The realis and irrealis distinction on verbs marked with one of the UVs (LV) is shown in (17) - (18):

LOCATIVE VOICE **realis**:

(17) *paawesanèla lansuna*

pa- awes -an =la lansuna

DYN add LV DIR.PROX onion

‘(He) adds the onion’

(TDN_32_KK_00:04:22)

LOCATIVE VOICE **irrealis**:

(18) *pelelemèan dagingnèa*

pa- Ce- lemè’ -an daging =nèa

DYN IRR soft LV meat 3.PL.POSS

‘(They) will tenderise their meat (on the chopping board)’

(TDN_31_00:03:19)

In (17) the action of adding onion to a recipe is judged to be an actual, happening event, and as such the clause is in realis mood. Alternatively, in (18) the action of tenderising meat has not happened yet, although it is considered likely to happen soon. This clause is therefore marked morphologically as irrealis.

The paradigm for realis and irrealis complex stems⁷³ is outlined in Table 3.2 utilising the lexical root *sèro*⁷⁴.

Table 3.2: Verbal stems displaying mood distinctions

Lexical root *sèro* ‘search’

Mood:	AV:	PV:	LV:	CV:
Realis	ma- <i>sèro</i>	pa- <i>sèro</i> -en	pa- <i>sèro</i> -an	(i-)pa- <i>sèro</i>
Irrealis	me- se- <i>sèro</i>	pe- se- <i>sèro</i> -en	pe- se- <i>sèro</i> -an	(i-)pe- se- <i>sèro</i>

⁷³ The affixes *ma-*, *me-*, *pa-*, and *pe-* are all related forms of the DYNAMIC primary verbal affix. See §4.5.1 for a full description of all primary verbal affixes.

⁷⁴ The complex stems in Table 3.2 do not include all the possible morphological markers of TAM. Complex stems which display all these possibilities are found in Table 9.2 in §9.3.

3.7 Basic constituent order

The constituent order for all three of the basic clause types is explained in further detail in §4.4 and §4.5. When discussing constituent ordering in clauses, the relevant constituents are the PIV argument and the predicate (i.e. PIV-PRED or PRED-PIV). There are various possibilities for constituent order in verbal clauses, with variation often dependent upon whether a clause is marked for AV or one of the three UVs. In non-verbal clauses the order is less flexible.

The notion of the ‘predicate’ adopted in this work is as follows: In AV marked verbal clauses the predicate is judged to be the morphologically marked verb plus the non-pivot UNDERGOER (NPIV.UN) argument. In UV marked verbal clauses the predicate is the morphologically marked verb plus the non-pivot ACTOR argument (i.e. the NPIV.A). The PIV argument and any oblique arguments are never counted as part of the predicate.

The definition of predicate used here is obviously similar to what is commonly labelled as the ‘verb phrase’ (VP) in traditional grammatical descriptions. However, due to the fact that predicates in Tondano may often lack a verbal head (i.e. are non-verbal), the term ‘verbal predicate’ is preferred⁷⁵. More information on the order and structure of both AV and UV verbal predicates is found in §9.1.

Arguments in clauses are most commonly represented by noun phrases (NPs) and pronominals, although occasionally they may also be expressed with prepositional phrases (PPs). From this point onwards the label of ‘argument’ may refer to NPs, pronominals, or PPs. Arguments may have various GRs and may be oblique or non-oblique (as noted in §3.1).

The following clauses exemplify predicates in AV and PV transitive clauses, and the common constituent occurring within them (predicates are underlined):

⁷⁵ While it has been claimed that a VP constituent does exist in some Western AN languages (see Himmelmann 2005 and Quick 2008 for discussions), this analysis is not always agreed upon. The problem with analysing all verb plus non-pivot argument constructions as VPs in Tondano is that the non-pivot arguments differ morphosyntactically depending upon the voice marking of the clause. In UV clauses the NPIV.A argument has different features than the non-pivot NPIV.UN argument in an AV clause. These differences relate to things like morphological marking, word order, and definiteness. This particular issue also makes assessing the core/non-core status of these arguments problematic (see also §4.2).

ACTOR VOICE clause:

(19) *kosimadia forat*

ko= s<im>adia forat
2.SG.PIV <AV.PST> prepare supplies

‘You prepared some supplies’

(TDN_10_00:17:32)

PATIENT VOICE clause:

(20) *kaa pasiwonèa balè kaapa sabua*

ka’a pa- siwo -en =nèa balè ka’apa sabua
because DYN make PV 3.PL.NPIV.A house or hut

‘Because they make the houses or the huts’

(TDN_31_KK_00:00:55)

The definition of predicate for non-verbal clauses is slightly different. In an equational clause the predicate may be various syntactic units, including NPs, PPs, or adjectives (see §3.8 and §4.4.2). In existential clauses the predicate exclusively consists of the existential marker *wewèan* ‘there is/are’ (see §3.8 and §4.4.1). Examples of these non-verbal predicates are provided in the next section.

Table 3.3 displays the various constituent order possibilities for all of the Tondano basic clause types.

Table 3.3: Basic clause constituent order

Clause type:		
Verbal:		
AV (Intrans)	PIV - PRED	PRED - PIV
AV (Trans)	PIV - PRED	
UV (Trans)	PIV - PRED ⁷⁶	PRED - PIV
Existential:	PRED- PIV	
Equational:	PIV - PRED	PRED - PIV

⁷⁶ In the event that the PIV argument is expressed with a proclitic, the order in an UV clause must be PIV - PRED - see §4.5.4.

To summarise briefly the information in Table 3.3: In AV intransitive clauses the PIV argument frequently precedes the predicate, but may also follow it. The particular order which occurs may depend upon how the PIV is expressed⁷⁷. In AV transitive clauses the PIV argument has a fixed pre-predicate position. In UV transitive clauses the PIV may either precede or follow the predicate, with the choice again somewhat dependent upon the lexical element used to express the PIV. Existential clauses exclusively have a PRED - PIV constituent order, while equational clauses may have either PIV-PRED or PRED-PIV order. In addition, there is one situation where equational clauses must have a PRED-PIV order, with this being when a question word functions as the PRED (see §4.4.2).

3.8 Basic clause types

The three basic Tondano clause types are: 1) verbal, 2) equational, and 3) existential. Each of the three categories is defined by its function, and by the features of its predicate. These categories are now explained separately with relevant examples.

Verbal clauses minimally consist of a lexical root which is commonly marked with one of the primary verbal affixes (see §4.5.1), together with one of the four voice affixes. This morphologically marked verbal stem is the head of the verbal predicate. The verbal predicate describes an action, event, process, or a physical or psychological state. While more than two arguments can appear in verbal clauses, any clause with more than two arguments will always contain at least one oblique argument. Thus, the maximum valency value for any verbal clause is bivalent.

Verbal clauses are further categorised as either intransitive or transitive. The definitions of intransitive and transitive used here are explained fully in §4.2. As a broad characterisation, intransitive clauses are those in which the only non-oblique argument is the PIV, with any further arguments being OBL. Transitive clauses are those which are comprised of a PIV argument plus an NPIV.UN or NPIV.A argument, with any arguments in addition to these being OBL.

In the example below we see an intransitive clause which exclusively contains one non-oblique argument (the participant may be overt or simply implied) which is the PIV:

⁷⁷ E.g. personal pronouns which are proclitics exclusively have a PIV function - see §8.3.3.

ACTOR voice marked intransitive clause:

(21) *kumakèlang wia engunung pasar*

ku= ma- kèlang wia N= gunung pasar
1.SG.PIV AV.DYN walk to.PROX INAN mountain sand

‘I go to the sandy mountain

(TDN_07_00:01:13)

In (21) the PIV argument is *ku=* ‘I’. The other participant which is present is an oblique argument expressed with the PP *wia en=gunung pasar* ‘to the sandy mountain’. This PP has a dative function and takes an NP complement with the semantic role of GOAL.

Verbs in intransitive clauses are morphologically marked as either DYNAMIC (as in (21)) or STATIVE (see §4.5.1 and §4.5.3). The choice of marking depends upon the situation denoted by the verb, and upon the type of semantic role of the referent expressed by the PIV argument (and its level of volition/control).

Transitive clauses are those with a minimum two participants, with two of these participants represented by non-oblique arguments. Prototypically, one argument is an ACTOR and another argument is an UNDERGOER (see §4.2). In these clauses either of these arguments may function as the PIV argument, with these functions closely linked to voice marking. The non-PIV arguments will be either an NPIV.UN argument (in an AV clause) or an NPIV.A argument (in an UV clause).

Transitive clauses therefore commonly describe events or actions where one participant affects another participant in some way (predicates are underlined), e.g.:

ACTOR voice marked transitive clause:

(22) *kosumèrèt lodèi?*

ko= s<um>èrèt lodèy
2.SGPIV <AV> ride boat

‘You would ride a boat?’

(TDN_11_AW_HL_00:04:43)

PATIENT voice marked transitive clause:

(23) *pasiwonèa sopi*

pa- siwo -en =nèa sopi
DYN make PV 3.PL.NPIV.A palm.sugar.brandy
'They make the palm sugar brandy'
(TDN_32_OL_0:01:07)

Transitive clauses may also express situations where one participant perceives another entity, or experiences some mental or emotional state related to it. These clauses contain two arguments which commonly have the roles of EXPERIENCER and STIMULUS, e.g.:

(24) *itu kate'uan niom lèo*

ni'tu ka- te'u -an ni= om Lèo
that.MED STAT know LV AN.SG.NPIV.A uncle PN
'Uncle Leo knows about that (the Minahasan history)'
(TDN_31_00:00:24)

The verbal roots which occur in clauses like (24) obviously describe different situations from those in (22) - (23). This difference is often expressed via the different verbal morphology which verbal roots may host (DYNAMIC, POTENTIVE or STATIVE - see §4.5.1)

Transitive clauses may also contain three participants. Despite this, Tondano lacks true ditransitive clauses, a not uncommon situation in AN languages (Foley 2008:28).

Transitive clauses with more than two participants will always contain an argument which is an oblique PP⁷⁸. The two non-oblique arguments in three participant clauses are those with the roles of a prototypical ACTOR and UNDERGOER. The NP complement within the oblique PP will represent the entity which has a more peripheral semantic role such as LOCATION, GOAL, SOURCE, RECIPIENT, or BENEFICIARY⁷⁹, e.g.:

⁷⁸ See Margetts & Austin (2007) for further information on encoding strategies for three participant events. The situation whereby a verb is subcategorised for only two arguments and additional participants are expressed with obliques or adjuncts is explained in further detail.

⁷⁹ While participants with all of these peripheral roles may function as the PIV in two participant clauses, in three participant clauses they are always the complement within an oblique PP.

ACTOR VOICE three participant transitive clause:

(25) *koumaèdomou bua bua wia enlilik lalan*

kow= ma- èdo =mow CVCV- bua wia
2.PLPIV **AV.DYN** **take** **CPL** **RDP** **fruit** **from.PROX**
N= lilik lalan
INAN **side** **road**

‘You pick up some fruits from the side of the road’

(TDN_07_00:00:56)

Equational clauses are one of the two non-verbal clause types. Equational clauses consist of a predicate (an NP, PP, or a predicate adjective), and a PIV argument which is represented by an NP or a pronominal. The predicate in the clause functions to clarify, classify, or provide some form of additional information about the entity which is expressed by the PIV argument, e.g.:

Equational clause with nominal predicate:

(26) *ngarangku sèfli tulangi*

ngaran =ku Sefli Tulangi
name **1.SG.POSS** **PN** **PN**

‘My name is Sefli Tulangi’

(TDN_12_00:00:47)

Equational clause with adjectival predicate:

(27) *timpa weru, nemis*

timpa’ weru N= emis
palm.sugar.wine **fresh** **INAN** **sweet**

‘The fresh palm sugar wine, is sweet’

(TDN_29_00:20:08)

Existential clauses are the second non-verbal clause type. They are primarily used to describe or assert the existence or presence of something. However, they may also encode a type of possession (see §4.4.1). The existential marker in Tondano is *wewèan* ‘there is/are’. In existential clauses *wewèan* functions as the predicate and is followed by a nominal complement. This complement is an NP (including an NP consisting of a head noun modified by a relative clause) which functions as the PIV argument, e.g.:

(28) *wewèan walè*
wewèan walè
 EXIST house
 ‘There is a house’
 (TDN_31_00:05:31)

(29) *wewèan pos nè=brawijaya*
wewèan pos nè= Brawijaya⁸⁰
 EXIST post AN.PL.POSS PN
 ‘There are the Brawijaya checkpoints’
 (TDN_21_00:00:58)

In examples (28) - (29) the predicate *wewèan* confirms the existence of an entity denoted by the NPs, i.e. *walè* ‘house’ and (the possessive NP) *pos nè=brawijaya* ‘The Brawijaya checkpoints’. Both of these NPs function as the sole (PIV) argument.

⁸⁰ *Brawijaya* is a regiment from the *tentara nasional Indonesia* ‘Indonesian national army’. This is a reference to avoiding army units during the Permesta rebellion - see §1.3.3.

4.0 BASIC CLAUSE STRUCTURE

4.1 Introduction

In addition to basic clause structure, this chapter also examines aspects relating to grammatical relations (GRs), primary verbal morphology, and transitivity.

Firstly, definitions of transitivity and the terminology used for GRs are described in §4.2 and §4.3. The various basic verbal and non-verbal clause types are then each examined. Non-verbal clauses are further categorised as either equational or existential, with each examined in §4.4.1 and §4.4.2. In §4.5 verbal clauses are examined, beginning with a description of the primary verbal morphology which categorises the various situations expressed by all verbal predicates (§4.5.1 - §4.5.2). In §4.5.3 - §4.5.5 a description of the various levels of transitivity in verbal clauses is provided. Within these subsections the basic constituent order of all clause types is explained, as are any changes in clause structure due to variations in voice marking.

In §4.6 the interaction of semantic roles and GRs is examined. In §4.6.1 the mapping between semantic roles and GRs in clauses is discussed, while in §4.6.2 the unique features of the primary GR in any clause, that of the syntactic pivot⁸¹, are detailed. Lastly, in §4.7 topicalisation processes are explained.

4.2 Transitivity

Common cross linguistic definitions of morphosyntactic transitivity generally focus on how many arguments are required for a particular verbal predicate. As such, many analyses traditionally see transitivity as a property of verbs, with only clauses containing a minimum of two overt arguments considered transitive (Kittilä 2011:348-50)⁸².

Alternatively, transitivity may be measured by whether clauses have objects or not (Dryer 2007:250).

However, defining transitivity in Tondano as solely a property of verbs would be misleading. The fact that essentially any lexical root may function as a verb (i.e. as the head of a verbal predicate - see §6.1) means that, in any verbal clause, a verb is not necessarily guaranteed to require a specific number of arguments.

⁸¹ The definition of *pivot* as presented in this thesis follows that as outlined by Foley (2007:389, 2008:42) and Dixon (1979). In these publications the pivot is considered to be the NP around which a large number of a language's syntactic processes revolve. In the case of Tondano this is clearly whichever element is functioning as the PIV argument.

⁸² These two arguments are the syntactic pivot and an additional core argument.

Essentially, there are a number of reasons why more traditional notions of transitivity are not entirely appropriate when applied to Tondano morphosyntax, these are:

- Verbs are not easily categorised as either intransitive or transitive.
- There is no clear dichotomy in transitivity between clauses with different voice marking, i.e. AV vs UV. That is, unlike syntactically Accusative or Ergative languages, the voice marking within a clause does not align with its transitivity. In terms of grammatical structure, an UV marked clause is not derived from an AV marked clause, and it does not contain a demoted ACTOR argument⁸³.

The fact that variation in voice marking does not align with transitivity is demonstrated by the following verbal clauses. The first clause is an UV (PV) marked clause, while the second is an AV marked clause. Both clauses are transitive, e.g.:

(30) *sa koèdonèala*

sa ko= èdo -en =nèa =la
if, when 2.SG.PIV take PV 3.PL.NP.V.A DIR.PROX

‘If they will take you away’

(TDN_07_00:04:40)

(31) *komèdo kotèi nse’ut*

ko= <um> èdo kotèy N= se’ut
2.SG.PIV <AV> take stem INAN banana

‘You would take a banana palm stem’

(TDN_11_AW_HL_00:02:50)

Both (30) and (31) have two arguments, one ACTOR and one UNDERGOER. The difference between them is: in (30) the ACTOR is the non-pivot (NP.V.A) enclitic =nèa ‘they’, while in (31) the ACTOR argument is represented by the PIV proclitic ko= ‘you’. Furthermore, both clauses also have UNDERGOER arguments, i.e. ko=⁸⁴ ‘you’ in (30) and kotèy n=se’ut, ‘banana palm leaf stem’ in (31).

While in fact UV clauses such as (30) are always transitive, AV marked clauses may be either transitive (as in (31)) or intransitive, as displayed by the following clause, e.g.:

⁸³ This second point is relevant in the context of a Philippine-type language where voice marking can be considered to correlate with levels of transitivity, e.g. the Ergative vs Symmetrical voice analysis, see Ross (2002:24) for a succinct explanation.

⁸⁴ These two examples demonstrate that personal proclitics such as ko= (2.SG) exclusively have the function of PIV in verbal clauses. See also §8.3.3.

(32) *sa sia mewarèngi*

sa sia ma-⁸⁵ warèng =mi
if, when 3.SG AV.DYN return.home DIR.DIST
 ‘If she returns home (to here - from Watulaney)’
 (TDN_12_00:07:58)

As neither the choice of verb nor the choice of voice marking specifically determine transitivity, a definition of transitivity as being related to the number (and type) of arguments within a clause is more appropriate here. The definition of transitivity used here relates to the presence of arguments which have particular GRs⁸⁶ (as explained in further detail in the following section §4.3) in any verbal clause. Any clause which has an argument with the GR of PIV, and no arguments which are NPIV.UN or NPIV.A, is intransitive. Clauses which contain a PIV argument in combination with a NPIV.UN or NPIV.A argument are transitive. The presence of an OBL argument has no effect on the level of transitivity. In contrast, the presence or absence of the non-oblique PIV, NPIV.UN, and NPIV.A arguments will always have an effect on transitivity levels.

The terms ‘oblique’ and ‘non-oblique’ are used throughout this work in preference to ‘core’ and ‘non-core’. Describing both NPIV.UN and NPIV.A arguments as unambiguously ‘core’ is not entirely appropriate. This is due to the fact that the non-pivot UNDERGOER (NPIV.UN) in an AV clause and the non-pivot ACTOR(NPIV.A) in an UV clause have different features as regards: morphological marking, definiteness, and distribution (c.f. also f.n. 68).

As expected, the semantic roles of participants represented by the various GRs vary depending upon the semantics of the verb. The labels of ‘ACTOR’ and ‘UNDERGOER’ (as per Foley & Van Valin 1984:29) are utilised here to refer to both the voice marking orientation of a clause, and to semantic macroroles of participants. The term UNDERGOER subsumes a number of non-ACTOR semantic roles, and these may be specified with labels such as PATIENT, GOAL, THEME, LOCATION, EXPERIENCER, STIMULUS, RECIPIENT, BENEFICIARY, SOURCE, or INSTRUMENT.

⁸⁵ The form *ma-* is a conflation of the AV affix <*um*> and the primary verbal affix (DYNAMIC) *pa-*. See §5.3 for further descriptions of prefixes, and §4.5.1 for information about primary verbal affixes such as *pa-*.

⁸⁶ For reasons explained in §4.3, the labels of ‘subject’ and ‘object’ are not utilised.

4.3 Grammatical relations (GRs)

The use of terms such as S, A, and O (in the sense of Dixon 1979: 61) for GRs is not considered suitable here⁸⁷. This is because their use is connected to the presence of an Accusative or Ergative case marking system (*ibid*:59, 61). These types of systems, and their resulting passive and antipassive derivations, are not present in Tondano. The use of S, A, and O is therefore avoided⁸⁸.

On a related note, the analysis of GRs in Philippine-type languages can be controversial, with much debate over whether “Subjects” and “(direct) Objects” (in the common cross linguistic sense) exist as surface GRs in these languages (Starosta and Pawley 1979: 109)⁸⁹. The use of these terms is also avoided here, as it would be misleading unless extensive evidence was provided to substantiate their use. Instead, the terminology used here defines both the syntactic function and, to a lesser extent, the semantic role, of different constituents within clauses. The following terms are used to describe GRs⁹⁰.

These labels are defined as follows:

- (i) *Pivot* (PIV) is applied to the argument in a clause which has the function of syntactic pivot (as per Dixon 1979; Foley 2007, 2008). This is the one particular argument which has special syntactic characteristics in comparison with all other arguments (see §4.6.2). The PIV argument may or may not be specifically marked morphologically (see §8.3).
- (ii) *Non-pivot UNDERGOER* (NPIV.UN) is applied to the non-pivot, non-oblique argument (which always has an UNDERGOER role) in an AV marked verbal transitive clause.
- (iii) *Non-pivot ACTOR* (NPIV.A) is applied to the non-pivot, non-oblique argument (which always has an ACTOR role)⁹¹ in an UV marked verbal transitive clause.

⁸⁷ Where S = intransitive subject, A = transitive subject and O = transitive object.

⁸⁸ The terms *Nominative*, *Accusative*, *Genitive*, and *Dative* have also been used to describe GRs in some contemporary studies of Philippine-type languages such as Tagalog (e.g. Kroeger 1993 and Kaufman 2009a, 2009b). These terms have been avoided here due to their more common historical use to describe morphological markers which encode grammatical case.

⁸⁹ This controversial topic has previously been debated for Tagalog in studies as early as Bloomfield (1917) and Blake (1925), and also in more contemporary works by Schachter (1976, 1994), and Kroeger (1993).

⁹⁰ These labels apply to both DYNAMIC and STATIVE marked verbal clauses, although the semantic roles of various clausal arguments differ between the two types. Instead of arguments with the macroroles of ACTOR and UNDERGOER, STATIVE marked verbal clauses contain arguments with the roles of EXPERIENCER and STIMULUS (see §4.5.1 - §4.5.4). However, the patterning of clausal arguments is the same in both cases, and as such the single set of labels in (i) - (iv) is sufficient.

⁹¹ There is one exception to this rule. When verbal clauses are marked as STATIVE the NPIV.A argument will be an EXPERIENCER and not an ACTOR. However, in all cases the NPIV.A argument has the highest semantic role in a non-AV clause, and the same glossing is used in all instances - see §4.5.1.

This argument is always specifically marked morphologically with either phrase markers (see §8.4.2) or enclitics (see §8.3.5)⁹².

- (iv) *Oblique* (OBL) is applied to the non-pivot oblique argument in a clause. These OBL arguments are prepositional phrases (with any of the four prepositions as a head) and always contain an NP complement expressing participants with semantic roles such as GOAL, BENEFICIARY, RECIPIENT, LOCATION, and occasionally, INSTRUMENT.

The various strategies used for encoding these GRs in all verbal clause types are summarised in Table 4.1⁹³.

Table 4.1 Encoding of GRs in verbal clauses

GR:	Clause type:	Encoding strategy:
PIV	ACTOR (INTRANS.)	1. Argument type. No NPIV.UN or NPIV.A. 2. Personal pronoun type (proclitic or free form)
PIV	ACTOR (TRANS.)	1. Word order (pre-verbal) 2. Pronoun type (proclitic or free form)
PIV	UNDERGOER (TRANS.)	1. Personal pronoun type (proclitic) 2. Word order (pre-verbal or following NPIV.A)
NPIV.UN	ACTOR (TRANS.)	1. Word order (post-verbal) 2. Pronoun type (exclusively free form)
NPIV.A	UNDERGOER (TRANS.)	1. Word order (post-verbal - directly after verbal stem) 2. Pronoun type (enclitic) or NPIV.A phrase marker
OBL	ACTOR (TRANS. and INTRANS.)	1. Word order (post-predicate or fronted) 2. Phrase type (PP) 3. Clausal function (oblique)
OBL	UNDERGOER (TRANS.)	1. Word order (post-verbal or fronted) 2. Phrase type (PP) 3. Clausal function (oblique)

⁹² In addition, at a phrasal level NPIV.A marking (both enclitics and phrase markers) has the function of expressing possessors within NPs. When used in this function these forms are labelled as POSS (see §8.3.5 and §8.4.2).

⁹³ These features are in addition to the voice marking on verbs which indicates the semantic role of the PIV argument.

4.4 Non-verbal clauses

Non-verbal clauses are further categorised as either existential or equational. Both of these clause types are characterised by their different functions. Existential clauses are examined first in §4.4.1, followed by equational clauses in §4.4.2.

4.4.1 Existential clauses

Existential clauses denote the existence or presence of a particular entity in discourse. In terms of function, the existential clause is used to introduce new or additional participants (with varying semantic roles) into discourse, or to express the presence of someone or something.

Existential clauses consist of a single argument and a predicate. The constituent order in existential clauses is more rigid than that seen in equational or verbal clauses. The constituent order is exclusively as follows:

Figure 4.1: Structure of existential clauses

PRED (EXIST marker) PIV (NP/PRO)

The basic constituent order is: a predicate followed by a nominal complement which functions as the PIV argument. The existential marker *wewèan* (commonly shortened to *wèan*) functions as the predicate in all existential clauses, while the PIV argument is expressed with an NP or a pronominal (predicates underlined), e.g.:

(33) *wèan lepo'*

wewèan lepo'

EXIST fields

‘There are fields’

(TDN_31_00:05:24)

(34) *wèanoula kayu manis*

wewèan =mow =la kayu manis

EXIST CPL DIR.PROX wood sweet

‘There is already cinnamon’

(TDN_03_00:01:20)

(35) *wewèan siguru niokiku*

wewèan si= guru ni= oki' =ku
EXIST AN.SG teacher AN.SG.POSS small 1.SG.POSS

‘There is the teacher of my child / there is my child’s teacher’

(TDN_12_00:06:32)

The clauses in (33) - (35) demonstrate how *wewèan* is used to denote the person or thing whose existence is being discussed or asserted.

In addition to the NPs such as those in (33) - (35), the PIV argument of an existential clause may also be a headless relative clause (see §10.3.1). These relative clauses always have a specific referent, and despite being omitted, the noun head which these relative clauses modify is always discernible through context, e.g.:

(36) *wewèan sèmepa'ayang kantor*

wewèan sè= ma- pa'ayang kantor
EXIST 3.PL.REL AV.DYN work office

‘There are those who work in offices (i.e. ‘office workers’)

(TDN_12_00:01:37)

(37) *bewèan enpaèdoan entimpa'*

wewèan N= pa- èdo -an N= timpa'
EXIST 3.SG.REL DYN take LV INAN palm.sugar.sap

‘There is the palm sugar sap container (i.e. ‘place from which palm sugar sap is taken’)

(TDN_26_0:00:34)

(38) *wèan, uh tinamen walina?*

wewèan uh t<in>anem -Ø walina
EXIST HES <PST> cultivate PV other

‘There are, uhm, other crops (i.e. ‘things which are cultivated by s.o.)?’

(TDN_29_00:04:38)

In addition to the different forms of the PIV NPs, the type of entity described by existential clauses also varies. In examples (36) - (38) the PIV argument expresses either an inanimate object, or animate, human entities. In addition to more concrete entities such as these, *wewèan* may express the existence of abstract concepts, e.g.:

(39) *jadi wèan pengidopan*

jadi wewèan peN- idop -an
so **EXIST** **DYN** life LV
‘So, there is the subsistence (i.e. living)’
(TDN_31_00:05:19)

The existential predicate *wewèan* is restricted in the amount of additional morphology which it may host. The only two bound elements which modify it are the frequently occurring enclitics *=mow* and *=pè’*, which can encode (amongst other things) information relating to completeness or degrees of certainty (see §5.6), e.g.:

(40) *wèanou sèpuyun*

wewèan =mow sè= puyun
EXIST **CPL** **AN.PL** grandchild
‘There are grandchildren’
(TDN_14_HK_DT_00:07:08)

(41) *wewèané’ parou’mi witu nuka*

wewèan =pè’ i- pa- row’ =mi witu
EXIST **INCPL** **CV** **DYN** far **DIR.DIST** from.MED
N= uka’
INAN coconut.shell
‘There’s still the dregs (lit. ‘the thing that is removed’) from the coconut shell’
(TDN_26_00:09:18)

The function of clitics such as *=mow* (CPL) in (40) and *=pè’* (INCPL) in (41) is the same as some of their functions in verbal clauses. *=mow* indicates a sense of certainty about the situation denoted by the predicate, while *=pè’* expresses a state of affairs which is not yet complete.⁹⁴

In addition to the clauses exemplified by (33) - (41), there is also a sub-category of existential clauses which sees *wewèan* function as a marker of possession (see also §8.3.5 and §8.4.2. for the more common methods of marking possession), for example:

⁹⁴ Both *=mow* and *=pè’* also have additional functions – see §5.6.1 and §5.6.2

(42) *niaku kasi wewèanè manuang*

niaku kasi wewèan =pè' manuang
1.SG again EXIST INCPL parents.in.law
 'I still have in laws'
 (TDN_12_00:11:05)

(43) *sèa wewèan pepa'ayangen*

sèa wewèan Ce- pa'ayang -en
3.PL EXIST NR work PV
 'They have work'
 (TDN_29_00:07:16)

In both (42) and (43) the pronominal arguments *niaku* 'I' and *sèa* 'they' occur clause initially and reference the entity which is the possessor, while the NPs *manuang* 'in laws' and *pe-pa'ayang-en* (NR - work - PV) 'job' which follow *wewèan* express the possessed entity.

The existential clause constructions exemplified by (43) - (44) present somewhat of a problem for analysis. The presence of two arguments could possibly lead to a situation whereby these clauses are analysed as verbal. However, apart from containing two arguments these clauses have none of the morphosyntactic features of Tondano verbal clauses which are described in §4.5. And if these clauses are non-verbal, how then can the presence of two arguments explained?

One analysis for this type of construction labels the post-*wewèan* argument as the PIV, and the pre-*wewèan* argument as a clause external topic, despite the fact that any pauses or changes in prosody are minimal. This analysis mirrors that used for other AN languages such as Balantak (van den Berg & Busenitz 2013:134)⁹⁵, Kimaragarang (Kroeger 2005b: 409), and the Oceanic language Vera'a (Schnell 2011). In this analysis the existential clause in (43) above has a reading of something like 'As for them, there is work' = 'They have a job'.

This analysis initially works well for Tondano, especially as there is syntactic evidence that the NPs occurring post predicate in (42) - (43) are the PIV arguments. As will be explained in §4.6.2 and §9.3.1, only PIV arguments have the relativised function within a

⁹⁵ A WMP language spoken in Central/Eastern Sulawesi. While not a Philippine-type language, Balantak has a number of structural similarities including the symmetrical voice system.

relative clause, and only the head of a PIV argument can be relativised. In the following example the NP which follows *wewèan* contains the head of a relative clause, and therefore this noun must also be the head of the PIV argument of the existential clause⁹⁶:

(44) *kita wewèan entampa ni janji nituhan yesus wia nikita*

kita	wewèan	[N=	tampa	ini	[janji ⁹⁷	ni=
1.PL.IN	EXIST	INAN	place	this.PROX	promise	AN.SG.NPIV.A
Tuhan	Yesus	wia	nikita]]			
PN	PN	to.PROX	1.PL.IN			

‘We have this place (on earth) which is promised by Lord Jesus to us’

(TDN_07_00:15:53)

In (44) the noun *tampa* ‘place’ is the head noun which is modified by the relative clause (*janji ni=tuhan yesus wia nikita* ‘promised to us by Lord Jesus’), and is therefore the head of the complex NP which functions as the PIV argument of the existential clause.

While the analysis of a co-occurrence of topic plus PIV works well initially, there is a major problem with labelling the pre-*wewèan* argument as a clause external topic. This problem is observed if any of the personal pronominal proclitics occur attached to *wewèan*, e.g.:

(45) *sèwèan loit*

sè=	wewèan	loit
3.PL.PIV	EXIST	money

‘They have the money’

(TDN_12_00:13:15)

An obvious problem here lies with labelling a proclitic as a clause external topic. The fact that this element is phonologically attached to the predicate means this analysis is entirely inappropriate. An additional problem is that these personal proclitics exclusively express the PIV argument of a clause (see §8.3.3)⁹⁸. The position that the pre-*wewèan* argument is a clause external topic is therefore indefensible.

⁹⁶ This head is therefore interpreted as both the head of the PIV argument of the main existential clause, and the PIV argument of the modifying relative clause - see §4.6.2.

⁹⁷ This verb is a loanword from standard Indonesian. These loanwords can sometimes appear as verbs without voice marking, as is the case here.

⁹⁸ The independent pronominals in (42) - (44) also commonly express the PIV argument of a clause. However, unlike the bound forms they are not restricted to this function - see §8.3.2).

Considering that there is clear morphosyntactic evidence that both arguments in clauses such as (42) - (45) are the PIV, an analysis must be considered in which this type of existential clause represents a construction with double pivot marking. This type of construction is not as uncommon as might be expected, in fact it is well attested in a number of East and Southeast Asian languages, perhaps most prominently in Korean and Japanese where it is labelled as the ‘double subject’ or ‘double Nominative’ construction (see Shibatani 2001; Kuno & Johnson 2005; Wunderlich 2014 for analyses of this construction in Japanese). In the absence of any other suitable hypotheses it is the double pivot analysis which is used here.

4.4.2 Equational clauses

The second non-verbal clause type is the equational clause. As with existential clauses, equational clauses consist of a predicate and a single argument. Often both the predicate and the PIV are NPs. The other elements which may function as predicates are pronouns, adjectives, and PPs.

Predicates in equational clauses have the function of clarifying the identity of the PIV argument, or providing additional information regarding it (e.g. classification)⁹⁹. These clauses function in the same way as the subject plus subject complement construction commonly seen in English, where copula verbs such as ‘to be’ or ‘to become’ are used. There are no copula verbs in Tondano, and equational clauses display a structure whereby the PIV argument and the predicate are simply juxtaposed.

The most common basic constituent order in an equational clause is PIV - PRED, and can be represented as follows:

Figure 4.2: Structure of equational clauses

PIV (NP/PRO) PRED (NP/PRO, adjective, PP)

Commonly, equational clauses consist of two juxtaposed NPs (excluding any clause external adverbial modifiers - see §6.5) of varying complexity. The following examples display the common PIV - PRED constituent order (predicates underlined), e.g.:

⁹⁹ This particular definition of an equational clause possibly differs somewhat from the standard terminology. The notion of the equational clause as it is used here follows that of Himmelmann (2005:139-40), and what are termed ‘equative’ clauses in van den Berg and Businitz (2013:134-6).

(46) *niaku oki' ka'epat*

niaku oki' ka- epat

1.SG small ORD four

'I am the fourth child'

(TDN_12_00:0:25)

(47) *siopo kangkasi papa nilumimu'ut?*

si= Opo¹⁰⁰ kangkasi papa ni= Lumimu'ut

AN.SG elder also father AN.SG.POSS PN

'The elder (God) is also the father of Lumimu'ut?'

(TDN_31_00:11:49)

(48) *jadi silumimu'ut ku'a iputri niraja iti'i*

jadi si= Lumimu'ut ku'a si= putri ni= raja iti'i

so AN.SG PN PART AN.SG daughter AN.SG.POSS king that.MED

'So, Lumimu'ut then, is the daughter of that king'

(TDN_31_00:11:54)

Example (46) has the pronominal *niaku* 'I' as the PIV argument, while the NP *oki' ka-epat* (child ORD - four) 'fourth child' is the predicate. The PIV argument in (47) is the NP *si=opo* 'the elder', and the NP (possessive phrase) *papa ni=lumimu'ut* (father AN.SG.POSS= Lumimu'ut) 'Lumimu'ut's father' is the predicate. Lastly, in (48) the NP *si=lumimu'ut* (AN.SG=PN) is the PIV argument, and the predicate is the NP *si=putri ni=raja iti'i* (AN.SG= daughter AN.SG.POSS=king that) 'the daughter of that king'. In all three examples the predicate either identifies the PIV argument or provides more information about it.

There is a certain amount of variation in the types of NPs which function as the PIV argument in equational clauses. They may be expressed with bound or independent pronominals denoting animate and human participants, such as those in (46) above and (54) - (56) below. Alternatively, they may be expressed with NPs which contain various types of lexical roots as heads, and which denote non-human and/or inanimate entities. The head of the NP may be a common or proper noun (49), or it may be a verbal root with additional morphology (50), e.g.:

¹⁰⁰ The term *Opo* literally translates as 'elder' or 'ancestor'. However, it is also used to refer to God as an abbreviated version of *Opo Empung* 'elder God'. These words were used in pre-Christian (animist) times to refer to the ancestors who were worshipped. In contemporary Tondano the Malay *Tuhan* is also used to refer to God (as it is in standard Indonesian).

(49) *ngarana keluarga pungus moni*

ngaran =na keluarga Pungus Moni
name 3.SG.POSS family PN PN

‘The family’s name is Pungus Moni’

(TDN_12_00L06:43)

(50) *timpa’ iti’i engkekoo’an*

timpa’ iti’i N= Ce- koo’ -an
palm.sugar.wine that.MED INAN NR drink NR

‘That palm sugar wine is a (type of) drink’

(ELICITED)

In addition, demonstrative pronouns may also function as the PIV argument in an equational clause. Demonstrative pronouns (see §6.6.2) are anaphoric, and may denote either animate or inanimate entities¹⁰¹, e.g.:

(51) *ni’tu engkarua*

ni’tu N= ka- rua
that.MED INAN ORD two

‘That (phase) is the second one

(TDN_31_00:03:09)

(52) *ye’i sitabiluk*

ye’i si= tabiluk
this.PROX AN.SG flying.beetle

‘This (insect) is a flying horned beetle’

(TDN_32_DT_00:04:34)

(53) *ketarèla ni’itu engkaan beru*

ka- tarè =la ni’itu N= kaan weru
very recently DIR.PROX that.MED INAN rice fresh

‘That first one (part of the process) is the fresh rice’

(TDN_31_00:01:32)

The PIV argument in (51) and (53) is expressed with the medial demonstrative *ni’tu* ‘that’, while in (52) it is the proximate demonstrate *ye’i* ‘this’. The NP predicates in each

¹⁰¹ The evidence that in (51) – (53) the demonstratives are arguments, and not modifiers within an NP, comes from their distribution. When demonstrative pronouns modify the head of an NP they always occur following it – see §6.6.1.

example vary from an ordinal numeral in (51), a lexical root (common noun *tabiluk* ‘flying beetle’) with modifying phrase marker in (52), and a head noun (*kaan* ‘rice’) with a phrase marker and an attributive lexical root in (53).

In the same way that different NPs and pronominals may function as PIV arguments, the lexical elements which function as predicates also vary somewhat. These may be NPs which have nominal lexical roots as heads, as with (52) - (53). These nominal roots may be proper nouns such as in (49), or common nouns as in (52) - (53) and (54) - (55) below, e.g.:

(54) *sia situ’atuama*

sia si= tu’atuama

3.SG AN.SG old.man

‘He is the husband’

(TDN_14_HK_DT_00:07:20)

(55) *sèa sèrua wewènè*

sèa sè= rua wewènè

3.PL AN.PL two woman

‘They are the two women’

(TDN_31_00:12:33)

Additionally, NPs functioning as predicates may also have numerals as the head, e.g. (c.f. also (51)):

(56) *niaku kuenem pulu dumou*

niaku ku= enem pulu dua =mow

1.SG 1.SG.PIV six ten two CPL

‘As for me I am already sixty two years old’

(TDN_14_HK_DT_00:07:25)

All of the predicates thus far have been NPs. However, in an equational clause the predicate may also be a PP (see §6.11). When a PP functions as the predicate the clause does not clarify or identify the entity expressed by the PIV argument. Instead, it commonly provides information on its location, e.g.:

(57) *kèiwia rinègètan*

kèy= wia Rinègètan

1.PL.EX.PIV **in.PROX** **PN**

‘We are in (the suburb of) Rinègètan’

(TDN_11_AW_HL_00:12:41)

(58) *siurangku waki brisbèn*

si= urang =ku waki Brisbane

AN.SG **child** **1.SG.POSS** **in.DIST** **PN**

‘My child is in Brisbane’

(TDN_20_00:00:13)

The PP predicate in these examples consists of a preposition, which is the head, together with its complement, a proper noun denoting a location.

Finally, the lexical items that function as predicates in equational clauses are sometimes adjectives (see §6.1). When adjectives function as predicates they commonly express qualities or properties relating the entity referred to by the PIV argument, e.g.:

(59) *ado balolong kasa sela*

adu walolong kasa sela

PART **wave** **very** **big**

‘Oh dear the wave is very big’

(TDN_28_00:00:30)

(60) *taan siwangun, to?*

ta’an si= wangun to

but **3.SG.PIV** **good** **PART**

‘But she is nice yes?’

(TDN_31_00:18:08)

(61) *kulengèi*

ku= lengèy

1.SG.PIV **ignorant**

‘I am ignorant’

(TDN_29_00:20:08)

The predicate in (59) consists of the lexical root *sela* ‘big’ as the head, and the adverb *kasa* as the modifier. In (60) *wangun* ‘good, fine’ is the predicate, while in (61) *lengèi* ‘stupid, ignorant’ has this function. The predicates in these examples differ from those in (46) - (58), as they are describing qualities of states which an entity is seen to possess. However, the clausal function of these lexical items is the same in that they are predicates providing information concerning the entity represented by the PIV argument.

In some equational clauses the constituent order is the opposite to what is observed in all the previous examples (i.e. PRED - PIV), although this order is much less frequent, e.g.:

(62) *werumoukan saratus ti’i*

weru =mowkan saratus iti’i
fresh **definitely** **chanting.group** **that.MED**
 ‘That chanting group is really recent (to our culture)’
 (TDN_31_00:10:55)

(63) *layamoukan napi*

laya =mowkan¹⁰² N= api’
alight **definitely** **INAN** **fire**
 ‘The fire is definitely alight’
 (TDN_11_AW_HL_00:06:31)

The question words (see §7.1.2) used for constructing content questions may also function as the predicate of an equational clause. The use of question words in equational clauses demonstrates the only instance in which the basic constituent order must be PRED - PIV, e.g.:

(64) *sapa itu?*

sapa itu
what **that.MED**
 ‘What is that?’
 (TDN_11_AW_HL_00:11:12)

¹⁰² The occurrence of the adverb *=mowkan* as part of the predicate in both (62) and (63) is purely coincidental.

(65) *pira menit?*

pira menit
how.many minute

‘How many minutes?’

(TDN_31_00:18:33)

(66) *sèi ngarana?*

sèy ngaran =na
who name 3.SG.POSS

‘What is her name (lit. ‘who is she called’)?’

(TDN_14_DK_NK_00:02:58)

In order to complete the discussion of equational clauses there is one further variation which must be mentioned. There is one exception to the rule which states all equational clauses are non-verbal. Specifically, there are certain clauses which function in exactly the same manner as all the equational clauses presented so far, but in which the predicate is verbal. The verbal lexical root of these particular predicates is always *muali* ‘to be, happen, become’, and in these clauses the link between the PIV argument and predicate relates to a change of some sort, e.g.:

(67) *mamualimou gula*

ma- muali =mow gula
EV.STAT become CPL sugar

‘(It - the hot liquid) becomes palm sugar’

(TDN_26_00:05:44)

(68) *sèbisa mamuali tabiluk*

sè= bisa¹⁰³ ma- muali tabiluk
3.PL.PIV can EV.STAT become flying.beetle

‘They can become flying horned beetles’

(TDN_32_DT_00:01:41)

The PIV argument in (67) is omitted but understood, while in (68) it is the pronominal *sè=* ‘they’. In each case the verb *muali* expresses a change of state, i.e. of liquid into solid (67) or larvae into beetle (68). Despite seemingly having a verbal predicate and multiple

¹⁰³ The use of *bisa* ‘can’ represents code mixing. This is standard Indonesian as opposed to Tondano *toro* ‘can, be able’.

arguments, these clauses are not considered transitive as they do not contain the required two arguments with the GRs of PIV and NPIV.UN or NPIV.A.

In addition, in both (67) and (68) the two arguments actually refer to the same participant. In (67) the second argument *gula* ‘palm sugar’ refers to the omitted PIV NP, and in (68) *tabiluk* ‘flying beetle’ refers to the PIV *sè*= ‘they’. In effect, this means the arguments which follow the verb *muali* are predicate complements, and they are not assigned any of the non-PIV GRs outlined in §4.3. Rather, they are required in order for the situation expressed by the predicate to be complete. These clauses are therefore similar to those which copula verbs and predicate complements express in other languages, e.g. ‘(to) be, become’ in English.

Although the presence of a verb differentiates the clauses in (67) - (68) from other equational clauses, the function in all instances is identical. That is, in (48) - (68) the predicate always provides or clarifies information about the PIV argument. The presence of the verb *muali* simply expresses that this is as a result of a process of change.

4.5 Verbal clauses

The core of any verbal clause is a verbal predicate, the head of which is comprised of a lexical root marked with various forms of verbal morphology. This morphology provides information on everything from situation denoted by the verb, the semantic features of NPs, to TAM information (see §9).

All verbal clauses are categorised in three ways, these are:

- (i) By the level of transitivity,
- (ii) By the primary verbal affixation hosted by the verb i.e. DYNAMIC, POTENTIVE, or STATIVE. This morphology differentiates the type of event, process, action, or state denoted by the verbal root, and to a lesser extent the semantic features of the entity expressed by the PIV argument.
- (iii) Whether they are marked for ACTOR voice, or one of the three UNDERGOER voices.

In the following subsections the primary verbal affixation which is integral to almost all verbal clauses is described in §4.5.1, with an explanation of how the functions of certain homophonous verbal affixes are differentiated in §4.5.2. It will be demonstrated how the use of this verbal affixation is closely linked to the type of situations expressed by the

verbal root, and that these distinctions cut across any divisions in transitivity. Verbal clauses are then examined with regards to their different features of transitivity and voice marking in §4.5.3 - §4.5.5. This examination incorporates a discussion of the variation between AV and UV transitive clauses, including any variation in constituent order between the two.

4.5.1 Primary verbal affixes *pa-*, *ka-*, and *ka-*

There are three primary verbal affixes which are commonly hosted by the head of a verbal predicate. These prefixes are labelled as DYNAMIC (*pa-*), POTENTIVE (*ka-*), and STATIVE (*ka-*). The following points summarise their features:

- They interact with the voice affixes (see §3.3) to form complex verbal stems.
- Some lexical roots require primary affixes before they may host voice marking, while others may host voice affixes directly¹⁰⁴.
- POTENTIVE and STATIVE affixes do not co-occur with PV marking on stems. That is, this paradigm only consists of three forms and not four as might be expected.
- With the exception of the AV POTENTIVE form, the three primary verbal affixes are mutually exclusive and do not co-occur together in a single stem.
- They express the type of event, process, action, or state denoted by the verbal root, semantic characteristics of the entity expressed by PIV argument, and (indirectly) information related to the mood (realis or irrealis) of the situation.

a. DYNAMIC *pa-*

The DYNAMIC verbal affix is *pa-/peN-*¹⁰⁵. Verbs in both intransitive and transitive clauses may host *pa-*. Verbal predicates which include this affix denote an action or event that requires a volitional or controlling ACTOR participant¹⁰⁶. Verbal roots which host DYNAMIC *pa-* generally express situations where one participant directly affects another, or those involving volitional movement and/or posture (these type of lexical roots are labelled as Type III roots - see §6.1).

¹⁰⁴ Stems which consist solely of a lexical root and a voice affix still express information on the action, event, or state denoted by the root. These stems are always DYNAMIC and the primary verbal affixation is considered to be zero marked.

¹⁰⁵ The variation in form of DYNAMIC prefixes *pa/peN-* and *ma-/meN-* does not appear to encode any specific distinction in function. The morphophonological process which results in *meN-* is discussed in §2.6.2, while a small amount of additional information regarding *peN-/meN-* is found in §5.3.1.

¹⁰⁶ This is regardless of whether or not this participant is overtly marked in a clause.

Verbal roots which may host *pa-/peN-* may also occur without it, i.e. they may be marked solely with one of the voice affixes. Predicates with these verbs as heads are still considered DYNAMIC, with the primary affixation being zero marked. Verbs marked in this fashion exclusively encode irrealis situations (see §7.3 and §9.3.3). The presence of the DYNAMIC verbal affix *pa-/peN-* also encodes a situation which the speaker judges is factual or currently occurring (either at the time of utterance or in a more general sense), thereby giving a realis interpretation to the clause.

DYNAMIC verbal stems occur in a paradigm where each form consists of a verbal root, *pa-/peN-*, and one of the four basic voice affixes. The resulting morphological forms are displayed in Table 4.5 (this includes the possibility of zero marking). Within this paradigm the combination of the AV infix *<um>* with DYNAMIC *pa-* results in the bimorphemic prefix *ma-/meN-*.

Table 4.2: DYNAMIC verbal stems

DYNAMIC affix:	Voice affix:	Resulting form of verb:
<i>pa-/peN-</i>	AV: <i><um></i>	<i>ma-/meN-</i> [LEXICAL ROOT]
		\emptyset - <i><um></i> [LEXICAL ROOT]
<i>pa-/peN-</i>	PV: <i>-en</i>	<i>pa-/peN-</i> [LEXICAL ROOT] <i>-en</i>
		\emptyset - [LEXICAL ROOT] <i>-en</i>
<i>pa-/peN-</i>	LV: <i>-an</i>	<i>pa-/peN-</i> [LEXICAL ROOT] <i>-an</i>
		\emptyset - [LEXICAL ROOT] <i>-an</i>
<i>pa-/peN-</i>	CV: <i>i-</i>	<i>(i-)pa-/peN-</i> [LEXICAL ROOT]
		\emptyset - <i>(i-)</i> [LEXICAL ROOT]

Verbal predicates which contain DYNAMIC marked verbs occur in both intransitive and transitive clauses. In both instances they express a situation which requires an argument with the semantic role of ACTOR. In an intransitive clause there is only one (non-oblique) argument which is the PIV. This argument expresses the ACTOR, and the situation denoted by the verb expresses volitional movement or posture, e.g.:

(69) *sèmakaluar witu nakel*

sè= ma- kaluar witu N= akel
3.PL.PIV AV.DYN exit of.MED INAN sugar.palm.tree
'They (the sago grubs) come out from the palm sugar tree'
(TDN_11_EO_00:00:27)

(70) *èmenekenekela*

sè= meN- CVCV- tek¹⁰⁷ =la
3.PL.PIV AV.DYN RDP sleep DIR.PROX
'They are sleeping'
(TDN_31_OL_00:05:12)

(71) *koumakèlangitèmi*

kow= ma- kèlang =itè =mi
2.PL.PIV AV.DYN walk LIM DIR.DIST
'You just walk (to the mountainous area and then back here)'
(TDN_07_00:01:11)

The single (PIV) argument in an intransitive clause with DYNAMIC marking therefore always has the role of ACTOR. Because the PIV argument always has the ACTOR role, and because there are no other (non-oblique) arguments which may take this function, intransitive clauses with DYNAMIC affixation are only ever marked for AV.

Transitive clauses which include verbs with DYNAMIC affixation occur marked for all four voices. Regardless of the voice marking there is always one (non-oblique) argument which has the semantic role of ACTOR, and this argument may or may not be the PIV. The situations denoted by DYNAMIC marked verbs in transitive clauses usually involve one participant volitionally affecting another in some way. Transitive clauses with DYNAMIC marked verbs in each of the four voices are demonstrated by (72) - (75):

¹⁰⁷ This is obviously based on the assumption of a volitional action of laying down to go to sleep, rather than falling asleep unintentionally.

(72) *tamaali gula mèa*

ta= ma- ali gula mèa'

1.PL.IN.PIV AV.DYN bring sugar red

'We bring along some palm sugar'

(TDN_11_AW_HL_00:09:18)

(73) *paawesenèamou kalèkèw nipèrèt*

pa- awes -en =nèa =mow kalè'kèw ni= pèrèt

DYN add PV 3.PL.NPIV.A CPL wing AN.SG.POSS bat

'They add the bat's wing (to the wok)'

(TDN_32_KK_00:02:10)

(74) *pasera'an sèwatè*

pa- sera' -an sè= watè

DYN meat LV AN.PL sago.grub

'(They) prepare the sago grubs'

(TDN_11_EO_00:00:53)

(75) *paaliali nilumimu'ut*

i- pa- CVCV- ali ni= Lumimu'ut

CV DYN RDP bring AN.SG.NPIV.A PN

'Lumimu'ut is bringing along (it - the *tuis* branch)'

(TDN_31_00:15:03)

The argument with the semantic role of ACTOR is expressed by the pronouns *ta=* 'we' in (72), *=nèa* 'they' in (73), and is omitted in (74) - (75). These arguments have various GRs which in part are dependent upon the voice marking on the verb¹⁰⁸. The important fact here is that these situations all require a volitional ACTOR argument, and as such the DYNAMIC affix *pa-/peN-* occurs within the verbal predicate.

Examples (69) - (73) demonstrate DYNAMIC verbal affixation within both intransitive and transitive clauses. Numerous other examples of verbal clauses with DYNAMIC marked verbs (in all four different voices) are found in §4.5.3 and §4.5.4.

¹⁰⁸ The interaction between GRs and semantic roles in relation to voice marking is demonstrated in the explanation of intransitive and transitive clauses in §4.5.3 - §4.5.5, and is summarised in §4.6.1.

b. POTENTIVE *ka-*

The POTENTIVE verbal affix is *ka-*. The Type III (i.e. verbal) lexical roots which host the DYNAMIC affix *pa-* may also host POTENTIVE *ka-*. Verb forms which include the POTENTIVE affix will (broadly speaking) denote an action or event which has the possibility of occurring, or which may occur without the full intention or control of the ACTOR participant. In contrast to clauses with DYNAMIC marked verbs, those which have POTENTIVE marked verbs do not include an argument which refers to a fully volitional and controlling ACTOR participant.

In order to be marked as POTENTIVE, verbal stems must host *ka-* together with a voice affix. The zero marking of primary verbal affixation which occurs in DYNAMIC verbal stems does not occur with POTENTIVE marking, and POTENTIVE verbal stems occur in a paradigm where the forms consist of a verbal root, *ka-*, and a basic voice affix. POTENTIVE affixes do not appear to be compatible with the PV affix *-en*. As such, the POTENTIVE paradigm displays only a three way distinction between AV, LV, and CV. An additional irregularity in this paradigm is the AV form *maka-*. This appears to consist of the voice affix *<um>*, DYNAMIC affix *pa-*, and the POTENTIVE affix *ka-*¹⁰⁹, e.g.:

Table 4.3: POTENTIVE verbal stems

POTENTIVE affix:	Voice affix:	Resulting form of verb:
<i>ka-</i>	AV: <i>ma-</i> (<i><um></i> + <i>pa-</i>)	<i>maka-</i> [LEXICAL ROOT]
<i>ka-</i>	LV: <i>-an</i>	<i>ka-</i> [LEXICAL ROOT] <i>-an</i>
<i>ka-</i>	CV: <i>i-</i>	<i>(i-)ka-</i> [LEXICAL ROOT]

POTENTIVE marked verbs occur in both intransitive and transitive clauses. In the corpus transitive clauses are much more common.

Verb stems which host POTENTIVE affixes express a number of situations. POTENTIVE marking commonly expresses that a particular entity has the possibility or opportunity to

¹⁰⁹ In the AV form the POTENTIVE prefix *ka-* therefore attaches to a prefix which is already bimorphemic, i.e. *ma-* (AV.DYN). The explanation for this appears simple. Verbal prefixes which consist of a merger between *<um>* and a primary verbal affix already exist in both the AV. DYN *ma-* and the EV.STAT *ma-* (see below and §4.5.1 above) forms. The form *maka-* therefore avoids a third homophonous *ma-* form. Despite the fact that the AV. POT *maka-* prefix includes the DYNAMIC prefix *pa-*, the situations expressed by clauses which include verbs marked with *maka-* demonstrate a clear difference to those with the DYNAMIC *pa-*.

achieve an event or situation. When the ACTOR voice form *maka-* is used, the PIV argument refers to the participant who has the opportunity, or would potentially achieve, the event or action denoted by the verb (# indicates a clause boundary), e.g.:

(76) *sèmaanapè ona, makasoiewela wona*

sè= ma- ana' =pè wona' # maka- soyow
3.PL.PIV **AV.DYN** **stay** **INCPL** **perhaps** **AV.POT** **slice.up**
=la wona'
DIR.PROX **perhaps**

‘They still wait there perhaps, perhaps (they) can slice up (the harvest)’

(TDN_10_00:06:03)

(77) *simè mang makaèdola lè'olè'os bahasa nètoudano*

si= mèmang maka- èdo =la CVCV- lè'os bahasa
3.SG.PIV **truly** **AV.POT** **take** **DIR.PROX** **RDP** **good** **language**
nè= Toudano
AN.PL.POSS **PN**

‘He really could take (i.e learn) well the language of the Tondanese’

(TDN_31_KK_00:05:31)

The overtly expressed PIV arguments in (76) - (77) are represented by the pronominals *sè=* ‘they’ and *si=* ‘he/she. All of the entities which these arguments represent are judged capable of achieving or undertaking the situations denoted by the verbal root. However, none of them have actually done so at the time of utterance. If they had, the DYNAMIC affix *pa-/peN-* would be used instead

It is important to note that in (76) - (77) the possibility to perform these actions comes from circumstances which are not inherent to the ability of the entity represented by the PIV argument (i.e. in (76) it is due to being close to the crops, while in (77) it is due to assistance from native speakers).

Alternatively, POTENTIVE marking may express the innate or internal ability of an ACTOR participant to perform an action or event, i.e. it has an abilitative reading, e.g.:

(78) *makarow wiala*

maka- row' wia =la

AV.POT far here DIR.PROX

‘(You) could remove (it - the palm sugar sap) from here’

(TDN_29_00:01:23)

(79) *sa komakaurangè sumoup*

sa ko= maka- urang =pè' sumoup

if, when 2.SG.PIV AV.POT child INCPL frequently

‘If you could still bear many children’

(GENESIS 48:6)

The ACTOR participant is omitted in (78), and expressed by *ko=* ‘you’ in (79). In both instances the participants are judged capable of performing the actions expressed by the verb, although they have not done so yet. In (78) the ACTOR participant is someone who has collected palm sugar sap for many years, and is therefore has an inherent ability to do this task. In (79) the process of having children is a more obvious example of a woman’s innate ability to perform this event.

In (78) - (79) external circumstances do not play a role in the potential of the participants to perform the action or event. However, at some level there is still similarity between the situations in (76) - (77) and those in (78) - (79). This is due to the fact that in each instance the ACTOR participant has not actually performed the action or event; he/she simply has the potential to do it.

A third meaning expressed by POTENTIVE verbal affixation is that the event or action denoted by the verb is achieved accidentally, or without full volitional control of the ACTOR argument, e.g.:

(80) *makaretamoukan*

maka- reta =mowkan

AV.POT liberate definitely

‘(You) definitely detach (it - the bamboo tube from the sugar palm tree)’

(TDN_29_00:05:09)

Unlike in (76) - (79), the ACTOR participant in (80) does in fact perform the action expressed by the verb, i.e. he frees a bamboo tube from the top foliage of a sugar palm

tree. However, this action is achieved somewhat involuntarily due to the fact that it occurred while the participant tries to do something else (untie some string which is attached to the same bamboo tube). The verb is again marked as POTENTIVE because the clause lacks a volitional and controlling ACTOR participant.

The POTENTIVE (AV) prefix *maka-* is also used together with one particular lexical root, *ato* ‘see, look’ with a separate meaning. The combination of *maka-* + *ato* has become lexicalised and now means ‘to obtain or earn the concept or entity denoted by [X]’, with [X] expressed by an NP. This specific lexical meaning is often quoted as being the equivalent of the standard Indonesian verb *mendapat* ‘get, earn, obtain, possess’, e.g.:

(81) *sia makaato saratus gantang*

sia maka- ato saratus gantang

3.SG AV.POT see, look one.hundred bushel

‘He gets 100 bushels (of rice)’

(TDN_29_00:15:17)

(82) *minaka’atokè juara satu tuana*

maka- <in> ato =kè juara satu tuana

AV.POT PST see, look EPIS champion one thus

‘Supposedly (you) got first place (at the dance competition) like this’

(TDN_11_AW_HL_00:13:36)

(83) *tamakaato tu’awènè*

ta= maka- ato tu’awènè

1.PL.IN.PIV AV.POT see, look old.woman

‘We have girlfriends’

(TDN_14_DK_NK_00:00:27)

This use of *maka-* differs fundamentally from that which is demonstrated in (76) - (80). In (81) - (83) there is no indication that the obtaining or earning of a particular entity is accidental, or only a possibility. Rather, the participants expressed by the PIV arguments have all volitionally achieved or undertaken an action which results in them having obtained the items or entities.

All the verbal stems with POTENTIVE affixation in (76) - (83) are marked for AV. When verbal stems consist of LV or CV marking in combination with the POTENTIVE affix, the

meaning is essentially the same, although the semantic roles and GRs of the participants differ. In clauses where verbs have both POTENTIVE and LV marking, the PIV argument represents the entity which is affected in some way by the action or event, while the potential ACTOR participant is expressed by the NPIV.A argument, e.g.:

(84) *ndèi kaèdoana waya embahasa toudano*

N= rèy' ka- èdo -an =na waya N=
INAN not POT take LV 3.SG.NPIV.A all INAN
 bahasa Toudano
language PN

'He couldn't learn all of the Tondano language'

(TDN_31_00:05:58)

(85) *katumisanèala itu*

ka- tumis -an =nèa =la itu
POT stir.fry LV 3.PL.NPIV.A DIR.PROX that.MED

'They can stir fry that'

(TDN_32_OL_00:07:04)

(86) *kaloo'anèala sètou ismael*

ka- loo' -an =nèa =la sè= tow Ismael
POT see, look LV 3.PL.NPIV.A DIR.PROX AN.PL people Ishmael

'They could see the Ishmaelite people'

(GENESIS 37: 25)

(87) *sa kinatutupanou waya gula mèa*

sa ka- <in> tutup -an =mow waya gula mèa
if, when POT PST close LV CPL all sugar red

'When (you've) covered all of the palm sugar (with the dough)'

(TDN_19_00:02:28)

Examples (84) - (87) once again express situations which potentially could occur, but which have not. The ACTOR participant is represented by the NPIV.A enclitics =na (3.SG.NPIV.A) or =nèa (3.PL.NPIV.A) in (84) - (86), and is omitted in (87). The entities which could be affected by the actions and events of these potential ACTORS are expressed by the PIV arguments *n=bahasa Toudano* (84), *itu* (85), *sè=tou ismaèl* (86), and

gula mèa (87). The semantic role of the PIV can be any one of a number of UNDERGOER roles, e.g. PATIENT, THEME, LOCATION, or STIMULUS.

When verbal stems contain the POTENTIVE *ka-* in combination with the CV affix *i-*, the result is *(i-)ka-*. These clauses contain a participant which has the potential to be conveyed from one place to another by the ACTOR participant. The entity which could potentially be conveyed is expressed by the PIV argument which has the semantic role of THEME or PATIENT. The potential ACTOR is again expressed as a NPIV.A argument.

CV marked POTENTIVE verbal stems may express an event or situation which could potentially occur (either because of the inherent ability of potential ACTOR, or due to external circumstances), as with (86), or one which is performed somewhat involuntarily or accidentally by the ACTOR participant, as with (88) - (90):

(88) *wo engkapal ikatenem*

wo N= kapal i- ka- tenem

and INAN boat CV POT sink

‘And (God) could sink the boat’

(JONAH 1:5)

(89) *sèko’ko’ nèi katele’umi mana*

sè= ko’ko’ nèy¹¹⁰ ka- tele’u =mi mana

AN.PL chicken CV.PST POT remain DIR.DIST there

‘(I) left the chickens there (by accident - I forgot them)’

(TDN_29_00:05:49)

(90) *ta’an elabungna nèikatele’u*

ta’an N= labung =na nèy ka- tele’u

but INAN clothes 3.SG.POSS CV.PST POT remain

‘But (he) left his cloak behind (i.e. it was grabbed and he let go of it when he escaped with haste)’

(GENESIS 39:12)

Finally, there is one additional use involving POTENTIVE affixation. Lexical roots which seem inherently nominal (i.e. Type I - see §6.3.1) may host the AV.POT *maka-* prefix with the resulting construction meaning ‘have, be owner of [LEXICAL ROOT]’, for example:

¹¹⁰ The CV.PST form *nèi* is explained in detail in §5.3.2.

(91) *situama mekegaran dèine gerungan*

si= tuama maka- ngaran

AN.SG man AV.POT name

Dèine Gerungan

PN PN

‘The man called (lit. ‘with the name’) Deine Gerungan’

(TDN_12_00:01:00)

(92) *sa sèa makaampit ku’a*

sa sèa maka- ampit ku’a

if, when 3.PL AV.POT spouse PART

‘If they have a spouse (then they are a couple)’

(TDN_31_00:05:06)

(93) *imekewalèou?*

si= maka- walè =mow

3.SG.PIV AV.POT house CPL

‘He is the homeowner?’

(TDN_28_:00:07:23)

When used in this way *maka-* is one of a number of methods of encoding possession. The other methods are with the existential marker *wewèan* (see §4.4.1), or through the use of the POSS enclitics (§8.3.5) and POSS phrase markers (§8.4.1).

c. STATIVE *ka-*

The last of the primary verbal affixes is STATIVE *ka-*. Clauses with STATIVE marked verbs always contain a PIV argument which has one of the UNDERGOER semantic roles. For verbal stems to be marked as STATIVE they must host *ka-* in combination with a voice affix. The zero marking of primary verbal affixation which occurs in DYNAMIC verbal stems does not occur with STATIVE marking.

The STATIVE affix paradigm is outlined in Table 4.4. In parallel with the POTENTIVE paradigm there is no PV form present. Moreover, it is clear that some of the forms (primarily LV and CV) are homophonous with those in the POTENTIVE paradigm, while

one in particular (i.e. the EV STATIVE *ma*-¹¹¹) is homophonous with the AV form in the DYNAMIC paradigm. Despite any similarities in form, the specific functions of these two sets of homophonous affixes demonstrate they are part of different paradigms.

Table 4.4: STATIVE verbal stems

STATIVE affix:	Voice affix:	Resulting form of verb:
<i>ka</i> -	EV: < <i>um</i> >	<i>ma</i> - [LEXICAL ROOT]
<i>ka</i> -	LV: <i>-an</i>	<i>ka</i> - [LEXICAL ROOT] <i>-an</i>
<i>ka</i> -	CV: <i>i</i> -	(<i>i</i> -) <i>ka</i> - [LEXICAL ROOT]

Table 4.4 demonstrates an irregularity in verbal stems marked with a combination of STATIVE *ka*- and voice affixation. Despite the fact that clauses with the verb forms in Table 4.4 never have an ACTOR (or even a potential ACTOR) participant, the STATIVE *ma*- is a bimorphemic prefix¹¹² comprising the AV infix <*um*> and STATIVE *ka*-. Confusingly, this prefix is homophonous with the DYNAMIC (AV) prefix *ma*-. Despite this homophony, the types of verbal roots which host the two separate *ma*- prefixes clearly express different situations. Moreover, previous comparative work provides evidence of the combination of separate historical forms which likely produced the two forms of *ma*- (see Ross 2002:34; Blust 2003: 440-1)¹¹³.

The verbal roots which host STATIVE marking primarily express psychological and physical states, rather than actions or events. These are often roots which are labelled as ‘Type II lexical roots’ (see §6.3.1). These particular lexical roots almost exclusively take STATIVE marking and are usually incompatible with affixes from the DYNAMIC or POTENTIVE paradigms¹¹⁴.

¹¹¹ See Table 4.7 in §4.5.3 for further information on the EV STATIVE prefix *ma*-.

¹¹² STATIVE *ma*- is labelled here as an EXPERIENCER VOICE affix. It should be noted that the label of ‘EXPERIENCER voice’ does not refer to a canonically marked super category common to Philippine-type languages, i.e. in the same way that ACTOR and UNDERGOER voices do. However, due to its function, and due to the characteristics of verbs and arguments in clauses marked with *ma*-, this label is appropriate.

¹¹³ This evidence suggests that they come from a conflation of different morphemes. The Tondano EV STATIVE affix *ma*- is widely attested in many languages as a STATIVE affix (Blust 2013:376). This prefix is judged to be a reflex of PAN **ka*- inchoative + ACTOR voice *<*um*> (Blust 2003:440-41), while AV DYNAMIC *ma*- is a reflex of PAN causative **pa*- + ACTOR voice *<*um*> (Ross 2002:34).

¹¹⁴ However, it appears likely that certain roots may take either DYNAMIC or STATIVE morphology in order to differentiate between volitional and non-volitional situations of perception, e.g. ‘hear’ vs ‘listen’, ‘see’ vs ‘look’ etc. In situations where both the AV.DYN and EV.STAT morphemes are *ma*-, it is context which clarifies the meaning of the root. See §6.3.1

Verbs which are marked with STATIVE *ka-* occur in both intransitive and transitive clauses. STATIVE marked verbal stems express two different situations when they occur within intransitive clauses. The first of these relates to physical, emotional, and psychological states, the second relates to actions which can be labelled as non-volitional and which usually relate to movement or posture.

When verbal predicates contain EV marked STATIVE verbs, the PIV argument represents an entity which ‘experiences or possesses a quality or state denoted by [LEXICAL ROOT]’:

(94) *jadi sa komaaremou*

jadi sa ko= ma- arem =mow
 thus if,when 2.SG.PIV EV.STAT hungry CPL
 ‘So if you are already hungry’
 (TDN_07_00:00:54)

(95) *suma mepali’*

suma ma- pali’
 mouth EV.STAT hurt
 ‘(Your) mouth hurts (if you eat hot odè cakes)’
 (TDN_19_00:06:17)

(96) *komèidè*

ko= ma- idè’
 2.SG.PIV EV.STAT afraid
 ‘You are afraid’
 (TDN_07_00:06:06)

(97) *mawedumou*

ma- wedu =mow
 EV.STAT tired CPL
 ‘(You) are tired (you must go and sleep)’
 (TDN_11_AW_HL_00:11:20)

(98) *komarèomou ya*

ko= ma- rèò’ =mow ya
 2.SG.PIV EV.STAT thirst CPL AFF
 ‘You are already thirsty, right’
 (TDN_21_00:05:34)

STATIVE marked verbs can also occur in an intransitive clause which denotes a situation of movement, posture, or some form of physical action. These situations will all involve involuntary and uncontrolled actions (commonly movement or posture), e.g.:

(99) *sa kita, rèi makè'èkè*

sa kita rèy' ma- kè'kè
if, when 1.PL.IN not EV.STAT laugh
 'If we don't laugh (then - we don't live)'
 (TDN_11_AW_HL_00:09:01)

(100) *kumakero!*

ku= ma- kero'
1.SG.PIV EV.STAT vomit
 'I throw up!'
 (TDN_11_AW_HL_00:08:56)

(101) *mawulèlong waki numa*

ma- wulèlong waki N= uma
EV.STAT faint in.DIST INAN fields
 '(We) faint in the fields (from hard work)'
 (TDN_14_DK_NK_00:09:57)

Occasionally, STATIVE marking is used in intransitive clauses expressing a situation where the PIV argument refers to an entity which is not an EXPERIENCER in the strict sense. That is, inanimate entities which are in a non-volitional state only perceived by others (c.f. also (95)), e.g.:

(102) *melegulegu hapèmu*

ma- CVCV- legu hapè¹¹⁵ =mu
EV.STAT RDP noisy mobile.telephone 2.SG.POSS
 'Your mobile phone is ringing'
 (TDN_14_HK_DK_00:10:36)

When STATIVE marked verbal stems occur in transitive clauses, the verbal root often describes a situation of knowledge, cognition, perception or opinion. If the verbal stem is marked for EV, then the PIV argument will represent the participant with the role of

¹¹⁵ *hapè* represents the letters 'h' and 'p', and is the abbreviation for *han pon* 'mobile telephone' in standard Indonesian

EXPERIENCER, while the NP.V.UN argument expresses the participant which is the STIMULUS, e.g.:

(103) *sa komegenagenangla isèron*

sa	ko=	ma-	CVCV-	ghenang	=la
if, when	2.SG.PIV	EV.STAT	RDP	think	DIR.PROX
si=	Sharon				
AN.SG	PN				

‘If you are thinking about Sharon’

(TDN_28_00:03:36)

(104) *supaya sia ma, mate’u lèolè’os embahasata*

supaya	sia	ma	ma-	te’u	CVCV-	lè’os	N=
so.that	1.SG	HES	EV.STAT	know	RDP	good	INAN
bahasa	=ta						
language	1.PL.IN.POSS						

‘So that he can know well our language’

(TDN_28_00:01:56)

(105) *rèi maliur*

rèy’	ma-	liur
not	EV.STAT	forget

‘(We) don’t forget (that we were in the village of Karekoan)’

(TDN_21_00:03:26)

(106) *sèrèy’pè mete’u nagama*

sè=	rèy’	=pè’	ma-	te’u	N=	agama
3.PL.PIV	not	INCPL	EV.STAT	know	INAN	religion

‘They don’t know about religion’

(TDN_31_00:14:09)

(107) *wo malingamoula nisèa, ya*

wo	ma-	linga	=mow	=la	nisèa	ya
and	EV.STAT	hear	CPL	DIR.PROX	3.PL	AFF

‘And (I) overheard them, yes’

(TDN_10_00:00:32)

Certain lexical roots such as *ghenang* ‘think, remember’, *linga* ‘hear, listen’, and *loo* ‘or ato’ ‘see, look’ are part of a small number of roots which may form either DYNAMIC or STATIVE verbal stems. Due to the homophonous forms for AV.DYN and EV.STAT (i.e. *ma-*), the specific verbal affix which occurs (and whether or not a volitional controlling ACTOR participant is present) on these roots is often only discernible from context. Alternatively, the presence of DYNAMIC marking may be confirmed when these particular roots overtly host the basic AV affix *<um>* or DYNAMIC *pa-/peN-* in combination with one of the three UV affixes.

If the STATIVE verbal stem in transitive clauses is marked for LV, then the PIV argument will express a participant with the role of STIMULUS. This participant will represent the person, place, or thing towards which an entity experiences the state or situation denoted by the verb. The non-pivot argument (if overtly expressed) will be represented by a NPIV.A argument¹¹⁶. This particular argument expresses the participant with the role of EXPERIENCER, e.g.:

(108) *adu permesta kèidèan*

adu Permasta ka- idè’ -an

PART PN STAT afraid LV

‘Oh my, (we) are afraid of the Permesta rebellion’

(TDN_14_HK_DT_00:09:55)

(109) *rèi kateu’an sèi sia*

rèy’ ka- te’u -an sèy sia

not STAT know LV who 3.SG

‘(You) don’t know who he/she is’

(TDN_11_AW_HL_00:14:56)

(110) *sapa kate’uan niom lèo*

sapa ka- te’u -an ni= om Lèo

what STAT know LV AN.SG.NPIV.A uncle PN

‘What (the Minahasan history) uncle Leo knows about’

(TDN_31_00:00:24)

¹¹⁶ As stated above, in LV and CV clauses where the verbal predicate includes STATIVE marking there is not actually an argument with the semantic role of ACTOR. In these clauses the label of NPIV.A encodes the non-oblique argument with the highest semantic role. This label is used here in the same as it is in clauses with DYNAMIC marking because the morphosyntactic features of this argument are consistent with those in DYNAMIC marked clauses.

(111) *kinaliuranou situ'awènè*

ka- <in> liur -an =mow si= tu'awènè
STAT PST forget LV CPL AN.SG old.woman

‘(They) forgot about the wife (because they are dancing with other people)’

(TDN_11_AW_HL_00:08:03)

If the STATIVE verbal stem in these types of transitive clauses is marked for CV, the PIV argument represents the participant which is the reason the EXPERIENCER experiences the situation expressed by the verbal root. The verbal root may denote cognition, perception, or opinion, or it may express psychological or emotional states. The semantic role of the PIV argument is again that of STIMULUS, while the EXPERIENCER is again expressed by a NPIV.A marked argument, e.g.:

(112) *kèidè'ena ilumimu'ut*

i- ka- idè' =na si= Lumimu'ut
CV STAT afraid 3.SG.NPIV.A AN.SG PN

‘He is afraid of Lumimu'ut’

(TDN_31_00:12:02)

(113) *ikaupi' nituama iti'i sèurangena*

i- ka- upi' ni= tuama iti'i sè= urang
CV STAT angry AN.SG.NPIV.A man that.MED AN.PL child

=na

3.SG.POSS

‘That man is angry (at) his children’

(ELICITED)

(114) *embalèna ikèrang nitim*

N= walè =na i- ka- irang ni= Tim
INAN house 3.SG.POSS CV STAT embarrassed AN.SG.NPIV.A PN

‘Tim is embarrassed of his house (it is messy)’

(ELICITED)

(115) *ikaupi' nitim motor ni'tu*

i-	ka-	upi'	ni=	Tim	motor	ni'tu
CV	STAT	angry	AN.SG.NPIV.A	PN	motorbike	that.MED

'Tim is angry at that motorbike'

(ELICITED)

Thus, in (112) - (115) the PIV NPs *i=lumimu'ut* 'Lumimu'ut', *sè=urang=na* 'his children', *em=balè=na* 'his house', and *motor ni'tu* 'that motorbike' denote the entities deemed responsible for the situations expressed by the STATIVE marked verbal stems, i.e. the fear, anger, and embarrassment felt by the EXPERIENCERS. The entities which have the EXPERIENCER semantic role are again marked with NPIV.A morphology, i.e. *=na* 'him' in (112), *ni=tuama iti'i* 'that man' in (113), and *ni=tim* 'Tim' in (114) - (115).

There are obvious similarities in the semantic characteristics of entities which are expressed by PIV arguments in the LV and CV transitive clauses in (108) - (115). These entities may be animate or inanimate, human or non-human, a location, or an object at a location. However, the difference between the two voices broadly relates to one characteristic: with LV marking the PIV argument simply identifies the entity towards which the EXPERIENCER feels a physical or psychological sensation, while with CV marking the PIV argument is the entity which is somehow responsible for the emotional or psychological state of the EXPERIENCER.

4.5.2 Differentiation between STATIVE and POTENTIVE marking

The discussion and examples in the last subsection makes it clear that POTENTIVE and STATIVE verbal affixation are similar in that: 1) both occur in clauses which lack a volitional and controlling ACTOR argument, and 2) both have the same form for the basic affix (*ka-*), as well as identical LV and CV forms in their paradigms (c.f. Table 4.3 and 4.4).

The notion of "potentive verbs" is a well attested phenomenon in Western AN languages (Himmelmann 2004:1; Liao 2011b:857). In the analysis of some of these languages, e.g. Iloko (Rubino 2000, 2005:340), a single paradigm has been constructed for all instances in which there is no volitional or controlling ACTOR participant present. This is also the case in the previous work on Tondano by Sneddon (1970:227) where both the constructions outlined above are conflated into one category labelled "non-volitional" (*ibid*).

However, there are important differences between POTENTIVE and STATIVE verbal affixation which necessitate that they should be divided into two separate paradigms, as is done in Tables 4.3 and 4.4. These differences relate to: (i) the types of lexical roots which may host the different affixes, and (ii) the semantic roles and GRs of arguments which occur in clauses with POTENTIVE and STATIVE marked verbs, for example:

(i) While the LV and CV affixes in the POTENTIVE and STATIVE paradigms are formally identical, there is much variation in the inherent semantics of the various lexical roots they attach to. Words such as *ka-èdo-an* (POT-take-LV) and *ka-upi'-an* (STAT-angry-LV) have identical bound morphology, but vastly different semantic content in their lexical roots. The participants in any verbal clauses with these two verb stems will always have completely different semantic roles. Consequently, an analysis of these bound elements as representing a single construction appears flawed.

(ii) Moreover, clauses which contain POTENTIVE marked verbal stems contain an argument which is a potential ACTOR, or a non-volitional ACTOR. In contrast, clauses with STATIVE marked verbal stems never contain an argument with these characteristics. Instead, the highest ranked semantic role of the PIV argument in STATIVE marked clauses is that of EXPERIENCER, while any additional argument has the role of STIMULUS.

By summarising the features of the PIV and non-PIV arguments in the two different constructions, we can observe a number of unambiguous contrasts. The differences between the semantic roles and the situations expressed in POTENTIVE vs STATIVE marked clauses provide ample evidence for an analysis of two separate constructions, rather than one single paradigm of ‘non-volitional’ marking. This information is summarised in Table 4.5:

Table 4.5: PIV and NPIV.A arguments in POT and STAT marked clauses

Voice:	POTENTIVE: èdo ‘take’	Voice:	STATIVE: liur ‘forget’
ACTOR	PIV = (potential) ACTOR, NPIV.A = n/a NPIV.UN = PATIENT, THEME	EXPERIENCER	PIV = EXPERIENCER, NPIV.A = n/a NPIV.UN = STIMULUS
LOCATIVE	PIV = LOCATION, PATIENT, THEME (location, or entity at location acted upon), NPIV.A = (potential)ACTOR	LOCATIVE	PIV = STIMULUS (location, or entity at location towards which EXPERIENCER feels state, emotion), NPIV.A = EXPERIENCER
CONVEYANCE	PIV = PATIENT, THEME (entity moved/ conveyed/utilised), NPIV.A = (potential) ACTOR	CONVEYANCE	PIV = STIMULUS (entity representing reason that EXPERIENCER feels state, emotion), NPIV.A = EXPERIENCER

4.5.3 Intransitive clauses

Intransitive clauses have the following characteristics:

- In terms of overt morphological marking they minimally consist of a voice marked lexical root.
- They have a single non-oblique argument which is represented by the PIV argument.
- They contain verbs which may be marked as either DYNAMIC or STATIVE as per the verbal affixes in §4.5.1 (in addition to a basic voice affix), with the choice conditioned by the type of event or situation expressed by the verb, and the corresponding semantic characteristics of the PIV.
- Any participants other than those expressed by the PIV are represented by OBL arguments, exclusively in the form of PPs.

