AN ERGATIVE VIEW OF THAO SYNTAX

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAI'I IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

LINGUISTICS

MAY 2004

By
Shan-Shan Wang

Dissertation Committee:

Lawrence A. Reid, Chairperson
Byron W. Bender
Robert A. Blust
William D. O'Grady
Chin-Tang Lo
ACKNOWLEDGMENTS

I would first like to acknowledge the unstinting assistance that I received from my Thao assistants during the fieldwork that I undertook for this dissertation. I was especially privileged to have worked with Mr. A-Song Shi, Mr. Chang-Feng Kao and Ms. Qiu-Xiang Mao-Liu, who were my primary Thao consultants. To them I offer my warmest thanks.

The completion of this dissertation is due to the great generosity of many individuals. I wish to thank Prof. Lawrence Reid, my dissertation committee chair for first stimulating my interest in Formosan languages, and for teaching me how to go about the task of doing fieldwork. He has provided me with endless encouragement, emotional support, and wise guidance throughout the process of dissertation writing. I feel that I have been greatly blessed for having him as my advisor, and for the hours we spent together, discussing the many analytical problems that needed to be resolved before the dissertation could be completed. His extensive detailed comments on earlier drafts of this dissertation were extremely insightful and beneficial to my later revisions. I owe a debt to my advisor that can never be properly expressed or repaid.

I extend the deepest gratitude to my committee members. I have profited immensely from Prof. William O’Grady, from whom I acquired my understanding of syntax. He has shown me the way toward a better understanding of the subject by challenging my ideas, providing a wide range of references, and kindly giving me valuable comments as well as suggestions that led to significant revisions. I thank Prof. Robert Blust for introducing the Thao language and Thao friends to me in Sun-Moon Lake, for generously providing his Thao data for me before it was published, and for being an excellent scholar as well as
a teacher. I am equally thankful to Prof. Byron Bender, for his supporting and
electuring me to live up to my full potential. He is a superb role model and an amazing
teacher. My sincere gratitude goes also to my outside committee member, Prof.
Chin-Tang Lo, a wonderful and hard-working Chinese scholar, who has shared with me
his confidence in my ability to complete this dissertation. Accordingly, to the chair and
all members of my dissertation committee, I am deeply indebted for their invaluable
scholarly direction through this final stage of my academic career at the University of
Hawai‘i at Mānoa.

I owe a deep debt to Prof. Ann Peters. Her patience and warm encouragement, her
willingness to spend hours going over my problems or discussing ideas, and her steadfast
friendship has buoyed me on the sometimes turbulent waters of graduate student life.

My special thanks go to Dr. Amy Schafer, for giving me invaluable comments and
assistance in statistical analyses, which lead to significant revisions of parts of the
dissertation.

Prof. Ying-Che Li of the East Asian Language and Literature Department at UH also
deserves my heartfelt thanks for his kind attention and continuing encouragement
throughout my graduate student days.

My sincere gratitude also goes to Dr. Elizabeth Zeitoun at Academic Sinica in Taiwan
for her scholarly sharing, friendship and encouragement in the past.

The friendship and encouragement of the UHM linguistics graduate students kept me
going and made life fun. I especially owe a deep debt to Dr. Hsiu-chuan Liao, for her
willingness to spend many hours discussing my questions, giving perceptive and useful
comments on my earlier drafts, and mentally supporting me through to the completion of
the dissertation. My special thanks also go to my fellow graduate students in linguistics, Dr. Te-Fang Hua, Hui-Hua Hwang, Dr. Derek Chang of the National Chung-Cheng University, Dr. Soo-Ok Kwan, Cathy Kawahata, Dr. Min Sun Song, Dr. Moriyo Shimabukoro of the University of the Ryukyus, and Dr. Sarka Stivarova, who were always giving me encouragement throughout the various stages of this dissertation research, and making my graduate student life unforgettable. They are special friends and companions in linguistics and in real life.