Intransitive clauses may contain no overtly expressed arguments at all, and may minimally consist of a voice marked verb. Examples of prototypical intransitive clauses are as follows:

(116) *kurumuberou*

ku= r<um>uber =mow
1.SG.PIV <**AV**> sit **CPL**
 ‘I will sit’
 (TDN_07_00:20:15)

(117) *sèmengèa mana embè nang*

sè= meN- èa mana N= Wè nang
3.PL.PIV **AV.DYN** go to.**DIST** **INAN** **PN**
 ‘They go to Manado’
 (TDN_07_00:09:46)

Both (116) - (117) consist of a verb and a single non-oblique participant represented by the PIV argument. In (116) this argument is represented by the personal pronoun *ku=* ‘I’, while in (117) it is *sè=* ‘they’. The second argument in (117) is an OBL argument consisting of a PP with an NP complement expressing the semantic role of GOAL. The information expressed by the difference in verbal morphology between <*um*> (116) and *meN-* (117) relates primarily to mood (see §9.3.3).

Both these intransitive clauses contain DYNAMIC marked verbal stems. This marking occurs through the zero marking of the primary verbal affix (*pa-*) and the overt marking of the AV infix <*um*>¹¹⁷ in (116), or through the use of the bimorphemic prefix *ma-/meN-* (comprising <*um*> + *pa-/peN-* - see §4.5.1 and §5.3.1) in (117). In contrast, STATIVE marked intransitive clauses must contain verbal stems which are marked with both a basic affix and the STATIVE affix *ka-* (i.e. the EV.STAT *ma-*).

These clauses also illustrate the basic PIV - PRED constituent order for intransitive clauses. Variation to the basic constituent order is rare, and does not appear to serve any particular function. Intransitive clauses display somewhat more flexibility in constituent order because the distribution of the PIV argument is not fixed to a preverbal position, as it is in (AV) transitive clauses (see §4.5.4).

¹¹⁷ That is, any verb which only overtly hosts a basic voice affix and no other morphology represents a DYNAMIC situation by default.

Examples of intransitive clauses with the order of PRED - PIV are as follows:

(118) *iyò, matingkatingkas kouman sèa ye'i*

iyò ma- CVCV- tingkas kowman sèa ye'i

AFF AV.DYN RDP run meanwhile 3.PL now

‘Yes, now meanwhile they are running away (the rats from the field)’

(TDN_10_00:06:50)

(119) *mengurèngurè situama ti'i*

meN- CVCV- urè si= tuama iti'i

EV.STAT RDP long AN.SG man that.MED

‘That man is taking so long (to tie the string)’

(TDN_26_00:02:34)

The PIV arguments in (118) - (119) both occur post predicate, and are represented by *sèa* ‘they’ and *si=tuama ti'i* ‘that man’. This flexibility in constituent order does not extend to oblique arguments, such as the PP in (117). In both intransitive and transitive clauses these arguments only ever occur post predicate¹¹⁸.

Table 4.6 summarises the possible ordering of elements for intransitive clauses:

Table 4.6: Intransitive clause constituent order

Valency:	Possible order of constituents:			
1 (DYN/STAT)	PIV – NP/PRO (bound or free)	VERB	OBL - PP	
1 (DYN/STAT)		VERB	PIV – NP/PRO (bound or free)	OBL - PP

Verbs in intransitive clauses which host (AV) DYNAMIC affixes are those relating to motion, posture, or some form of activity which only affects the participant represented by the PIV argument¹¹⁹. The participant expressed by the PIV argument volitionally controls and instigates this action or event. As such the PIV argument always has the semantic role of ACTOR, e.g.:

¹¹⁸ The one exception is the marked construction of ‘adjunct fronting’, see in §10.5.2.

¹¹⁹ See §6.3.1 for a list of these monovalent verbal roots.

(120) *tumoori kasi*

t<um>o'or =mi kasi
<AV> get.up DIR.DIST again
'(We) will get up again'
(TDN_14_HK_DT_00:04:19)

(121) *kotimumpa wisa?*

ko= t<im¹²⁰>umpa wisa
2.SG.PIV <AV.PST> descend where
'Where did you go down to?'
(TDN_07_0:02:57)

(122) *komusti ma'ana'*

ko= musti ma- ana'
2.SG.PIV must AV.DYN stay
'You have to wait (for your friends)'
(TDN_10_00:02:52)

Verbs in intransitive clauses which host the (EV) STATIVE affix *ma-* (from <um> + *ka-* - see §5.3.1) are those describing situations of non-volitional movement, or physical, psychological or emotional states. In these clauses the highest ranked semantic role possible for the PIV arguments is that of EXPERIENCER, e.g. ((123) - (124) are repeated from (101) and (98). See §4.5.1 for more examples):

(123) *mawulèlong waki numa*

ma- wulèlong waki N= uma
EV.STAT faint in.DIST INAN fields
'(We) faint in the fields (from hard work)'
(TDN_14_DK_NK_00:09:57)

(124) *komarèomou ya*

ko= ma- rèò' =mow ya
2.SG.PIV EV.STAT thirst CPL AFF
'You are already thirsty, right'
(TDN_21_00:05:34)

¹²⁰ As outlined in §5.3.1 and §5.3.2 <im> ← <um>(AV) + <in>(PST).

The interaction between verbal morphology, the semantics of the root, and the features of the PIV argument in intransitive clauses is summarised in Table 4.7:

Table 4.7: Verbal morphology in intransitive clauses

Voice marking:	Affixes:	Characteristics of entity expressed by PIV:
ACTOR	<um>, <i>ma-/meN-</i> (DYNAMIC)	Volitionally initiates movement or posture denoted by verbal root.
EXPERIENCER	<i>ma-/meN-</i> (STATIVE)	Non-volitionally experiences a physical, emotional, or psychological state, or movement denoted by verbal root.

It is important to note that the system summarised in Table 4.7 is part of the overall framework of DYNAMIC, POTENTIVE, and STATIVE verbal marking described in §4.5.1. This verbal affixation is central to almost all verbal clauses, and is not simply restricted to one subcategory of verbs. Therefore, the categorisation of all intransitive clauses as being either DYNAMIC or STATIVE does not represent a split intransitive or Unaccusative/Unergative system such as those described by Dixon (1979) or Foley (2007: 380)¹²¹.

4.5.4 Transitive clauses

The core of all transitive clauses is a lexical root which is minimally overtly marked for one of four voices: ACTOR (AV), PATIENT (PV), LOCATIVE (LV), or CONVEYANCE (CV), and which is also commonly marked with one of the three primary verbal prefixes *pa-*, *ka-* and *ka-*. Depending upon the particular situation expressed by the root which is the head of the predicate, the presence of these verbal affixes may be obligatory or optional.

The primary feature that differentiates transitive from intransitive clauses is the obligatory presence (either overt or simply understood) of two non-oblique arguments, one of which has the GR of PIV, the other which has the GR of either NPIV.UN or NPIV.A.

The following examples demonstrate primary verbal affixation and voice marking within transitive clauses, and how voice marking provides information about the identity and

¹²¹ See also Himmelmann (2004) for an explanation of why STATIVE and POTENTIVE type marking in Philippine-type languages does not constitute a split-S system.

characteristics of the PIV argument. Examples (125) - (128) are elicited, and are presented with the same caveat as the previous clauses in §3.3 (i.e. examples (3) - (6)):

ACTOR VOICE:

(125) *sioki'ku mateles raaren*

si= oki' =ku ma- teles raaren
 AN.SG small 1.SG.POSS AV.DYN buy vegetable

‘My child buys a/some vegetable(s)’

(ELICITED)

PATIENT VOICE:

(126) *raaren patelesen nioki'ku*

raaren pa- teles -en ni= oki' =ku
 vegetable DYN buy PV AN.SG.NPIV.A small 1.SG.POSS

‘My child buys the vegetables’

(ELICITED)

LOCATIVE VOICE:

(127) *pasar patelesan nioki'ku*

pasar pa- teles -an ni= oki' =ku
 market DYN buy PV AN.SG.NPIV.A small 1.SG.POSS

‘The market is where my child buys s.t. (i.e. some vegetables)’

(ELICITED)

CONVEYANCE VOICE:

(128) *eloit ipateles nioki'ku*

N= loit i- pa- teles ni= oki' =ku
 INAN money CV DYN buy AN.SG.NPIV.A small 1.SG.POSS

‘The money is what the child buys s.t. (i.e. vegetables) with’

(ELICITED)

The semantic role of the PIV argument differs in each example, with each PIV argument having the semantic role as indicated by the voice marking on the root *teles* ‘buy’. The somewhat unnatural English glosses are again a result of restrictions on pivots in English basic clauses, restrictions which Tondano does not have (see §9.2 for information on voice and pivot selection).

While examples (125) - (128) don't clarify issues such as distribution, specific usage, or frequency of the different voice affixes, they demonstrate a number of characteristics common to all transitive clauses. These, and other important points which have not yet been noted, are now summarised. Following on from this, transitive clauses in each of the four different voices are examined separately.

- Transitive clauses minimally consist of a voice marked lexical root.
- Unlike AV marked clauses, UV marked clauses exclusively require two non-oblique arguments (expressing an ACTOR and an UNDERGOER) and are therefore always transitive.
- The two participants in transitive clauses are represented by the PIV argument and an NPIV.UN or NPIV.A argument.
- Any participants in addition to the two non-oblique arguments will be represented by oblique PPs.
- The semantic roles of the two arguments in transitive clauses are dependent upon the primary verbal affixation. Clauses with DYNAMIC marked verbal predicates will contain arguments with the macroroles of ACTOR and UNDERGOER, those with POTENTIVE marking will have a potential ACTOR and an UNDERGOER, and those with STATIVE marking will have an EXPERIENCER and a STIMULUS (transitive clauses with POTENTIVE and STATIVE marking are not dealt with here - see §4.5.1)
- PIV arguments within transitive clauses are always highly topical and definite, and may have a number of different semantic roles. The semantic role of the PIV argument is matched by the voice marking on the verb.
- Constituent order in transitive clauses differs between AV and UV clauses. AV clauses are restricted to having the PIV argument pre-verbally, while in UV clauses PIV arguments occur either pre-verbally or post-verbally. A robust generalisation in UV marked clauses is that NPIV.A arguments are restricted to occurring directly after the verb.

a. ACTOR voice transitive clauses:

The following examples demonstrate the constituent order in AV marked verbal clauses. The PIV argument exclusively occurs pre-verbally, while the UNDERGOER (NPIV.UN) argument always occurs following the verb, e.g.:

(129) *komèdo kotèi nse'ut*

ko= <um> èdo kotèy N= se'ut-
2.SG.PIV <AV> take stem INAN banana

‘You will take some banana (palm) stems’

(TDN_11_AW_HL_00:02:50)

(130) *o imaki'kis po'opo'*

wo si= ma- ki'kis po'po'
and 3.SG.PIV AV.DYN grate coconut

‘And he grates some coconut’

(TDN_32_KK_00:04:39)

(131) *kita, sumèrèt lodèi*

kita s<um>èrèt lodèy
1.PL.IN <AV>ride boat

‘We, would ride (in) a boat’

(TDN_28_00:00:19)

(132) *kumasewok enye'i*

ku= ma- sewok N= ye'i
1.SG.PIV AV.DYN mix INAN this.PROX

‘I mix this’

(TDN_03_00:03:04)

(133) *jadi mengingi'it nisèa*

jadi meN- CVCV- ki'it nisèa
so AV.DYN RDP follow 3.PL

‘So, (you) are following them’

(TDN_07_00:09:32)

The constituent order for the AV transitive clauses in (129) - (133) is summarised schematically in Table 4.8.

Table 4.8: AV transitive clause constituent order

Valency:	Order of constituents:			
2	PIV – NP/PRO (bound or free)	VERB	NPIV.UN - NP /PRO (free)	OBL - PP

Identifying specific GRs within these clauses is straightforward for various reasons. Syntactically, the clitic pronouns in (129) - (130) and (132) only reference PIV arguments (see §8.3.3). Therefore, in (133) where the only overt argument is an independent pronoun, it must exclusively function as the NPIV.UN. Furthermore, word order also assigns specific GRs to arguments. In AV marked clauses if there are arguments occurring both pre- and post-verbally, then the pre-verbal argument is the PIV and the post-verbal argument is the NPIV.UN.

Semantically, clauses with AV marked verbs must have a PIV argument which expresses an ACTOR participant, i.e. one which volitionally controls an action or event, and is often animate and/or human. Moreover, the semantic role of this argument correlates with the morphological marking on the verb. Consequently, voice marking indirectly identifies the argument with the semantic role of ACTOR, and in an AV marked clause this argument must have the PIV function. This is another method which disambiguates GRs in transitive clauses where both arguments represent animate and human entities, e.g. in (133) *nisèa* ‘they/them’ cannot be the PIV as it does not have the semantic role of ACTOR.

The clauses above all display characteristics indicative of AV transitive clauses. These distinguishing features (and others) can be summarised as:

- The argument with the semantic role of ACTOR functions as PIV argument.
- The argument with the semantic macrorole of UNDERGOER (commonly PATIENT or THEME) functions as the NPIV.UN argument, although this is not marked morphologically in any way.
- There are no arguments with the GR of NPIV.A.
- Arguments with a OBL function are PPs with an NP complement. These oblique arguments have semantic roles such as RECIPIENT, BENEFICIARY, LOCATION, SOURCE, or GOAL.
- The encoding of GRs is primarily through word order and the use and position of specific pronominals.

The AV transitive clauses in (129) - (133) do not display all the possibilities as regards verbal morphology. Examples of AV transitive clauses with more morphologically complex verbal stems (including various TAM marking) are as follows:

AV past tense¹²²:

(134) *kosimèrèt kuda*

ko= s<im>èrèt kuda

2.SG.PIV <AV.PST> ride horse

‘You rode a horse’

(TDN_07_00:05:00)

AV past tense:

(135) *kominarongkitèla*

ko= ma- <in> rongkit =la

2.SG.PIV AV.DYN <PST> thief DIR.PROX

‘You stole (things)’

(TDN_29_00:19:14)

AV imperfective (iterative - expression of repeated action at a point in time):

(136) *siamepa’aypa’ayang beren kangkasi*

sia ma- CVCV- pa’ayang weren kangkasi

3.SG AV.DYN RDP work eye also

‘She is also playing (i.e. rolling) with her eyes again’

(TDN_31_00:16:49)

AV irrealis mood (actions which have not yet begun but are judged likely to occur):

(137) *kaa sèmekekaanou kasi kaan weru, to?*

ka’a sè= ma- Ce- kaan =mow kasi kaan

because 3.PL.PIV AV.DYN IRR rice CPL again rice

weru to

fresh PART

‘Because they will eat some new (fresh) rice again, right?’

(TDN_31_00:01:40)

A full explanation of the TAM distinctions and other verbal morphology is found in §9. Examples (134) - (137) simply demonstrate the form and position of some of this morphology as part of verbal predicates within AV transitive clauses.

¹²² The differences between the two types of past tense marking are explained in §9.3.1.

b. PATIENT voice transitive clauses:

The clauses in (138) - (142) exemplify the constituent order and clause structure of prototypical PV transitive clauses:

(138) èdoni mbaya lulut

èdo -en =mi N= waya lulut
take PV DIR.DIST INAN all cooking.bamboo
 ‘(You) would take all of the cooking bamboo (tubes)
 (TDN_11_AW_HL_00:02:31)

(139) ipakèrètengkumèè

si= pa- kèrèt -en =ku =mèè
3.SG.PIV DYN summon PV 1.SG.NPIV.A DIR.MED
 ‘I summon her to come’
 (TDN_32_OL_KK_00:03:23)

(140) binunu ’nèamou napi

w<in>unu’ -Ø =nèa =mow N= api’
<PST> extinguish PV 3.PL.NPIV.A CPL INAN fire
 ‘They already put out the fire’
 (TDN_26_00:06:13)

(141) papuusenou empo ’opo’

pa- pu’us -en =mow N= po’po’
DYN kneads PV CPL INAN coconut
 ‘(He) squeezes the (grated) coconut’
 (TDN_11_AW_HL_00:06:24)

(142) empaalinou nituama esa

N= pa- ali -en =mow ni= tuama esa
3.SG.INAN DYN bring PV CPL AN.SG.NPIV.A man one
 ‘The first man brings it (the hard bamboo) along’
 (TDN_26_00:01:57)

Like the AV marked verbal clauses above, the PV marked clauses in (138) - (142) all have voice marked verbs denoting events or actions requiring two arguments with the

macroroles of ACTOR and an UNDERGOER. However, beyond this there are a number of differences.

Firstly, PV transitive clauses display a flexibility in constituent order which is lacking in AV transitive clauses. The NP which represents the PIV argument may occur pre-verbally, as with (139) and (142), or post-verbally, as with (138) and (140) - (141). Secondly, the non-pivot argument in each example is always expressed by an NPIV.A marked element (marked with a specific enclitic or phrase marker - see §8.3.5 and §8.4.2) which refers to the participant with the semantic role of ACTOR. This particular GR only occurs in UV marked verbal clauses where it exclusively occurs directly following the verb.

These constituent order patterns as seen (138) - (142) hold true for all three different types of UV transitive clauses, and are summarised in the following Table.

Table 4.9: UV transitive clause constituent order

Valency:	Order of constituents:			
2	PIV – NP/PRO (free/bound)	VERB	NPIV.A – PRO (bound)	OBL - PP
	PIV – NP/PRO (free/bound)	VERB	NPIV.A (<i>ni=/nè=</i> + N)	OBL - PP
	VERB	NPIV.A – PRO (bound)	PIV – NP/PRO (free)	OBL - PP
	VERB	NPIV.A (<i>ni=/nè=</i> + N)	PIV – NP/PRO (free)	OBL - PP

The following features are indicative of PV marked transitive clauses:

- Frequently, the PIV argument is the NP which has the semantic role of PATIENT or THEME. Occasionally, it may also be a RECIPIENT or BENEFICIARY.
- The argument representing the argument which has the semantic role of ACTOR is marked as NPIV.A.
- There is no argument which has the GR of NPIV.UN.
- GRs are encoded primarily through word order and through the use of specific pronominals.

The clauses in (138) - (142) display many of these features. When arguments in PV transitive clauses are represented with personal pronominals, the proclitic always represents the PIV argument, and the enclitic always represents the NPIV.A argument, e.g.:

(143) *sa kouman kopewewuingkuèpèmèè*

sa kowman ko= pa- Ce- wui -en =ku
if,when meanwhile 2.SG.PIV DYN IRR ask PV 1.SG.NPIV.A
 =pè' =mèè
INCPL DIR.MED

‘Meanwhile if I can still ask you about something’

(TDN_31_00:09:48)

(144) *sirinebusenèala kua*

si= r<in>ebus -Ø =nèa =la ku’a
3.SG.PIV <PST> boil PV 3.PL.NPIV.A DIR.PROX PART

‘They boiled him (the bat) up then’

(TDN_32_OL2_ 00:07:19)

In the event that one of the arguments is represented with an independent pronoun (which may occur either pre-verbally or post-verbally), the presence of an NPIV.A enclitic will still assist in distinguishing the separate GRs of the two arguments, e.g.:

(145) *sa sia pinèlèngumou*

sa sia p<in>èlèng -Ø =mu =mow
if,when 3.SG <PST> choose PV 2.SG.NPIV.A CPL

‘If you choose her’

(TDN_31_00:17:16)

Thus, in (145) *sia* ‘he/she’ must be the PIV as the enclitic =*mu* ‘you’ can only have the GR of NPIV.A. This method of encoding GRs is most observable in clauses which contain two animate/human participants. This is because with minor exceptions (see §8.3.2 and (144) above) personal pronominals only express human participants. In addition, the system of encoding the non-pivot (ACTOR) argument in this way occurs not just in PV marked transitive clauses, but in all UV marked transitive clauses.

In addition to the enclitics used to represent the NPIV.A argument (as seen in (143) - (145)), a full NP may be used instead. In this situation the head of the NPIV.A argument is marked by one of the NPIV.A phrase markers *ni=* (AN.SG.NPIV.A) or *nè=* (AN.PL.NPIV.A), e.g. (NPIV.A NPs in parentheses):

(146) *toto' nipèrèt kinaan nitim*

toto' ni= pèrèt k<in>aan -Ø [ni= Tim]
breast AN.SG.POSS bat <PST> rice PV AN.SG.NPIV.A PN
'Tim ate the bat's breast (meat)'
(TDN_32_OL2_00:08:39)

(147) *pengingiiten nibrawijaya*

peN- CVCV- ki'it -en [ni= Brawijaya]
DYN RDP follow PV AN.SG.NPIV.A PN
'The Brawijaya regiment is following (me)'
(TDN_21_00:02:37)

(148) *sa kita rèipè' pengèrèteni nituhan*

sa kita rèy' =pè' peN- kèrèt -en =mi
if, when 1.PL.EX not INCPL DYN summon PV DIR.DIST
[ni=¹²³ Tuhan]
AN.SG.NPIV.A God
'If God hasn't summoned us yet'
(TDN_07_00:16:43)

The NPIV.A arguments in (146) - (148) are *tim* 'Tim', *brawijaya* 'Brawijaya regiment', and *tuhan* 'God' respectively. As with the NPIV.A enclitics, the position that these arguments may occupy is restricted to directly following the verb. This is regardless of whether the PIV argument is pre- or post-verbal. In the event that both the PIV and the NPIV.A arguments occur after the verb, the NPIV.A argument will always precede the PIV, as seen in example (149). In all UV marked clauses no arguments may occur between the verb and the NPIV.A argument¹²⁴, e.g.:

(149) *palo'namou kokong*

pa- loo' -en =na kokong
DYN see, look PV 3.SG.NPIV.A head
'He sees the head (of the bat)'
(TDN_32_KK_00:02:26)

¹²³ This particular entity is obviously not human. However, in an overtly religious society such as North Sulawesi a monotheistic deity is considered to be very high on the animacy hierarchy.

¹²⁴ It appears that this is a robust generalisation which can be made about many Philippine-type languages, see also Kroeger (1993: 40) and Himmelmann (2005:143, 1991)

Lastly, the variation in how the NPIV.A argument is represented is conditioned to a certain extent by whether or not it represents a previously identified participant, and how salient or referential this participant is. Previously identified participants which are not represented by the PIV argument¹²⁵ are commonly denoted by the enclitic pronominals (or omitted altogether). This is the case in (139) - (140) and (143) - (144). However, in some situations a proper noun is used even if it refers to an already identified participant. This proper noun functions as the head of the NPIV.A NP and always requires a phrase marker. In this situation the proper nouns are used mainly to express formality and respect to the participants they express, as is the case in (146) - (148).

c. *LOCATIVE voice transitive clauses:*

LV transitive clauses have similar characteristics and structures to those outlined for PV transitive clauses. However, LV transitive clauses are not nearly as productive within the UV paradigm. With regards to constituent order, the patterns which occur for LV clauses are identical to those which occur for PV marked clauses (as outlined in Table 4.9).

LV transitive clauses may contain verbs which are overtly marked solely with the LV basic voice affix *-an* (and are zero marked for the DYNAMIC primary affix *pa-*). Clauses with this minimal marking are irrealis, as demonstrated the following examples which are imperative constructions (see also §7.3):

(150) *pè'ananou*

pè'an -an =mow

taste LV CPL

‘(You) try (it - the cucur cake)!’

(TDN_03_00:19:11)

(151) *awesanèla rano*

awes -an =la rano

add LV DIR.PROX water

‘(You) add the water’

(TDN_03_00:11:20)

¹²⁵ Participants which are highly referential and topical (and therefore identifiable) are usually expressed as the PIV argument (see §9.2). In the event that both participants are previously identified, then the most salient will be expressed by the PIV, and the other by the NPIV.A.

The PIV arguments in (150) - (151) have the semantic role of PATIENT and THEME respectively. LV transitive clauses commonly have PIV arguments with these semantic roles, in addition to the more expected role of LOCATION (e.g. (152) - (154) below).

Common characteristics of LV transitive clauses are as follows:

- The PIV argument is the argument which has the semantic role of LOCATION, PATIENT, or THEME.
- The argument representing the participant which has the semantic role of ACTOR is marked with NPIV.A morphology.
- There is no argument which has the GR of NPIV.UN.
- LV transitive clauses are less likely than PV clauses to contain PIV arguments which express human or animate participants.
- In addition to its use as part of a verbal predicate, LV *-an* commonly occurs as part of nominalising processes (i.e. confixes - see §8.2.4). Moreover, verbal stems marked with *-an* are more likely to occur with a syntactically nominal function, i.e. as complements of other verbs.

The exact semantic role of PIV arguments in LV clauses may vary somewhat from clause to clause. This variation is more pronounced than any seen with either of the two other UNDERGOER voices. Examples where the PIV argument represents a location in the strict sense of the word are relatively rare, e.g.:

(152) *raba'an embalè*

raba' -an N= walè

stomp LV INAN house

‘(You) would stomp (jump around) in the house (lit. ‘the house is the place of stomping’),

(TDN_31_00:03:12)

(153) *lodèi kouman anu sinèrètan nèkuda rua*

lodèy kowman anu s<in>èrèt -an nè=
 boat meanwhile NON.SPEC <PST> ride LV AN.PL.NPIV.A
 kuda rua
 horse two

‘Meanwhile the two horses got up on the boat thingy (the ferry)’

(TDN_07_00:03:33)

(154) *kinetoranitè empuser*

k<in>etor -an =itè N= puser
 <PST> slice LV LIM INAN navel

‘(He) just sliced open the navel (lit. ‘the navel was the place of slicing’- to deliver a baby)’

(TDN_07_00:10:52)

In (152) - (154) the PIV NPs represent either a physical location in *em=walè* ‘the house’ and *lodèi* ‘boat’, or a location on a person’s body in *em=puser* ‘the navel, bellybutton’. In these instances the PIV NP expresses the location where an ACTOR participant performs the action or event denoted by the verb. However, more frequently the semantic role of PIV arguments in LV clauses is that of PATIENT or THEME. While this may also be the case in PV marked transitive clauses, there is one important difference: *in LV marked transitive clauses any PIV argument with the role of PATIENT or THEME will be at the location which is relevant to the performing of the particular action or event, e.g.:*

(155) *empotung tiniboian nituama esa*

N= potung t<in>iboy -an ni= tuama esa
 INAN bamboo.tube <PST> grab LV AN.SG.NPIV.A man one

‘The first man grabbed the bamboo tube’

(TDN_26_00:01:41)

(156) *pasiwoan kopra*

pa- siwo -an kopra
 DYN make LV copra

‘(He) makes the copra’

(TDN_12_00:10:36)

(157) *engula, pawèèwanamou itu nuka*

N= gula pa- wèè -an =na =mow witu
 INAN sugar DYN give LV 3.SG.NPIV.A CPL in.MED
 N= uka
 INAN coconut shell

‘He puts the (hot liquid) sugar into the half coconut shell’

(TDN_32_OL_00:08:54)

In (155) - (157) the PIV arguments *en=potung* ‘the bamboo tube’ and *kopra* ‘copra’ are PATIENTS, while *en=gula* ‘the palm sugar’ is a THEME. However, despite these specific semantic roles, in all three instances the location of the event or action denoted by the verb is highly relevant. In (155) the bamboo tube (through which palm sugar tree sap flows) has been lowered from the top of a palm sugar tree, in (156) the copra (made by drying and breaking up the coconut flesh) is made where the coconut palms grow, and in (157) the hot palm sugar liquid is only poured into shells at a specific location under a basic man made shelter. In these particular situations all of the traditional cash crop processes almost exclusively occur at these particular locations. This fact helps explain why the clauses are marked for LV, and not PV.

In addition to functioning as head of a verbal predicate, verbs marked for LV may also have a nominal function within clauses, i.e. as syntactic arguments (complements) of verbs, or as complements of prepositions. While any voice marked lexical root has this ability, this pattern is observed more frequently with roots marked for LV¹²⁶.

When functioning as an argument within a verbal clause, the voice marked lexical root will have the interpretation of ‘place where [LEXICAL ROOT] happens, occurs’, for example:

(158) *moas pekaanan*

<um> oas pa- kaan -an
 <AV> wash DYN rice LV

‘(I) will wash plates (i.e. place of eating)’

(TDN_12_00:07:21)

¹²⁶ This particular pattern occurs over and above the various nominalising processes which use the *-an* suffix - see §8.2.4.

(159) *woitè, matè wia empalewu'an*

wo =itè <um> patè wia N= pa- lewu' -an
and LIM <AV> die on.PROX INAN DYN go.to.field LV

‘And just (I) would die on the track (i.e. place of walking to the fields)!’

(TDN_29_00:17:56)

(160) *empaana'anèa engkampung dèsi hill*

N= pa- ana' -an =nèa N= kampung Daisy Hill
INAN DYN stay LV 3.PL.POSS INAN village PN PN

‘Their home (i.e. place of staying) is (in the suburb of) Daisy Hill’

(TDN_20_00:00:27)

In (158) *pa-kaan-an* (DYN-rice-LV) functions as the NPIV.UN argument in a verbal clause, in (159) *pa-lewu'-an* (DYN-go to the field-LV) functions as the NP complement within a PP, and in (160) *pa-ana'-an=nèa* (DYN-stay-LV=3.PL.NPIV.A) is the PIV argument in an equational clause. Thus, in each instance the LV marked verbal root expresses the location where the event or situation occurs. That is, the place of the eating (158), the place of the walking to the fields (158), and the place of staying (160).

d. CONVEYANCE voice transitive clauses:

The use of CV marking within transitive clauses is more restricted than that of the other two UVs. Moreover, the semantic role of the participant expressed by the PIV argument is also somewhat more restricted.

The following characteristics are found in CV marked transitive clauses:

- The PIV argument frequently has the semantic role of THEME.
- Much less frequently the PIV argument may have the semantic role of INSTRUMENT or STIMULUS.
- The argument which has the semantic role of ACTOR is marked as NPIV.A.
- There is no argument which has the GR of NPIV.UN.
- The participant represented by the PIV argument is almost exclusively inanimate and non-human.

- The basic CV affix *i-* has been lost from almost all morphological environments¹²⁷, with the only exceptions occasionally occurring in the speech of older speakers.

CV transitive clauses are extremely common in procedural narratives, e.g. in descriptions of traditional food making, framing, or crafting. Clauses with this type of CV marking generally have an irrealis reading, and consist solely of a root with voice affixation (which commonly entails no overt primary verbal affixation). These clauses function as imperatives or commands in procedural narratives, e.g.:

(161) *tu wèèmèè mbiir*

tu i- wèè =mèè N= wiir
 then CV give DIR.MED INAN hulled.rice
 ‘Then (you) put in the hulled rice’
 (TDN_11_AW_HL_00:01:24)

(162) *roumou empanci oki iti’i*

i- row’ N= panci oki’ iti’i
 CV far INAN pan small that.MED
 ‘(You) remove that little pan’
 (TDN_25_00:05:03)

(163) *awesèla rano!*

i- awes =la rano
 CV add DIR.PROX water
 ‘(You) add the water!’
 (TDN_03_00:04:36)

The clauses in (161) - (163) demonstrate that in CV marked clauses the PIV argument consistently has the semantic role of THEME, and that it refers to an inanimate object being moved and conveyed for a specific purpose.

In the event that CV transitive clauses overtly contain verbal stems consisting of both primary verbal morphology (e.g. DYNAMIC *pa-/peN-*) and voice marking, the irrealis restriction does not apply. The constituent order and structure of these clauses matches that of the other UV clauses, e.g.:

¹²⁷ This fact is noted as far back as the work of Sneddon (1975:257), who states the basic voice affix *i-* is almost entirely absent from the speech of younger speakers.

(164) *pesandarela witu sesadaran*

i- pa- sandar =la witu Ce- sandar -an
CV DYN lean.on DIR.PROX on.MED NR lean.on LV
'(He) leans (it - the bamboo tube) on the frame'
(TDN_11_AW_HL_00:01:47)

(165) *mpatoamou witu rumping*

N= i- pa- toa' =mow witu rumping
3.SG.INAN CV DYN pour, spill CPL in.MED wok
'(He) pours it (the palm sugar sap) into the wok'
(TDN_25_00:01:35)

(166) *engula ye'ikan, pewangkèr wia sitou walina*

N= gula ye'i -kan i- pa- wangkèr wia
INAN sugar this.PROX also CV DYN sell to.PROX
si= tow walina
AN.SG person other
'(They) sell this palm sugar also to another person'
(TDN_32_OL_00:09:25)

(167) *nèi patumpanamou entabelang esa*

nèy pa- tumpa =na =mow N= tabelang esa
CV.PST DYN descend 3.SG.NPIV.A CPL INAN hard.bamboo one
'He brings down one hard bamboo tube'
(TDN_26_00:03:46)

All of the PIV arguments in (164) - (167) represent inanimate entities which change location or possession. While the PIV NP *en=gula ye'i* 'this palm sugar' in (166) could possibly be analysed as having some sort of INSTRUMENT role (i.e. being utilised to make money), in reality all the PIV arguments in (164) - (167) are THEMES.

The features of the PIV arguments in (161) - (167) are indicative of those in clauses with CV marking. Contrary to what is stated in earlier analyses, the use of CV marking to indicate a PIV argument with the semantic role of INSTRUMENT is rare¹²⁸. Diachronically, it is possible that CV marking was much more prevalent in marking PIV arguments as INSTRUMENTS. However, contemporary Tondano simply does not need this specific

¹²⁸ Although this type of voice marking is labelled as 'Instrument' in Sneddon (1975), the data collected for this thesis suggest the label 'Conveyance' (as per §3.3) is much more appropriate.

function, as there are other ways to express participants which are utilised in some way. Firstly, the Manado Malay verbal root *pakè* ‘to utilise, by means of’ (c.f. standard Indonesian *pakai*) provides an obvious lexical item to fulfil this role¹²⁹, e.g.:

(168) *sisoo mepakè ngaran timonti*¹³⁰

si= so’o ma- pakè ngaran timonti
3.SG.PIV don’t.want AV.DYN utilise name PN

‘He doesn’t want to use the name “Timonti” ’

(TDN_28_00:00:49)

(169) *siminakèmou kuda kuda*

si= <im> pakè =mow kuda kuda
3.SG.PIV <AV.PST> utilise CPL RDP strut

‘He used some timber struts (to build the hut)’

(TDN_26_00:03:28)

The use of the verbal root *pakè* is not the only method used to refer to an inanimate entity which is utilised for a specific purpose. Additionally, the co-ordinating conjunction *wo* (see §10.2.1) may be used with the meaning of ‘with’ or ‘by means of’, e.g.:

(170) *tuana, supaya itu toro nga’anga’an wo emba’ang*

tuana supaya itu toro nga’anga’ -an wo N= wa’ang
thus so.that that.MED can chew LV with INAN tooth

‘Thus, so you can chew that with (your) teeth’

(TDN_03_00:22:30)

(171) *kualinamou wo noto*

ku= ali -en =na =mow wo N= oto
1.SG.PIV bring PV 3.SG.NPIV.A CPL with INAN car

‘He would take me with the car (to Manado)’

(TDN_21_00:02:49)

The use of lexical items to encode participants which are utilised in some way means that CV marking is not specifically required for this function (if it in fact was at an earlier

¹²⁹ As observed in (169) - (170) clauses with *pakè* do not necessarily contain an argument with the role of INSTRUMENT. It may denote any item which is somehow utilised for a purpose.

¹³⁰ The word *timonti* comes from *t<im>onti*’ (<AV.PST> penis ‘fucked’) and is a play on words regarding the pronunciation by native speakers of the author’s first name.

stage). To speculate somewhat, it is possible that this pattern can be seen as the beginning of a breakdown of the symmetrical voice system¹³¹.

In contrast to (161) - (167), CV transitive clauses may display variation with regards to the role of the PIV argument. The PIV argument may express an object of cognition, emotion, or perception, and when this is the case the PIV has the semantic role of STIMULUS, e.g.:

(172) *nèi paturu'la nètu'a wia nikou*

nèy pa- turu' =la nè= tu'a wia nikow
CV.PST DYN indicate DIR.PROX AN.PL.NPIV.A old to.PROX 2.PL
 'The elders taught it (the way of living) to us'
 (TDN_30_00:06:43)

(173) *kaa pekantar nètu'a*

ka'a i- pa- kantar nè= tu'a
because CV DYN sing AN.PL.NPIV.A old
 'Because the elders sing (prayer songs)'
 (TDN_29_00:20:10)

(174) *nèi sanimèè nètu'a rior*

nèy sani =mèè nè= tu'a rior
CV.PST advise DIR.MED AN.PL.NPIV.A old fast, early
 'The elders from before advised (us - of how to live well)'
 (TDN_31_00:00:36)

In examples (172) - (174) CV marking is used to denote the imparting of knowledge to someone by a particular ACTOR entity. The omitted PIV arguments denote things such as advice, prayer songs, and a particular way of living. All these things relate to spiritual knowledge which Minahasans consider to have been passed down to them by the ancestors from pre-Christian times (i.e. 'the elders').

4.5.5 Three participant transitive clauses

Verbal clauses with three participants are a sub-category of transitive clauses, rather than a separate category which can be labelled as ditransitive. The use of this term is not appropriate because in any verbal clause with three participants there is always one

¹³¹ However, this interesting question is beyond the scope of this thesis.

argument which is an OBL PP. Consequently, these clauses must only be monotransitive¹³² and the label ‘three participant transitive clause’ is used instead. This label is essentially the same as that used in Margetts and Austin (2007), i.e. “three participant events”.

There are no specific lexical roots which license clauses with a valency of three. Rather, there are a range of lexical roots such as *wèè* ‘to give, offer, put’, *èdo* ‘take’, *ali* ‘bring’, *teles* ‘buy’, *wangkèr* ‘sell’, *susui* ‘speak, talk’, and, *sani* ‘advise’ which may occur in clauses with either two or three participants.

The semantic roles and GRs of the different participants within three participant transitive clauses are dependent upon the voice marking on the verb (see also §4.6.1 for mapping of semantic roles to GRs). In an AV marked clause the arguments with the semantic roles of ACTOR and PATIENT/THEME function as the PIV and NPIV.UN respectively. The third participant will have a semantic role such as LOCATION, GOAL, SOURCE, RECIPIENT, or BENEFICIARY, all of which are expressed by means of an OBL PP, e.g. (PPs in square parentheses):

(175) *koumèdomou bua bua wia elilik lalan*

kow= <um> èdo =mow bua bua [wia
2.PL.PIV AV take CPL RDP fruit from.PROX
N= lilik lalan]
INAN side road
‘You would take some fruit from the side of the road’
(TDN_07_0:00:56)

(176) *sèmeurus sèoki wia engkampung*

sè= ma- urus sè= oki’ [wia
3.PL.PIV AV.DYN raise AN.PL small in.PROX
N= kampung]
INAN countryside
‘They raise children in the countryside (during the *Permesta* rebellion)’
(TDN_07_00:11:19)

¹³² This particular feature of three participant clauses is attested in other AN languages. This analysis matches that put forward in Foley (2008:28)

(177) *sèmasiwo got got waki lalan*

sè= ma- siwo got got [waki lalan]
3.PL.PIV AV.DYN make RDP drain on.DIST road
 ‘They make drains on the road’
 (TDN_12_0:16:43)

The semantic roles of the participants expressed by the PPs in (175) - (177) are SOURCE and LOCATION respectively.

In the event that the clause is marked for PV, LV, or CV, the PIV argument will commonly express a participant with the role of PATIENT, THEME, or LOCATION. The participant with the role of ACTOR is expressed by the NPIV.A argument, while the third participant is again expressed by means of an OBL PP, e.g.:

(178) *wèènoula rano witu puusen*

wèè -en =mow =la rano [witu pu’us -en]
give PV CPL DIR.PROX water to.MED knead PV
 ‘(You) put the water into the squeezed mixture (of shredded coconut)’
 (TDN_32_KK_00:04:49)

(179) *sèalinta aki wènanang*

sè= ali -en =ta [waki Wènanang]
3.PL.PIV bring PV 1.PL.IN.NPIV.A to.DIST PN
 ‘We would take them to Manado’
 (TDN_14_HK_DT_00:01:50)

(180) *nèi warèngnamoula ensamar witu nakel*

nèy warèng =na =mow =la N= samar
CV.PST return 3.SG.NPIV.A CPL DIR.PROX INAN container
 [witu N= akel]
to.MED INAN sugar.palm.tree
 ‘He returned the palm sugar container to the sugar palm tree’
 (TDN_25_00:00:57)

In (178) - (180) the semantic role of *n=uka* ‘coconut shell’, *Wènanang* ‘Manado’, and *n=akel* ‘sugar palm tree’ is that of GOAL. There are restrictions on the semantic role of the third participant in UV marked clauses. This is due to the fact that the PIV argument may have a number of different semantic roles which are subsumed under the macrorole of

UNDERGOER. As such, in the event that the PIV argument itself refers to a participant with the semantic role of RECIPIENT, GOAL, or LOCATION, the participant expressed by the OBL PP will never have the same semantic role.

It could be stated that the inherent semantics of roots such as *wangkèr*, *wèè*, *èdo*, and *ali*, mean they all must include a participant which has the role of BENEFICIARY/RECIPIENT/LOCATION (i.e. ‘sell’, ‘give’, ‘take’, and ‘bring’ something to someone or somewhere’) in addition to an ACTOR and a THEME. However, this does not necessitate that the verb must subcategorise an argument for every single one of these semantic roles. Furthermore, in a language which does not display rigid verbal subcategorisation it is not surprising that the third participant in a transitive clause is expressed by means of an OBL argument. Each three participant clause in (175) - (180) contains one participant which can only be expressed as the complement of a preposition within an OBL PP. Consequently, these clauses are best analysed as transitive clauses in which the third participant is never subcategorised.

4.6 Semantic roles and grammatical relations

The mapping of semantic roles to GRs via voice marking on verbs is outlined schematically in §4.6.1, before a description of the unique characteristics of the PIV argument (and diagnostics which can be utilised to identify it) is presented §4.6.2.

4.6.1 Mapping of semantic roles and grammatical relations

The labels given to the various different GRs in this description are those of *Pivot*, *Non-pivot UNDERGOER*, *Non-pivot ACTOR*, and *Oblique*. These terms were previously defined in §3.1 and §4.3. In this section we will be concerned with the mapping between GRs and the various semantic roles which are assigned to all arguments in verbal clauses.

While the specific voice marking on heads of verbal predicates may indirectly assist in identifying the PIV argument, the encoding of all GRs is primarily realised through word order and the features of pronominal forms (see Table 4.1). The exact interaction between syntactic function, semantic role, and voice marking within transitive clauses is summarised in Table 4.10 (for intransitive clauses see Table 4.7 and §4.5.1):

Table 4.10: Interaction of GR, semantic role, and voice marking

GR (syntactic function):	Semantic role:	Voice marking on verbal predicate:
PIV (syntactic pivot)	Any	Any
NPIV.UN	1) PATIENT	AV
	2) THEME	AV
NPIV.A	1) ACTOR	PV, LV, CV
	2) POSSESSOR	N/A (NP in any clause)
OBL	1) RECIPIENT	AV (PV, LV, CV)
	2) BENEFICIARY	AV (PV, LV, CV)
	3) LOCATION	AV (PV, LV, CV)
	4) GOAL	AV (PV, LV, CV)
	5) SOURCE	AV (PV, LV, CV)

Table 4.10 demonstrates that PIV arguments have at least one special feature in contrast to all other GRs, i.e. a lack of restriction in the semantic role they encode. This is one of a number of unique features which only the PIV argument in a clause displays.

4.6.2 Unique features of pivot arguments

Any PIV argument will have a number of specific and unique characteristics in comparison with any other argument. These can be summarised as:

- Only the PIV argument is referenced by a voice marking affix on the head of the verbal predicate.
- Only the PIV argument may be separated from the quantifiers which modify it (so called ‘quantifier floating’).
- Only the PIV argument can be extracted through question formation and relativisation, (i.e. the “subjects only” restriction on extraction from Keenan (1976)).
- The PIV is the only argument which is co-referenced by clause external topics in topicalisation constructions.

As previously detailed in §3.3, and in earlier sections of this chapter, voice marking inherently contains information about the semantic role and function of the PIV argument.

This feature is not examined further here. In the following sections the unique features relating to question formation, relativisation, and quantifier floating are examined. Following on from this, the different processes of topicalisation (and the fact that only PIV arguments are co-referent with topicalised elements) are discussed in §4.7.

a. Question formation

Only PIV arguments may be extracted in question formation (see §7.1.2). For instance, in content questions, if the argument referred to by the clause external question word (i.e. *wh*- word) has the ACTOR semantic role, then the verb is AV marked, e.g.:

(181) *sèi sirèipè kimawèng kua?*

sèy si= rày' =pè' k<im>awèng ku'a

who 3.SG.PIV not INCPL <AV.PST> marry PART

‘Who is not married then?’

(TDN_07_00:16:19)

(182) *sèi sikimaanou entinutu'an?*

sèy si= k<im>aan =mow N= tinutu'an

who 3.SG.PIV <AV.PST> rice CPL INAN vegetable.porridge

‘Who ate vegetable porridge?’

(ELICITED)

(183) *sèi simaturu' niko?*

sèy si= ma- turu' niko

who 3.SG.PIV AV.DYN indicate 2.SG

‘Who teaches you (to sing)?’

(BBT: 07/01/2012)

In (181) - (183) the verb forms are all marked with AV morphology, signalling that the interrogative *sèi* ‘who’ refers to an ACTOR participant. This means that the only argument in all three clauses which may express the PIV is *si=* ‘he/she/it. Any UNDERGOER arguments such as *en=tinutu'an* in (182) or *niko* in (183)¹³³ may only have the GR of NPIV.UN.

¹³³ The fact that these arguments are not the PIV is also demonstrated by restricted word order in AV transitive clauses as outlined in §4.2.2.

The exclusivity of PIV arguments being extracted in question formation is observed if the voice marking is changed. Any attempt to use UNDERGOER voice marking on the verb when the question word still refers to an ACTOR participant results in ungrammaticality, e.g.:

(184) **sèi sikinaanou entinutu'an?*

sèy si= k<in>aan -Ø¹³⁴ =mow N= tinutu'an
 who 3.SG.PIV <PST> rice PV CPL INAN vegetable.porridge

'Who ate the vegetable porridge?'

(ELICITED)

The presence of the PV marking on the verb in (184) signifies that the PIV argument must refer to a participant with the semantic role of PATIENT or THEME. The only argument which fulfils this role is *en=tinutu'an*. However, in order for this argument to function as the PIV, both the proform and the voice marking must change from that seen in (182), e.g.:

(185) *kinaanou nisèi entinutu'an?*

k<in>aan -Ø =mow ni= sèy N= tinutu'an
 <PST> rice PV CPL AN.SG.NPIV.A who INAN vegetable.porridge

'Who ate the vegetable porridge?'

(ELICITED)

In (185) the ACTOR participant is now expressed with the interrogative *sèi*¹³⁵, which is marked with the NPIV.A phrase marker *ni=*. The PATIENT participant *en=tinutu'an* now has the PIV function, as indicated by the PV marking on the verb.

In truth, while (185) is judged as grammatically acceptable by speakers, it is also judged somewhat strange semantically. This is because in question formation an inanimate participant is generally only expressed with a PIV argument if it is the unknown entity, in which case the question word *sapa* 'what' is used. Similarly, when the unknown entity is human then *sèi* will be used.

¹³⁴ As will be noted in §5.3.2 the PV suffix *-en* and the past tense infix *<in>* never co-occur in verbal predicates. This pattern is also attested in various other Philippine-type languages.

¹³⁵ In (185) the question word *sèi* functions as the ACTOR argument here. This is unlikely to be a naturally occurring construction. If the PIV argument refers to an inanimate (UNDERGOER) participant, then the question word *sapa* is more likely to be used - see §7.1.2

b. Relativisation

Relative clauses and the restrictions related to relativisation in Tondano are discussed in greater detail §10.3.1. Here it will suffice to say that only the head of a PIV argument¹³⁶ can be relativized. This head is therefore interpreted as both the head of the PIV argument of the main clause, and the PIV argument of the modifying relative clause. Put another way, the relativised function (i.e. the GR which the head of the modified argument is assigned inside the modifying relative clause) can only be that of PIV.

With one exception,¹³⁷ Tondano relative clauses are externally headed and post-nominal. Both relative pronouns and the gapping strategy may be used to indicate the relativised function¹³⁸. When the gapping strategy is used the missing argument indicated by the ‘gap’ inside the relative clause is only ever the PIV. As such, any overtly expressed argument within a relative clause never functions as the PIV. e.g.:

(186) *pekekemesenala lia tinomemumou*

pa-	Ce-	kemes	-en	=la	[lia	[t<in>omen	-Ø
DYN	IRR	wash	PV	DIR.PROX	ginger	<PST> pound	PV
=mu		=mow]]					
2.SG.NPIV.A CPL							
‘(He) will wash the ginger that you crushed’							
(TDN_11_00:00:50)							

Example (186) contains a main verbal predicate marked for PV (*pe-ke-kemes-en=la*) together with the (clausal) PIV argument *lia t<in>omem=u=mou*. This clausal argument consists of the head noun *lia* ‘ginger’ (which is both the head of the PIV argument of the main clause, and the PIV argument of the relative clause) and the relative clause which modifies it, *t<in>omem=u=mou* ‘was crushed by you’. Together these two syntactic elements comprise the larger (PIV) NP of the main clause. In (186) the antecedent of the missing NP inside the relative clause can only be *lia*. Another indication of the status of *lia* is observed in the voice marking, i.e. in both the main clause and the relative clause the verbal stem is marked for PV, as is required when the PIV argument has the semantic role of PATIENT.

¹³⁶ Both NPs and pronouns may be modified by relative clauses.

¹³⁷ Relative clauses may be headless when the matrix clause is existential - see §10.3.1.

¹³⁸ To a certain extent the factors of animacy and volition condition whether the gapping or relative pronouns are used- see §10.3.1.

Any attempt to extract the non-PIV argument as the head of the relative clause leads to ungrammaticality, e.g.:

(187) **pekekemesenala lia tinomemumou*

pa- Ce- kemes -en =la [ko= [t<in>omen -Ø
 DYN IRR wash PV DIR.PROX 1.SG <PST> pound PV
 =mow lia]]
 CPL ginger

‘(He) will wash the ginger that you crushed’

(ELICITED)

In (187) *lia* is the overtly expressed argument inside the relative clause, while the proclitic *ko=* ‘you’¹³⁹ is ostensibly the head of the PIV argument of the main clause, and is modified by the relative clause *t<in>omem=u=mou lia*. *ko=* should therefore also be the PIV argument of this relative clause. However, *ko=* cannot function as either the head of the PIV argument of the main clause, or as the PIV argument of the relative clause. This is because *ko=* has the semantic role of ACTOR, meaning the PV marking on both verbs is ungrammatical. Furthermore, the only argument with the correct semantic role to match the voice marking (i.e. PATIENT) is *lia*, but if this NP were to be the PIV argument it could not be overtly expressed inside the relative clause. The fact that *ko=* cannot be the head of the PIV argument of the main clause means that the relativised function is not that of PIV, and as such (187) cannot be grammatical.

c. Quantifier floating

The third feature which is specific to the PIV argument is quantifier floating. This is a common cross linguistic process whereby quantifier elements do not have to occur within the NP which they modify. In a number of Philippine-type languages it is exclusively the syntactic pivot (PIV) which may be modified by these ‘floated’ quantifiers (Kroeger 1993:21). This feature results in a large amount of flexibility in the position of a quantifier within a clause. However, the fact that the floating quantifier only ever modifies the PIV avoids any potential ambiguity.

¹³⁹ In order to have a 2.SG form as a PIV argument the proclitic *ko=* must be used. Enclitics cannot function as PIV. Furthermore, pronominal enclitics can never be the PIV argument in any situation – see §8.2.4

One of the most common quantifiers is *waya* ‘all, everything, everyone’. *waya* commonly occurs as part of an NP, preceding the head noun and phrase marker it modifies, e.g.:

(188) *sa menèlok waya sèoki*’

sa meN- sèlok waya sè= oki’
 if, when AV.DYN wrong all AN.PL small
 ‘When all the children behave badly’
 (TDN_07_00:16:07)

(189) *nièdomutèla waya empèra*’

<in> èdo -Ø =mu =itè =la waya N= pèra’
 <PST> take PV 2.SG.NPIV.A LIM DIR.PROX all INAN roe
 ‘You just took all the fish eggs’
 (TDN_28_00:00:56)

In both (188) - (189) *waya* ‘all’ occurs within NPs which have the head nouns *oki*’ ‘child’, and *pèra*’ ‘roe’ respectively. The occurrence of *waya* within the NP means there is no ambiguity as to which head noun it modifies. Also, as (188) is intransitive there is only one noun which can be modified.

However, in some clauses with two participants *waya* does not occur within the NP it modifies. In these clauses context and general knowledge may indicate which NP the quantifier modifies, e.g.:

(190) *paèdonou waya nikalo empèra*’

pa- èdo -en =mow waya ni= Kalo N= pèra
 DYN take PV CPL all AN.SG.NPIV.A PN INAN roe
 ‘Kalo takes all of the fish eggs’
 (TDN_28_00:0:13)

In (190) *waya* is non-adjacent to the head noun which it modifies, *pèra* ‘roe’. However, this does not result in any ambiguity due to the fact that the second participant in the clause, the NPIV.A marked ACTOR argument (and proper noun) *Kalo*, is known to be singular. This information is both common knowledge, and morphologically marked by the singular NPIV.A phrase marker *ni=*. Accordingly, it would be semantically very strange for *waya ni=Kalo* (all AN.SG.NPIV.A=Kalo) to mean ‘all the Kalos’.

In a situation where the quantifier is floated and either of the two participants could be plural, there is more chance for ambiguity, e.g.:

(191) *sèmate'u waya siopo, siopo mana natas*

sè=	ma-	te'u	waya	si=	Opo	si=	Opo
3.PL.PIV	EV.STAT	know	all	AN.SG	elder	AN.SG	elder
mana	N=	atas					
up.MED	INAN	above					

‘They all know (about) God, God up above’

(TDN_12_00:16:15)

(192) *kaanenou waya nèkawok engkaan*

kaan	-en	=mow	waya	nè=	kawok	N=	kaan
rice	PV	CPL	all	AN.PL.NPIV.A	mouse	INAN	rice

‘The mice would eat all the rice (if they come down to the fields)’

(TDN_31_00:09:32)

The clauses in (191) - (192) each have two participants which could both possibly be plural¹⁴⁰, with either participant possibly being modified by the quantifier. However, because the quantifier can only be construed as referring to the PIV NP, any ambiguity is avoided. In (191) *waya* cannot be interpreted as modifying the NPIV.UN NP *si=opo mana n=atas* ‘God up above’, and in (192) it cannot modify the NPIV.A (ACTOR) *nè=kawok* ‘the mice’. Rather, *waya* modifies the arguments *sè=* ‘they’ and *eng=kaan* ‘the rice’ and thereby assists in identifying these arguments as PIV.

In order for the NPIV.A NP *nè=kawok* in (192) to be modified by *waya*, it is required to have the PIV function. This requires a change in its position within the clause, and a change in the voice marking on the verb, e.g.:

¹⁴⁰ As detailed in §8.4.1 the AN.SG phrase marker *si=* can be used to refer to entities as a group, or as whole species. The NP *si=opo mana n=atas* could plausibly mean multiple ‘Gods up above’.

(193) (waya) sè=kawok (waya)kumaanou (waya) engkaan

(waya) sè= kawok (waya) k<um>aan =mow (waya)

all AN.PL mouse all <AV> rice CPL all

N= kaan

INAN rice

‘All the mice would eat the rice’

(ELICITED)

In example (193) the ACTOR NP sè=kawok is the PIV argument as indicated by the AV marking on the verb. The quantifier waya may occur in any of the positions seen in (193), while still only ever modifying the PIV NP sè=kawok.

4.7 Topicalisation

As in many languages (including English), arguments which function as topics¹⁴¹ in Tondano share a number of traits with syntactic pivots. The discourse function of topics requires the argument which expresses them to be both highly salient, and to be the entity which the proposition of the clause comments on. As such, in many instances the argument which has the function of syntactic pivot expresses presupposed or given information, and is therefore also the topic, e.g.:

(194) susur nendo kumusti tumoor ee, rior

susur N= endo ku= musti t<um>o’or erh rior

every INAN day 1.SG.PIV must <AV> get.up HES fast

‘Every day I have to get up erh, early’

(TDN_12_00:07:13)

(195) kina’atoan nètù’a rior entimpa ye’i

ka- <in> ato -an nè= tu’a rior N=

POT <PST> see, look LV AN.PL.NPIV.A old fast INAN

timpa’ ye’i

palm.sugar.sap this.PROX

‘The elders from before could see (i.e. obtain) this palm sugar sap’

(TDN_32_OL_00:05:51)

¹⁴¹ The notion of *Topic* adheres to the common definition of “the entity (person, thing etc.) about which something is said” (Crystal 2008:488), with the notion of *comment* as opposite. The use of *topic* in Sneddon (1975) refers to the syntactic pivot.

The PIV arguments in (194) - (195) are *ku*= 'I' and *en=timpa' ye'i* 'this palm sugar sap'. These arguments both represent highly prominent and previously mentioned entities about which the clause comments on, and as such they are also topics.

However, there are also instances where the topic and the PIV are realised as separate arguments. These instances result from processes of topicalisation in which a constituent within a clause is moved to a different (usually peripheral) clausal position.

There are three different processes of topicalisation in Tondano, two of which result in arguments occurring externally to the clause, usually with a corresponding prosodic break. These arguments are resumed by a co-referent clause internal element, which is the PIV argument (the PIV argument is pronominal which then has the function of a resumptive pronoun). The arguments which occur as clause external topics are co-referent solely with the PIV argument, and therefore display another feature which exclusively relates to the syntactic pivot.

The third process of topicalisation only occurs with OBL PPs. Furthermore, these PPs are not clause external, and there is rarely a prosodic break between them and other clausal constituents. Despite any similarities, these three processes of topicalisation are differentiated by separate functions at a discourse level. They are labelled here as of 'left dislocation' (§4.7.1), 'right dislocation' (§4.7.2) and 'oblique fronting' (§4.7.3).

4.7.1 Left dislocation

In left dislocation an NP which is co-referent with the PIV argument always occurs at the left periphery of a clause, i.e. prior to the first clause internal constituent. The left dislocated topic is clause external and precedes the PIV argument, separated by a pause in intonation. The PIV argument is then expressed clause internally by a personal pronominal which matches the left dislocated element in person and number. The left dislocated topic therefore exclusively refers to the PIV argument, e.g.:

(196) *sèoki' ye'i, sèma'ajar masiwo cucur*

sè= oki' ye'i sè= ma- ajar ma-
 AN.PL small this.PROX 3.PL.PIV AV.DYN learn AV.DYN
 siwo cucur
 make cake

'These children, they learn to make cucur cake'

(TDN_03_00:08:00)

(197) *tu'a rior nèminahasa, sèsimiwola mènngkat ti'i*

tu'a rior nè= Minahasa sè= s<im>iwo
 old fast AN.PL.NPIV.A PN 3.PL.PIV <AV.PST> make
 =la maèngkat iti'i
 DIR.PROX traditional dance that.MED

'The elders of Minahasa, they did those traditional dances'

(TDN_31_00:04:06)

(198) *kèiye'i wo sitim, kèiwia entondano*

kèy= ye'i wo si= Tim kèy= wia
 1.PL.EX now and AN.SG PN 1.PL.EX.PIV in.PROX
 N= Tondano
 INAN PN

'Now us and Tim, we are here in Tondano town'

(TDN_32_DT_00:00:07)

In (196) - (198) the left-dislocated topics are externalised from the clause by a clear prosodic break which separates them from the initial constituent of the following clauses, i.e. the PIV arguments *sè=* in (196) - (197) and *kèi=* in (198). Left dislocated topics have the function to introduce or emphasise a new participant (as is the case in (196) and (198)), or to re-introduce a participant which was previously mentioned (as is the case in (197)), but which has become less salient. This function is in contrast to clauses such as (194) - (195) where the topic and PIV occur in a single argument which expresses a salient and already identified participant.

Left dislocation may also occur when both the topic and the PIV argument are expressed with pronominals, e.g.:

(199) *niaku, kumasuweng wia nisèa*

niaku ku= ma- suweng wia nisèa
 1.SG 1.SG.PIV AV.DYN work.together to.PROX 3.PL

‘As for me, I work together with them’

(TDN_21_00:05:00)

(200) *kita, tanèi teleumèè*

kita ta= nèy tele’u =mèè
 1.PL.IN 1.PL.IN.PIV CV.PST remain DIR.DIST

‘As for us, we were left there (by the others)’

(TDN_07_00:14:43)

(201) *sèa sèmetanem se’ut*

sèa sè= ma- tanem se’ut
 3.PL 3.PL.PIV AV.DYN cultivate banana

‘As for them, they cultivate bananas (near my village)’

(TDN_12_00:02:03)

In (199) - (201) the left dislocated topics are expressed with full independent pronouns, i.e. *niaku* ‘I’, *kita* ‘we’, and *sèa* ‘they’. In contrast, the subsequent PIV arguments are realised as the corresponding bound proclitics which match the independent forms in person and number. The intonation pause in these examples is occasionally less discernible than that is observed in examples where the topic is a full NP. Nonetheless, the function of the left dislocation is similar, and the dislocated topic ‘announces’ (and therefore highlights pragmatically) the participant referred to by the PIV.

4.7.2 *Right dislocation*

The second process of topicalisation also involves a clause external topic NP which refers to the clause internal PIV argument. Right dislocated topics occur to the right periphery of a clause. There is sometimes a far less clear intonation break between the right dislocated topic and the clause than that observed in left dislocation. An additional difference is that right dislocated topics are only ever represented by independent pronominals or full NPs, and never by bound pronominals, e.g.:

(202) *simana' aki walèmu sia?*

si= <um> ana' waki walè =mu sia
 3.SG.PIV <AV> stay at.DIST house 2.SG.POSS 3.SG
 'He will stay at your house, (will) he?'
 (TDN_28_00:02:22)

(203) *sèa maparangan sèraja iti'i*

sèa ma- parang -an sè= raja iti'i
 3.PL AV.DYN machete MUT AN.PL king that.MED
 'They fought against each other, those kings'
 (TDN_31_00:11:59)

(204) *empesesiwonèa, gula mèa'*

N= pa- Ce- siwo -en =nèa gula mèa'
 3.SG.INAN DYN IRR make, do PV 3.PL.NPIV.A sugar red
 'They will make it, the palm sugar'
 (TDN_32_OL2_00:02:55)

In (202) - (204) the right dislocated topics are *sia* 'he', *sè=raja iti'i* 'those kings', and *gula mèa'* 'palm sugar'. Of these examples, only (202) and (204) have a noticeable pause between the clause and the right dislocated topic. Despite this, the three external topics are all clearly co-referent with the earlier PIV arguments which they agree with in person and number.

Right dislocated topics do not serve the same purpose as left dislocated topics. This is evident because they can never introduce new participants or re-introduce older participants. In the data these right dislocated topics only have only one discernible function. The addition of a clause external topic at the right periphery is to further clarify the entity expressed by the clause internal PIV argument. This pattern occurs in clauses which are statements, as in (203) - (204), or those which are yes/no questions, as in (202).

4.7.3 Oblique fronting

As observed in §4.5, in verbal clauses (either intransitive or transitive) the default position for the OBL PP is post predicate. However, in certain situations this PP may occur in a

Oblique fronting has a number of pragmatic functions such as focussing, confirming, and disambiguating the entity represented by the fronted PP constituent, e.g.:

wia N= atas rumping w<in>èè -an =na
on.PROX INAN top wok <PST>give LV 3.SG.NPIV.A
 ‘On top of the wok he has put (it - the lid)’
 (TDN 32 OL 00:07:05)

175

expressed with the PP to be topicalised, while at the same time the clause maintains a PIV argument which represents the most highly salient entity (as it is required to - see §9.2.1).

5.0 MORPHOLOGICAL ELEMENTS AND WORD STRUCTURE

This chapter provides a description of words and word formation in Tondano.

Morphological elements may be entirely lexical in nature, such as independent lexical roots, or entirely grammatical, such as the assorted affixes and clitics which commonly appear as part of words. In §5.1 and §5.2 the features of words, stems, and roots are described, before the various bound morphological elements are explained in §5.3 - §5.6. In §5.7 the typological characteristics of Tondano clitic pronominals within a Western AN context are briefly discussed.

The functions of a number of the morphological elements in this chapter are explained in more detail in other chapters (e.g. proclitics, enclitics, and particles). When this is the case they are only briefly summarised in this chapter. Links are then given to the relevant chapters containing further explanation.

5.1 The Tondano word

There are two morphological categories. There are independent monomorphemic units which occur without additional morphology, and there are complex forms which comprise independent units hosting various additional bound morphemes. These bound morphemes may either be inflectional or derivational in nature. The terminology used to describe these two word categories is lexical roots and morphologically complex words (i.e. stems - see §5.2.2) respectively.

Regardless of whether a word is an independent element or a complex form, we can distinguish two types of word: phonological and grammatical. The various criteria for defining phonological words are as follows (from Dixon & Aikhenvald 2002:13-24; Dixon 2010: 7-12). Phonological words are the smallest possible utterance in a language, and usually have a number of the following features:

- A minimum of one syllable.
- Phonotactic restrictions within syllables and across syllable boundaries.
- Stress assignment on at least one syllable.
- Phonological processes which occur word internally and across morpheme boundaries.

Phonological words consist of one or more syllables, and display the patterns of syllable structure, phonotactics, and morphophonological processes outlined in §2. Phonological words can be either independent monomorphemic units, or morphologically complex forms. Examples of phonological words which consist solely of an independent lexical root are words such as: *lansa* ‘dance’, *toto* ‘breast’, *akel* ‘sugar palm tree’, *kunir* ‘yellow’, and *pasu* ‘hot’. Phonological words which are complex forms (stems) are those such as: *se-sani-en* (NR-instruct- PV) ‘advice, instructions’, *ma-kèlang* (AV.DYN-walk) ‘walks’, and *t<in>iboy-an* (<PST> grab-LV) ‘grabs.’.

As for grammatical words in Tondano, they will have the following features (again from Dixon & Aikhenvald 2002:13-24 and Dixon 2010:12-20), e.g.:

- They consist of a lexical root to which various morphological processes are applied. This results in the addition of various bound morphological elements to the root. This bound morphology may be derivational or inflectional and has a range of grammatical functions.
- These elements occur adjacent to one another (rather than in different places throughout a clause) and generally occur in a fixed order.
- The resulting form will have conventionalised meaning amongst speakers.

Morphologically complex words which demonstrate these features are those such as: *p<in>a-ali-en=ku=mi* (DYN.PST- bring-PV=1.SG.NP.V.A=DIR.DIST) ‘I brought (it) along (from there)’ or *si=k<um>aan=ow=itè* (3.SG.PIV =<AV> rice=COMP=LIM) ‘he will just eat (it)’.

Whereas the six criteria above allow phonological and grammatical words to be identified in most instances, there are words which are slightly problematic to categorise, as well as examples of overlap between the two sets of criteria. The most obvious mismatch between phonological and grammatical words relates to clitics. These bound elements only possess one of the features of the phonological word (i.e. they are minimally monosyllabic) and do not consist of a lexical root plus bound element, yet they are syntactically independent and commonly have conventionalised meaning. Consequently, clitics such as *ku=* (1.SG.) ‘I’ and *si=* (3.SG.) ‘he/she’ are judged here to have more features of the grammatical word, and are categorised as such.

There are clear examples of overlap where the phonological word and the grammatical word coincide. In fact, with the exception of clitics, all grammatical words are also phonological words. Thus, phonological words may consist of multiple grammatical words, i.e. in the case of multiple clitics, e.g.: *ko=t<im>ingkas=ow* (2.SG.PIV =AV.PST – run=COMP) ‘you ran away’ or *N=te-tekel-an=mu* (INAN=NR- sleep -LV=2.SG.POSS) ‘your bed’.

Finally, a grammatical word may also consist of multiple phonological words. This occurs solely with the disyllabic root reduplication (see §2.6.6) process which expresses imperfective aspect (see §9.3.2). Words which undergo this process are commonly comprised of multiple phonological words in the form of lexical roots and affixes, e.g.: *ma-aliali* (AV.DYN - RDP- bring) ‘is bringing along s.t.’ or *sè=ma-tinga-tingkas* (3.PL=AV.DYN- RDP -run) ‘they are running away’.

5.2 Morphological elements

Tondano has complex and productive morphology with a total of eight different morphological elements attested. These are: lexical roots, prefixes, infixes, suffixes, circumfixes, proclitics, enclitics, and particles¹⁴³. Of these eight categories only lexical roots and particles can function as independent words. All other categories must attach to either a lexical root, or a stem which already consists of a lexical root and additional morphology. The various bound elements which occur to form words are both inflectional and derivational. Moreover, the voice marking affixes (see §3.3) have features of both inflectional and derivational morphology.

5.2.1 Lexical roots

A distinction can be made between three different types of lexical roots, with the three types distinguished on a semantic and morphological basis (see §6.1 for further detail). While lexical roots are the only elements which may occur in their bare form, not all of them appear to do so. Many verbal roots (e.g. all Type III and some Type II) require additional morphology to form words.

In order to distinguish lexical roots from other morphological elements, the following definition is given and adhered to from this point on: *a lexical root is any single*

¹⁴³ In addition, certain prefixes and suffixes may occur together with a different function than when they occur independently. These combinations are confixes (see §8.2.4 for examples). However, they are not considered a separate category of morphological element.

morpheme which may occur in its bare form within a clause, or which may host additional morphology.

5.2.2 Stems

A textbook definition of a morphological stem is one such as that put forward by Kroeger (1993:250): “the stem of a word consists of its root(s) and all the derivational affixes it contains, but no inflectional affixes”. Broadly speaking, this particular notion of a stem is also applicable to Tondano words. However, there are some instances (specifically with voice affixation - explained below) where this definition of a stem does not completely hold true.

A prototypical example of stem formation is when Type III lexical roots (which are very broadly speaking, verbal roots - see §6.1) host derivational morphology in the form of primary verbal affixation. These affixes derive verbal stems¹⁴⁴, and these stems then function as the head of verbal predicates, a function that no bare (unaffixed) Type III root can have. The resulting verbal stem may then host various inflectional morphological elements. Most commonly this inflectional morphology is voice marking, which is also required in order for a verbal stem to act as the head of a verbal predicate. Another example of stem formation occurs when a lexical root hosts nominalising affixation (see §8.2.4). Table 5.1 displays both these processes with verbal roots such as *lutam* ‘shoot’, *tekel* ‘sleep’, and *kantar* ‘sing’.

Table 5.1: Stem formation

Lexical root:	Primary (derivational) affixation → stem	Inflectional (voice) affixation → complex stem
<i>lutam</i>	+ <i>pa-</i> (DYN) → <i>pa-lutam</i>	+ < <i>um</i> > (AV) → <i>ma-lutam</i>
<i>lutam</i>	+ <i>pa-</i> (DYN) → <i>pa-lutam</i>	+ <i>-en</i> (PV) → <i>pa-lutam-en</i>
<i>lutam</i>	+ <i>pa-</i> (DYN) → <i>pa-lutam</i>	+ <i>-an</i> (LV) → <i>pa-lutam-an</i>
<i>lutam</i>	+ <i>pa-</i> (DYN) → <i>pa-lutam</i>	+ <i>i-</i> (CV) → <i>(i-)pa-lutam</i>
<i>lutam</i>	+ <i>Ce-</i> (NR) → <i>le-lutam</i>	
<i>tekel</i>	+ <i>Ce-</i> (NR) + <i>-an</i> (LV) → <i>te-tekel-an</i>	
<i>kantar</i>	+ <i>Ce-</i> (NR) + <i>-en</i> (PV) → <i>ke-kantar-en</i>	

¹⁴⁴ These affixes are derivational in the sense that they derive a new category of lexical item. In some instances the lexical root class and the derived word class are the same, while in others they differ - see §6.1.

Two of the final three words in the second column (*te-tekel-an* ‘bed’ and *ke-kantar-en* ‘song’) above present an interesting irregularity. The morphology which derives these nouns consists of a nominalising prefix *Ce-*, together with one of the voice affixes *-an* or *-en* (in combination these constructions are confixes - see §8.2.4). While this morphology is clearly derivational (as it derives nouns from verbal roots), the traditional function of voice marking means it is usually regarded as an example of inflectional morphology¹⁴⁵. Examples such as these mean that analysing voice morphology in the language as purely inflectional would be misleading. Moreover, an examination of the characteristics of voice affixation indicates that it does have at least some derivational features.

This idea that voice marking in Philippine-type languages is at least partly derivational is not controversial. Previous work by Starosta, Pawley, & Reid (1982), Sells (1997:117) and Himmelmann (2008:284) characterises voice marking in this way when analysing data from Tagalog. The conclusion that Tondano voice marking has some derivational properties is obtained by utilising some relevant diagnostics by Kroeger (1993:253). Table 5.2 displays properties of derivational and inflectional morphology in columns two and three, while column four demonstrates the features of voice affixes like AV *<um>*:

Table 5.2: Derivational and inflectional features of voice marking

Morphology:	<i>Derivational</i>	<i>Inflectional</i>	<i><um> AV affix</i>
Feature:			
<i>Category changing</i>	often	generally not	sometimes
<i>Paradigmatic</i>	no	yes	yes
<i>Productivity</i>	limited (lexically specific)	highly productive	productive
<i>Type of meaning</i>	often purely lexical	purely grammatical	both
<i>Semantic regularity</i>	often unpredictable	regular	regular
<i>Restriction on syntactic environment</i>	no	yes	no
<i>Position</i>	central (near root)	peripheral	central (near root)
<i>Portmanteau forms</i>	rarely	often	sometimes ¹⁴⁶

¹⁴⁵ As per Crystal (2008:243) inflectional morphology “signals grammatical relationships...and do not change the grammatical class of the stems to which they attach”. Prototypical voice marking such as that found in active → passive/antipassive alternations normally fits this definition.

¹⁴⁶ That is, in bimorphemic prefixes such as *ma-* (AV.DYN) - see §5.3.1.

The features for <um> presented in Table 5.2 show that while it mostly has inflectional features, it also has a number of derivational features. While voice marking is still considered to be primarily inflectional here, the caveat is given that these affixes should not be considered a canonical example of inflectional morphology.

Words which consist of a lexical root, derivational morphology, and inflectional morphology are labelled as ‘complex stems’. Complex stems are minimally forms such as those in column three of Table 5.1, or they may have forms which include various other inflectional morphemes (any one of a number of affixes or clitics). The resulting words then have various functions at a phrasal and clausal level, up to and including that of an entire clause.

Examples of complex stems which are comprised of more bound elements than those in Table 5.1 are displayed in Table 5.3. These examples are not an exhaustive list of all the possible bound elements which may occur within a complex stem. They merely provide an idea of the numerous morphological possibilities in complex stem formation.

Table 5.3: Complex stems

Stem:	Inflectional morphology:	Complex stem:
<i>pa-lutam</i> (DYN)	+ <in> (PST) + <um> (AV) + <i>ku</i> = (1.SG.PIV) →	<i>ku=m<in>a-lutam</i>
<i>pa-lutam</i> (DYN)	+ <i>Ce</i> - (IRR) + <i>-an</i> (LV) + <i>=na</i> (3.SG.NPIV.A) →	<i>pe-pe-lutam-an=na</i>
<i>pa-lutam</i> (DYN)	+ CVCV- (RDP) + <i>-an</i> (REFL) + <um> (AV) →	<i>ma-luta-lutam-an</i>
<i>pa-lutam</i> (DYN)	+ <i>pa</i> - (CAUS) + <i>-en</i> (PV) + <i>si</i> = (3.SG.PIV) →	<i>si=pa-pa-lutam-en</i>
<i>ka-lutam</i> (POT)	+ <in> (PST) + <i>-an</i> (LV) →	<i>k<in>a-lutam-an</i>
<i>ka-lutam</i> (POT)	+ <i>ma</i> - (<um>+ <i>pa</i> -) + <in> (PST) →	<i>m<in>aka-lutam</i>

In some situations inflectional morphology may attach directly to a lexical root. This may occur if the primary verbal affix *pa*- is zero marked (see Table 4.2 in §4.5.1), or when bound elements such as phrase marking proclitics (see §8.4) and/or possessive enclitics (see §8.3.5) attach directly to certain lexical roots (commonly Type I - nominal). In instances such as these the lexical root which hosts the inflectional morphology is both a root and a stem. Examples of lexical roots which are also stems are presented in Table 5.4.

Table 5.4: Words which are both roots and stems

Root/stem:	Inflectional morphology:	Complex stem:
\emptyset - <i>lutam</i> (DYN)	+ <um> (AV) →	<i>l<um>utam</i>
\emptyset - <i>lutam</i> (DYN)	+ <um> (AV) + <in> (PST) →	<i>l<im>utam</i>
\emptyset - <i>lutam</i> (DYN)	+ -en (PV) →	<i>lutam-en</i>
\emptyset - <i>lutam</i> (DYN)	+ -an (PV) →	<i>lutam-an</i>
\emptyset - <i>lutam</i> (DYN)	+ <i>i-</i> (CV) →	<i>(i-) lutam</i>
<i>uma</i> ‘field’	+ <i>N=</i> (INAN) →	<i>n=uma</i>
<i>mèong</i> ‘cat’	+ <i>si=</i> (AN.SG) →	<i>si=mèong</i>
<i>walè</i> ‘house’	+ = <i>nèa</i> (3.PL.POSS) →	<i>walè=nèa</i>
<i>tali</i> ‘rope’	+ <i>N=</i> (INAN) + = <i>ku</i> (1.SG.POSS) →	<i>n=tali=ku</i>

5.3 Affixes and affix ordering

This section describes the features and characteristics of the various affixes. Information regarding prefixes, infixes, suffixes, and circumfixes is presented in §5.3.1, §5.3.2, §5.3.3, and §5.3.4.

There are a number of features which all affixes possess. These attributes can be used as diagnostics to differentiate affixes from other bound morphological elements in the language, i.e. clitics. Criteria used here for distinguishing between affixes and clitics parallels those of Zwicky & Pullum (1983) and Kroeger (1993):

- As mentioned in §5.1, clitics are grammatical words. They can be thought of as syntactically independent but phonologically dependent. Affixes on the other hand are both syntactically and phonologically dependent.
- Affixes attach to either lexical roots, or to stems which consist of a root plus another affix. They generally do not attach to a word that already has clitics attached.
- Affixes are able to take stress, and affect the assignment of it, within both the phonological and grammatical word. Clitics on the other hand are not counted for stress.

The different forms and functions of the major affixes are outlined in Table 5.5. Table 5.5 is not an exhaustive list of all affixes present in the language. Those not described here are described in further detail in other chapters.

Table 5.5: Forms and functions of major affixes

	Function encoded:		Function encoded:
Form:		Form:	
<um>	Voice affix: ACTOR	pa ₂ -	CAUSATIVE (§9.4.1)
-en	Voice affix: PATIENT	paka-	COMPLETIVE (§9.5.1)
-an	Voice affix: LOCATIVE	kapa-	MANNER marker (§9.5.2)
i-	Voice affix: CONVEYANCE	paki-	REQUESTIVE (§9.4.2)
<in>	Past tense (LV & PV) ¹⁴⁷	ka> <an	NOMINALISER (location -§8.2.4)
<im>	Past tense (AV)	ka> <an	NOMINALISER (abstract noun - §8.4.1)
pa ₁ - /peN- ¹⁴⁸	DYNAMIC verbal affix (UV) (§4.5.1)	Ce-	IRR mood (§9.3.3)
pina-	DYNAMIC.PAST verbal affix (PV, LV, and CV)	ka-	ORD for numerals (§6.9.3)
ka-	STATIVE verbal affix (§4.5.1)	mina-	DYNAMIC.PAST verbal affix (AV)
ka-	POTENTIVE verbal affix (§4.5.1)	CVCV-	IMPERF aspect (§9.3.2)
maka-	MULT for numerals (§6.9.5)	ka-	ASSOC prefix (§8.2.4)
ma-/ meN-	DYNAMIC verbal affix (AV) (§4.5.1)	pa> <an	NOMINALISER (state -§8.2.4)
-an	MUT marker (§9.4.3)	Ce- -en	NOMINALISER (object -§8.2.4)
Ce-	NOMINALISER (instrument - §8.2.4)	Ce- -an	NOMINALISER (location -§8.2.4)
ka-	Degree adverb (§6.5.1)	maka-	POSSESSOR of [LEXICAL ROOT]

Table 5.5 at least partially demonstrates the multiple instances of homophony displayed by the system of affixes. For this reason it can sometimes be problematic to discern the exact number of functions from the multiple homophonous forms. Furthermore, there are

¹⁴⁷ The morpheme which encodes past tense and CV is not an affix. It is the particle *nèi* (CV.PST). This is comprised of the CV prefix *i-* and the verb *èi* ‘come’ - see §5.3.1.

¹⁴⁸ The homophonous forms of *pa-* (DYN) and *pa-* (CAUS) are labelled from hereon as *pa₁-* and *pa₂-*

issues which relate to whether certain affixes should be considered simple or complex, and whether combinations of prefixes and suffixes should be analysed as confixes, or as circumfixes. These issues are addressed below.

Prior to discussing the different categories of affixes separately, Tables 5.6 and 5.7 provide a summary of the ordering of affixes in verbal clauses¹⁴⁹. Separate tables are required due to the different ordering found in AV verbs as opposed to UV (PV, LV, and CV) verbs.

Table 5.6: Ordering of affixes in AV marked verbs

-3	-2	-1	0	+1
			LEXICAL ROOT	
<um> AV	<i>pa-</i> (CAUS)	<i>pa-</i> (DYN)		<i>-an</i> (MUT)
	< <i>in</i> > (PST)	<i>ka-</i> (STAT)		
	<i>Ce-</i> (IRR)	<i>ka-</i> (POT)		
	<i>CVCV-</i> (IMPERF)			
	<i>maki-</i> (REQ)			
	<i>maka-</i> (CPL)			
	<i>kapa-</i> (MANN)			

Table 5.7: Ordering of affixes in UV marked verbs

-3	-2	-1	0	+1
			LEXICAL ROOT	
<i>i-</i> (CV)	< <i>in</i> > (PST)	<i>pa-</i> (DYN)		<i>-en</i> (PV)
	<i>pa-</i> (CAUS)	<i>ka-</i> (STAT)		<i>-an</i> (LV)
	<i>Ce-</i> (IRR)	<i>ka-</i> (POT)		
	<i>CVCV-</i> (IMPERF)			
	<i>paki-</i> (REQ)			
	<i>paka-</i> (CPL)			
	<i>kapa-</i> (MANN)			

¹⁴⁹ For specific examples of this ordering see clauses such as (648) - (652) in §9.1.1 for AV marked verbal clauses, and (655) - (665) in §9.1.2 for UV marked verbal clauses.

There are a number of comments which must be made with regards to Tables 5.6 and 5.7, some of which illustrate certain issues relating to affix morpheme ordering. These issues are summarised as (and are addressed in the following subsections):

- Within any stem the primary verbal affixes are the morphological units which are attached first to the lexical root.
- The placement of the *ma-* (AV.DYN), *ka-* (POT/STAT), and *pa-* (DYN) prefixes as completely separate to infix *<in>* (PST) is somewhat disingenuous. While these are all separate morphemes which all occur individually, they may also occur together in the forms *m<in>a-*, *k<in>a-*, and *p<in>a-*. While these may have the appearance as single complex prefixes¹⁵⁰, the readily discernible functions of the separate morphemes means they are instead judged as sequences of multiple affixes. The interaction and form of these sequences results from a restriction on the distribution of infixes (see §5.3.1).
- While voice marking is obligatory on any verbal stem, this morphology is always added last. Evidence for this ordering is observed in affix sequences such as *ma-pa-* ← *pa₁-* (DYN) + *pa₂-* (CAUS) + *<um>* (AV) (see §5.3.1 below for further explanation). If voice marking were not added last, these sequences would be expected to be realised as **pa-ma-* ← *<um>* (AV) + *pa₁-* (DYN) + *pa₂-* (CAUS).

Table 5.5 gives a brief indication that at least some of the numerous affixes in the language are a combination of multiple (sometimes homophonous) forms. Various affixes are able to combine and interact with each other to produce additional bimorphemic forms, or they may occur together with a function which differs from their separate functions. Further evidence for this is provided in Table 5.8. The appearance of this process in Tondano morphology is perhaps not surprising, as it is noted in historical work on Philippine-type languages (Blust 2003:455).

5.3.1 Prefixes

Prefixes are the most productive bound elements in the language, and may display complex patterns as regards their form. In word formation prefixes may attach to practically any lexical root and derive words with various functions. Prefixes may attach to lexical roots to derive stems, and to stems to derive complex stems (as in Tables 5.1 and 5.3).

¹⁵⁰ They are also often analysed as such by speakers.

Prefixes may be simple or complex, and monosyllabic or disyllabic. Simple prefixes are those which only encode one function, i.e. they are monomorphemic. Complex prefixes are bimorphemic. Both monosyllabic and disyllabic prefixes may be bimorphemic, and both are often deconstructable into separate morphemes. However, there are also a small number of disyllabic prefixes which historically may be bimorphemic, but which are not analysable into their component parts and are therefore considered monomorphemic. Table 5.8 outlines a selection of prefixes¹⁵¹ which are categorised as regards being monosyllabic or disyllabic, and monomorphemic or bimorphemic:

Table 5.8: Simple and complex prefixes

+ monosyllabic + monomorphemic:	+ monosyllabic + bimorphemic:
<i>pa</i> ₁ - (DYN)	<i>ma</i> - (AV.DYN) ← < <i>um</i> > (AV) + <i>pa</i> ₁ -(DYN)
<i>peN</i> ₁ - (DYN)	<i>meN</i> - (AV.DYN) ← < <i>um</i> > (AV) + <i>peN</i> ₁ -(DYN)
<i>pa</i> ₂ - (CAUS)	<i>ma</i> - (EV.STAT) ← < <i>um</i> > (AV) + <i>ka</i> ₁ -(STAT)
<i>ka</i> ₁ - (STAT)	< <i>im</i> > (AV.PST) ← < <i>um</i> > (AV) + < <i>in</i> >(PST)
<i>ka</i> ₂ - (POT)	<i>min</i> - (AV.PST) ← < <i>um</i> > (AV) + < <i>in</i> >(PST)
+ disyllabic + monomorphemic:	+ disyllabic + bimorphemic:
<i>paka</i> - (CPL)	<i>maka</i> - (AV.POT) ← < <i>um</i> > (AV) + <i>pa</i> ₁ -(DYN) + <i>ka</i> ₁ -(POT)
<i>paki</i> - (REQ)	<i>maka</i> - (AV.CPL) ← < <i>um</i> > (AV) + <i>paka</i> -(CPL)
<i>kapa</i> - (MANN)	<i>maki</i> - (AV.REQ) ← < <i>um</i> > (AV) + <i>paki</i> -(REQ)
	<i>mina</i> - (AV.DYN.PST) ← < <i>um</i> > (AV) + <i>pa</i> ₁ -(DYN) + < <i>in</i> > (PST)
	<i>pina</i> - (DYN.PST) ← <i>pa</i> ₁ - (DYN) + < <i>in</i> > (PST)
	<i>kina</i> - (EV.PST.STAT) ← <i>ka</i> ₁ -(STAT) + < <i>in</i> > (PST)

Table 5.8 demonstrates that complex prefixes (both monosyllabic and disyllabic) are often a result of the AV infix <*um*> combining with other verbal affixes. The analysis of certain prefixes as bimorphemic is also reflected in historical work on PAN, and in some modern daughter languages. The reconstruction of separate homophonous *ma*- prefixes

¹⁵¹ The reduplicative prefixes *Ce*- and *CVCV*- are not described here. See instead §2.6.6.

(i.e. *ma-* (AV.DYN) and *ma-*(EV.STAT)) is attested in Ross (2002:34-5) and Blust (2003: 400). Also, the alternation of <*um*> + /*p*/ initial prefixes resulting in complex *m*-initial forms (e.g. *maki-* (AV.REQ) and *maka-* (AV.COMP)), is considered to be a reflex of the separate PAN forms (Wolff 1973:72 cited in Blust 2003:455, Blust 2013:374) ¹⁵².

However, certain prefixes which have been analysed as bimorphemic in other Philippine-type languages, e.g. *paka-* (Zeitoun 2000:391-92; Blust 2003:459) and *paki-* (Liao 2011a: 210), cannot be separated into component morphemes in Tondano.

Table 5.8 also illustrates a distinction in form between two sets of prefixes which arguably encode the same information. The prefixes *pa-/peN-* and *ma-/meN-* all have the same grammatical function, i.e. that of DYNAMIC primary verbal affixes (see §4.5.1). The *peN-* and *meN-* forms both trigger the process of nasal substitution outlined in §2.6.2, and both are likely reflexes of PAN **mang-* and **pang-* (Blust 2013:378). The difference in meaning between verbal stems which are marked with *pa-/ma-*, and those marked with *peN-/meN-*, is not apparent. The only differences which emerge relate to distribution, whereby *peN-/meN-* occur with higher frequency in verbal stems which also include CVCV- reduplication.

Additionally, *meN-* often occurs on verbal stems which have a syntactically nominal function as arguments in verbal clauses, e.g.: *si=meng-uma* (AN.SG=AV.DYN - field) ‘(the) farmer’. To summarise, a true functional distinction between *pa-/ma-* and *peN-/meN-* appears to have been lost in Tondano. This contrasts with what is attested in central Philippine languages such as Tagalog, in which the cognate forms of *mag-* and *ma-* do maintain a functional distinction (Blust 2013:364, 368).

Table 5.8 also displays a number of disyllabic and bimorphemic prefixes. While the forms of some of these are deconstructable into separate morphemes, due to their form the question arises as to whether they should be analysed as single complex prefixes, or two (or more) affixes which can co-occur in sequence within a word? The following previously mentioned disyllabic elements demonstrate this problem:

mina- (i.e. *m<in>a-* (AV.DYN.PST))

pina- (i.e. *p<in>a-* (DYN.PST))

¹⁵² The forms in question in PAN are reconstructed as **paR-* and **paN-*. Evidence of this pattern is extremely widespread in modern Malayo-Polynesian languages, however it should not be considered a universal rule (Liao 2011b:860) and does not extend to all paradigms in Tondano.

kina- (i.e *k<in>a-* (POT/STAT.PST))

An analysis of these forms as sequences of separate affixes is preferred here. This is because the two affixes within these forms express morphemes with two separate discernible functions, and because these separate affixes may occur independently of each other. Examples of the lexical root *siwo* ‘make, do’ with various combinations of these mono- and disyllabic prefixes is as follows¹⁵³:

Table 5.9: Mono- and disyllabic prefixes in stems

Root + <i>pa-</i> (DYN) + voice affix:		Root + \emptyset (DYN) + <i><in></i> (PST) + voice affix:	Root + <i>pa-</i> (DYN) + <i><in></i> (PST) + voice affix:
(AV)	<i>ma-siwo</i>	<i>s<in>iwo</i>	<i>m<in>a-siwo</i>
(PV)	<i>pa-siwo-en</i>	<i>s<in>iwo-\emptyset</i> ¹⁵⁴	<i>p<in>a-siwo-\emptyset</i>
(LV)	<i>pa-siwo-an</i>	<i>s<in>iwo-an</i>	<i>p<in>a-siwo-an</i>

The various combinations of *ma-* (AV.DYN), *pa-* (DYN), and *<in>* (PST) on verbal roots such as *siwo* ‘make, do’ all encode separate functions within a verbal predicate. The fact that a complex stem which includes the verbal prefix *pa-* (DYN), the infix *<in>* (PST), and the voice suffix *-an* (LV) is realised as *p<in>a-siwo-an* and not **pa-s<in>iwo-an* demonstrates that there is a restriction on the position of infixes within stems.

The default position for infixes is directly following the first consonant of the lexical root (see §5.3.2). It appears that this position close to the left edge of a word must be maintained not only when the word is a lexical root, but also when it is a (derived) stem. This restriction on the position of infixes means that just as *<in>* occurs after the initial consonant in *s<in>iwo-an*, so must it take this position in words like *p<in>a-siwo-an*. The fact that all prefixes in the language contain onsets means an infix will always be able to follow an (initial) consonant at the left edge of any word.

Affix ordering in Tondano always sees the voice marking affixes added last. In the event that a verbal stem hosts the DYNAMIC affix *pa*₁-, the CAUSATIVE affix *pa*₂-, and one of the (UV) basic voice affixes, the order in which these affixes occurs is as follows:

¹⁵³ The forms *ka-* and *k<in>a-* are not included in this table. The paradigm for STATIVE and POTENTIVE verbal morphology is slightly different to that of DYNAMIC verbal morphology - see §4.5.1. The analysis of *k<in>a-* as two separate affixes still applies here.

¹⁵⁴ The PV suffix *-en* is zero marked when occurring together with *<in>*. See §5.3.2.

- 1) [LEXICAL ROOT] + *pa*₁- → *pa*₁- [LEXICAL ROOT]
- 2) [LEXICAL ROOT] + *pa*₁- + *pa*₂- → *pa*₂- *pa*₁- [LEXICAL ROOT]
- 3) [LEXICAL ROOT] + *pa*₁- + *pa*₂- + -*en* → *pa*₂- *pa*₁- [LEXICAL ROOT] -*en*

The two homophonous *pa*- forms could be problematic for analysing affix ordering. However, the ordering process must have *pa*₂- (CAUS) being added after *pa*₁- (DYN) in the affix sequence *pa*₂-*pa*₁-(CAUS-DYN). Evidence for this analysis comes from the fact that the addition of the causative prefix *pa*₂- is only compatible with verbal stems already containing the DYNAMIC prefix *pa*₁-. Clauses which express causation therefore require a verbal stem containing both *pa*₂- and *pa*₁-¹⁵⁵.

Evidence for this particular ordering of affixes is more clearly observed in verbal stems which contain a lexical root hosting AV <*um*>, *pa*₁-, and *pa*₂-. These affixes occur in the following order, e.g.:

- 1) [LEXICAL ROOT] + *pa*₁- → *pa*₁- [LEXICAL ROOT]
- 2) [LEXICAL ROOT] + *pa*₁- + *pa*₂- → *pa*₂- *pa*₁- [LEXICAL ROOT]
- 3) [LEXICAL ROOT] + *pa*₁- + *pa*₂- + <*um*> → *ma*₂- *pa*₁- [LEXICAL ROOT]

The fact that the voice affix <*um*> is added last results in the sequence of *ma*₂-*pa*₁- (AV.CAUS.DYN), in contrast to the *pa*₂- *pa*₁- sequences which are observed in stems containing UV marking. In stems which contain both DYN and CAUS marking, the AV <*um*> infix merges with the *pa*₂- (CAUS) prefix, just as it does when it merges with the *pa*₁- (DYN) prefix, i.e. in stems which do not contain causative marking. The combination of <*um*> (AV) + *pa*₂- (CAUS) therefore results in the bimorphemic *ma*-, in exactly the same way that <*um*> (AV) + *pa*₁- (DYN) results in *ma*-. If AV <*um*> were added after *pa*₁- (DYN), and before *pa*₂- (CAUS), then the sequence of affixes would be **pa*₂-*ma*₁-.

One final point relating to prefixes requires a mention here. The broad range of functions displayed by prefixes is not exclusively achieved by combinations of multiple

¹⁵⁵ That is, any stem which consists solely of a voice affix and a single *pa*- prefix will never express causation.

morphemes. Simple monomorphemic prefixes such as *pa-* and *ka-* may have multiple functions, with *ka-* being especially multifunctional¹⁵⁶ as demonstrated in Table 5.10:

Table 5.10: Functions of monomorphemic prefix *ka-*

Prefix:	Function:
<i>ka</i> ₁ - (STAT)	Primary verbal affixation for STATIVE verbal predicates.
<i>ka</i> ₂ - (POT)	Primary verbal affixation for POTENTIVE verbal predicates.
<i>ka</i> ₃ - (ORD)	Derives ordinal numerals from cardinal numerals.
<i>ka</i> ₄ - (ASSOC)	Derives specific nominals from nominal lexical roots.
<i>ka</i> ₅ - (ADV.DEG)	Adverb of degree meaning ‘very, too’.

5.3.2 Infixes

There are three infixes, with one of these forms possibly historically derived from a combination of the other two. All infixes are monosyllabic and two are monomorphemic, these are: <*um*>¹⁵⁷ (AV) and <*in*> (PST). The third infix <*im*> (AV.PST) is bimorphemic, representing a conflation of the other two. The hypothesis of <*im*> ← <*um*> + <*in*> is presented in descriptions of several other Philippine-type languages, c.f. Toratán (Himmelman & Wolff 1999:13) and Iloko (Rubino 2005:339). Historically <*im*> is most likely a reflex of the PAN and PMP combined form *<*umin*> (Ross 1995, 2002:33, 49, 2009:296).

All infixes have an identical default distribution when they are added to lexical root or stem, this being directly after the first consonant. However, all three infixes have at least one allomorph which results from various morphophonological processes. These processes are not explained in detail here (see §2.6.3 and §2.6.4). Instead, the various forms of the infixes are simply outlined in Table 5.11 and Table 5.12.

¹⁵⁶ The various functions of the single prefix *ka-* outlined in Table 5.10 are considered to represent at various different forms, rather than one single form with five different functions. This analysis is based on historical reconstructions such as those by Blust (2003: 441-47). This reconstruction hypothesises that the broad range of functions of *ka-* in modern Philippine-type languages are reflexes from at least three different core *ka-* prefixes in PAN.

¹⁵⁷ The AV infix <*um*> is ubiquitous in AN languages. When discussing reflexes of the PAN **mu-* (marking verbs of motion), Liao (2011b:854-56) notes that while *mu-* is common in Formosan languages, it is almost non-existent in Philippine languages, which instead frequently use <*um*> for verbs of motion. Liao (*ibid*: 856) argues against an analysis that PAN **mu-* and PAN *<*um*> are distinct from one another, in contrast to the hypothesis of Blust (1999a:64). The thought is that unlike Formosan languages, all Philippine languages use reflexes of PAN/PMP *<*um*> or **maR-* for verbs of motion. The idea that <*um*> on lexical roots may express motion, or at least some form of physical movement, also works well when applied to Tondano.

Table 5.11: Allomorphs of <um>, <im>, and <in>

Infix:	<um>	<im>	<in>
Initial phone of lexical root:			
C (except /p/ or /w/):	<um>	<im>	<in>
C (/p/ or /w/):	m-	min-	<in>
V:	m-	min-	ni-

Table 5.12: Lexical roots with variations of <um>, <im>, and <in>

Infix:	<um>	
Initial phone of lexical root:		Example:
C (except /p/ or /w/):	<um>	+ kèrèt ‘call, summon’ → k<um>èrèt
C (/p/ or /w/):	m-	+ wingkot ‘answer’ → m-ingkot
V:	m-	+ upu ‘pick, pluck’ → m-upu
Infix:	<im>	Example:
Initial phone of lexical root:		
C (except /p/ or /w/):	<im>	+ sodo ‘ladle’ → s<im>odo
C (/p/ or /w/):	min-	+ warèng ‘return.home’ → min-arèng
V:	min-	+ ana’ ‘wait, stay’ → min-ana’
Infix:	<in>	Example:
Initial phone of lexical root:		
C (except /p/ or /w/):	<in>	+ tiboy ‘grab, hold’ → t<in>iboy
C (/p/ or /w/):	<in>	+ pèlèng ‘choose’ → p<in>èlèng
V:	ni-	+ ali ‘bring’ → ni-ali

The allomorphy observed for <in> does not match the patterns or processes which result in the allomorphy observed for <um> and <im> (as explained in §2.6.3 and §2.6.4).

When the lexical root <in> attaches to is vowel initial then <in> → *ni-*, e.g.:

<in>	+	<i>untep</i>	‘enter (church)’	→ <i>ni-untep</i>
<in>	+	<i>ana</i> ’	‘wait, stay’	→ <i>ni-ana</i> ’
<in>	+	<i>èdo</i>	‘take’	→ <i>ni-èdo</i>

The motivation for the allomorph *ni-* on vowel initial roots is most likely linked to phonotactic restrictions. Words like **u<in>ntup*, **a<in>na*’, or *è<in>do* would break phonotactic rules on consonant clusters, while words such as **in-untup*, **in-ana*’, and *in-èdo* would violate syllable structure of prefixes (i.e. they always have onset consonants). The form of the allomorph *ni-* avoids all of these possible phonotactic and syllable structure issues¹⁵⁸.

Table 5.13 displays the interaction of <um>, <in>, and <im> and the voice affixes within stems, (the lexical root is *sewok* ‘mix s.t.’). This paradigm demonstrates a number of irregularities which are then discussed:

Table 5.13: Complex stems with <um>, <in>, and <im>

	Lexical root:	Stem:		
Voice affix:		NPST:	PST:	PST:
(AV) <um>	<i>sewok</i>	<i>s<um>ewok</i>	<i>s<im>ewok</i>	<i>m<in>a- sewok</i>
(PV) <i>-en</i>	<i>sewok</i>	<i>sewok -en</i>	<i>s<in>ewok -Ø</i>	<i>p<in>a- sewok -Ø</i>
(LV) <i>-an</i>	<i>sewok</i>	<i>sewok -an</i>	<i>s<in>ewok -an</i>	<i>p<in>a- sewok -an</i>
(CV) <i>i-</i>	<i>sewok</i>	<i>(i-) sewok</i>	<i>nèi sewok</i>	<i>nèi pa- sewok</i>

There are two irregularities relating to the forms of the verbal stems in Table 5.13. Firstly, there is a restriction on the co-occurrence of the infix <in> (PST) together with the PV suffix *-en*. This represents a gap in the paradigm for which an explanation is not offered here. It can be stated however that this pattern appears to hold true in many Philippine-

¹⁵⁸Words like *ni-ana*’ and *ni-èdo* might be seen to violate the dispreference for complex words to have a syllable only nucleus (see §2.4.5), e.g. *ni.a.na*’ and *ni.è.do*. This violation does not occur due to the fact a non-phonemic glide is inserted following /i/ - see §2.4.3. The examples above therefore have the syllable structure of *ni.jun.tup*, *ni.ja.na*’, and *ni.jè.do*.

type languages, e.g. Tagalog (Kroeger 1993:16; Himmelmann 2005:363), and Iloko (Rubino 2005:339), and is well attested in reconstructions of both PAN (Ross 2002:33, 2009:296) and PMP (Ross 2002:49). For an explanation of the possible motivation for this phenomenon see Starosta, Pawley, & Reid (1982:23).

Secondly, the form of *nèi* (CV.PST) differs from all other forms which mark a combination of past tense and voice marking. Sneddon (1975:217) attests an affix with the form of *nai-*, which supposedly results from *i-* + *<in>*. However, both the written and spoken form in data used here is *nèi*, i.e. [nɛj]¹⁵⁹. Furthermore, there are examples which cast doubt on the status of *nèi*, both as a prefix, and on its status as derived from *i-* + *<in>*, e.g.:

(208) *nèimou wèèla aki rumping ntimpa'*

nèy	=mow	wèè	=la	waki	rumping	N=
CV.PST	CPL	give	DIR.PROX	in.DIST	wok	INAN

timpa'

palm.sugar.sap

‘(He) put the palm sugar sap in the wok’

(TDN_25_00:03:14)

(209) *kaa nèimou paakirou*

ka'a	nèy	=mow	pa-	akir	=mow
because	CV.PST	CPL	DYN	large.spoon	CPL

‘Because (they) ladled out (the palm sugar sap)’

(TDN_32_OL2_00:07:53)

(210) *nèimou ti'is ee, endano*

nèy	=mow	ti'is	erh	N=	rano
CV.PST	CPL	drain	HES	INAN	water

‘(He) drained, erh the water’

(TDN_32_OL2_00:06:04)

All of the clauses in (208) - (210) display *nèi* hosting the enclitic *=mow* (CPL), showing that the analysis of *nèi* as a prefix is incorrect. In order to host morphological elements such as *=mow*, *nèi* cannot be a ‘weaker’ phonological element itself. As such it must be analysed as a full phonological word.

¹⁵⁹ It is possible that Sneddon’s analysis of a *nai-* prefix becoming *nèi-* was based on the fact that the /a/ phoneme has the [e] allophone when it precedes the high front vowel /i/ - see §2.2.6.

Moreover, the analysis that *i-* + *<in>* → *nèi* is also questionable. A more likely hypothesis has been put forward by Wolff (1996:37) who reconstructs *nèi* as consisting of the verb *èi* ‘come’ and the infix *<in>*. The morphophonological patterns already demonstrated show that *<in>* → *ni-* before vowels. Therefore it is not unreasonable to think that *<in>* → *n-* before a lexical root which starts with another mid/high vowel. Furthermore, due to the fact that the CV affix *i-* has been lost in almost all environments (see - §4.5.2), it is probable that another element could be utilised in its place in certain situations.

5.3.3 Suffixes

There are only two suffixes in the language, these being the monosyllabic voice marking suffixes *-en* and *-an*. The variation in the morphological form of suffixes is limited to the vowel deletion process for *-en* outlined in §2.6.3.

Both the *-en* (PV) and *-an* (LV) suffixes are polyfunctional. In addition to marking voice, these suffixes occur as part of nominalising constructions (where they are part of a confix). LV *-an* also functions as part of the mutual construction (see §9.4.3). Further details and examples of *-en* and *-an* as voice affixes are found in §3.3 and §4.5.4. Examples of *-en* and *-an* as part of nominalising confixes are found in §8.2.4.

5.3.4 Circumfixes

The three circumfixes in Tondano all function as nominalisers. It must be noted that it is slightly problematic to ascertain whether affixes hosted by lexical roots are circumfixes, or simply combinations of prefixes and suffixes (i.e confixes). This is due to the fact that forms which can be considered circumfixes have the same form as some of the separate prefixes and suffixes already described above. Nonetheless, the status of multiple bound elements on a lexical root as a single circumfix can be ascertained by examining a number of factors, such as: 1) whether or not the function or meaning expressed by the circumfix can be derived from the function or meaning expressed by each of the component affixes, 2) whether the function expressed by the circumfix matches that which is attested in related languages (or in historical reconstruction), and 3) the type of lexical root which hosts the bound elements.

The three circumfixes are outlined in Table 5.14.

Table 5.14: List of circumfixes:

Form:	Function:
<i>ka></i> [LEXICAL ROOT] <i><an₁</i>	NOMINALISER (location)
<i>ka></i> [LEXICAL ROOT] <i><an₂</i>	NOMINALISER (abstract noun)
<i>pa></i> [LEXICAL ROOT] <i><an</i>	NOMINALISER (entity with characteristics of root)

The reasoning behind the status given to each of the forms in Table 5.13 is as follows:

ka>[LEXICAL ROOT] *<an₁* (nouns of location): certain lexical roots host *ka-* (STAT/POT) and *-an* (LV) as two separate affixes, with the resulting word often functioning as the head of a verbal predicate (POTENTIVE and STATIVE marking - see §4.5.1). However, the lexical roots to which the circumfix *ka> <an* attaches are inherently more nominal (i.e. type I), and the resulting stems act as nouns of location (see §8.2.4). While the *<an* part of the circumfix is homophonous with the voice affix *-an* (LV), it is unlikely that *ka>*[LEXICAL ROOT] *<an₁* forms are a result of a two-step derivational process.

Historical evidence also makes this analysis more likely as the *ka> <an* (locative) circumfix has been attributed to PAN, as well as to a number of modern Philippine and Western Indonesian languages (Blust: 2003:447-48).

ka>[LEXICAL ROOT] *<an₂* (abstract nouns): despite having the same form as the previous circumfix, the second *ka> <an* circumfix attaches to different types of lexical roots (Type II - see §6.1). When *ka> <an* occurs on lexical roots which express states or qualities the resulting stem expresses an abstract noun derived from the meaning of the root (see §8.2.4). Confirming the status of *ka>*[LEXICAL ROOT] *<an₂* as a circumfix is initially difficult due to the fact that the *ka-* (STAT/POT) and *-an* (LV) affix combination is also hosted by the same category of lexical roots (with a resulting verbal function). However, comparative research again assists in this regard, with the *ka> <an* circumfix reconstructed in PMP as deriving abstract nouns (Blust 2003: 448, 473). This particular abstract nominalisation is also well attested in various WMP languages including Malay (*ibid*: 448).

pa>[LEXICAL ROOT] *<an* (stative nouns): the two components of this circumfix are homophonous with the *pa-* (DYN) [LEXICAL ROOT] *-an* (LV) affix combination which often occurs as part of LV marked verbal predicates (see §4.5.4). Stems consisting of this affix

combination may also function as arguments denoting the location of an action or event. Despite this, the function expressed by the *pa>* <*an* circumfix clearly differs from both of these functions. *pa>* <*an* attaches to STATIVE (Type II) lexical roots (which normally host the *ka-* (STAT/POT) prefix) with the resulting stem referring to an animate entity. This entity is judged to have the physical or psychological characteristics denoted by lexical root.

5.4 Clitics: Features and distribution

5.4.1 Clitic features

There are a broad range of clitics whose form, distribution, and function bear similarities to those attested in other Philippine-type languages. These include both enclitics and proclitics. The various types of clitics are as follows:

- Pronominal (personal) clitics. These are both proclitics and enclitics. The proclitics are morphologically similar to the independent personal pronouns (see §8.3.2). Proclitics always exclusively have the same function (GR) in both verbal and non-verbal clauses, that of the PIV.
- Pronominal (possessive) enclitics. The single paradigm of NPIV.A enclitics function as both possessors at a phrasal level, and also as arguments with the semantic role of ACTOR in UV marked verbal clauses.
- Clitics which express functions related to TAM and deixis.
- Phrase marking clitics. These occur as modifiers within NPs, and encode information relating to animacy, person, and number (see §8.4)¹⁶⁰.

The properties used to define clitics overlap somewhat with what was detailed in §5.3 when describing the unique features of affixes. Bound elements which are analysed as clitics have the following features (Zwicky & Pullum 1983; Kroeger 1993):

- Clitics tend to occur farther away from the lexical root than affixes. In verbal clauses clitics often attach to words which already contain verbal affixation (i.e. are stems).
- Clitics may attach to practically any lexical root, and they are not subcategorised for a particular host.

¹⁶⁰ The clitics *si=*/*sə=* express a range of functions and are homophonous with the 3.SG./ 3.PL personal proclitics (§8.3.3). In addition, *si=* *sə=* also function as relative pronouns (§10.3.1).

- Clitics are unstressed.
- Bound elements analysed here as clitics are deemed by speakers to be independent grammatical words. Consequently, the combination of clitic and lexical root are commonly judged to be separate units. In contrast, a lexical root and an affix are usually considered as a single lexical item.

Table 5.15 summarises the various forms and functions of clitics, before a number of them are examined in more detail below (any clitics not discussed here are examined in other chapters, e.g. pronominals in §8.3 and deictic markers (directionals) in §6.7).

Table 5.15: List of clitics

Pronominals:		Phrase markers:		TAM/ADV/DEIXIS
Proclitic (PIV):	Enclitic (NPIV.A):	Animate :	Inanimate:	
<i>ku</i> = (1.SG)	= <i>ku</i> (1.SG)	(<i>s</i>) <i>i</i> = (3.SG)	(<i>e</i>) <i>N</i> = (3.SG)	=(<i>m</i>) <i>ow</i> (CPL)
<i>ko</i> = (2.SG)	=(<i>m</i>) <i>u</i> (2.SG)	(<i>s</i>) <i>è</i> = (3.PL)	(<i>e</i>) <i>N</i> = (3.PL)	=(<i>p</i>) <i>è</i> ' (INCPL)
<i>ta</i> = (1.PL.IN)	= <i>ta</i> (1.PL.IN)			=(<i>i</i>) <i>tè</i> (ADV)
<i>kèy</i> = (1.PL.EX)	=(<i>m</i>) <i>èy</i> (1.PL.EX)	Animate (NPIV.A):		=(<i>m</i>) <i>i</i> (DIR.DIST)
<i>kow</i> = (2.PL)	=(<i>m</i>) <i>iu</i> (2.PL)	<i>ni</i> = (3.SG)		=(<i>m</i>) <i>èè</i> (DIR.MED)
(<i>s</i>) <i>i</i> = (3.SG)	= <i>na</i> (3.SG)	<i>nè</i> = (3.PL)		= <i>la</i> (DIR.PROX)
(<i>s</i>) <i>è</i> = (3.PL)	= <i>nèa</i> (3.PL)			= <i>kè</i> (ADV)
				=(<i>m</i>) <i>owkan</i> (ADV)
				= <i>kan</i> (ADV)

5.4.2 Distribution and ordering of clitics

Table 5.15 shows that clitic types (i.e. proclitic or enclitic) can be differentiated with regards to the grammatical function they encode. Only enclitics function as TAM¹⁶¹, adverbial, or deictic markers. Alternatively, both enclitics and proclitics may function as personal pronominals in a clause. Proclitics mark PIV arguments (i.e. syntactic pivots), while enclitics are restricted to marking NPIV.A arguments.

¹⁶¹ In a very broad sense. The enclitics =*mow* (CPL) and =*pè*' (INCPL) mark levels of completion or attainment. However, they are not aspect markers in a true sense. See §5.6.1 and §5.6.2.

The ordering of clausal arguments when encoded by pronominal clitic elements is therefore rigid, and this is in contrast to clausal arguments encoded by full NPs which display greater flexibility in word order.

Table 5.16 summarises the order of clitics in AV clauses.

Table 5.16: Ordering of clitics in AV marked verbal clauses

-1	0	+1	+2	+3
PRO.PIV	STEM	TAM	ADVERB	DEIXIS
<i>ku=</i>		<i>=(m)ow</i>	<i>=(i)tè</i>	<i>=(m)i</i>
<i>ko=</i>		<i>=(p)è'</i>	<i>=kè</i>	<i>=(m)èè</i>
<i>ta=</i>			<i>=(m)owkan</i>	<i>=la</i>
<i>kèy=</i>			<i>=kan</i>	
<i>kow=</i>				
<i>(s)i=</i>				
<i>(s)è=</i>				

The following examples demonstrate clitic order within AV marked verbal clauses ((211) is intransitive, while (212) - (213) are transitive):

(211) *simasekolapè to?*

si= ma- sekola =pè' to
3.SG.PIV AV.DYN school INCPL PART
 'She still attends school then?'
 (TDN_14_DK_NK_00:06:42)

(212) *kaa minupumoumi karati*

ka'a <im> upu =mow =mi karati
because <AV.PST> pick CPL DIR.DIST water.lily
 'Because (they) picked some water lilies'
 (TDN_11_AW_HL_00:05:41)

(213) *kumalitèla ko'oko' rua*

ku= <um> ali =itè =la ko'ko' rua
1.SG.PIV <AV> bring LIM DIR.PROX chicken two
 'I would just bring along two chickens'
 (TDN_14_DK_NK_00:02:35)

Table 5.17 displays the order of clitics in UV clauses.

Table 5.17: Ordering of clitics in UV marked verbal clauses

-1	0	+1	+2	+3	+4
PRO.PIV	STEM	PRO.NPIV.A	TAM	ADVERB	DEIXIS
<i>ku=</i>		<i>=ku</i>	<i>=(m)ow</i>	<i>=(i)tè</i>	<i>=(m)i</i>
<i>ko=</i>		<i>=(m)u</i>	<i>=(p)è'</i>	<i>=kè</i>	<i>=(m)èè</i>
<i>ta=</i>		<i>=ta</i>		<i>=(m)owkan</i>	<i>=la</i>
<i>kèy=</i>		<i>=(m)èy</i>		<i>=kan</i>	
<i>kow=</i>		<i>=(m)iu</i>			
<i>(s)i=</i>		<i>=na</i>			
<i>(s)è=</i>		<i>=nèa</i>			

The following examples demonstrate clitic ordering in UV marked verbal clauses:

(214) *sèpakumpulanèala*

sè= pa- kumpul -an =nèa =la
3.PL.PIV DYN collect LV 3.PL.NPIV.A DIR.PROX
 'They collect them (some sago grubs)'
 (TDN_32_DT_00:0:14)

(215) *pesesanikutèla*

i- pa- Ce- sani =ku =itè =la
CV DYN IRR advice 1.SG.NPIV.A LIM DIR.PROX
 'I will just advise (this - to you)'
 (TDN_30_00:04:50)

(216) *koèdongkumoula*

ko= èdo -en =ku =mow =la
2.SG.PIV take PV 1.SG.NPIV.A CPL DIR.PROX
'I would take you (to be my wife)'
(TDN_31_00:13:53)

5.5 Proclitics

Proclitics are always monosyllabic as is demonstrated by Table 5.15 above. In regards to their function, proclitics are either personal pronominals or phrase markers. When functioning as personal pronouns, proclitics exclusively have the GR of PIV within the clause (see §8.3.3).

The proclitics which function as phrase markers are most commonly used as modifiers (including possessors) to the head of an NP. The various phrase markers express distinctions relating to animacy, person, and number of the noun they modify. A detailed explanation of all phrase markers together with relevant examples is found in §8.4. This includes reference to the fact that certain forms which are phrase markers (e.g. *si=* (AN.SG), *sè=* (AN.PL), and *N=* (INAN)) also have a number of other functions, including as full personal pronominals.

5.6 Enclitics

Enclitics may be either monosyllabic or disyllabic. As shown in Table 5.15, enclitics function as NPIV.A personal pronominals which have the same person and number distinctions as the PIV proclitics. The enclitics which are not NPIV.A pronominals have a wide variety of functions, this includes everything from marking TAM type distinctions to adverbial functions. The NPIV.A pronominal enclitics are multifunctional. Their different functions as possessors in NPs and as ACTOR arguments in UV marked clauses are explained further in §8.3.5 and §4.5.4 respectively.

Of the remaining enclitics, the following are briefly described with regards to form and function in subsequent subsections: *=pè'* (INCPL) in §5.6.1, *=mow* (CPL) in §5.6.2, *=itè* (LIM) in §5.6.3, and *=kè* (EPIS) in §5.6.4. These enclitics have functions ranging from adverbial to pragmatic. Further detail on these enclitics, and examples, are provided in §6.5.2 and in §6.5.3. Lastly, the focussing adverb *=mowkan* is described in §6.5.2, while the deictic enclitics *=la* (DIR.PROX), *=mèè* (DIR.MED), and *=mi* (DIR.DIST) are explained in §6.7.2.

5.6.1 INCOMPLETEIVE =pè'

=pè' is labelled here as an INCOMPLETEIVE enclitic. This enclitic has the allomorphs =pè' and =è'. =è' occurs when the final syllable of the word it attaches to contains a coda. In addition, the glottal stop in is often weakly articulated (or not articulated at all).

=pè' marks the action, event, or state denoted by the predicate as incomplete, as yet unattained, or as having an endpoint which has not yet been reached. The most obvious translation into English is 'still' or 'yet', e.g.:

(217) *sè itu pasupè'*

sa itu pasu' =pè'
if that.MED hot INCPL
'If it's still hot (then blow on it)'
(TDN_3_00:19:27)

(218) *wengipè kèimèamou*

wengi =pè' kèy= <um>èa =mow
night INCPL 1.PL.EX.PIV <AV> go CPL
'(When it's) still night we would go out'
(TDN_14_HK_DT_00:04:22)

(219) *urèpè' kasa*

urè =pè' kasa
long INCPL very
'It's still a very long time'
(TDN_10_00:01:51)

If the lexical root expresses an action or event, then =pè' may signify that the action or event occurred in spite of another state of affairs:

(220) *jadi kotimingkasè' sididon*

jadi ko= t<im>ingkas =pè' si= Didon
so 2.SG.PIV <AV.PST> run INCPL AN.SG PN
'So you still ran away (with) Didon (even though your parents didn't approve)?'
(TDN_07_00:12:43)

(221) *ta'an nirisanapèla rior*

ta'an <in> iris -an =na =pè' =la rior
but <PST> cut LV 3.SG.NP.V.A INCPL DIR.PROX fast

‘But he still cut (it-the branch) earlier (even though he finished extracting the palm sugar sap)’

(TDN_26_00:02:24)

(222) *simalutu'pè' sandiri*

si= ma- lutu' =pè' sandiri
3.SG.PIV AV.DYN cook INCPL REFLX

‘She can still cook for herself (even though she is very old)’

(TDN_12_00:09:49)

The meaning expressed by =pè' in (220) - (222) illustrates why this enclitic is not analysed as an imperfective (aspect) marker. Despite the fact it may denote situations as incomplete or unfinished, =pè' cannot mark habitual or frequentative type events, as would be expected of imperfective marking. Instead, imperfective marking requires CVCV-reduplication, as explained in §9.3.2.

=pè' may attach to roots or stems from various lexical categories. It may also be hosted by certain interrogatives where it can be translated as ‘else’ (223), or by negators such as *rèi* with the resulting translation of ‘not yet’ (224) (see also §7.2), e.g.:

(223) *sapapè'?*

sapa =pè'
what INCPL

‘What else (is there to say)?’

(TDN_7_00:12:03)

(224) *rè'pè' lutu'n kua*

rèy' =pè' lutu' -en ku'a
not INCPL cook PV PART

‘(He) has not yet cooked (it)’

(TDN_3_00:20:32)

5.6.2 COMPLETIVE =*mow*

The enclitic =*mow* is seemingly ubiquitous, and may attach to practically any root or stem. When the root or stem which hosts it contains a final syllable with a coda, =*mow* has the allomorph =*ow*.

=*mow* has the primary function of specifying that the action, event, or state denoted by a verbal predicate has reached a conclusion. As such, it may occur together with the past tense infix <*in*>, e.g.:

(225) *kaa nièdomou entimpa'*

ka'a <in> èdo -Ø =mow N= timpa'
 because <PST> take PV CPL INAN palm.sugar.sap
 'Because (he) already took the palm sugar sap'
 (TDN_25_00:03:11)

(226) *kotimanemou*

ko= t<im>anem =mow
 2.SG.PIV <AV.PST> cultivate CPL
 'You have already planted (the fields)'
 (TDN_10_00:22:31)

In clauses such as (225) - (226) =*mow* can be given a literal English translation of 'already'. =*mow* also expresses a sense of certainty regarding the situation denoted by the lexical root, i.e. that it will definitely occur. When used in this way =*mow* can indicate certainty for situations which are happening, or which the speaker desires to happen, e.g.:

(227) *kèimarèngou*

kèy= <um> warèng =mow
 1.PL.EX.PIV <AV>return.home CPL
 '(When it is afternoon) we will return home'
 (TDN_14_HK_DT_00:04:14)

(228) *wewèanou encontoh*

wewèan =mow N= contoh
 EXIST CPL INAN example
 'There is an example (which I made earlier)'
 (TDN_03_00:05:57)

(229) *kokumantarèla esa kaapa rua lagu? esamou*

ko= k<um>antar =la esa ka'apa rua lagu
2.SG.PIV <AV> sing **DIR.PROX** one or two song
 # esa =mow
 one **CPL**

‘Will you sing one or two songs, (definitely) one’.

(TDN_28_00:06:44)

When employed in this way =*mow* may attach to virtually any lexical root or stem, and not just verbal stems such as those in (227) - (229). For instance, in (228) - (229) =*mow* is hosted by an existential marker and a numeral respectively.

In addition to the functions of =*mow* illustrated in (225) - (229), it also commonly occurs as part of imperative constructions (see also §7.3.1), .e.g.:

(230) *ya mèamow!*

ya <um> èa =mow
AFF <AV> go **CPL**

‘Yes let’s go (dancing)!’

(TDN_07_00:12:53)

(231) *oasanoula*

owas -an =mow =la
wash **LV** **CPL** **DIR.PROX**

‘(you) wash (it)’

(TDN_11_AW_HL_00:03:00)

Finally, when hosted by the negator *rèi’* or *(n)dèi’*, the resulting form of *rèi’mou* or *dèi’mou* implies that the action or event of the predicate no longer occurs (see also §7.2.1). When used in this way it has translation of ‘no longer’, ‘already done’, or ‘finished’ e.g.:

(232) *dèimou pernah lumèlè’ aki pantè*

rèy’ =mow pernah l<um>èlè’ =mi waki pantè
not **CPL** **ever** <AV> bathe **DIR.DIST** **at.DIST** **beach**

‘(I) no longer ever bathe at the beach’

(TDN_14_DK_NK_00:07:38)

5.6.3 LIMITATIVE=*itè*

The (adverbial) enclitic =*itè* has the allomorph =*tè* if the word it attaches to has an open final syllable. =*itè* is used to delimit the possible interpretation of the event or situation denoted by the lexical root or stem which hosts it. The most appropriate English translation for =*itè* is ‘only’ or ‘just’. More precisely, =*itè* can be said to mean ‘nothing more than’, or ‘nothing other than’, for example:

(233) *tatumèwèlitèmèè*

ta= t<um>èwèl =itè =mèè

1.PL.IN.PIV <AV> fly LIM DIR.PROX

‘We would just fly there (i.e. not walk or take a bus)’

(TDN_14_DK_NK_00:05:31)

In (233) the use of =*itè* expresses that the type of movement denoted by the verb is the only type which could occur in a particular situation, in this case the act of travelling overseas. Further examples of clauses with =*itè* are found in the section on focussing adverbs (§6.5.2).

5.6.4 EPISTEMIC adverb =*kè*

The (adverbial) element =*kè* provides epistemic information regarding the state of affairs denoted by the root or stem which hosts it. When the root or stem which hosts =*kè* has a final syllable containing a coda, then the allomorph =*è* occurs instead. =*kè* is an epistemic adverb which states that the assertion put forward is assumed to be correct. However, the assumption of truth does not come from the direct personal experience of the speaker. Rather, it is considered to be shared or general knowledge between the interlocutors or amongst people in the wider speech community.

Thus =*kè* can be given a translation of ‘reputedly’, ‘supposedly’ ‘so it’s said’, or ‘so they say’, e.g.:

(234) *minaka’atokè juara satu*

maka <in> ato =kè juara satu

AV.POT PST see, look EPIS victor one

‘It’s said (you) could have obtained first place’

(TDN_11_AW_HL_00:13:36)

Additional examples of clauses which are modified by =*kè* are found in §6.5.3.

5.7 Tondano pronominal clitics: Second position (2P) or verb adjacent?

The presence of what are known as special clitics¹⁶² (as per Halpern 1998:109) are well attested in Western AN languages. These special clitics are further categorised as either “second position ” (a.k.a. 2P or Wackernagel¹⁶³) or “verbal” (a.k.a verb adjacent) clitics (*ibid*). This section very briefly examines whether Tondano bound pronominals should be considered as 2P, verb adjacent, or perhaps neither.

2P pronominal clitics are deemed as commonly occurring in both Philippine (Billings & Kaufman 2004:18) and Philippine-type languages (Himmelman 2005:113). Furthermore, AN languages south of the Philippines¹⁶⁴ are judged to lack 2P clitics. From Central Sulawesi (Billings & Kaufman 2004:20) southwards, pronominals are instead frequently realised as verb adjacent, preposed pronominals (commonly prefixes). In contrast, this type of preposed pronominal is seen as absent in languages of North Sulawesi (van den Berg 1996:89). The expectation is therefore that Tondano should display 2P enclitics while lacking preposed bound pronominals.

Initial examinations appear to provide some evidence for 2P, with examples of pronominal clitics such as =*na* (3.SG) and =*nèa* (3.PL) in (235) - (236), and =*ku* (1.SG) in (237) occurring after the first word of a clause, e.g.:

(235) *paloo 'namou kokong*

pa-	loo'	-en	=na	=mow	kokong
DYN	see, look	PV	3.SG.NPIV.A	CPL	head
'He sees the head (of the bat)'					
(TDN_32_KK_00:02:26)					

(236) *binunu 'nèamou napi*

w<in>unu'	-Ø	=nèa	=mow	N=	api'
<PST> extinguish	PV	3.PL.NPIV.A	CPL	INAN	fire
'They already put out the fire'					
(TDN_26_00:06:13)					

¹⁶² That is, clitics which occupy a special syntactic within a clause.

¹⁶³ The latter terminology comes from the scholar (Jacob Wackernagel) of the same name, to whom the discovery of this patterning is attributed in his seminal paper of 1892. These are clitics which must occur following the first syntactic element of a clause (Halpern 1998:109).

¹⁶⁴ The so called ‘Indonesian type’. The type of clitics a language possesses (2P vs preposed/verb adjacent) has been used as one of the features which distinguish Indonesian-type languages from Philippine-type.

(237) *wuingkula ngaran nitua 'wènèna*

wui	-en	=ku	=la	ngaran	ni=	tu'awènè
ask	PV	1.SG.NPIV.A	DIR.PROX	name	AN.SG.POSS	old.woman
=na						
3.SG.POSS						

‘I would ask the name of his girlfriend’

(TDN_28_00:03:21)

However, an analysis of 2P patterns from clauses such as (235) - (237) is misplaced. Firstly, the position of these pronouns is fixed whereby they must directly follow the verb (see §9.1.2), and not simply the first grammatical unit of a clause. The fact that these verbal stems are clause initial is purely coincidental. Secondly, not all pronominal clitics have this distribution. Only enclitics which express a NPIV.A argument with the semantic role of ACTOR take this position, and only in an UV marked verbal clause. Thirdly, it has been attested that in a number of Philippine languages 2P behaviour will result in pronominal clitics occurring as enclitics on negators, fronted oblique arguments, or fronted adverbials (Kroeger 1998:4; Billings & Kaufman 2004:19). In contrast, Tondano pronominal enclitics are not hosted by any of these particular constituents.

In the context of Western AN personal pronominal placement, the lack of 2P enclitics gives cause to believe that verb adjacent, preposed pronominals may instead be present. This pattern looks possible from the following examples (and numerous others - for instance see §8.3.3):

(238) *sipaturuenè nituama esa*

si=	pa-	turu'	-en	=pè'	ni=	tuama	esa
3.SG.PIV	DYN	indicate	PV	INCPL	AN.SG.NPIV.A	man	one

‘The first man still teaches him’

(TDN_26_00:00:22)

(239) *tasumèropèla*

ta=	s<um>èro	=pè'	=la
1.PL.IN.PIV	<AV> search	INCPL	DIR.PROX

‘We would still search (for work)’

(TDN_14_DK_NK_00:09:52)

(240) *koumakèlangitèmi*

kow= ma- kèlang =itè =mi
2.PL.PIV AV.DYN walk LIM DIR.DIST
'You are just going (there)'
(TDN_7_00:01:11)

The positioning of *si*= (3.SG), *ta*= (1.PL.IN), and *kow*= (2.PL) in (238) - (240) initially points to an analysis of verb adjacent clitics. However, further investigation shows that this is not the case, and that pronominal proclitics are also hosted by various other elements such as negators (241), auxiliary verbs (242), and adverbials (243):

(241) *korèi timanen cinkè rèèn?*

ko= rèy' t<im>anem cinkè rè'èn
2.SG.PIV not <AV.PST> cultivate clove PART
'You haven't planted cloves then?'
(TDN_29_00:05:13)

(242) *taan siso 'o mapèra'*

ta'an si= so'o ma- pèra'
but 3.SG.PIV don't.want AV.DYN fish.roe
'But he doesn't want to lay eggs (i.e. procreate)'
(TDN_28_00:01:17)

(243) *sèmèmang ee, mewaliwali*

sè= mèmang erh ma- CVCV- wali
3.PL.PIV truly HES EV.STAT RDP together
'They are absolutely erh, together'
(TDN_31_00:01:49)

To summarise, while it could be expected that Tondano contains 2P pronominal enclitics, this is not the case. There is also no evidence which allows for pronominal clitics to be analysed exclusively as verb adjacent, preposed pronominals. Instead, there are pronominal clitics which may have various positions within a clause, but which are differentiated by the GR which they express (i.e. PIV for proclitics and NP.V.A for enclitics)¹⁶⁵.

¹⁶⁵ This result demonstrates that using the features of pronominals to differentiate Indonesian-type vs Philippine-type languages is problematic. This aspect of AN language typology would benefit from more research on the pronominal systems of languages in North

5.8 Particles

Morphologically, particles are always independent elements. They may be monosyllabic or disyllabic. Particles exclusively function at a discourse level as injections and exclamations. They are discussed together with relevant examples in §6.10.

Sulawesi. Despite a lack of 2P pronominal clitics, Tondano has other characteristics which allow it to be analysed as a Philippine-type language, primarily the multiple voice system with one ACTOR voice and multiple UNDERGOER voices (Ross 2002:21-2; Arka & Ross 2005:7).

6.0 LEXICAL CATEGORIES (WORD CLASSES)

Tondano has four content word classes. These are nouns (§6.2), verbs (§6.3), adjectives (§6.4), and adverbs (§6.5). However, while the content word classes are distinguishable, they appear much less clearly defined than corresponding classes in more familiar, i.e. European, languages¹⁶⁶. While lexical roots can be given a ‘default’ word class on a semantic basis, this default word class may change. That is, the expected syntactic function of a word does not always correspond to the word class of its lexical root (i.e. nominal lexical roots may function as the head of verbal predicates, (c.f. (1) and (2) in §3.2) and vice versa). Broadly speaking, all lexical roots may host verbal morphology and voice marking. This means that although three separate categories of words labelled ‘noun’, ‘verb’, and ‘adjective’ can be identified based solely on the semantics of lexical roots, it is the syntactic function of a word within a clause which is the only true indicator of its lexical category.

The function word classes are identifiable as: demonstratives (§6.6), numerals (§6.9), deictic elements (§6.7), quantifiers (§6.8), adverbs (§6.5), particles (§6.10), prepositions (§6.11), conjunctions, and pronominals (of these minor classes, the last two are not discussed here - see instead §10.3 and §8.3). One of these classes (deictic elements) consists of a number of lexical elements which are all grouped together on the basis of a shared function. The elements in this section include bound and independent lexical items, and include words which formally belong to other word classes (including nouns and prepositions). It is thought that grouping this class of elements together based purely on their shared function is preferable to having to discuss various elements with the same function in different thesis chapters.

6.1 Lexical root class vs word class

There are three categories of lexical roots. These categories are differentiated by their default semantics, and by whether they have the ability to form words independent of any additional morphology. The first category contains roots which do not require any additional morphology to function as words¹⁶⁷, the second category contains roots which may or may not require additional morphology to form words (this is dependent upon the

¹⁶⁶ The lack of distinction between nouns and verbs in Philippine (and Philippine-type) languages is much discussed in previous literature as part of the ‘Austronesian Nominalism’ hypothesis, e.g. De Wolff (1988), Himmelmann (1991, 2005, 2008), Kaufman (2009a, 2009b), Naylor (1975), and Starosta, Pawley, & Reid (1982).

¹⁶⁷ This does not entail that they cannot host additional morphology, just that they are not required to.

syntactic function the word will have), and the third category contains roots which cannot function as words without additional morphology. These three categories are labelled here as Type I, Type II, and Type III lexical roots¹⁶⁸. Due to their semantic features, these three root types can also be broadly labelled as nominal, adjectival/STATIVE verbal, and DYNAMIC verbal respectively.

While lexical roots can therefore be assigned a default word class in their ‘bare’ (i.e. lacking any additional morphology) state, the addition of morphological elements often results in a word class which differs from that denoted by the lexical root¹⁶⁹. This does not however mean that lexical roots are considered precategorial, rather that there is a lack of stringent morphological and lexical sub-categorisation for lexical roots.

Lexical roots such as *walè* ‘house’, *mèong* ‘cat’, *wu’uk* ‘hair,feather’, and *sera* ‘meat,fish’ can typically be interpreted as nouns. These roots function as words without further morphology, and often have the function of prototypical nouns, i.e. as heads of NPs (or NPs themselves) which function as arguments in verbal clauses, e.g.:

(244) *sa kosumiwo sera*
 sa ko= s<um>iwo sera’
 if, when 2.SG.PIV <AV> make meat
 ‘When you make fish (dishes)’
 (TDN_11_AW_HL_00:02:48)

In (244) the lexical root *sera* ‘ is the head of an NP which functions as the NP.IV.UN argument in an AV marked clause. However, roots such as *sera* ‘ may also have non-nominal functions at a clausal level when they occur with additional morphology. Table 6.1 demonstrates the different possible syntactic functions of the (Type I - nominal) lexical root *kawok* ‘mouse’.

¹⁶⁸ These three types cover all lexical roots except a small number which function as adverbs and quantifiers – see §6.5 and §6.8.

¹⁶⁹ The disparity between lexical root class and morphosyntactic word class described above is well attested in Western Austronesian and Philippine-type languages, see Himmelmann 1991:16; Gil 1993; Himmelmann 2005:126-7; Himmelmann 2008; Kaufman 2009b: 19.

Table 6.1: Syntactic functions of Type I lexical roots

	Lexical root: <i>kawok</i>		
Function:	Form:	Morphemes:	Gloss:
Head of NP:	<i>si=kawok</i>	(AN.SG= mouse)	‘the mouse’
Head of (DYNAMIC) verbal predicate:	<i>ko=k<um>awok</i>	(2.SG=<AV>mouse)	‘you climb (s.t). like a mouse’
Head of voice marked verb with nominal (argument function).	<i>si=mengawok</i>	(AN.SG=AV.DYN - mouse)	‘the mouse catcher’

In Table 6.1 there are three different words which all contain the lexical root *kawok*. Two of these words function as NPs (arguments) in verbal clauses (*si=kawok* and *si=mengawok*), while the third functions as the head of a verbal predicate (*k<um>awok*). This single lexical root can therefore have various word classes, as either a noun or a verb, despite the fact it has the default class of noun. Moreover, in one case it has a nominal function even though it hosts verbal morphology (*si=mengawok*).

This type of variation is not confined to lexical roots which have a default Type I nominal root class. Roots which have the default class of Type II - adjective /STATIVE verb, such as *wangun* ‘good, fine’, also display this variation, as seen in Table 6.2:

Table 6.2: Syntactic functions of Type II lexical roots

	Lexical root: <i>wangun</i>		
Function:	Form:	Morphemes:	Gloss:
Head of NP:	<i>ka>wangun<an iti’i</i>	(NR-good, fine -NR that.MED)	‘that goodness, beauty’
Modifier in NP:	<i>si=tou wangun</i>	(AN.SG= person good, fine)	‘the good person’
Predicate in non-verbal clause:	<i>nisia wangun</i>	(3.SG good, fine)	‘he/she is good’
Head of verbal (STATIVE) predicate:	<i>si=tou ma-wangun</i>	(AN.SG= person EV.STAT good, fine)	‘the person is being good’

There are four different words which all contain the same lexical root *wangun* in Table 6.2. These four words have a number of different functions which could see them labelled variously as noun, adjective, or verb. While the default class of *wangun* is as an adjective/ STATIVE verb, the addition of various types of morphology allows for variation in its word class at a functional level.

In the same vein as *kawok* and *wangun*, roots which have the default class of Type III - DYNAMIC verbs, such as *wangkèr* ‘sell’, may also have various syntactic functions, as Table 6.3 demonstrates:

Table 6.3: Syntactic functions of Type III lexical roots

	Lexical root: <i>wangkèr</i> ‘sell’		
Function:	Form:	Morphemes:	Gloss:
Head of verbal (DYNAMIC) predicate:	<i>si=tou ma- wangkèr raaren</i>	(AN.SG= person AV.DYN-sell vegetable)	‘the person sells vegetables.’
Head of NP:	<i>pa-wangkèr-an spesial</i>	(DYN -sell- LV special)	‘special sale (i.e. place of selling)’

The default word class of the lexical root *wangkèr* is as a verb. However, the different syntactic functions of the two words in Table 6.3 could see it labelled as either a noun (*pa-wangkèr-an*) or a verb (*ma-wangkèr*). The word class of *wangkèr* at a syntactic level may differ from its default root class. Unsurprisingly, this variation can be achieved with specific nominalising morphology. But more importantly, as is the case with words such as *pa-wangkèr-an* and *si=mengawok*, a stem which includes only verbal morphology may refer to the place where the action or event of the verb occurs, or to the entity which performs the action or event. This word then has a nominal function at a syntactic level, i.e. as an argument.

However, it is interesting to note that the degree of flexibility within the major word classes varies slightly depending upon the default class of the lexical root. That is, Type I - nominal lexical roots appear to have more flexibility in this regard than Type II - adjectival, or Type III - verbal lexical roots¹⁷⁰. While many inherently nominal roots such

¹⁷⁰ This is perhaps not entirely unexpected. Previous diachronic work on Philippine-type languages hypothesises that voice marked forms as predicates are historically derived from nominalisations - see Starosta, Pawley, & Reid (1982) and Kaufman (2009a).

as *kawok* can function as nouns in their bare form and verbs when hosting additional morphology, the reverse is not true of all verbal roots. Verbal roots never occur in their bare form and require additional morphology (be it inflectional or derivational) in order to have any syntactic function, be it as either nouns or verbs.

The three types of roots exemplified in Tables 6.1, 6.2, and 6.3 broadly correspond to nouns, adjectives, and verbs. These terms are used from this point on with the obvious caveat that the default root class may not match the word class at a clausal level.

The three lexical root types are differentiated by the following specific characteristics:

Type I (nominal): Lexical roots which are nominal by default (e.g. *kawok* in Table 6.1), and which do not require any further morphology to function as words. In their bare form these roots function as heads of NPs in verbal or non-verbal clauses. When occurring with additional verbal morphology these roots also often function as verbs (in verbal clauses - *k<um>awok* in Table 6.1).

Type II (adjectival/ STATIVE verbal): Lexical roots which denote states, qualities, and emotional or psychological feelings. These roots do not require additional morphology to function as adjectives. As adjectives they function as modifiers to head nouns (e.g. *wangun* in *si= tou wangun* in Table 6.2) or as adjectival predicates (e.g. *nisia wangun* in Table 6.3). These roots require additional morphology to function as nouns (e.g. *ka-wangun-an*), or as (STATIVE) verbs (as with *ma-wangun* in Table 6.3).

Type III (DYNAMIC verbal): Lexical roots which denote actions or events, and which are verbal by default. These lexical roots cannot form words independently. They most commonly occur with verbal morphology and function as (DYNAMIC) verbs. However, these roots may also have the syntactic function as head of an NP, either with the addition of specific (i.e. nominalising) morphology, or even when hosting verbal morphology. These NPs may function as arguments in both verbal and non-verbal clauses.

Table 6.4 displays a number of lexical roots from the three different categories.

Table 6.4 Examples of Type I, Type II, and Type III lexical roots

Type I:	Type II:	Type III:
<i>rano</i> ‘water’	<i>sela</i> ‘big’	<i>wangker</i> ‘sell’
<i>kawok</i> ‘mouse’	<i>upi</i> ‘angry’	<i>teles</i> ‘buy’
<i>wo’odo</i> ‘morning’	<i>kunir</i> ‘yellow’	<i>ali</i> ‘bring’
<i>pèra</i> ‘fish eggs, roe’	<i>rintek</i> ‘small, fine’	<i>èi</i> ‘come’
<i>lulut</i> ‘bamboo’	<i>esem</i> ‘sour’	<i>susui</i> ‘speak, talk’
<i>sodo</i> ‘ladle’	<i>lè’os</i> ‘good, well’	<i>linga</i> ‘listen’
<i>sera</i> ‘meat, fish’	<i>weresi</i> ‘clean’	<i>kèlang</i> ‘walk, go’
<i>kaan</i> ‘rice, food’	<i>rou</i> ‘far’	<i>tingkas</i> ‘run, escape’
<i>nuru</i> ‘talismán’	<i>ghegher</i> ‘cold’	<i>wèè</i> ‘give, offer’
<i>tou</i> ‘person’	<i>irang</i> ‘shy’	<i>kèrèt</i> ‘call, summon’
<i>uma</i> ‘field’	<i>oki</i> ‘small’	<i>tokol</i> ‘fight, hit’

There is often a reasonably straightforward semantic link when lexical roots change their ‘default’ word class via additional morphology. For example, from Type I the bare root *kaan* ‘rice’ (food) is a noun, while in *pa-kaan-en* (AV.DYN-rice-PV) it is a DYNAMIC marked verb meaning ‘to eat s.t.’. Similarly, *sodo* ‘ladle’ is a noun, while in *ma-sodo* (AV.DYN-ladle) it is a DYNAMIC marked verb meaning ‘to ladle s.t out.’ However, there are some roots whose change in word class can be slightly more abstract, e.g. *pèra* ‘fish eggs’ (noun) vs *ma-pèra* ‘make, lay fish eggs (procreate)’ (verb).

Type II roots can be either modifiers to the head of an NP, non-verbal predicates, or STATIVE marked verbs. Their function depends upon the presence or absence of additional morphology. Therefore, a root such as *sela* ‘big’ is an adjectival modifier in the NP *watè sela* ‘big sago grub’, a verb in *ko=ma-sela* (2.SG.PIV=EV.STAT- big) ‘you grow (up)’, and an adjectival predicate in *nisia sela* ‘he/she is big’. Furthermore, some Type II roots may also function as DYNAMIC marked verbs when derived, e.g.: *wanua rou* ‘far (away) village’ vs *pa-rou’en* (DYN- far-PV) ‘remove (i.e. make something far)’ or *en=timpa’ emis* (INAN-palm.sugar.sap sweet) ‘the sweet palm sugar sap’ vs *ma-emis* (AV.DYN-sweet) ‘sweeten s.t./make s.t. sweet’.

Type III roots always have the default word class of verb, and they cannot function as word independently. When these lexical roots function as derived nominals it can be as a result of one of the specific nominalisation processes described in §8.2.4. These semantics of these processes can range from quite transparent to more arbitrary. The word class of Type III roots may also be non-verbal even when they host verbal morphology. This is commonly demonstrated by examples like *pa-wangkèr-an* (DYN-sell-LV) ‘sale, place of selling’, where the derived form is a nominal referring to a place or an entity which is related to the event or action expressed by the verbal root.

6.2 Nouns

Words which are labelled as nouns are characterised by the various syntactic functions which they have within NPs and clauses. Independent nominal lexical roots and morphologically complex nouns are distinguished here with the labels of ‘simple’ and ‘complex’ nouns.

The different subtypes of noun together with the structure of NPs are covered in further detail in §8.1. Features which can characterise all nouns are summarised here as:

- Nouns commonly host one of a number of phrase markers (see §8.4) which differentiate nouns on the basis of animacy, person, and number.
- They can be modified by lexical roots which have an attributive function (i.e. the Type II roots).
- They can be modified by demonstratives (see §6.6).
- They can be quantified with numerals (see §6.9) and quantifiers (see §6.8).
- Semantically, nouns can be further differentiated into subclasses such as body parts, animals, foods, geography, natural phenomena, manmade items, and people (see §8.2).

The various functions of nouns are demonstrated in §8.1, and in different sections throughout this thesis. A summary of these functions followed by an example for each is as follows (sections with other examples are indicated):

- The head of NPs which are commonly arguments of verbs within verbal clauses - (see §4.5 and *pèrèt* ‘bat’ in (245) below)
- As heads of the complements of prepositions within PPs (see §8.5 and *se-sandar-an* ‘frame’ in (246) below).

- As the predicate in a non-verbal clause (see §4.4.2 and *tuama* ‘man’ in (247) below).
- As the PIV NP in an existential clause (see §4.4.1 and *walè* ‘house’ in (248) below).
- As the possessor or possessed in a possessive phrase (see §8.4.2) as with *papa* ‘father’ and *walè* ‘house’ in (249).

(245) *parintekanèamou sipèrèt*

pa- rintek -en =na =mow si= pèrèt

DYN small PV 3.SG.NPIV.A CPL AN.SG bat

‘He dices up the bat’

(TDN_32_OL2_00:02:51)

(246) *pesandarla witu sesadaran*

i- pa- sandar =la witu Ce- sandar -an

CV DYN lean.on DIR.PROX on.MED NR lean.on LV

‘(He) leans (it - the bamboo tube) on the frame’

(TDN_11_AW_HL_00:01:47)

(247) *kotuama, ya?*

ko= tuama ya

2.SG.PIV man AFF

‘You are a man, yes?’

(TDN_29_00:13:27)

(248) *wewèan walè*

wewèan walè

EXIST house

‘There is the house’

(TDN_31_00:05:31)

(249) *walè nipapa*

walè ni= papa
house AN.SG.POSS father
'Father's house'
(TDN_28_00:02:27)

6.3 Verbs

Verbs are considered to be any lexical root which hosts verbal morphology, and which then has certain characteristics and syntactic functions (see below). This definition of 'verb' is distinct from 'verbal roots', which is the term broadly used for certain unmarked lexical roots (Type II and some Type III) above. Morphologically, verbs are stems which are formed from any of the lexical root types; however, they most frequently contain Type II and Type III roots. These verbs denote a range of different situations, including: actions, achievements, events, processes, emotions, and physical and psychological states.

While all roots may take primary verbal affixation and voice marking, there are restrictions on which roots may host particular verbal affixation. Specifically, Type I and Type III lexical roots almost exclusively host DYNAMIC and POTENTIVE marking, while Type II lexical roots host STATIVE marking.

The characteristics of verbs with regards to morphology and syntactic function are as follows (section numbers indicate where examples are found):

- Verbs most commonly function as the head of verbal predicates (see §9.1 and §4.5).
- When functioning as heads of verbal predicates, lexical roots will be marked with one of the primary verbal affixes (even if zero marked) and one of the voice affixes.
- Verbs have tense, aspect, and mood values (see §9.3). This may or may not be overtly morphologically marked on the verb.
- Verbs also host morphology which increases or decreases the number of participants in a clause (valence changing - see §9.4).

6.3.1 Subcategories of verbs

Lexical verbs in Tondano lack specific categories on the grounds of transitivity. As explained in §4.2, transitivity is much more appropriately described as a property of

clauses (and the various arguments with specific GRs they contain) instead of specific lexical items. The related notion of valency is more useful for differentiating verbal lexical roots, and is applied here. However, it is still difficult to state that all verbal roots are subcategorised for a specific number of arguments. While Type II and Type III lexical roots can be broadly characterised as either ‘monovalent’ or ‘bivalent’, it must be stated that these roots may also display flexibility as regards subcategorisation. This sees some monovalent verbal roots occur as verbs in transitive clauses (see (257) - (258) below), and some bivalent roots occur as verbs in clauses with three participants (see §4.5.5).

a. Monovalent verbs

Monovalent verbs almost exclusively occur in intransitive clauses. The verbal roots which derive them may be further differentiated with regards to both the type of primary verbal affix they host (DYNAMIC, POTENTIVE, or STATIVE - see §4.5.1), and the semantic role of the PIV argument.

The first type of monovalent verbal root is that which denotes an event or situation where a volitional ACTOR is present. These verbal roots host either DYNAMIC or POTENTIVE verbal affixes. The verbal root which forms these monovalent verbs may denote movement and posture, or the volitional production of certain sounds, e.g.:

Table 6.5: Verbal roots deriving DYNAMIC monovalent verbs

Verb root:	Gloss:
<i>èi</i>	‘come’
<i>èa</i>	‘go’
<i>warèng</i>	‘return (home)’
<i>sosor</i>	‘climb (a slope)’
<i>eros</i>	‘descend (a slope)’
<i>tumpa’</i>	‘go down’
<i>kepa’</i>	‘face, lie downward’
<i>redèi</i>	‘stand, lean on s.t.’
<i>tingkas</i>	‘run, escape’
<i>kèlang</i>	‘walk, go’
<i>lewu’</i>	‘go (to the fields)’
<i>tekel</i>	‘sleep’
<i>wingkot</i>	‘answer, reply’
<i>èkè’</i>	‘call out (girlishly)’
<i>kantar</i>	‘sing’

The verbal roots in Table 6.5 must all host verbal morphology to function as heads of verbal predicates. These predicates occur in intransitive clauses as follows (see also §4.5.3):

(250) *marèngi wia embalè*

<um> warèng =mi wia N= walè
 <AV> return.home DIR.DIST to.PROX INAN house
 ‘(We) would return home to the house’
 (TDN_14_HK_DT_00:10:16)

(251) *sèmekantar*

sè= ma- kantar
 3.PL.PIV AV.DYN sing
 ‘They sing (prayer songs)’
 (TDN_31 _00:07:45)

(252) *tamèa waki wènanang*

ta= <um> èa waki Wènanang

1.PL.IN.PIV <AV> go to.DIST PN

‘We will go to Manado’

(TDN_31_00:14:05)

(253) *kèiminatekel aki walè*

kèy= ma- <in> tekèl waki walè

1.PL.EX.PIV AV.DYN <PST> sleep at.DIST house

‘We slept at a house (when we visited Brisbane)’

(TDN_20_00:03:44)

(254) *tamèa waki uma*

ta= <um> èa waki uma

1.PL.IN.PIV <AV> go to.DIST field

‘We will go to the fields’

(TDN_14_HK_DT_00:04:01)

The second type of monovalent verbal root is one which denotes an event or situation without the possibility of a participant with the role of ACTOR. These verbal roots (with one or two exceptions) host STATIVE affixes. As described in §4.5.1, verbs which host STATIVE affixes denote everything from physical and psychological states, to perception, knowledge, and cognition, as well as certain (non-volitional) actions of movement or location. Intransitive clauses with these monovalent verbal roots often have a PIV argument representing an entity which experiences the state of affairs denoted by the root, and which therefore has the semantic role of EXPERIENCER.

Table 6.6: Verbal roots deriving *STATIVE* monovalent verbs

Verb root:	Gloss:
<i>rior</i>	‘fast, early’
<i>wedu</i>	‘weary, tired’
<i>roung</i>	‘annoy’
<i>irang</i>	‘shy, embarrassed’
<i>idè’</i>	‘afraid’
<i>liur</i>	‘forget’
<i>te’u ~ to’u</i>	‘know’
<i>arem</i>	‘hungry’
<i>re’o</i>	‘thirsty’
<i>pera</i>	‘dry, arid’
<i>taang</i>	‘endure’
<i>sela</i>	‘big’
<i>kunir</i>	‘yellow (i.e. be jaundiced)’
<i>ketè</i>	‘solid, hard’
<i>kolo’</i>	‘fall down, collapse’
<i>ra’ragh</i>	‘fall off s.t.’
<i>ghenang</i>	‘think, remember’
<i>ra’raa</i>	‘be sick’

Intransitive clauses with monovalent verbs derived from the roots in Table 6.6 are those such as (more examples in §4.5.1):

(255) *sa kumera’raala, sapapè’?*

sa ku= ma- ra’raa =la sapa =pè’
if,when **1.SG.PIV** **EV.STAT** **sick** **DIR.PROX** **what** **INCPL**

‘If I am sick, then what?’

(TDN_07_00:19:06)

Further to human, animate EXPERIENCER entities such as *ku=* ‘I’ in (251), the entity expressed by the PIV argument in these clauses may also be an inanimate entity which possesses a state or quality denoted by the verbal root, e.g.:

(256) *maperala*

ma- pera =la
EV.STAT dry DIR.PROX
'(The fields) are becoming dry'
(TDN_10_00:20:45)

However, in addition to forming monovalent verbs like those in clauses (250) - (256), some of the verbal roots in Table 6.6 may also occur as bivalent verbs within transitive clauses. In these clauses there are two arguments, one which has the role of EXPERIENCER and another which has the role of STIMULUS (see §4.5.1 and §4.5.4 for further examples):

(257) *sikaupitè' nètù'aku*

si= i- ka- upi' =itè nè= tu'a =ku
3.SG.PIV CV STAT angry LIM AN.PL.NPIV.A old 1.SG.POSS
'My parents are just angry at him'
(TDN_07_00:12:26)

(258) *dèi' katouan nètou*

rèy' ka- to'u -an nè= tow
not STAT know LV AN.PL.NPIV.A person
'The people don't know (that I took it)'
(TDN_29_00:19:30)

The clauses in (257) - (258) both have two non-oblique arguments with the GRs of PIV and NPIV.A. The PIV marked arguments represent the entity at which the NPIV.A marked argument feels or experiences the state of affairs denoted by the verbal root.

Finally, a number of the verbal roots which occur in STATIVE marked verbal clauses can also form DYNAMIC verbs¹⁷¹. Verbal roots such as *loo* 'translate as either 'see' or 'look, watch', *linga* as either 'listen' or 'hear', and *ghenang* as either 'think', or 'remember, recall'. The fact that both the AV.DYN and EV.STAT prefixes are the homophonous *ma-* (see §4.5.1) means that these meanings are often only disambiguated through context. Alternatively, sometimes it is clear that possibly STATIVE verbal roots are DYNAMIC because they only overtly host the AV (and therefore DYNAMIC) basic affix <um>. The primary verbal affix in this case is zero marked. This results in verb stems such as

¹⁷¹ Verbs which are formed from these verbal roots may therefore have arguments which are either volitional or non-volitional participants.

l<um>oo ‘watch s.t.’, *l<um>inga* ‘listen to s.t., s.o.’ and *gh<um>enang* ‘think (volitionally) about s.t.’

b. Bivalent verbs

Bivalent verbal roots are those which commonly form verbs occurring in transitive clauses. These verbs express an action, event, or situation which is volitionally instigated by one participant on or towards another participant. Bivalent verbs are often formed with Type III roots, and a number of these are listed in Table 6.7:

Table 6.7: Verbal roots deriving bivalent verbs

Verb root:	Gloss:	Verb root:	Gloss:
<i>awes</i>	‘add s.t.’	<i>pu’us</i>	‘knead’
<i>tokol</i>	‘fight, hit’	<i>ki’kis</i>	‘grate, scrape’
<i>wangker</i>	‘sell’	<i>susui</i>	‘speak, talk’
<i>teles</i>	‘buy’	<i>penet</i>	‘close, shut s.t.’
<i>siwo</i>	‘make, do’	<i>wunu’</i>	‘kill, extinguish’
<i>ketor</i>	‘slice, cut (crossways)’	<i>luga</i>	‘boil’
<i>iwu</i>	‘slice, cut (top to bottom)’	<i>ki’it</i>	‘follow’
<i>ali</i>	‘bring, carry’	<i>lutu’</i>	‘cook’
<i>èdo</i>	‘take’	<i>pè’an</i>	‘try, taste s.t.’
<i>wèè</i>	‘give, offer’		
<i>kèrèt</i>	‘call, summon’		
<i>owas</i>	‘wash s.t.’		
<i>tura’</i>	‘stab (with a spear)’		

Bivalent verbal roots often occur in clauses which have a minimum of two non-oblique arguments (with the GRs of PIV and NPIV.UN or NPIV.A - see §4.5.4 for numerous examples.). These bivalent verbal roots are further differentiated from monovalent roots by the fact that they cannot host STATIVE verbal affixes.

However, in addition to Type III lexical roots, there are a small number of monovalent Type II roots which may also form bivalent verbs. Verbal roots such as *rintek* ‘small’, *rou’* ‘far’, *weresi* ‘clean’ and *ghegher* ‘cold’ may all function as bivalent verbs in

transitive clauses which have an both an ACTOR and an UNDERGOER argument¹⁷². When functioning as bivalent verbs in this way they express a causative reading¹⁷³, e.g.:

(259) *parintekenou lansuna*

pa- rintek -en =mow lansuna

DYN small PV CPL onion

‘(They) dice the onion’

(TDN_32_KK_00:03:51)

(260) *paru’n embaya, baya riberek*

pa- rou’ -en N= waya waya riberek

DYN far PV INAN HES all entrails

‘(They) remove all, all of the entrails’

(TDN_32_OL2_00:01:20)

(261) *sèmaberesberesi waya po’ong cinkè ni’tu*

sè= ma- CVCV- weresi waya po’ong cinkè ni’tu

3.PL.PIV AV.DYN RDP clean all tree clove that.MED

‘They are cleaning (i.e. removing vermin from) all those clove trees’

(TDN_12_00:02:44)

Thus, in (259) - (261) the Type II lexical roots *rintek*, *rou’*, and *weresi* are functioning as bivalent verbs within transitive clauses. This flexibility in the use of lexical roots as both monovalent and bivalent verbs further demonstrates the lack of explicit subcategorisation in verbal roots.

The bivalent (Type III) lexical roots in Table 6.7 also sometimes form verbs in clauses with three participants. These clauses will always have one of the three participants expressed as an oblique argument (a PP). This particular pattern means the language has neither trivalent verbal roots nor ditransitive clauses (see §4.5.5 for more detail).

c. Modal auxiliary verbs

Table 6.8 summarises the auxiliary verbs in Tondano. These verbs are modal auxiliaries which occur in addition to main verbs as part of a complex predicates (see §10.1.2).

When used in this function these verbs occur as independent lexical roots, i.e. they do not

¹⁷² These roots host DYNAMIC marking when they function as bivalent verbs.

¹⁷³ This is despite the fact that they are not morphologically marked as causative. See §9.4.1 for overt causative marking.

host any verbal morphology. Auxiliaries encode various aspects of modality relating to the proposition expressed by the main verb in a clause. In terms of semantics, they express ability, consent, obligation, or desire.

Table 6.8: Auxiliary verbal roots

Verb root:	Gloss:
<i>toro</i>	‘can, be allowed, be able’
<i>pa’ar</i>	‘want, will ,desire’
<i>so’o</i>	‘don’t want to (do s.t.)’
<i>musti</i>	‘must, have to (do s.t.)’
<i>sia’~ sigha’</i>	‘be able, be expert at (related to a skill)’

6.4 Adjectives

The problem of defining a separate category of words which can be labelled as ‘adjectives’ in AN languages is reasonably well accepted (e.g. Ross 1998; Himmelmann 2005:128; Blust 2013:49). Furthermore, it is not unusual in AN languages for words which have the features of an adjective to be expressed with stative verbs. In spite of these typological issues, a major word class of adjectives is identifiable in Tondano, where both the morphological form and the syntactic function of adjectives and STATIVE verbs differ.

The same lexical roots (Type II) which derive STATIVE verbs are also adjectival modifiers or adjectival predicates in their bare form. When these particular lexical roots host verbal affixation they exclusively function as heads of verbal predicates, and they can never function as modifiers within NPs or as adjectival predicates in non-verbal clauses.

Examples of the lexical roots which include adjectives are presented in Table 6.6, and are not repeated here. However to summarise, a separate major word class of adjectives is identified here for the following reasons:

- They denote characteristics and properties which can be attributed to various entities. These are characteristics such as age, dimension, value, colour, physical features, speed, and human propensity.

- They commonly function as modifiers to the heads of NPs, and also as adjectival predicates in non-verbal (equational) clauses.
- The function of Type II lexical roots as either adjectives or STATIVE verbs is clearly distinguished morphologically. If a Type II lexical roots hosts primary verbal affixation and voice marking (and any other verbal morphology) it must have a verbal function. When this root is in its bare form it must have an adjectival function.