My special thanks go to Wendy Onishi, the retired former secretary of the Department of Linguistics, and Jennifer Kanda, the present secretary, and to Caroline Paet, now secretary at the Department of Second Language Studies, for their professional assistance on administration issues.

For the following Chinese friends, words of thanks are never enough. In their own generous ways through the years, Hu Che, Shu-Ching Liang, Chen-Ling Chou, Pei-Ru Chen, Jing-Min Qiu, and Susan Wu in Honolulu have been unfailing helping hands during times of trouble. Without their kind help, the completion of my Ph.D. program at UH might have remained a dream.

My deepest thanks go to the Wang family, my father, my mother, and my brothers for having provided endless mental support and love for me. Finally, to Alex Chu and Shin-Yi, my husband and my son, to whom this dissertation is dedicated, I give my most sincere gratitude for their endless love, patience, support and understanding while I have been painstakingly trying to reach the finish line.
Finally, I would like to express my gratitude to various unnamed individuals who have helped me toward the completion of this dissertation but whose help has been just as important as the contributions of the others mentioned above.
ABSTRACT

Previous works on Thao syntax, whether descriptive or theoretical, recognized the fundamental distinction drawn by Tsuchida (1976) between actor-focus (AF: -um/-m-verbs) and non-actor focus (NAF: -in/-an verbs, i.e., patient-focus, goal-focus, instrument-focus, etc.) verbs. However, they failed to recognize that the distinction between AF and NAF is actually one of transitivity: NAF verbs are syntactically transitive and AF verbs are syntactically intransitive. As a result, Thao has been analyzed as an accusative or split-ergative language.

This study considers the notion of transitivity to be crucial to the determination of the actancy system of the language. Transitivity is considered to be a combination of the morphological, semantic and syntactic properties that a clause exhibits. This dissertation demonstrates that although there are two distinct dyadic clause patterns in Thao, only one of them (i.e., the major class of -in/-an verbs) is a canonical transitive construction and the other is an extended intransitive construction (i.e., m- verbs). Consequently, Thao turns out to be neither accusative, nor split-ergative, but exhibits a pure ergative system. The ergativity of Thao is manifested in its grammatical relation coding strategies such as word order and cross-referencing system, as well as in syntactic phenomena with respect to relativization, quantifier association, topicalization, nominalization, clefting, and coordination.

A sketch of Thao grammar is also provided in this study. It includes predicational constructions, word order, and the pronominal system of Thao. The study suggests that a transitive verb may carry actor agreement forms, namely, the first and second person singular -k and -nu, the remnants of ergative clitic pronouns that probably existed in the
prehistory of the language. In addition, different types of constructions are also
examined such as dynamic agentless intransitives, imperative, existential, possessive,
negative, causative constructions, and \( wh \)-questions, with attention also being paid to
some special classes of verbs. Finally the structure of noun phrases is looked into. The
influence from Taiwanese appears to be obvious, particularly with reference to the
neutralization of the distinction between the marking of relative clauses and
genitive/possessive constructions.
# TABLE OF CONTENTS

Acknowledgements ........................................................................................................ iv  
Abstract ........................................................................................................................... viii  
List of Tables .................................................................................................................. xv  
List of Figures ................................................................................................................ xvii  
List of Abbreviations ..................................................................................................... xx  