Examples of adjectives functioning as predicates are found in §4.4.2. When adjectives modify the head of an NP they may occur either preceding or following it¹⁷⁴. A number of examples of adjectives functioning as modifiers to the head of an NP are as follows:

<i>siwatè rebur</i>	(AN.SG=sago.grub chubby)	‘the fat sago grub’
<i>siasu item</i>	(AN.SG=dog black)	‘the black dog’
<i>tu’a embalè</i>	(old INAN=house)	‘the old house’
<i>sètou lengèi</i>	(AN.PL=person poor)	‘the poor people’
<i>nakal wangko</i>	(INAN= sugar.palm.tree big)	‘the big sugar palm tree’
<i>esem ntimpa’</i>	(sour INAN=palm.sugar.wine)	‘the sour palm sugar wine’
<i>sèkawok rior</i>	(AN.PL=mouse fast)	‘the fast mice’
<i>sitolè kerèmo’</i>	(AN.SG=youth filthy)	‘the filthy (faced) youth’

6.5 Adverbs

The minor class of lexical items which are adverbs represent somewhat of a mixed bag in terms of their function and their morphological form¹⁷⁵. Despite this, there are a number of characteristics which allow lexical items to be grouped together under the label of ‘adverb’, these are:

- Adverbs may be various lexical elements, either independent or bound.

¹⁷⁴ In contrast, when adjectives function as predicates in equational clauses they usually follow the NP which functions as the PIV - see §4.4.2.

¹⁷⁵ In addition, there are some words which have an function as adverbs, but which are formally other word classes, e.g. temporal nouns (see §8.2.5) or prepositions which function as deictic adverbs (see §6.7.3).

- Syntactic function: adverbs frequently function as modifiers to verbs which are the heads of predicates. In addition, they are also able to modify adjectives, NPs (in predicate and argument function of non-verbal clauses), or entire clauses.
- They may occur either preposed or postposed regardless of the element they modify. Similarly, this flexibility of position is regardless of whether or not the adverb is clause internal.
- At both a clausal and a phrasal level, adverbs exclusively function as modifiers.
- Unlike many other lexical roots, adverbs never host any verbal morphology.

Adverbs are categorised with regards to the type of information they encode. The different categories of adverbs identified here are: degree adverbs, focussing adverbs, evidential and epistemic adverbs, and temporal adverbs. Degree adverbs (§6.5.1), focussing adverbs (§6.5.2), evidential and epistemic adverbs (§6.5.3), and temporal adverbs (§6.5.4) are all examined separately in the following subsections.

6.5.1 Adverbs of degree

The degree adverbs function as intensifiers. They may be bound or free, and encode information on the degree of intensity of the event or situation expressed by the verb in a predicate. The degree adverbs are as follows:

kasa ~ *ka-* ‘very, too, really’

talous ~ *ta-* ‘exceedingly, too, very’

a. *kasa* ~ *ka-*

kasa, together with its corresponding bound form, *ka-* ‘very, too’ modifies verbs and adjectives. *kasa* may occur either before or after the adjective it modifies. These adjectives can be modifiers to head nouns within an NP, e.g.:

(262) *kasa entè ndano*

kasa *entè* N= *rano*

very **strong** **INAN** **water**

‘The very powerful water (in the irrigation channel)’

(TDN_10_00:15:21)

(263) *bangun kasa po'opo' ti'i*

wangun kasa po'po' iti'i
good very coconut that.MED
'That very good (yummy) coconut'
(TDN_32_OL_KK_00:04:17)

In certain instances when *kasa* modifies an adjective it has the function of a superlative marker, e.g.:

(264) *kasa sedap engkaan*

kasa sedap N= kaan
very tasty INAN rice
'The tastiest rice (is the rice which is picked first)'
(TDN_31_00:01:44)

In non-verbal clauses both *kasa* and *ka-* modify adjectives which function as predicates.
e.g.:

(265) *sè itu dagingitè kasa ipis*

sa ni'tu daging =itè kasa ipis
if,when that.MED meat LIM very thin
'If that meat is just very thin (then it's been chopped too much)'
(TDN_32_KK_00:02:49)

While the independent form *kasa* may occur preceding or following the predicate adjective it modifies, the prefix *ka-* only occurs before the adjectival predicate, e.g.:

(266) *sèkawangun waya*

sè= ka- wangun waya
3.PL.PIV very good all
'They are all very nice'
(TDN_12_00:07:16)

(267) *nakal itii kaberguna*

N= akal iti'i ka- berguna
INAN sugar.palm.tree that.MED very useful
'Those sugar palm trees are very useful'
(TDN_32_OL_00:11:43)

Another difference between the bound and independent forms relates to whether they may act as a modifier of the verb in verbal clauses. While *ka-* is restricted to modifying non-verbal predicates, *kasa* also modifies verbal predicates, e.g.:

(268) *sèmèidè'mou kasa*

sè= ma- idè' =mow kasa
3.PL.PIV EV.STAT fear CPL very
 'They are very afraid'
 (MARK 4:41)

(269) *sikasa pa'ar metete'ula embahasa tondano*

si= kasa pa'ar ma- Ce- te'u =la N=
3.SG.PIV very want DYN IRR know DIR.PROX INAN
 bahasa Tondano
language PN
 'He very much wants to learn the Tondano language'
 (TDN_32_OL_00:12:07)

In certain situations both *ka-* and *kasa* may co-occur, with both forms modifying the same element. This pattern occurs on predicate adjectives, with the degree of intensity conveyed higher than if the adjective were only modified with either *ka-* or *kasa* separately. This construction may occur in clauses which are modified by discourse particles functioning as exclamationatives (see §6.10), e.g.:

(270) *ti'i watè, o tuang kasela kasa!*

iti'i watè o tuang ka- sela kasa
that.MED sago grub PART PART too big very
 'That sago grub, oh God no it's too big!'
 (TDN_11_00:02:42)

b. *talous~ ta-*

The functions and positions of *talous* and *ta-* appear to be identical to those presented for *kasa* and *ka-*. However, there are no examples of these adverbs in the data corpus used for this thesis. Instead see Sneddon (1975:98, 135, 144-5).

6.5.2 Focussing adverbs

Focussing adverbs are used to focus on one particular entity, situation, or event in addition to, or to the exclusion of, all others. They are used to express a degree of certainty or inevitability.

The focussing adverbs are:

<i>kasi</i>	‘again, still, more’
<i>=moukan</i>	‘definitely, certainly, nothing else but’
<i>=itè</i>	‘only, just’
<i>kangkasi, kangkèi, =kan</i>	‘also, in addition to’

These adverbs modify NPs, predicates (both verbal and non-verbal), or whole clauses.

a. *kasi*

kasi ‘again, still, more’ expresses the notion that the event or situation denoted by the predicate or clause continues or happens again in some way.

In intransitive verbal clauses *kasi* most commonly occurs following the verb it modifies, e.g.:

(271) *kèy mèimou kasi*

kèy= <um> èy =mow kasi
1.PL.EX.PIV <AV> come CPL again
‘We will come again’
(TDN_14_HK_DT_00:04:20)

(272) *mupu kasi*

<um> upu kasi
<AV> pick again
‘(We) will pick rice again’
(TDN_10_00:24:25)

(273) *marèngoumi kasi aki walè*

<um> warèng =mow =mi kasi waki walè
 <AV> return.home CPL DIR.DIST again to.PROX house
 ‘(We) would return home again to the house’
 (TDN_20_00:01:18)

In all examples (271) - (273) *kasi* occurs predicate internally, a fact more clearly demonstrated in (273) where *kasi* occurs after the verb it modifies, but before the non-predicate constituent (the oblique PP) *waki walè*.

In transitive verbal clauses *kasi* modifies the entire predicate. Once again *kasi* is predicate internal, a fact demonstrated in (274) - (276) where *kasi* occurs between the two main components of the predicate, i.e. the verb (and the bound elements it hosts) and the NPIV.UN NP, e.g.:

(274) *sa kimi ’itè’ kasi nisèa*

sa k<im>i’t =pè’ kasi nisèa
 if, when <AV.PST> follow INCPL again 3.PL
 ‘If (we) still followed them again’
 (TDN_07_00:06:48)

(275) *kusimiwotèla’ kasi masalah*

ku= s<im>iwo =itè’ =la kasi masalah
 1.SG.PIV <AV.PST> make LIM DIR.PROX again problem
 ‘You just made problems again’
 (TDN_14_DK_NK_00:06:22)

(276) *kèisumèrèti kasi kapal*

kèy= s<um>èrèt =mi kasi kapal
 1.PL.EX.PIV <AV> ride DIR.DIST again ship
 ‘We took a ship again’
 (TDN_20_00:04:49)

When *kasi* occurs in non-verbal clauses it again functions as a modifier of the predicate. In existential clauses *kasi* occurs adjacent to the existential marker *wewèan* which functions as the predicate, e.g.:

(277) *wewèan kasi patuari waki wanua*

wewèan kasi patuari =ku waki wanua
EXIST again nuclear family 1.SG.POSS in.DIST village
 ‘There are still my family members in the village’
 (TDN_12_00:12:24)

(278) *niaku kasi wewèan manuang*

niaku kasi wewèan manuang
1.SG again EXIST parents.in.law
 ‘I still have parents in law’
 (TDN_12_00:11:05)

Thus, in (277) *kasi* modifies *wewèan* (but not the PIV *patuari=ku* or the oblique *waki wanua*), while in (278) it modifies *wewèan* to the exclusion of the PIV arguments *manuang* and *niaku*.

Lastly, in equational clauses *kasi* also occurs adjacent to the predicate which it modifies. In these clauses *kasi* may therefore modify NPs, pronouns, or proforms, e.g.:

(279) *sapapè kasi kita?*

sapa =pè’ kasi kita
what INCPL again 1.PL.IN
 ‘What more are we (i.e. what else can we do/say)?’
 (TDN_11_00:02:20)

b. =itè

The LIMITATIVE enclitic =itè is hosted by the element which it modifies. For example, in (280) =itè’ modifies the NP *nisia* in a verbal clause, while in (281) it modifies *mi*. In both instances =itè functions to focus and delimit the number of possible referents, e.g.:

(280) *nisiaitè sitoro mejagajagami nikita*

nisia =itè si= toro ma- CVCV-
3.SG LIM 3.SG.REL can AV.DYN RDP
 jaga =mi nikita
watch.over DIR.DIST 1.PL.IN
 ‘Only he (God) who can watch over us (is answered by us through prayer)’
 (TDN_3000:03:55)

(281) *samiitè kumaan*

sa mi =itè k<um>aan

if, when noodle LIM <AV> rice

‘If (we) eat only instant noodles (and nothing else - it means we are poor)’

(TDN_14_00:07:14)

=itè also modifies verbs, as seen with (282), as well as the NPs and adjectives which function as non-verbal predicates, e.g. (283) - (284):

(282) *ondè ondè ka’apa odè odè, masuatitè*

ondè ondè ka’apa odè odè ma- suat =itè

RDP cake or RDP cake EV.STAT same LIM

‘Ondè ondè or odè odè are just the same (i.e. both words mean the same thing)’

(TDN_19_00:05:40)

(283) *tim, ruaitè’ sia*

Tim rua =itè’ sia

PN two only 3.SG

‘Tim, he is (i.e. had) only two (tilapia fish)’

(TDN_28_00:05:48)

(284) *nokitè’, dèi’ laker gula mèa*

N= oki’ =itè rèy’ laker gula mèa’

INAN small LIM not much sugar red

‘(It) is just a little bit, not (too) much palm sugar’

(TDN_19_00:02:27)

c. =moukan

The enclitic adverb =moukan (and its allomorph =oukan) has a meaning of ‘definitely, certainly’, ‘only’, or ‘nothing or no one else but’. In addition (and in contrast to =itè) it also expresses a sense of certainty and conviction. =moukan modifies NPs which are PIV arguments in verbal clauses, e.g.:

(285) *niakumoukan maesaesa waki walè*

niaku =mowkan ma- CVCV- esa waki walè
1.SG definitely EV.STAT RDP one at.DIST house
 ‘Only I am alone in the house’
 (TDN_12_00:08:07)

(286) *siamoukan linele’*

sia =mowkan l<in>elè’ -Ø
3.SG definitely <PST> bathe PV
 ‘Definitely only she (and not her sister) was baptised’
 (TDN_14_HK_DT_00:01:20)

=*moukan* also modifies NPs which are functioning as either arguments (287) or predicates (288) in non-verbal clauses:

(287) *sèamoukan telu*

sèa =mowkan telu
3.PL definitely three
 ‘They are definitely three (i.e. there are definitely three of them)’
 (TDN_31_00:13:16)

(288) *jadi, sètu’aku esamoukan*

jadi sè= tu’a =ku esa =mowkan
thus AN.PL old 1.SG.POSS one definitely
 ‘So my parents are only one (I only have one parent left)’
 (TDN_12_00:09:14)

In verbal clauses, =*moukan* is internal to the predicate and can be hosted by the verb which it modifies, e.g.:

(289) *kokumolokomoukan mana bulan september*

ko= k<um> oloko =mowkan mana bulan September
2.SG.PIV <AV> scatter definitely there month September
 ‘You’ll definitely sow the fields there in September’
 (TDN_10_00:00:23)

In AV marked verbal clauses =*moukan* often occurs following the verb and the PIV argument, but preceding any other arguments or elements (as in (289)). However, due to

the restrictions on the position of NPIV.A arguments (see §4.5 and §9.1), in UV marked verbal clauses *=moukan* occurs following the verb and both arguments, e.g.:

(290) *empalinamoukan*

N= pa- ali -en =na =mowkan
 3.SG.INAN DYN bring PV 3.SG.NPIV.A definitely
 ‘He definitely brings it (some food)’
 (TDN_32_OL_KK_00:04:26)

d. *kangkasi, kangkèi, =kan*

The adverb *kangkasi*, and its alternative forms *kangkèi* or *=kan*, expresses the fact that an event or situation is occurring in addition to another. *kangkasi* and *kangkèi* function as modifiers to verbs and are internal to the predicate, e.g.:

(291) *sa komaesaesa kangkèi*

sa ko= ma- CVCV- esa kangkèi
 if, when 2.SG.PIV EV.STAT RDP one also
 ‘If you are alone also’
 (TDN_10_00:11:59)

(292) *kaa empenera’n kangkasi, empila pilana*

ka’a N= peN- sera’ -en kangkasi N=
 because 3.SG.INAN DYN meat PV also INAN
 pila pila =na
 wing 3.SG.POSS
 ‘Because (they) also prepared it, it’s (the bat’s) wings (as well as its breast meat)’
 (TDN_32_OL2_00:00:34)

(293) *kosumadia kangkasi podang?*

ko= s<um>adia kangkasi podang
 2.SG.PIV <AV> prepare also pandanus.leaf
 ‘You would prepare some pandanus leaf as well (as rice flour)?’
 (TDN_11_00:01:05)

In addition, *kangkasi* and *kangkèi* also function as modifiers of NPs in both verbal and non-verbal clauses. When modifying NPs, *kangkasi* and *kangkèi* express the fact that more

than one entity is involved in the situation denoted by the verb, as is the case in (294) - (295):

(294) *siopo kangkasi papa nilumimu'ut?*

si= Opo kangkasi papa ni= Lumimu'ut
AN.SG elder also father AN.SG.POSS PN

'The elder (God) also is the father of Lumimu'ut (in addition to the king)?'

(TDN_31_00:11:48)

(295) *ètabilukou kangkasi ti'i, èpengaanen*

sè= tabiluk kangkasi iti'i sè= peN- kaan -en
AN.PL horned beetle also that.MED 3.PL.PIV DYN rice PV

'Those horned beetles also, (you) can eat them also (as well as the sago grubs)'

(TDN_32_DT_00:03:49)

Finally, *kangkasi* and *kangkèi* may modify *wewèan* 'there is/are' which functions as the predicate in existential clauses:

(296) *wewèan kangkasi sèmawolèwolè?*

wewèan kankasi sè= ma- CVCV- wolè
EXIST also 3.PL.REL AV.DYN RDP row

'There are also rowers (i.e. those who are rowing)?'

(TDN_31_00:12:34)

The adverb *kangkasi* or *kangkèi* may occur in the form of the enclitic *=kan*, which also modifies both NPs (297) and verbs (298) - (299). The exact factors which condition the use of *=kan* as opposed to *kangkasi* or *kangkèi* are not currently clear.

Due to its form as an enclitic, the distribution of *=kan* is restricted to always following the head of the phrase or predicate it modifies, e.g.:

(297) *nuru' iti'ikan*

nuru' iti'i =kan
talisman that.MED also

'That talisman also (is used to protect against outsiders)'

(TDN_29_00:03:12)

(298) *mesabo ti'ikan*

ma- sabo iti'i =kan

AV.DYN prayer that.PROX also

‘(They) sing that (prayer song) also (as well as the one asking for forgiveness)’

(TDN_31_00:09:08)

(299) *malè'olè'oskan*

ma- CVCV- lè'os =kan

EV.STAT RDP good also

‘(I) am (feeling) good also (as well as being ready)’

(TDN_31_00:07:00)

6.5.3 Evidential and epistemic adverbs

Evidential and epistemic adverbs (after Payne 1997:70) are those which encode a speaker's viewpoint or opinion with regards to the state of affairs expressed by the predicate or clause they modify. These adverbs encode a speaker's certainty or doubt on the situation being discussed, and are as follows:

wona' ~ wo'o ‘perhaps, maybe, approximately’

musti ‘certainly, have to, must be’

mèmang ‘absolutely, truly’

=*kè* ‘reputedly, supposedly, it is said’

a. *wona', wo'o*

The adverb *wona' ~ wo'o* expresses doubt or uncertainty, and has different forms depending upon the type of constituent it modifies. When an NP or pronominal is modified the form *wo'o* (sometimes shortened to *woo*) is used. *wo'o* always occurs adjacent to the head it modifies while preceding the predicate, e.g.:

(300) *tu kowoo ketarè sumiwola*

tu ko= wo'o ka- tarè s<um>iwo =la

then 2.SG.PIV maybe very recently <AV> make DIR.PROX

‘Then you maybe would do it first’

(TDN_14_HK_DT_00:00:12)

(301) *siwo'o, simèamou*

si= wo'o si= <um> èa =mow
3.SG maybe 3.SG.PIV <AV> go CPL
 'He maybe, he will go'
 (TDN_21_00:02:00)

In (300) and (301) *wo'o* modifies the pronominals *ko*= 'you' and *si*= 'him'. If the constituent being modified is a whole clause then the form used is *wona'*. *Wona'* occurs following the verbal predicate, e.g.:

(302) *èmana'pè wona'*

sè= <um> ana' =pè' wona'
3.PL.PIV <AV> stay INCPL maybe
 'Maybe they still wait'
 (TDN_10_00:06:03)

(303) *sètimanem wona' ye'i?*

sè= t<im>anem wona' ye'i
3.PL.PIV <AV.PST> cultivate maybe now
 'Maybe now they have planted (crops)?'
 (TDN_29_00:17:34)

(304) *makasoiewela wona'*

maka- soyow =la wona'
AV.POT slice.up DIR.PROX maybe
 'Maybe (they) will cut up (some of the harvest)'
 (TDN_10_00:06:05)

(305) *paèdonèa wona'?*

pa- èdo -en =nèa wona'
DYN take PV 3.PL.NPIV.A maybe
 'Maybe they take (it) away?'
 (TDN_11_00:09:08)

Although the constituent modified differs between (300) - (301) and (302) - (305), the function of *wo'o* and *wona'* is the same in all examples, i.e. to express the speaker's lack of certainty.

b. *musti*

The second epistemic adverb is *musti*. This is a Manado Malay loan word¹⁷⁶ which expresses the meaning of ‘has to, must’. In non-verbal clauses *musti* functions as an epistemic adverb. In verbal clauses it is a modal auxiliary verb which occurs in complex verbal predicates (see §10.1.2).

When occurring in non-verbal clauses *musti* precedes the predicate, e.g.:

(306) *mèmang musti tuana, to?*¹⁷⁷

mèmang musti tuana to
truly must thus PART
‘(It - life) truly must be this way, yes?’
(TDN_29_00:13:53)

(307) *musti emis entimpa’*

musti emis N= timpa’
must sweet INAN palm.sugar.wine
‘The palm sugar wine must be sweet’
(TDN_32_OL_00:03:00)

(308) *komusti wewèan engkartu penduduk*

ko= musti wewèan N= kartu penduduk
2.SG.PIV must EXIST INAN card inhabitant
‘You must have an identity card’
(TDN_21_00:00:52)

(309) *musti wewèan walè pa’ana’an*

musti wewèan walè pa- ana’ -an
must EXIST house DYN stay LV
‘There must be a house (which) is lived in’
(TDN_31_00:02:18)

Examples (306) - (307) are equational clauses, while (308) - (309) are existential. In each instance *musti* expresses the fact that the situation denoted by the predicate is known or believed to be true in opinion of the speaker. While this sense of certainty is somewhat

¹⁷⁶ The Tondano word with this function appears to have been *karengan* (Sneddon 1975:99). However the Manado Malay form *musti* has now replaced *karengan* in all speech recorded for this thesis.

¹⁷⁷ The PIV argument in this equational clause is omitted.

similar to the meaning expressed by *=mowkan*, *musti* does not express the sense of exclusivity denoted by *=mowkan*.

c. *mèmang*

Mèmang ‘absolutely, truly’ is another loan word, this time from standard Indonesian. *Mèmang* expresses a sense of emphasis and certainty regarding the situation or event expressed by the clause. In non-verbal clauses *mèmang* modifies adjectives which function as the predicate (310), while in verbal clauses it modifies verbs (311) - (312):

(310) *mèmang kasa wangko*

mèmang kasa wangko
truly very big
 ‘(It - the sago grub) is truly very big’
 (TDN_32_KK_00:01:00)

(311) *sèmèmang ee, mewaliwali*

sè= mèmang erh ma- CVCV- wali
3.PL.PIV truly HES EV.STAT RDP together
 ‘They are absolutely together’
 (TDN_31_00:01:49)

(312) *sèmepa’ayang mèmang ulit ulit*

sè= ma- pa’ayang mèmang ulit ulit
3.PL.PIV AV.DYN work truly RDP correct
 ‘They are truly working correctly’
 (TDN_12_00:02:18)

(310) - (312) demonstrate that *mèmang* can occur either preceding or following the adjective or verb it modifies. In either case it is internal to the predicate.

d. *=kè*

The final epistemic adverb is the enclitic *=kè* which can be glossed as ‘reputedly’, ‘it is said’, ‘supposedly, or ‘so they say’. *=kè* is also used to express a sense of certainty by the speaker, but perhaps to a lesser degree than the other epistemic adverbs *musti* and *mèmang*. Moreover, the expression of certainty expressed by *=kè* is not attributed solely

to the speaker's belief or knowledge. Instead *=kè* expresses belief or knowledge attributed to other people, or to a sense of shared cultural knowledge.

Due to the fact that *=kè* makes a statement about the entire utterance it commonly modifies clauses, and not NPs or verbs. *=kè* is hosted by the head of the predicate of the modified clause (where it may be followed by other clitic elements).

Examples (313) - (314) demonstrate *=kè* modifying two verbal clauses:

(313) *entumènèngoukè*

N= t<um>ènèng =mow =kè
3.SG.INAN¹⁷⁸ <AV> stand up, erect CPL EPIS
 'It's said it will become erect'
 (TDN_28_00:01:26)

(314) *mupukè*

<um> upu =kè
 <AV> pick EPIS
 'It's said (they) will pick rice'
 (TDN_10_00:23:24)

Alternatively, (315) - (316) demonstrate the use of *=kè* in non-verbal clauses. In the equational clause (315) *=kè* is hosted by the adjective which functions as the predicate, e.g.:

(315) *sisensokè*

si= senso' =kè
3.SG.PIV boring EPIS
 'Supposedly he is boring'
 (TDN_28_00:03:56)

In an existential clause, *=kè* is hosted by the existential marker *wewèan* (which functions as the predicate), e.g.:

¹⁷⁸ As per §4.5 AV marking is almost exclusively used when the PIV argument is a volitional, controlling ACTOR In (309) the PIV argument is an inanimate body part, however this body part is being anthropomorphised by the speaker.

(316) *sa kowèanoukèla tèmbokan*

sa ko= wewèan =mow =kè =la tèmbokan

if, when 2.SG.PIV EXIST CPL EPIS DIR.PROX **mallet**

‘Supposedly if you have a mallet (you can extract palm sugar sap)’

(TDN_29_00:08:45)

6.5.4 Temporal adverbs

Temporal adverbs are a small closed set of lexical items which express the frequency or rarity of a situation, or whether an action, event, or state expressed by a clause occurs recently or not¹⁷⁹. The following are some of the more commonly occurring Tondano temporal adverbs:

kakakurala ‘sometimes’

ketarè ‘first(ly)’

mekasa ‘once, one time’

tarè ‘recently, just now’

tarèkan ~ tèakan ‘now, soon’

todong ~ tumodong ‘forthwith, following’

soup ~ sumoup ‘frequently’

wèitou ~ tawi ‘almost’

ye’i ‘now, at this time’

All of the above temporal adverbs modify entire clauses and have a position at the periphery of a clause, where they may appear either clause initially or clause finally.

The following examples show a number of the temporal adverbs in their function as clausal modifiers (adverbs are underlined):

¹⁷⁹ When used to express this last type of temporality, the temporal adverbs have a similar function as the temporal nouns described in §8.2.5. However, temporal adverbs like *ketarè* ‘first’ and *kakakurala* ‘sometimes’ differ from temporal nouns, and they do not have the features common to all nouns outlined in §6.2.

(317) *kakurala kumekekirong*

kakurala ku= ma- Ce- kirong
 sometimes 1.SG.PIV AV.DYN IRR conceal
 ‘Sometimes I will to hide (from them)’
 (TDN_21_00:02:09)

(318) *kaa mekasa makèlang niaku wo sitim*

ka’a mekasa ma- kèlang niaku wo si= Tim
 because once AV.DYN walk 1.SG and AN.SG PN
 ‘Because one time Tim and I are walking’
 (TDN_31_KK_00:06:22)

(319) *sitèa, tare makiwèè*

si= tèa tarè ma- kiwèè
 3.SG.PIV HES recently AV.DYN ask.forgiveness
 ‘He just recently begs forgiveness (from God)’
 (TDN_30_00:12:41)

(320) *ketarè kita sumèrèt lodèi*

ka- tarè kita s<um>èrèt lodèy
 very recently 1.PL.IN <AV> ride boat
 ‘Firstly, we would get on a boat’
 (TDN_28_00:00:20)

(318) *tèakan kita sumiwo odè odè*

tèakan kita s<um>iwo odè odè
 now 1.PL.IN <AV> make RDP PN
 ‘Now we will make some odè odè (cakes)’
 (TDN_19_00:00:40)

(319) *tumodongela ni’tu,sa sèa minakaupumou*

tumodong ni’tu sa sèa maka- <in> upu =mow
 directly that.MED if, when 3.PL AV.POT <PST> pick CPL
 ‘Following that, if they could have picked (the rice)’
 (TDN_31_00:02:15)

(320) *sumiwo tabulè'lèng sumoup*

s<um>iwo tabulèlèng sumoup
 <AV> make sphere frequently
 '(You) keep making balls (of dough)'
 (TDN_19_00:02:38)

(321) *iwèitoumoukan kasi lumetok*

si= wèytow =mou kangkasi l<um>entok
 3.SG.PIV almost CPL also <AV> explode
 'He also almost explodes (with anger)'
 (TDN_28_00:04:02)

In addition to its function as modifier of nouns (c.f. (324) in §6.6), *ye'i* also functions as a temporal adverbial with the meaning of 'now' or 'at this time', e.g.:

(322) *ye'in, sioki'ku masekola waki èsema satu tondano*

ye'i si= oki' =ku ma- sekola waki
 now AN.SG small 3.SG.POSS AV.DYN school in.DIST
 SMA satu Tondano
 SMA one PN
 'At this time my child attends school at junior high school number 1 in Tondano'
 (TDN_12_00:01:11)

(323) *aa ye'i sèpatununou*

ah ye'i sè= i- pa- tunun =mow
 HES now 3.PL.PIV CV DYN grill CPL
 'Ah now (he) grills them (the sago grubs)'
 (TDN_32_DT_00:03:06)

6.6 Demonstratives

Demonstratives are a minor class of independent lexical items which are utilised to individuate or clarify entities in space and time. Demonstratives function as both modifiers to the heads of NPs (§6.6.1), and as pronominals (i.e. arguments - §6.6.2). All demonstratives are distinguished with regard to spatial deixis. Some are also further distinguished with regards to the animacy features of the noun they modify.

6.6.1 Demonstratives as modifiers

When functioning as modifiers, demonstratives have a number of different forms which encode deictic distinctions. This is a three way distinction relating to the distance (relative to the speaker) of the entity referred to by the head noun. This three way split matches that of the proximate, medial, and distal system displayed by prepositions (see §3.2 and §6.11). In addition to spatial deixis, the medial demonstratives display a distinction relating to the animacy features of the head noun which they modify.

Table 6.9 outlines the demonstratives and the information they encode.

Table 6.9 Demonstratives

	Animate:	Inanimate:	Gloss:
PROX :	<i>ye'i</i>		‘this, these’
MED:	<i>iti'i</i>	<i>iti'i,ni'tu/itu</i>	‘that, those (close)’
DIST:	<i>iti'ila</i>		‘that, those (far)’

Demonstrative modifiers almost always directly follow the head noun which they modify. As is observed with prepositions, the proximate form is used when the noun refers to an entity which is visible to the interlocutors, the medial form is used when the referent is outside the immediate vicinity and/or not visible, and the distal form is used when the referent is in another village, region, city, or country.

The proximate form *ye'i* may modify nouns referring to inanimate entities, such as in (324) and (325), e.g.:

(324) *mèmang engkaoatan ye'i*

mèmang eng= ka> owat <an ye'i
truly INAN NR day NR this.PROX
‘Truly, this world (is not ours)’
(TDN_07_00:15:49)

(325) *entimpa' ye'i*

N= timpa' ye'i
INAN palm.sugar.sap this.PROX
'This palm sugar sap (is sweet)'
(TDN_32_OL_00:01:02)

In addition to modifying inanimate entities, *ye'i* also modifies nouns which refer to animate entities, as shown in (326) and (327):

(326) *sèoki' ye'i*

sè= oki' ye'i
AN.PL small this.PROX
'These children (are learning to cook)'
(TDN_3_00:08:01)

(327) *sitanta ye'i*

si= tanta ye'i
AN.SG aunt this.PROX
'This aunt here (is the one who plants rice)'
(TDN_07_00:17:48)

The medial forms in the paradigm (*iti'i* and *ni'tu/itu*) are differentiated by the types of nouns which they modify. *iti'i* may modify nouns which refer to both animate and inanimate entities, as displayed by (328) - (331):

(328) *nuka iti'i*

N= uka iti'i
INAN coconut.shell that.MED
'That coconut shell (will have palm sugar put in it)'
(TDN_32_OL_00:09:43)

(329) *engula mèa ti'i*

N= gula mèa' iti'i
INAN sugar red that.MED
'That palm sugar (is cooled down)'
(TDN_32_DT_00:02:36)

(330) *sèwatè iti'i tu'a*

sè= watè iti'i tu'a

AN.PL sago grub that.MED old

'Those sago grubs are old'

(TDN_32_DT_00:01:35)

(331) *pilapila nèpèrèt iti'i*

pila pila nè= pèrèt iti'i

RDP wing AN.PL.POSS bat that.MED

'The wings of those bats'

(TDN_32_OL2_00:00:29)

iti'i is also used to modify nouns referring to human entities. These nouns may refer to actual people (332), or to figures or characters from historical stories or creation myths which are considered human (333) - (334), e.g.:

(332) *tuama iti'i*

tuama iti'i

man that.MED

'That man (ties the string)'

(TDN_26_00:01:19)

(333) *sèraja iti'i*

sè= raja iti'i

AN.PL king that.MED

'Those kings (fought each other)'

(TDN_31_00:12:00)

(334) *ipanglima iti'i*

si= panglima iti'i

AN.SG commander that.MED

'That commander (is not spoken of)'

(TDN_31_00:12:46)

In contrast, the forms *ni'tu* and *itu*¹⁸⁰ are only used to modify nouns which refer to inanimate and non-human entities. Attempts to elicit NPs with animate and human head nouns modified by *ni'tu* and *itu* were judged as incorrect and unnatural. The forms *ni'tu*

¹⁸⁰ *Itu* appears to be a loan word from standard Indonesian (where it is also a medial/distal demonstrative).

and *itu* are interchangeable, and express exactly the same features of spatial deixis and animacy, e.g.:

(335) *rumping nitu*

rumping ni'tu

wok that.MED

‘That wok (is used to heat the palm sugar)’

(TDN_25_00:01:49)

(336) *nuka itu*

N= uka itu

INAN coconut.shell that.MED

‘That coconut shell (is already filled)’

(TDN_25_00:06:09)

(337) *enuma itu*

N= uma itu

INAN field that.MED

‘Those fields’

(TDN_12_00:02:02)

(338) *waya po'ong cinkè ni'tu*

waya po'ong cinkè ni'tu

all tree clove that.MED

‘All those clove trees (are harvested)’

(TDN_12_00:02:47)

The final demonstrative is the distal *iti'ila*. This form displays no distinction with regards to animacy. It modifies nouns which represent inanimate, animate, or human entities, e.g.:

(339) *kalota tiila*

kalo =ta iti'ila

male.friend 1.PL.IN.POSS that.DIST

‘That friend of ours (can become an expert on the Tondano language)’

(TDN_31_00:16:41)

(340) *sèasu iti'ila*

sè= asu iti'ila
AN.PL dog that.DIST

‘Those dogs (in the next village - are always barking)’
(ELICITED)

(341) *embalè iti'ila*

N= walè iti'ila
INAN house that.DIST

‘That house (in the rice fields by the lake - is very nice)’
(ELICITED)

6.6.2 *Demonstratives as pronouns*

In addition to their function as modifiers of the heads of NPs, demonstratives may also function as anaphoric pronouns. When utilised in this function they are clausal arguments referencing entities which have already been mentioned in the preceding discourse.

The same deictic and animacy distinctions observed in §6.6.1 apply when the demonstratives are utilised as pronouns. In terms of clausal function, demonstrative pronouns may have most (but not all) GRs and semantic roles (the exception being the GR of NP_{IV.A}). Demonstrative pronouns therefore express almost any entity which is normally expressed via personal pronouns or full NPs, e.g.:

(342) *sinewokan ye'i*

s<in>ewok -Ø ye'i
<PST> mix PV this.PROX
‘(I) already mixed this (dough)’
(TDN_03_00:06:06)

(343) *kusimewok ye'i*

ku= s<im>ewok ye'i
1.SG.PIV <AV.PST> mix this.PROX
‘I mixed this (the dough)’
(ELICITED)

(344) *ye'i timèwèlou*

ye'i t<im>èwèl =mow

this.PROX <AV.PST> wing CPL

‘This one (it) has flown away’

(TDN_32_DT_00:04:42)

ye'i functions as a clausal argument which has the GR of PIV, as in (342) and (344), or the GR of NPIV.UN, as in (343). Furthermore, when *ye'i* functions in this way it optionally hosts either the animate phrase markers *si=* (SG) or *sè=* (PL) or the inanimate phrase marker *N=* (see §8.4). The one restriction as regards clausal function is that demonstrative pronouns such as *ye'i* cannot function as the NPIV.A. This restriction applies to all the demonstratives, and attempts to elicit *ye'i* as an NPIV.A argument were always judged as ungrammatical, e.g.:

(345) **kukis sinewok niye'i*

kukis s<in>ewok -Ø ni= ye'i

cake <PST> mix PV AN.SG.NPIV.A this.PROX

‘This (guy) made a cake’

(ELICITED)

As was the case when it is utilised as a modifier, when functioning as a pronoun the medial demonstrative *iti'i* refers to entities which are either inanimate (346) - (347) or animate (348):

(346) *masuat enti'i*

ma- suat N= iti'i

EV.STAT same INAN that.PROX

‘That one (cucur cake) is the same (as the first one)’

(TDN_03_00:06:36)

(347) *tim woo kumaan iti'i*

Tim wo'o k<um>aan iti'i

PN maybe <AV> rice that.PROX

‘Maybe Tim will eat that (bat curry)’

(TDN_32_OL2_00:08:09)

(348) *ti'i simiwomou lobang*

iti'i s<im>iwo =mow lobang
that.PROX <PST> make CPL hole
 'That (sago grub) has made a hole'
 (TDN_11_EO_00:02:26)

In (346) and (348) *iti'i* functions as an argument with the GR of PIV, while in (347) it functions as an argument with the GR of NPIV.UN. In (346) it takes the inanimate phrase marker *N=*.

The other medial demonstratives *ni'tu/itu* also function as pronominal arguments within a clause. As demonstrative pronouns *ni'tu/itu* exclusively refer to inanimate entities, e.g.:

(349) *pakasewokemèè itu*

i- paka sewok =mèè itu
CV CPL mix DIR.MED that.MED
 'When he has mixed that'
 (TDN_11_AW_HL_00:03:30)

(350) *toa'nemi itu*

toa' -en =mi itu
pour PV DIR.DIST that.MED
 'Pour it (the hot palm sugar) out'
 (TDN_25_00:00:08)

(351) *lutu'mou ni'tu*

lutu' =mow ni'tu
cook CPL that.MED
 'That (the cake) is cooked'
 (TDN_19_00:06:02)

(352) *melelo'ni'tu*

ma- Ce- loo' ni'tu
AV.DYN IRR see, look that.MED
 '(You) will see that (the cooked cake)'
 (TDN_19_00:04:13)

Due to the restriction on expressing only inanimate entities, *ni'tu* and *itu* are not able to function as PIV arguments in AV clauses (i.e. those which require the entity expressed by the PIV to be a volitional, controlling, and animate ACTOR). In AV marked verbal clauses *ni'tu/itu* only function as NPIV.UN arguments, as seen in (352). However, in UV marked clauses (and in non-verbal clauses - (351)) *ni'tu/itu* may also function as PIV arguments, as in (349) - (350).

Finally, in verbal clauses the distal demonstrative pronoun *iti'ila* also functions as either the PIV argument (353), or the NPIV.UN argument (354):

(353) *marèngoukani siti'ila*

<um> warèng =mowkan =mi si= iti'ila
 <AV> return.home definitely DIR.DIST AN.SG that.DIST
 'Only that guy (from Watulaney) will return'
 (TDN_14_DK_NK_00:02:06)

(354) *simesesiwo iti'ila*

si= ma- Ce- siwo iti'ila
 3.SG.PIV AV.DYN IRR make that.DIST
 'He will build that (a house in his home village)'
 (ELICITED)

iti'ila is used to refer to both inanimate and animate entities, and as such it may function as either the PIV or NPIV.UN argument in AV marked verbal clauses, or the PIV argument in UV marked verbal clauses.

6.7 Deictic elements

The category of elements used to express spatial deixis¹⁸¹ includes elements which formally belong to more than one word class (including nouns and prepositions). It is their common function of locating entities or events within a certain space which is the reason they are grouped together here. The spatial information expressed by these elements may be relative either to the interlocutors, or to entities or events at another location.

¹⁸¹ The demonstrative modifiers/pronouns are not included in this section due to the fact they have unique characteristics. That is, they may function as arguments in verbal clauses (i.e. with PIV or NPIV.UN function), while all elements in this subsection do not have this function.

Both independent and bound forms are used to express deixis. The first set of deictic elements consists of independent words which indicate the location of an entity relative to the speaker, or relative to cardinal direction (§6.7.1). The second set are bound elements which express the location or direction of an action or event relative to the speaker or to the entity performing the event (§6.7.2). While the third set comprises a number of independent words which express the location of an action or event relative to interlocutors (§6.7.3).

6.7.1 Absolute and relative locatives

The elements which express absolute and relative locatives are nouns, albeit with restricted functions. Both types are independent morphological elements, and both types commonly occur as the complement within a PP.

a. Absolute locatives

Absolute locatives are those which are based on the geography of either the immediate countryside, or somewhere farther afield. The forms consist of the four points of the cardinal compass. These forms are summarised in Table 6.10.

Table 6.10 Cardinal direction points

Cardinal direction:	Gloss:
<i>amian</i>	‘north’
<i>timu</i>	‘south’
<i>sedangan</i>	‘east’
<i>talikuran</i>	‘west’

The words in Table 6.10 do not have some of the primary functions of nouns, i.e. the ability to function as arguments in verbal clauses. They do however display nominal behaviour in that they are able to function as complements of prepositions in PPs, and they optionally host the phrase marker *N=*, e.g. (Dotulong 2010: 84):

<i>waki (en)amian</i>	(to.DIST north) ‘to the north’
<i>witu (en)timu</i>	(to.MED south) ‘to the south’
<i>wia (en)sedangan</i>	(to.PROX east) ‘to the east’

witu (en)talikuran (to.MED west) ‘to the west’

These absolute locatives function as part of oblique arguments in intransitive clauses expressing movement, e.g. *ku=mèa waki amian* (1.SG.PIV=<AV> go to.DIST north) ‘I will go to the north’, or location, e.g. *sia ma-ana’ witu timu* (3.SG.PIV=AV.DYN-wait, stay in.MED south) ‘he/she lives in the south’. Furthermore, the PPs including absolute locations also have a predicate function in equational clauses, e.g. *nikita wia en=amian* 1.PL.IN.PIV in.PROX north) ‘we are in the north’.

It should be noted that the Tondano words for the four cardinal points are rarely used, and no examples occurred naturally in the corpus. Instead, the standard Indonesian or Manado Malay forms are used, these are: *utara* ‘north’, *selatan* ‘south’, *timur* ‘east’, and *barat* ‘west’.

a. *Relative locatives*

Relative locatives are elements which describe a space or location relative to the location of the speaker, or relative to the known location of someone or something else. These forms are summarised in Table 6.11.

Table 6.11 *Relative locatives*

Direction or location:	Gloss:
<i>atas</i>	‘above, up’
<i>wawa’</i>	‘below, down’
<i>kawii</i>	‘left’
<i>lelè'os</i>	‘right’
<i>muri</i>	‘behind, back’
<i>muka, depan</i>	‘front,

As was the case with absolute locatives, the relative locatives function primarily as the complement of a preposition within a PP. These PPs either function as oblique arguments in verbal clauses ((355) - (356) and (358)), or predicates in equational clauses (357), e.g.:

(355) *minatoutoumi wia natas engkoatan*

ma- <in> CVCV- tou =mi wia N= atas N=
 AV.DYN <PST> RDP person DIR.DIST in.PROX INAN above INAN
 ka> oat <an
 NR midday NR

‘(They - the ancestors) lived up above the earth’

(TDN_30_00:03:37)

(356) *tu wèèla itu embawa engkayu*

tu i- wèè =la witu N=¹⁸² wawa’ N= kayu
 then CV give DIR.PROX at.MED INAN below INAN wood

‘Then put (it - the burning paper) underneath the wood’

(TDN_33_KK_00:00:48)

(357) *siesa witu elelè’os wo siesa witu engkawii*

si= esa witu N= lelè’os wo si= esa witu
 AN.SG one at.MED INAN right and AN.SG one at.MED
 N= kawii
 INAN left

‘The one on the left and the one on the right (side of Jesus)’

(MARK 10:37)

(358) *witu muri gereja sa kowman tamamulai*

witu muri gereja sa kowman ta= ma- mulai
 at.MED behind church if, when meanwhile 1.PL.IN.PIV AV.DYN begin

‘Meanwhile when we begin (planting) behind the church’

(TDN_10_00:10:43)

The spatial distinctions expressed by the relative locatives in (355) - (354) and (358) are specifically related to the location of the speaker and addressee at the time of utterance. This includes examples such as (355) where the location referred to is a more abstract place, but one which the speaker considers to be close (in a spiritual sense). In contrast to these examples, in (357) the location is not relative to the interlocutors, but rather to characters in a narrated story.

¹⁸² The occurrence of the nasal *N=* on both elements of the NP *em=bawa eng=kayu* is due to its function as a nasal linker. *N=* occasionally functions as a linker between modifying elements and the head of an NP. The use of *N=* in this way is non-obligatory. See §8.4.3 for further detail.

6.7.2 Directionals =la, =mèè, and =mi

The second set of elements which express spatial deixis are the three directional enclitics =la (DIR.PROX), =mèè (DIR.MED), and =mi (DIR.DIST). These clitics indicate varying degrees of directionality and location. Firstly, they reference whether the actions or events expressed by the predicate are near or far in relation to the speaker. Secondly, they can also express if the action or event is moving towards or away from the speaker.

All three of the directional enclitics display some variation with regards to the precise information they express. These variations are noted below, and are usually conditioned by the semantics of the verbal roots they attach to.

a. Proximate directional =la

The proximate directional enclitic =la has directional as well as pragmatic functions, which will be examined one after the other.

When attached to a stem functioning as the head of a predicate, =la and its allomorphs =èla and =ela indicate that the event or action occurs at a location which is close to the speaker, e.g.:

(359) wèè moula panci

i- wèè =mow =la panci
CV give CPL DIR.PROX pan
'(You) add the pan (to the fire - in front of me)'
(TDN_33_KK_00:03:32)

(360) taan kumantarèla opo mana natas

ta'an k<um>antar =la Opo mana N= atas
but <AV> sing DIR.PROX elder at.MED INAN above
'But (I) will sing "God up above" (i.e. I will sing it sitting here)'
(TDN_28_00:06:38)

While it is problematic to discern a precise distance marked by =la, it is reasonably clear that it indicates an event or action occurs somewhere in the immediate vicinity of the

speaker¹⁸³. That is, either adjacent to, in front of, behind, or perhaps (very approximately) within a few metres of the speaker.

When the verb expresses a form of movement, there is an assumption that the event or action will begin close to the speaker and then move away from the deictic centre, e.g.:

(361) *komèdomoula niaku*

ko= <um> èdo =mow =la niaku

2.SG.PIV <AV> take CPL DIR.PROX 1.SG

‘You would take me (from here)’

(TDN_29_00:18:35)

(362) *sa maroula*

sa ma- row’ =la

if, when AV.DYN far DIR.PROX

‘If (you) remove (a container - from here)’

(TDN_29_00:01:24)

(363) *sèwate èdonèala?*

sè= watè èdo -en =nèa =la

AN.PL sago.grub take PV 3.PL.NPIV.A DIR.PROX

‘Will they take the sago grubs (away from here)?’

(TDN_32_DT_00:01:10)

While =*la* indicates an action or event which occurs close to the speaker, the performer of the action or event may also be close to this location. This is the case in (359) and (361) - (363) where the person who may perform the action or event is next to the speaker. This pattern also holds true in (360) where the speaker and the person who will perform the action or event are the same entity.

In other instances the entity which is expected to perform the action may not be close to the speaker. However, the enclitic =*la* is still used if it is assumed that the action or event will occur close to the speaker. This demonstrates that the function of =*la* is to express that the action or event occurs close to the speaker, and not close to the performer, e.g.:

¹⁸³ The decision as to what constitutes ‘close’ comes from discussions with speakers and from observing video recordings of conversations in which =*la* is used.

(364) *kaa empekekaanenèla nèoki'*

ka'a N= pe- Ce- kaan -an =la nè= oki'
 because 3.SG.INAN DYN IRR rice LV DIR.PROX AN.PL.NPIV.A small
 'Because the children will eat it (the food here on the table)'

(TDN_03_00:18:14)

(365) *kumaanèla engkukis*

k<um>aan =la N= kukis
 <AV> rice DIR.PROX INAN cake
 '(You) eat the cake (on the table in front of me)!'

(TDN_03_00:24:52)

In (364) - (365) the action or event has not occurred yet. The entities expected to perform this action are currently (at the time of utterance) either on the other side of the room (365), or in another part of the house (364). It is expected that the respective performers will come close to the speaker to perform the action, and as such =*la* is still used. While the situation expressed in (364) - (365) will not move away from the speaker, it will still in effect 'disappear' (afterwards) from the deictic centre.

Despite the identifiable function of =*la* in (361) - (365), there are other examples which appear to contradict this, for instance those where the action or event denoted by the verb does or will not take place close to the speaker, e.g.:

(366) *tasumèropèla*

ta= s<um>èro =pè' =la
 1.PL.IN.PIV <AV> search INCPL DIR.PROX
 'We will still search (around the village for girlfriends)'

(TDN_14_DK_NK_00:00:30)

(367) *nièdomutèla waya empera'*

<in> èdo -Ø =mu =itè =la waya N= pera'
 <PST> take PV 2.SG.NPIV.A LIM DIR.PROX all INAN fish.eggs
 'You took all of the roe (when we ate at the lake earlier)'

(TDN_28_00:00:56)

(368) *nèi pè'anela nisèron*

nèy pè'an -an =la ni= Sharon
CV.PST taste LV DIR.PROX AN.SG.NPIV.A PN
 'Sharon tried (it - the cake)'
 (TDN_32_OL_00:04:30)

In (366) the possible action or event would take place in the same village, but not in the immediate vicinity of the speaker. Moreover, in (367) - (368) the actions of eating and tasting cake both occurred far away from the speaker's current location. The explanation provided by speakers for this apparently contradictory use of =*la* is that it adds emphasis and has a pragmatic function which adds a greater sense of certainty to a proposition. When =*la* is used in this function it is interchangeable with the COMPLETIVE enclitic =*mow* (§5.6.2).

Discerning when =*la* is used as a directional, and when it is used for this pragmatic function, is slightly problematic. While the semantics of the verb provide some indication of the function of =*la*, in other instances these functions are solely disambiguated through context.

b. *Medial directional =mèè*

In contrast to =*la*, the functions of the medial directional =*mèè* are quite unambiguous. In its primary function =*mèè* and its allomorph =*èè* express the fact that an event or action occurs away from the speaker, and not in the immediate vicinity, e.g.:

(369) *kita, tanèi telo'umèè*

kita ta= nèy telo'u =mèè
1.PL.IN 1.PL.IN.PIV CV.PST remain DIR.DIST
 'As for us, (they) left us behind (there - in the ditch near the lake)'
 (TDN_07_00:14:43)

(370) *matomèè wia elalan*

<um> ato =mèè wia N= lalan
<AV> see, look DIR.DIST on.PROX INAN road
 '(You) be careful on the road (on your way home)'
 (TDN_32_OL_KK_00:07:08)

(371) *entimpa' matumpamèè*

N= timpa' ma- tumpa =mèè
INAN palm.sugar.sap EV.STAT descend DIR.DIST
'The palm sugar sap flows down (the bamboo tube)'
(TDN_25_00:02:30)

In certain situations =mèè also denotes that the action or event will occur away from the speaker, and that it will then move farther away from the speaker. This function is limited to when =mèè is hosted by verbal roots such as *èdo* 'take', *wèè* 'give, offer', or *rou* 'far (remove)', e.g.:

(372) *paroumèè sèkawok*

i- pa- row' =mèè sè= kawok
CV DYN far DIR.DIST AN.PL mouse
'(They) remove the mice'
(TDN_31_00:09:29)

In (372) the act of removing the mice (exterminating vermin from the fields) takes place away from the speaker, and also presumably moves farther away as the rodents are disposed of (or possibly eaten) at some other location.

c. *Distal directional =mi*

The third directional enclitic is =mi and its allomorph =i. =mi has somewhat of a parallel function with =mèè in that it also expresses an event or situation which occurs away from the immediate vicinity of the speaker. The way in which =mi is distinguished from =mèè is that it denotes that the action or event is in some way moving towards the speaker, e.g.:

(373) *kawok waya entè' matumpami tu ketana'an*

kawok waya entè' ma- tumpa =mi witu
mouse all strong AV.DYN descend DIR.DIST from.MED
ka> tana' <an
NR land NR
'All the mice descend (in droves) from the rice fields (towards our house here at the edge of the fields)'
(TDN_10_00:15:43)

(374) *nialianami foto*

<in> ali -an =na =mi foto
<PST> bring LV 3.SG.NPIV.A DIR.DIST photo
'He brought the photos (from there to us here)'
(TDN_21_00:03:40)

(375) *sa sia malimi*

sa sia <um> ali =mi
if, when 3.SG <AV> bring DIR.DIST
'If he brings (it - from there to here)'
(TDN_29_00:13:06)

(376) *tinelesoumi way enano*

t<in>eles -Ø =mow =mi waya N= ano
<PST> buy PV COMP DIR.DIST all INAN NON.SPEC
'(We) bought all of the what's it (at the market and brought it here to the house)'
(TDN_32_OL_00:01:00)

Occasionally, the spatial information expressed with *=mi* differs slightly. Firstly, when *=mi* is hosted by verbs which specify movement in a direction that is away from the speaker, *=mi* denotes the fact that an entity has moved away and then returned (or will return), e.g.:

(377) *kèilimaami waki walè nitim*

kèy= l<im>aa =mi waki walè ni= Tim
1.PL.EX.PIV <AV.PST> go DIR.DIST to.DIST house AN.SG.POSS PN
'We went to Tim's house (picked him up, and came back here)'
(TDN_32_OL_KK_00:00:08)

(378) *koumakèlangitèmi*

kow= ma- kèlang =itè =mi
2.PL.PIV AV.DYN walk LIM DIR.DIST
'You just walk (to the mountainous area - and then back here)'
(TDN_07_00:01:11)

(379) *marèngoumi aki pasar*

<um> warèng =mow =mi waki pasar

<AV> return.home CPL DIR.DIST from.DIST market

‘(We) will return from the market (to here - once you have bought ingredients)’

(TDN_32_OL_KK_00:01:54)

Secondly, there are certain verbal roots which do not express any type of movement, and as such they do not denote that an event or situation can be moving towards the speaker. If these particular verbal roots host =*mi*, the default interpretation is identical to that of =*mèè*, i.e. that the action or event occurs (or occurred or may occur) at a location away from the immediate vicinity, e.g.:

(380) *takimaani sawo terang*

ta= k<im>aan =mi sawo terang

1.PL.IN.PIV <AV.PST> rice DIR.DIST broth clear

‘We ate some clear broth (at the lake)’

(TDN_31_OL_00:02:03)

(381) *kinèètanamoumi nye’i*

k<in>èèt -an =na =mow =mi N= ye’i

<PST> extract.sap LV 3.SG.NPIV.A CPL DIR.DIST INAN this.MED

‘He extracted this (palm sugar sap - in the fields)’

(TDN_32_OL_00:01:26)

(382) *komewewèèmi, ya?*

ko= ma- Ce- wèè =mi ya

2.SG.PIV AV.DYN IRR give DIR.DIST AFF

‘You will give me (some chickens - from your house), yes?’

(TDN_14_DK_NK_00:02:40)

6.7.3 Deictic adverbs

The third group of elements which encode information relating to spatial deixis are deictic adverbs. The independent elements used for this purpose formally belong to the word class of prepositions (see §3.2 and §6.11), i.e. *wia*, *witu*, *mana*, and *waki*. In addition to functioning as heads of PPs, these elements also function as adverbials which refer to the location of an event or situation expressed by a predicate. They are labelled in this section as deictic adverbs based purely on their syntactic function.

In their adverbial function these elements encode the three way distinction with regards to the distance from the speaker, i.e. *wia* ‘here (proximate)’, *witu* ‘there (medial)’, *mana* ‘there (medial/distal)’, and *waki* ‘there (distal)’.

When functioning as prepositions these words are heads of PPs which are followed by complement NPs. However, when used as deictic adverbs they are not followed by complement NPs, and instead they function as (oblique) modifiers at a clausal level, e.g.:

(383) *tamatoanoukan wia*

ta= <um> ato -an =mowkan wia
1.PL.IN.PIV <AV> see, look MUT definitely here
 ‘We will definitely see each other again here’
 (TDN_29_00:19:41)

(384) *sèmengèi witu*

sè= meN- èy witu
3.PL.PIV AV.DYN come there
 ‘They (the sago grubs) come there’
 (TDN_32_DT_00:04:25)

(385) *ya matirotiro’ sera’, waya sera’ mana*

ya ma- CVCV- tiro’ sera’ waya sera’ mana
AFF AV.DYN RDP order meat all meat there
 ‘Yes (they) are sorting fish, all fish there (in Bitung)’
 (TDN_14_DK_NK_00:09:27)

(386) *sèwaki mewaliwali*

sè= waki ma- CVCV- wali
3.PL.PIV there EV.STAT RDP together
 ‘They are there together (in the palace of the king - far away)’
 (TDN_31_00:12:21)

The information on location in space which is represented by the deictic adverbs in (383) - (386) closely resembles that expressed by the directional enclitics in (359) - (382), i.e. it specifies the distance of an action or event relative to the location of the speaker. However, there are differences between the function of these two sets of deictic elements. While the deictic adverbs solely specify the particular location of a situation, the

directional enclitics can specify both location and direction (either towards or away) relative to the speaker. An additional difference is that the deictic adverbs have an anaphoric function, with a previously mentioned location as the antecedent.

6.8 Quantifiers

The class of elements categorised as quantifiers consists of a small number of independent lexical items. Some of these lexical roots are some of the few elements which cannot be easily categorised as one of the three different types of lexical roots outlined in §6.1. The exceptions to this are *laker* ‘many, much’ and *oki* ‘small’¹⁸⁴ which arguably denote qualities, and are therefore categorised as adjectives (Type II). The status of all these lexical roots as quantifiers is evident from their syntactic function within the phrase or clause.

The following lexical items function as quantifiers:

<i>laker</i>	‘much, many’
<i>susur</i>	‘every’
<i>waya</i>	‘all, everyone, everything’
<i>oki</i>	‘a little bit, few’
<i>wo’opira</i>	‘several, some’

The most common function of quantifiers is to modify the head noun within an NP. The use of a quantifier provides non-specific information on the quantity of the entity or entities referred to by the noun, e.g.:

(387) *laker nuka nèi wèè itu enano*

<i>laker</i>	N=	<i>uka</i>	<i>nèy</i>	<i>wèè</i>	<i>witu</i>	N=	<i>ano</i>
many	INAN	coconut.shell	CV.PST	give	in.MED	INAN	NON.SPEC

‘(He) put many coconut shells in the thingummy’
(TDN_32_OL_00:09:52)

¹⁸⁴ The lexical root *oki* also functions as a noun meaning ‘child’.

(388) *embaya engkaan ye'i*

N= waya N= kaan ye'i
 INAN all INAN rice this.PROX
 'All of this rice (was planted in our field)'
 (TDN_10_00:25:21)

(389) *susur nendo, tuana pepa'ayangenku*

susur N= endo tuana Ce- pa'ayang -en =ku
 every INAN day thus NR work PV 1.SG.POSS
 'Every day, my work is like this'
 (TDN_12_00:08:44)

(390) *noki'moukan endano*

N= oki' =mowkan N= rano
 INAN small definitely INAN water
 'Only a little bit of water'
 (TDN_10_00:19:35)

(391) *mbo'opira minggu, mamualimou ensapa?*

N= wo'opira minggu ma- muali N= sapa?
 INAN several week EV.STAT become INAN what
 'In several weeks, (they) become, what?'
 (TDN_11_EO_00:04:48)

In the examples above the quantifiers *laker* (387), *waya* (388), *susur* (389), *oki'* (390), and *wo'opira* (391) modify the head nouns of an NP. These head nouns are *uka*, *kaan*, *pepa'ayangen*, *dano*, and *minggu* respectively.

While quantifiers often occur adjacent to the head noun they modify, they also display the phenomenon of 'quantifier floating', whereby the quantifier occurs in a position that is not within the NP it belongs to. This particular process only affects PIV arguments, and is a useful diagnostic for identifying the syntactic pivot of a clause (see §4.6.2 for examples).

In natural discourse the head noun which a quantifier modifies may be omitted. This occurs when the referent of the noun has already been identified, e.g.:

(392) *o mawua laker*

wo ma- wua' laker
and EV.STAT fruit many
'And (the trees) bear a lot (of cloves)'
(TDN_12_00:03:08)

(393) *kumewèè oki'*

ku= ma- wèè oki'
1.SG.PIV AV.DYN give small
'I give a little (bit of palm sugar)'
(TDN_29_00:18:46)

(394) *sinadiamou waya*

s<in>adia -Ø =mow waya
<PST> prepare PV CPL all
'(We) prepared everything (all the ingredients)'
(TDN_03_00:00:05)

The entities quantified in (392) - (394) were previously mentioned in the discourse. Consequently, they can be omitted and are understood from context.

6.9 Numerals

The Tondano numeral system consists of a closed class of lexical items which may occur as independent or prefixed forms. This numeral system is decimal. The independent elements are cardinal numbers which may stand alone, or combine with bound elements in complex forms (multitudes of tens, hundreds, thousands, fractions or multiplicatives).

All numerals express the number or amount of a specific entity, or entities, and all have the same possible functions at phrasal level. Numerals modify the head noun of an NP. In the following subsections the various different independent and complex numeral forms are explained¹⁸⁵.

¹⁸⁵ It must be noted that in natural speech the numeral systems of the languages of wider communication are more commonly used, especially for the complex forms. It is therefore more usual to have standard Indonesian or Manado Malay numerals in recordings. The data for the original system comes from elicitation sessions and from discussions about numerals on social media (<https://www.facebook.com/groups/216682561681304/>). Data taken from these sources matches that of the numeral system outlined previously in Sneddon (1975:108-10).

6.9.1 Independent cardinal numerals

The cardinal numerals occur as either independent forms or as complex (i.e. compound) forms. Both the independent and complex forms may host a limited amount of morphology in the form of TAM or adverbial enclitics. The independent cardinal numerals are displayed in Table 6.12.

Table 6.12: Independent cardinal numerals

1	<i>esa</i>	6	<i>enem</i>
2	<i>rua</i>	7	<i>pitu</i>
3	<i>telu</i>	8	<i>(u)walu</i>
4	<i>epat</i>	9	<i>siuw, siow</i>
5	<i>lima</i>	0	<i>nol</i>

The cardinal numerals in Table 6.12 have an attributive function, and act as modifiers to heads of NPs, for example:

(395) *paawesanè kasi tabelang esa*

pa- awes -an =pè' kasi tabelang esa
DYN add LV INCPL again hard.bamboo one
 '(He) again adds one (length of) bamboo'
 (TDN_26_00:03:33)

(396) *sèrua cèwè, sèma, makulia*

sè= rua cèwè sè= ma- ma- kulia
AN.PL two girl 3.PL.PIV HES AV.DYN university.lecture
 'These two girls, they attend university'
 (TDN_12_00:07:00)

In situations where a referent is already identified and understood from context, it may be omitted, leaving only the numeral modifier (as was the case with quantifiers in §6.8), e.g.:

(397) *matè kukimaan epat*

matè ku= k<im>aan epat
PART 1.SG.PIV <AV.PST> rice four
 'Dear me, I ate four (tilapia fish)!'
 (TDN_28_00:05:40)

(398) *maan telutè ku'a èdonta*

ma'an telu =itè ku'a èdo -en =ta

although three LIM PART take PV 1.PL.IN.NPIV.A

'Although we would take just three (girlfriends)'

(TDN_14_DK_NK_00:00:35)

(399) *esamoukankè pa'awesan*

esa =mowkan =kè pa awes -en

one definitely EPIS DYN add PV

'They say only one (more job) is added'

(TDN_14_DK_NK_00:09:15)

The numerals in (395) - (399) all specify the exact number of the omitted entities.

Moreover, these numerals demonstrate an ability to host certain adverbial clitics such as *=itè* and *=mowkan* (see §6.5.2).

The third function of a cardinal numeral is as a predicate in an equational clause. While this function mirrors that of common or proper nouns (see §4.4.2), numerals such as *telu* below should not be considered a sub-class of nouns. This is because their other functions and their ability to host adverbial clitics differentiate them from common or proper nouns. In addition, numerals do not possess all the other features of nouns detailed in §6.2.

In (400) the cardinal numeral *telu* 'three' functions as the predicate:

(400) *sèamoukan telu*

sèa =mowkan telu

3.PL definitely three

'They are definitely (only) three'

(TDN_31_00:13:16)

6.9.2 Complex cardinal numerals

In order to derive cardinal numerals in multitudes tens, hundreds, and thousands, a variety of additional morphology is required. The numeral bases for ten, hundred, and thousand are *pulu'*, *atus*, and *riwu* respectively. The way in which decimal bases are derived is through the use of the prefixes *ma-* or *nga-*¹⁸⁶. Therefore, the numerals for 'ten', 'one

¹⁸⁶ *nga-* is a nasal linker of the sort which commonly occurs in Philippine-type languages where it links together elements within a domain of modification (Kaufman 2009a: 211). It appears that Tondano has mostly lost this particular morpheme, although the nasal phrase marker *N=* may optionally have the function of a linker (see §8.3.)

hundred’, and ‘one thousand’ are *ma-pulu* ‘ten’, *ma-atus*, ‘one hundred’ and *ma-riwu* ‘one thousand’. For more complex numerals in the tens, hundreds, and thousands, the morpheme *nga-* (LNK) attaches to *pulu*, *atus*, or *riwu*, while being preceded by the relevant cardinal numeral. Thus, ‘twenty’ is *rua nga-pulu*, ‘four hundred’ is *epat nga-atus* and so on.

Numbers in the tens, hundreds, or thousands which require multiple decimal bases, or one decimal base together with independent cardinal numerals, are linked together with the element *wo* ‘and’, e.g.:

<i>rua nga-pulu</i> ’ <i>wo</i> <i>pitu</i>	‘twenty seven’
<i>telu nga-atus</i> <i>wo</i> <i>uwalu</i>	‘three hundred and eight’
<i>pitu nga-riwu</i> <i>wo</i> <i>lima nga-atus</i> <i>wo</i> <i>ma-pulu</i> ’ <i>wo</i> <i>telu</i>	‘seven thousand, five hundred and thirteen’

The somewhat complicated combinations of complex compound numerals are illustrated by the various examples in Table 6.13.

Table 6.13: Base numerals and complex compound numerals

Base numerals:		Complex compounds:	
10	<i>ma-pulu'</i>	11	<i>ma-pulu' wo esa</i>
20	<i>rua nga-pulu'</i>	12	<i>ma-pulu' wo rua</i>
30	<i>telu nga-pulu'</i>	13	<i>ma-pulu' wo telu</i>
40	<i>epat nga-pulu'</i>	14	<i>ma-pulu' wo epat</i>
50	<i>lima nga-pulu'</i>	15	<i>ma-pulu' wo lima</i>
60	<i>enem nga-pulu'</i>	16	<i>ma-pulu' wo enem</i>
70	<i>pitu nga-pulu'</i>	17	<i>ma-pulu' wo pitu</i>
80	<i>(u)walu nga-pulu'</i>	18	<i>ma-pulu' wo (u)walu</i>
90	<i>siuw, siow nga-pulu'</i>	19	<i>ma-pulu' wo siuw, siow</i>
100	<i>ma-atus</i>		
200	<i>rua nga-atus</i>	21	<i>rua nga-pulu' wo esa</i>
400	<i>epat nga-atus</i>	32	<i>telu nga-pulu' wo rua</i>
700	<i>pitu nga-atus</i>	43	<i>epat nga-pulu' wo telu</i>
1000	<i>ma-riwu</i>	54	<i>lima nga-pulu' wo epat</i>
2000	<i>rua nga-riwu</i>	65	<i>enem nga-pulu' wo lima</i>
4000	<i>epat nga-riwu</i>	76	<i>pitu nga-pulu' wo enem</i>
7000	<i>pitu nga-riwu</i>	87	<i>(u)walu nga-pulu' wo pitu</i>
10000	<i>ma-pulu' nga-riwu</i>	98	<i>siuw, siwo nga-pulu' wo (u)walu</i>

In reality the forms in Table 6.13 rarely occur in natural recorded speech, with standard Indonesian or Manado Malay forms often used instead. All the complex cardinal numerals above have the same functions as those outlined for independent cardinal numerals in §6.9.1.

6.9.3 Ordinal numerals

In order to express ordinal numerals the prefix *ka-* is added to independent forms, base numerals, and complex compounds. Table 6.14 displays examples of ordinal numerals.

Table 6.14: Ordinal numerals

1 st	<i>ka-esa</i>	7 th	<i>ka-pitu</i>
2 nd	<i>ka-rua</i>	8 th	<i>ka-uwalu</i>
3 rd	<i>ka-telu</i>	9 th	<i>ka-siuw, ka-siow</i>
4 th	<i>ka-epat</i>	12 th	<i>ka-ma-pulu' wo rua</i>
5 th	<i>ka-lima</i>	25 th	<i>ka-rua nga-pulu' wo lima</i>
6 th	<i>ka-enem</i>	401 st	<i>ka-epat nga-atus wo esa</i>

The ordinal numerals in Table 6.1.4 have the same functions as the (independent or complex) cardinal numerals, that is, as modifiers to heads within NPs or as predicates within equational clauses.

6.9.4 Fractions

Fractions are derived by adding the prefix *nga-* to numerals which consist of the DYNAMIC verbal prefix *pa-* plus an independent cardinal numeral. The *pa-* plus numeral compound has the meaning of ‘to divide something by X’ where ‘X’ is the numeral, e.g.:

(401) *mèdola tuis, tu paruala*

<um> èdo =la tuis tu i- pa- rua =la

AV.DYN take DIR.PROX branch then CV DYN two DIR.PROX

‘(They) take a tuis branch, then divide it in two’

(TDN_31_00:14:16)

In (401) the word *pa-rua* literally means to ‘make something into two’. In this process the number expressed as a numeral functions as the numerator, while the one expressed by the second numeral is the denominator. The linker *nga-* then joins the two elements, e.g.:

sanga (esa nga) - pa-rua → ‘one half’

sanga (esa nga) - pa-lima → ‘one fifth’

sanga (esa nga) - pa-pitu → ‘one seventh’

For fractions which require different numerators and denominators, the various other independent cardinal numerals are used, for example:

telu nga-pa-epat → ‘three quarters’

epat nga-pa-lima → ‘four fifths’

enem nga-pa-uwalu → ‘six eighths’

6.9.5 Multiplicatives

Multiplicatives are formed by the addition of the prefix *maka-* to any cardinal numeral.

The resulting compound form has the meaning ‘X times’, for example:

maka-rua → ‘twice’

maka-pitu → ‘seven times’

maka-rua nga-pulu’wo esa → ‘twenty one times’

maka-telu nga-atus wo lima → ‘three hundred and five times’

maka-riwu → ‘one thousand times’

In regards to their function, multiplicatives act as adverbials which modify verbal predicates, e.g.:

(402) *simakatelu kumè’ang*

si= maka- telu k<um>è’ang

3.SG.PIV MULT three <AV> step

‘He will take three steps (lit. ‘step three times)’

(DOTULONG 2010: xix)

6.10 Discourse particles: Interjections and exclamatives.

Discourse particles are not the base element for derived forms (stems), and they cannot function as heads of NPs, or the head of a predicate. Rather, they function as elements which express attitudinal or emotive information. They occur externally to the clause and form independent utterances in their own right, either as responses to questions or statements, or to attract attention. Furthermore, they can also be used when one speaker wants ‘the floor’ from another. Some of the emotions conveyed by these particles are: surprise, shock, happiness, amazement, disappointment, pity, empathy, and pain.

The discourse particles which occur in the data set are listed below in Table 6.15. This list is considered non-exhaustive and further research is necessary to describe all possible functions of the discourse particles, and the fine grained differences between them. Each

particle is given an approximate description of the emotion it expresses together with an estimated English gloss.

Table 6.15 Discourse particles

Form:	Emotion or attitude conveyed:	Gloss:
<i>o</i>	sudden realisation (often used in conjunction with other particles)	‘oh’
<i>èi</i>	impatience (attracts attention)	‘hey’
<i>kela ~ kala</i>	surprise, amazement (positive)	‘wow, gosh’
<i>pasil</i>	surprise, shock (negative)	‘oh no’
<i>tuang</i> (Manado Malay loan)	pain, disappointment, shock	‘Oh God no’
<i>kasiang</i> (Manado Malay loan)	pity, empathy	‘dear me, you poor thing’
<i>matè</i> (<um> + <i>patè</i>)	emphasis	‘oh boy’ (lit. ‘die’)
<i>tuana</i>	agreement	‘for sure’
<i>kiok</i>	pity, empathy	‘dear me, you poor thing’
<i>adu~ ado</i> (Indonesian loan)	distress	‘ouch, oh my’
<i>rè’èn</i>	desire for agreement, softener	‘right, ok?’
<i>wèlow</i>	worry, anxiety	‘heaven forbid’
<i>ku’a ~ kwa</i> ¹⁸⁷	disagreement, contrast	‘ok, right, isn’t it’
<i>to</i> (Manado Malay loan)	assumption of agreement	‘right, yes (question tag)’

Examples of the various discourse particles (bolded) are demonstrated by (403) - (414):

(403) *èi rèimoula tu’awènè ku’a?*

èy **rèy’** =mow =la tu’awènè ku’a

PART **EXIST.NEG** **CPL** **DIR.PROX** **old.woman** **PART**

‘Hey! So (you) no longer have a wife right?’

(TDN_29_00:11:32)

¹⁸⁷ *Ku’a* appears to be used interchangeably with the Manado Malay form *kwa*, which has essentially the same function.

(404) *tumokol o kela!*

t<um>okol o kela
 <AV> fight PART PART
 ‘(They) would fight, oh wow!’
 (TDN_31_00:03:07)

(405) *imekaan èwatè o pasil!*

si= ma- kaan sè= watè o pasil
 3.SG.PIV AV.DYN rice AN.PL sago grub PART PART
 ‘He eats some sago grubs, oh no!’
 (TDN_32_DT_00:03:35)

(406) *ti’i watè, o tuang kasela kasa*

iti’i watè o tuang ka- sela kasa
 that.MED sago grub PART PART too big very
 ‘That sago grub, oh God it’s too big’
 (TDN_11_00:02:42)

(407) *pakekosentèla embibir, kasiang e wèlow*

pa- kekos -en =itè =la N= bibir kasiang
 DYN wet PV LIM DIR.PROX INAN lips PART
 wèlow
 PART
 ‘Your lips were only moistened (i.e. there was no water to drink), oh dear me how terrible’
 (TDN_07_00:00:41)

(408) *tuana kangkèi sa sumiwo laèng*

tuana kangkèy sa s<um>iwo laèng
 PART also if,when <AV> make other
 ‘For sure, also when (you) make another one’
 (TDN_19_00:02:15)

(409) *ya kiok sa komawingkung*

ya kiok sa ko= ma- wingkung
 AFF PART if, when 2.SG.PIV AV.DYN hoe.the.ground
 ‘Yes, poor thing, when you hoe the ground (it’s very hard work)’
 (TDN_21_00:05:23)

(410) *sumosor meros, ado!*

s<um>osor <um> eros **ado**
 <AV> climb.a.hill <AV> descend **PART**
 ‘(We) climb up a hill (then) down again, oh my!’
 (TDN_11_AW_HL_00:09:51)

(411) *rumamba’, ni’tumou rèèn sèsimiwo walè weru*

r<um> amba ni’tu =mow **rè’èn** sè=
 <AV> stamp.feet that.MED CPL **PART** **3.PL.PIV**
 s<im>iwo walè weru
 <AV.PST> make house fresh
 ‘(They) stomp that (floor), right, (so then) they made a new house’
 (TDN_31_00:02:34)

(412) *èmakoo’ sopi wo timpa’, o wèlow!*

sè= ma- koo’ sopi wo timpa’
3.PL.PIV **AV.DYN** **drink** **palm.sugar.brandy** **and** **palm.sugar.wine**
wèlow
PART
 ‘They drink palm sugar brandy and wine, oh heaven forbid!’
 (TDN_31_00:02:48)

(413) *maèngkat ti’i ku’a, entelu enano, telu babak*

maèngkèt iti’i **ku’a** N= telu N= ano
traditional.dance **that.MED** **PART** **INAN** **three** **INAN** **NON.SPEC**
 telu babak
three **phase**
 ‘That traditional dance then, it’s three what’s its, three phases’
 (TDN_31_00:01:25)

(414) *koyabu ni alian waki mèlbon, kannen nisèron, to?*

koyabu ini¹⁸⁸ ali -en waki Melbourne kaan -en
 PN this.PROX bring PV to.DIST PN rice PV
 ni= Sharon to
 AN.SG.NPIV.A PN PART

‘(You) will take this koyabu cake to Melbourne, Sharon would eat it, yes?’

(TDN_32_OL_KK_00:04:37)

6.11 Prepositions and prepositional phrases

Prepositions are a class of function words which comprise four lexical items: *wia*, *witu*, *mana*, and *waki*. The initial /w/ consonant on three of these prepositions is sometimes not articulated, especially if the preceding word ends with a vowel or a semi vowel. All of the prepositions can be glossed variously as ‘to’, ‘from’, ‘in’, ‘on’, or ‘at’. The exact gloss is dependent upon the semantics of the verb which precedes it, and by the features of the NP which functions as a complement of the preposition. In addition to *wia*, *witu*, *mana*, and *waki*, the co-ordinating conjunction *wo* (see §10.2) is also sometimes used as a preposition with the meaning of ‘with, by means of’ (see §4.5.4).

Table 6.1.6 lists the prepositions and the features of spatial deixis which differentiate them:

Table 6.16: Prepositions

Preposition:	Distance from speaker:
<i>wia</i>	Near (proximate)
<i>witu</i>	Far (medial)
<i>mana</i>	Far (medial/distal)
<i>waki</i>	Far (distal)
<i>wo</i>	Any (instrumental preposition)

This spatial deixis encodes the distance of the entity expressed by the NP complement of the preposition from the speaker (at the time of utterance).

The structure of PPs is as follows:

¹⁸⁸ This demonstrative is an Indonesian loanword. The corresponding Tondano form is *ye’i*.

Figure 6.1: Constituent order in PPs

Head (Preposition) NP/PRO

The phrasal function of PPs are summarised in Table 6.17. Included in this table are references to examples which demonstrate these functions.

Table 6.17: Functions of PPs

Function:	Location of examples:
Oblique argument of an intransitive clause	(420) -(422) below
Oblique argument of a transitive clause	§4.5.5 ((175) - (180))
Fronted oblique argument	§4.7.3 ((205) - (207))
Predicate of equational clause	§4.4.2 ((57) - (58))
Adjunct of head noun within an NP	§8.1 ((529) - (530))

The following examples give an idea of the differing features of spatial deixis of prepositions, and of the semantic role of their NP complements, e.g.:

(415) *matomèè wia elalan*

<um> ato =mèè wia N= lalan
 <AV> see, look **DIR.MED** on.**PROX** **INAN** road
 ‘(You) will be careful on the road (here in front of us)’
 (TDN_32_OL_KK_00:07:08)

(416) *sèmakaluar witu nakel*

sè= ma- kaluar witu N= akel
3.PL.PIV **AV.DYN** exit from.**MED** **INAN** sugar.palm.tree
 ‘They (the sago grubs) come out of the sugar palm tree (over there)’
 (TDN_11_EO_00:00:27)

(417) *sèmakulia waki unima*

sè= ma- kuliah waki UNIMA
3.PL.PIV **AV.DYN** university.lecture at.**DIST** **PN**
 ‘They attend lectures at the Mando State University (in another district)’
 (TDN_12_00:12:29)

The exact distance of entities or locations which are considered proximate, medial, and distal from speakers is not always completely explicit. Broadly speaking, *wia* is used when the entity or location is close and/or visible, *witu* is used for referents which are outside the immediate vicinity and/or not visible, and *waki* is used when referent is in another area, region, city, or country. However, these three categories do not always appear to be strictly adhered to.

In addition to *wia*, *witu*, and *waki*, *mana* may also be used. When used as a preposition, *mana* is more or less interchangeable with *witu*, and less frequently, *waki*. The use of *mana* is something akin to a default ‘non-proximate’ preposition, e.g.:

(418) *mewarèngoumi mana empantè*

ma- warèng =mow =mi mana N= pantè
AV.DYN return.home CPL DIR.DIST to.DIST INAN beach
 ‘(I) return to to the beach (towards the coast and away from here)’
 (TDN_07_00:00:24)

(419) *kawisa komèa marut mana numa?*

kawisa ko= <um> èa <um> arut mana N= uma
when 2.SG.PIV <AV> go <AV> spread at.MED INAN field
 ‘When will you go and sow in the fields (behind this house)?’
 (TDN_10_00:00:06)

In terms of phrasal function, prepositions are heads of prepositional phrases (PPs) which take NPs as complements. These NPs have a variety of semantic roles such as LOCATION, SOURCE, GOAL, RECIPIENT, and BENEFICIARY. PPs always function as oblique arguments within a verbal clause (i.e. with the GR of OBL), and are never required as complements for verbs. The only time when PPs have a more syntactically core function within a clause is when they act as predicates in non-verbal (equational) clauses (see §4.4.2).

The functions of PPs, and the various semantic roles of the NP complements, are demonstrated by the following examples:

LOCATION:

(420) *simana' aki walèmu?*

si= <um> ana' waki walè =mu
3.SG.PIV <AV> stay at.DIST house 2.SG.POSS
'He will stay at your house, (will) he?'
(TDN_28_00:02:21)

(421) *tatimulitè wia engkoatan*

ta= t<im>uli =itè wia N= ka> oat <an
1.PL.IN.PIV <AV.PST> drop.in LIM on.PROX INAN NR midday NR
'We just dropped by on the world (i.e. our life is fleeting)'
(TDN_07_00:15:46)

(422) *wo pasiwon gula mèa' ee, witu rumping*

wo pa- siwo -en gula mèa erh witu rumping
and DYN make PV sugar red HES in.MED wok
'And (they) make palm sugar in the wok'
(TDN_32_OL_00:06:48)

SOURCE:

(423) *kaa kèimèi aki pasar wo sikalo*

ka'a kèy= <um> èy waki pasar wo si= Kalo
because 1.PL.EX.PIV <AV> come from.DIST market and AN.SG PN
'Because we will come from the market together with Kalo'
(TDN_32_OL_KK_00:00:10)

(424) *empengidopan nètou minahasa wia, wia entondano*

N= peN- idop -an nè= tow Minahasa wia wia
INAN DYN life LV AN.PL.POSS person PN HES from.PROX
N= Tondano
INAN PN
'The sustenance of the Minahasan people from, from Todano'
(TDN_32_OL_00:11:21)

(425) *rèpè' kimaluar itu nakel*

rèy' =pè' k<im>aluar witu N= akel
 not INCPL <AV.PST> exit from.MED INAN sugar.palm.tree
 '(They) have not yet come out from the sugar palm tree'
 (TDN_11_EO_00:01:12)

GOAL:

(426) *marèngi wia embalè*

<um> warèng =mi wia N= walè
 <AV> return.home DIR.DIST to.PROX INAN house
 '(He) would return home to the house'
 (TDN_14_HK_DT_00:10:16)

(427) *tamèa waki uma*

ta= <um> èa waki uma
 1.PL.IN.PIV <AV> go to.DIST field
 'We will go to the fields'
 (TDN_14_HK_DT_00:04:01)

(428) *pesandarla witu sesadaran*

i- pa- sandar =la witu Ce- sandar -an
 CV DYN lean.on DIR.PROX on.MED NR lean.on LV
 '(He) leans (the bamboo tube) on the frame'
 (TDN_11_00:01:47)

RECIPIENT (animate):

(429) *tamakiwèè wia situhan*

ta= ma- kiwèè wia si= Tuhan¹⁸⁹
 1.PL.IN.PIV AV.DYN ask.forgiveness from.PROX AN.SG God
 'We ask for forgiveness from God'
 (TDN_07_00:16:48)

¹⁸⁹ In this example the complement of *wia*, *tuhan* 'God', is clearly not at a specific location. However, the use of *wia* here signifies the speaker's belief that God is close to him spiritually.

RECIPIENT (inanimate):

(430) *gula, pawèènamou itu nuka*

gula	pa-	wèè	-en	=na	=mow	witu	N=
sugar	DYN	give	PV	3.SG.NPIV.A	CPL	in.MED	INAN
uka							

coconut.shell

‘He puts the palm sugar **in** a coconut shell’

(TDN_32_OL_0:08:54)

7.0 OTHER CLAUSE TYPES

This chapter examines clause types which differ in some way from the basic verbal and non-verbal clauses previously described in chapter 4. The following subsections will describe: clauses used for question formation (§7.1), clauses which express negation and prohibitives (§7.2), and clauses which express imperatives and adhortatives (§7.3).

7.1 Question formation

There are two types of questions in Tondano: Yes/no questions and content questions. The way in which questions are distinguished from declarative statements primarily involves the use of prosody. Yes/no questions are most commonly marked with a rise in intonation on the final word of the clause. This rise in intonation is highest on the stressed syllable of the final word. In addition to intonational rise, yes/no questions may also be expressed lexically with *to*, one of the particles described in §6.1.0. Yes/no questions are explained in §7.1.1.

In contrast to yes/no questions, content questions are indicated by the use of specific question words (interrogative proforms). These are outlined in §7.1.2.

7.1.1 Yes/no questions

A yes/no question has the same structure as a basic declarative clause, e.g.:

(431) *kominakèètoula?*

ko= ma- <in> kè'èt =mow =la
2.SG.PIV AV.DYN PST extract.sap CPL DIR.PROX
'Did you extract palm sugar sap?'
(TDN_29_00:00:17)

(432) *kominèa waki rou'?*

ko= <im> èa waki row'
2.SG.PIV <AV.PST> go to.DIST far
'You went far away?'
(TDN_7_00:00:22)

(433) *kolimelè'mou?*

ko= l<im>elè' =mow

2.SG.PIV <AV.PST> bathe CPL

'Have you bathed yet?'

(TDN_14_DK_NK_00:03:31)

(434) *pewewuina?*

pa- Ce- wui -en =na

DYN IRR ask PV 3.SG.NPIV.A

'Will he ask (us)?'

(TDN_14_DK_NK_00:00:02)

Each of the examples (431) - (434) is a yes/no question which is expressed solely by a rise in intonation on the stressed syllable of the final word. This increase in prosodic stress intonation may co-occur with a slight lengthening of the vowel within the stressed syllable (unless the vowel is already a long vowel). Thus, in (431) the intonation peak is on [è] in *kèèt* 'extract sap', on [o] in *rou* 'far', in (432), on the final [è] in *l<im>el'è* 'bathed' in (433), and on [i] in *wui* in (434).

In addition to the change in prosody, the particle *to* may also mark a yes/no question¹⁹⁰. Yes/no questions marked with *to* differ slightly to those without it. As previously mentioned (see §6.1.0) this particle expresses the speaker's belief that the addressee will agree with the proposition of the clause (i.e. it is a question tag). *to* marked yes/no questions may be used to clarify with the addressee information which is considered obvious or previously agreed on, or to confirm new information.

In yes/no question clauses *to* always occurs clause finally, e.g.:

(435) *èpinatèanou nimamanèa, to?*

sè= p<in>atè -an =mow ni= mama =nèa to

3.PL.PIV <PST> die LV CPL AN.SG.NPIV.A mother 3.PL.POSS PART

'Their mother killed them, right?'

(TDN_07_00:19:52)

¹⁹⁰ In effect, yes/no questions with *to* may make use of both prosody and a lexical element to indicate a question, as the addition of *to* does not mean that there is never a rising intonation towards the end of a clause. However, any intonation change is usually minimal when *to* is present.

(436) *tuis ti'i pekaanen to?*

tuis iti'i pa- kaan -en to
PN that.MED DYN rice PV PART
 '(They) eat that tuis fruit, yes?'
 (TDN_31_00:14:20)

(437) *taan siwangun, to?*

ta'an si= wangun to
but 3.SG.PIV good PART
 'But she is nice yes?'
 (TDN_31_00:18:08)

There are obviously numerous responses which may follow a yes /no question, and these responses differ depending upon whether the clause is verbal or non-verbal. Responses may be everything from the expected lexical items for 'yes' and 'no', to negators, modal verbs, or even to repetitions of lexical items which were within the original question clause.

Examples of question and answer sets for verbal clauses are as follows:

(438) Q: *paaliali nètù 'a?*

i- pa- CVCV- ali nè= tu'a
CV DYN RDP bring AN.PL.NPIV.A old
 'The elders bring along (it - the branch)?'
 (TDN_31_00:15:01)

A: *dèi*

dèy'
not
 'No'
 (TDN_31_00:15:02)

(439) Q: *tapi komusti mèa wítumèè to?*

tapi ko= musti <um> èa witu =mèè to
but 2.SG.PIV must <AV> go there DIR.MED PART
 'But you will have to go there right?'
 (TDN_07_00:04:14)

A: *ion*

ion

AFF

‘Yes (I will have to go there)’

(TDN_07_00:04:15)

(440) Q: *komupu?*

ko= <um> upu

2.SG.PIV <AV> pick

‘Will you pick (the rice)?’

(TDN_29_00:16:04)

A: *iyō toro*

iyō¹⁹¹ toro

AFF can

‘Yes (I) could’

(TDN_29_00:16:05)

Examples of responses to non-verbal clauses which are yes/no questions are as follows
(*iyō* or *ion* would also be appropriate, of course):

(441) Q: *taan siwangun, to?*

ta’an si= wangun to

but 3.SG.PIV good PART

‘But she is nice yes?’

(TDN_31_00:18:08)

A: *wangun*

wangun

good

‘(Yes) she is nice

(TDN_31_00:18:09)

¹⁹¹ *iyō* is the Manado Malay word for ‘yes’. It is often used instead of the Tondano *ion*.

(442) Q: *bewèanè wi'o mana?*

wewèan =pè' wi'o mana

EXIST INCPL wild.pig there

‘Are there still wild pigs there?’

(TDN_29_00:09:22)

A: o *lakerè' wi'o*

o laker =pè' wi'o

PART many INCPL wild.pig

‘Oh (yes - there are) still many wild pigs there

(TDN_29_00:09:25)

7.1.2 Content questions

Unlike yes/no questions, content questions are requests for specific information which do not have responses limited to a choice between negative and affirmative. The structure of content questions differs from that of yes/no questions, and specific lexical elements are utilised depending upon the information which is sought.

Content questions are formed with the use of the question words presented in Table 7.1.

Table 7.1: Question words

<i>Interrogative:</i>	<i>Gloss:</i>
<i>sapa</i>	‘what’
<i>sèi</i>	‘who’
<i>ka'a</i>	‘why’
<i>wisa</i>	‘where’
<i>kawisa</i>	‘when’
<i>pira</i>	‘how much, many’
<i>kura, kumura</i>	‘how’

The question words in Table 7.1 are not a formally unified word class. Rather, they are grouped together in this section due to their shared function of requesting information. In verbal clauses question words are all primarily fronted proadverbs, and are therefore clause external. Two of these forms (*sèi* ‘who’ and *sapa* ‘what’) always represent an extracted clause internal PIV argument. This restriction on the extraction of arguments in

question formation is one of a number of syntactic features unique to the syntactic pivot (see §4.6.2).

The remaining proadverbs in Table 7.1 also refer to clause internal arguments. However, these are always oblique arguments (i.e. adjuncts) which provide non-obligatory information regarding location, temporality, quantity, reason, and manner or method.

In addition to their modifying (i.e. adverbial) function in verbal clauses, all of the question words also function as predicates in equational (non-verbal) clauses (see §4.4.2). In certain instances the interrogative proforms *sèi* and *sapa* may also have a pronominal (clause internal) function; they are the only question words in Table 7.1 which demonstrate this. Each of the question words in Table 7.1 is now described separately together with examples and descriptions which display their distribution and functions.

a. *sapa* ‘what’

sapa ‘what’ is used to obtain information about a particular inanimate entity, and occurs either pre-predicate or post predicate. *sapa* refers to a non-human entity within the clause which the speaker is asking the addressee to identify. In content questions *sapa* precedes what would normally be a declarative clause. The unknown inanimate entity is expressed in the clause by a proform with the PIV function (the fact that the nasal phrase marker *N=* may also have a pronominal function is outlined in §8.4.3), e.g.:

(443) *sapa ensiwon?*

sapa N= siwo -en
 what 3.SG.INAN make PV
 ‘What will (we) do?’
 (TDN_07_00:09:27)

(444) *sapa nèdon mana?*

sapa N= èdo -en mana
 what 3.SG.INAN take PV there
 ‘What would (you) take?’
 (TDN_10_00:24:55)

(445) *sapa empawèèn?*

sapa N= pa- wèè -en
what 3.SG.INAN DYN give PV

‘What do (they) give?’

(TDN_11_AW_HL_00:13:34)

In (443) - (445) *sapa* refers to the PATIENT (PIV) arguments from within PV marked verbal clauses. When *sapa* occurs in front of verbal clauses these clauses are never marked for AV. Instead, *sapa* is only used with clauses marked for one of the three UVs¹⁹².

In non-verbal clauses *sapa* functions as the predicate. In equational clauses *sapa* requests the addressee to provide information about an NP or pronominal referring to a non-human entity. This NP or pronominal functions as the PIV of the clause (see also §4.4.2), e.g.:

(446) *sapa rè'èn sia?*

sapa rè'èn sia
what PART 3.SG

‘What is it then (i.e. what sort of insect)?’

(TDN_11_EO_00:04:05)

(447) *bumbu nasi jaha sapa waya?*

bumbu nasi jaha sapa waya
cooking.spices rice glutinous what all

‘What are all the ingredients for (making) glutinous rice?’

(TDN_11_AW_HL_00:00:08)

(448) *sapa itu?*

sapa itu
what that.MED

‘What is that?’

(TDN_11_AW_HL_00:11:12)

¹⁹² This is because in an AV marked clause the interrogative proform must refer to a volitional and controlling ACTOR (PIV) argument. However, *sapa* can only refer to non-human entities.

(449) *kaa sapa rumaraa?*

ka'a sapa r<um>a'raa

becausee what <AV> sick

'Because (of) what sickness?'

(TDN_29_00:03:02)

In a small number of clauses (four in the entire data set) *sapa* functions as the NPIV.UN argument in an AV marked clause, e.g.:

(450) *korèi mèdo sapa mana?*

ko= rèy' <um> èdo sapa mana

2.SG.PIV not <AV> take what there

'What don't you take there?'

(TDN_10_00:25:18)

(451) *kokumaanou sapa?*

ko= k<um>aan =mow sapa

2.SG.PIV <AV> rice CPL what

'What would you eat?'

(TDN_29_00:07:59)

Instead of the adverbial function it has in (443) - (449), in (450) - (451) *sapa* has a function as a clausal argument which substitutes for an as yet unspecified full NP. It is clause internal and has a post-verbal position within the clause, and these features provide evidence that it expresses the NPIV.UN argument. In an AV marked clause the PIV argument occurs pre-verbally while the NPIV.UN argument is always post-verbal (see Table 4.8 in §4.5.4)¹⁹³.

b. *sèi* 'who'

sèi 'who' is used to identify an animate human referent which is normally referred to by an NP or pronominal. When occurring in equational clauses, *sèi* functions as the predicate, while the PIV argument in the clause refers to the entity which the speaker would like identified. In these clauses *sèi* always occurs clause initially, e.g.:

¹⁹³ In addition, both the form and semantic role (ACTOR) of the entity expressed by the proclitic *ko=* 'you' also indicate that *sapa* must be the NPIV.UN argument.

(452) *sèi situamana?*

sèy si= tu'atuama =na
who AN.SG old.man 3.SG.POSS

‘Who is her husband?’

(TDN_31_00:13:04)

(453) *sèi tolè?*

sèy tolè
who youth

‘Who is the girl?’

(TDN_14_DK_NK_00:02:52)

When requesting the name of a person, the question word *sèi* ‘who’ is used, rather than the proform ‘what’ as is the case in English, e.g.:

(454) *sèi ngaranna?*

sèy ngaran =na
who name 3.SG.POSS

‘What is her name?’

(TDN_14_DK_NK_00:02:58)

In verbal clauses *sèi* occurs as a clause external proadverb in front of both AV and UV marked clauses, e.g.:

(455) *sèi siminèwè niko?*

sèy si= <im> wèwè niko
who 3.SG.PIV <AV.PST> strike 2.SG

‘Who struck you?’

(MARK 14: 65)

(456) *sèi sièdon?*

sèy si= èdo -en
who 3.SG.PIV take PV

‘Who would be taken?’

(TDN_11_AW_HL_00:15:57)

(457) *sèi sitimiboimi elabungku?*

sèy si= t<im>iboy =mi N= labung =ku
who 3.SG.PIV <AV.PST> grab DIR.DIST INAN clothes 1.SG.POSS
 ‘Who grabbed my clothes?’
 (MARK 5: 31)

(458) *sèi simaturu’ niko?*

sèy si= ma- turu’ niko
who 3.SG.PIV AV.DYN indicate 2.SG
 ‘Who teaches you (to sing)?’
 (BBT: 07/01/2012)

The verbal clauses in (455) - (458) again demonstrate that only the PIV argument can be extracted in question formation. In each example *sèi* refers to a human entity within the clause which the speaker is asking the addressee to identify. This entity is referred to (effectively ‘copied’) by the PIV argument inside the clause, i.e. by the pronoun *si=* ‘he/she’.

c. *ka’a* ‘why’

The question word *ka’a* ‘why’¹⁹⁴ is one of a number of interrogative words in Table 7.1 which function as proadverbs. However, unlike *sapa* and *sèi*, *ka’a* does not request information about entities which are expressed by PIV arguments within the clause. Instead, *ka’a* requests the addressee to provide a reason for the proposition of the clause, e.g.:

(459) *kaa komekekèlang?*

ka’a ko= ma- Ce- kèlang
why 2.SG.PIV AV.DYN IRR walk
 ‘Why will you go (home)?’
 (TDN_32_OL_KK_00:05:10)

¹⁹⁴ *ka’a* is also used as a subordinating conjunction which expresses a relationship of reason between two clauses (see again §10.3.3).

(460) *ka'a korè'èn simiwo entuana?*

ka'a ko= rè'èn s<im>iwo N= tuana
 why 2.SG.PIV PART <AV.PST> make INAN thus

‘Why then did you do (it) like that?’

(JONAH 1: 10)

(461) *kaa itu rèi pakè?*

ka'a itu rèy' i- pakè
 why that.MED not CV utilise

‘Why do (you) not use that?’

(TDN_29_00:18:45)

If *ka'a* occurs as part of a non-verbal clause it will have the function of predicate, and any argument will function as the PIV. This structure is demonstrated by a number of equational clauses in §4.4.2.

d. *wisa* ‘where’

The proadverb *wisa* ‘where’ is utilised to clarify the location of an entity or situation. *Wisa* occurs peripherally in a clause final position where it follows the proposition which describes the entity or situation. The missing locative participant would normally be expressed by an oblique PP or deictic adverb, e.g.:

(462) *kotimumpa wisa?*

ko= t<im>umpa wisa
 2.SG.PIV <AV.PST> descend where

‘Where did you go down to?’

(TDN_07_00:02:57)

(463) *kominèa wisa ?*

ko= <im>èa wisa
 2.SG.PIV <AV.PST> go where

‘Where did you go?’

(TDN_14_DK_NK_00:06:21)

(464) *koumatoanou kangkèi ulang, wisa?*

kow= <um> ato -an =mow kangkèi ulang wisa
 2.PL.PIV <AV> see, look MUT CPL also frequent where
 ‘Will you see each other again regularly, where?’
 (TDN_14_DK_NK_00:05:25)

As *wisa* is clause external, a pause in intonation may occur between the clause and *wisa*, as observed in (464).

Wisa also functions as the predicate in equational clauses, where it occurs preceding the PIV argument, e.g. *wisa sia?* ‘where is he/she?’, *wisa tu’awènèmu?* ‘where is your girlfriend?’, or *wisa ni’tu?* ‘where is it?’.

e. *kawisa* ‘when’

kawisa ‘when’ is used by speakers in an attempt to clarify the timeframe of a situation or event expressed by the clause. *kawisa* often precedes the content question clause, and refers to a time within the clause which would normally be expressed by a temporal adverb or temporal noun (see §6.5.4 and §8.2.5), e.g.:

(465) *kawisa komekekawèng*

kawisa ko= ma- Ce- kawèng
 when 2.SG.PIV AV.DYN IRR marry
 ‘When will you get married?’
 (TDN_14_DK_NK_00:02:22)

(466) *ya, kawisa komèa marut mana numa?*

ya kawisa ko= <um> èa <um> arut mana
 AFF when 2.SG.PIV <AV> go <AV> spread in.MED
 N= uma
 INAN field
 ‘Yes, so when will you go and sow in the fields?’
 (TDN_10_00:00:06)

(467) *minatoumou kawisa sia?*

ma- <in> tow =mow kawisa sia
 EV.STAT PST person CPL when 3.SG
 ‘When was he born?’
 (TDN_07_00:09:13)

The situations expressed by the predicates in (465) and (466) relate to the timing of possible future events, while in (467) the event has already occurred prior to the utterance. While the default position of *kawisa* appears to be clause initially, (467) demonstrates that there can be exceptions to this rule.

f. *pira* ‘how many’

pira ‘how many’ or ‘how long’ is utilised to enquire as to the quantity of certain entities, or to the duration of a particular event or situation. *Pira* may be used predicatively in non-verbal clauses where it occurs either clause initially or clause finally, for example:

(468) *jam pira?*

jam pira
 hour how.many
 ‘What time (lit. how many hours)’
 (TDN_14_DK_NK_00:07:47)

(469) *pira menit?*

pira menit
 how.many minute
 ‘How many minutes?’
 (TDN_31_00:18:33)

(470) *sèpuyunta, sèa pira mou?*

sè= puyun =ta sèa pira =mow
 AN.PL grandchild 1.PL.IN.POSS 3.PL how.many CPL
 ‘Our grandchildren, how many of them are there?’
 (TDN_14_HK_DT_00:05:44)

The clauses in (468) - (470) are all equational. *Pira* functions as the predicate, while the unknown quantity is referred to by the PIV arguments *jam* ‘hour’, *menit* ‘minute’, and *sèa* ‘they’.

In verbal clauses *pira* is used as a modifier within NPs. The head modified by *pira* refers to the entity of which there is an unknown quantity, e.g.:

(471) *pira karong pawèènèa engkota?*

pira karong pa- wèè -en =nèa N= kota
 how.many sack DYN give PV 3.PL.NPIV.A INAN city
 ‘How many sacks (of rice) do they provide (to) the city’
 (TDN_29_00:15:02)

However, the structure exemplified in (471) changes if what is being quantified is the duration of the action or event expressed by the predicate. In this instance, *pira* modifies a temporal noun which refers to the unit of time used to measure the duration of the action or event. Together *pira* and the temporal adverb function as an adverbial modifier to the entire clause, e.g.:

(472) *piramou te’un kominana’?*

pira =mow te’un ko= <im> ana’
 how.many CPL year 2.SG.PIV <AV.PST> stay
 ‘How many years (ago) did you stop (collecting palm sugar sap)?’
 (TDN_28_00:01:47)

(473) *jadi piramou te’un pakekas rèimou pakèn?*

jadi pira =mow te’un pakakas rèy’ =mow
 so how.many CPL year tool not CPL
 pakè -en
 use PV
 ‘So how many years since (you) used your tool (i.e. penis)?’
 (TDN_29_00:18:27)

In examples (472) and (473) the pronoun *ko=* ‘you’ and the NP *pakakas* ‘tool, instrument’ are the respective PIV arguments. Unlike in (471), the element *pira=mou te’un* is clause external and functions as a modifier to the entire clause.

g. *kumura* ‘how’

*Kumura*¹⁹⁵ ‘how’ (or sometimes *kura*) is used by speakers to obtain more information on the manner or method of undertaking an event or action. When appearing in content questions, *kumura* may be glossed as ‘how’, ‘how come/why’, or ‘how about that’.

In verbal clauses *kumura* functions as a proadverb and modifies the question clause. It occurs either preceding or following the clause it modifies, e.g.:

(474) *kumura paloo ’anoula si, calèg?*

kumura pa- loo’ -an =mow =la si=
 how DYN see, look LV CPL DIR.PROX AN.SG
 calèg

legislative.candidate

‘How do (you) see the legislative candidate?’

(TDN_32_OL_KK_00:03:00)

(475) *sè itu pesesiwon emis, kumura?*

sa itu pa- Ce- siwo -en emis kumura
 if, when that.MED DYN IRR make PV sweet how

‘If (they) make that (the palm sugar) sweet, how is it done?’

(TDN_29_00:01:05)

(476) *empatèn ban motorku kumura?*

N= patè -en ban motor =ku kumura
 INAN die PV wheel motorbike 1.SG.POSS how

‘How would (I) break my motorbike’s wheel?’

(TDN_14_DK_NK_00:01:58)

In (474) - (476) the speaker seeks clarification regarding the manner in which a number of different situations occur. The clause in (474) relates to a situation which is already underway, but the speaker requires more information about how the addressee takes part in it. However, in (475) - (476) the situations denoted by the clause are hypothetical.

¹⁹⁵ It is likely that historically *kumura* comprises the two separate morphemes of *kura* and <um>. However, *kumura* now seems to be lexicalised and considered as monomorphemic.

Unlike the other question words, *kumura* does not function as the predicate in non-verbal clauses. Instead, it remains as a modifier to the entire clause, as in the following equational clauses:

(477) *kumura kurèi'pè cècè?*

kumura ku= rày =pè' cècè
 how 1.SG.PIV not INCPL grandchild
 'How/why is it I don't have grandchildren yet?'
 (TDN_07_00:16:217)

(478) *kumura sioki' tè'in ti'i*

kumura si= oki' tè'in iti'i
 how AN.SG small thus that.MED
 'How is it/why is the child is like that?'
 (TDN_07_00:05:45)

When *kumura* is used in equational clauses such as (477) - (478) it always has the gloss of 'how come' or 'why is it so', and it does not specifically ask for information regarding a manner or process. Instead, the speaker is somewhat broadly and dramatically asking for a reason as to why the current situation is as it is.

7.2 Negation and prohibitives

Negation in Tondano clauses is expressed through the use of three different independent morphological elements. These are *rèi'* 'not, don't, aren't', *rèi'la* 'there is not/are not', and *so'o* 'don't/doesn't want'. Both *rèi'*, and *so'o* are used in verbal and equational clauses, while *rèi'la* functions as the negator in existential clauses. All these elements are examined in §7.2.1. The prohibitive marker *tèa'* is detailed in §7.2.2.

7.2.1 Negators *rèi'* and *so'o*

a. *rèi'*

rèi' is used to negate the proposition asserted by a predicate in a declarative clause, while *so'o* is used to express a referent's lack of desire to enter into the situation asserted by the predicate.

rèi' (also sometimes *rèi* or *rè'*) always occurs in a pre-predicate position following the PIV argument (if overtly expressed) regardless of whether verbal clause is marked for AV or UV, e.g.:

(479) *jadi sèrèi mèdo rano*

jadi sè= rày' <um> èdo rano
 so 3.PL.PIV not <AV> take water
 'So they don't take somewater'
 (TDN_10_00:16:44)

(480) *sa korèi kumirong, mèi sèbrawijaya*

sa ko= rày' k<um>irong <um> èy sè= Brawijaya
 if, when 2.SG.PIV not <AV> conceal <AV> come AN.PL PN
 'If you don't hide, the Brawijaya regiment will come (and find you)'
 (TDN_21_00:06:36)

(481) *èrèi parèo' nètu'a*

sè= rày' i- pa- rèo' nè= tu'a
 3.PL.PIV not CV DYN order AN.PL.NPIV.A old
 'The elders don't order (them)'
 (TDN_29_00:07:01)

(482) *rèi mengèa mana lepo'*

rày' meN- èa mana lepo'
 not AV.DYN go to.MED rice field
 '(You) don't go to the rice fields'
 (TDN_07_00:18:45)

When occurring as part of a complex predicate, such as those which consist of auxiliary verbs and main verbs (see §10.1.2), the exact translation of *rèi'* is dependent upon the meaning of the auxiliary verb. When the modal auxiliary *toro* 'can' is used, the meaning of the negator and *toro* is 'cannot'. When the form *rèi'* = *mow* (see below) occurs before *toro*, the meaning is 'no longer can', e.g.:

(483) *jamou enam rèimou toro makekaluar embalè*

jam =mow enem rèy' =mow toro maka- kaluar
 hour CPL four not CPL can AV.POT exit
 N= walè
 INAN house

‘At four o’clock (you) can no longer leave the house’ (because there is a curfew)’
 (TDN_21_00:00:47)

(484) *ta'an rèi toro kumaan pasupè'*

ta'an rèy' toro k<um> aan pasu' =pè'
 but not can <AV> rice hot INCPL

‘But (you) cannot eat it (if it’s) still hot’
 (TDN_19_00:06:14)

In (483) - (484) *rèi' toro* expresses that the situation or event denoted by the verbal predicate can not or will not happen, usually for a specific reason. If only *rèi'* were used the reading of these clauses would simply be ‘you don’t leave the house’ and ‘you won’t eat’.

As an independent morphological element, *rèi'* may host clitics, such as the pronominal proclitics in (479) - (480), or enclitics such as =*mow* (CPL) in (483). The resulting combined forms may sometimes convey a slightly different meaning than if *rèi'* occurs independently. As mentioned in §5.6.2, the combined form *rèi'=mow* has the sense that an action, event or state which at some stage occurred does not happen anymore. Thus *rèi'=mow* can be glossed as ‘no longer’, e.g.:

(485) *sa lakerou wuras, rèimou sedap*

sa laker =mow wuras rèy' =mow sedap
 if, when much CPL salt not CPL tasty

‘If there’s a lot of salt it’s no longer tasty’
 (TDN_19_00:00:43)

(486) *panglima iti'i sirèi'mow kinasusui*

panglima iti'i si= rèy =mow ka- <in> susui
commander that.MED 3.SG.PIV not CPL POT PST speak
 -an
 LV

‘That commander, (the Minahasans) could no longer speak about him’
 (TDN_31_00:12:47)

Thus, in examples (485) - (486) *rèi'* still negates the propositions asserted by the respective clauses, i.e. that a dish being cooked is tasty and that a particular character in a creation myth is spoken about by the Minahasans. However, the difference in clauses where *rèi'* hosts =*mow* is that there is a presupposition that the proposition of the clause was true at some earlier time.

The combination of the negator *rèi'* and the enclitic =*pè'* expresses the sense that an action, event, or state has not occurred yet, but presumably will happen at some later stage. *rèi'*=*pè'* can therefore be glossed as ‘not yet’ or ‘don’t yet’, (see also §5.6.1), e.g.:

(487) *sèrèi'ipè' mete'u nagamamou*

sè= rèy' =pè' ma- te'u N= agama
3.PL.PIV not INCPL EV.STAT know INAN religion
 =mow
CPL

‘They don’t yet know religion’
 (TDN_31_00:14:09)

(488) *sèi rèi'pe' kimawèng kua ya?*

sèy rèy' =pè' k<im>awèng ku'a ya
who not INCPL <AV.PST> marry PART AFF
 ‘Who is not yet married then, yes?’
 (TDN_07_00:16:19)

rèi' also functions as a negator in non-verbal clauses. When the proposition of an equational clause is negated, and the PIV argument is omitted, the clause may simply consist of *rèi'* plus an NP which acts as the predicate. In these clauses *rèi'* expresses the notion of ‘it isn’t X’ or ‘they aren’t X’, e.g.:

(489) *sa rèi' katrili*

sa rày' katrili
if, when not katrili.dance
 'If (it's) not the katrili (then we dance the polka)'
 (TDN_11_AW_HL_00:11:08)

(490) *entè' kapa rày' embalè*

entè' ka'apa rày N= walè
strong or not INAN house
 '(It's) strong or it's not a (proper) house'
 (TDN_31_00:03:15)

In equational clauses where the PIV argument is overtly expressed, *rèi* follows this argument. These clauses express the notion that the PIV argument is not or are not what is denoted by the nominal or adjectival predicate, e.g.:

(491) *sètou rèi' yahudi*

sè= tow rày' Yahudi
AN.PL person not PN
 'The people are not Jewish'
 (MARK 10:33)

(492) *ka'a niaku kurèi' empung*

ka'a niaku ku= rày' Empung
because 1.SG 1.SG.PIV not God
 'Because as for me, I am not God'
 (GENESIS 50:19)

In existential clauses a combination of *rèi* together with the enclitic *=la*¹⁹⁶ is used as the negator. While an existential clause which has a positive affirmation uses *wewèan*, a negated existential clause simply has *rèi=la* (and not **rèi' wewèan*) as the predicate.

*rèi'=la*¹⁹⁷ can be glossed as 'there isn't' or 'there aren't'. *rèi'la* functions as the predicate in the existential clause, while the NP or pronominal referring to an entity judged not to exist functions as the PIV argument, for example:

¹⁹⁶ *=la* has a number of functions in addition to its the primary function as a deictic marker – see §6.7.1.

¹⁹⁷ Note that the other deictic enclitics (*=mèè* and *=mi*) do not co-occur with *rèi'* as negators in existential clauses.

(493) *rèi'la loit*

rèy' =la loit
EXIST.NEG DIR.PROX money
 'There is not any money'
 (TDN_14_DK_NK_00:09:34)

(494) *rèimoula emba'ang*

rèy' =mow =la N= wa'ang
EXIST.NEG CPL DIR.PROX INAN tooth
 'There are no longer teeth'
 (TDN_28_00:05:30)

Example (494) also demonstrates how *rèi'* may host multiple enclitics (i.e. both =*mow* and =*la*) with the resulting form of *rèi'*=*mou*=*la*. The difference between *rèi'*=*la* and *rèi'*=*mou*=*la* in negating existential clauses is seen in the glossing, i.e. in (493) 'there is not' as opposed to (494) 'there are no longer'.

As explained in §4.4.1, the existential marker *wewèan* also expresses a form of possession. Similarly, the existential negator *rèi'la* has the additional function of expressing that an entity is not possessed, e.g.:

(495) *sa korèi'la ioki'*

sa ko= rèy' =la si= oki'
if, when 2.SG.PIV EXIST.NEG DIR.PROX AN.SG small
 'If you don't have a child'
 (TDN_29_00:18:51)

(496) *kaa sèrèi'la pepa'ayangen*

ka'a sè= rèy' =la Ce- pa'ayang -en
because 3.PL.PIV EXIST.NEG DIR.PROX NR work PV
 'Because they don't have jobs'
 (TDN_29_00:06:57)

In (495) - (496) *rèi'*=*la* expresses the fact that the entities referred to by the PIV arguments *si=oki'* and *pe-pa'ayang-en* do not exist (and are therefore not possessed). These clauses differ structurally from those displayed by (493) - (494) due to the presence of double PIV arguments. In these types of clauses the PIV argument representing the

possessor occurs pre-predicate, and the other PIV argument representing the possessed entity occurs post predicate (see also §4.4.1).

b. *so'o*

so'o is the element used to express desire for something not to happen, i.e. 'don't want', or 'not want'. *So'o* has a similar distribution to *rèi'*, *rèi'*=*mow*, and *rèi'*=*la* in that it most commonly occurs following the PIV argument (if it is overtly represented) and before the predicate, e.g.:

(497) *sia sookan kumaan*

sia *so'o* =kan k<um>aan

3.SG don't.want also <AV> rice

'(She) also doesn't want to eat'

(TDN_32_OL_KK_00:03:43)

(498) *siso'o maloo'la sèwalina*

si= *so'o* ma- loo' =la sè= walina

3.SG.PIV don't.want AV.DYN see, look DIR.PROX AN.PL other

'He doesn't want to look at other (women)'

(TDN_28_00:03:06)

(499) *jadi kokosoo mèa lepo'*

jadi ko= ko= *so'o* <um> èa lepo'

so HES 2.SG.PIV don't.want <AV> go rice field

'So you, you don't want to go (to) the fields'

(TDN_29_00:14:35)

The structure of *so'o* clauses mirror those which utilise modal verbs such as *toro* 'can, be able' or *pa'ar* 'want'. Formally, *so'o* is an auxiliary verb, and clauses which contain *so'o* display an identical structure to that of the complex multi-verbal predicates which are discussed in §10.1.2. *So'o* is included in this section due to its shared functional features with *rèi'*, that is, as a negator of the proposition asserted by a predicate.

There are a small number of instances where *so'o* has a function not seen with other auxiliary verbs. In (500) *so'o* appears to function as the main verb of clause, and takes an argument as a complement, e.g.:

(500) *kuso'o nisia*

ku= so'o nisia
1.SG.PIV don't.want 3.SG
 'I don't want (to marry) him'
 (TDN_21_00:02:23)

However, upon further investigation it appears that this is not the case. Rather, the main verb (in this case *kawèng* 'marry') has simply been omitted because it is clear from context. In addition, if *so'o* were a main verb it would be expected to host some form of verbal morphology, which it does not.

7.2.2 *Prohibitive tèa'*

tèa' is used with the prohibitive meaning of 'don't', or 'won't' and is followed by a verbal predicate expressing a situation which the speaker does not want to see take place. *tèa'* often occurs clause initially, commonly following the PIV and always preceding the predicate, e.g.:

(501) *tèa pemulimuliren emberen*

tèa' peN- CVCV pulir -en N= weren
PROH DYN RDP roll PV INAN eye
 'Don't (you) roll (your) eyes'
 (TDN_31_0:17:57)

(502) *ta'an tèa' pekekaan pasu'*

ta'an tèa' i- pa- Ce- kaan pasu'
but PROH CV DYN IRR rice hot
 'But (you) won't eat the hot thing'
 (TDN_19_00:05:18)

(503) *tèa meniwoniwo engkasèlokan*

tèa' meN- CVCV siwo N= ka> sèlok <an
PROH AV.DYN RDP make INAN NR wrong NR
 'Don't (you) go making mistakes (i.e. sinning)
 (TDN_30_00:07:03)

(504) *tèamou marua, rua ghenang*

tèa'	=mow	ma-	rua	rua	ghenang
PROH	CPL	AV.DYN	two	two	want, desire

‘Don’t (you) divide (break up) the two hearts’
(TDN_28_00:07:12)

There is a certain amount of similarity between prohibitives such as those expressed in (501) - (504), and imperative constructions (see §7.3.1 below). However, there are two important differences which differentiate prohibitives from imperatives. Firstly, imperatives are almost exclusively direct commands or instructions which are issued from the speaker to someone else present at the time of the utterance, i.e. the addressee. Secondly, imperative constructions are identifiable by their morphology. That is, verbs in imperative constructions are only ever overtly marked with voice marking (they have zero marked primary verbal affixation - see §4.5.1), unlike those in (501) - (504) which overtly host both primary verbal affixation and voice marking.

7.3 Imperatives and adhortatives

This section examines clauses which are commands or directions from the speaker to an addressee. Imperative clauses (§7.3.1) have two similar functions: the first is to issue a direct command to the addressee to perform an action then and there. The second is to inform someone how to carry out a task or activity in the context of a procedural instruction, e.g. ‘first you/one does this, and then this’.

A separate, but obviously related construction are adhortatives. These clauses are detailed in §7.3.2.

7.3.1 Imperative clauses

Imperative clauses are always in irrealis mood. As described in §5.2.2, complex verbal stems which are zero marked for primary verbal affixation consist solely of a lexical root and a voice affix. Predicates which contain these stems are always in irrealis mood, and are therefore frequently used within imperative clauses, e.g.:

(505) *kumaanèla kukis*

k<um>aan	=la	kukis
<AV> rice	DIR.PROX	cake

‘(You) eat some cake!’
(TDN_03_00:24:52)

(506) *pè'ananou encucur*

pè'an -an =mow N= cucur

taste LV COMP INAN PN

‘(You) try some cucur cake!’

(TDN_03_00:19:20)

(507) *siwon gula*

siwo -en gula

make PV sugar

‘(You) make the palm sugar!’

(TDN_25_00:00:19)

Imperative clauses such as those in (505) - (507) never have an overtly marked addressee. However, the entity being ordered to do the action is always clear from context.

Verbal stems with any of the four voices occur within imperative clauses. CV marking on verbal predicates is common in imperative clauses. In imperative clauses CV marking sees the addressee ‘utilised’ for some purpose, i.e. to perform an action for the speaker.

The CV voice affix *i-* is almost never overtly marked (see §3.3 and §4.5.4), and as such imperatives with predicates in CV are devoid of any overt verbal morphology. However, their function as head of the predicate of an imperative clause is clear, e.g.:

(508) *èdomi kartas*

i- èdo =mi kartas

CV take DIR.DIST paper

‘(You) take the paper (and bring it to me)!’

(TDN_33_KK_00:00:33)

(509) *wèèla engkayu itu*

i- wèè =la N= kayu itu

CV give DIR.PROX INAN wood that.MED

‘(You) put that wood (here)!’

(TDN_33_KK_00:01:51)

(510) *tunun itu embaa'*

i- tunun witu N= waa'
CV grill on.MED INAN coal
'(You) grill (it) on the coals'
(TDN_11_EO_0:03:17)

In addition to the direct commands seen in (508) - (510), imperative clauses are also commonly used in a more general sense. These imperatives are not issuing a direct command to the addressee at any particular time or place. Rather, they have the meaning of 'whenever you make X, you must first do Y, then Z etc.', and are somewhat less forceful than the direct commands, e.g.:

(511) *mèè rampa rampa*

<um> wèè rampa rampa
<AV> give RDP spice
'(You) put in the spices'
(TDN_32_OL2_00:07:06)

(512) *puusenoula empo'opo*

pu'us -en =mow =la N= po'po'
knead PV CPL DIR.PROX INAN coconut
'(You) knead in the (shredded) coconut'
(TDN_11_AW_HL_00:06:23)

(513) *o tu owasanoula*

wo tu owas -an =mow =la
and then wash s.t. LV CPL DIR.PROX
'And then (you) wash the (banana leaves)'
(TDN_11_AW_HL_00:03:00)

The imperative clauses in (511) - (513) are all describing part of the process of making specific recipes, and not actually commanding an entity to do something.

7.3.2 *Adhortative clauses*

The verbal roots *èi* 'come' and *èa* 'go' are used to express adhortative constructions. As adhortatives these verbs are always overtly marked with the AV affix <um>, together with the enclitic =mow, resulting in the forms *mèi=mow* and *mèa=mow*. These forms express the respective notions of 'come let's (us or you) do, or let's (us or you) go and do' the

action or event denoted by the verbal predicate in the clause. Adhortatives with *mèimow* and *mèamow* are much more like a suggestion, and less like the direct commands of imperative clauses.

mèimow always occurs before the verb which expresses the action or event, but following any PIV arguments¹⁹⁸, e.g.:

(514) *ya, mèimou melansalansa susur embengi ku'a*

yes <um> èy =mow ma- CVCV- lansa susur N=
AFF <AV> come COMP AV.DYN RDP dance every INAN
 wengi ku'a
night PART

‘Yes, let’s (us) dance every night then’

(TDN_07_00:12:53)

(515) *tim mèimou kumaan*

Tim <um> èy =mow k<um>aan
PN <AV> come CPL <AV> rice

‘Tim, come and let’s eat’

(TDN_31_00:04:44)

(516) *mèimou tumekel*

<um> èy =mow t<um>ekel
<AV> come CPL <AV> sleep

‘(You are tired), come (and) sleep (i.e. let’s get you to bed)’

(TDN_11_AW_HL_00:11:22)

The *mèimow* construction gives an adhortative meaning to all the actions or events denoted by the verbal predicates in (514) - (516). The use of the verb *èi* ‘come’ as part of the *mèimow* construction also expresses that the location where the action or event is to be performed is (broadly speaking) close to the interlocutors. However, if the speaker wants to urge the addressee(s) to perform a task at a location farther away from the interlocutors, then the verb *èa* ‘go’ is used and the adhortative construction is *mèamou*, e.g.:

¹⁹⁸ The clauses with *mèimow* plus a verbal predicate are very similar in structure to the Serial Verb Constructions (SVCs) described in §10.1. However, these two constructions are differentiated by the fact that when *mèi* or *mèa* are used in SVCs it never hosts the enclitic =mow, as it does here.

(517) *mèamou muka uma*

<um> èa =mow <um> wuka' uma

<AV> go CPL <AV> open field

'Let's go and open up (i.e. prepare) the fields'

(TDN_14_HK_DT_00:04:02)

(518) *mèamou mèloti waki sidoktèr*

<um> èa =mow <um> èlot =mi waki si= doktèr

<AV> go CPL <AV> cure DIR.DIST at.DIST AN.SG doctor

'Let's (you) go and get fixed at the doctor'

(TDN_31_00:01:16)

So, in (517) - (518) the speaker again urges the addressee to perform an action or event which is denoted by the verb. The only difference here is that the hypothetical situation is farther away from both parties.

8.0 NOUNS AND NOUN PHRASES

In this chapter the typological characteristics and structure of Tondano NPs are first described in §8.1. Subsequently, §8.2 describes the different categories of nouns which function as the heads of NPs, together with an explanation of the different morphological strategies which encode nominalisation (§8.2.4). Following this, the various pronominal forms which often substitute for nouns (or entire NPs) are examined in §8.3, including a brief note on the issues of distinguishing between bound forms as anaphoric pronouns or agreement markers (§8.3.4). In §8.4 the various noun phrase markers are then examined.

Also contained within this chapter are the primary methods for encoding possession. These processes are shared between the NPIV.A enclitics (§8.3.5) and the NPIV.A phrase markers (§8.4.2)¹⁹⁹.

8.1 Structure and typological features of NPs

The following are some typologically relevant properties of Tondano NPs:

- NPs are head marking with one exception (see §8.4.2).
- NPs may have any one of the four different syntactic functions described as GRs in §4.3. That is, as PIV, NPIV.UN, NPIV.A or OBL. OBL arguments within the clause are expressed by PPs (see §6.11), in which the NPs function as the complement of a preposition.
- The form of an NP may be as minimal as a simple noun, or as substantial as a head noun and a modifying relative clause.
- NPs also function as predicates in non-verbal (equational) clauses.

The constituent order within NPs is as follows (non-obligatory elements in parentheses²⁰⁰):

Figure 8.1: Constituent order in NPs

(QNT) (NUM) (MOD) (NP Mrkr) Head (NP/PRO[POSS]) (PP) (REL) (MOD) (QNT) (DEM)

A number of the non-obligatory elements of NPs are described in other chapters (i.e. quantifiers (§6.8), numerals (§6.9), demonstratives (§6.6), and relative clauses (§10.3.1)), and are not covered here. As displayed by Figure 8.1, the only obligatory element of a NP

¹⁹⁹ The two other minor methods of encoding possession are sub-functions of other syntactic constructions - see §4.4.1 (Existential constructions) and §4.5.1 (POTENTIVE marking).

²⁰⁰ (MOD) refers to adjectival modifiers which are commonly Type II lexical roots (see §6.3-§6.4). These adjectives may precede or follow the head of an NP.

is the head noun. Moreover, the position of certain elements such as quantifiers and numerals is flexible.

NPs which exemplify some of the possibilities of the constituent order in Figure 8.1 are as follows (head nouns underlined):

(519) *susur nendo*

susur N= endo

every INAN day

‘Every day’

(TDN_12_00:08:44)

(520) *telu babak*

telu babak

three phase

‘Three stages’

(TDN_31_00:01:27)

(521) *sètu’a rior*

sè= tu’a rior

AN.PL old fast

‘The elders from before (lit. ‘the fast, early elders)’

(TDN_31_00:02:55)

(522) *waya po’ong cinkè ni’tu*

waya po’ong cinkè ni’tu

all tree clove that.MED

‘All those clove trees’

(TDN_12_00:02:47)

(523) *sioki’ku*

si= oki’ =ku

AN.SG small 1.SG.POSS

‘My child’

(TDN_12_00:06:26)

(524) *ndano iti'i*

N= rano iti'i
 INAN water that.MED
 'That water'
 (TDN_07_00:03:12)

(525) *pupuk waya*

pupuk waya
 fertiliser all
 'All the fertiliser'
 (TDN_10_00:24:58)

NPs may also occur linked by one of two co-ordinating conjunctions (see §10.2.1), *wo* 'and' or *ka'apa* 'or'. When linked in this way the two NPs are still only assigned a single GR within the clause (c.f. (13), (282), (608), and (747)). Examples of complex NPs conjoined by *wo* are as follows:

(526) *ondè ondè ka'apa odè odè*

ondè ondè ka'apa odè odè
 RDP PN or RDP PN
 'Onde onde or ode ode (they are the same)'
 (TDN_19_00:05:40)

(527) *gula mèa, wo ntopong*

gula mèa wo N= topong
 sugar PN and INAN flour
 'Palm sugar, and flour (have been mixed in)'
 (TDN_03_00:04:08)

(528) *sikarèma wo silumimuut*

si= Karèma wo si= Lumimu'ut
 AN.SG PN and AN.SG PN
 'Karema and Lumimu'ut (are the original Minahasans)'
 (TDN_31_00:12:43)

Finally, the head noun of an NP may be modified by a PP, e.g.:

(529) *sètou waki wanuaku*

sè= tow waki wanua =ku
AN.PL person in.DIST village 1.SG.POSS
‘The people in my village (grow cloves)’
(TDN_12_00:04:26)

(530) *sejarahta wia minahasa*

sejarah =ta wia Minahasa
history 1.PL.IN.POSS in.PROX PN
‘Our history in Minahasa (is what we will talk about now)’
(TDN_31_00:00:18)

8.2 Definition of a noun

The term *noun* refers to words which have certain syntactic (see §8.1), morphological (see §6.1 and §6.2), and semantic features. These words may be simple and consist solely of a lexical root, or they may be morphologically complex and host various other bound elements. Syntactically, nouns function as the head of NPs and may be modified by a number of elements (as above). Alternatively, an NP may consist solely of an unmodified noun. Simple, unmodified nouns may have all the same functions as any NP, e.g. as arguments of verbs (§4.5), as predicates in equational clauses or arguments in existential clauses (§4.4.1), and as complements of prepositions (§6.11). Semantically, nouns express various concepts relating a range of concrete or abstract entities which exist at some level in the world of speakers.

Nouns are divided into two categories with regards to semantic features of the entities or concepts they represent. These two categories are those of common nouns and proper nouns.

8.2.1 Common nouns

Common nouns may refer to any member of a particular class of entities or concepts, rather than any one particular identifiable member of this class. The classes of concepts denoted by common nouns relate to entities such as animals, body parts, buildings, and landscape features, e.g. *wolèi* ‘monkey’, *lawas* ‘hand, arm’, *walè* ‘house’, and *teberan* ‘river’.

Examples of the semantic distinctions of concepts expressed by common nouns are outlined in Table 8.1

Table 8.1: Semantic categories of common nouns

Animals:	Geographic features:	Natural foods:	Body parts:
<i>asu</i> ‘dog’	<i>tasik</i> ‘sea’	<i>po’po</i> ‘coconut’	<i>kokong</i> ‘head’
<i>mèong</i> ‘cat’	<i>lour</i> ‘lake’	<i>tadèi</i> ‘corn’	<i>a’è</i> ‘leg, foot’
<i>wo’u</i> ‘turtle’	<i>lalan</i> ‘road’	<i>kalibong</i> ‘mango’	<i>wa’ang</i> ‘tooth’
<i>tabiluk</i> ‘flying beetle’	<i>lepo</i> ‘irrigated field’	<i>cinkè</i> ‘clove’	<i>toto</i> ‘chest, breast’
<i>kawalo</i> ‘horse’	<i>toka</i> ‘hill, mountain’	<i>lia</i> ‘ginger’	<i>penar</i> ‘buttocks’
<i>wèwèk</i> ‘duck’	<i>lawanan</i> ‘beach’	<i>kekuru</i> ‘thai basil’	<i>talinga</i> ‘ear’
<i>kawok</i> ‘bush rat’	<i>watu</i> ‘rock, stone’	<i>lansuna</i> ‘onion’	<i>suma</i> ‘mouth’
<i>pèrèt</i> ‘bat’		<i>saribata</i> ‘lemongrass’	<i>gio~ghio</i> ‘face’
			<i>seseputan</i> ‘nose’
Man made items:	Man made items:	Physical phenomena:	People:
<i>walè</i> ‘house’	<i>lodèi</i> ‘boat’	<i>aro</i> ‘rain’	<i>tou</i> ‘person’
<i>nuru</i> ‘charm talisman’	<i>kalèwang</i> ‘sword’	<i>awun</i> ‘smoke’	<i>kawasaran</i> ‘warrior’
<i>tetèboan</i> ‘window’	<i>paai</i> ‘knife’	<i>api</i> ‘fire’	<i>Opo</i> ‘elder (God)’
<i>tetekelan</i> ‘bed’	<i>wewolè</i> ‘oar’	<i>walolong</i> ‘wave’	<i>puyun</i> ‘grandchild’
<i>reruberan</i> ‘chair’	<i>lelutu’an</i> ‘stove, brazier’	<i>kèrap</i> ‘lightening’	<i>tona’as</i> ‘priest/preiestess’
<i>rumping</i> ‘wok’	<i>tali</i> ‘rope’	<i>sumesena</i> ‘star’	<i>mengopas</i> ‘fisherman’

Common nouns may be morphologically simple such as the lexical roots *api* ‘fire’ or *tou* ‘person’, or complex derived forms such as *tetekelan* (NR- sleep -LV) ‘bed’ and *wewolè* (NR - row) ‘oar’. These complex forms are often achieved via the various nominalisation strategies. One particular type of common noun, abstract nouns, may only occur as complex forms (see §8.2.4).

Common nouns may function as NP arguments within clauses, either with or without any additional modifiers. These NPs express various GRs with different degrees of definiteness

and referentiality. The level of definiteness often varies depending upon the GR of the NP which contains the common noun as its head²⁰¹, e.g.:

(531) *èmakoo' sopi*

sè= ma- koo' sopi
 3.PL.PIV AV.DYN drink palm.sugar.brandy
 'They drink some palm sugar bandy'
 (TDN_31_00:02:48)

(532) *timpa' ye'i mèmang, laker ee kaberguna*

timpa' ye'i mèmang laker erh ka- berguna
 palm.sugar.sap this.PROX truly much HES very useful
 'This palm sugar sap is truly much, very useful'
 (TDN_32_OL_00:05:10)

In (531) the common noun *sopi* 'palm sugar brandy' is head of an NP which functions as the NPIV.UN. At this stage of the discourse the entity referred to by this noun is indefinite, thus the best translation is '**some** palm sugar brandy'. However, in (532) the status of the participant in the discourse is more salient, and is already known and previously mentioned. It refers to a definite and identifiable entity and is best translated as '**this** palm sugar sap'. Furthermore, in this clause *timpa'* is head of the PIV NP, and as such is required to be highly referential and definite (see §9.2.1).

8.2.2 Proper nouns

Proper nouns refer to inherently unique and identifiable entities which require specific knowledge on the part of the interlocutors. These entities are commonly animate and human. However, proper nouns may also refer to inanimate (e.g. locations) or non-human entities which are often culturally and spiritually relevant. Proper nouns which refer to animate and/or human entities commonly host the animate phrase marking proclitics (see §8.4.1 below).

Proper nouns in Tondano are differentiated into the following sub categories:

- Names of specific people, whereby the noun optionally hosts the animate phrase marker *si=*, or its reduced form, *i=*. For example, *i=Tim* 'Tim' or *si=Didon* 'Didon'. If the proper noun is the possessor of another noun within the NP then it

²⁰¹ Levels of definiteness and referentiality are major conditioning factors in voice selection of verbal clauses - see §9.2.

will obligatorily host a POSS phrase marker, e.g. *walè ni=Tim* ‘Tim’s house’ (see §8.4.2).

- Characters in folk stories and traditional songs. These proper nouns may refer to entities which are human or non-human and which are considered to be either living or dead. Furthermore, they are often marked with the phrase marker *si=*, e.g.: *si=raki* ‘The East wind’, *si=opo empung* ‘God’, *si=lumimu’ut* ‘Lumimu’ut’ (a character in the indigenous Minahasan creation myth), or *si=wolèi wo si=wo’u* ‘The monkey and the turtle’ (characters in a folk story).
- Kin terms. These proper nouns refer to one or more people related to a human referent. When individuals are referred to the phrase marker *si=/i=* is often used, e.g.: *si=ampit=na* ‘his/her spouse’, *si=tu’atuama=mu* ‘your husband’, and *si=oki’=ku* ‘my child’.
- Place names. These nouns refer to places or locations, and occasionally they may host the inanimate phrase marking clitic *N=*. Examples of place names are *Wènanang* ‘Manado’, *Tanawangko*, and *Tondano*.

As with all nouns, proper nouns function as heads of NPs in clauses. These NPs can be arguments in verbal clauses (533) - (535), or predicates in non-verbal clauses (540):

(533) *tim mekaanou!*

Tim ma- kaan =mow
 PN AV.DYN rice CPL

‘Tim eats (some bat meat)!’

(TDN_32_OL2_00:08:11)

(534) *katarè linelè siyuni*

ka- tare l<in>elè’ -Ø si= Yuni
 very recently <PST> bathe PV AN.SG PN

‘(The priest) baptised Yuni first’

(TDN_14_HK_DT_00:00:48)

(535) *siamou itoar*

sia =mow si= Toar
 3.SG CPL AN.SG PN

‘He is Toar’

(TDN_31_00:13:25)

Proper nouns also occur as complements of prepositions, with the resulting PP functioning as an oblique argument in a verbal clause (536), or a predicate in a non-verbal clause (537):

(536) *simelelaa waki wènanang*

si= ma- Ce- laa waki Wènanang
3.SG.PIV AV.DYN IRR go to.PROX PN
 ‘He will go to Manado’
 (TDN_31_KK_00:07:22)

(537) *kèiwia ntondano*

kèy= wia N= Tondano
1.PL.EX.PIV in.PROX INAN PN
 ‘We are in Tondano town’
 (TDN_32_DT_00:00:07)

8.2.3 Simple vs complex nouns

Table 8.1 demonstrates that common nouns may consist of either a lexical root in isolation, or one which hosts additional morphological elements. These additional morphological elements may be either inflectional or derivational in nature. The ability to form morphologically complex nouns is generally restricted to common nouns, with one exception. Some proper nouns can be morphologically complex, for example the place name *Tondano* from *tou n=rano* (person INAN=water) ‘water people’, or a person’s name, e.g. *si=Didon* ‘Didon’.

Nouns which are morphologically complex are those consisting of a lexical root which then hosts any one of three different categories of bound elements:

- Phrase markers, e.g.: *tuama* ‘man’ → *si=tuama* ‘a/the man’ or *pepatil* ‘machete’ → *m=pepatil* ‘a/the machete’.
- POSS (NP.V.A) enclitics, e.g.: *walè* ‘house’ → *walè=nèa* ‘their house’.
- Nominalising morphology, e.g.: *koo* ‘drink’ → *ke-koo’-an* (NR- drink- LV) ‘glass’.

These elements add grammatical information to both common and proper nouns, with the resulting nominal then considered a complex form. Morphologically complex common nouns are not restricted to hosting one of the three categories of bound elements above,

and may host all three, e.g.: *em=pe-pa'ayang-en=ku* (INAN=NR- work -PV=1.SG.POSS) 'my job'.

All of the different sorts of complex nouns have the same function as simple nouns, i.e. the ability to function as arguments in clause, e.g.:

(538) *moas kekoo'an*

<um> oas Ce- koo' -an

<AV> wash NR drink LV

'(I) will wash glasses'

(TDN_12_00:07:22)

(539) *sesepunana menadènadèng*

Ce- sepun -an =na meN- CVCV- tadèng

NR nasal.mucus LV 3.SG.POSS EV.STAT RDP protrude

'His nose is protruding, sticking out'

(TDN_31_KK_00:06:33)

The complex common noun in (538) is *kekoo'an* which functions as the NPIV.UN NP in the verbal clause. In (539) the complex common noun is *sesepunan* which functions as the PIV NP in a STATIVE marked verbal clause.

8.2.4 Nominalisation

Nominalisation adds derivational morphology to any of the three types of lexical root (see §6.1), with the resulting output word always functionally nominal. When nominalising morphology attaches to lexical roots which are already nominal, then the derived form has a more abstract meaning.

The bound elements which are added to produce these complex nouns are prefixes²⁰² and suffixes which occur in various combinations, and which are not always easily deconstructable. These affix combinations may be either confixes or circumfixes. Some of these bound forms are homophonous with affixes which occur in other complex words (e.g. verbal predicates), while other nominalising affixes are utilised for more than one function and occur in other environments.

²⁰² These prefixes consists of those with a fixed form, e.g. *ka-*, and also those which are derived via the reduplication process described in §2.6.6. The exact form of this second category is dependent upon the consonant of the first syllable of the lexical root.

In reference to their semantic features, the various nominalising strategies are labelled as *stative*, *locative* (from verbal roots), *objective*, *instrumental*, *locative* (from nominal roots), *abstract noun*, and *associative*.

a. Stative nominalisation (*pa*> <*an*):

The *pa*> [LEXICAL ROOT] <*an* circumfix derives a nominal which describes someone who consistently undergoes the physical or psychological state denoted by the root. The resulting nominal can sometimes be glossed similarly to the English *-er*, e.g. *wa'an* 'sneeze' → *pa-wa'an-an* '(habitual) sneezer, one who sneezes'. Due to the fact that these nominals reference a specific human entity, the phrase markers *si=i=* optionally occur with these forms, e.g.:

<i>lèla</i> 'crazy, mentally unbalanced'	→ <i>si=pa>lèla'<an</i> '(the) madman'
<i>liur</i> 'forget'	→ <i>si=pa>liur<an</i> '(the one) who always forgets'
<i>sèlok</i> 'mistaken'	→ <i>si=pa>sèlok<an</i> '(the one) who is mistaken'
<i>upi</i> 'angry'	→ <i>si=pa>upi'<an</i> ²⁰³ '(the) angry person'
<i>wa'an</i> 'sneeze'	→ <i>si=pa>wa'an<an</i> '(the) sneezing person'

b. Locative nominalisation (*Ce-* -*an*):

The *Ce-* [LEXICAL ROOT] -*an* confix derives a place where the action or event denoted by the verbal root is habitually carried out, for example:

<i>lelè</i> 'bathe, wash'	→ <i>le-lelè -an</i> 'washroom'
<i>lutu</i> 'cook'	→ <i>le-lutu' -an</i> 'stove, brazier'
<i>tèbo</i> 'look down or out at s.t'	→ <i>te-tèbo -an</i> 'window'

²⁰³ In addition to these forms the lexical root may also undergo CVCV- reduplication (see §2.6.6), and the *pa-* prefix may undergo nasal substitution (§2.6.2). Thus, the form *si=pa-upi'-an* may also occur as *si=pengupi' ngupi'-an*. The imperfective aspect encoded by the CVCV- reduplication (§3.5 and §9.3.2) of the root again emphasises the ongoing nature of the state on the person in question. One particular speaker considered only the reduplicated forms 'correct' for encoding this type of nominal. However, all other speakers considered both forms equally acceptable.

<i>tekel</i> ‘sleep’	→ <i>te-tekel -an</i> ‘bed’
<i>ruber</i> ‘sit’	→ <i>re-ruber -an</i> ‘chair’

Unlike the *pa* > *<an* circumfix above, it appears likely that the *-an* suffix in nouns such as *te-tekel-an* is the same LV suffix which occurs within verbal stems. Furthermore, the *Ce-* prefix also has a (separate) nominalising function (see below). As such, the *Ce-* [LEXICAL ROOT] *-an* combination is analysed as a nominalising confix and not a circumfix.

c. Objective nominalisation (*Ce-* *-en*):

The *Ce-* [LEXICAL ROOT] *-en* confix derives an entity which has semantic link to the event or action denoted by the verbal root. This entity is usually a somewhat abstract object which is related to the action expressed by the lexical root, e.g.:

<i>susui</i> ‘speak, talk’	→ <i>se-susui-en</i>	‘story, tale’
<i>kantar</i> ‘sing’	→ <i>ke-kantar-en</i>	‘song’
<i>kaan</i> ‘rice’	→ <i>ke-kaan-en</i>	‘food’
<i>sani</i> ‘advise’	→ <i>se-sani-en</i>	‘advice, instruction’
<i>pa’ayang</i> ‘work’	→ <i>pe-pa’ayang-en</i>	‘job’

As with the *Ce-* *-an* nominalisation strategy, the *-en* suffix in the above examples is considered to be the PV suffix co-occurring with *Ce-* reduplication. The resulting affix combination is a nominalising confix. The UNDERGOER (i.e. PATIENT) characteristics of the derived nominals above are unambiguous, i.e. the story is the thing told and the song the thing sung, and so forth.

d. Instrumental nominalisation (*Ce-*):

The *Ce-* [LEXICAL ROOT] combination derives a nominal which expresses an instrument used to attain the action or event denoted by the verbal root, for example:

<i>tudu</i> ‘indicate, point, s.t.’	→ <i>te-tudu</i>	‘index (pointer) finger’
<i>palen</i> ‘close s.t.’	→ <i>pe-palen</i>	‘door’
<i>lutam</i> ‘shoot’	→ <i>le-lutam</i>	‘gun’

<i>wolè</i> ‘row’	→ <i>we-wolè</i>	‘oar’
<i>to’omen</i> ‘pound, grind (food)’	→ <i>te-to’omen</i>	‘grinder’
<i>wou</i> ‘smell’	→ <i>we-wou</i>	‘perfume, cologne’

e. Locative nominalisation (*ka* > <*an*):

The *ka* > [LEXICAL ROOT] <*an* circumfix attaches to lexical roots which are already entity denoting. The derived nominal then describes a more specific location or concept related to the nominal root, e.g.:

<i>tana</i> ‘land, earth’	→ <i>ka>tana’<an</i>	‘uncultivated field’
<i>oat</i> ‘midday, day’	→ <i>ka>oat<an</i>	‘world’
<i>wonor</i> ‘eroded earth’	→ <i>ka>wonor<an</i>	‘landslide’
<i>tou</i> ‘person, people’	→ <i>ka>tou<an</i>	‘birthplace’

f. Abstract noun nominalisation (*ka* > <*an*):

The second *ka* > [LEXICAL ROOT] <*an* circumfix occurs on lexical roots which denote states or events. The resulting form is an abstract nominal with a semantic link to the state or action, e.g.:

<i>apu</i> ‘finish, complete’	→ <i>ka>apu’<an</i>	‘final, last’
<i>wedu</i> ‘tired, worn out’	→ <i>ka>wedu<an</i>	‘tiredness, laziness’
<i>lekep</i> ‘complete’	→ <i>ka>lekep<an</i>	‘completion’
<i>sèlok</i> ‘fault, wrong’	→ <i>ka>sèlok <an</i>	‘mistake, sin’
<i>wangun</i> ‘good, fine’	→ <i>ka>wangun<an</i>	‘beauty’
<i>lè’os</i> ‘good, well’	→ <i>ka>lè’os<an</i>	‘goodness’

g. Associative nominalisation (ka-):

ka- [LEXICAL ROOT] attaches to lexical roots which denote both entities, or events and states. The ASSOC prefix *ka*-²⁰⁴ prefix derives a nominal referring to a human entity. This entity shares or works together with others in the action or entity denoted by the lexical root, e.g.:

<i>wolè</i> ‘row’	→ <i>ka-wolè</i> ‘oarsman’
<i>wanua</i> ‘village, district’	→ <i>ka-wanua</i> ‘villager, compatriot’
<i>walè</i> ‘house’	→ <i>ka-walè</i> ‘housemate’
<i>awu</i> ‘ash, stove (kitchen)’	→ <i>ka-awu</i> ‘wife’
<i>ampit</i> ‘with’	→ <i>ka’ampit</i> ‘friend’

All the nominals derived by these processes have the same functions as described for common and proper nouns in §8.1.2 and §8.2.2. Furthermore, the use of simple vs complex nouns by speakers is flexible, and it is not uncommon to have both simple and complex nouns describing the same entity. For example, both the complex *te-tèwèl* (NR-fly) and the underived *kalè’kèw* are used for ‘wing’, while ‘spouse (female)’ can be described with either *ampit* or the derived *ka-awu* (NR - ash, stove (kitchen)).

8.2.5 Temporal nouns

An additional subclass of nouns are those which express temporality²⁰⁵. Temporal nouns express the temporal distance of a situation in relation to the moment of utterance. At a phrasal level, temporal nouns function as the head of an NP. An NP with a temporal noun as its head most often functions as an adverbial. These adverbials have a position at the periphery of a clause and may appear either clause initially or clause finally.

The following NPs all contain temporal noun as their heads (underlined), and all express temporal distance:

<u><i>endo</i></u> <i>ye’i</i>	‘today’
<i>oat</i>	‘midday’

²⁰⁴ See §5.3.1 for more information on the various homophonous forms of *ka-*.

²⁰⁵ A small number of the Tondano temporal nouns are loanwords from either standard Indonesian or Manado Malay.

<i>kaawi'in</i>	‘yesterday’
<i>wo'odo</i>	‘morning (tomorrow)’
<i><u>wo'odo</u> ye'i</i>	‘morning (today)’
<i>wengi</i>	‘night’
<i><u>wengi</u> tarèkan ~ ye'i</i>	‘tonight’
<i><u>kawengi</u></i>	‘last night’
<i>sendot ~ sumendot</i> ²⁰⁶	‘month (lit. ‘moon’)
<i><u>sumendot</u> tumodong</i>	‘next month’
<i><u>sumendot</u> rior</i>	‘last month’
<i><u>sumendot</u> limangkoi</i>	‘previous month(s)’
<i>tèmpo</i>	‘time, when’
<i>te'un</i>	‘year’
<i><u>te'un</u> ye'i</i>	‘this year’
<i><u>te'un</u> tumodong</i>	‘next year’
<i><u>tèmpo</u> rior ~ toro ni'tu</i>	‘previously (historically)’

The following examples show a number of the temporal nouns in their function as clausal modifiers (the temporal nouns are underlined):

(540) *tèmpo kominatunanganou sididon*

<u>tèmpo</u>	ko=	ma-	<in>	tunangan	=mow	si=	Didon
time	2.SG.PIV	AV.DYN	PST	fiancée	CPL	AN.SG	PN

‘(The time) when you were engaged to Didon’

(TDN_07_00:12:07)

²⁰⁶ Temporal adverbs which display an alternation such as *sendot ~ sumendot* more than likely consist of the lexical root plus the <um> infix. Frequently these adverbs will have the complex form. However, unlike in verbal predicate phrases, <um> here does not indicate the presence of an ACTOR argument or that these words are predicates. Rather, these items are complex forms which have become lexicalised.

(541) *wia tèmpo rior, masaratus wiamou?*

wia tèmpo rior ma- saratus wia =mow
 here time fast AV.DYN chant here CPL

‘Here in the old days, (the warriors) chanted prayer songs here?’

(TDN_31_00:10:29)

(542) *toro makèlang oat*

toro ma- kèlang owat
 can AV.DYN walk midday

‘(You) can go there during the day’

(TDN_07_00:01:19)

(543) *siomku lèo, kaawi'in sipinenèrokula*

si= om =ku Lèo kaawi'in si= peN-
 AN.SG uncle 1.SG.POSS PN yesterday 3.SG.PIV DYN
 <in> sèro -Ø =ku =la
 <PST> search PV 1.SG.NPIV.A DIR.PROX

‘My uncle Lèo, yesterday I was searching for him’

(TDN_31_KK_00:07:09)

(544) *wo kosumuoyomou wo'odo?*

wo ko= s<um>oyo =mow wo'odo
 and 2.SG.PIV <AV> slice CPL morning

‘And you'll thresh (the crops) tomorrow?’

(TDN_29_00:17:44)

(545) *wengipè' kèimèamou*

wengi =pè' kèy= <um> èa =mow
 night INCPL 1.PL.EX.PIV <AV> go CPL

‘We will go to the fields when t's still night (dark)’

(TDN_14_HK_DT_00:04:08)

(546) *teun ye'i dèypè' maaro*

te'un ye'i rèy' =pè' ma- aro
 year this.PROX not INCPL EV.STAT rain

‘This year it has not rained yet’

(TDN_10_00:04:08)

8.3 Pronominals

This section describes the various categories of Tondano pronominals. However, prior to this, the phrasal status of these forms requires a minor clarification. In some traditional grammatical analyses pronominals are judged as elements which can substitute for nouns, and are therefore a subclass of nouns. However, in the Tondano data it is clear that pronominal forms are able to substitute for both single nouns and entire NPs.

Consequently, pronominals are best analysed as belonging to the category of NP rather than that of noun. This definition of pronominals adheres to those of Payne (1997:43), Kroeger (2005a:45-6), and Crystal (2008:391). This does not, however, entail that pronominals are NPs. Rather, it denotes that NPs, single nouns, and pronominals are all able to express arguments at a clausal level.

Pronominals may be either independent or bound elements. In §8.3.1 - §8.3.5 the different personal pronouns are detailed with separate subsections dedicated to independent vs clitic pronouns. In addition, the sometimes problematic issue of whether to analyse bound forms as either agreement markers or anaphoric pronouns is addressed briefly in §8.3.4. In §8.3.5 the clitics which represent one of the primary methods of encoding possession are described (the other method is explained in §8.4.2). Lastly, elements which reference indefinite entities in discourse are discussed in §8.3.6.

8.3.1 *Personal pronouns*

Personal pronouns in Tondano are divided into three separate paradigms, with one set of independent forms and two sets of bound forms, as shown in Table 8.2. Each paradigm makes a distinction between 1st, 2nd, and 3rd person singular and plural. Furthermore, a distinction between inclusive and exclusive is present in the 1st person plural forms.

The three different sub-classes of pronouns encode various GRs within a clause, although some overlap exists between the independent and proclitic forms, which are both able to function as PIV arguments. The choice of different personal pronouns is to a large extent conditioned by the type of voice marking in a clause (i.e. AV or UV). With the exception of the 3rd person forms, all personal pronouns are used exclusively to reference human entities²⁰⁷.

²⁰⁷ The inanimate phrase marker *N=* may also function as a personal pronoun. This function is detailed in §8.4.3.

Table 8.2: Personal pronouns

	Free form (PIV, NPIV.UN, OBL)	Proclitic (PIV)	Enclitic (NPIV.A)
1st sing.	<i>niaku</i>	<i>ku=</i>	<i>=ku</i>
2nd sing.	<i>niko</i>	<i>ko=</i>	<i>=(m)u</i>
3rd sing.	<i>nisia ~sia</i> ²⁰⁸	<i>(s)i=</i>	<i>=na</i>
1st pl. (IN)	<i>nikita ~ kita</i>	<i>ta=</i>	<i>=ta</i>
1st pl. (EX)	<i>nikèy</i>	<i>kèy=</i>	<i>=(m)èy</i>
2nd pl.	<i>nikow</i>	<i>kow=</i>	<i>=(m)iu</i>
3rd pl.	<i>nisèa ~sèa</i>	<i>(s)è=</i>	<i>=nèa</i>

The functions of the different personal pronouns in Table 8.2 are now described separately in the following subsections.

8.3.2 Independent personal pronouns

Independent personal pronouns display the most variation with regards to function of all the pronominals in Table 8.2. That is, they can be assigned any one of the GRs of PIV, NPIV.UN or OBL²⁰⁹. An additional feature of the independent forms is that they more frequently occur in AV marked verbal clauses, as independent pronominals cannot function as ACTORs in UV marked clauses.

In the following examples independent pronominals function as the PIV argument, e.g.:

(547) *niaku maana' wia*

niaku ma- ana' wia

1.SG AV.DYN stay here

'I live here'

(TDN_12_00:06:21)

²⁰⁸ It is probable that the independent pronouns in column one of Table 8.2 historically consisted of two separate paradigms. The forms which include *ni* appear to result from a historical process whereby the phrase marker *ni* attached to independent pronouns to form another paradigm of independent forms. This fits with reconstructions of both PAN and PMP personal pronoun paradigms by Ross (2002:36, 51, 2006:532). In modern Tondano it appears that the forms with *ni* are now simply part of the overall basic independent pronoun paradigm. The exact difference between forms such as *sia* (3.SG) and *nisia* (3.SG) is not entirely clear, although forms such as *nisia* are considered more formal.

²⁰⁹ The statement that independent pronouns have the GR of OBL actually relates to their role (as complements of a preposition) in OBL PPs, e.g. see (553) - (555) below.

(548) *torotè mèa nikow*

toro =itè' <um> èa nikow

can LIM <AV> go 2.PL

‘Only you may go’

(TDN_07_00:18:09)

(549) *niaku limingatè kangkasi*

niaku l<im>inga =itè kangkasi

1.SG <AV.PST> listen LIM also

‘I just listened as well’

(TDN_31_00:16:05)

Independent pronominals may also function as the UNDERGOER NP (i.e. with the GR of ANPIV.UN) in an AV marked clause, as demonstrated by *nisia* (3.SG), *nikow* (2.SG), and *nikita* (1.PL.IN) in (550) - (552):

(550) *panglima ti'i kime'ketla nisia*

panglima iti'i k<im>e'ket =la nisia

commander that.MED <AV.PST> gnaw DIR.PROX 3.SG

‘That commander gnawed (i.e. had sex with) her’

(TDN_31_00:13:09)

(551) *sedang sètuama, sèkumiititè nikou*

sedang sè= tuama sè= k<um>i'tit =itè nikow

while AN.PL man 3.PL.REL <AV> follow LIM 2.PL

‘While the men who just follow you around (you would not dance with)’

(TDN_11_00:14:17)

(552) *komèdomoula niaku*

ko= <um> èdo =mow =la niaku

2.SG.PIV <AV> take CPL DIR.PROX 1.SG

‘You would take me away’

(TDN_29_00:18:35)

Finally, the independent forms also function as the complement of a PP within verbal clauses. Thus, *nikow*, *nikita*, and *nisèa* are part of the oblique PPs in (553) - (555):

(553) *itu paparèntala nètu'a wia nikou*

itu i- pa- parènta =la nè= tu'a
that.MED CV DYN command DIR.DIST AN.PL.NPIV.A old
 wia nikow
to.PROX 2.PL
 'The elders command that to you'
 (TDN_31_00:05:01)

(554) *sitoro maturumi lalan wia nikita*

si= toro ma- turu' =mi lalan wia nikita
3.SG.PIV can AV.DYN indicate DIR.DIST road to.PROX 1.PL.IN
 'He can teach the path (of righteousness) to us'
 (TDN_30_00:04:20)

(555) *supaya korèi mèi wo nisèa*

supaya ko= rèy' <um>èy wo nisèa
so.that 2.SG.PIV not <AV>come with 3.PL
 'So that you don't (have to) come with them'
 (TDN_07_00:05:33)

In addition to their role in verbal clauses such as (553) - (555), independent personal pronouns also function as arguments in non-verbal clauses. In existential constructions these pronouns may function as one of the two PIV marked arguments which occur in the double PIV constructions previously described in §4.4.2, e.g.:

(556) *niaku wèan kaka telu*

niaku wewèan kaka telu
1.SG EXIST older.sibling three
 'I have three older siblings'
 (TDN_12_00:00:20)

In addition, in equational clauses independent pronominals also function as the PIV argument, e.g.:

(557) *tujuh dua niaku*

tujuh dua niaku
 seven two older.sibling
 ‘I am seventy two (years old)’
 (TDN_07_00:15:38)

(558) *nikua tuama, ya*

niaku tuama ya
 1.SG man AFF
 ‘I am a man, yes’
 (TDN_29_00:12:21)

The alternate forms for the 3.SG, 3.PL, and 1.PL.IN independent pronominals displayed in Table 8.2 lack the *ni* component, i.e. they are *sia*, *sèa*, and *kita*. The range of functions of these particular independent forms appears restricted in contrast to those which *nisia*, *nisèa*, and *nikita* express. In the data the reduced forms exclusively have the GR of PIV, e.g.:

(559) *sèa marengi embanua*

sèa <um> warèng N= wanua
 3.PL <AV> return.home INAN village
 ‘They will return home (to) the village’
 (TDN_14_HK_DT_00:03:24)

(560) *paloongkula sèa*

pa- loo’ -en =ku =la sèa
 DYN see, look PN 1.SG.NPIV.A DIR.PROX 3.PL
 ‘I see them’
 (TDN_29_00:13:57)

(561) *tuanakan sa kita sumusuila*

tuana =kan sa kita s<um>usui =la
 thus also if, when 1.PL.IN <AV> speak DIR.PROX
 ‘Thus, if we also chat’
 (TDN_31_00:05:55)

(562) *sia mè'èwèl*

sia <um> wè'wèl

3.SG <AV> tap.branch

‘He will tap the sugar palm tree branch’

(TDN_26_00:02:27)

It is currently not entirely clear if the reduced forms are restricted to the single function as the PIV argument, or if there is simply a gap in the data. When asked about the possibility of the reduced forms being assigned different GRs, speakers have differing views. A number of speakers stated that there are no differences in meaning or function between the two independent forms, while others indicated that the forms without *ni* cannot be used in all contexts. One observation which does hold in the data is that the independent forms which include *ni* are judged by speakers to be more formal and polite, and that when speakers are not using the (more frequently occurring) proclitics it is the full forms which are more often used.

An additional asymmetry between the two sets of 3.SG, 3.PL, and 1.PL.IN independent forms is that the shortened 3.SG and 3.PL forms are very occasionally used to refer to inanimate objects. In comparison, *nisia* and *nisèa* (and the 3.SG and 3.PL proclitics *si=* and *sè=*) do not refer to inanimate participants, e.g.:

(563) *sa sia lumentut, aa tanu ti'in*

sa sia l<um>entut ah tanu iti'i

if, when 3.SG <AV> float HES like that.PROX

‘When it (the onde cake) floats to the surface, ah like this’

(TDN_19_0:05:55)

(564) *sa sia makaro'komou, angkatenoumi*

sa sia ma- karo'ko =mow angkat -en =mow

if, when 3.SG EV.STAT boil CPL remove PV CPL

=mi

DIR.DIST

‘When it (the water) boils, remove it (from the fire)’

(TDN_33_KK_00:04:12)

In both (563) - (564) the pronominal *sia* refers to an animate object which is part of the cooking process. Speakers judge that the use of *sia* for this purpose is incorrect and

ungrammatical. However, in a number of instances these forms are used (sometimes by the same speakers who judged them as incorrect) to refer to inanimate entities. Whether or not this represents an overall reanalysis of *sia/ sèa* is difficult to ascertain, as there are too few examples of *sia* and *sèa* being used in this way.

8.3.3 *Pivot proclitics*

The bound personal pronouns in the second column of Table 8.2 are restricted to functioning as the PIV argument in a clause. The use of proclitics is common in AV marked clauses which often have a PIV argument which expresses a human participant, e.g.:

(565) *kominewangkèritèla*

ko= ma- <in> wangkèr itè =la
2.SG.PIV AV.DYN PST sell LIM DIR.PROX
 ‘You just sold (some food items)’
 (TDN_07_00:20:05)

(566) *kèiminepa’ayang numa*

kèy= ma- <in> pa’ayang N= uma
1.PL.EX.PIV AV.DYN PST work INAN field
 ‘We worked the fields’
 (TDN_21_00:06:10)

(567) *sèmasadiamou uka*

sè= ma- sadia =mow uka
3.PL.PIV AV.DYN prepare CPL coconut shell
 ‘They prepare some coconut shells’
 (TDN_26_00:05:54)

In cases where the PIV argument refers to a non-volitional human participant, and the clause has STATIVE verbal affixation (see §4.5.1), the proclitics still exclusively function as the PIV, e.g.:

(568) *tarèi’ mou mèirang*

ta= rèy’ =mow ma- irang
1.PL.IN.PIV not CPL EV.STAT shy
 ‘We are no longer shy’
 (TDN_14_DK_NK_00:03:58)

(569) *sikaupi'tè' nètu'amu*

si= i- ka- upi' =itè nè= tu'a =mu
 3.SG.PIV CV STAT angry LIM AN.PL.NPIV.A old 2.SG.POSS
 'Your parents are just angry at him'
 (TDN_07_00:12:26)

Proclitics are also used in UV clauses if the PIV argument expresses an animate or human entity²¹⁰, as demonstrated by *si*=(3.SG), *ko*=(2.SG), and *sè*=(3.PL) in (570) - (573), e.g.:

(570) *kaawi'in sipinèrokula*

kaawi'in si= peN- <in> sèro -Ø =ku =la
 yesterday 3.SG.PIV DYN PST search PV 1.SG.NPIV.A DIR.PROX
 'Yesterday I searched for him?'
 (TDN_31_KK_00:07:12)

(571) *sipaturuenè nituama esa*

si= pa- turu' -en =pè' ni= tuama esa
 3.SG.PIV DYN indicate PV INCPL AN.SG.NPIV.A man one
 'The one (first) man still teaches him'
 (TDN_26_00:00:22)

(572) *kopenèronèron*

ko= peN- CVCV- sèro -en
 2.SG.PIV DYN RDP search PV
 '(Your girlfriend) is searching for you'
 (TDN_14_DK_NK_00:06:25)

(573) *sèpakumpulanèala*

sè= pa- kumpul -an =nèa =la
 3.PL.PIV DYN collect LV 3.PL.NPIV.A DIR.PROX
 'They collect them (the sago grubs)'
 (TDN_32_DT_00:01:14)

In addition to functioning as the PIV argument in all types of verbal clauses, proclitics also have this function in equational clauses, e.g.:

²¹⁰ Inanimate PIV UNDERGOERS are instead encoded with NPs, the inanimate phrase marker *N=*, or omitted altogether.