Chapter 1: Introduction .................................................................................................. 1  
1.1 General Background ............................................................................................... 1  
1.2 Linguistic Studies of Thao ...................................................................................... 1  
  1.2.1 The Linguistic Position of Thao ........................................................................ 2  
    1.2.1.1 The traditional period .............................................................................. 2  
    1.2.1.2 The modern period ................................................................................. 3  
      1.2.1.2.1 Li’s early classification of Thao .......................................................... 3  
      1.2.1.2.2 Blust’s classification of Thao .............................................................. 4  
      1.2.1.2.3 Li’s revision of the classification of Thao .......................................... 8  
  1.2.2 Literature Review .............................................................................................. 10  
    1.2.2.1 Pioneering work ...................................................................................... 10  
    1.2.2.2 Phonological and/or morphological studies ........................................... 11  
    1.2.2.3 Syntactic studies ..................................................................................... 13  
    1.2.2.4 Lexicography ......................................................................................... 14  
    1.2.2.5 Educational materials ............................................................................ 14  
1.3 Goal of the Dissertation ......................................................................................... 14  
1.4 Data Sources and Language Consultants .............................................................. 16  
1.5 Thao Phoneme Inventory and Orthography ............................................................ 16  
1.6 Outline of this Dissertation .................................................................................... 18  

Chapter 2: Transitivity and Actancy Structure ............................................................... 19  
2.1 Introduction ............................................................................................................. 19  
2.2 Transitivity .............................................................................................................. 19  
  2.2.1 Theoretical Orientation ............................................................................... 20  
  2.2.2 Determination of Transitivity ..................................................................... 24  
    2.2.2.1 Morphological transitivity ................................................................. 25  
    2.2.2.2 Semantic transitivity ....................................................................... 31  
    2.2.2.3 Syntactic transitivity ...................................................................... 38  
    2.2.2.4 Discourse grounding transitivity ....................................................... 46  
    2.2.2.5 Textual frequency tests ................................................................. 50  
    2.2.2.6 Summary ...................................................................................... 52  
2.3 Actancy Structure ................................................................................................. 53  
  2.3.1 Accusative vs. Ergative Actancy Structure ................................................. 54  
  2.3.2 Split Actancy Structure ............................................................................. 60  
  2.3.3 Syntactic Accusativity/Ergativity ............................................................. 70  
    2.3.3.1 “Morphologically ergative” languages ............................................. 71  
    2.3.3.2 “Syntactically ergative” languages ................................................... 73
5.3.3 Topicalized Constructions .................................................. 241
  5.3.3.1 Topicalization of nominative/absolutive NPs ..................... 241
  5.3.3.2 Topicalization of ergative NPs ................................... 243
  5.3.3.3 Topicalization of oblique NPs .................................... 244
  5.3.3.4 Topicalization of the possessor .................................. 244
  5.3.3.5 Topicalization in imperative constructions ....................... 246
5.3.4 Existential Constructions .................................................. 246
  5.3.4.1 Affirmative existential constructions ............................ 247
    5.3.4.1.1 Existential constructions with an indefinite nominative NP 247
    5.3.4.1.2 Existential constructions with a definite nominative NP .... 249
  5.3.4.2 Negative existential constructions ................................ 250
5.3.5 Possessive Constructions .................................................. 251
  5.3.5.1 Affirmative possessive constructions ............................ 252
    5.3.5.1.1 With a possessive NP as a nominative/absolutive NP ........ 252
    5.3.5.1.2 With a possessor as a nominative/absolutive NP ............ 253
  5.3.5.2 Negative possessive constructions ................................ 254
    5.3.5.2.1 The negative form uka .................................... 255
    5.3.5.2.2 The negative form antu with the existential verb yanan .... 256
5.3.6 Negative Constructions .................................................. 257
  5.3.6.1 Negative declarative constructions with ani .................... 258
  5.3.6.2 Negative declarative constructions with antu ................... 262
    5.3.6.2.1 The distribution of antu .................................. 262
  5.3.6.3 More thoughts on ani and antu ................................... 265
    5.3.6.3.1 Relation between ani and antu ............................. 265
    5.3.6.3.2 Semantic differences between ani and antu ................ 267
    5.3.6.3.3 Syntactic differences between ani and antu ............... 269
  5.3.6.4 The negative forms niwan and niza ............................... 271
  5.3.6.5 The negative form qaiza ......................................... 275
5.3.7 Causative Constructions .................................................. 276
  5.3.7.1 Intransitive and transitive causatives ........................... 276
  5.3.7.2 On causativization ............................................... 282
5.3.8 Impersonal Meteorological Verbs ........................................ 285
5.3.9 Extension Verb: miku ................................................... 286
5.3.10 Speech Verbs ........................................................... 288
5.3.11 Other Verbs Taking a Verbal Complement ............................ 290
5.3.12 Adverbial Verbs ........................................................ 291
    5.3.12.1 Other miscellaneous adverbial verbs ......................... 294
5.3.13 WH-words .............................................................. 295
5.4 Deictics ................................................................. 299
  5.4.1 Nonverbal Deictics .................................................... 300
    5.4.1.1 Nominal deictics ............................................. 300
    5.4.1.2 Prepositional deictics ...................................... 301
  5.4.2 Verbal Deictics ...................................................... 303
5.5 The Structure of Noun Phrases ............................................. 310
  5.5.1 Determiners .......................................................... 311
5.5.1.1 The determiner na
5.5.1.2 The determiner ti
5.5.1.3 The determiner sa
5.5.1.3.1 The distribution of sa
5.5.1.3.2 Post cliticization of s(a)
5.5.1.4 The determiner tu
5.5.1.4.1 The distribution and function of tu
5.5.1.4.2 The determiner tu with a specific, contrastive, demonstrative interpretation
5.5.1.5 The determiner ya
5.5.1.6 The determiner satu
5.5.2 Relative Clauses
5.5.2.1 Verbal relative clauses
5.5.2.2 Nonverbal relative clauses
5.5.2.3 “Adjectival” relative clauses
5.5.2.4 Deictic relative clauses
5.5.3 Genitive/possessive Noun Phrases
5.5.3.1 Proper nouns and common nouns as possessors
5.5.3.2 Personal possessive pronouns as possessors
5.5.4 Possessed Relative Clauses
5.6 Conclusion