(574) *kuwaki kendis*

ku= waki Kendis

1.SG.PIV in.DIST PN

‘I was in Kendis (village)’

(TDN_21_00:03:13)

(575) *jadi kèitu’amou to?*

jadi kèy= tu’a =mow to

thus 1.PL.EX.PIV old CPL PART

‘So we are already old, right’

(TDN_14_HK_DT_00:07:29)

Finally, as with the independent pronominals, proclitics may function as one of the two PIV arguments which occur as part of double PIV constructions in certain existential clauses, e.g.:

(576) *siwèan ampit*

si= wewèan ampit

3.SG.PIV EXIST spouse

‘He has a wife’

(TDN_21_00:01:08)

(577) *sèwèan loit*

sè= wewèan loit

3.PL.PIV EXIST money

‘They have money’

(TDN_12_00:13:16)

8.3.4 *The status of proclitics: pronouns or agreement?*

It is worth noting here that describing the status of pronominal clitics such as those in §8.3.3 can sometimes be extremely problematic (Siewierska 2004:125), and even controversial. This is because when analysing bound elements some scholars consider them to be pronouns, while others consider that they are agreement markers (Corbett 2003:168). This is the case with Tondano, where the earlier work of Sneddon (1975:141) labels the proclitics in Table 8.2 (and the phrase marker *N=* see §8.4.3) as “topic markers” which are used to “establish cross-reference between the Topic²¹¹ of the clause

²¹¹ In Sneddon’s work “Topic” is the argument which functions as the syntactic pivot.

and predicate” (*ibid*:140). This analysis is therefore one which regards these proclitics as agreement markers.

Evidence that the proclitics in Table 8.2 are unlikely to be agreement markers comes from an examination of their use as proposed by Sneddon (*ibid*:141). These Topic markers are described as obligatorily occurring (pre-predicate) if the PIV argument occurs post predicate²¹². However, examples such as (578) - (579) (which commonly occur in the data) dispute this:

(578) (*si=) *paiwuana sipèrèt*

pa- iwu -an =na si= pèrèt

DYN slice LV 3.SG.NPIV.A AN.SG bat

‘He slices up the bat’

(TDN_32_OL2_00:02:35)

(579) (*si=) *kiniitenèami sia, to*

k<in>i’t -Ø =nèa =mi sia to

<PST> follow PV 3.PL.NPIV.A DIR.DIST 3.SG PART

‘They followed him, right?’

(TDN_07_00:12:31)

There is often variation as to what constitutes agreement markers and what constitutes anaphoric pronouns (Siewierska 2004:121), and it is also the case that some cases of agreement are more canonical than others (Corbett 2003:162). As such, the difference between pronouns and agreement markers is best viewed as a scalar continuum (Siewierska 2004:121). Using diagnostics from a number of sources (Corbett 2003:180; Siewierska 2004:121-26; and Kroeger 2005a:326), the proclitics in Table 8.2 are analysed as being much closer to the pronoun end of the scale as they display the following characteristics²¹³:

- They are full syntactic arguments. This fact alone is a strong indicator of a status that is closer to pronominal. In this thesis there are numerous examples of

²¹² Sneddon considers them obligatory if the PIV NP is omitted. This is also unlikely due to the fact that arguments with any GR are commonly omitted without the need for agreement markers or pronouns (see §4.5).

²¹³ The only proclitic form which does not possess all of these features is the inanimate phrase marker *N=*, and this exception is explained below.

proclitics which function as the PIV argument in a clause - see for instance §4.5.4 and §8.3.3.

- Proclitics attach to words in a clause other than the verbs which select them (e.g. to negators, adverbs, or auxiliaries - see §5.4 and §5.7).
- They are not obligatory.
- They appear to be in complementary distribution with full NPs, i.e. there is no multi-representation (Corbett 2003:186).
- They have descriptive content and do not simply encode grammatical information.
- They often refer to entities which are high in referentiality, i.e. are definite and identifiable.

8.3.5 *Possessive enclitics*

The NP.IV.A/POSS enclitics presented in column 3 of Table 8.2 perform two specific functions, one at a phrasal level and one at a clausal level. At a phrasal level these enclitics function as modifiers of head nouns within (possessive) NPs. Their function is to reference the entity which possesses another entity referred to by the head. The second function is as a full clausal argument which references the ACTOR argument within an UV marked verbal clause. The enclitics share these two specific functions with the NP.IV.A/POSS phrase markers (see §8.4.2). The function of these enclitics as clausal arguments in UV marked verbal clauses is described in various other chapters (§4.5.4 and §9.1.2), and is only briefly mentioned here.

The possessive enclitics occur directly after the (head) noun they modify, and no additional bound elements may intervene between them and the head. The possessive enclitic almost exclusively expresses an animate (often human) entity which possesses the entity referred to by the head noun. The possessed noun may refer to an animate entity which has a personal or kin relationship with the possessor enclitic, e.g.:

(580) *sètu'aku*

sè= tu'a =ku

AN.PL old 1.SG.POSS

'My parents'

(TDN_12_00:09:16)

(581) *sèka 'ampitèi tuama*

sè= ka'ampit =mèy tuama
AN.PL friend 1.PL.EX.POSS man
'Our male friends'
(TDN_21_00:00:36)

(582) *sipatuarita*

si= patuari =ta
AN.SG nuclear.family 1.PL.IN.POSS
'Our family'
(TDN_28_00:00:05)

The possessed head noun may also refer to an inanimate entity which the possessor physically owns, or is part of, as in (583) - (585):

(583) *wanuamèi*

wanua =mèy
village 1.PL.EX.POSS
'Our village'
(TDN_12_00:01:48)

(584) *walèmu*

walè =mu
house 2.SG.POSS
'Your house'
(TDN_28_00:02:22)

(585) *tampanèa*

tampa =nèa
place 3.PL.POSS
'Their place'
(TDN_32_OL_00:01:00)

Or, it may refer to other inanimate objects such as body parts, as in (586) - (587):

(586) *sesepunana*

Ce- sepun -an =na
place nasal mucus LV 3.SG.POSS
'His nose
(TDN_31_00:06:32)

(587) *entontina*

N= tonti' =na
INAN penis 3.SG.POSS
'His penis'
(TDN_28_00:05:01)

Finally, the possessed noun may refer to a more abstract entity, such as in (588) - (589):

(588) *pepa 'ayangengku*

Ce- pa'ayang -en =ku
NR work PV 1.SG.POSS
'My work/job'
(TDN_32_OL_KK_00:05:20)

(589) *sejarahta*

sejarah =ta
history 1.PL.IN.POSS
'Our history'
(TDN_31_00:00:18)

Possessive NPs such as these have the same range of clausal functions as any other NP. They often function as complements of verbs or oblique PPs, and have the GRs of PIV (590), NPIV.UN (591), or OBL (592), e.g. (possessive NPs in parentheses):

(590) *sioki 'ku masekola mana*

[si= oki' =ku] ma- sekola mana
AN.SG small 3.SG.POSS AV.DYN school there
'My child attends school there'
(TDN_12_00:07:50)

(591) *siminèdomou taè empepatilna*

si= <im> èdo =mow tarè [N= pepatil =na]
 3.SG.PIV <AV.PST>take CPL recently INAN machete 3.SG.POSS
 ‘He’s just now taken his machete’
 (TDN_26_00:03:10)

(592) *simana’ aki walèmu?*

si= <um> ana’ waki [walè =mu]
 3.SG.PIV <AV> stay at.DIST house 2.SG.POSS
 ‘He stays at your house?’
 (TDN_28_00:02:21)

In non-verbal (equational) clauses they may function as the PIV NP, e.g.:

(593) *sampitku sioki kaenam*

[si= ampit =ku] si= oki’ ka- enam
 AN.SG spouse 1.SG.POSS AN.SG small ORD six
 ‘My husband is the sixth child’
 (TDN_12_00:11:30)

(594) *siurangku waki brisbèn*

[si= urang =ku] waki Brisbane
 AN.SG child 1.SG.POSS in.DIST PN
 ‘My child is in Brisbane’
 (TDN_20_00:00:13)

In addition to what is observed in (580) - (594), there are instances in which the 3.SG POSS enclitic =na (3.SG.POSS) displays a slightly different pattern. In the event that the possessor of a head noun is a non-human or inanimate entity, both the POSS enclitic and a noun which references the possessor co-occur within the NP, e.g.:

(595) *kemaal tarè, hargana cinkè*

ka- ma’al tarè [harga =na cinkè]
 very expensive recently price 3.SG.POSS clove
 ‘Just now it's too expensive, the price of cloves’
 (TDN_12_00:05:23)

(596) *kokongna santang*

[kokong =na santang]

head 3.SG.POSS coconut.milk

‘The head (the main part) of the coconut milk’

(TDN_32_KK_00:07:43)

(597) *marou witek waki, apa, po’ongna cinkè*

ma- row’ witek waki apa [po’ong =na cinkè]

AV.DYN far worm.larvae from.DIST what tree 3.SG.POSS clove

‘(They) remove worms from, what, (from) clove trees’

(TDN_12_00:02:34)

The possessive NPs in (595) - (597) have a similar structure to those where the POSS phrase markers *ni=* and *nè=* are used (see §8.4.2). However, the difference here is that the entity possessing the head noun is inanimate, a characteristic which possessor nouns marked with *ni=* or *nè=* never have. The pattern of marking the NPs in (595) - (597) is used to encode part-whole relationships within inanimate entities, a relationship which is normally encoded by the POSS phrase markers (c.f. (619) - (621) below), e.g.: *ghio ni=tim* (face AN.SG.POSS= PN) ‘Tim’s face’ or *lawas ni=kalo* (hand=AN.SG.POSS PN) ‘Kalo’s hand’. The use of *=na* in this function is the only situation where POSS enclitics refer to inanimate entities. The motivation behind this can only be speculated on, but it is possible that *=na* functions in this way via analogy with the POSS phrase markers.

The second function of these enclitics is at a clausal level, where they may occur as full syntactic arguments in UV marked verbal clauses. In this function they exclusively represent a participant with the semantic role of ACTOR, and they only occur attached to the head of the verbal predicate, e.g. (for further examples see the UV marked transitive clauses in §4.5.4):

(598) *padahal paèdonku empèra*

padahal pa- èdo -en =ku N= pèra’

although DYN take PV 1.SG.NPIV.A INAN roe

‘Although I take the fish eggs’

(TDN_28_00:01:07)

(599) *pesesiwonèa, gula mèa*

pa- Ce- siwo -en =nèa gula
DYN IRR make PV 3.PL.NPIV.A sugar
 ‘They will make the palm sugar’
 (TDN_32_OL_00:02:58)

8.3.6 *Non-specific referents anu/ano*

There are two lexical elements which are used to explicitly reference a participant as non-specific or unidentifiable²¹⁴ at the time of utterance. Both of these forms are loan words from standard Indonesian and Manado Malay²¹⁵, these being the standard Indonesian *anu* ‘thingy, what’s it, who’s it’, something, someone’, and the cognate form *ano* in Manado Malay. Although it may be tempting to analyse these forms as pronouns, they are actually better analysed as nouns due to the fact that they host various phrase markers and function as the heads of NPs. Moreover, the examples below demonstrate that *anu/ano* have a slightly different function than indefinite pronouns.

anu/ano function as all-purpose nouns which are used to refer to indefinite entities, both animate and inanimate, for example:

(600) *sèmelaamou waki ano, waki akel*

sè= ma- laa =mow waki ano waki akel
3.PL.PIV AV.DYN go CPL to.DIST NON.SPEC to.DIST sugar.palm.tree
 ‘They go to the what’s it, sugar palm tree’
 (TDN_32_OL_00:01:59)

(601) *pesiwonèamou enano*

pa- siwo -en =nèa N= ano
DYN make LV 3.PL.NPIV.A INAN NON.SPEC
 ‘They make the thingy’
 (TDN_32_OL_00:06:06)

²¹⁴ The level of definiteness and specificity is also encoded to some extent by the GR of an argument - see §9.2.

²¹⁵ The existence of true indefinite pronouns in conservative Philippine-type languages is seen as questionable, especially if the ‘nominalist hypothesis’ regarding these languages is adhered to (Kaufman 2009a:204). It has been put forward that conservative Philippine-type languages do not have indefinite pronouns, rather they have a construction consisting of an existential marker plus a voice marked lexical root (*ibid*: 204). However, this construction is not present in Tondano.

(602) *mèlèngla sianu*

<um> pèlèng =la si= anu
 <AV> choose DIR.PROX AN.SG NON.SPEC
 ‘(She) will choose what’s his name’
 (TDN_31_00:14:34)

Examples (600) - (602) demonstrate that *anu/ano* have the same phrasal function as other nouns. In (600) *ano* is a complement to the preposition *waki* which is the head of a PP, while in (601) - (602) it is the head of the NPs *en=ano* and *si=ano*. At a clausal level these phrases then have the same function as those with any other noun, i.e. as the complement within an oblique OBL PP in (600), a PIV NP in (601), and an NPIV.UN NP in (602).

Examples such as (601) are interesting exceptions to the rule that all PIV NPs must express definite and identifiable entities (see §9.2). However, the explanation for this exception is clear if the discourse function of *anu/ano* is taken into account. These nouns have a primary pragmatic function as hesitation markers, as well as what has previously been labelled as “recognitional expression” (Enfield 2003:115). These words are used when a speaker has temporarily forgotten a specific word, or does not want to identify the entity in question.

This is the case in (600) - (602), which demonstrate the fact that a speaker has only temporarily forgotten the identity of an entity. Because of this, the specific noun which expresses the identifiable entity often occurs after the NP containing *anu/ano*, e.g.:

(603) *maèngkat ti’i ku’a telu enanu, telu babak*

maèngkat iti’i ku’a telu N= anu telu babak
 traditional.dance that.MED PART three INAN NON.SPEC three phase
 ‘That traditional dance then (it’s) three what’s its, three parts’
 (TDN_31_00:01:25)

Alternatively, the entire clause may be repeated, with the identifiable entity then expressed with an NP (i.e. with a common or proper noun), e.g.:

(604) *pasiwonèa para para*

pa- siwo -en =nèa para para
DYN make LV 3.PL.NPIV.A RDP waste.hole
 ‘They make the waste holes’
 (TDN_32_OL_00:06:09)

The clause in (604) occurs directly after that in (601). This demonstrates that the PIV NP in (601) was always definite and identifiable, as is required, but that the speaker was simply searching for the correct lexical item.

8.4 Phrase markers

This section examines the distribution and function of the three different types of clitic phrase markers hosted by various categories of nouns. These phrase markers²¹⁶ are common occurring elements within NPs, and are similar to those frequently observed in other Philippine-type languages (Reid 2002:295; Himmelmann 2005:145). Only one of the three sets of phrase markers in Tondano (the NPIV.A/POSS *ni=* and *nè=* - see §8.4.2) is obligatory²¹⁷. Furthermore, often some of the semantic features they encode (i.e animacy), and the GR of the NPs they are part of, are discernible through other means.

The phrase markers and the GR of the NP they modify are outlined in Table 8.7. In contrast to some other well known Philippine-type languages (e.g. Tagalog, Iloko), the Tondano phrase marker paradigm does not contain separate forms for common and proper nouns. Rather, the phrase markers are primarily differentiated with regards to the animacy features of the noun they modify.

²¹⁶ It should be noted that previous terminology used for these type of elements in Philippine-type languages varies greatly, with numerous terms being utilised such as: articles, case marking particles, determiners, construction markers, common noun markers, prepositions, specifiers, and relation markers (Reid 2002:295). The label of ‘phrase markers’ is preferred here. It is judged the most appropriate due to the fact that the fundamental function of these elements is to mark the heads of NPs.

²¹⁷ It is possible that historically the phrase markers played a greater role in the syntax of the language (e.g. for encoding GRs) and were obligatory. The current system possibly represents a breakdown of an earlier system. Whatever the case, the encoding of GRs is achieved without the use of phrase markers (see §4.3)

Table 8.3: Phrase marking clitics

Phrase markers:			
Animate:	GR of NP:	Inanimate:	GR of NP:
<i>(s)i=</i> (3.SG)	PIV, NPIV.UN, OBL	<i>N=</i> (3.SG)	PIV, NPIV.UN, OBL
<i>(s)è=</i> (3.PL)	PIV, NPIV.UN, OBL	<i>N=</i> (3.PL)	PIV, NPIV.UN, OBL
<i>ni=</i> (3.SG)	NPIV.A		
<i>nè=</i> (3.PL)	NPIV.A		

The phrase markers in Table 8.4 are examined separately in the following subsections.

8.4.1 Phrase markers *si=* and *sè=*

The bound forms *si=* (AN.SG) and *sè=* (AN.PL) have a number of different functions throughout Tondano grammar. While only their function as phrase markers is detailed here, they also function as personal pronouns (§8.3.3) and relative/resumptive pronouns (§4.6.2) and (§10.3.1)).

The phrase markers *si=* and *sè=* are hosted by the head noun of an NP. These NPs have a number of different grammatical functions within a clause. The following points summarise the types of nouns which host *si=* and *sè=*, and the function of NPs which contain these phrase markers:

- Common nouns which refer to entities considered to be animate (both human and non-human), which may be currently alive or dead, real or mythological.
- Proper nouns (commonly animate entities) including names of people and kin terms. Therefore, the proper nouns marked with *si=* and *sè=* are identifiable (i.e. definite) entities.
- A small number of proper nouns which express inanimate entities may also host *si=* and *sè=*.
- *si=* and *sè=* do not encode the clausal function of the NP they are a part of. These NPs may have various GRs in both AV and UV voice marked clauses.

The use of these phrase markers on common nouns to refer to animate and human entities is observed as follows:

(605) *siurangku waki brisbèn*

si= urang =ku waki Brisbane
 AN.SG child 1.SG.POSS in.DIST PN
 ‘My daughter is in Brisbane’
 (TDN_20_00:00:13)

(606) *siampitku sioki kaenam*

si= ampit =ku si= oki’ ka- enam
 AN.SG spouse 1.SG.POSS AN.SG small ORD six
 ‘My husband is the sixth child’
 (TDN_12_00:11:30)

(607) *sètou waki wanuaku*

sè= tow waki wanua =ku
 AN.PL person in.DIST village 1.SG.POSS
 ‘The people in my village’
 (TDN_12_00:04:25)

In (605) - (607) *si=* marks the common nouns *urang* and *oki’* as animate and singular, while in (607) *sè=* marks the noun *tow* as animate and plural. In these examples the nouns express human entities, however, the primary feature encoded with these phrase markers is simply animacy. Non-human animate entities are also marked with *si=* and *sè=*, e.g.:

(608) *mèi kumaan sèko’ko wo sètìèi*

<um> èy k<um>aan sè= ko’ko’ wo sè= tièy
 <AV> come <AV> rice AN.PL chicken and AN.PL pig
 ‘(He) comes to eat some chicken and pork’
 (TDN_28_00:02:46)

(609) *pesesiwonèa siwatè*

pa- Ce- siwo -en =nèa si= watè
 DYN IRR make PV 3.PL.NPIV.A AN.SG sago grub
 ‘They will prepare (cook) the sago grub’
 (TDN_32_DT_00:00:41)

In (608) *sè=* marks the common nouns *ko'ko'* and *tièy* as animate and plural, while in (609) it designates *watè* as animate and singular.

Nouns which are marked with *si=* and *sè=* may have differing levels of definiteness. For example, in (605) - (607) and (609) the common nouns *urang*, *ampit*, *tow*, and *watè* are all identifiable and definite, while in contrast the common nouns *ko'ko'* and *tièy* in (608) are not. In this clause *sè=* refers to common nouns which are non-specific (indefinite) mass nouns²¹⁸.

si= and *sè=* may also modify nouns which are definite and identifiable by default, i.e. proper nouns, e.g.:

(610) *mèi sivèike*

<um>èi si= Vèike
 <AV> come AN.SG PN
 'Veike will come'
 (TDN_14_HK_DT_00:02:06)

(611) *kèrètengkula sitim*

kèrèt -en =ku =la si= Tim
 summon PV 1.SG.NPIV.A DIR.PROX AN.SG PN
 'I would call Tim (to come and eat)'
 (TDN_31_KK_00:04:43)

si= and *sè=* may also mark proper nouns referring to entities which are not human or animate, but which are considered alive and which are culturally and spiritually important, e.g.:

(612) *kaa sèmate 'umou, siopo empung*

ka'a sè= ma- te'u =mow si= Opo Empung
 because 3.PL.PIV EV.STAT know CPL AN.SG elder God
 'Because now they know God'
 (TDN_12_00:14:58)

²¹⁸ These phrase markers may also be used to denote an entire species, in this instance either *si=* or *sè=* may be used.

(613) *kosimusuimi sikarema wo, silumimu't*

ko= s<im>usui =mi si= Karema wo si=
2.SG.PIV **<AV.PST> speak** **DIR.DIST** **AN.SG** **PN** **and** **AN.SG**
 Lumimu'ut
 PN

'You spoke about Karema and Lumimu'ut'

(TDN_31_00:11:17)

(614) *kuso'o matoanou sibrawijaya*

ku= so'o <um> ato -an =mow si= Brawidjaya
1.SG.PIV **don't.want** **<AV>** **see, look** **MUT** **COMP** **AN.SG** **PN**

'I don't want to meet (i.e. see each other) the Brawijiya regiment'

(TDN_21_00:02:37)

(615) *mawi'wisou siraki waki lour*

ma- wi'wis =mow si= Raki waki lour
AV.DYN **blow** **CPL** **AN.SG** **east wind** **on.DIST** **lake**

'The East wind blows across the lake'

(Dotulong 2010: 9)

In (612) - (613) the proper nouns refer to God (*opo empung*) and the two main characters from the pre-Christian creation myth (*karema* and *lumimu'ut*). The use of *si=* and *sè=* with proper nouns such as these is not surprising, despite the fact they are not strictly animate or human. On some spiritual level they are considered to be present, and are considered much closer to animate beings than inanimate objects or animals.

The use of the phrase markers with proper nouns like those in (614) - (615) is much rarer. The proper nouns *brawijiya* and *raki* are not only inanimate, but are slightly more abstract than others which host *si=* and *sè=*. The use of the phrase markers in this instance is due to the high level of referentiality of the entities in discourse, and because they are culturally relevant. It appears that these features allow certain inanimate proper nouns to be anthropomorphised somewhat.

At a clausal level *si=* and *sè=* do not occur as part of NPs with any specific GR. In fact, NPs which include *si=* or *sè=* may function as any GR except NPIV.A. The following examples show *si=* and *sè=* as part of a PIV NP (616), an NPIV.UN NP (617), and the OBL NP complement of a PP (618):

(616) *pèiwuana sipèrèt*

pa- iwu -an =na si= pèrèt

DYN slice LV 3.SG.NPIV.A AN.SG bat

‘He slices the bat’

(TDN_32_OL2_00:02:35)

(617) *korèi makaèdo sikalo*

ko= rèy’ maka- èdo si= Kalo

2.SG.PIV not AV.POT take AN.SG PN

‘You wouldn’t take Kalo away’

(TDN_31_OL_00:02:50)

(618) *mengalèngalèi wia siopo wa’ilan*

meN- CVCV- alèy wia si= Opo wa’ilan

AV.DYN RDP implore from.PROX AN.SG elder noble, great

‘(We) are begging (forgiveness) from the noble God’

(TDN_29_00:20:39)

8.4.2 *Phrase markers ni= and nè=*

The second set of clitic phrase markers are the NPIV.A/POSS *ni=* (AN.SG) and *nè=* (AN.PL).

In contrast to the multi-functional elements *si=* and *sè=*²¹⁹, *ni=* and *nè=* do not have an additional function as full (pronominal) clausal arguments.

However, the nouns which host them do express some of the same features as seen with nouns in §8.4.1 above.

The following points summarise the features of *ni=* and *nè=*.

- They may be hosted by both common and proper nouns.
- The defining features expressed with these phrase markers are animacy and clausal and phrasal function.
- Nouns hosting *ni=* and *nè=* may or may not be definite and identifiable.
- They have specific functions at both a phrasal and clausal level. Firstly, as a marker of the possessor noun within possessive NPs, and secondly, as marker of the ACTOR NP in UV marked clauses (these features are shared with the enclitics described in §8.3.5).

²¹⁹ That is, as well as functioning as phrase markers, *si=* and *sè=* also function as personal pronominals (see §8.4.1) and relative pronouns (see §10.3.1).

- Unlike all other phrase markers, *ni=* and *nè=* are obligatory for nouns which have either of these functions at a phrasal or clausal level.

When functioning at a phrasal level, possessive NPs with POSS phrase markers display a different structure to those with POSS enclitics. POSS phrase markers attach to the possessor noun, and not to the possessed noun²²⁰. The possessor noun and proclitic phrase marker always occur following the possessed noun.

The entity which is possessed may be an inanimate object as in (619), or body parts (i.e. part whole relationships) as in (620) - (621) e.g.:

(619) *walè nitim*

walè ni= Tim
house AN.SG.POSS PN
 ‘Tim’s house’
 (TDN_32_OL_KK_00:00:09)

(620) *kalè ’kèw nipèrèt*

kalè ’kèw ni= pèrèt
wing AN.SG.POSS bat
 ‘The bat’s wing’
 (TDN_32_KK_00:02:07)

(621) *engio nitim*

N= gio ni= Tim
INAN face AN.SG.POSS PN
 ‘Tim’s face’
 (TDN_28_00:00:41)

The POSS phrase markers also express relations between entities, such as personal (622) and kin relationships (623):

(622) *dosen niokta*

dosen ni= Oktavius
lecturer AN.SG.POSS PN
 ‘Oktavian’s lecturer’
 (TDN_28_00:02:33)

²²⁰ Possessive NPs with POSS phrase markers are therefore dependent marking rather than head marking.

(623) *siopo kangkasi papa nilumimu 'ut?*

si= Opo kangkasi papa ni= Lumimu'ut
 AN.SG elder also father AN.SG.POSS PN

‘The elder was also the father of Lumimu’ut?’

(TDN_31_00:11:48)

In addition to the more concrete concepts of possession in (619) - (623), the relationship between the possessor and possessed may also be slightly abstract. In (624) the entity judged as possessed (i.e. advice) is intangible. In (625) the relationship expressed is that of ethnic origin, with the ‘possessor’ actually the region that the possessed entity is judged to belong to²²¹:

(624) *sesanien nèopo*

Ce- sani -en nè= Opo
 NR advice PV AN.PL.POSS elder.PN

‘The advice of the Gods’

(TDN_30_00:04:29)

(625) *tu'a rior nèminahasa*

tu'a rior nè= Minahasa
 old fast AN.PL.POSS PN

‘The pre-Christian elders of Minahasa’

(TDN_31_00:04:06)

In certain instances both POSS phrase markers and POSS enclitics occur as part of more complex possessive NPs. These are NPs in which both the head (possessed) noun and the possessor noun are possessed. This construction allows for multiple levels of possession along the lines of “my father’s uncle’s sister’s house”, e.g.:

(626) *sikaka niampitku*

si= kaka ni= ampit =ku
 AN.SG older.sibling AN.SG.POSS spouse 1.SG.POSS

‘My husband’s older brother’

(TDN_12_00:10:39)

²²¹ Therefore, in (623) the possessor is not strictly an animate entity. However, in this case the proper noun *Minahasa* refers to the ethnic group (of people) to which the possessed entity belongs, and there is still a link to animate entities.

(627) *siguru nioki 'ku*

si= guru ni= oki' =ku
 AN.SG teacher AN.SG.POSS small 1.SG.POSS
 'My child's teacher'
 (TDN_12_00:06:34)

In (627) the possessor noun *ampit* 'spouse' hosts both the POSS phrase marker *ni=* and a POSS pronoun *=ku*. This results in embedded possession occurring within one NP, whereby *=ku* expresses the possessor of *ampit* while *ni=* marks *ampit=ku* as the possessor of the head noun *kaka*. Similarly, in (627) the possessor noun *oki'* 'child' also hosts both the phrase marker and the POSS pronoun. Here *=ku* expresses the possessor of *oki'*, while *ni=* denotes that *oki'=ku* is the possessor of the head noun *guru*.

When functioning at a clausal level (in UV marked verbal clauses) these phrase markers are hosted by the head of the NP with the semantic role of ACTOR. In UV marked verbal clauses these phrase markers²²² only ever modify nouns with the ACTOR semantic role, e.g. *ma-piara* (AV.DYN-raise) 'the creator' and *mama=nèa* (mother=3.PL.POSS) 'their mother' in (628) - (629) (see §4.5.4 for more examples):

(628) *tèmpo takèrètenou nimapiara*

tèmpo ta= kèrèt -en =mow ni= ma- piara
 time 1.PL.IN.PIV summon PV COMP AN.SG.NPIV.A AV.DYN raise
 'When we would be called by the creator (i.e. death)'
 (TDN_07_00:16:45)

(629) *sèpinatèanou nimamanèa to'?*

sè= p<in>atè -an =mow ni= mama =nèa
 3.PLPIV <PST> die LV COMP AN.SG.NPIV.A mother 3.PL.POSS
 to
 PART
 'They were killed by their mother, right?'
 (TDN_07_00:19:51)

8.4.3 Phrase marker *N=*

The third phrase marker in Table 8.4 is the homorganic nasal clitic *N=*, which results in the forms *(e)n=*, *(e)m=*, *(e)ng=*, and *e=* (see §2.6.1).

²²² This restriction holds in many Philippine-type languages.

The various functions and different types of nouns which host *N=* are summarised as follows:

- Common nouns which are non-human and inanimate are marked with *N=* .
- Common nouns marked with *N=* may or may not be definite and identifiable.
- NPs modified with *N=* may have any GR with the exception of NPIV.A.
- *N=* may also function as a full pronoun in UV marked clauses. In this function it is restricted to expressing the PIV argument.
- Within NPs *N=* may also be used as a nasal linker which links all modifying elements to the head of the NP.

The following examples demonstrate common nouns which are marked with *N=*, and the different forms of *N=*:

(630) *enpanci oki ti'i*

N= panci oki' iti'i
INAN pan small that.MED
 'That small pan'
 (TDN_25_00:05:03)

(631) *mba'ang*

N= wa'ang
INAN tooth
 'The tooth'
 (TDN_28_00:05:30)

(632) *engkasèlokan*

N= ka> sèlok <an
INAN NR wrong NR
 'A mistake'
 (TDN_30_00:05:36)

NPs which have nouns marked with the animate marker *N=* may have various GRs. In the following examples *N=* modifies the head of a PIV NP (633), an NPIV.UN NP (634), and the OBL NP within a PP (635) - (636):

(633) *paswionou engula*

pa- siwo -en =mow N= gula
DYN make PV CPL INAN sugar
'(They) make the (palm) sugar'
(TDN_25_00:04:02)

(634) *sikimiring empistol*

si= k<im>irong N= pistol
3.SG.PIV <AV.PST> conceal INAN pistol
'He hid a pistol'
(TDN_07_00:07:46)

(635) *minaanakèla witu enggot*

ma- <in> anak =la witu N= got
AV.DYN <PST> child DIR.PROX in.MED INAN drain
'(You) gave birth in a drain'
(TDN_07_00:06:54)

(636) *siminèdomou taè empepatilna*

si= <im> èdo =mow tarè N= pepatil =na
3.SG.PIV <AV.PST>take CPL recently INAN machete 3.SG.POSS
'He's just now taken his machete'
(TDN_26_00:03:09)

In (633) - (636) there are different values of definiteness and specificity expressed by nouns marked with $N=$ ²²³. In (631) the common noun *gula* 'palm sugar' is uniquely identifiable to both interlocutors and is therefore definite. Alternatively, in (634) - (636) the head nouns *pistol* 'pistol', *got* 'drain', and *pepatil* 'machete' are all unidentifiable to the addressee and are therefore indefinite. However, these three indefinite arguments have different levels of specificity, with *pistol* and *pepatil* being specific, while *got* is non-specific.

While *pistol*, *pepatil*, and *got* are all unidentifiable to the addressee, *pistol* and *pepatil* refer to a particular gun which was hidden and a particular machete which was taken, they are therefore specific (and are identifiable to the speaker). In contrast, *got* is an entity

²²³ See §9.2.1 for a precise classification of definiteness and specificity.

which is unidentifiable and which may refer to any possible drain, it is therefore non-specific (and is unidentifiable to both speaker and addressee).

Example (633) demonstrates that when nouns marked with *N=* are the head of a PIV NP, they are definite by default. In contrast, nouns which function as heads of NPIV.UN NPs or OBL complements of PPs are always indefinite, despite any differing levels of specificity.

An additional function of *N=* is that of a linking element between the head noun and any other modifiers within an NP²²⁴. As with its other functions, *N=* is non-obligatory when utilised for this purpose.

When used as a linking element *N=* will often occur on both the head noun and the lexical element which modifies it, e.g.:

(637) *enrumping engkasela*

N= *rumping* *N=* *ka-* *sela*
INAN **wok** **INAN** **very** **big**
'A very big wok'
(TDN_26_00:07:29)

(638) *engkaan emberu*

N= *kaan* *N=* *weru*
INAN **rice** **INAN** **fresh**
'The fresh rice'
(TDN_31_00:01:32)

(639) *embaya engkotor*

N= *waya* *N=* *kotor*
INAN **all** **INAN** **dirty, soiled**
'The whole mess'
(TDN_3_00:05:18)

²²⁴ The use of *N=* as a linking element is attested as ubiquitous in Philippine languages Kaufman (2009a:211).

(640) *entien embangko*

N= tien N= wangko
 INAN stomach INAN big
 ‘The big stomach
 (TDN_07_00:02:03)

(641) *enatas engkaoatan*

N= atas N= ka> oat <an
 INAN above INAN NR midday,day NR
 ‘Above the earth’
 (TDN_30_00:05:17)

The non-obligatory nature of *N=* as both phrase marker and linker means that NPs such as *eng=kaan em=beru* in (638) can also occur as simply *kaan weru*. Similarly, *N=* may occur on the head of the NP and not the modifier, i.e. *eng=kaan weru*, or even on the modifier but not the head, e.g.:

(642) *kotèi ense ’ut*

kotèy N= se’ut
 stem INAN banana
 ‘A/some banana (palm) stem’
 (TDN_11_AW_HL_00:02:51)

The somewhat unpredictable use of *N=* is understandable considering that the information it encodes is rather redundant (as is also the cause with *si=* and *sè=*). At a phrasal level information regarding animacy is often discernible from the semantics of the noun itself, while the identity of the head noun is observed from the order of elements within the NP. Furthermore, at a clausal level the functions of the various NPs are usually expressed via other means such as voice marking, word order, and category of personal pronominal (see §4.3 and §8.2).

The final function of *N=* is as a pronominal PIV argument within a clause. In this (non-obligatory) function *N=* acts as an anaphoric pronoun referring to a highly salient entity in the discourse which has already been mentioned a number of times. The use of *N=* in (641) - (643) in this way is judged to be pronominal because it has the features of pronouns outlined in §8.3.4. The use of *N=* as a pronoun is quite infrequent in the data, and it occurs predominantly amongst older speakers.

Due to the fact that *N=* only marks inanimate entities, it is only used in clauses in which the PIVargument expresses an inanimate entity, i.e. in UV marked verbal clauses, e.g.:

(643) *kaa mpetetoea'mou witu rumping*

ka'a N= i- pa- Ce- toa' =mow witu rumping
 because 3.SG.INAN CV DYN IRR pour CPL in.MED wok
 'Because (he) will pour it (the palm sugar sap) into the wok'
 (TDN_25_00:05:53)

(644) *empekekèetan*

N= pa- Ce- kè'èt -an
 3.SG.INAN DYN IRR extract.sap PV
 '(He) will extract it (the plam sugar sap)'
 (TDN_32_OL_00:01:57)

(645) *empawèènèala*

N= pa- wèè -en =nèa =la
 3.SG.INAN DYN give PV 3.PL.NPIV.A DIR.PROX
 'It (the spices) is added by them'
 (TDN_32_OL2_00:06:55)

9.0 VERBAL PREDICATE STRUCTURE AND MORPHOLOGY

In this chapter the topics of verbal predicate structure and verbal predicate morphology are examined (excluding the primary verbal affixes already described in §4.5.1). In §9.1 the structure of both AV and UV verbal predicates is described, including the ordering of the different morphological elements found within them. In §9.2 the topic of voice selection in verbal clauses is discussed. This section explains the factors which condition the selection of ACTOR or UNDERGOER voice marking. These factors are: definiteness/specificity, referentiality, and the semantic role of entities represented by PIV arguments.

In §9.3 the morphological means for marking tense (§9.3.1), aspect (§9.3.2), and mood (§9.3.3) are discussed. Following this, in §9.4 the morphological elements which may result in variation to the number of clausal arguments are presented; these are causatives (§9.4.1), requestives (§9.4.2), mutuals (§9.4.3), and reflexives (§9.4.4). Lastly, §9.5 examines verbal morphology which provides information on the sequence or manner in which actions or events expressed by the verbal predicate are achieved. This morphology is labelled as completive (§9.5.1) and manner marking (§9.5.2).

9.1 Verbal predicate structure

The core elements which make up a verbal predicate were briefly outlined in §3.7. In this section the two specific types of verbal predicate structure are described in further detail. Firstly, in §9.1.1 the structure of AV marked verbal predicates is described, before the structure of UV marked verbal predicates is outlined in §9.1.2. The structure and ordering of verbal elements presented here is valid for all predicates regardless of whether the verbal head is marked with DYNAMIC, POTENTIVE, or STATIVE prefixes.

Table 9.1 lists some common bound morphological elements which occur in various combinations within verbal predicates:

Table 9.1: Morphological elements within verbal predicates

	Function encoded:		Function encoded:
Form:		Form:	
<um>	Voice affix: ACTOR	<i>paki-</i>	REQUESTIVE
<i>-en</i>	Voice affix: PATIENT	<i>Ce-</i>	IRR mood
<i>-an</i>	Voice affix: LOCATIVE	<i>CVCV-</i>	IMPERF aspect
<i>i-</i>	Voice affix: CONVEYANCE	<i>=mow</i>	COMPLETIVE
<in>	Past tense (LV & PV)	<i>=pè'</i>	INCOMPLETIVE
<im>	Past tense (AV)	<i>=kè</i>	EVIDENTIAL
<i>nèi</i>	Past tense (CV)	<i>=la</i>	PROXIMATE deictic marker
<i>pa-</i>	DYNAMIC primary verbal affix	<i>=mèè</i>	MEDIAL deictic marker
<i>ka-</i>	STATIVE primary verbal affix	<i>=mi</i>	DISTAL deictic marker
<i>ka-</i>	POTENTIVE primary verbal affix	<i>=itè</i>	LIMITATIVE marker
<i>pa-</i>	CAUSATIVE		
<i>paka-</i>	COMPLETIVE		
<i>kapa-</i>	MANNER marker		
<i>-an</i>	MUT marker		

9.1.1 AV verbal predicates

The structure and ordering of elements within AV marked verbal predicates is as follows (parentheses indicate non-obligatory elements):

Figure 9.1: Structure of AV predicates

(NEG) (AUX) (VERB AFFIX) (TAM) VOICE marked verb (TAM) (ADV) (DEI) (NP_{IV}.UN -PRO / NP)

The head of any verbal predicate is a lexical root which is marked with one of the primary verbal affixes and a voice affix. Due to the fact that primary verbal affixation may be zero marked (see §4.5.1), the minimal surface form for an AV verbal predicate is a root to which the AV affix <um> is attached (predicate boundaries are underlined), e.g.:

(646) *kokumawèng*

ko= k<um>awèng

2.SG.PIV <AV> marry

‘You would get married’

(TDN_07_00:12:17)

Minimal verbal predicates such as *k<um>awèng* in (646) occur in verbal clauses which do not contain an NPIV.UN argument, i.e. intransitive clauses. Predicates in AV intransitive clauses never contain any arguments. Instead, the sole argument is the PIV argument which is never part of a verbal predicate.

In contrast, AV marked predicates in transitive clauses often include an additional (NPIV.UN) argument in the form of a full NP or pronoun which follows the voice marked head, e.g.:

(647) *mèèmi sera tièi*

<um> wèè =mi sera’ tièy

<AV> give DIR.DIST meat pig

‘(You) add some pig meat’

(TDN_11_AW_HL_00:03:17)

Example (647) also demonstrates how deictic elements in the form of enclitics such as =mi may also occur as part of the predicate (whereby they always follow the voice marked head).

When the head of an AV verbal predicate is overtly marked with primary verbal affixation, it is often in the form of the DYNAMIC verbal affix *pa-* (see §4.5.1). The combination of *pa-* with the voice affix *<um>* results in the bimorphemic prefix *ma-*, with this prefix occurring prior to the verbal head of the predicate. Primary verbal affixation encodes various grammatical information, including realis mood (c.f. the irrealis moods in (644) - (645)):

(648) *masadisadia rano?*

ma- CVCV- sadia rano

AV.DYN RDP prepare water

‘(You) are preparing water’?

(TDN_07_00:00:39)

Example (648) also displays the use of disyllabic reduplication to encode TAM distinctions (i.e., imperfective aspect - see §9.3.2). The various elements which encode TAM and deictic distinctions are prefixes, infixes, and enclitics. These different elements may occur in front of, within, or after the verbal stem which functions as the head of the predicate, e.g.:

(649) *sisimadiamou rampa rampa*

si= <im> sadia =mow rampa rampa
3.SG.PIV **<AV.PST>** **prepare** **CPL** **RDP** **spices**
 ‘He prepared some spices’
 (TDN_32_KK_00:03:26)

(650) *kèiminapa’ayang numa*

kèy= ma- <in> pa’ayang N= uma
1.PL.EX.PIV **AV.DYN** **PST** **work** **INAN** **field**
 ‘We worked the fields’
 (TDN_21_00:06:10)

In (649) both the infix <im> (AV.PST) and the multifunctional enclitic =mow (CPL) encode TAM distinctions. The occurrence of the infix <im> demonstrates that both TAM (PST) and voice (AV) marking may occur within one morpheme, and that this morpheme may occur ‘inside’²²⁵ the verb which acts as the head of the predicate. Moreover, the marking of past tense on heads which also host *ma-* (AV.DYN) results in the form *m<in>a-*, which combines primary verbal affix marking, tense marking, and voice marking. More precisely this is a combination of the DYNAMIC affix *pa-*, the past tense infix <in>, and the voice affix, <um> (see also §5.3.1). This element again occurs prior to the head as demonstrated in (650).

There are other verbal affixes in addition to *ma-* which occur as part of an AV verbal predicate, and which occur prior to the head. These are elements such as the CAUSATIVE affix *pa-* and the REQUESTIVE affix *maki-*, e.g.:

²²⁵ However, when the lexical root which hosts <im> has an initial consonant which is a /w/, /p/, or a vowel, the infix <im> is realised as the prefix *min-*. See §5.3.2.

(651) *wo sia mapaatomèè siempung wia si yajob*

wo sia ma- pa- ato =mèè si=
and 3.SG AV.CAUS DYN see, look DIR.MED AN.SG
Empung wia si= Yakob
God to.PROX AN.SG Jacob

‘And he shows (lit. ‘causes to see’) God to Jacob’

(GENESIS 46:2)

(652) *siom lèo makièdo ensèipa wia sitim*

si= om Lèo maki- èdo N= sèipa wia si= Tim
AN.SG uncle PN AV.REQ take INAN hat to.PROX AN.SG PN

‘Uncle Leo requests Tim pick up the hat’

(ELICITED)

Finally, both auxiliary (modal) verbs and negators also occur as part of the AV verbal predicate. The position of these elements is fixed, preceding the head of the predicate but following any PIV argument, e.g.:

(653) *sitoro maturumi lalan wia nikita*

si= toro ma- туру’ lalan wia nikita
3.SG.PIV can AV.DYN indicate road to.PROX 1.PL.IN

‘He can teach the path (of righteousness) to us’

(TDN_30_00:04:19)

(654) *korèi’ mapiara, tièi*

ko= rèy’ ma- piara tièy
2.SG.PIV not AV.DYN raise pig

‘You don’t rear pigs’

(TDN_29_00:05:54)

9.1.2 UV verbal predicates

UV marked verbal predicates are comprised of the same elements which occur in AV marked predicates. However, their distribution and form differ. Voice marking in UV marked verbal predicates is via suffixes or prefixes rather than infixes. Overt²²⁶ voice affixes are almost exclusively suffixes, and therefore occur following the verb head.

²²⁶ While the CV basic voice affix is the prefix *i-*, this form has been lost and is zero marked in almost all environments - see §4.5.2 and §5.3.2.

In UV verbal predicates the position of the NPIV.A argument is fixed, and it directly follows the verbal head. However, the position of this argument in relation to the TAM/ADV/DEI enclitics varies depending upon whether it is represented by an enclitic or a full NP. NPIV.A arguments which are enclitics occur before these other modifying clitics (see (656) and (659) below, and Table 5.17 in §5.4.2), while NPIV.A arguments which comprise a phrase marker plus noun head occur following these clitics (see (657) and (662) - (663) below).

The following represents the structure and ordering of elements in UV verbal predicates:

Figure 9.2: Structure of UV predicates

(NEG) (AUX) (VERB AFFIX) (TAM) VOICE marked verb (NPIV.A - PRO) (TAM) (ADV) (DEI)
(NPIV.A - NP)

Like AV verbal predicates, UV marked verbal predicates may minimally consist of the verb head and a voice affix, with the primary verbal affix zero marked, e.g.:

(655) *sewoken kayu manis*

sewok -en kayu manis
mix s.t. PV wood sweet
'(You) mix in the cinnamon'
(TDN_03_00:04:02)

In addition to the minimal predicate form in (655), an UV marked predicate may also contain primary verbal affixes as well as additional non-PIV arguments, e.g.:

(656) *empaalinamoukan*

N= pa- ali -en =na =mowkan
3.SG.INAN DYN bring PV 3.SG.NPIV.A definitely
'He surely brings it (the palm sugar)'
(TDN_32_OL_KK_00:04:25)

In (656) the DYNAMIC verbal affix *pa-* occurs before the verb root *ali* 'bring', while the voice affix *-en* again occurs after it. Following the voice affix is the NPIV.A enclitic *=na* (3.SG) which represents the non-PIV ACTOR participant. No other elements may occur between the voice affix and these NPIV.A enclitics. (656) also displays the position of

clitic adverbial elements (the focusing adverb =*mowkan* ‘definitely’) within the predicate. These elements must occur following voice affixes and any NPIV.A enclitics.

As with AV marked verbal predicates, elements marking TAM occur in various positions with relation to the head verb, e.g.:

(657) *nièdomou nèwalina*

<in> èdo -Ø =mow nè= walina

<PST> take PV CPL AN.PL.NPIV.A other

‘The others took it (the water)’

(TDN_10_00:13:56)

(658) *siniwona potung*

s<in>iwo -Ø =na potung

<PST> make PV 3.SG.NPIV.A bamboo.tube

‘He made the bamboo tube’

(TDN_26_00:01:40)

(659) *pinakaanèamoula*

pa- <in> kaan -Ø =nèa =mow =la

DYN PST rice PV 3.PL.NPIV.A CPL DIR.PROX

‘They have eaten (the sago grubs)’

(TDN_32_DT_00:02:14)

The past tense infix <in> occurs as part of the verbal head in all clauses in (657) - (659). However, its exact position in relation to the verbal root is slightly different in each example. In (657) it occurs as a prefix²²⁷ attached to the root, in (658) it is an infix within the root, while in (659) it is part of the complex affix sequence *p<in>a-* (DYN.PST).

Due to the restriction on <in> (PST) co-occurring with the PV suffix *-en* (see §5.3.2), PV verbal predicates marked for past tense have a slightly different ordering of elements in comparison with LV and CV marked predicates. The zero marking of *-en* when verbal predicates are marked with <in> means that the NPIV.A enclitics attach directly to the verbal root. In contrast, a LV marked verbal predicate which contains <in> has the voice affix *-an* attaching to the root before the NPIV.A enclitic, e.g.:

²²⁷ The prefix form *ni-* (PST) is an allomorph of the basic form <in>. This allomorphy is conditioned by the first segment of the initial syllable of the lexical root - see §5.3.2.

(660) *kaa kinalingaankumou*

ka'a ka- <in> linga -an =ku =mow
 because POT PST listen LV 1.SG.NPIV.A CPL
 'Because I had already overheard (the conversation)'
 (TDN_21_00:02:42)

The ordering of elements displayed in (660) is not found in CV marked verbal predicates. Rather, any NPIV.A enclitics will again attach directly to the verbal root, as was observed in (659), e.g.:

(661) *dèi patèana*

rèy' i- pa- tèa' =na
 not CV DYN spill 3.SG.NPIV.A
 'He doesn't waste (it – his time here)'
 (TDN_28_00:02:12)

The modifying elements which occur after the head in UV predicates are again restricted to completive and deictic markers such as =mow and =la as seen in (659) - (660). The exact position of these elements depends upon whether a NPIV.A argument is present, and whether it is represented by a pronoun or NP. When the NPIV.A is expressed with a pronoun these markers occur after it. However, if the NPIV.A is expressed with an NP consisting of a phrase marker and noun, then these elements occur before the NPIV.A NP, e.g.:

(662) *tiniboianou nituama esa*

t<in>iboy -an =mow ni= tuama esa
 <PST> grab LV CPL AN.SG.NPIV.A man one
 'The one man has grabbed (it - the bamboo tube)'
 (TDN_26_00:01:46)

(663) *sa kita rè'pè pengèrèteni nituhan*

sa kita rèy' =pè' peN- kèrèt -en =mi
 if,when 1.PL.IN not INCPL DYN summon PV DIR.DIST
ni= Tuhan
 AN.SG.NPIV.A PN
 'If God has not yet called us'
 (TDN_07_00:16:43)

The same additional verbal affixes which occur as part of AV predicates also occur with UV predicates, e.g. CAUSATIVE *pa-* and REQUESTIVE *paki-*. Predicates with this marking occur within three participant transitive clauses (see §4.5.5). These clauses always contain one oblique argument which is never part of the verbal predicate, e.g.:

(664) *sia papaloo 'ngkula siwewènè*

sia	<u>pa-</u>	<u>pa-</u>	<u>loo'</u>	<u>-en</u>	<u>=ku</u>	<u>=la</u>	
3.SG	CAUS	DYN	see, look	PV	1.SG.NPIV.A	DIR.PROX	
si=	wewènè ²²⁸						
AN.SG	woman						
'I made him watch the woman'							
(TDN_31_KK_00:06:40)							

(665) *empepatil pakisiwonoukan niom lèo wia sikalo*

N=	pepatil	<u>paki-</u>	<u>siwo</u>	<u>-en</u>	<u>=mowkan</u>	<u>ni=</u>	<u>Om</u>
INAN	axe	REQ	make	PV	definitely	AN.SG.NPIV.A	uncle
<u>Lèo</u>	wia	si=	Kalo				
PN	to.PROX	AN.SG	PN				
'Uncle Leo definitely asked Kalo to make an axe'							
(ELICITED)							

9.2 Voice selection in verbal clauses

As should now be evident, the specific voice affix which occurs on the head of a verbal predicate indicates the semantic role of the PIV argument. However, this system does not pinpoint the specific factors which condition voice selection in any verbal clause.

Voice selection primarily comes down to the pragmatic and discourse related characteristics of the entities which are represented by clausal arguments²²⁹. These particular characteristics condition the PIV status which is given to one particular argument in every clause. Voice marking is then selected in accordance with the semantic role of the argument which functions as the PIV argument (see §3.3). Voice selection is therefore closely interrelated with the discourse factors which allow certain arguments to function as the PIV.

²²⁸ As will be explained in §9.4.1, in a causative clause with three participants there is always one participant represented as part of an oblique PP. In this clause *si= wewènè* 'the woman' represents the oblique argument. The preposition of this PP (*wia*) has been omitted. In the data this omission of the prepositional head only occurs with one speaker, KK.

²²⁹ Perhaps the only exception to this generalisation is the restriction on the type of clausal arguments which can be modified by relative clauses (i.e. only the PIV - see §4.6.2 and §10.3.1). This is a syntactic restriction relating to the characteristics of clausal arguments.

The following points summarise information on the factors which affect voice selection²³⁰. The unique factors which relate to the four separate voices are listed first. Following this, the two identifiable discourse factors which affect the choice of referent as the PIV, and therefore condition voice selection, are summarised and then explained further in §9.2.1 and §9.2.2.

Firstly, the following two points are relevant with regards to AV marking:

- AV marking commonly occurs within intransitive clauses of movement and posture in which the sole participant is a controlling ACTOR (i.e. DYNAMIC).
- When an ACTOR argument (usually human and animate) is introduced into discourse for the first time it will frequently be expressed as the PIV argument. The verb in this clause is then correspondingly marked for AV.

In addition to the two points above, it is worth noting that unlike UNDERGOER arguments, ACTOR arguments (i.e. human and/or animate) are often definite and identifiable by default (Du Bois 1987:829). Consequently, they do not always have to be previously mentioned in order to be definite and identifiable (and therefore be able to function as the PIV argument) as is normally the case with UNDERGOER arguments.

A number of broad generalisations regarding the selection of the various UNDERGOER voices are as follows:

- UNDERGOER arguments are rarely introduced into discourse with the immediate function of PIV argument. Unlike ACTOR arguments they are rarely definite and identifiable by default - one of the prerequisites for a PIV argument.
- Of the three UNDERGOER voices PV appears most frequently selected. As well as occurring when the clause contains a definite or highly salient argument with semantic role of PATIENT or THEME, PV marking may be used as a ‘default’ UNDERGOER voice which subsumes LV and CV.
- LOCATIVE voice marked clauses occur when there is a definite or highly salient argument with semantic role of LOCATION, PATIENT or THEME. In addition, LOCATIVE marked verbal stems are more often utilised as arguments within

²³⁰ However, the caveat given here is that these generalisations are based on the data corpus used for this work. The issue and conditioning of voice selection in Philippine-type languages is complex, and requires further research into these discourse factors in order to be applied more broadly.

clauses. The LOCATIVE suffix *-an* is also commonly part of the nominalisation processes (see §8.1.4).

- CV marked clauses are used when there is a definite or highly salient argument with semantic role of THEME, INSTRUMENT or STIMULUS. In the corpus, CV is most commonly used in recordings which are narratives relating to procedural discourse.

The points above display a clear pattern as regards voice marking. It is not merely the presence of an argument with a certain semantic role which conditions voice marking. Rather, voice selection is connected to the levels of definiteness and saliency (or referentiality) of particular arguments. Specifically, it can be said that:

- If a definite and identifiable UNDERGOER argument (commonly PATIENT or THEME) is present, it is highly likely to function as the PIV argument, thereby leading to UV marking.
- The related factor of referentiality²³¹ (or ‘topic availability’ as per Givón 1983:9) of arguments is another important factor. If both ACTOR and UNDERGOER arguments are definite, then the semantic role of the argument which is higher in referentiality will condition the voice marking. In §9.2.2 it is demonstrated that levels of referentiality can be measured with the diagnostic of ‘referential distance’ (Givón 1983:13, 1995:79).

Table 9.2 gives an indication of the proportion of AV versus UV marking within a selection of transitive verbal clauses²³². These results are taken from various different genres.

²³¹ Publications such as Givón (1983) use the term of “topicality” as one of the discourse measurements for topic continuity. The term “referentiality” is used here to refer to the level of discourse continuity of a referent. This is measured as per criteria from Givón (*ibid*) and Coorman, Fox, and Givón (1984).

²³² Only transitive verbal clauses (as defined in §4.2) are analysed. This is so as to compare AV and UV marking in clauses which have the possibility of both ACTOR and UNDERGOER PIV arguments. Furthermore, voice marked stems acting as arguments are not counted here, nor are clauses with STAT marked predicates. STAT clauses do not have the possibility of ACTOR arguments acting as PIV (see §4.5.1)

Table 9.2: AV versus UV marking in transitive verbal clauses

Recording genre:	Total clauses:	ACTOR voice:	UNDERGOER voice:
<i>All:</i>	314	95 (30.25%)	219 (69.75%)
<i>Narration:</i>			
TDN_32_KK	73	17 (23.3%)	56 (76.7%)
TDN_26	51	13 (25.5%)	38 (74.5%)
TDN_11_EO	24	9 (37.5%)	15 (62.5%)
<i>Procedural:</i>			
TDN_03	38	13 (34.2%)	25 (65.8%)
TDN_19	33	12 (36%)	21 (64%)
<i>Dialogue:</i>			
TDN_28	55	18 (32.7%)	37 (67.3%)
TDN_11_AW_HL	40	13 (32.5%)	27 (67.5%)

Although the results in Table 9.2 are from a small cross section of recordings in the data, they present an unambiguous indication that UV marking is preferred to AV marking. These results substantiate the broad generalisation that Philippine-type (symmetrical voice) languages often have a preference for UV, especially if there is a definite PATIENT or THEME argument (Ross 2002:23; Himmelmann 2005:363).

The results in Table 9.2 also show that this pattern holds true regardless of the type of recording genre. That is, while certain discourse genres inherently have a higher possibility of arguments with ACTOR characteristics (e.g. humans/animates in dialogues or narratives - DuBois 1987:829), this does not translate into a higher number of AV marked transitive clauses. The greatest influence on voice selection comes from the degree of definiteness and referentiality of arguments.

9.2.1 Definiteness in voice selection

The definition of ‘definite’ which is used here adheres to that of Foley (2007:411) and Crystal (2008:133). An argument is therefore deemed definite if it is *specific and uniquely identifiable by both interlocutors in a discourse situation*. If this is not the case then an argument is judged to be indefinite.

It is important to note that arguments which are indefinite can often be differentiated with regards to specificity. Indefinite arguments may be either specific or non-specific, unlike definite arguments which are also always specific. Indefinite arguments are therefore further categorised (as per Crystal 2008:444) as ‘specific indefinite’ or ‘non-specific indefinite’²³³.

The importance of definiteness in voice marking is seen in the fact that the PIV argument of a Tondano clause must be definite. This holds regardless of whether AV or UV voice is used, e.g.:

(666) *maan tasumiwotèla mi kua?*

ma'an ta= s<um>iwo =itè =la mi ku'a
although 1.PL.IN.PIV <AV> make LIM DIR.PROX noodle PART
‘Although we would only make some instant noodles, right?’
(TDN_14_DK_NK_00:06:57)

(667) *siampitku mepa 'ayangla waki sikakaku*

si= ampit =ku ma- pa'ayang =la waki
AN.SG spouse 1.SG.POSS AV.DYN work DIR.PROX at.DIST
si= kaka =ku
AN.SG older.sibling 1.SG.POSS
‘My husband works with my older brother’
(TDN_12_00:10:48)

(668) *kualinamou*

ku= ali -en =na =mow
1.SG.PIV bring PV 3.SG.NPIV.A CPL
‘He would bring me (to Manado with his car)’
(TDN_21_00:02:49)

²³³ See clauses (633) - (636) for examples of nouns which are both indefinite, but which have difference levels of specificity.

The use of the personal pronouns (*ta*= ‘we’ and *ku*= ‘I’) or proper nouns (*si=ampit=ku* ‘my husband’) in (666) - (667) is an obvious indication that these PIV arguments express definite and identifiable entities. While their semantic roles may vary (ACTOR in (666) - (667) and THEME in (668)), these participants all have high levels of definiteness.

The function of animate and human entities as a privileged (i.e. pivot) argument is unsurprising here, as it is a common pattern cross linguistically. In order to see the restrictions on definiteness in Tondano, the pattern with non-human and inanimate arguments is more informative. When introduced for the first time into discourse as part of a transitive clause, an inanimate and non-human entity is always viewed as indefinite and does not function as the PIV argument, e.g.:

(669) *imaki'kis po'opo*

si= ma- ki'kis po'po'
3.SG.PIV AV.DYN grate coconut
 ‘He grates a/some coconut’
 (TDN_32_ KK 00:04:40)

In (669) the UNDERGOER NP *po'po'* ‘a/some coconut’ is indefinite and therefore must function as the NPIV.UN argument. As this UNDERGOER NP is not the PIV, the voice marking selected cannot be one of the three UNDERGOER voices, instead AV marking is selected.

However, if an inanimate and non-human entity such as this is definite and identifiable (usually because it is previously mentioned), then it will commonly function as the PIV argument, e.g.:

(670) *o pewewèèn po'opo'*

wo pa- Ce- wèè -en po'po'
and DYN IRR give PV coconut
 ‘And (he) will put the coconut (into the mixture)’
 (TDN_32_ KK 00:04:41)

In (670), which is the utterance following (669), the entity referred to by *po'opo'* ‘coconut’ is now definite and identifiable to both interlocutors. It therefore preferred to function as the PIV argument. Consequently, in accordance with an UNDERGOER argument functioning as the PIV, the voice marking selected is one of the three UVs, in this case PV.

Examples (666) - (670) demonstrate how definiteness overlaps somewhat with referentiality, i.e. how salient the referent of the argument is and whether it represents presupposed or new information. Put simply, once an UNDERGOER argument is mentioned it becomes formally identified, and therefore definite. It then follows that this argument is higher in referentiality and also now represents presupposed information.

The clause in (669) is the utterance which directly precedes that in (670). These clauses demonstrate a common pattern whereby a non-human indefinite UNDERGOER argument is introduced into the discourse as a non-PIV argument. Once it is introduced and becomes identified and definite it will then function as the PIV argument in subsequent clauses, e.g. (clause boundaries indicated with ‘#’):

(671) *sèye’i, simaèdo sèwatè, sèwatè sènièdonèamou*

sè=	ye’i	sè=	ma-	èdo	sè=	watè	
AN.SG	this	3.PL.PIV	AV.DYN	take	AN.PL	sago.grub	
#	sè=	watè	sè=	<in> èdo	-Ø	=nèa	=mow
AN.PL	sago.grub	3.PL.REL	<PST>	take	PV	3.PL.NPIV.A	CPL

‘These guys, they take some sago grubs, the sago grubs are (the ones) taken by them’

(TDN_32_DT_00:00:32)

(672) *sèmewangkèr pèrèt, sètii, paketoren, paberesianèamou*

sè=	ma-	wangkèr	pèrèt	sè=	iti’i	#	pa-	ketor
3.PL.PIV	AV.DYN	sell	bat	AN.PL	that.MED	DYN	slice	
-en	#	pa-	weresi	-an	=nèa	=mow		
PV	DYN	clean	LV	3.PL.NPIV.A	CPL			

‘They sell some bats, these guys, (they) slice (the bats), they clean (the bats)’

(TDN_32_KK_00:01:08)

In (671) - (672) we see the familiar pattern. Firstly, a discourse participant (the NPs *sè=watè* in (671) and *pèrèt* in (672)) is introduced as an NPIV.UN argument. Once this referent is definite, identifiable, and represents presupposed information, it will then be represented with the PIV argument in the following clauses (for as long as it is still highly salient). The result of this is that UV voice marking will consistently occur once an UNDERGOER argument is (and remains) definite and salient.

9.2.2 Referentiality and discourse continuity in voice selection

The second factor which has a major effect on voice selection is referentiality (or topicality). This essentially means that whichever argument is higher in referentiality (i.e. the argument representing either the ACTOR or UNDERGOER) will be reflected in the voice selection. The referentiality of an argument relates to how accessible the identity of a referent is in discourse for the speaker (in Givón's words 1983:10 how "retrievable" the "file" is in the memory or "filing system" of the speaker).

One method for measuring this discourse accessibility relates to the gap between different occurrences of a referent, in this case the PIV argument, within clauses. This 'gap' is measured by the number of clauses to the left between any occurrence of the referent and its previous appearance in the discourse. This measurement of referentiality is counted in the number of clauses since the earlier mention of the entity, and is labelled "referential distance" as per Givón (1983:13).

As mentioned above, the referentiality of arguments within discourse overlaps somewhat with their status as given or presupposed information, i.e. their status as definite or indefinite. Arguments which represent presupposed information are both definite and highly referential. The high referentiality of these entities can be observed in their level of discourse continuity and accessibility. So as long as they are highly accessible and in the foreground of discourse, their level of referentiality will be high.

This level of referentiality can be measured with referential distance. Table 9.3 outlines the measurements for referential distance (as per Givón 1983:13):

Table 9.3: Referential distance

Number of clauses since previous occurrence:	Level of referentiality:
1 – 3 clauses earlier	High referentiality
> 3 clauses earlier	Low referentiality

The basic premise of Table 9.3 is that the higher in referentiality an argument is, the more likely it is to be regularly mentioned in discourse. Although it is true that Tondano verbal clauses may regularly omit any argument (including the PIV), this does not mean the criteria in Table 9.3 are not valid. While PIV arguments may be omitted, the notion that an

entity would be highly referential in discourse and not mentioned in some form for more than four clauses in a row (i.e. > 3 clauses earlier) is improbable.

By applying the analytics in Table 9.3 to some of the recordings outlined in Table 9.2 (with at least one of each discourse genre), it can be demonstrated that in any UV clause the PIV argument will almost always be highly referential. As such, a PIV argument in an UV marked transitive clause should have a high referential distance much more often than a PIV argument in an AV marked transitive clause.

Table 9.4 illustrates the referential distance of PIV arguments in AV vs UV transitive clauses.

Table 9.4: Referential distance in AV and UV clauses

Recording:	Number of AV clauses:	Referential distance of PIV:	Number of UV clauses:	Referential distance of PIV:
TDN_32_OL_KK	18	1-3(High) = 7	37	1-3 (High) = 29
		> 3 (Low) = 11		> 3 (Low) = 8
TDN_11_AW_HL	13	1-3(High) = 5	27	1-3 (High) = 18
		> 3 (Low) = 8		> 3 (Low) = 9
TDN_26	13	1-3 (High) = 5	38	1-3 (High) = 28
		> 3 (Low) = 8		> 3 (Low) = 10
TDN_11_EO	9	1-3 (High) = 4	15	1-3 (High) = 10
		> 3 (Low) = 5		> 3 (Low) = 5
TDN_19	12	1-3 (High) = 5	21	1-3 (High) = 16
		> 3 (Low) = 7		> 3 (Low) = 5

These results displayed in Table 9.4 demonstrate that in each recording it is the UV marked clauses which more often have PIV arguments scoring as High (i.e. mentioned within the last three clauses) for referential distance. The pattern reflected here is that

referent which is higher in referentiality is more likely to function as the PIV argument. When this particular argument is an UNDERGOER (which it often is) the voice marking selected will match this semantic role.

In AV clauses this pattern is reversed, the PIV argument more often scores as Low for referential distance, and is therefore low in referentiality²³⁴. These results have a correlation to what was observed in §9.2.1. That is, continuous AV marking in a transitive clause is unlikely because once there is an available and identifiable UNDERGOER then UV marking is preferred. Once these UNDERGOERS represent presupposed information, UV marking will usually continue until another new discourse participant is introduced (often with AV marking).

Finally, the contrasting levels of referentiality can be observed as a factor in voice selection when both arguments in a transitive clause are definite, e.g.:

(673) *wo kupasusuianiumi*

wo ku= pa- susui -an =mui =mi
and 1.SG.PIV DYN speak LV 2.PL.NPIV.A DIR.DIST
 ‘And you speak to me (and distract me)’
 (TDN_03_00:24:14)

(674) *toto’ nipèrèt kinaan nitim*

toto’ ni= pèrèt k<in>aan -Ø ni= Tim
breast AN.SG.POSS bat <PST> eat PV AN.SG.NPIV.A PN
 ‘Tim ate the bat breast’
 (TDN_32_OL2_00:08:39)

(675) *tu’a rior nèminahasa, sèsimiwola maèngkat iti’i*

tu’a rior nè= Minahasa sè= s<im>iwo
old fast AN.PL.NPIV.A PN 3.PL.PIV <AV.PST> make
 =la maèngkat iti’i
DIR.PROX traditional.dance that.MED
 ‘The elders of Minahasa, they did those traditional dances’
 (TDN_31_00:04:04)

²³⁴ Although, in two of the recordings (TDN_11_EO and TDN_19) the number of times that PIV arguments had high vs low referentiality is close to being equal.

In (673) - (674) both the ACTOR and UNDERGOER arguments in the transitive clauses are definite, however both clauses are still marked for UV, not AV. This is due to the fact that the UNDERGOER arguments *ku*= 'I' and *toto' ni=pèrèt* 'the bat's breast' are higher in referentiality. They have been highly salient throughout all of the discourse, and therefore UV selection still occurs despite the fact the ACTOR arguments (= *mui* 'you' and *Tim*) are also definite. In (675) both *sè*= 'they' and *maèngkat iti'i* 'that dance' are again both definite, but it is *sè*= which is higher in referentiality. This is due to the fact it was mentioned only one utterance previously where it was re-introduced after previously being backgrounded. In contrast, the definite UNDERGOER argument was last mentioned four clauses earlier.

The results of Tables 9.2 and 9.4 should not be taken as definitive proof that UV marking is always a 'default choice'. However, the pattern is clear: UV is frequently selected when there is a highly referential and definite UNDERGOER argument. And as long as this argument is salient then UV marking is likely to continue.

9.3 Tense, aspect, and mood morphology

This section expands upon the system of TAM marking which was briefly outlined in §3.4 - §3.6. The system of TAM marking encodes two tenses (§9.3.1), two aspects (§9.3.2), and two moods (§9.3.3). Prior to these separate examinations of tense, aspect, and mood, the way in which they are encoded morphologically is summarised.

Table 9.5 gives an overview of the complex morphological interaction between verbal affix marking, TAM morphology, and voice marking on the verbal stems which occur as the heads of verbal predicates. The lexical root here is *sewok* 'mix s.t.' :

Table 9.5: TAM marking on verbal predicates

TAM value:	AV	PV	LV	CV
1. NPST.PERF.IRR	<i>s<um>ewok</i>	<i>sewok -en</i>	<i>sewok -an</i>	<i>(i-) sewok</i>
2. PST.PERF.REAL	<i>s<im>ewok</i>	<i>s<in>ewok -Ø</i>	<i>s<in>ewok -an</i>	<i>nèi sewok</i>
3. NPST.PERF.REAL	<i>ma- sewok</i>	<i>pa- sewok -en</i>	<i>pa- sewok -an</i>	<i>(i-)pa- sewok</i>
4. PST.PERF.REAL.	<i>m<in>a- sewok</i>	<i>p<in>a- sewok -Ø</i>	<i>p<in>a- sewok -an</i>	<i>nèi pa- sewok</i>
5. NPST.IMPERF.REAL	<i>ma- sewo sewok</i>	<i>pa- sewo sewok -en</i>	<i>pa- sewo sewok -an</i>	<i>(i-)pa- sewo sewok</i>
6. PST.IMPERF.REAL	<i>m<in>a- sewo sewok</i>	<i>p<in>a- sewo sewok -Ø</i>	<i>p<in>a- sewo sewok -an</i>	<i>nèi pa- sewo sewok</i>
7. NPST.PERF.IRR	<i>ma-se- sewok</i>	<i>pa-se- sewok -en</i>	<i>pa- se- sewok -an</i>	<i>(i-)pa- se- sewok</i>

The following points clarify some of the information contained within Table 9.5:

- All verbal stems which are overtly marked solely with a voice affix (row 1) are irrealis by default. Stems which have both the primary verbal affixes and voice marking are realis (rows 3 - 7). In addition, these primary affixes provide information about the situation denoted by the predicate (i.e. action/event vs state), and information about the semantic characteristics of the entity expressed by PIV argument.
- Verbal stems which host *Ce-* reduplication also have an irrealis interpretation (row 7). The irrealis situations expressed by *Ce-* reduplication differ slightly from those expressed by the verbal stems in row 1.
- Perfective aspect is unmarked, while imperfective aspect is marked morphologically via *CVCV-* reduplication (i.e. rows 5 and 6).
- All stems are judged to be non-past by default. Thus, the addition of *<in>* (or *<im>* in AV marked clauses) expresses past tense (rows 2 and 4).
- Both the forms in the second (PST.PERF.REAL) and fourth (PST.PERF.REAL) rows encode past events. Nonetheless, there are discernible differences between the situations expressed by these two forms. Primarily, this relates to temporal distance (between the action or event and the utterance) and the likelihood of the action or event re-occurring.

9.3.1 Tense marking

Verbs in verbal clauses are formally differentiated for two tenses. Non-past tense is unmarked, while past tense is expressed morphologically with the use of the infix *<in>*.

<in> may either attach directly to stems which are only marked overtly for voice, or it may attach to stems which are overtly marked with both primary verbal affixes and voice affixes (c.f. rows 2 and 4 in Table 9.5).

Tense is defined here as per Comrie (1985:8) as the “grammaticalised expression of location in time”. This division between the two tenses in Tondano is *absolute*. In absolute tenses the distinction is simply between when the event is deemed to have happened, and the moment of utterance by the speaker. This contrasts with what is labelled as *relative past tense*, whereby a situation is judged to occur before another specific temporal reference point.

The contrasting examples in (676) - (677) demonstrate unmarked non-past tense with morphologically marked past tense, e.g.:

(676) *sèmasiwo po'opo*

sè= ma- siwo po'po'

3.PL.PIV AV.DYN make coconut

‘They make coconut flesh (copra)’

(TDN_12_00:10:26)

(677) *sèsimiwo, ee walè weru*

sè= s<im>iwo erh walè weru

3.PL.PIV <AV.PST> make HES house fresh

‘They made a new house’

(TDN_31_00:02:38)

In (676) the verbal root *siwo* ‘make, do’ is unmarked for tense. The verb form contains no specific reference to temporal location, and the situation expressed by the verb is judged not to have occurred or begun prior to the utterance. In contrast, the verb in (677) contains <im> (AV.PST) which encodes the fact that the state of affairs expressed by the verb has already occurred. There is no exact reference as to when this situation was, only that it occurred at some point prior to the utterance. Moreover, there is no specific reference to the terminal endpoint of the action or event, or whether or not the situation may occur again.

Examples of verbal predicates marked for the three UNDERGOER voices and the past tense marker <in> (or one of its various allomorphs), are as follows:

(678) *taan dèi' kinaana lalèina*

ta'an rèy' k<in>aan -Ø =na lalèina
but not <PST> rice PV 3.SG.NPIV.A leaf
 'But he didn't eat the leaves'
 (TDN_32_OL_KK_00:06:50)

(679) *winèèan kayu manis lakerèla*

w<in>èè -an kayu manis laker =la
<PST> give LV wood sweet much DIR.PROX
 '(You) put in a lot of cinnamon'
 (TDN_11_AW_HL_00:08:00)

(680) *naran tabelang nèi sadèr waki akel*

N= aran tabelang nèy sadar waki akel
INAN step hard.bamboo CV.PST lean.on on.DIST sugar.palm.tree
 '(He) leaned the hard bamboo ladder on the sugar palm tree'
 (TDN_32_OL_00:01:52)

The UV marked clauses in (678) - (680) again demonstrate that past tense marking simply marks an action or event as already having occurred, but does not specify temporal distance between the event and the utterance. For example, in (678) the situation described happened two days earlier, in (679) it is earlier during the same day, while in (680) it has only just occurred.

As well as expressing past tense, the occurrence of <in> within verbal predicates also gives the clause a realis interpretation. The distinction in mood between UV clauses which have a verbal root hosting <in>, and those which do not, is exemplified in the following PV clauses:

(681) *sèa lelè'en*

sèa lelè' -en
3.PL bathe PV
 '(The priest) would baptise them'
 (TDN_14_HK_DT_00:00:46)

(682) *katarè linelè' yuni*

ka- tarè l<in>elè' -Ø Yuni
very recently <PST> bathe PV PN
'(The priest) baptised Yuni first'
(TDN_14_HK_DT_00:00:48)

In (681) the verb head of the predicate consists of the root *lele'* 'bathe' and the voice affix *-en*. This clause denotes an irrealis state of affairs which has not happened, or is not happening. Alternatively, the verb in (682) comprises the same root with PV marking, but also includes the tense marker <in>. As such, this event has a realis interpretation.

In examples (681) - (682) the absolute past tense expressed by <in> (or <im>) appears clear. However, there is one slightly problematic issue in relation to tense marking. This is demonstrated by the fact that there are actually two different complex stems which are both marked as past tense, but which are not morphologically identical (as displayed in rows 2 and 4 in Table 9.5), e.g.:

(683) *tasimiwo sawo terang*

ta= s<im>iwo sawo terang
1.PL.IN.PIV <AV.PST> make broth clear
'We made clear broth (this morning)'
(TDN_31_OL_00:02:03)

(684) *wo korèi minasiwomi sopi?*

wo ko= rèy' ma- <in> siwo =mi sopi
and 2.SG.PIV not AV.DYN PST make DIR.DIST palm.sugar.brandy
'And you hadn't made some palm sugar brandy (back when you were collecting palm sugar sap)?'
(TDN_29_00:01:39)

These examples both demonstrate past tense marking with <in> or <im>, but differ in regards to the presence or absence of a primary verbal affix (in this case the DYNAMIC *pa-*). Thus, in (683) the verbal root hosts the bimorphemic affix <im> (i.e. Ø + <in> + <um>), while in (684) it hosts the complex sequence *m<in>a-* (i.e. *pa-* + <in> + <um>).

While the glossing may not make it explicitly clear, there are specific differences between verbal predicates which only host *<in>*, and those which also contain one of the primary verbal affixes like DYNAMIC *pa-*. These are: (i) the length of time judged to have passed between the situation occurring and the utterance by the speaker, or (ii) whether or not the situation is one which can, or is likely to, still be performed.

The contrasting examples in (683) - (684) demonstrate the first of these two distinctions. In example (683) the use of *<in>* on the verb expresses a situation which occurred on the same day, perhaps four hours previously. In contrast, the complex sequence *m<in>a-* on the verb in (684) refers to a situation which occurred in another time period, approximately 10 - 15 years ago when the interlocutor was much younger and was still able to climb trees and collect palm sugar sap. Thus, (684) expresses a much longer temporal distance between occurrence and utterance than is displayed by (683).

This second distinction is demonstrated by the following pair of PV marked clauses:

(685) *siniwomou engkoyabu*

s<in>iwo -Ø =mow N= koyabu
 <PST> make PV CPL INAN PN
 ‘(We) made the koyabu cake’
 (TDN_32_OL_KK00:02:34)

(686) *sapa pinasiwosiwotèla wia tondano*

sapa pa- <in> CVCV- siwo -Ø =itè =la wia
 what DYN PST RDP make PV LIM DIR.PROX in.PROX
 Tondano
 PN
 ‘What (we) only did in Tondano’
 (TDN_31_KK_00:02:10)

In both (685) - (686) the use of *<in>* again expresses situations which have already occurred prior to the utterance. However, the two situations expressed by the verb are different with regards to the likelihood of reoccurrence. In (685) the act of making traditional foods began a number of hours previously and ended not long prior to the utterance. However, this situation is more than likely to occur again after the utterance (i.e. later the same day), and as such *<in>* is used.

In contrast, in (686) the use of the complex sequence *p<in>a-* on the verb denotes a situation which has already occurred prior to the utterance (repeatedly over the last six weeks²³⁵), but one which is not likely to be performed again now or in the near future. This notion is presumably expressed because the situation (i.e. the work done) will not happen again as the researcher who was conducting the work has finished his fieldtrip.

There is some overlap between distinctions (i) and (ii). That is, situations which occur in a time period a long time prior to the utterance are conceivably also those which no longer happen. In the following example the use of the *p<in>a-* expresses both distinctions, e.g.:

(687) *pinatutunganèatè*

pa- <in> tutung -an =nèa =itè

DYN PST heat LV 3.PL.NPIV.A LIM

‘They (the TNI) just torched (the houses)’

(TDN_14_HK_DT_00:10:39)

The situation of houses being burnt relates to a historical period in the late 1950’s (the *Permesta* rebellion - see §1.3.3). The situation has a high temporal distance from the utterance, and is also an event which no longer occurs. Historical events such as this are often expressed with the use of the *m<in>a-* or *p<in>a-*. Despite this, the label of ‘historical’ or ‘remote past’ is avoided because these situations can also possibly have occurred closer to the utterance (c.f. (686) above).

Finally, there is one additional use of *m<in>a-*. It may also be hosted by a proper noun and occur as part of an NP. In this function it is glossed as ‘the late/deceased’, e.g.:

(688) *siminaberam gerungan nièdonèatèla*

si= ma- <in> Beram Gerungan <in> èdo -Ø =nèa

AN.SG AV.DYN <PST> PN PN <PST> take PV 3.PL.NPIV.A

=itè =la

LIM DIR.PROX

‘They just took away the late Beram Gerungan’

(TDN_07_00:08:16)

In the above example *m<in>a-* is a modifier to the head of the PIV NP of the clause, *beram gerungan*. This *m<in>a-* is considered the same form as that displayed in (684), although

²³⁵ This verbal predicate also contains imperfective marking in the form of the CVCV- prefix - see §9.3.2.

a precise explanation is difficult due to the rarity of this form²³⁶. The use of *m<in>a-* in (688) does bear some semantic similarity with its use in (684), i.e. it also represents a situation (someone's life) which occurred a long time ago and which will not occur again.