Chapter 6: Conclusion

Appendix: Thao Texts
References
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Thao Consonants</td>
<td>17</td>
</tr>
<tr>
<td>2.1 Hopper and Thompson’s Parameters of Transitivity</td>
<td>32</td>
</tr>
<tr>
<td>2.2 Features of High Transitivity Found in Foregrounded and Backgrounded Clauses</td>
<td>48</td>
</tr>
<tr>
<td>2.3 Agreement in Sacapultec Maya</td>
<td>59</td>
</tr>
<tr>
<td>2.4 Split Actancy Structure in Dyirbal</td>
<td>62</td>
</tr>
<tr>
<td>2.5 Split Actancy Structure in Managalasi</td>
<td>64</td>
</tr>
<tr>
<td>2.6 Verbal Agreement for 1s and 2s in Lakhota</td>
<td>90</td>
</tr>
<tr>
<td>2.7 Pronominal Forms for 1s in Eastern Pomo</td>
<td>92</td>
</tr>
<tr>
<td>2.8 Grouping of S, A, and O in the Four Types of Actancy Structures</td>
<td>95</td>
</tr>
<tr>
<td>3.1 Frequency of Dyadic m- clauses vs. Dyadic -in/-an Clauses in Mr. Shi’s Narrative and/or Activity and Procedural Texts</td>
<td>150</td>
</tr>
<tr>
<td>3.2 Frequency of Dyadic m- Clauses vs. Dyadic -in/-an Clauses in Ms. Mao’s Narrative and/or Activity and Procedural Texts</td>
<td>150</td>
</tr>
<tr>
<td>3.3 Observed Dyadic m- Clauses and Expected Dyadic m- Clauses in Narrative and/or Activity Texts</td>
<td>151</td>
</tr>
<tr>
<td>3.4 Observed Dyadic m- Clauses and Expected Dyadic m- Clauses in Procedural Texts</td>
<td>151</td>
</tr>
<tr>
<td>3.5 Dyadic m- Clauses and Dyadic -in/-an Clauses in Thao Texts</td>
<td>152</td>
</tr>
<tr>
<td>3.6 Clause Types in Mr. Shi’s Narrative/Activity and Procedural Texts</td>
<td>153</td>
</tr>
<tr>
<td>3.7 Clause Types in Ms. Mao’s Narrative/Activity and Procedural Texts</td>
<td>153</td>
</tr>
<tr>
<td>3.8 Definiteness of Theme NPs in Mr. Shi’s Texts</td>
<td>154</td>
</tr>
<tr>
<td>3.9 Definiteness of Theme NPs in Ms. Mao's Texts</td>
<td>154</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>A Classification of Southern Formosan Languages After Li (1990)</td>
<td>4</td>
</tr>
<tr>
<td>1.2</td>
<td>The Classification of the Formosan Languages Based on Shared Innovation in Phonology</td>
<td>7</td>
</tr>
<tr>
<td>1.3</td>
<td>Western Plains Group</td>
<td>8</td>
</tr>
<tr>
<td>1.4</td>
<td>Internal Relationships within the Western Plains Group</td>
<td>10</td>
</tr>
<tr>
<td>1.5</td>
<td>Thao Vowels</td>
<td>17</td>
</tr>
<tr>
<td>2.1</td>
<td>Hopper and Thompson’s Transitivity Continuum</td>
<td>33</td>
</tr>
<tr>
<td>2.2</td>
<td>Semantic vs. Syntactic Transitivity</td>
<td>38</td>
</tr>
<tr>
<td>2.3</td>
<td>Accusative vs. Ergative Systems</td>
<td>54</td>
</tr>
<tr>
<td>2.4</td>
<td>The Nominal Hierarchy</td>
<td>62</td>
</tr>
<tr>
<td>2.5</td>
<td>Active System</td>
<td>87</td>
</tr>
<tr>
<td>2.6</td>
<td>Three-Way or Tripartite or System</td>
<td>93</td>
</tr>
<tr>
<td>3.1</td>
<td>Verb-Initial Clause Patterns in Thao</td>
<td>100</td>
</tr>
<tr>
<td>3.2</td>
<td>Verb-Medial Clause Patterns in Thao</td>
<td>101</td>
</tr>
<tr>
<td>3.3</td>
<td>Thao as an Accusative Language</td>
<td>110</td>
</tr>
<tr>
<td>3.4</td>
<td>Thao as a Split-Ergative Language</td>
<td>112</td>
</tr>
<tr>
<td>3.5</td>
<td>Thao as an Ergative Language</td>
<td>112</td>
</tr>
<tr>
<td>4.1</td>
<td>Thao Verbal Clause Patterns</td>
<td>158</td>
</tr>
<tr>
<td>5.1</td>
<td>Nominal Predicate-First Word Order</td>
<td>174</td>
</tr>
<tr>
<td>5.2</td>
<td>Prepositional Predicate-First Word Order</td>
<td>176</td>
</tr>
<tr>
<td>5.3</td>
<td>Plain Intransitive Verbal Predicate-First Word Order</td>