9.3.2 Aspect marking

Verb forms within verbal predicates express either perfective or imperfective aspect, with only the latter being marked morphologically. The definitions of perfective and imperfective used here adhere to those found in Comrie (1976:21-24) and Crystal (2008: 237, 356). Perfective aspect encodes situations (both events and states) which are analysed in their entirety regardless of internal time contrasts, while imperfective aspect refers to situations in which the internal time structure is referenced in some way, and which are ongoing or repeated in some way. In Tondano, imperfective aspect encompasses a number of somewhat related subcategories which are labelled here as *habitual* and *iterative*.

The following examples display verbal predicates in which the verbs are unmarked for aspect, and are therefore perfective. The internal time structure of the situation is not referred to in any way, e.g.:

(689) *komekaan nasi jaha*

ko=	ma-	kaan	nasi	jaha
2.SG.PIV	AV.DYN	rice	rice	glutinous

‘You eat some glutinous rice’
(TDN_11_AW_HL_04:48)

(690) *imaki 'kis po'opo'*

si=	ma-	ki'kis	po'po'
3.SG.PIV	AV.DYN	grate	coconut

‘He grates some coconut’
(TDN_32_KK_00:04:39)

²³⁶ This is the only example in the entire corpus. When asked about this form two speakers maintained it is the same as that used on verbs, one speaker disagreed with this analysis.

(691) *pengatoanou leloi'*

peN- ato -an =mow leloi'
DYN see, look LV CPL snake
'(I) see the snakes'
(TDN_29_00:10:14)

(692) *timingkasou wia entalun*

t<im>ingkas =mow wia N= talun
<AV.PST> run CPL in.PROX INAN forest
'(They) fled into the forest'
(TDN_21_00:00:39)

In (689) - (692) the actions or events denoted by the verb are expressed in their totality, as a “single unanalyzable whole” (Kroeger 2005a:155) with no reference to any temporal stages within the event. These clauses therefore express perfective aspect regardless of whether the event or action occurs around the time of utterance, as in (689) - (691), or at some time prior to the utterance, as with (692).

Situations which are presented as perfective encompass various types of actions or events, from those which could conceivably have a medium to long temporal duration (as above), to those which have a much shorter duration, e.g.:

(693) *sia me'èwèl*

sia <um> wè'wèl
3.SG <AV> tap.branch
'He would tap the palm sugar banch'
(TDN_26_00:02:27)

(694) *makèkè' sika'ampit*

ma- kè'kè' si= ka'ampit
EV.STAT laugh AN.SG friend
'The friend laughs'
(TDN_07_00:03:29)

(695) *sihendrik matut*

si= Hendrik ma- etut
 AN.SG PN EV.STAT fart
 ‘Hendrik farts’
 (ELICITED)

The situations in expressed in (693) - (695) all have a much shorter temporal duration²³⁷ than those in (689) - (692). Despite this difference, there is no variation in aspect between all the clauses in (689) - (695). They are all perfective.

Perfective aspect is also displayed by verbal predicates which contain STATIVE verbal affixation (see §4.5.1), i.e. those denoting states, qualities, or cognition attributed to an entity. This quality or state expressed by the verb does not contain any reference to duration or internal temporality; instead it simply represents a property of the entity it refers to. Perfective aspect in STATIVE marked verbs expresses the same type of temporality as it does for verbs denoting actions or events, i.e. the totality of the situation, e.g.:

(696) *adu permesta, kèide’an*

adu Permesta ka- idè’ -an
 PART PN STAT afraid LV
 ‘Dear me, the *Permesta* rebellion scares (us)’
 (TDN_14_HK_00:09:55)

(697) *sikaupitè’ nètù’aku*

si= i- ka- upi’ =itè nè= tu’a =ku
 3.SG.PIV CV STAT angry LIM AN.PL.NPIV.A old 1.SG.POSS
 ‘My parents are just angry at him’
 (TDN_07_00:12:26)

(698) *kèide’nètou luar*

i- ka- idè’ nè= tow luar
 CV STAT afraid AN.PL.NPIV.A person outside
 ‘The outsiders are frightened (of it - the talisman)’
 (TDN_31_00:06:44)

²³⁷ The situation of laughing in (692) could be seen to have a longer duration than, say, farting or striking a branch. The reading in (694) is based on a single instance of non-repetitive laughing.

The states and qualities of knowing, being angry, and being afraid in (696) - (698) all express one particular state of affairs in one particular time period. Despite the fact that these situations are seen as applying to the individuals they are attributed to, this does not necessarily entail that these state of affairs are constantly ongoing or repeated. They are therefore not considered indicative of an entire time period. In order to express these types of situations imperfective marking is required.

Imperfective marking expresses a number of situations which are further distinguished as either habitual or iterative. While both habitual and iterative aspect relate to an ongoing repetition of an event or state, they also have inherent differences.

Habitual aspect is used to “describe a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed...as a characteristic feature of the whole period” (Comrie 1976:27-8). Consequently, verbs marked with imperfective (habitual) aspect express situations which cannot simply be viewed as one specific situation in its entirety, e.g.:

(699) *sa kou mèmang masiwosiwo engkasèlokan*

sa	kow=	mèmang	ma-	CVCV-	siwo	N=	ka>
if, when	2.PL.PIV	truly	AV.DYN	RDP	make	INAN	NR
sèlok	<an						
wrong	NR						

‘If you truly commit mistakes (i.e. sins - throughout your life)’

(TDN_30_00:07:22)

(700) *èmaaliali kalèwang, pepatil, paai*

sè=	ma-	CVCV-	ali	kalèwang	peptail	paai’
3.PL.PIV	AV.DYN	RDP	bring	sword	machete	knife

‘They are bringing swords, machetes, knives (to fight - during the old times)’

(TDN_31_00:07:08)

(701) *sèwewènè, sèmelegilegi', sèmengèkèngèkè*

sè= wewènè sè= meN- CVCV- legi' # sè=
AN.PL woman 3.PL.PIV AV.DYN RDP sway 3.PL.PIV
meN- CVCV- èkè'
AV.DYN RDP call.out

'The women they are swaying, they are calling out'

(TDN_31_00:03:42)

(702) *tanu peniwoniwon nèwalina*

tanu peN- CVCV- siwo -en nè= walina
like DYN RDP make PV AN.PL.NPIV.A other

'As the others are doing (it - the work)'

(TDN_30_00:05:39)

(703) *èmenekenekelèla*

sè= meN- CVCV- tekèl =la
3.PL.PIV AV.DYN RDP sleep DIR.PROX

'They are (constantly) sleeping'

(TDN_31_OL_00:05:12)

Each of the verb forms in (699) - (703) display *CVCV*-reduplication of the verbal root, and are therefore morphologically marked as imperfective. In contrast to what is expressed in (689) - (698), these verbs do not denote situations which can be viewed as single events presented in their entirety. Instead, each of these situations is viewed as repeated on numerous occasions over an extended time period. A second important difference is that verbs marked as imperfective may represent situations which occur simultaneously, such as the calling out and swaying in (701).

In (699) the situation denoted by the verb is viewed as repeated throughout one's life, while in (701) - (702) the situations described are characteristic of what people would do in the entire pre-Christian period in Minahasa. Finally, in (703) the verb describes an action which a particular group of people are thought to have always done, so much so that it characterises the entire group of people from this village.

The second subcategory within imperfective events is labelled as iterative. Iterative aspect is used to "refer to an event which takes place repeatedly" (Crystal 2008:257). While this description could also be used to describe habitual aspect, there is one specific feature

which distinguishes iterative from habitual; iterative imperfective aspect expresses the repetition of an action or event within a single occurrence, e.g.:

(704) *maan kita menusunusui, makoo'ela,*

ma'an kita meN- CVCV- susui ma-
although 1.PL.IN AV.DYN RDP speak AV.DYN
 koo' =la
drink DIR.PROX

‘Although we are chatting, (we) still drink (some coffee)’

(TDN_28_00:02:40)

(705) *maaliali empotung*

ma- CVCV- ali N= potung
AV.DYN RDP bring INAN bamboo.tube

‘(They) are bringing some bamboo collection tubes’

(TDN_32_OL_00:01:35)

(706) *sia mepa'aypa'ayang beren kangkasi*

sia ma- CVCV- pa'ayang weren kangkasi
3.SG AV.DYN RDP work eye also

‘She is also playing (rolling her) eyes’

(TDN_31_00:16:49)

(707) *koumengaangaan langsot*

kow= meN- CVCV- kaan langsot
2.PL.PIV AV.DYN RDP rice lansium.fruit

‘You are eating lansium fruit (while you climb up the hill)’

(TDN_11_AW_HL_00:10:26)

As was the case with habitual imperfective, the clauses in (704) - (707) are not viewed as expressing single events which are presented in their entirety. Once again they are presented as being repeated a number of times. However, these are situations which are viewed as occurring in one single period in time. This period of time can be anything from less than a minute (as with the facial movement in (706)) to a number of hours (as with the events in (704) and (705)). Although the exact length of time of the repeated actions is not specifically encoded by the iterative marking, it does preclude the notion

that the time period stretches over years or decades. Situations encoded with iterative aspect cannot be seen as characteristic of an entire historical time period.

The similarities between habitual and iterative aspect means that some clauses may appear to have an ambiguous reading. In circumstances such as these the two possible readings are disambiguated via context. For example, the reduplication of the verbal root *ali* ‘bring’ occurs in both (700) and (705). However, in (700) the speaker is describing a situation which commonly occurred in pre-Christian times, while in (705) the speaker describes what people are doing repeatedly as he watches them at that moment. Therefore, (700) is interpreted as habitual and (705) is interpreted as iterative. Finally, it should be noted that temporal adverbs (see §6.5.4) also assist in this regard, e.g. *tèmpo rior* ‘early times’ vs *nendo ye’i* ‘today’ etc.

9.3.3 Mood marking

Mood marking indicates the speaker’s attitude towards the event, action, or situation expressed by the verbal predicate. Specifically, the degree of certainty the speaker has that the proposition expressed by the clause is true or not. The definition of realis and irrealis adopted here is that of Payne (1997:244). Therefore, realis mood encodes a situation which the speaker deems to hold true, be happening, or have happened. In contrast, irrealis mood encodes a situation which the speaker does not think holds true, is not happening, or has not happened. In Tondano, irrealis marking is used to express various situations, from possible or probable future events to desideratives and imperatives.

The following pairs of examples display the distinction between irrealis and realis mood:

(708) *tamèa sumiwo sawo terang*

ta= <um> èa s<um>iwo sawo terang
1.PL.IN.PIV <AV> go <AV> make broth clear
 ‘We would/will go and make clear broth’
 (TDN_28_00:00:09)

(709) *sèmasiwo,ee, got got waki lalan*

sè= ma- siwo erh got got waki lalan
3.PL.PIV AV.DYN make HES RDP drain on.DIST road
 ‘They make, erh drains on the road’
 (TDN_12_00:16:42)

(710) *tim wona, ikumaan itii*

Tim wona' si= k<um>aan iti'i
 PN maybe 3.SG.PIV <AV> rice that.MED
 'Tim maybe, he will eat that (the bat)'
 (TDN_32_OL2_00:08:09)

(711) *tim mekaanou!*

Tim ma- kaan =mow
 PN AV.DYN rice CPL
 'Tim eats (some bat curry)!'
 (TDN_ OL2_00:08:11)

Examples (708) and (710) are in irrealis mood because the situation expressed by the predicate is only a possibility, i.e. it is not happening and has not happened. (709) and (711) are in realis mood because the situation is factual and occurring. These examples demonstrate that the distinction between moods may not always be marked with specific irrealis morphology, as is evident from the information presented in Table 9.5. (708) and (710) demonstrate that stems in which the only overt verbal morphology is one of the four voice affixes (i.e. where there is zero marking of primary verbal affixes) are in irrealis mood²³⁸. In contrast, (709) and (711) have both primary verbal affixation and voice affixation overtly marked in the bimorphemic prefix *ma-* (AV.DYN). With one exception clauses which contain this particular verbal morphology are always in realis mood²³⁹.

Verbal stems which are only overtly marked for voice are used in situations which are judged not to have actually occurred, are non-factual, but which are possible or even probable. Consequently, when a verbal root solely hosts a voice affix such as AV <um>, it encodes various situations from imperatives to possible or probable future situations (the AV <um> is commonly referred to by speakers as the equivalent of the standard Indonesian future tense marker *akan* 'will').

The use of AV <um> as a default irrealis marker (as opposed to the use of UVs *-en*, *-an*, and *i-*) occurs in a wider range of irrealis situations than verbal stems consisting of a lexical root and one of the UV affixes (these are more frequently used in imperative

²³⁸ There are occasional exceptions to this. In some procedural narratives verbal stems such as those in (708) and (710) may be used when speakers are describing an event which is actually occurring. See also §7.3.1.

²³⁹ If the *ma-* (AV.DYN) prefix occurs as part of a conditional adverbial clause introduced by *sa* 'if/when' then the action or event may be considered irrealis.

constructions - see §7.3). The focus in this section is therefore primarily concerned with the expression of irrealis via AV <um>.

The expression of irrealis situations with this type of verbal stem is one of a number of possible ways in which irrealis situations are expressed. The other primary method is with the reduplicated prefix *Ce-* (see row 7 in Table 9.5). Despite an occasional overlap in function, the <um> and *Ce-* constructions are differentiated by the exact type of irrealis situations they encode, as shown in Table 9.6.

Table 9.6: Irrealis marking morphology

Morphological element:	
AV affix <um>:	(i) Possible future event (either soon after utterance, further in the future, or with no specific time frame after utterance)
Reduplication with prefix <i>Ce-</i>:	(i) Highly likely immediate future event (soon after utterance).
	(ii) Desired, hoped for future event

Future events expressed by <um> may express those deemed possible (though not certain) to occur soon after the utterance, e.g.:

IRREALIS WITH <um>:

(712) *niaku kumantarèla, opo mana natas?*

niaku k<um>antar =la Opo mana N= atas
 1.SG <AV> sing DIR.PROX elder in.MED INAN above
 ‘I will sing ‘God up above (next)?’
 (TDN_31_00:06:39)

(713) *kita gumorèngou*

kita g<um>orèng =mow
 1.PL.IN <AV> fry CPL
 ‘We will fry (some of the mixture)’
 (TDN_03_00:07:10)

The verbal predicates in (712) - (713) both describe situations which are judged as possible or probable to occur soon after the utterance. The singing expressed by *k<um>antar* relates to the second song which will take place after the first (which was already sung), while the frying described by *g<um>orèng* can now begin after the dough is already mixed.

The possible future event expressed by verbs with *<um>* may also take place at a later time in the future, as demonstrated by (714) - (715). In these instances there is a very vague time frame in mind for the beginning of the situation, however it is usually further in the future, e.g.:

(714) *ya tumanemou mana*

ya t<um>anem =mow mana

AFF <AV> cultivate CPL there

‘Yes, (we) will plant some crops there (in around a months time)’

(TDN_10_00:10:59)

(715) *te’un esa, sisumekolamou tingkat, ee*

te’un esa si= s<um>ekola =mow tingkat erh

year one 3.SG.PIV <AV> school CPL level HES

‘(In) year one he will attend school at level, erh’

(TDN_12_00:12:09)

Irrealis situations such as those displayed in (714) - (715) are what *<um>* most commonly expresses. That is, actions and events which are likely (but are not entirely certain) to happen, and which may occur further in the future. The situations denoted by verbs with *<um>* do not usually indicate the desires or wishes of the speaker.

The second type of irrealis mood is marked morphologically via *Ce-* reduplication of the verbal root (see §2.6.6). This reduplication only occurs on complex stems which include the DYNAMIC verbal affix *pa-* together with voice marking, and does not occur on stems marked with POTENTIVE *maka-* or STATIVE *ka-*.

There are a number of situations which are expressed by the irrealis marker *Ce-*. Firstly, in analogy with *<um>* marked verbs, a common function of *Ce-* is to express an immediate future situation which has not yet occurred, but which the speaker judges will possibly occur at some stage after the utterance. In contrast to *<um>* marked verbs, the

future situation expressed with *Ce-* is viewed as more certain to occur soon after the utterance (possibly because another situation has already been realised), e.g.:

IRREALIS WITH *Ce-*:

(716) *tèakan kita mesesiwo cucur*

tèakan kita ma- Ce- siwo cucur
 new 1.PL.IN AV.DYN IRR make cucur.cake
 ‘Now (that we have the ingredients) we will make cucur cake’
 (TDN_03_00:00:01)

(717) *watè, sèmeleloo ’an*

watè sè= ma- Ce- loo’ -an
 sago.grub 3.PL.PIV AV.DYN IRR see, look MUT
 ‘The sago grubs, they will see (meet) each other’
 (TDN_11_EO_00:04:33)

(718) *imaki ’kis po ’opo, o pewewèèn po ’opo’*

si= ma- ki’kis po’po’ wo pa- Ce-
 3.SG.PIV AV.DYN grate coconut then DYN IRR
 wèè -en po’po’
 give PV coconut
 ‘He grates some coconut and (now) (he) will put in the coconut’
 (TDN_32_KK_00:04:39)

The situations denoted by the verbal predicates in (716) - (718) all occurred directly after the utterance. They are judged as almost certain to occur, but because they have not actually begun when the clause is uttered the situation is still marked as irrealis. The certainty that these situations will occur almost immediately in part comes from the fact that other events have already occurred. That is, in (716) the purchase and opening of ingredients allows the baking to begin, in (717) the act of putting of all the sago grubs on a banana palm leaf allows them to see/meet one another, while in (718) the grating of coconut means it is now ready to add to the mixture. If these other situations had not already occurred, then the possibility of future activity would more likely to have been expressed with *<um>*.

The second function of irrealis *Ce-* is to express situations which a particular entity highly desires or intends to perform. While there is obviously still a judgement that the situation will occur at some future time after the utterance, these situations are not always on the verge of occurring, as was the case in (716) - (718), e.g.:

(719) *kumekekawèngou ya*

ku= ma- Ce- kawèng =mow ya
1.SG.PIV AV.DYN IRR marry CPL AFF
 ‘I will get married, yes’
 (TDN_14_DK_NK_00:10:10)

(720) *kaa simelelongkot itu entabelang*

ka’a si= ma- Ce- longkot witu N= tabelang
because 3.SG.PIV AV.DYN IRR climb on.MED INAN hard.bamboo
 ‘Because he will climb up the hard bamboo tube’
 (TDN_26_00:00:25)

(721) *kopewewuìngkumèè, kumura kopaloo ’noula sicalèg?*

ko= pa- Ce- wui -en =ku =mèè k<um>ura
2.SG.PIV DYN IRR ask PV 1.SG.NPIV.A DIR.MED <AV> how
 pa- loo’ -en =mow =la si= calèg²⁴⁰
DYN see, look PV CPL DIR.PROX AN.SG legislative.candidate
 ‘I want/will ask you, how do you see the legislative candidate?’
 (TDN_32_OL_KK_00:02:57)

(722) *kèimepepalus*

kèy= ma- Ce- palus
1.PL.EX.PIV AV.DYN IRR work.together
 ‘We will work together (at some stage in the future)’
 (TDN_21_00:03:16)

The situations expressed in (719) - (722) are irrealis in that they reflect the desires or wishes of the speakers. They are still possible future actions, however unlike (716) - (718) there is less certainty that they will happen directly after the utterance. As such, the infix <um> could plausibly be used in these predicates with much the same meaning.

²⁴⁰ This is an abbreviation of the bahasa Indonesia words *calon legislatif* ‘legislative candidate’

The irrealis prefix *Ce-* may also be used in clauses which have negative polarity. Thus, verbal clauses with predicates marked for irrealis mood may also contain the negators *rèi'* or *so'o*, or the prohibitive *tèa'* (see §7.3.1) e.g.:

(723) *jadi kurèi melelila'mèè*

jadi ku= rèy' ma- Ce- lila' =mèè
 thus 1.SG.PIV not AV.DYN IRR tongue DIR.MED

'So, I won't say (that statements from me are correct)'

(TDN_31_00:16:08)

(724) *tèa pekekaan pasu'*

tèa i- pa- Ce- kaan pasu'
 PROH CV DYN IRR rice hot

'(You) should not/will not eat the hot (cake)'

(TDN_19_00:05:18)

(725) *sisoo rè'è mesesèrola walina*

si= so'o rè'èn ma- Ce- sèro =la walina
 3.SG.PIV don't.want PART AV.DYN IRR search DIR.PROX other

'He will not want to search for others'

(TDN_28_00:03:53)

All three of the clauses (723) - (725) are irrealis because they express situations which while possible, have not yet occurred. However, the exact interpretation varies depending upon which particular negator or prohibitive is used. In (723) the situation is one which is deemed unlikely to happen, in (724) the prohibitive *tèa'* expresses a situation which is unlikely to occur, and which is judged should not happen, while in (725) the negator *so'o* denotes a situation which the entity represented by the PIV argument does not wish to undertake.

It is necessary to note there are two minor exceptions to the mood marking described thus far. In certain instances the state of affairs expressed by a verb may be considered irrealis, but the predicate is not always morphologically marked as such. Firstly, adverbial subordinate clauses (see §10.3.2) which are introduced by the subordinating conjunction *sa* 'if/when' (conditional) may express an imaginative or predicative proposition which has not actually happened. Verbs in these adverbial clauses may or may not be marked morphologically as irrealis. Secondly, verbs which host POTENTIVE primary verbal

affixation also express potential situations which have not actually happened. Predicates which include POTENTIVE affixes do not also host the reduplicative prefix *Ce-*.

9.4 CAUSATIVES, REQUESTIVES, MUTUALS, and REFLEXIVES

This section describes four different morphological elements (two prefixes, one suffix, and one independent lexical element) which have a number of functions in verbal clauses. The first two of these prefixes are labelled as CAUSATIVE (§ 9.4.1) and REQUESTIVE (§ 9.4.2). Despite the fact these morphological items both add a participant to a clause, analysing them as valency increasing is not completely correct. For instance, while CAUSATIVE marking does derive transitive clauses from intransitive clauses, when a clause is already transitive there is no further increase in valency. Instead, in all instances where a clause has three participants as a result of CAUSATIVE or REQUESTIVE marking, there is always one argument which is expressed as an OBL PP²⁴¹.

The third morphological element expresses situations which are reciprocal or comitative, and is labelled here as a MUTUAL marker (§ 9.4.3). The addition of MUTUAL marking is a valency decreasing process which derives intransitive clauses (from those with bivalent verbal roots). The final element examined here marks a situation as REFLEXIVE (§ 9.4.4). This marking removes a participant from a transitive clause. However, clauses marked as REFLEXIVE are still structurally transitive as per the definition in §4.2. This marking is therefore not valency decreasing.

9.4.1 CAUSATIVE prefix *pa-*

The prefix *pa*₂²⁴² encodes causation in verbal predicates. It attaches to verbal stems which already host both primary verbal affixation and voice marking. The addition of this prefix²⁴³ results in the verbal forms outlined in Table 9.7. As is the case with a number of complex verbal stems (see §5.3.1), the AV form in the paradigm is /*m*/ initial in contrast to all the UV forms.

²⁴¹ This is unsurprising given that the language lacks ditransitive clauses, with the highest transitivity level being (mono)transitive (see §4.5.5).

²⁴² As in §5.3.2 the homophonous forms for the DYNAMIC and CAUSATIVE *pa-* prefixes are labelled here as *pa*₁- + *pa*₂- respectively to avoid confusion.

²⁴³ The *pa*₂- prefix is one which commonly occurs as a causative marker in AN languages. Reconstructions of PAN commonly have **pa-* as a generic causative marker (Ross 1998:391; Blust 2003), and Philippine-type languages seem to specifically encode causation with *pa-* (Himmelmann 2005:171).`

Table 9.7: Verb forms with CAUSATIVE prefix *pa*₂-

DYNAMIC affix:	CAUSATIVE affix:	Voice affix:	Resulting form of verb:
<i>pa</i> ₁ -	<i>pa</i> ₂ -	AV: < <i>um</i> >	<i>ma-pa</i> - [LEXICAL ROOT]
<i>pa</i> ₁ -	<i>pa</i> ₂ -	PV: <i>-en</i>	<i>pa-pa</i> - [LEXICAL ROOT] <i>-en</i>
<i>pa</i> ₁ -	<i>pa</i> ₂ -	LV: <i>-an</i>	<i>pa-pa</i> - [LEXICAL ROOT] <i>-an</i>
<i>pa</i> ₁ -	<i>pa</i> ₂ -	CV: <i>i-</i>	(<i>i-</i>) <i>pa-pa</i> - [LEXICAL ROOT]

Clauses that have any one of the four different verb forms in Table 9.7 express the meaning of ‘[argument X] causes [argument Y] to perform the action or event, or become state or quality indicated by [LEXICAL ROOT]’. When the verb form within verbal predicates includes *pa*₂- there is a requirement for the clause to have a minimum of two non-oblique participants.

The exact syntactic configuration of CAUSATIVE constructions is dependent the type of verbal lexical root (i.e. monovalent or bivalent) and the voice marking the verb contains. Within these parameters there are various possibilities for the interaction between GRs, semantic roles, and the roles of Causer and Causee. The various sub-categories of CAUSATIVE constructions are explained separately in the following subsections.

a. Causatives derived from monovalent verbal roots:

The information in Table 9.8 illustrates the possible GRs, semantic roles, and Causee/Cause roles for CAUSATIVE constructions which contain DYNAMIC marked monovalent verbal roots.

Table 9.8: Semantic roles and GRs in DYNAMIC monovalent CAUSATIVES

Monovalent verbal roots with DYNAMIC affixes:		
Participant 1:		Participant 2:
AV: PIV (Causer) ACTOR		NPIV.UN (Causee) UNDERGOER
UV: PIV (Causee) UNDERGOER		NPIV.A (Causer) ACTOR

Regardless of the semantic roles and GRs of participants within a CAUSATIVE transitive clause, there will always be two arguments which reference two specific entities; the one

which causes another to perform an action or experience a state (the Causer), and the entity which is made to perform the action or experience the state (the Causee).

Examples (726) - (727) demonstrate how the addition of CAUSATIVE morphology derives a transitive clause from what would normally be an intransitive clause. Both examples contain the DYNAMIC monovalent verbal root *tingkas* ‘run, escape’:

(726) *koutimingkas*

kow= t<im>ingkas

2.PL.PIV <AV.PST> run

‘You ran away’

(TDN_07_00:12:48)

(727) *niaku mapatingkasou sikawaloku*

niaku ma- pa- tingkas =mow si= kawalo =ku

1.SG AV.CAUS DYN run COMP AN.SG horse 1.SG.POSS

‘I make my horse run (i.e. I whip or hit it)’

(ELICITED)

In (726) the AV marked intransitive clause has one argument, the PIV *kow=* ‘you’. The corresponding AV marked CAUSATIVE construction in (727) has *niaku* ‘I’ as the PIV argument (and Causer) participant, and *si=kawalo=ku* ‘my horse’ as the NPIV.UN (and Causee) participant. These two arguments represent the ACTOR and UNDERGOER²⁴⁴ arguments respectively. In this example the addition of CAUSATIVE marking adds an ACTOR participant to an intransitive clause, thereby deriving a transitive clause. When CAUSATIVE marking is added to an AV marked intransitive clause with a DYNAMIC monovalent root, it is the argument with the GR of PIV and semantic role of ACTOR which is always the Causer in the resulting transitive clause.

In contrast to what is normally observed in underived transitive clauses, verbal predicates such as that in (727) are semantically complex, and actually encode multiple actions, events, or states. These are: 1) the action, event, or state which one participant causes another to perform or experience, and 2) the action, event, or state which is performed or

²⁴⁴ It could be argued that the NP *si=kawalo=ku* also has certain ACTOR characteristics, i.e. it still has to move its own legs in order to run. However, in terms of the semantic macroroles as outlined in §4.2, it is only the PIV argument *niaku* which has the semantic macrorole of ACTOR.

experienced the other participant. However, despite these semantically complex predicates, in terms of structure the clause still only assigns a single set of GRs.

In other situations a transitive CAUSATIVE clause may contain a verbal stem with UV marking. UV marked CAUSATIVE constructions have a PIV argument which is an UNDERGOER, and which is the Causee. Examples (728) - (729) again demonstrate an intransitive clause and a corresponding CAUSATIVE transitive clause. Both examples contain the DYNAMIC monovalent verbal root *ana* 'stay':

INTRANSITIVE (DYNAMIC - AV):

(728) *komusti ma'ana*

ko= musti ma- ana'
 2.SG.PIV must AV.DYN stay
 'You must wait (for your friends)'
 (TDN_10_00:02:52)

CAUSATIVE TRANSITIVE (DYNAMIC - PV):

(729) *ka'a kopapaana'nou nitu'awènèmu*

ka'a ko= pa- pa- ana' -en =mow ni=
 because 2.SG.PIV CAUS DYN stay PV CPL AN.SG.NPIV.A
 tu'awènè =mu
 old.woman 2.SG.POSS
 'Because your wife makes you wait'
 (TDN_28_00:05:17)

In example (728) the intransitive clause marked for AV has a single ACTOR argument *ko=* 'you' which is the PIV. In contrast, the PV CAUSATIVE transitive clause in (729) has two arguments, the UNDERGOER argument *ko=* 'you' which is the PIV and the Causee, and *tu'awènè=mu* 'your wife' which is the NPIV.A and Causer. The CAUSATIVE transitive clauses in (727) and (729) demonstrate the two types of configurations outlined in Table 9.8.

The configurations in Table 9.8 occur when the monovalent verbal root is DYNAMIC. A number of DYNAMIC monovalent verbal roots and their corresponding meanings in CAUSATIVE transitive clauses are listed in Table 9.9:

Table 9.9: CAUSATIVES with DYNAMIC monovalent verbal roots

Verbal root in intransitive clause:	CAUS	Meaning in causative transitive:
<i>tingkas</i> ‘run, escape’	+ <i>pa</i> ₂ - →	‘put s.t. to flight, cause s.t. run’
<i>warèng</i> ‘return home’	+ <i>pa</i> ₂ - →	‘cause s.o. return home’
<i>sèrèt</i> ‘mount, get up on, ride’	+ <i>pa</i> ₂ - →	‘put s.o. on s.t. (e.g. a horse)’
<i>rebur</i> ‘sit’	+ <i>pa</i> ₂ - →	‘seat s.o., cause s.o. sit’
<i>ana</i> ‘wait, stay’	+ <i>pa</i> ₂ - →	‘cause s.o. wait, stay’
<i>kaluar</i> ‘exit’	+ <i>pa</i> ₂ - →	‘cause s.o. or s.t. exit’

CAUSATIVE transitive clauses which contain STATIVE monovalent verbal roots demonstrate a slightly different syntactic configuration. STATIVE monovalent verbal roots within intransitive clauses normally have a single UNDERGOER argument which denotes an EXPERIENCER (see §4.5.1 and §4.5.3). Consequently, in CAUSATIVE transitive clauses these verbs will still require one argument with the semantic role of EXPERIENCER. The other participant will have the role of ACTOR. Table 9.10 demonstrates the possible syntactic configurations:

Table 9.10: Semantic roles and GRs in STATIVE monovalent CAUSATIVES

Monovalent verbal roots with STATIVE affixes:	
Participant 1:	Participant 2:
AV: PIV (Causer) ACTOR	NPIV.UN (Causee) UNDERGOER (EXPERIENCER)
UV: PIV(Causee) UNDERGOER (EXPERIENCER)	NPIV.A (Causer) ACTOR

Example (730) below demonstrates an intransitive clause with a STATIVE marked monovalent verb, while (731) is the corresponding transitive clause derived via CAUSATIVE marking. The verbal root in both clauses is *upi* ‘angry’, e.g.:

INTRANSITIVE (STATIVE):

(730) *kumaupi 'mou*

ku= ma- upi' =mow

1.SG.PIV EV.STAT angry CPL

'I am angry'

(ELICITED)

CAUSATIVE TRANSITIVE (DYNAMIC - AV):

(731) *situa 'wènèku mapaupi' niaku*

si= tu'awènè =ku ma- pa- upi' =mow niaku

AN.SG old.woman 1.SG.POSS AV.CAUS DYN angry CPL 1.SG

'My girlfriend makes me angry'

(ELICITED)

The intransitive clause in (730) has the single (PIV) argument *ku* = 'I' which has an UNDERGOER semantic role, i.e. EXPERIENCER. In contrast, the addition of CAUSATIVE marking results in the derived transitive clause in (731). In this clause there are two participants, i.e. the entity which experiences the state denoted by the verb, *niaku* 'me', and the entity causing the other entity to experience the state, i.e. *si=tu'awènè=ku* 'my girlfriend'. *Niaku* represents the ACTOR and Causer argument, while *si= tu'awènè=ku* represents the UNDERGOER (EXPERIENCER) and Causee argument. Note that the presence of an ACTOR argument now means that the verbal stem no longer includes STATIV marking, it must instead include DYNAMIC marking.

Derived CAUSATIVE transitive clauses with STATIV monovalent roots may also be marked for one of the three UVs. In this instance the syntactic configuration differs from that seen in (731), e.g.:

CAUSATIVE TRANSITIVE (DYNAMIC - PV):

(732) *kupapaupi 'n nitu'awènèku*

ku= pa- pa- upi' -en ni= tu'awènè =ku

1.SG.PIV CAUS DYN angry PV AN.SG.NPIV.A old.woman 1.SG.POSS

'My girlfriend makes me angry'

(ELICITED)

The CAUSATIVE transitive clause in (732) has PV marking. It has a NPIV.A argument *tu'awènè=ku* 'my girlfriend' expressing the participant which is the Causer, and which has the semantic role of ACTOR. The PIV argument *ku=* 'I' expresses the participant which is the Causee, and which has the necessary semantic role of UNDERGOER (EXPERIENCER). The verbal stem in (732) again contains DYNAMIC verbal affixation, despite the fact the verbal root is still the monovalent STATIVE *upi* 'angry'.

The inherent semantics of the verbal root in (730) - (732) means that any clause (intransitive or derived transitive) containing this verb must always have at least one argument with an UNDERGOER role. Regardless of the particular voice marking, the addition of an argument expressing a Causer (a volitional ACTOR) results in the required pairing of semantic roles for a transitive clause, those of ACTOR and UNDERGOER. A number of STATIVE monovalent roots and their corresponding meanings in CAUSATIVE transitive clauses are listed in Table 9.11:

Table 9.11: CAUSATIVES with STATIVE monovalent verbal roots

Verbal root in intransitive clause:	CAUS	Meaning in derived transitive:
<i>idè</i> 'afraid'	+ <i>pa₂</i> - →	'cause s.o. to be afraid'
<i>irang</i> 'ashamed, embarrassed'	+ <i>pa₂</i> - →	'cause s.o. to be ashamed or embarrassed'
<i>ghegher</i> 'cold'	+ <i>pa₂</i> - →	'cause s.t. to cool down'
<i>pasu</i> 'hot, heat'	+ <i>pa₂</i> - →	'cause s.t. to warm up'
<i>wedu</i> 'weary, tired'	+ <i>pa₂</i> - →	'tire s.o. out'
<i>upi</i> 'anger, angry'	+ <i>pa₂</i> - →	'cause s.o. to be angry'

From this subsection we see that there are various syntactic configurations possible when CAUSATIVE marking derives transitive clauses from intransitive clauses. Furthermore, we see that the variation in the mapping of semantic roles to GRs in causative derived transitive clauses is primarily dependent upon the voice marking of the verbal clause, and to a lesser extent the type of monovalent verbal root which hosts the CAUSATIVE marking.

b. Causatives derived from bivalent verbal roots:

Clauses which are already transitive may also host CAUSATIVE marking. The resulting derived clauses have an ACTOR (Causer) participant added, which results in a three

participant clause. However, only two of these participants are realised as non-oblique arguments (as one argument is always expressed with an oblique PP), and therefore CAUSATIVE marking cannot be considered valency increasing in the same way as was demonstrated in the previous subsection.

The syntactic configurations which occur in CAUSATIVE transitives with bivalent verbal roots always involve three arguments with the GRs of: ACTOR, UNDERGOER, and OBL. These clauses therefore have the same pattern of two non-oblique and one oblique argument as was observed in the underived three participant transitive clauses described in §4.5.5.

As was the case in the previous subsection, the mapping of semantic roles to GRs in CAUSATIVE transitive clauses with bivalent roots is dependent to a certain extent upon the semantic roles of the participants, and upon the related factor of voice marking.

Table 9.12 outlines the various possible configurations between semantic roles, Causee and Causer roles, GRs, and voice marking which occur in these CAUSATIVE constructions.

Table 9.12: Semantic roles and GRs in bivalent CAUSATIVES

Participant 1:	Participant 2:	Participant 3:
AV: PIV (Causer): ACTOR	NPIV.UN (Causee): UNDERGOER	OBL PP: UNDERGOER
UV: PIV: UNDERGOER	NPIV.A (Causer): ACTOR	OBL PP: (Causee) UNDERGOER

The clauses in (733) - (734) demonstrate an underived AV marked transitive clause and a corresponding CAUSATIVE derived AV marked transitive clause. In (731) there are two participants expressed by two non-oblique arguments which have the semantic roles of ACTOR and UNDERGOER, e.g.:

TRANSITIVE (AV):

(733) *sètou meleloo 'la nikèi*

sè= tow ma- Ce- loo' =la nikèy
 AN.PL person AV.DYN IRR see, look DIR.PROX 1.PL.EX
 'The people will see us'
 (TDN_14_DK_NK_00:09:35)

As (731) is an AV marked transitive clause, the NP with the ACTOR semantic role, *sè=tou* ‘the people’, has the GR of PIV. The argument with the UNDERGOER semantic role, *nikèi* ‘us’, has the GR of NPIV.UN.

In contrast, an AV CAUSATIVE transitive clause has an additional argument. There are now three participants, with two non-oblique arguments (and ACTOR and an UNDERGOER) and one oblique argument (another UNDERGOER), e.g.:

CAUSATIVE TRANSITIVE (AV):

(734) *sètuama mapaloo’ embalènèa wia sèwewènè*

sè=	tuama	ma-	pa-	loo’	sè=	wewènè
AN.PL	man	AV.CAUS	DYN	see, look	AN.PL	woman
wia	N=	walè	=nèa			
at.PROX	INAN	house	3.PL.POSS			

‘The men show (cause to see) the women their house’

(ELICITED)

In (734) the NP *sè=tuama* ‘the man’ has the semantic role of ACTOR, is the PIV, and represents the Causer. The NPIV.UN argument *sè=wewènè* ‘the women’ represents the Causee, while the second UNDERGOER argument, which is the entity the Causer makes the Causee see, is represented as part of the OBL PP *wia em=balè=nèa* ‘at their house’. The exact semantic roles of the two UNDERGOER arguments in CAUSATIVE transitive clauses such as (734) are somewhat dependent upon the semantics of the verbal root. However, the common feature of all these constructions is that one of the UNDERGOER arguments will always express the Causee, with the GR of this argument related to the voice marking of the clause.

A number of examples of bivalent verbal roots along with their meaning in CAUSATIVE transitive clauses are as follows:

Table 9.13: Bivalent verbal roots in CAUSATIVE clauses

Verbal root in transitive clause:	CAUS	Meaning in derived transitive:
<i>ato</i> ‘see, look’	+ <i>pa</i> ₂ - →	‘show, display (cause s.o. see s.t.)’
<i>wèwè</i> ‘hit’	+ <i>pa</i> ₂ - →	‘make s.o. to hit s.t. or s.o.’
<i>kaan</i> ‘eat’	+ <i>pa</i> ₂ - →	‘feed, cause s.o. to eat s.t.’
<i>siwo</i> ‘make, do’	+ <i>pa</i> ₂ - →	‘cause s.o. do s.t.’
<i>sawang</i> ‘help s.o.’	+ <i>pa</i> ₂ - →	‘cause s.o. to help’
<i>loo</i> ‘see, look’	+ <i>pa</i> ₂ - →	‘display, show (cause s.o. to see s.t.)’

In a CAUSATIVE transitive clause where the verb is marked for UV the configuration differs somewhat from what is observed in (734). Examples (735) - (736) demonstrate a non-derived transitive and a corresponding CAUSATIVE transitive, with both clauses marked for PV, e.g.:

TRANSITIVE (PV):

(735) *paloo 'namou engkokong*

pa- loo' -en =na =mow kokong

DYN see, look PV 3.SG.NPIV.A CPL head

‘He sees the head (of the bat)’

(TDN_32_KK_00:02:26)

CAUSATIVE TRANSITIVE (PV):

(736) *sia papaloo 'ngkula wia siwewènè*

sia pa- pa- loo' -en =ku =la wia

3.SG CAUS DYN see, look PV 1.SG.NPIV.A DIR.PROX at.PROX

si= wewènè

AN.SG woman

‘I show him to the woman’

(TDN_31_KK_00:06:40)

The underived transitive in (735) has the required non-oblique ACTOR and UNDERGOER arguments, with the UNDERGOER (PATENT) argument *kokong* ‘the head’ having the GR of PIV. The CAUSATIVE transitive in (736) instead has three participants, with the non-oblique UNDERGOER and ACTOR arguments *sia* ‘him’ and *=ku* ‘I’, and the oblique

argument *wia si=wewènè* ‘to the woman’. This PV marked CAUSATIVE transitive clause has one of the UNDERGOER arguments (*sia*) expressing the PIV, while the ACTOR argument (*=ku*) has the GR of NPIV.A and expresses the Causer. Unlike in (734), in (736) the Causee participant is now represented by the NP complement (*si=wewènè* ‘the woman’) of the OBL PP. (734) and (736) therefore demonstrate that while both AV and UV marked CAUSATIVE transitives contain three participants, the allocation of Causer/Causee roles and GRs differs as outlined in Table 9.12.

When CAUSATIVE transitive clauses are marked for LV or CV, the allocation of semantic roles, Causer/Causee roles, and GRs matches that observed in (736), e.g.:

CAUSATIVE TRANSITIVE (LV):

(737) *mpotung papatiboian nituama wia sioki’ku*

N=	potung	pa-	pa-	tiboy	-an	ni=
INAN	bamboo.tube	CAUS	DYN	grab	LV	AN.SG.NPIV.A
tuama	wia	si=	oki’	=na		
man	at.PROX	AN.SG	small	3.SG.POSS		

‘The man makes his child grab the bamboo tube’

(ELICITED)

CAUSATIVE TRANSITIVE (CV):

(738) *gambar papalo’muela wia situ’awenènèmu*

gambar	i-	pa-	pa-	loo’	=mu	=la	wia
picture	CV	CAUS	DYN	see, look	2.SG.NPIV.A	DIR.PROX	at.PROX
si=	tu’awènè	=mu					
AN.SG	old.woman	2.SG.POSS					

‘You show the picture to your girlfriend’

(ELICITED)

In (737) - (738) the PIV argument NPs *n=potung* ‘the bamboo tube’ and *gambar* ‘the picture’ represent the UNDERGOER participants which the Causer (NPIV.A arguments *ni=tuama* ‘the man’ and *=mu* ‘you’) makes the Causee (NPs *si=oki’=na* ‘his child’ and *si=tu’awènè=mu* ‘your girlfriend’) perform an action on or towards. Once again the argument which represents the Causee participant is expressed as the NP complement of the OBL PP.

9.4.2 REQUESTIVE prefix *paki-*

The prefix *paki-*²⁴⁵ is labelled here as a REQUESTIVE marker. Unlike CAUSATIVE *pa₂-*, the verbal stems which host REQUESTIVE *paki-* are not overtly marked with the primary verbal affix *pa₁-* (DYNAMIC). However, the verbal predicates which include *paki-* always denote situations with a volitional and controlling ACTOR participant, and as such these verbal stems are judged to be zero marked for DYNAMIC *pa-*.

The possible combinations of voice morphology together with *paki-* on verbal stems are presented in Table 9.14. This paradigm displays the common variation whereby the AV forms are /m/ initial, while the UV forms are /p/ initial.

Table 9.14: Verb forms with REQUESTIVE prefix *paki-*

REQUESTIVE affix:	Voice affix:	Resulting form of verb:
<i>paki-</i>	AV: <um>	<i>maki-</i> [LEXICAL ROOT]
<i>paki-</i>	PV: -en	<i>paki-</i> [LEXICAL ROOT] -en
<i>paki-</i>	LV: -an	<i>paki-</i> [LEXICAL ROOT] -an
<i>paki-</i>	CV: i-	(i-) <i>paki-</i> [LEXICAL ROOT]

The addition of *paki-* to verbal stems expresses a meaning of ‘[argument X] asks, requests, begs [argument Y] to perform the action or event expressed by [LEXICAL ROOT]’²⁴⁶. The obvious functional similarity between REQUESTIVE and CAUSATIVE constructions is that both result in an additional participant occurring within a clause. However, in contrast to CAUSATIVE *pa₂-*, REQUESTIVE constructions which derive transitive clauses from intransitive clauses have not been recorded or elicited in the data. While in all probability these constructions exist²⁴⁷, the focus in this subsection will be on three participant clauses derived via REQUESTIVE marking. These clauses are derived from those which are already transitive and which contain predicates with bivalent verbal roots.

²⁴⁵ An obvious question is whether the *paki-* prefix is bimorphemic and includes the DYNAMIC prefix *pa-*. While this is a tempting analysis, as mentioned in §5.3.1 it is not possible to deconstruct *paki-* into separate morphemes *pa-* + *ki-*. For discussion of whether this form was historically bimorphemic see Liao (2011a:227).

²⁴⁶ Liao (2011a) attests a number of related functions to *paki-* in AN languages. These are labelled *social/comitative*, *polite imperative*, *requestive*, and *causative*.

²⁴⁷ There appears to be at least one example of this in Sneddon (1975:226).

The mapping of semantic roles to GRs for REQUESTIVE transitive clauses is similar to that observed with the CAUSATIVE marking above (Table 9.12). Consequently, REQUESTIVE derived transitive clauses always contain two non-oblique arguments and one oblique argument. Two of these participants will represent the entity requesting the action be performed (Requester) and the entity requested to perform the action or event (Requestee). The third participant is the entity which is affected by the action or event.

Table 9.15 outlines the various possible configurations for semantic roles, Requester /Requestee role, and GRs in REQUESTIVE transitive clauses:

Table 9.15: Semantic roles and GRs in REQUESTIVE clauses

Participant 1:	Participant 2:	Participant 3:
AV: PIV (Requester): ACTOR	NPIV.UN: UNDERGOER	OBL PP (Requestee): UNDERGOER
UV: PIV: UNDERGOER	NPIV.A (Requester): ACTOR	OBL PP (Requestee): UNDERGOER

Table 9.1.5 demonstrates that unlike CAUSATIVE constructions, the argument which expresses the Requestee in REQUESTIVE constructions is the same regardless of the voice marking, i.e. it is always represented by the NP complement of the OBL PP.

Examples (739) - (740) demonstrated an underived transitive and a REQUESTIVE transitive clause, both clauses are marked for UV (LV) and contain the verbal root *pè'an* 'taste', e.g.:

TRANSITIVE (LV):

(739) *engkoyabu pinè'anantamoula*

N= koyabu p<in>è'an -an =ta =mow =la
 INAN PN <PST> taste LV 1.PL.IN.NPIV.A CPL DIR.PROX

'We tasted the koyabu'

(TDN_32_OL_KK_00:06:41)

REQUESTIVE TRANSITIVE (LV):

(740) *engkoyabu pakipè'ananta wia sitim*

N=	koyabu	paki-	pè'an	-an	=ta	wia	si=	Tim
INAN	PN	REQ	taste	LV	1.PL.IN.NPIV.A	to.PROX	AN.SG	PN

'We ask Tim to taste the koyabu'
(ELICITED)

(739) is an underived LV transitive clause where the NPIV.A argument is expressed with *=ta* 'we', and where the PIV argument is expressed with *eng=koyabu* 'the koyabu'. The clause requires only two arguments which express the ACTOR and UNDERGOER participants of the verb *pè'an* 'taste s.t.'.

However, in (740) the addition of *paki-* means the clause now contains three participants, i.e. the Requester (*=ta* 'we'), the Requestee (the NP *si=Tim* 'Tim'), and the entity which the Requestee is asked to perform an action on (the NP *eng=koyabu* 'the koyabu'). As was the pattern with CAUSATIVE *pa₂₋*, a transitive clause derived with *paki-* now has a semantically complex predicate expressing multiple actions. This REQUESTIVE transitive contains two non-oblique arguments in the form of a Requester ACTOR NP and an UNDERGOER NP. The third argument is expressed by an oblique PP containing the Requestee UNDERGOER.

The following examples of PV and CV REQUESTIVE transitives also illustrate the same pattern observed in (740):

REQUESTIVE TRANSITIVE (PV):

(741) *empakiwèèn nètu'a wia siopo emung mana natas*

N=	paki-	wèè	-en	nè=	tu'a	wia
3.SG.INAN	REQ	give	PV	AN.PL.NPIV.A	old	to.PROX

si=	Opo	Empung	mana	N=	atas
AN.SG	elder	God	up.MED	INAN	above

'The elders implored God up above to provide it (a command)'
(TDN_30_00:05:54)

REQUESTIVE TRANSITIVE (CV):

(742) *empepatil ipakièdo nikalo wia om lèo*

N= pepatil i- paki- èdo ni= Kalo wia
INAN machete CV REQ take AN.SG.NPIV.A PN to.PROX
om Lèo
uncle PN
‘Kalo requests uncle Leo to pick up the machete’
(ELICITED)

In AV marked REQUESTIVE transitive clauses the configuration varies slightly from that observed in (740) - (742). In AV clauses the PIV and ACTOR argument always represents the Requester, while the Requestee is still represented by the NP complement of the OBL PP. Example (743) demonstrates an AV marked REQUESTIVE transitive containing the verbal root *siwo* ‘make’:

REQUESTIVE TRANSITIVE (AV):

(743) *siom lèo makiwiso empeptail wia sikalo*

si= om Lèo maki- siwo N= peptail wia
AN.SG uncle PN AV.REQ make INAN machete from.PROX
si= Kalo
AN.SG PN
‘Uncle Leo asks Kalo to make a machete’
(ELICITED)

In (743) the Requester is expressed by the PIV and ACTOR argument *si=om lèo* ‘Uncle Leo’, while the Requestee is again expressed by the NP complement of a PP *si=kalo* ‘Kalo’. In contrast to the UV marked REQUESTIVE transitives, in (743) the non-oblique (NPIV.UN) UNDERGOER *em=pepatil* ‘the axe’ expresses the participant which the Requester asks the Requestee to perform an action on.

9.4.3 MUTUAL suffix -an

The suffix *-an* (MUT) encodes reciprocal and comitative situations. This suffix is used to demonstrate that multiple (a minimum of two) participants within a clause are all mutually engaged in a particular action or state.

When MUTUAL marking is added to a verb the clause is always intransitive, even when the verbal root is bivalent and would normally occur within a transitive clause. This pattern is displayed in (744) - (745):

(744) *è kaka adè mawunuan*

sè= kaka adè ma- wunu' -an
 AN.PL older.sibling younger AV.DYN kill MUT
 'The older and younger brothers kill one another'
 (TDN_14_HK_DT_00:10:00)

(745) *mawulèwulèngan*

ma- CVCV- wulèng -an
 AV.DYN RDP carry MUT
 '(We) are carrying each other (spiritually)
 (TDN_30_00:09:02)

Example (744) has a verbal root normally found in transitive clauses (*wunu'* 'kill'), but only has one argument, the PIV NP *sè=kaka adè* 'the older and younger brothers'. Similarly, in (745) there is only one argument, the pronominal PIV *sè=* 'they', but the bivalent verbal root *wulèng* 'carry' normally occurs in a transitive clause with two arguments.

Despite the fact that they contain bivalent verbal roots, both of these clauses are intransitive. The combination of the MUTUAL suffix *-an* and the prefix *ma-* (AV .DYN) encodes the fact that the multiple entities represented by the PIV argument are producing the state or action denoted by the verbal predicate upon each other. In effect, the single argument in the clause has multiple semantic roles, i.e. *sè=kaka adè* encodes both the ACTOR and the UNDERGOER roles. These two semantic roles do not entail two GRs. Instead, both semantic roles are contained in the single PIV argument.

Unlike other paradigms of verbal morphology seen in this chapter, MUTUAL marking only occurs in ACTOR voice. The lack of UNDERGOER voices for reciprocal constructions is an obvious consequence of the fact that MUTUAL marked clauses are intransitive and only contain one argument (albeit a complex one which expresses multiple semantic roles). In contrast, UV clauses are always transitive and contain separate PIV and NPIV.A NPs with roles of UNDERGOER and ACTOR (§4.5.4).

There are occasions when the multiple participants which perform the action or event upon one another are expressed separately. However, even in this situation the two arguments still both share only one GR, i.e. that of the PIV, e.g.:

(746) *kusoo matoanou sibrawijaya*

ku=	so'o	<um>	ato	-an	=mow	si=	Brawijaya
1.SG.PIV	don't .want	<AV>	see, look	MUT	CPL	AN.SG	PN

'I don't want the Brawijaya and I to see each other (i.e. meet)'

(TDN_21_00:02:37)

In (746) the two entities which perform an action on each other are expressed by the personal pronoun *ku=* 'I', and the NP *si=Brawijaya* 'the Brawijaya regiment'. This particular structure is rare, and it almost exclusively used with the verbal root *ato* 'see, look' with the meaning of 'to meet (one another)'.

Another way in which the two entities in a reciprocal relationship may be expressed is with a complex co-ordinated NP, e.g.:

(747) *sèwewènè wo sètuama mebalabalasan*

sè=	wewènè	wo	sè=	tuama	ma-	CVCV-
AN.PL	woman	and	AN.PL	man	AV.DYN	RDP

balas -an

answer MUT

'The women and the men are answering each other (i.e. chanting back and forth)'

(TDN_31_00:09:41)

In (747) despite the fact that the two entities of speaker and listener are expressed with separate nouns, they are co-ordinated and share one only GR, that of PIV. Consequently, the clause is still intransitive.

Finally, in addition to its more common function of expressing actions or events which are reciprocal in nature, MUTUAL *-an* also encodes actions or events with a comitative reading, e.g.:

(748) *èmina'ana'anan*

sè= ma- <in> ana' -an
 3.PL.PIV AV.DYN PST stay MUT
 'So, they waited together (for the water)'
 (TDN_10_00:09:38)

In (748) the verbal root is *ana'* which can be glossed variously as 'stay', 'wait' or 'live'. None of these meanings constitute an action or event which different individuals can perform upon each other. As such, the context must simply be that the entities perform the action or event together, and/or at the same time.

9.4.4 REFLEXIVE markers: *sandiri*, *nu esa*, and *nu waya*

REFLEXIVE marking is another situation in which an entity (or entities) within a clause both affects, and is effected by, the action, event, or state denoted by the verbal predicate. Clauses which contain verbs with REFLEXIVE marking only have one participant. However, they have two arguments with separate GRs, and are therefore still transitive.

The expression of REFLEXIVE actions is achieved through the use of two different forms; *sendiri/sandiri* and *nu esa/nu waya*. In contrast to other elements described in this chapter, both types of REFLEXIVE marking utilise independent morphological elements. Regardless of which form is used, there will always be an antecedent for these forms within the same clause.

The first type of marking utilises loan words from standard Indonesian (*sendiri*), or Manado Malay (*sandiri*), both of which can be glossed as 'self'. The difference in the number of participants in a transitive clause with and without REFLEXIVE marking is displayed in (749) - (750)²⁴⁸:

(749) *makemes labung*

ma- kemes labung
 AV.DYN wash clothing
 '(I) wash the clothes'
 (TDN_12_00:17:08)

²⁴⁸ Both the natural examples in (749) - (750) and the elicited examples below only display clauses marked for AV. Anecdotal evidence from speakers allows a hypothesis that REFLEXIVE marking in UV marked clauses follows the same pattern. However, further elicitation of fieldwork is required to confirm this.

(750) *simakemes sandiri*

si= ma- kemes sandiri

3.SG.PIV AV.DYN wash REFLX

‘She washes herself’

(TDN_12_00:09:48)

Example (749) contains the verbal root *kemes* ‘wash s.t.’. As such it has two participants, an ACTOR argument (the PIV - omitted) and an NPIV.UN (*labung* ‘clothing’) argument. In (750) the clause contains the same verbal root, but it only has one participant. The presence of *sandiri* denotes that the sole participant (*si=* ‘she’) has two semantic roles, as both ACTOR and UNDERGOER. Despite this, (750) still contains two arguments with two separate GRs, the PIV argument *si=* ‘he/she’ and the NPIV.UN argument *sandiri* ‘self’. The clause in (750) must therefore also be considered transitive (as per the definition used in §4.3).

The Tondano REFLEXIVE markers did not occur naturally in the data corpus, and required elicitation. These forms consist of one of the independent personal pronouns in (see §8.3.2) together with the element *nuesa* for singular pronouns, and *nuwaya* for plural pronouns²⁴⁹.

Table 9.16: Tondano REFLEXIVE pronominal paradigm

	Independent form:	Reflexive marker:	
1 st sing.	<i>niaku</i>	<i>nuesa</i>	‘myself’
2 nd sing.	<i>niko</i>	<i>nuesa</i>	‘yourself’
3 rd sing.	<i>(ni)sia</i>	<i>nuesa</i>	‘him/herself’
1 st pl. (IN)	<i>(ni)kita</i>	<i>nuwaya</i>	‘ourselves’
1 st pl. (EX)	<i>nikèi</i>	<i>nuwaya</i>	‘ourselves’
2 nd pl.	<i>nikou</i>	<i>nuwaya</i>	‘yourselves’
3 rd pl.	<i>(ni)sèa</i>	<i>nuwaya</i>	‘themselves’

²⁴⁹ While the meaning of *esa* ‘one’ and *waya* ‘all’ is obvious, the exact meaning of *nu* in these forms is unknown. Speakers were unable to deconstruct these forms into possible component parts. In the dictionary work of Dotulong (2010:372) the form *nu* is given as a synonym for *ka’a* ‘why, because’. However, this form has not occurred in the data corpus.

The following sets of examples demonstrate the use of the REFLEXIVE markers displayed in Table 9.15. The first transitive clause in each set has two participants expressed as two non-oblique NP arguments. These NPs express ACTOR and UNDERGOER participants with the GRs of PIV and NPIV.UN. In contrast, the second transitive clause also has two non-oblique NP arguments, but which both refer to the same participant. The two arguments again have the GRs of PIV and NPIV.UN, e.g.:

(751) *sikakaku limoo' èsbèiyèi wia telefisi*

si=	kaka	=ku	l<im>oo'	SBY ²⁵⁰	wia	telefisi
AN.SG	sibling	1.SG.POSS	<AV.PST> see, look	PN	on.PROX	television

'My older brother saw SBY on television'
(ELICITED)

(752) *sikakaku limoo' nisia nuesa wia telefisi*

si=	kaka	=ku	l<im>oo'	nisia	nuesa
AN.SG	older.sibling	1.SG.POSS	<AV.PST> see, look	3.SG	REFL

wia telefisi
on.PROX television
'My older brother saw himself on television'
(ELICITED)

(753) *sètou kimemes engkekaanen*

sè=	tow	k<im>emes	N=	ke-	kaan	-en
AN.PL	person	<AV.PST> wash	INAN	NR	rice	PV

'The people washed some food (i.e. vegetables)
(ELICITED)

(754) *sètou kimemes nisèa nuwaya*

sè=	tow	k<im>emes	nisèa	nu waya
AN.PL	person	<AV.PST> wash	3.PL	REFL

'The people washed themselves'
(ELICITED)

9.5 COMPLETIVE prefix *paka-* and MANNER prefix *kapa-*

This section describes an additional two bound morphological elements which may be hosted by heads within a verbal predicate. Neither of these prefixes have the function of

²⁵⁰ At the time of recording the Indonesian president was Susilo Bambang Yudiono, abbreviated by most people to his initials, SBY.

increasing or decreasing valency, as was the case with certain affixes in §9.4. In §9.5.1 the COMPLETIVE marking prefix *paka-* is described, while the MANNER marking prefix *kapa* is outlined in §9.5.2.

9.5.1 COMPLETIVE prefix *paka-*

The primary function of the verbal prefix *paka-* is to encode that the event or action denoted by the predicate is complete, or on the verge of completion. However, *paka-* is unlike the TAM markers described in §9.3, in that it is used to express the completion of one action or event in order that (or simply after which) another action or event will occur.

The verbal stems which *paka-* attaches to are not overtly marked with primary verbal affixation. The predicates which include these verbal stems denote actions or events with an ACTOR participant, and (as with *paki-* in §9.4.2) they are judged to have zero marking of the DYNAMIC affix *pa*²⁵¹.

The complex verbal stems which result from the addition of *paka-* to stems with overt voice marking are presented in Table 9.17. The common alternation where initial /p/ is realised as /m/ in the AV form also occurs in this paradigm.

Table 9.17: Verb forms with COMPLETIVE prefix *paka-*

REQUESTIVE affix:	Voice affix:	Resulting form of verb:
<i>paka-</i>	AV: <um>	<i>maka-</i> [LEXICAL ROOT]
<i>paka-</i>	PV: -en	<i>paka-</i> [LEXICAL ROOT] -en
<i>paka-</i>	LV: -an	<i>paka-</i> [LEXICAL ROOT] -an
<i>paka-</i>	CV: i-	(i-)paka-[LEXICAL ROOT]

In previous descriptions of other Philippine-type languages (e.g. Blust 1999b:347), Himmelmann & Wolff 1999:66, and Zeitoun 2000:391-92) the *paka-* prefix is analysed as belonging to a sub-category of causative morphology. In this analysis *paka-* is historically derived from PAN **pa-* causative plus **ka-* stative (Blust 2003:459). In at

²⁵¹ As with REQUESTIVE *paki-* in §9.4.2, it is problematic to deconstruct *paka-* into two separate morphemes. The form of *paka-* again begs the question of whether DYNAMIC *pa-* could be part of this prefix. However, in Tondano it is not possible to deconstruct *paka-* into separate morphemes.

least one Philippine-type language, Toratán (Himmelman & Wolff 1999:60) *paka-* is described as marking a causative of statives, and is labelled an “exhaustive stative”.

While *paka-* does have an exhaustive function of sorts in Tondano (a sense of completion or near completion), it only ever occurs on verbal stems which host DYNAMIC verbal affixes. In contrast to the analyses described above, *paka-* does not appear on roots which normally take STATIVE verbal affixes (# indicates a clause boundary), e.g.:

AV COMPLETIVE:

(755) *makalansela kowèènoumi kumoo'*

maka-	lansa	=la	# ko=	wèè	-en	=mow
AV.CPL	dance	DIR.PROX	2.SG.PIV	give	PV	CPL
=mi	k<um>oo'					

DIR.DIST <AV> drink

‘When (you) finish dancing (they) would give you a drink’

(TDN_11_AW_HL_00:11:15)

(756) *makatelesi embengimou, marèngoumi aki walè*

maka-	teles	=mi	N=	wengi	=mow	# <um> warèng
AV.CPL	buy	DIR.DIST	INAN	night	CPL	<AV> return.home
=mow	=mi	waki	walè			
CPL	DIR.DIST	to.DIST	house			

‘After (we) shop at night, (then) we will return home to the house’

(TDN_20_00:01:17)

PV COMPLETIVE:

(757) *pakasodonami itu, ndèimou*

paka-	sodo	-en	=na	=mi	itu	# N=	rèy'	=mow
CPL	ladle	PV	3.SG.NPIV.A	DIR.DIST	that.MED	INAN	not	CPL

‘He ladles that (palm sugar) out, no more’

(TDN_26_00:08:31)

(758) *pakaisinèala witu nukua itu, papaghegheranou*

paka- isi -en =nèa =la witu N= uka
CPL fill PV 3.PL.NPIV.A DIR.PROX in.MED INAN coconut.shell
 itu # pa- pa- ghegher -an =mow
that.MED CAUS DYN cold LV CPL

‘After they pour (it - palm sugar sap) into that coconut shell, (they) make it cool’
 (TDN_25_00:07:26)

LV COMPLETIVE:

(759) *jadi pakalekepanèamoukan*

jadi paka- lekep -an =nèa =mowkan
thus CPL complete LV 3.PL.NPIV.A definitely

‘So, they definitely complete (their study)’
 (TDN_31_00:16:32)

CV COMPLETIVE:

(760) *pakatoa 'mi nitu, igantongoula*

i- paka- toa' =mi ni'tu # i- gantong
CV CPL pour DIR.DIST that.MED CV bag
 =mow =la
CPL DIR.PROX

‘(You) pour that out (then) (you) will bag it’
 (TDN_29_00:01:14)

(761) *sa pakaloo 'la gula mèana, karirisengkeni*

sa i- paka- loo' =la gula mèa =na
if,when CV CPL see, look DIR.PROX sugar red 3.SG.POSS
 # ka- riris -an =keni
STAT disgusting LV PART

‘If (you) already see the palm sugar (coming out of the cake) then it will be disgusting’
 (TDN_19_00:04:09)

The use of the COMPLETIVE prefix *paka-* as part of the verbal predicates in (755) - (761) means all these actions or events are viewed as completed, or on the point of completion. When discussing its function with speakers, *paka-* is often translated into standard

Indonesian as *selesai* ‘finish’ or *setelah* ‘after’. However, this is not completely accurate. Rather, with the use of *paka-* there is a clear ordering of events. While there is an obvious reference to temporality, it relates solely to the timing of the events relative to each other, and not simply from the moment of utterance as is the case with markers of absolute tense.

Clauses which contain verbs marked with COMPLETIVE *paka-* always express situations viewed as occurring before some other state of affairs. In some cases the subsequent event may be a situation which commonly occurs after the first event, e.g. having a drink after dancing (755) or returning home after shopping in a mall (756). In other instances the situation which is one which must be completed before the second event may occur. This is displayed by (757) - (758) where hot boiling palm sugar must be poured into coconut shells before it can be cooled (and then sold at market).

Lastly, when a clause with a *paka-* marked verbal predicate is not directly followed by another verbal clause, there is still the implication that another situation may now occur (as a result of the first situation being concluded). A COMPLETIVE marked clause may instead be followed by the negator *rèi'* in combination with *=mow* (CPL). The form *rèi'=mow* ‘no longer, already, finished’ (see §5.6.1 and §7.2.1) expresses the situation denoted by the COMPLETIVE *paka-* marked clause is completed²⁵², and that another situation may now occur, e.g. (c.f. also (757) above):

(762) *pakaputaputarla itu, ndèi'mou*

i-	paka-	CVCV-	putar	=la	itu	# N=	rèy'	=mow
CV	REQ	RDP	turn	DIR.DIST	that.MED	INAN	not	CPL

‘(You) turn that over, already done (now it can be cooked)’
(TDN_11_AW_HL_00:02:08)

9.5.2 MANNER marking prefix *kapa-*

The prefix *kapa-* occurs infrequently and encodes: ‘the manner or method in which the situation expressed by [LEXICAL ROOT] is achieved’.

²⁵² In the occurrence that the COMPLETIVE *paka-* marked clause is directly followed by *dèi'=mow*, the verbal clause expressing the now possible action or event will often then follow *dèi'=mow*.

As with the prefixes *paki-* and *paka-*, *kapa-*²⁵³ attaches to verbal stems which are not overtly marked with primary verbal affixation, but which express situations with a volitional and controlling ACTOR participant. The forms which result from the combination of verbal stems and the prefix *kapa-* are presented in Table 9.18.

Table 9.18: Verb forms with MANNER prefix *kapa-*

MANNER affix:	Voice affix:	Resulting form of verb:
<i>kapa-</i>	AV: <um>	<i>kapa-</i> [LEXICAL ROOT]
<i>kapa-</i>	PV: -en	<i>kapa-</i> [LEXICAL ROOT] -en
<i>kapa-</i>	LV: -an	<i>kapa-</i> [LEXICAL ROOT] -an
<i>kapa-</i>	CV: i-	(i-)kapa-[LEXICAL ROOT]

The paradigm above appears to have a gap, that is, voice affixes which are infixes (i.e. AV <um>) or prefixes (i.e. CV *i-*) are zero marked when the MANNER prefix *kapa-* is hosted by the verbal stem. Due to the fact that the primary verbal affix (DYNAMIC *pa-*) is also zero marked, *kapa-* attaches directly to lexical roots. Despite this irregularity, it is quite clear when a verbal predicate with *kapa-* is also marked for AV, e.g.:

(763) *kala entè' kouman kapawe'akes tuama iti'i*

kela entè' kowman kapa- wa'akes tuama iti'i

PART strong meanwhile MANN tie.with.string man that.MED

‘Wow, meanwhile that man is tying the string forcefully’

(TDN_26_00:01:18)

(764) *kumura si= Fèndi kapa- siwo N= tinutu'an?*

kumura si= Fèndi kapa- siwo N= tinutu'an

how AN.SG PN MANN make INAN vegetable.porridge

‘How does Fendy make vegetable porridge?’

(ELICITED)

²⁵³ It is not entirely clear if *kapa-* should be considered a bimorphemic prefix or not. As with *paki-* and *paka-*, this form is not deconstructable into separate morphemes.

(765) *jadi kumura kapawui tu'awènèmu?*

jadi kumura kapa- wui tu'awènè =mu
 thus how MANN ask old.woman 2.SG.POSS
 'So, how did (you) ask your girlfriend out?'
 (TDN_14_DK_NK_00:04:04)

The fact that (763) - (765) are AV verbal clauses is demonstrated by the semantic role of the PIV arguments. That is, *tuama iti'i* 'that man' (763), *si=fèndi* 'Fendy' (764), and the omitted *ko=* 'you' (765) are all ACTORS. Furthermore, the lack of any UV marking on the verbal roots, or any NPIV.A marked arguments, further reflects an AV status.

In contrast, PV and LV are marked as expected with their respective *-en* and *-an* suffixes on the verb. While overt CV marking is again absent, *kapa-* constructions in CV are identified by the fact the verb stem does not contain either PV or LV marking, and by the fact that the clause will have the expected NPIV.A marked argument expressing an ACTOR participant (which no AV marked clause will ever have). Examples (766) - (768) display *kapa-* constructions with the three types of UV marking, e.g.:

(766) *kumura kapasiwon itu*

kumura kapa- siwo -en itu
 how MANN make PV that.MED
 'How (you) make that (cake)'
 (TDN_03_00:24:46)

(767) *kumura embalè kapasiwoan nifèndi?*

kumura N= walè kapa- siwo -an ni= Fèndi
 how INAN house MANN make LV AN.SG.NPIV.A PN
 'How does Fendi build the house?'
 (ELICITED)

(768) *tuana kapasabo nètu'a*

tuana kapa- i- sabo nè= tu'a
 thus MANN CV prayer.song AN.PL.NPIV.A old
 'The elders sung (prayers) like this'
 (TDN_31_00:08:05)

While all the clauses in (766) - (768) contain bivalent verbal roots and are transitive, the use of *kapa-* is not restricted to situations which inherently require two participants.

Monovalent verbal roots which take DYNAMIC affixes also host *kapa-*, resulting in forms such as *kapa-tingkas* (AV.MANN - run, flee) ‘how s.o. ran’ or *kapa-tekul* (AV.MANN - sleep) ‘how s.o. sleeps’. In contrast, monovalent verbal roots which take STATIVE affixes do not appear to host *kapa-*, e.g. **kapa-upi* (EV.MANN - angry) ‘how s.o. is angry’ or **kapa-irang* (EV.MANN - ashamed, embarrassed) ‘how s.o. is shy, ashamed’.

Finally, as seen in a number of the examples above, *kapa-* often occurs together with the question word *kumura* ‘how’. This is unsurprising given the similarity in the semantics inherent to both forms. The combination of *kapa-* and *kumura* may be utilised in the context of a content question, such as (764) - (765) and (767), or in a declarative statement as seen in (763), (766), and (768).

10.0 COMPLEX CLAUSES

This chapter describes the various complex clause constructions found in the language. These may be complex predicates within single independent clauses, or clauses which consist of multiple clauses due to processes of subordination or coordination.

Firstly, complex predicates within monoclausal constructions are examined in §10.1. Complex predicate constructions are either serial verb constructions (henceforth SVCs) (§10.1.1), or complex predicates consisting of an auxiliary verb (see §6.3.1) together with a main verb (§10.1.2).

The remaining sections describe the various categories of multiple complex clauses. In §10.2 complex clauses which consist of multiple conjoined independent clauses (coordination - §10.2.1) are examined. Following this, §10.3 describes complex clauses which consist of dependent clauses embedded within independent clauses (subordination). Subordinate clauses are divided into three separate classes depending on their function. Clauses which function as modifiers of NPs (i.e. relative clauses) are examined in §10.3.1, clauses which function as modifiers of independent verbal clauses (i.e. adverbial subordinate clauses) are examined in §10.3.2, and clauses which function as arguments (i.e. complements) of verbal clauses are examined in §10.3.3.

Finally, in §10.3.4 constructions which have the function of encoding indirect speech are discussed. While one of these constructions has clauses embedded within other clauses, applying the label of ‘subordination’ is problematic. A diagnostic will demonstrate that these clauses are not complements of a verb, and are not subordinate to a main clause.

10.1 Complex predicates in monoclausal constructions

The following two categories of complex predicates have one specific feature in common. Both are monoclausal constructions in which the predicate contains two verbs. Despite this, there are also a number of important differences between SVCs and auxiliary verb constructions, both in terms of morphology and function.

10.1.1 Serial Verb Constructions (SVCs)

Cross linguistically, there are a broad range of criteria which have been previously used to define SVCs (Haspelmath 2015:1). Furthermore, it is problematic to find criteria for SVCs which can be considered “universal”, so much so that in a recent publication Foley (2010:

107) states that these universal defining properties probably do not exist. While the recent work of Haspelmath (2015) has proposed a narrower set of criteria for defining SVCs, it remains to be seen whether these criteria can be applied successfully to complex monoclausal constructions cross linguistically.

The focus of this subsection will be to demonstrate that the constructions labelled as SVCs match a broad definition of this concept, and that they display various features which delineate them from other complex constructions. The features which can be used to define SVCs in Tondano are all cited as occurring in constructions labelled as SVCs in other languages.

The broad definition of an SVC applied here follows that of Haspelmath (*ibid*: 2) which states that an SVC is “a monoclausal construction consisting of multiple independent verbs with no element linking them and with no predicate-argument relation²⁵⁴ between the verbs”.

In addition to this overarching feature, SVCs in Tondano also have the following characteristics (these are also considered characteristics of SVCs in Durie 1997:291, Aikhenvald 2006, Dixon 2006, and Noonan 2007:65, 88):

- SVCs are comprised of multiple verbs which occur together within a clause. Other elements (e.g. conjunctions, negators, NPs, or PPs) do not occur between the two verbs.
- The multiple verbs function as the head of a single predicate, and more importantly, they refer to a situation which is viewed as a single overall event.
- Each verb in the SVC may also function independently as the sole verb in a verbal clause.
- An SVC has only one shared pivot argument.

The clauses in (769) - (773) all demonstrate how SVCs in Tondano contain all of the features listed above:

²⁵⁴ A “predicate-argument relation is defined as where “one of the verbs is (part of) an argument of the other verb” (*ibid*:14).

(769) *koma'ana' maèdo paai*

ko= ma- ana' ma- èdo paay'
2.SG.PIV AV.DYN stay AV.DYN take knife

‘You wait (to) take a knife’

(TDN_21_00:05:53)

(770) *sèma'ajar masiwo cucur*

sè= ma- ajar ma- siwo cucur
3.PL.PIV AV.DYN learn AV.DYN make PN

‘They learn to make cucur cake’

(TDN_03_00:08:04)

(771) *wo paèdon pekaanentela*

wo pa- èdo -en pa- kaan -en =ta =la
and DYN take PV DYN rice PV 1.PL.IN.NPIV.A DIR.PROX

‘And we take (the dried rice) to eat’

(TDN_10_00:17:03)

(772) *komèa sumiwo litir manamèè?*

ko= <um> èa s<um>iwo litir mana =mèè
2.SG.PIV <AV> go <AV> make dike there DIR.MED

‘Will you go and build dikes over there?’

(TDN_10_00:01:42)

(773) *sèmelelaamou mekekèèt waki akel*

sè= ma- Ce- laa =mow ma- Ce- kè'èt
3.PL.PIV AV.DYN IRR go CPL AV.DYN IRR extract.sap

waki akel

to.DIST sugar.palm.tree

‘They will go (to) collect palm sugar sap from the palm sugar tree’

(TDN_32_OL_00:01:17)

An examination of the clause in (769) demonstrates that it has two verbs, *ana'* ‘stay’ and *èdo* ‘take’ both of which are marked with the (AV.DYN) prefix *ma-*. Therefore, both verbs are marked as AV and as DYNAMIC, and both have the same TAM features of realis, non-past, and perfective. Furthermore, the PIV argument expressed by *ko=* ‘you’ is the shared pivot argument for both verbs. (769) therefore consists of the PIV argument *ko=* ‘you’ and

the complex verbal predicate *ma'ana' maèdo paai* (AV.DYN-wait AV.DYN-take knife). The clauses in (769) - (773) all share these unique features of complex predicates.

Perhaps the only characteristic of SVCs which is not immediately clear in (769) - (773) is that the action or events expressed by the verbs comprise a single overall event. The term 'overall event' as it is used here does not mean that the complex predicate cannot be comprised of a number of sub-events. Rather, it means that the multi-verbal predicate contains "just one assertion – in contrast to coordinate and subordinate clauses" (Noonan 2007:65). It is this feature, together with the identical TAM values, which are why these SVC examples are not a form of parataxis. Were this to be the case then these clauses would contain two assertions, and the verbs could possibly occur with different TAM values²⁵⁵.

In addition, there is another important reason why these examples do not each contain two separate clauses. Firstly, in all cases the second verb represents a development, a result, a goal, or a culmination of the situation expressed by the first verb. Secondly, for these examples to express two independent juxtaposed clauses a co-ordinating conjunction such as *wo* 'and', or *tu* 'then' is often required. A comparison of the following examples with those in (769) - (773) demonstrates this:

(774) *mupumi karati wo tumulimi witu sèpatuari itu Toulour*

<um> upu =mi karati wo t<um>uli =mi
 <AV> pick DIR.DIST water.lily and <AV> drop.in DIR.DIST
 witu sè= patuari witu Toulour
 to.MED AN.PL nuclear.family in.MED PN
 '(We) would pick lilies and/then (we) drop in to the families in Toulour'
 (TDN_11_00:05:44)

(775) *pasodoanèami tu pawèèmi itu ndano*

pa- sodo -an =nèa =mi tu
 DYN ladle LV 3.PL.NPIV.A DIR.DIST then
 i- pa- wèè =mi witu N= rano
 CV DYN give DIR.DIST in.MED INAN water
 'They ladle out (the palm sugar) then (they) put it in the water'
 (TDN_26_00:06:16)

²⁵⁵ The *=mow* enclitic on the verb in (771) does not have a TAM function. It encodes a sense of certainty c.f. (224) in §5.6.2.

In contrast to (769) - (773), (774) - (775) each have two verbs which are part of two separate predicates (and therefore part of two independent clauses). While the two verbs share the same TAM values, the addition of the co-ordinating conjunction *wo* ‘and’ or *tu* ‘then’ signifies that these are two separate events which occur simultaneously or in succession. Furthermore, the two events expressed by the two verbs in (774) - (775) are not sub-events of a larger single event. That is, the visiting of other families is not a result or direct development of the picking of water lilies.

Although it is possible to achieve the multiple clause co-ordination exemplified by (774) - (775) without the use of co-ordinating conjunction, there are still features which differentiate these constructions from the SVCs above, e.g.:

(776) *sèa mupumou, èmengantangantar*

sèa	<um>	upu	=mow	sè=	meN-	CVCV-	kantar
3.PL	<AV>	pick	CPL	3.PL.PIV	AV.DYN	RDP	sing

‘They would pick (rice), they are singing’
(TDN_31_00:02:04)

Example (776) again displays two separate clauses, despite the absence of a co-ordinating conjunction. The reason this can only be an instance of parataxis (see also (§10.2)) is due to a number of features, these are: the pause in intonation between the two verbs, the difference in TAM marking (<um> is irrealis while *meN-* is realis), the separate representations of the PIV arguments, and the fact that there are two separate assertions (events) denoted by the verbal predicates.

10.1.2 Auxiliary verb constructions

The second category of complex verbal predicate constructions are those in which auxiliary verbs (see §6.3.1) co-occur with main verbs. Auxiliary verbs are differentiated from all other verbs by the fact they occur as independent lexical roots without additional verbal morphology.

Complex monoclausal constructions involving modal auxiliaries have the following features:

- There is only a single PIV argument for both verbs in the complex predicate.
- Unlike SVC constructions, the two verbs in an auxiliary construction are not sub-events in a larger single event.

- The only verb which expresses an event, action, or situation is the main verb.

The four auxiliaries *toro* ‘can, be able’, *pa’ar* ‘want, desire, like’, *musti* ‘must, have to’, and *sia’~sigha’* ‘can, be capable of, expert at’ are all modal verbs. They are non-finite and encode various types of modality relating to the proposition expressed by the main verb. They are dependent upon the main verb of a clause and cannot be used independently to assert a proposition. The features of each of these auxiliary verbs within complex predicates are now explained in further detail.

a. *toro* ‘can’

The auxiliary verb *toro* ‘can, be able’ encodes epistemic modality relating to the speaker’s belief or knowledge that a situation expressed by the main verb is possible or probable, e.g.:

(777) *o koto ro kumèlangla ti’ila*

wo ko= toro k<um>èlang =la iti’ila
 and 2.SG.PIV can <AV> walk DIR.PROX that.DIST

‘And you could go (over) that way (i.e. there are no roadblocks)’

(TDN_07_00:06:00)

(778) *sia toro mamuali, profesor*

sia toro ma- muali professor
 3.SG can EV.STAT become professor

‘He can become a professor (i.e. he was good at university)’

(TDN_28_00:04:25)

(779) *toro pasiwon sopi*

toro pa- siwo -en sopi
 can DYN make PV palm.sugar.brandy

‘(They) can make the palm sugar brandy (from the palm sugar sap)’

(TDN_32_OL_00:05:23)

The use of *toro* in (777) - (779) expresses the fact that the event or action denoted by the main verbs *kèlang* ‘walk, go’, *muali* ‘be, become’, and *siwo* ‘make, do’ is judged to be possible. The exact reason the situation is deemed possible varies, and is often context dependent. In (777) it is because something which previously made the situation difficult now no longer exists, in (778) it is due to the perceived ability of an entity which

performs the action or event, and in (779) it refers to the attributes of a natural product (palm sugar sap) which allows someone with the correct knowledge to use it for a specific purpose.

When *toro* occurs with the negator *rèi'* (see §7.2.1), the assertion is that the event or action expressed by the verb is not possible and will not happen. While this type of epistemic modality is also expressed with irrealis marking, the use of *rèi'* together with *toro* is a more emphatic method of stating that an action or event is not possible. Often the use of *rèi'* and *toro* indicates there is a specific reason why the action or event is not possible, e.g.:

(780) *rèimou toro makekaluar embalè*

rèy' =mow toro maka- kaluar N= walè
not CPL can AV.POT exit INAN house

‘(At four o’clock, you) can no longer leave the house (there are TNI patrols)’
(TDN_21_00:00:48)

b. *pa'ar* ‘want’

The auxiliary verb *pa'ar* ‘want, desire, like’ encodes the wish or desire of an entity to perform an action, event, or situation expressed by the main verb. This sort of modality can also be expressed with irrealis marking. However, the use of the auxiliary verb makes this sense of desire more explicit. In complex predicates which contain *pa'ar* the main verb is also often marked as irrealis, e.g.:

(781) *sikasa pa'ar metete'ula embahasa toudano*

si= kasa pa'ar ma- Ce- te'u =la
3.SG.PIV very want EV.STAT IRR know DIR.PROX
N= bahasa Toudano
INAN language PN

‘He really wants to know the Tondano language’
(TDN_32_OL_00:12:05)

(782) *sipaar sumaru niko*

si= pa'ar s<um>aru niko
3.SG.PIV want <AV> fight.against 2.SG
 'She wants to argue the point with you'
 (TDN_29_00:12:00)

(783) *sa kopaar mopas*

sa ko= pa'ar <um>opas
if, when 2.SG.PIV want <AV> fishing.rod
 'If you like to fish'
 (TDN_30_00:01:27)

Alternatively, *pa'ar* is also used to denote the fact that an entity enjoys or likes to perform the action or event expressed by the main verb, be it occasionally or regularly. As this action or event is judged to actually occur, the main verb will have realis marking, e.g.:

(784) *kopa'ar makopi*

ko= pa'ar ma- kopi
2.SG.PIV want AV.DYN coffee
 'You like to make coffee'
 (TDN_11_00:15:29)

(785) *sèa pa'ar, pa'ar mèdo*

sèa pa'ar pa'ar <um> èdo
3.PL want want <AV> take
 'They would like, like to take (you - dancing)
 (TDN_11_00:15:52)

c. *musti* 'must'

As detailed in §6.5.3, *musti* 'must be, have to' is both an epistemic adverb²⁵⁶ and a modal auxiliary verb. When functioning as an auxiliary verb, *musti* encodes deontic modality and expresses a sense of obligation regarding the event or action expressed by the main verb, e.g.:

²⁵⁶ Examples (306) - (309) in §6.5.3 demonstrate the use of *musti* as an epistemic adverb.

(786) *komusti mèa*

ko= musti <um> èa

2.SG.PIV must <AV> go

‘You would have to go’

(TDN_07_00:04:14)

(787) *tamusti mali motor*

ta= musti <um> ali motor

1.PL.IN.PIV must <AV> bring motorbike

‘We have to bring a motorbike’

(TDN_14_DK_NK_00:01:55)

(788) *tamusti lumelè’mou*

ko= musti l<um>elè’ =mow

2.SG.PIV must <AV> bathe CPL

‘You will have to bathe’

(TDN_12_00:08:22)

There are various contextual reasons for the perceived sense of obligation expressed by *musti*. For instance, in (786) the entity referenced by the PIV argument has no choice and is socially obligated to perform the action or event, in (787) the action of the main verb is required in order to perform another action, while in (788) the action of the verb is a societal norm that everyone must perform in order to maintain personal hygiene.

In some situations the modality expressed by *musti* is more epistemic than deontic. Usually this is the case when *musti* is used as an adverb. However, this also occurs when *musti* functions as an auxiliary verb, e.g.:

(789) *cinkè ni’tu musti mawu’a laker*

cinkè ni’tu musti ma- wu’a laker

clove that.MED must EV.STAT fruit much

‘Those clove (trees) must/have to bear a lot of fruit (because they have been looked after well and cleared of grubs)’

(TDN_12_00:02:28)

In (789) *musti* is perhaps better glossed as ‘have to be’ rather than ‘must be’. The information encoded by *musti* in this clause is epistemic because it reflects the speaker’s

attitude that the situation expressed by the verb must be true. That is, that there is no other possible outcome except high yield crops when the trees have all been well maintained.

d. *sia'~sigha* 'capable, expert at'

As with *toro*, the modal auxiliary verb *sia'~sigha* 'be capable of, be expert/fluent at' also express epistemic modality. However, unlike *toro*, the possibility or probability that the action or event denoted by the main verb will occur is perceived as a result of the ability of the entity which performs it, e.g.:

(790) *komèmang siga' maliali oto*

ko= mèmang sigha' <um> CVCV- ali oto
 2.SG.PIV truly capable <AV> RDP bring car
 'You're truly able to bring a car (through the crowded marketplace)'
 (TDN_32_OL_KK_00:01:42)

(791) *kosiga' malobo rè'n?*

ko= sigha' ma- lobo' rè'èn
 2.SG.PIV capable AV.DYN trawl PART
 'Are you expert at net fishing then?'
 (TDN_29_00:17:05)

(792) *mèmang sèsiga'mou masiwo pèrèt sèa*

mèmang sè= sigha' =mow ma- siwo
 truly 3.PL.PIV capable CPL AV.DYN make
 pèrèt sèa
 bat 3.PL
 'Truly they are able to prepare bats, these people.'
 (TDN_32_OL2_00:01:41)

Thus, in (790) it is the skill of the entity referenced by the PIV argument *ko=* 'you' which allows the car to be navigated through a crowded marketplace without incident. In (791) the act of catching fish with a net is judged as probable because one of the interlocutors has been doing it for many years, and finally in (792) the act of gutting a bat is achieved with great speed due to the knife skills of the bat seller.

e. *so'o* 'don't want'

So'o is both an auxiliary verb and a negator, and encodes that an entity does not wish or desire to perform an action, event, or enter into a situation expressed by the main verb. *So'o* expresses negative assertions which are the opposite of the positive assertions expressed by *pa'ar*. Examples which demonstrate the structure of verbal clauses with *so'o* (which are identical to those of the other auxiliary verb constructions) are found in §7.2.1.

10.2 Complex clauses: Co-ordination

This section examines one of two categories of Tondano complex clauses. The clauses described here do not contain complex predicates. Rather, they consist of multiple independent clauses which are conjoined with one of a number of co-ordinating elements which allow various independent syntactic units of the same type to be linked together.

10.2.1 Co-ordinated clauses

The four co-ordinating elements are: *wo* 'and', *tu* 'and/then', *ta'an* 'but/however', and *ka'apa* 'or'. These elements encode conjunctive co-ordination (*wo* and *tu*), disjunctive co-ordination (*ka'apa*), and adversative co-ordination (*ta'an*) respectively. In terms of semantic relationships, these elements express addition, temporality, alternation, and adversativity between the conjoined clauses.

a. *wo* 'and'

The co-ordinating conjunction *wo* 'and' is used to conjoin two independent clauses which describe two separate situations denoted by separate verbal predicates²⁵⁷, for example (separate clausal units are indicated by parentheses):

(793) *mupumi karati wo tumulimi witu sèpatuari itu tolour*

[<um> upu	=mi	karati]	wo	[t<um>uli	=mi	witu
<AV> pick	DIR.DIST	water.lily	and	<AV> drop.in	DIR.DIST	to.MED
sè=	patuari	witu		Toulour]		
AN.PL	nuclear.family	in.MED	PN			

'(We) will pick water lilies and (then) drop in at families in Toulour'

(TDN_11_AW_HL_00:05:44)

²⁵⁷ *wo* is also used to conjoin NPs - see 8.1.

(794) *paloo 'namou kokong, wo paketorena tuana*

[pa- loo' -en =na kokong] wo [pa- ketor -en
DYN see, look PV 3.SG.NPIV.A head and DYN slice PV
 =na tuana]
3.SG.NPIV.A thus

‘He sees the head (of the bat) and he cuts (it) off like this’

(TDN_32_KK_00:02:26)

(795) *me, mejaga sioki 'ku, o mepa 'ayang waki walè ti 'in*

[ma- ma- jaga si= oki' =ku] wo [ma-
HES AV.DYN watch.over AN.SG small 1.SG.POSS and AV.DYN
 pa'ayang waki walè iti'i]
work in.DIST house that.MED

‘(I) watch over my child and (I) work in that house’

(TDN_12_00:06:24)

(796) *masiwo sopi, wo masiwo timpa*

[ma- siwo sopi] wo [ma- siwo
AV.DYN make palm.sugar.brandy and AV.DYN make
 timpa']
palm.sugar.wine

‘(They) make palm sugar brandy, and (they) make palm sugar wine’

(TDN_32_OL_00:11:36)

In (793) - (796) *wo* connects two independent clauses. Clauses which are conjoined in this way may occur with or without an intonation break between the two clauses, as demonstrated by (793) and (794) respectively. As well as expressing a sense of multiple situations occurring, the use of *wo* may encode sequential events, as in (793), i.e. ‘We do A and then we do B’. This contrasts with (795) - (796) where the events are not judged to occur in a sequence. Instead, the separate events in (795) - (796) occur at different times irrespective of each other. Despite this difference, the primary function of *wo* is displayed by all these examples, that is, the expression of an action or event occurring in addition to other actions or events.

The use of *wo* to express multiple, sequential events is not always obligatory. Two independent clauses may be juxtaposed without *wo* and still express a second situation

following on from the first. However, these constructions do not exemplify conjunctive co-ordination e.g.:

(797) *paketorenèamou, parintekenou lansuna*

[pa- ketor -an =nèa =mow] [pa- rintek -an =mow lansuna]
DYN slice LV 3.PL.NPIV.A CPL DYN small LV CPL onion
 ‘They slice (the onion), (they) dice the onion’
 (TDN_32_KK_00:03:47)

(798) *pasiwonèa para para, pewewèèn gula mèa*

[pa- siwo -en =nèa para para] [pa Ce- wèè
DYN make PV 3.PL.NPIV.A RDP waste.hole DYN IRR give
 -en gula mèa’]
PV sugar red
 ‘They make the waste holes, (they) will put palm sugar (through the hole)’
 (TDN_32_OL_00:06:09)

The linking of clauses in (797) - (798) exemplifies parataxis. Unlike conjunctive co-ordination with *wo*, there is always an intonation break between the two clauses. Furthermore, this construction always expresses a sequence, starting with the event described in the first clause followed by those described in subsequent clauses.

b. *tu* ‘and, then’

The second co-ordinating conjunction *tu* ‘and/then’ is also used to connect two independent clauses²⁵⁸. However, in contrast to *wo*, *tu* is only used when the actions or events expressed by the two clauses are a sequence of events, and not when multiple situations are considered to be simultaneous, e.g.:

(799) *tutunganoula engkartas tu wèèla itu, bawa engkayu*

[tutung -an =mow =la N= kartas] tu [i- wèè
heat LV CPL DIR.PROX INAN paper then CV give
 =la witu wawa’ N= kayu]
DIR.PROX at.MED below INAN wood
 ‘(You) light the paper then (you) put (it) underneath the wood’
 (TDN_33_KK_00:00:48)

²⁵⁸ Unlike *wo*, *tu* is not used to connect NPs, only whole clauses.

(800) *wangkèngenoula tu kaanenou*

[wangkèng -en =mow =la] tu [kaan -en =mow]
crush PV CPL DIR.PROX then rice PV CPL
 ‘(You) crush (the shell) then (you) eat (it)’
 (TDN_21_00:05:57)

(801) *pasiwoanala entangga tu irèidèimi witu, mm, tabelang esa tu wa’akesela*

[pa- siwo -an =na =la N- tangga] tu
DYN make LV 3.SG.NPIV.A DIR.PROX INAN ladder then
 [i- redèi witu mm tabelang esa] tu [i-
CV stand on.MED HES hard.bamboo one then CV
 wa’akes =la]
tie.with.string DIR.PROX

‘He makes the ladder then (he) leans the first piece of hard bamboo on the, hmm, then (he) will tie it with string’
 (TDN_26_00:00:11)

In (799) - (801) *tu* co-ordinates multiple clauses which describe separate, sequential situations. In contrast to events conjoined with *wo* above, clauses co-ordinated with *tu* must express a specific ordering of events. These events must occur in the order in which they are uttered. In addition, the action or event denoted by the first clause is required in order for actions expressed by subsequent clauses to occur. This particular feature of *tu* means it often occurs in procedural narratives, such as when speakers describe a sequence of events involved in undertaking traditional activities. Often more than two clauses are conjoined in this way (e.g. as in (801)).

In some sequential series of events *wo* and *tu* may be used together. This construction is much less frequent, but expresses the same relationship as is expressed by *tu* alone, e.g.:

(802) *mèèmi sera tièi o tu irisen*

[<um> wèè =mi sera’ tièy] wo tu [iris -en]
<AV> give DIR.DIST meat pig and then slice PV
 ‘(You) put in some pork meat then (you) slice (it)’
 (TDN_11_00:03:18)

c. *ka'apa* 'or'

ka'apa is a co-ordinating disjunction which conjoins independent clauses expressing multiple possibilities or a sense of uncertainty between two situations. *ka'apa* therefore encodes alternation between the two clauses it co-ordinates, e.g.:

(803) *komèatè magho 'gho kaapa metanem*

[ko= <um> èa ma- ghò'ghò'] ka'apa [ma- tanem]
 2.SG.PIV <AV> go AV.DYN sift or AV.DYN cultivate
 'You go and sift/sort (some picked rice) or (you) plant (some rice seeds)'
 (TDN__07_00:19:59)

(804) *sètou menguma ka'apa maupu*

[sè= tou meN- uma] ka'apa [ma- upu]
 AN.PL person AV.DYN field or AV.DYN pick
 'The people work the fields or (they) pick rice'
 (GENESIS 46:5)

(805) *wo'odo komèa waki wèngang ka'apa mèa waki bitung*

wo'odo [ko= <um> èa waki Wèngang] ka'apa [<um> èa
 morning 2.SG.PIV <AV> go to.DIST PN or <AV> go
 waki Bitung]
 to.DIST PN
 '(Tomorrow) morning you will go to Manado or (you) will go to Bitung'
 (ELICITED)

In (803) - (805) the use of *ka'apa* means that there are multiple possible situations, and also an expectation that at least one of these situations is occurring, or will occur. These examples are all declarative clauses, and the speaker does not necessarily require other interlocutors to clarify or choose either one of the two assertions. Often the referent of the PIV argument is the same in both co-ordinated independent clauses. This argument is commonly omitted in the second clause, especially if it is overtly expressed in the first clause.

d. *ta'an* 'but'

ta'an 'but, however' is an adversative co-ordinator. When *ta'an* is used the semantic relationship expressed between the two clauses is that of opposition. The first clause puts

forward an assertion which is in opposition to, or is an antithesis of, the assertion of the second clause, e.g.:

(806) *itim kimaanla rua, rua, ta'an dèy kinaana lalèina*

[si= Tim k<im>aan =la rua rua] ta'an [rèy'
 AN.SG PN <AV.PST> rice DIR.PROX HES two but not
 k<in>aan -Ø =na lalèina]
 <PST> rice PV 3.SG.NPIV.A leaf

'Tim ate two, two (fish), but he didn't eat the leaf (the fish was wrapped in)'

(TDN_32_OL_KK_00:06:44)

(807) *rèi'la tetèwèl, ta'an sipèrèt siwewèan tetèwèl*

[rèy' =la Ce- tèwèl] ta'an [si= pèrèt si=
 EXIST.NEG DIR.PROX NR fly but AN.SG bat 3.SG.PIV
 wewèan Ce- tèwèl]
 EXIST NR fly

'(The mouse) does not have wings but the bat, it has wings'

(TDN_32_OL2_00:01:06)

(808) *dèymou simè'èwèlou, taan niirisanapè'la rior*

[rèy' =mow si= <um> wè'èl =mow] ta'an
 not CPL 3.SG.PIV <AV> tap.branch CPL but
 [<in> iris -an =na =pè'] =la rior
 <PST> cut LV 3.SG.NPIV.A INCPL DIR.PROX fast

'He no longer hits the branch, but he had still cut (it) before'²⁵⁹

(TDN_26_00:02:20)

In (806) and (808) the clauses conjoined by *ta'an* are both verbal, while in (807) they are non-verbal (existential). In addition, *ta'an* may conjoin a verbal clause together with a non-verbal clause, e.g.:

²⁵⁹ This situation described here relates to the collection of palm sugar sap. Normally the branch that will be sliced open (to enable the sap to flow) is tapped repeatedly with a wooden mallet for a number of days beforehand. In this instance the person being watched by the speaker starts to use the mallet to tap the branch before realising that he has already tapped and made incisions into the branch earlier.

(809) *kumekekawèng, taan dèi'pèla tu'awènè*

[ku= ma- Ce- kawèng] ta'an [rèy' =pè' =la
 1.SG.PIV AV.DYN IRR marry but EXIST.NEG INCPL DIR.PROX
 tu'awènè]

old.woman

‘I will get married but (I) don’t yet have a girlfriend’

(TDN_14_DK_NK_00:10:17)

The reason that the two assertions of the conjoined clauses are in opposition to one another is often context dependent. In addition to this primary function, *ta'an* is also used in a discourse function to bring the conversation back to an earlier topic. When *ta'an* is used in this way the clause which asserts an adversative proposition does not directly precede it. However, it is always recoverable from the earlier discourse, e.g.:

(810) *taan kumantarèla opo mana natas*

ta'an niaku k<um>antar =la opo mana N= atas
 but 1.SG <AV> sing DIR.PROX elder at.MED INAN above

‘But (as we agreed earlier) I will sing “God up above” ’

(TDN_28_00:06:38)

Finally, *ta'an* is also a comparative marker for qualities and states. The pattern of ‘argument X *ta'an* [STATE or QUALITY] argument Y’ expresses that the entity referred to by the argument preceding *ta'an* is judged to have more of a certain quality or characteristic than the entity which follows, e.g.:

(811) *niaku sela taan niko*

niaku sela ta'an niko
 1.SG big but 2.SG

‘I am bigger than you’

(TDN_31_00:14:01)

10.3 Complex clauses: Subordination and juxtaposition

In this section the second category of complex clauses is examined. These are clauses which are embedded within other (i.e. main) clauses. There are four different categories of embedded clauses, with three of these displaying a structure whereby the embedded clause is subordinate to the main clause. These are: relative clauses (§10.3.1), adverbial clauses (§10.3.2), and complement clauses (§10.3.3). Of these three types, only adverbial

subordinate clauses contain an obligatory subordinating conjunction. In relative clauses the use of these elements is optional, while in complement clauses they are not used at all. Instead, complement clauses are embedded via the use of juxtaposition.

Analysing clauses as complements of verbs is initially problematic as they do not display a number of the features often observed in prototypical complement clauses²⁶⁰.

Nonetheless, they do contain sufficient features to differentiate them from the other complex clauses described above (i.e. SVCs or parataxis), and can also be seen to have syntactic functions as arguments (with various GRs) of the main clause (see §10.3.3) .

Another type of embedded clause is also encoded via juxtaposition. This category of embedded clause expresses indirect speech in the form of direct quotations. These clauses are discussed in §10.3.4 where it will be demonstrated that although they are embedded in the main clause, they are not complements of verbs, nor do they bear any GR within the clause, and therefore they cannot be considered as subordinate.

The following table summarises the different subtypes and functions of subordinate clauses.

Table 10.1: Subtypes of subordinate complex clauses

Subordinate clause type:	Main syntactic unit:	Embedded syntactic unit:	Function of embedded unit:
RELATIVE CLAUSE:	NOUN PHRASE	VERBAL CLAUSE	CLAUSAL MODIFIER OF HEAD NOUN WITHIN NP
ADVERBIAL CLAUSE:	INDEPENDENT (MAIN) CLAUSE	VERBAL CLAUSE	CLAUSAL MODIFIER OF MAIN CLAUSE
COMPLEMENTATION (VIA JUXTAPOSITION):	VERBAL PREDICATE	VERBAL CLAUSE	CLAUSAL ARGUMENT
INDIRECT SPEECH (VIA JUXTAPOSITION):	VERBAL PREDICATE	ANY (WORD, PHRASE, OR CLAUSE)	REPEATS DIRECT QUOTATION FROM ANOTHER INTERLOCUTOR

10.3.1 Relative clauses

Relative clauses are subordinate clauses which function as modifiers to the head of an NP, or to a pronominal argument. The combination of the modified element together with the

²⁶⁰ These are features such as overt subordinating conjunctions or unique verb forms - see §10.3.3 for further details.

relative clause forms a larger NP. The function of a relative clause is described as per the following definition from Andrews (2007:206):

A relative clause is a subordinate clause which delimits the reference of an NP by specifying the role of the referent of that NP in the situation described by the relative clause.

Tondano relative clauses display the following characteristics:

- They are almost always externally headed.
- In existential clauses a relative clause may be headless.
- They occur post nominally, i.e. following the antecedent head noun which is modified by the relative clause.
- In some instances the proclitics *si=/sè=* function as non-obligatory relative pronouns which express the relativised function. These relative pronouns always refer to the antecedent functioning as the head of a PIV argument which is modified by the relative clause.
- In addition, the ‘gapping’ strategy is also sometimes employed to express the relativised function within the relative clause. In this instance it is this missing element within the relative clause which refers to the antecedent.
- The relativised function of the head of the modified NP can only be that of PIV²⁶¹.

The final point above deserves special mention. As mentioned in §4.6.2, the relativised function is the GR which the head of the modified argument is assigned inside the modifying relative clause. This restriction on the relativised function, generally known as the “subjects only” (Keenan 1976) restriction, is commonly attested in Philippine-type languages. This particular feature means the head of the PIV argument in the main (matrix) clause must also be interpreted as the PIV argument of the modifying relative clause (Kroeger 2005b:412).

The following examples display AV marked clauses in which the head of the PIV argument (of the main clause) is modified by a relative clause. The relativised function is expressed with a relative pronoun, e.g.:

²⁶¹ There are a handful of examples from younger speakers where this is not the case. A likely explanation is that the younger, less fluent speakers are in the process of losing this particular syntactic restriction.

(812) *sètuama sèkumiititè nikou*

[sè= tuama [sè= k<um>i'tit =itè nikow]]

AN.PL man 3.PL.REL <AV> follow LIM 2.PL

‘The men who just follow you around (you would not dance with)’

(TDN_11_00:14:17)

(813) *kimawèngou siesa simakuliamou waki apa, malalayang*

k<im>awèng =mow [si= esa [si= ma-

<AV.PST> marry CPL AN.SG one 3.SG.REL AV.DYN

kulia =mow waki apa Malalayang]]

university.lecture CPL at.DIST what PN

‘The one who attends university at where, Malalayang, is already married’

(TDN_14_HK_DT_00:03:44)

(814) *sètu'a rior sèntè kumoo'*

[sè= tu'a rior [sè= entè' k<um>oo']]

AN.PL old fast 3.PL.REL strong <AV> drink

‘The elders from before who were heavy drinkers (fought one another)’

(TDN_31_00:02:55)

Each of the clauses in (812) - (814) displays the head of a PIV argument modified by a subsequent relative clause. The modified head nouns are: *tuama* (812), *esa* (813), and *tu'a* (814). In each of the relative clauses the 3.SG and 3.PL bound proforms *si=* and *sè=* function as relative pronouns which introduce the modifying clauses²⁶². The function of the modifying clauses is the same in each instance; it restricts the number of possible referents which are expressed by the NP (which has a common noun as its head).

Evidence that *si=* and *sè=* function as relative pronouns comes from the fact they are anaphoric, and that they have the head noun of the main clause as their antecedent. Their anaphoric features are demonstrated by their agreement in number with the head noun, i.e. singular *si=* in (813) and plural *sè=* in (812) and (814).

²⁶² Confusingly, in these examples *si=*/*sè=* also function as phrase markers to the head nouns (see §8.4.1 for a detailed description of the function of *si=*/*sè=* as phrase markers). However, the different functions of the same forms are still easily discernible in the examples above. For instance, in all examples the first occurrence of *si=*/*sè=* is as a modifier to the head of an NP, the second occurrence is as a full argument (a relative pronoun) in the relative clause.

In all the examples above *si=* and *sè=* encode the relativised function within the modifying clause. As explained in §4.6.2, and illustrated in the examples above, the GR denoted by the relativised function is always that of PIV. Therefore, in (812) - (814) the relative clauses exclusively modify the head of the PIV argument of the main clause. Due to this strategy of encoding the relativised function with a relative pronoun, any overt argument inside the relative clause which does not have the modified head noun as its antecedent can never function as the PIV. Consequently, in (812) the proform *nikow* ‘you’ can only be the NPIV.UN argument.²⁶³

In (810) - (812) all the clauses are marked for AV, and therefore all have PIV arguments which express ACTORS. In UV marked clauses where the PIV argument is always an UNDERGOER the pattern remains the same. In UV marked clauses a relative clause construction commonly utilises the gapping strategy to encode the relativised function within the modifying clause²⁶⁴. With the gapping strategy, any overt NP within the relative clause is never the PIV, e.g.:

(815) *wèè moula sianu, sipèrèt rinebusanèa*

i- wèè =mow =la si= anu [si= pèrèt
CV PV CPL DIR.PROX AN.SG NON.SPEC AN.SG bat
 [r<in>ebus -an =nèa]]
 <PST> boil LV 3.PL.NPIV.A
 ‘They will add the what’s it, the bat which they have boiled’
 (TDN_32_OL2_00:07:08)

(816) *kaa bèènou ngula siniwola entadi*

ka’a wèè -en =mow [N= gula [s<in>wo
 because give PV CPL INAN sugar <PST> make
 -Ø =la N= tadi]]
 PV DIR.PROX INAN early
 ‘Because (they) will put in the palm sugar which (they) made earlier’
 (TDN_26_00:06:01)

²⁶³ This is further confirmed by the fact that *nikow* references an UNDERGOER, and not an ACTOR as required for the PIV of an AV marked clause.

²⁶⁴ The use of a relative pronoun is to some extent conditioned by the animacy features of the PIV argument. If the PIV argument expresses an animate entity then *si=*/*sè=* are often used. For obvious reasons an AV marked clause is more likely to have an animate entity expressed by the PIV. Although, this is also possible in an UV marked clause, as demonstrated by (816) below.

(817) *o tu wèèla itu po'opo' kini'kis*

wo tu i- wèè =la [itu po'po' [k<in>i'kis
and then CV give DIR.PROX that.MED coconut <PST> grate
-Ø]]

PV

‘And then (you) put in that coconut which (he) has grated’

(TDN_19_00:03:44)

(818) *sèwatè sènièdonèamou*

[sè= watè [sè= <in> èdo -Ø =nèa
AN.PL sago.grub 3.PL.REL <PST> take PV 3.PL.NPIV.A
=mow]]

CPL

‘The sago grubs which they took’

(TDN_32_DT_00:00:35)

In (815) - (818) the head nouns of PIV NP arguments modified by relative clauses are the UNDERGOERS *pèrèt* (813), *gula* (816), *po'opo'* (817), and *watè* (816). These head nouns are all modified by the relative clauses which follow them, and all are the missing PIV argument within the relative clause. Once again, the relativised function of the head noun inside the relative clause is always that of PIV.

Unlike the AV clauses in (812) - (814), only one of the UV clauses (818) includes a relative pronoun (*sè=*). This is because only this clause has a PIV argument which refers to an animate entity. Regardless of whether *si=* / *sè=* are functioning as phrase markers or pronouns, they exclusively refer to animate entities (see §8.4). Consequently, AV clauses more often contain these bound elements.

While the corresponding bound element for inanimates, *N=*, also functions as both a phrase marker and a pronoun (see §8.4.3), its use is generally much less productive. Consequently, relative clauses which modify PIV NPs expressing inanimate entities (e.g. (816) - (817)) often lack a relative pronoun. However, through elicitation the use of *N=* as both a phrase marker on the head noun, and an anaphoric relative pronoun which introduces the relative clause, is confirmed, e.g. (c.f. (816) above):

(819) *kaa bèènou ngula siniwola entadi*

ka'a wèè -en =mow [N= gula [N=
 because give PV CPL INAN sugar 3.SG.REL
 s<in>wo -Ø =la N= tadi]]
 <PST> make PV DIR.PROX INAN early
 'Because (you) put in the palm sugar which was made earlier'
 (ELICITED)

The relative clauses presented so far are all restrictive. Thus, (815) - (819) all have unknown referents (represented by common nouns) which the relative clause assists in identifying. The strategy used to express restrictive relative clauses is also used to express non-restrictive relative clauses. In (820) - (822) the identities of the entity expressed by the PIV argument are not simply common nouns which could refer to any number of entities. Instead, their identities are already known and the relative clause simply provides additional information, e.g.:

(820) *siampitku simepa'ayangla waki sikakaku ma, mewangkèr*

[si= ampit =ku [si= ma- pa'ayang =la
 AN.SG spouse 1.SG.POSS 3.SG.REL AV.DYN work DIR.PROX
 waki si= kaka =ku]] ma- ma- wangkèr
 at.DIST AN.SG older.sibling 1.SG.POSS HES AV.DYN sell
 'My husband who works with my older brother sells (it - copra)'
 (TDN_12_00:10:48)

(821) *nisiaitè sitoro mejagajagami nikita*

[nisia =itè [si= toro ma- CVCV-
 3.SG LIM 3.SG.REL can AV.DYN RDP
 jaga =mi nikita]]
 watch.over DIR.DIST 1.PL.IN
 'Only he (God) who can watch over us (is answered by us through prayer)'
 (TDN_30_00:03:55)

(822) *ye'i situama tu'a simakulia kumelaarou te'un esa*

ye'i [si= tuama tu'a [si= ma-
 now AN.SG man old 3.SG.REL AV.DYN
 kulia]] k<um>elaar =mow te'un esa
 university.lecture <AV> finish CPL year one

‘Now the older brother who attends university will finish first year’

(TDN_14_HK_DT_00:02:43)

When the main clause is non-verbal (existential), the larger NP (including the relative clause) functions as the PIV while the existential marker *wewèan* (see §4.4.1) is the predicate, e.g.:

(823) *wèan sileloi kinetor*

wewèan [si= leloy [k<in>etor -Ø]]
 EXIST AN.SG snake <PST> chop PV

‘There is the snake which (he) chopped up’

(TDN_32_KK_00:00:15)

In (823) the head noun and UNDERGOER argument *leloi* ‘snake’ is modified by the PV marked relative clause *k<in>etor* ‘chopped up (by him)’. As expected, *leloi* is the missing PIV argument indicated by the gap within the relative clause. In addition, the non-PIV (NPIV.A) argument is also omitted from the relative clause.

On occasion, existential clauses such as (823) may lack an overt head of the PIV argument, as demonstrated by (824) - (825):

(824) *wewèanou sisimusui wia niaku*

wewèan =mow [si= s<im>usui wia niaku]
 EXIST CPL 3.SG.REL <AV.PST> speak to.PROX 1.SG

‘There was (the person) who spoke to me’

(TDN_21_00:02:43)

(825) *wewèan sipaar sumaru niko*

wewèan [si= pa'ar s<um>aru niko]
 EXIST 3.SG.REL want <AV fight.against 2.SG

‘There is (she) who wants to argue the point with you’

(TDN_29_00:11:58)

Analysing the function of *si=* in (824) - (825) is slightly problematic. It could conceivably be functioning either as a personal pronoun, or as a relative pronoun. The latter explanation is preferred here. This is because if *si=* were functioning as a 3.SG personal pronoun it should allow for the possibility of clauses such as *wewèan si=si=pa'ar sumaru niko* (3.SG.PIV=3.SG.REL= <AV> fight.against 2.SG) 'There is she who wants to argue with you'. Clauses such as this simply do not occur. Consequently, (824) - (825) are better analysed as headless relative clauses.

Furthermore, in the event that non-restrictive relative clauses have an overt PIV argument expressed with a personal pronominal, an independent pronominal is used, e.g.:

(826) *sia siki'iten*

[sia [si= ki'it -en]]

3.SG 3.SG.REL follow PV

'(You choose) he that is followed (by others)'

(TDN_11_00:15:01)

10.3.2 Adverbial subordinate clauses

Adverbial clauses are adjuncts which modify independent (main) clauses, and which express information relating to the reason, purpose, conditionality, concession, or manner of the situation expressed by the predicate of a main clause. Adverbial clauses are subordinate to a main clause because they do not express a complete proposition independently.

For each different semantic relationship between the main and the subordinate clause there is a specific subordinating conjunction. A list of the adverbial subordinating conjunctions, and the relationship they encode between the adverbial clause and the main clause, is as follows:

Table 10.2: Adverbial subordinating conjunctions

Subordinator:	Semantic relationship expressed:	Position of subordinate clause to main clause:
<i>rior</i> ‘so that’	Purpose/expected outcome	Postposed.
<i>ka’a</i> ‘because’	Reason	Preposed or postposed.
<i>sa</i> ‘if, when’	Condition	Preposed or postposed.
<i>ma’an</i> ‘although’	Concession	Postposed or postposed.

In the reminder of this section further details on each subordinating conjunction in Table 10.2 are presented together with examples which demonstrate their use, and which demonstrate the different semantic relationships they express.

a. *rior* ‘so that’

The conjunction *rior*²⁶⁵ ‘so that, in order to’ has a fixed position and occurs before the subordinate clause it introduces. Adverbial subordinate clauses introduced by *rior* always follow the main clause, and there is often an intonation break between the two clauses.

Adverbial clauses introduced by *rior* explain the purpose and expected outcome of the action or event expressed by the main clause, e.g.:

(827) *pa’asaasaran, rior toro matoutou witu engkawangunan*

[pa- CVCV- asar -an [rior toro ma- CVCV-
DYN RDP story LV so.that can AV.DYN RDP
 tow witu N= ka> wangun <an]]
person with.MED INAN NR good NR

‘(They) tell stories (to others), so that (the others) can live with goodness’

(TDN_31_00:04:11)

(828) *kumusti tumoor, rior makemes labung*

[ku= musti t<um>o’or [rior ma- kemes labung]]
1.SG.PIV must <AV> get.up so.that AV.DYN wash s.t. clothing

‘I have to get up so that (I) can wash clothes’

(TDN_12_00:07:15)

²⁶⁵ This particular lexical element also used as a modifier meaning ‘early, fast’.

In (827) the main clause describes the act of storytelling. This clause is then followed by the subordinate clause introduced by *rior* which explains the purpose of telling the stories (i.e. to advise others to live well). In (828) the subordinate clause introduced by *rior* explains the purpose behind the speaker getting up early the next morning, i.e. to wash the clothes.

In addition to subordinate clauses expressed solely with *rior*, *rior* also occurs in combination with the conjunctions *wo* and *tu*. Describing the specific difference between examples (826) - (828), and those such as (829) - (830), is difficult. In both instances *rior* still functions to introduce an adverbial clause, e.g.:

(829) *wèèla podang witu rano, o rior, mawuomi sedap, ndano*

[i-	wèè	=la	podang	witu	rano	[wo	rior	
CV	give	DIR.PROX	pandanus.leaf	in.MED	water	and	so.that	
ma-		wuo	=mi	sedap	N=	rano]]		
EV.STAT	smell	DIR.DIST	pleasant	INAN	water			

‘(You) would add pandan leaf in the water, and/so that the water smells nice’
(TDN_19_00:00:55)

(830) *panci tii nèitè sèmpèr rior rèi’ ma, maresik*

[panci	iti’i	nèy	=itè	sèmpèr	[rior	tu	rèy’	ma-
pan	that.MED	CV.PST	LIM	block	so.that	then	not	HES
ma-		resik]]						
EV.STAT	stain							

‘(They) just blocked the pan so that (it the hot palm sugar) does not spill out’
(TDN_32_OL_07:37)

The clauses introduced by *wo rior* and *rior tu* in (829) - (830) are subordinate adverbial clauses expressing purpose. As such, the complex clauses in (829) - (830) all demonstrate the same relationship between the main clause and the subordinate adverbial clause as seen in (827) - (828). In all these complex clauses the main clause describes an action or event, while the adverbial clause expresses an intended or expected outcome.

b. *ka’a* ‘because’

The subordinating conjunction *ka’a* ‘because’ introduces an adverbial clause which expresses the reason for the situation or event expressed by the main clause. While *ka’a*

always occurs before the subordinate clause it introduces, the position of the subordinate clause in relation to the main clause may vary. In (831) - (833) it occurs after the main clause, e.g.:

(831) *parou'namou ensamar, kaa empetetou'mou witu rumping*

[pa- rou' -en =na N= samar [ka'a N=
DYN far PV 3.SG.NPIV.A INAN container because 3.SG.INAN
 i- pa- Ce- toa' =mow witu rumping]]
CV DYN IRR pour CPL in.MED wok

'He removes the sugar palm container because (he) will pour it (the palm sugar sap) into the wok'

(TDN_25_00:00:50)

(832) *pawèèn rano, kaa pepepuusenèa santang*

[pa- wèè -en rano [ka'a pa- Ce- pu'us
DYN give PV water because DYN IRR knead
 -en =nèa santang]]
PV 3.PL.NPIV.A coconut.milk

'(They) add the water because they will make the coconut milk²⁶⁶,

(TDN_32_OL2_00:00:54)

(833) *sioki kouman, sirimawakou te'in ti'i kaa sikimirong empistol*

[si= oki' kowman si= r<im>awak =mow
AN.SG small meanwhile 3.SG.PIV <AV.PST> carry CPL
 te'in iti'i [ka'a si= k<im>irong N=
thus that.MED because 3.SG.PIV <AV.PST> conceal INAN
 N= pistol]]
INAN pistol

'The child meanwhile, he (the husband) carried (it) like this, because he (the husband) was hiding a pistol²⁶⁷,

(TDN_07_00:08:07)

The semantic relationship between the subordinate clause and the main clause in (831) - (833) displays similarity to what is seen in (827) - (830) above, i.e. [action or event] →

²⁶⁶ *Santang* is the result of mixing shredded coconut flesh and water together. The resulting liquid is then separated from the coconut flesh and is coconut milk. In this situation the water must be added to the shredded coconut before coconut milk is produced.

²⁶⁷ In this situation the speaker explains that a man holds a child to (the front) of his chest. The reason he does this is because he is hiding a pistol between the child's body and his chest, in order to smuggle the weapon through an army checkpoint.

[expected outcome]. However, example (833) illustrates the difference. Subordinate clauses with *ka'a* do not have to specifically express an expected outcome²⁶⁸. Rather, they may simply express the reason for the action or event described by the main clause.

In addition to occurring postposed to the main clause, the subordinate clauses introduced by *ka'a* also occur preposed, e.g.:

(834) *kaa wèan ee, kotor, ma, masem entimpa'*

[ka'a	wewèan	erh	kotor]]	ma-	ma-	esem
because	EXIST	HES	dirt	HES	EV.STAT	sour
N=	timpa']					
INAN	sugar.palm.wine					

‘Because there’s uhm, dirt (in it), the palm sugar wine is souring’

(TDN_32_OL_00:03:12)

Regardless of the position of the subordinate clauses in (831) - (834), their syntactic function and semantic relationship to the main clause remains the same.

c. *sa* ‘if, when’

The third subordinating conjunction in Table 10.2 is *sa* ‘if, when’. This element expresses the relationship of conditionality between the main clause and the subordinate clause. *sa* always occurs before the clause it introduces. However, the subordinate clause may be either preposed or postposed to the main clause.

The subordinate adverbial *sa* clauses introduce situations which are both ‘real’ and ‘unreal’. More specifically, real conditionals can be further divided (as per Thompson, Longacre, and Hwang 2007:255) into those which are “present, habitual/generic, or past” conditionals, e.g.:

²⁶⁸ Although the reason may include an expected outcome, as demonstrated by (831) - (832).

Present:

(835) *sa sèa metanem cinkè, sèmepa'ayang mèmang ulit ulit*

[[sa sèa ma- tanem cinkè] [sè= ma-
if, when 3.PL AV.DYN cultivate clove 3.PL.PIV AV.DYN
pa'ayang mèmang ulit ulit]
work truly RDP correct

'If/when they are cultivating cloves (i.e. this week), they truly work efficiently'

(TDN_12_00:02:17)

Habitual/generic:

(836) *sa kosumiwo sera', komèdo kotèi nse'ut*

[[sa ko= s<um>iwo sera'] [ko= <um>èdo
if, when 2.SG.PIV <AV> make meat 2.SG.PIV <AV> take
kotèy N= se'ut]
stem INAN banana

'If/when you make fish (dishes), you (need to) take some banana palm stems'

(TDN_11_00:02:47)

Past:

(837) *sa sèa minakaupumou, sèmusti wewèan walè paana'ana'an*

[[sa sèa maka- <in> upu =mow] [sè=
if, when 3.SG AV.POT PST pick CPL 3.PL.PIV
musti wewèan walè pa- CVCV- ana' -an]
must EXIST house DYN RDP stay LV

'If/when they could pick (rice crops), they had to have a house which is lived in
(i.e. you can't go working the fields if you don't have a house first)'

(TDN_31_00:02:15)

In each of the examples above, the subordinate clause introduced by *sa* occurs before the main clause and expresses a conditional situation. This is the situation which is required to hold true in order for the situation (or consequence) in the main clause to occur. The

situations expressed with these subordinate clauses are all considered ‘real’, and they all occur, or have occurred, at some point in time²⁶⁹.

There are also *sa* subordinate clauses which differ semantically in comparison with those above. These clauses express ‘unreal’ situations and can be labelled as either “imaginative or predicative” (*ibid*:256). These non-factual conditional clauses describe hypothetical situations which have not occurred or are not occurring²⁷⁰.

Imaginative conditionals denote situations in which the speaker imagines a situation which could occur, e.g.:

(838) *sa kopa’ar mekekaan sera’ pèrèt, paloo’ngkola tuana sèmasiwo*

[[sa	ko=	pa’ar	ma-	Ce-	kaan	sera’	pèrèt]	
if, when	2.SG.PIV	can	AV.DYN	IRR	rice	meat	bat	
[pa-	loo’	-en	=ko	=la	tuana	sè=	ma-	
DYN	see, look	PV	2.SG.NPIV.A	DIR.PROX	thus	3.PL.PIV	AV.DYN	

siwo]
make

‘If/when you want to eat bat meat, you watch (how) they make (it) thus’

(TDN_32_KK_00:05:43)

Therefore, in (838) the speaker imagines the reason why someone would want to watch people demonstrating how to prepare traditional cuisine, i.e. because they want make this food themselves.

In addition to imaginative situations, *sa* subordinate clauses may also express situations which are unreal, but which the speaker(s) predict could transpire. These subordinate clauses have a ‘predicative’ meaning, e.g.:

²⁶⁹ That is, people are cultivating cloves (835), fish dishes are always made by Minahasans (836), and people in the past always cultivated rice (837).

²⁷⁰ *sa* conditional clauses which are predicative or imaginative are an exception to the normal patterns of mood marking (see §9.2.3). While adverbial clauses introduced by *sa* may be irrealis, the verb may or may not be marked as such.

(839) *suma mepali' sa kumaan nodè nodè pasu'*

[suma ma- pali'] [[sa k<um>aan N= odè N= odè
mouth EV.STAT wound if, when <AV> rice INAN RDP INAN PN
pasu']

hot

'If/when (you) eat the hot ode ode cakes, (your) mouth is injured'

(TDN_19_00:05:23)

(840) *sa sia makaro'komou, angkatenoumi*

[[sa sia²⁷¹ ma- karo'ko' =mow] [angkat -en
if, when 3.SG EV.STAT boil CPL remove PV
=mow =mi]

CPL DIR.DIST

'If/when it boils, (you) remove it (from the heat)'

(TDN_33_KK_00:04:11)

In (839) - (840) the situation denoted by the conditional clause is one which the speaker predicts could happen at some stage after the utterance. The difference between these two conditional clauses and the one in (838) comes down to the attitude of the speaker. In (839) - (840) the events expressed by the *sa* conditional clauses are judged as a distinct possibility, while in (838) the event is purely speculative.

Within the category of imaginative conditionals there is a further sub-type. These conditional clauses have previously been labelled 'counterfactual' (*ibid*:256) and express a situation which might have been, but which did not eventuate, e.g.:

²⁷¹ As stated in §8.3.3, the personal pronominals are almost exclusively used to reference animate and/or human referents. However, it appears this rule is changing, and on occasion independent pronominals may reference inanimate entities, as is seen here.

(841) *sa sia rèi maka'ampitou siom lèo, wo sikalo, wo sèwalina, ndè' kaèdoana waya embahasa toudano*

[[sa sia rèy' maka- ampit =mow si= Om
if, when 3.SG not AV.POT with CPL AN.SG uncle
Lèo wo si= Kalo wo sè= walina] [N= rèy'
PN and AN.SG PN and AN.PL other INAN not
ka- èdo -an waya N= bahasa Toudano]
POT take LV all INAN language PN

'If he hadn't befriended Leo, and Kalo, and the others, he cannot learn all the Tondano language'

(TDN_31_KK_00:05:51)

In contrast to all the previous examples, the *sa* subordinate clause in (841) denotes a situation which could have transpired, but definitely did not. That is, at the time of utterance the entity referred to by the PIV argument *sia* had befriended the people named, and had learnt some (but certainly not all) of the Tondano language.

d. *ma'an* 'although'

The subordinating conjunction which expresses concession is *ma'an* 'although, in spite of the fact.' *ma'an* exclusively occurs before the subordinate clause that it introduces.

Subordinate clauses introduced by *ma'an* may occur either before or after the main clause, and their function is to express a concession which contrasts with the proposition of the main clause (Thompson, Longacre, & Hwang 2007:262), e.g.:

(842) *maan tamengèatè megaji hari, mawulèlong waki numa*

[[ma'an ta= meN- èa =itè ma- gaji hari]
although 1.PL.IN.PIV AV.DYN go LIM AV.DYN salary day
[ma- wulèlong waki N= uma]
EV.STAT faint in.DIST INAN field

'Although we just go to do paid work daily, (we) faint in the fields (i.e. the work is so tiring)'

(TDN_14_DK_NK_00:09:55)

(843) *ma'an kita menusenusi, makoo'la makoo'la*

[[ma'an kita meN- CVCV- susui [ma- koo'
although **1.PL.IN** **AV.DYN** **RDP** **speak** **AV.DYN** **drink**
=la ma- koo' =la]

DIR.PROX **AV.DYN** **drink** **DIR.PROX**

'Although we are chatting, (we) drink, (we) drink (coffee)'

(TDN_28_00:02:40)

(844) *ma'an maaremou rèila'kekaanen*

[[ma'an ma- arem =mow] [rèy' =la Ce-
although **EV.STAT** **hungry** **CPL** **EXIST.NEG** **DIR.PROX** **NR**
kaan -en]

rice **PV**

'Although (you) are hungry there is no food'

(TDN_07_00:05:56)

In (842) the concessive subordinate clause asserts that the interlocutors currently undertake paid physical work daily, with the obvious entailment that they are capable of performing this task. However, this assertion conflicts with the proposition expressed by the main clause which states that they struggle to perform this work. Similarly, in (843) - (844) the *ma'an* clause denotes a state of affairs which contrasts in some way with the assertion of the main clause. In (843) the act of using one's mouth to speak doesn't stop speakers from drinking coffee, and in (844) the presence of hunger does not necessarily mean that food is available.

In addition to the order of subordinate clause and main clause above, the opposite order of these clauses is observed whereby the *ma'an* subordinate clause follows the main clause. This variation in clause order does not change the syntactic function or semantic relationship expressed by the *ma'an* clause, e.g.:

(845) *kumèamoukan dèy'ya, maan kumalitèla ko'ko' rua?*

[ku= <um>èa =moukan dè' ya [[ma'an ku=
1.SG.PIV <AV> go definitely PART AFF although 1.SG.PIV
 <um> ali =itè =la ko'ko' rua]
 <AV> bring LIM DIR.PROX chicken two
 'I'll definitely come yes, although I'll just bring two chickens)?'
 (TDN_14_DK_NK_00:02:33)

10.3.3 Juxtaposition: Complement clauses

The final subtype of subordinate clause is that which is embedded in the main clause via juxtaposition. This juxtaposition signifies that an embedded dependent clause functions as an argument of the independent main clause. This particular feature matches the primary characteristic of complement clauses as described in traditional grammar (e.g. Payne 1997:313; Kroeger 2005a:219). However, the term 'complement clause' is used here with a small caveat. While Tondano complement clauses do function as clausal arguments, they do not contain some of the following prototypical features of complementation:

- Lexical or morphological elements which function as subordinators (i.e. complementisers)²⁷².
- Unique verb forms in the subordinate clause.
- Specific restrictions or changes in word order in the subordinate clause.
- Restrictions on the expression of PIV NPs within the subordinate clause (i.e. omitted or only pronominals).

When an embedded subordinate clause functions as a clausal argument it always occurs following the main independent clause, e.g.:

²⁷² It should be mentioned that historically it appears that there was a lexical element *nu* 'that' which functioned as a complementiser. Clauses with this element are present in the work of Sneddon (1975:139) and in some of the bible translation work. However, this element has never been attested in any of the data collected for this thesis.

(846) *paloo 'ngkula iwèitoumou kangkasi lumetok*

[pa- loo' -en =ku =la [si= wèytow
DYN see, look PV 1.SG.NPIV.A DIR.PROX 3.SG.PIV almost
 =mow kangkasi l<um>etok]]

CPL also <AV> explode

‘I see that he is also almost about to explode (with anger)’

(TDN_28_00:04:01)

(847) *dèipè minaloo sètou tou mateles laker laker barang*

[rèy' =pè' ma- <in> loo' [sè= tow tow ma-
not INCPL AV.DYN PST see, look AN.PL RDP person DYN
 teles laker laker barang]]

buy RDP many item

‘(We) hadn’t yet seen that the people buy lots of goods’

(TDN_12_00:13:50)

(848) *kumete'u nisia minèamou waki wènanang*

[ku= ma- te'u [nisia <im> èa =mow waki Wènanang]]
1.SG.PIV EV.STAT know 3.SG <PST> go CPL to.DIST PN

‘I know that he went to Manado’

(ELICITED)

The complex clauses in (846) - (848) all have one argument which is represented by a pronominal, or omitted (i.e. =ku ‘I’ in (846), omitted in (847), and ku= ‘I’ in (848)), and a second argument expressed by an embedded subordinate clause. The GR expressed by these subordinate clauses varies depending upon the voice marking of the main clause. In the UV (PV) marked clause (846) it functions as the PIV argument, while in the AV and EV marked clauses (847) - (848) it functions as the NPIV.UN argument. Consequently, it is only in (847) - (848) that the complement clauses are part of the verbal predicate of the main clause.

The lack of a subordinating element in (846) - (848) means an analysis of parataxis could be considered. Moreover, the multiple clauses in these examples all express two assertions, as do paratactic constructions above (c.f. (776)). However, there are a number of important features which make it highly improbable that (846) - (848) are paratactic constructions:

- The clausal constituents which function as arguments can be substituted with proforms.
- The semantics of the verbs match those which commonly (cross linguistically) take clauses as arguments (see Table 10.3 below).
- There is no intonation break between the two clauses.
- Unlike paratactic constructions, the complement clauses in (846) - (848). correspond to an argument that is left unexpressed in the main clause

To exemplify the first point, the following clauses are elicited from (846) and (848) above. They are judged as essentially having the same reading under the assumption that the assertion of the subordinate clause expresses presupposed information, e.g.:

(849) *paloo 'ngkula ni 'tu*

pa- loo' -en =ku =la ni'tu
DYN see, look PV 1.SG.NPIV.A DIR.PROX that
 'I see that/it (i.e. that he is almost about to explode again)'
 (ELICITED)

(850) *kumete 'u ni 'tu*

ku= ma- te'u ni'tu
1.SG.PIV EV.STAT know that.MED
 'I know that/it (i.e. that he went to Manado)'
 (ELICITED)

ni 'tu 'that' in (849) - (850) is able to replace the earlier subordinate clauses while retaining an identical clausal function. As such, both *ni 'tu* and the subordinate clauses in (846) and (848) are arguments (complements) of the respective verbs.

Cross linguistically, verbs which take clauses as complements tend to belong to certain semantic classes (Kroeger 2005a:223). The semantics of these verbs often relates to situations involving saying and knowing, demands, and manipulation. The verbs in Tondano which are attested to take clausal complements match a number of these categories, as listed in Table 10.3:

Table 10.3: Verbal roots which allow clausal complements

Verbal Root:	Gloss:	Semantic class:
<i>te'u</i>	'know'	Cognition
<i>ghenang</i>	'think, remember, believe'	Cognition
<i>loo'</i>	'see, look'	Perception
<i>linga</i>	'hear, listen'	Perception

The verbal roots in Table 10.3 are not meant as an exhaustive list of those which may take verbal complements. However, this list does show that there are certain semantic features which are common to the verbs which occur in these complex clauses. In this case the roots are those which commonly denote things like perception and cognition. A verbal root which could also be expected to appear in Table 10.3, but which does not, is *ila'~lila'* 'tongue' (i.e. 'to say, speak'). In fact, this verbal root does not allow for clausal complements, but rather for a separate type of clause embedding which represents direct quotations.

10.3.4 Juxtaposition: Indirect speech

The lexical root *lila'~ila'* 'tongue' is used in two different ways to express specific quotations that the speaker wants to attribute to another person. These quotations may be things which have actually been said, or those which simply might be said.

When used without any verbal morphological marking, *lila'~ila'* can be glossed as 'word' or 'statement' and is the head of a possessive NP which introduces quoted speech. The possessor in the NP expresses the entity to whom the statement which follows is attributed, e.g.:

(851) *ila'la nipapaku, minèa aki wèngang*

lila' *=la* *ni=* *papa* *=ku*
tongue **DIR.PROX** **AN.SG.POSS** **father** **1.SG.POSS**

<im> *èa* *waki* *Wèngang*

<AV.PST> *go* *to.DIST* *PN*

'My father's word (my father said) "(she) has gone to Manado" '

(TDN_21_00:03:03)

(852) *lila'la niurangku, sa koso'omou memiamia*

lila'	=la	ni=	urang	=ku		
tongue	DIR.PROX	AN.SG.POSS	child	1.SG.POSS		
sa	ko=	so'o	=mow	meN-	CVCV-	wia
if,when	1.SG.PIV	don't.want	CPL	AV.DYN	RDP	here

‘My child’s word (my child said) “If you don’t want to stay here” ’

(TDN_20_00:04:29)

In both (851) and (852) the possessive NP functions as a quotative marker which introduces the indirect speech. When indirect speech is encoded in this way there is no clausal embedding as is seen when *lila'~ila'* functions as the head of a verbal predicate which introduces the quoted speech.

The root *lila'~ila'* also occurs with verbal morphology. It has the exact same function as that displayed by (851) - (852). However, in this instance it is the head of a verbal predicate, e.g.:

(853) *pèila' nètù'a, ondè ondè ka'apa odè odè, masuatitè*

i-	pa-	lila'	nè=	tu'a	ondè	ondè
CV	DYN	tongue	AN.PL.NPIV.A	old	RDP	cake
ka'apa	odè	odè	ma-	suat	=itè	
or	RDP	cake	EV.STAT	same	LIM	

‘The elders say “ondè ondè or odè odè are just the same (i.e. both words mean the same thing)” ’

(TDN_19_00:05:40)

(854) *jadi kurèi melelila'mèè, o nye'i nulis wia niaku*

jadi	ku=	rèy'	ma-	Ce-	lila'	=mèè	o	N=
thus	1.SG.PIV	not	AV.DYN	IRR	tongue	DIR.MED	PART	INAN
ye'i	N=	ulit	wia	niaku				
this	INAN	correct	from.PROX	1.SG				

‘So I will not say “Oh this (statement) is correct from me” ’

(TDN_31_00:16:19)

(855) *kulimila 'moula wia sikolèhata ti 'i, wèanè pepa 'payangengku ku 'a*

ku=	l<im>ila'	=mow	=la	wia	si=	
1.SG.PIV	<AV.PST>	tongue	CPL	DIR.PROX	to.PROX	AN.SG
kolèha	=ta	iti'i	wewèan	=pè'	Ce-	pa'ayang
colleague	1.PL.IN.POSS	that.MED	EXIST	INCPL	NR	work
-en	=ku	ku'a				
PV	1.SG.POSS	PART				

'I said to that colleague of ours "there's still my work then" '

(TDN_32_OL_KK_00:05:16)

The entity to whom the quotations are attributed in (853) - (855) is expressed differently depending upon the voice marking on the verbal predicate. In the UV (CV) clause in (853) the speaker is expressed as the NPIV.A NP with the phrase marker *nè=*. While this marking is obviously identical to that observed in (851) - (852), the verbal morphology present on the root *lila'~ila'* means that *nè=tu'a* is analysed as part of a verbal predicate, and not a possessor NP within a larger NP.

The function of *lila'~ila'* is identical in all examples (851) - (855), despite the fact it is the head of an NP in (851) - (852) and a verbal head in (853) - (855). However, the best analysis for the quoted speech in (853) - (855) is somewhat less clear.

While it initially appears that these embedded clauses have the same function and GRs as those in (846) - (850), analysing them as verbal complements is incorrect. The status of direct quotes as subordinate to verbs, and therefore as complements, has previously been argued against (Haiman 1992:58-9; Kroeger 2005a:226), and is also argued against here. The reasoning behind this is that subordinate clauses which express direct quotes "bear no grammatical relation (e.g. subject, object etc.) to any verb" (Weber 1989:20).

The question of whether clauses expressing direct quotes are subordinate complements of the verb in a main clause can be examined in a number of ways. In this instance we can use the same test that was used with (846) and (848), and (849) - (850) above. This allows us to observe whether or not an embedded clause can be replaced by a pronoun, e.g.:

(856) *pèila' nètú'a, ní'tu*

i- pa- lila' nè= tu'a ní'tu
CV DYN tongue AN.PL.NPIV.A old that.MED

'The elders say, "that"

(ELICITED)

While (856) proves that embedded clauses representing direct quotes can be replaced with proforms, this is not evidence that they function as a GR within the clause. This test only proves that the direct quote in (853) is a constituent which can be replaced by a proform. The obvious problem with this test is that the constituent *ní'tu* in (856) is now only an example of a direct speech quote if someone literally uttered the word "*ní'tu*".

The direct quote embedded clauses in (853) - (855) cannot be shown to exhibit any GR to the root *ila'~lila'*, regardless of the fact that they are embedded within a larger independent clause. This is because the quoted speech represents a "separate discourse, and may contain any amount of linguistic material from a single word to an entire story" (Weber 1989:21). The use of direct quotes is therefore a process of "reporting the linguistic expressions used by a speaker, rather than the content or the message which the speaker expressed" (Kroeger 2005a:226). As a consequence, there is no real grammatical link between the words of the person restating the quote, and the words of the original person who is being quoted.

APPENDIX A: SAMPLE TEXT

The following sample text represents an eight minute and fifty second stimulus video narrative (monologue) which is comprised of 134 utterances. Some utterances express a single clause, while others may be comprised of multiple clauses. Still others may be incomplete utterances (e.g. false starts which are less than a clause).

This recording was initially annotated with FLE_x before it was exported to Microsoft Word. The layout of the interlinear glossing differs in one respect to that observed in the rest of this thesis, i.e. the third line of the glossing is the same font size as the first two lines. This was done because changing the font size of the third line results in spacing issues. Utterances which not words, e.g. laughing, coughing, and sneezing are not included. All other utterances are included and glossed.

TDN_32_OL2_Kiniar: Buying bats at the market and the preparation of bat curry.

1.1 *patuari waya , niaku mesesusuila en*
patuari waya niaku ma- Ce- susui =la N=
nuclear.family all 1.SG AV.DYN IRR speak DIR.PROX INAN

rinekam nipatuariku tim ,
 <in> rekam -Ø ni= patuari =ku Tim
 <PST> **record PV AN.SG.POSS nuclear.family 1.SG.POSS PN**

waki lolah , tombulu , tomohon.
waki Lolah Tombulu Tomohon
in.DIST PN PN PN

Everyone, I will talk about, the recoding of our family member Tim, in Lolah, Tombulu area, Tomohon.

1.2 *sèsèsimiwomou pèrèt.*
sè= sè= <im> siwo =mow pèrèt
HES 3.PL.PIV <AV.PST> make CPL bat

They, they prepared some bat.

1.3 *pèrèt iti'i wo sèkawok.*
pèrèt iti'i wo sè= kawok
bat that.MED and AN.PL mouse

That bat and the mice.

1.4 *ee , pilapila nèpèrèt ti'in # kaa*
ee pilapila nè= pèrèt iti'i ka'a
HES wing AN.PL.POSS bat that.MED because
penera'an kangkasi empilapilana.
peN- sera' -an kangkasi N= pilapila =na
DYN meat LV also INAN wing 3.SG.POSS

Erh, the wings of those bats, because (they) also prepare its wings.

1.5 *taan musti , pali'pik.*
ta'an musti pali'pik
but must wingtip

But the wingtips have to...

1.6 *pali'pik , patèwèl , patèwèl*
pali'pik i- pa- tèwèl i- pa- tèwèl
wingtip CV DYN fly CV DYN fly
ninipèrèt em pali'pikena ,
ni= ni= pèrèt N= pali'pik =na
HES AN.SG.NPIV.A bat INAN wingtip 3.SG.POSS
penera'an kangkasi # ta'an musti
pa- sera' -an kangkasi ta'an musti
DYN meat LV also but must
siluwanèla.
siruw -an =la
remove.hair LV DIR.PROX

The wingtips, wings, the bat's wings are its wingtips. (He) prepares (them) also but (he) must remove the hair.

1.7 ee *papato'nèami*

ee pa- pa- ato -en =nèa =mi
HES DYN CAUS look, see PV 3.PL.NPIV.A DIR.DIST
ikawok , *kawok putipus*.
 si= kawok kawok puti' ipus
AN.SG HES mouse white tail

Erh, they display the mouse (to the others at the market), the white tailed mouse.

1.8 *wèanou sèanu* , *sèsèkawok wo*
 wewèan =mow sè= anu sè= sè= kawok wo
EXIST CPL AN.PL NON.SPEC HES AN.PL mouse and
sèpèrèt.
 sè= pèrèt
AN.PL bat

There are the what's its, the, the mice and the bats.

1.9 *èkawok ku'a sirèi'la pali'pik*
 sè= kawok ku'a si= rày' =la pali'pik
AN.PL mouse PART 3.SG.PIV NEG.EXIST DIR.PROX wingtip
 # *rè'ila tetèwèl* , # *ta'an sipèrèt siwewèan*
 rày' =la Ce- tètèwèl ta'an si= pèrèt si=
NEG.EXIST DIR.PROX NR wing but AN.SG bat 3.SG.PIV
tètèwèl.
 wewèan Ce- tètèwèl
EXIST NR fly

The mice then, it doesn't have wingtips, (they) don't have wings, but the bat, it has wings.

1.10 ee , *paketorenèamou*.
 ee pa- ketor -en =nèa =mow
HES DYN cut PV 3.PL.NPIV.A CPL

Erh, they cut it (the bat) up.

1.11 *parou'n embaya , baya riberek.*
 pa- row' -en N= waya waya riberek
DYN far PV INAN HES all entrails

(They) remove all, all of the entrails.

1.12 *baya dèi' , rèi' penganen # emparou' ,*
 waya rèy' rèy' peN- kaan -en N= i- pa- row'
all HES not DYN rice PV INAN CV DYN far
ee , # parou' embaya , baya enano.
 ee i- pa- rou' N= waya waya N= anu
HES CV DYN far INAN all all INAN NON.SPEC

All, (you) don't, don't eat (the entrails), (they) remove (them), erh (they) remove all, all the thingummy.

1.13 *tine'è emparou'mi ee.*
 tinè'i N= i- pa- row' =mi ee
intestine INAN CV DYN far DIR.DIST HES

The intestine, they remove them, erh.

1.14 *ee mèmang sèsig'amou masiwo pèrèt*
 ee mèmang sè= sigha' =mow ma- siwo pèrèt
HES truly 3.PL.PIV capable CPL AV.DYN make bat
sèa.
sèa
3.PL

Erh truly they are capable of preparing bats, these people.

1.15 *toulodaken èmèmang , èi wona èi.*
 sè= mèmang èy wona' èy
3.PL.PIV truly PART perhaps PART

____? They truly, hey perhaps, hey

pa- saput -en =nèa
DYN **cover** **LV** **3.PL.NPIV.A**

1.17 *pasiruw* *ano* , *wuuk* *witu* *pali'pik*.
 pa- siruw -an anu wu'uk witu pali'pik
DYN **remove.hair** **LV** **NON.SPEC** **hair** **on.MED** **wingtip**

1.18 *witu enano* , *witu keketotan*
witu N= anu witu Ce- ketot -an
on.MED INAN NON.SPEC on.MED NR urine LV
niano , *nipèrèt*.
ni= anu ni= pèrèt
AN.SG.POSS NON.SPEC AN.SG.POSS bat

1.19 *paketozani* *pèrèt ku'a , sia # sa*
 pa- ketot -an =mi *pèrèt ku'a sia sa*
DYN urine LV DIR.DIST bat PART HES if, when
sia , maketot mana engkokongena
 sia ma- ketot mana N= kokong =na
3.SG.PIV AV.DYN urine on.MED INAN head 3.SG.POSS
 # *empaketotan.*
 N= pa- ketot -an
INAN DYN urine LV

468

1.20 *ni'tumou sèpèrèt ni sè.*
 ni'tu =mow sè= pèrèt ini sè=
that.MED CPL AN.PL bat this.PROX 3.PL

So then these bats, they.

1.21 *sa koghumorem itu ruraar*
 sa ko= <um> ghorem witu ruraar
if, when 2.SG.PIV <AV> enter.inside to.MED cave

mawou ketot tampa nèpèrèt tii.
 ma- wou ketot tampa nè= pèrèt iti'i
EV.STAT smell urine place AN.PL.POSS bat that.MED

If you enter into a cave (and you) smell urine, (it's) the place of that bat.

1.22 *èpaketorenadou.*

sè= pa- ketor -en =na =mow
3.SG.PIV DYN cut PV 3.SG.NPIV.A CPL

She slices them (the bats) up.

1.23 *okela iiwewènè ti'i mèmang kasa siga'*
 o kala si= si= wewènè iti'i mèmang kasa sigha'
PART PART HES AN.SG woman that.MED truly very capable

, # *paiwuana' sipèrèt.*
 pa- iwu -an =na si= pèrèt
DYN slice LV 3.SG.NPIV.A AN.SG bat

Oh dear me the,that woman she truly is expert, she slices up the bat.

1.24 *dèi' , aa s oo pa parintekenamou*
rèy' aa s oo pa pa- rintek -en =na =mow
not HES HES HES HES DYN small PV 3.SG.NPIV.A CPL

sipèrèt.

si= pèrèt

AN.SG bat

Oh it's not, ah the, he dices the bat.

1.25 *èi loo'la , o , # kaa wona pa*
èy i- loo' =la wo ka'a wona' pa
PART CV see, look DIR.PROX and because perhaps HES

parapuanèaitè , wewèanou itu.
pa- repu' -an =nèa =itè wewèan =mow itu
DYN break LV 3.PL.NPIV.A LIM EXIST CPL that.MED

Hey (you) would see (it), and because perhaps they just chop up (the bat), hmm it is already there.

1.26 *aa , pa parerebusanamou.*
aa pa pa- Ce- rebus -an =na =mow
HES HES DYN IRR boil LV 3.SG.NPIV.A CPL

Ah, he will boil (the bat).

1.27 *peleluga' , peleluganou wo ee*
pa- Ce- luga pa- Ce- luga -en =mow wo ee
HES HES HES DYN IRR boil PV COMP and HES

Boil, (he) will boil (the bat) and erh.

1.28 *ee* , *nèi* , *nèinou* *wèèla* *witu*
ee *nèy* *nèy* =mow *wèè* =la *witu*
HES HES CV.PST CPL give DIR.PROX in.MED

enano , *toumou* , *tou* *empanci*.
en= *anu* *tow* =mow *tow* *N=* *panci*
INAN NON.SPEC like CPL like INAN pan

Erh (he) has put it in the what's it, (it's) like, like a pan.

1.29 *aa* *sinadiamou* *embaya* *rampa* *rampa* ,
aa <in> *sadia* -Ø =mow *N=* *waya* *rampa* *rampa*
HES <PST> prepare PV CPL INAN all RDP spices

lelè'os *wo* *enano* , *lansuna* , *lansuna mèa'* *wo* *lansuna*
lelè'os *wo* *N=* *anu* *lansuna* *lansuna mèa'* *wo* *lansuna*
spring.onion and INAN NON.SPEC onion onion red and onion

puti' , *wo* *lia* , *wo* *saribata* , *wo* *enano* ,
puti' *wo* *lia* *wo* *saribata* *wo* *N=* *anu*
white and ginger and lemongrass and INAN NON.SPEC

podang , *dano* , *marisa* , *marisa* *wo*.
podang *rano* *marisa* *marisa* *wo*
pandanus.leaf water chilli chilli and

Ah, (they) have prepared all the spices, spring onion and what's it, onion, red onion and
garlic, and ginger, and what's it, pandanus leaf, water, chilli, chilli and

1.30 *lia'* *empamèanitè* , # *lansuna mèa* ,
lia *N=* *i-* *pa-* *mèan* =itè *lansuna mèa*
ginger 3.SG.INAN CV DYN strike LIM onion red

peteto'omenamou , *ee* *o* *kela!*
pa- *Ce-* *to'om* *-en* =na =mow *ee* *o* *kala*
DYN IRR pound PV 3.SG.NP.V.A CPL HES PART PART

Ginger, (he) bashes it, he will grind up the red onion, erh, oh wow!

1.31 o *empa* , o *empato'omen*
 wo N= pa wo N= pa- to'om -en =na
and INAN HES and 3.SG.INAN DYN pound PV 3.SG.NPIV.A
witu en teto'omeian , marisa , lansuna.
 witu N= Ce- to'om -an marisa lansuna
in.MED INAN NR pound LV chilli onion

And he grinds (it) up in the grinding dish, chilli, onion.

1.32 *sinawokenamou* *enanu* , *rampa*
 <in> sewok -an =na =mow N= anu rampa
 <PST> **mix LV 3.SG.NPIV.A CPL INAN NON.SPEC RDP**
rampa sedapoukan # maloo'la.
 rampa sedap =mowkan ma- loo' =la
spices tasty definitely AV.DYN see, look DIR.PROX

He has ground up the what's'it, the truly tasty spices, (I) can see (it).

1.33 *mèmang pererampan* # *pererampan*
 mèmang pa- Ce- rampa -en pa- Ce- rampa -en
truly DYN IRR spices PV DYN IRR spices PV
nininipèrèt iti'i.
 ni= ni= ni= pèrèt iti'i
HES HES AN.SG.POSS bat that.MED

Truly (he) will spice up the (bat), (he) will spice (the bat), the spices of that bat.

1.34 *sa sia rèi' tena'an* , # *ndèi' sedap.*
 sa sia rèy' tena'an N= rèy' sedap
if, when 3.SG not exact INAN not tasty

If it isn't (spiced) correctly, it isn't tasty.

1.35 *taan sèitu* *tena'an* , # *loo'nèa*.
 ta'an sa itu tena'an i- loo' =nèa
but if, when that.MED exact CV see, look 3.PL.NPIV.A

But if this, if this is exact, they would see (it).

1.36 *paki'kis* *po'opo* # *kaa simusti* *ano* ,
 i- pa- ki'kis po'po' ka'a si= musti anu
CV DYN grate coconut because 3.SG.PIV must NON.SPEC
wèènèa *ano*.
 wèè -en =nèa anu
give PV 3.PL.NPIV.A NON.SPEC

(They) grate the coconut because they have to what's it, they will add the thingy.

1.37 *wèènèa* *santang* , # *po'opo'*
 wèè -en =nèa santang po'opo'
give PV 3.PL.NPIV.A coconut.milk coconut
 # *kini'kis*.
 <in> ki'kis -Ø
 <PST> **grate PV**

(They) will add coconut milk, (and) coconut which (they) have grated.

1.38 *pawèèn* *rano* # *kaa* ,
 pa- wèè -en rano ka'a
DYN give PV water because
pepepuusanèa *santang*.
 pa- Ce- pu'us -an =nèa santang
DYN IRR knead LV 3.PL.NPIV.A coconut.milk

(They) add water because they will squeeze the coconut milk mixture.

The bat, if it has coconut milk (added), the main part of the coconut milk is truly (thick), (they) still filter (it).

(I) can see that (they) are drooling yes.

Aah, he pours out the coconut milk, (he) puts it in the small water container.

He mixes the coconut milk in, in a small plastic container.

1.43 *petapisen* *santang*.
 pa- tapis -en santang
DYN filter PV coconut.milk

(He) filters the coconut milk.

1.44 *pèrèt sa sia , mèmang ee , tena'an # ee rampa rampa*
pèrèt sa sia mèmang ee tena'an ee rampa rampa
bat if, when 3.SG truly HES exact HES RDP spices

mèmang.

mèmang

truly

The bat, if it is erh, truly, correct, the spices (are).

1.45 *sedap # sia mekekaan.*
sedap sia ma- Ce- kaan
tasty 3.SG AV.DYN IRR rice

tasty, he will eat (it).

1.46 *ilinuga'namoula*
si = <in> luga -Ø =na =mow =la
3.SG.PIV <PST> boil PV 3.SG.NPIV.A CPL DIR.PROX
sipèrèt ano # nèimou ti'is endano.
si= pèrèt anu nèy =mow ti'is N= rano
AN.SG bat NON.SPEC CV.PST CPL drain INAN water

He has boiled it, the bat. What's it, (he) has drained out the water.

1.47 *dano ketarè , linuga nisia # kaa si*
 rano ka- tarè <in> luga -Ø nisia ka'a si=
water very recently <PST> boil PV 3.SG because 3.SG.PIV

pererampanou.

pa- Ce- rampa -en =mow
DYN IRR spices PV CPL

First the water, (he) has boiled him (the bat), because (he) will spice it (the bat).

1.48 *pawèènéamou ,*
 pa- wèè -en =nèa =mow
DYN give PV 3.PL.NPIV.A CPL

pawèènéamou lana , lana weru.
 pa- wèè -en =nèa =mow lana lana weru
DYN give PV 3.PL.NPIV.A CPL oil oil fresh

They put in (it), they put in oil, fresh oil.

1.49 *patumisen lana weru.*
 pa- tumis -en lana weru
DYN stirfry PV oil fresh

(They) stirfry (heat up) the fresh oil.

1.50 *pakè lana weru # patumis.*
 i- pakè lana weru i- pa- tumis
CV use oil fresh CV DYN stirfry

(They) will use fresh oil, (they) stirfry (the bat).

1.51 *lansunapè' rerior , lelè'os.*
 lansuna =pè' Ce- rior lelè'os
onion INCPL NR fast spring.onion

Still onion is from before, spring onion.

1.52 *patumisen waya , embaya rampa rampa.*
 pa- tumis -en waya N= waya rampa rampa
DYN stirfry PV HES INAN all RDP spices

(They) stir fry all, all the spices.

1.53 *wewèan podang.*
 wewèan podang
EXIST pandanus.leaf

There's pandan leaf.

1.54 *pasedapan ku'a.*
 pa- sedap -an ku'a
DYN tasty LV PART

(They) make (it) tasty then.

1.55 *o wèta , ee.*
 o wèta ee
PART PART HES

Oh wow, erh

1.56 *winèèanou podang , rampa rampa jago jago*
 <in> wèè -an =mow podang rampa rampa jago jago
 <PST> give LV CPL pandanus.leaf RDP spices RDP expert

empewèènèla.

N= pa- wèè -en =la
3.SG.INAN DYN give PV DIR.PROX

(They) have added pandanus leaf, the perfect ingredients, (they) add it.

1.57 *lia*.

lia

ginger

Ginger.

1.58 *katumisenèala*

itu.

ka-	tumis	-an	=nèa	=la	itu
POT	stirfry	LV	3.PL.NPIV.A	DIR.PROX	that.MED

They can stirfry that (bat).

1.59 *mèè* *rampa* *rampa*.

<um>	wèè	rampa	rampa
<AV>	give	RDP	spices

(They) would add some spices.

1.60 *wèèmoula*

siano

, *sipèrèt* ,

i-	wèè	=mow	=la	si=	anu	si=	pèrèt
CV	give	CPL	DIR.PROX	AN.SG	NON.SPEC	AN.SG	bat

linubusanèa.

<in>	rubus	-an	=nèa
<PST>	boil	LV	3.PL.NPIV.A

(They) would add the what's it, the bat which they have already boiled.

1.61 *pèrèt ti'i*
pèrèt ti'i
bat that.MED

silinubusanèala *ku'a* ,
si = <in> rubus -an =nèa =la *ku'a*
3.SG.PIV <PST> boil LV 3.PL.NPIV.A DIR.PROX PART
 # *silutu'mou* *sia.*
si= lutu' =mow *sia*
3.SG.PIV cook CPL 3.SG

That bat, they have boiled (it) then, he's cooked, it is.

1.62 *sia si rampamoukan* # *sia*
sia si= rampa =mowkan *sia*
3.SG 3.SG spices definitely 3.SG
wèèla , # *wèènèala*
i- wèè =la wèè -en =nèa =la
CV give DIR.PROX give PV 3.PL.NPIV.A DIR.PROX
santang.
santang
coconut.milk

As for it, it is definitely spiced, (they) put it in, they add coconut milk.

1.63 *pasempo'anaèla* *daong.*
pa- sempo' -an =na =la *daong*
DYN dissolve LV 3.SG.NPIV.A DIR.PROX leaf

He renders away (pandanus) leaves.

1.64 *mawèèla* *santang* , # *sedapoukan*
 ma- wèè =la santang sedap =mowkan
AV.DYN give DIR.PROX coconut.milk tasty definitely
ye'i.
ye'i
this.PROX

(He) adds coconut milk, this one is definitely tasty.

1.65 *aa nèimou paakirou* ,
 aa nèy =mow pa- akir =mow
HES CV.PST COMP DYN large.spoon CPL
 # *paakiromi.*
 i- pa- akir =mow =mi
CV DYN large.spoon CPL DIR.DIST

(He) has ladled (it) out, (he) ladles (it) out.

1.66 *pa pawèèmou itu empiring.*
 pa i- pa- wèè =mow witu N= piring
HES CV DYN give CPL on.MED INAN plate

(He) puts (it) on a plate.

1.67 *ee , èkumaanou.* .
 ee sè= <um> kaan =mow
HES 3.PL.PIV <AV> rice CPL

Erh, they will eat (the bat curry).

1.68 *tim wona' kumaan ti'i* , # *tim mekaanou.*
 Tim wona' <um> kaan iti'i Tim ma- kaan =mow
PN perhaps <AV> rice that.MED PN AV.DYN rice CPL

Perhaps Tim will eat (it). Tim eats (it)!

1.69 *o kela , ye'i , itou lolah si wewèan , o*
o kala ye'i si= tow Lolah si= wewèan o
PART PART now AN.SG person PN 3.SG.PIV EXIST PART

mamma , o tuang !
mamma o tuang
mother PART God

Oh my, now, the Lolah people he has, oh mamma! Oh god!

1.70 *tepesoukan.*
i- tepes =mowkan
CV smell definitely

(They) will really taste (it).

1.71 *o , aa tepesenèa entoto'*
wo aa tepes -en =nèa N= toto'
and HES smell PV 3.PL.NPIV.A INAN breast

nipèrèt.
ni= pèrèt
AN.SG.POSS bat

And, ah, they will taste the bat's breast.

1.72 *toto' nipèrèt , tim , o kela!*
toto' ni= pèrèt Tim o kala
breast AN.SG.POSS bat PN PART PART

The bat's breast, Tim, oh dear me!

1.73 *toto' nipèrèt kinaan nitim.*
toto' ni= pèrèt <in> kaan -Ø ni= Tim
breast AN.SG.POSS bat <PST> rice PV AN.SG.NPIV.A PN

Time ate the bat's breast.

Tim tasted the bat's breast.

APPENDIX B: FIELDWORK PHOTOGRAPHS



Lake Tondano at dusk



Mt. Lokon and rice fields



Boat moored of Lihaga island



The author with the Nangin family and friends



Village children at a party



Food preparation in an outdoor kitchen



Tinutu'an - Minahasan vegetable porridge



Fishing on Lake Tondano



Traditional Tondanese style houses near the lake



The author and Tondano speech consultants



Outdoor palm sugar brandy distillery



Transcription work with colleagues from UNIMA

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