<td>178</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>5.4</td>
<td>Extended Transitive Verbal Predicate-First Word Order</td>
<td>179</td>
</tr>
<tr>
<td>5.5</td>
<td>Transitive Verbal Predicate-First Word Order</td>
<td>180</td>
</tr>
<tr>
<td>5.6</td>
<td>Nominal Predicate-Second Word Order</td>
<td>182</td>
</tr>
<tr>
<td>5.7</td>
<td>Prepositional Predicate-Second Word Order</td>
<td>183</td>
</tr>
<tr>
<td>5.8</td>
<td>Word Order of Predicate-Second Verbal Clauses</td>
<td>184</td>
</tr>
<tr>
<td>5.9</td>
<td>Word Order of Dynamic Agentless Intransitive Constructions</td>
<td>222</td>
</tr>
<tr>
<td>5.10</td>
<td>Word Order of Intransitive Imperative Constructions</td>
<td>224</td>
</tr>
<tr>
<td>5.11</td>
<td>Word Order of V–i Transitive Imperative Constructions</td>
<td>227</td>
</tr>
<tr>
<td>5.12</td>
<td>Word Order of V-in/-an Transitive Request Constructions</td>
<td>230</td>
</tr>
<tr>
<td>5.13</td>
<td>Negative Intransitive Imperative Constructions</td>
<td>233</td>
</tr>
<tr>
<td>5.14</td>
<td>Negative Nominal Imperative Constructions</td>
<td>237</td>
</tr>
<tr>
<td>5.15</td>
<td>Word Order of Topicalized Constructions with the Nominative/Absolutive NP as the Topic</td>
<td>242</td>
</tr>
<tr>
<td>5.16</td>
<td>Word Order of Topicalized Constructions with the Ergative NP as the Topic</td>
<td>243</td>
</tr>
<tr>
<td>5.17</td>
<td>Word Order of Topicalized Constructions with an Oblique NP as the Topic</td>
<td>244</td>
</tr>
<tr>
<td>5.18</td>
<td>Existential Constructions with an Indefinite Nominative/Absolutive NP</td>
<td>247</td>
</tr>
<tr>
<td>5.19</td>
<td>Existential Constructions with a Definite Nominative/Absolutive NP</td>
<td>249</td>
</tr>
<tr>
<td>5.20</td>
<td>Word Order of Negative Existential Constructions</td>
<td>250</td>
</tr>
<tr>
<td>5.21</td>
<td>Possessive Constructions with a Possessive NP as a Nominative/Absolutive NP</td>
<td>252</td>
</tr>
<tr>
<td>5.22</td>
<td>Possessive Constructions with a Nominative/Absolutive Possessor</td>
<td>253</td>
</tr>
<tr>
<td>5.23</td>
<td>Negative Possessive Constructions Headed by <em>Uka</em></td>
<td>255</td>
</tr>
<tr>
<td>5.24</td>
<td>Negative Possessive Constructions Headed by <em>Antu</em> with <em>Yanan</em></td>
<td>257</td>
</tr>
<tr>
<td>5.25</td>
<td>Negative Nominal Predicate</td>
<td>258</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>5.26</td>
<td>Negative Prepositional Predicate</td>
<td>259</td>
</tr>
<tr>
<td>5.27</td>
<td>Negative Verbal Predicate</td>
<td>260</td>
</tr>
<tr>
<td>5.28</td>
<td>NP Modified by a Relative Clause</td>
<td>330</td>
</tr>
<tr>
<td>5.29</td>
<td>Possessive NP with Possessor Preceding and Following Possessed Noun</td>
<td>340</td>
</tr>
<tr>
<td>5.30</td>
<td>Possessed Relative Clauses</td>
<td>345</td>
</tr>
</tbody>
</table>
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>first person singular</td>
</tr>
<tr>
<td>1pex</td>
<td>first person plural exclusive</td>
</tr>
<tr>
<td>1pin</td>
<td>first person plural inclusive</td>
</tr>
<tr>
<td>2s</td>
<td>second person singular</td>
</tr>
<tr>
<td>2p</td>
<td>second person plural</td>
</tr>
<tr>
<td>3s</td>
<td>third person singular</td>
</tr>
<tr>
<td>3p</td>
<td>third person plural</td>
</tr>
<tr>
<td>actr</td>
<td>actor</td>
</tr>
<tr>
<td>Abs</td>
<td>absolutive</td>
</tr>
<tr>
<td>Acc</td>
<td>accusative</td>
</tr>
<tr>
<td>Antipass</td>
<td>antipassive</td>
</tr>
<tr>
<td>Asp</td>
<td>aspect</td>
</tr>
<tr>
<td>Aux</td>
<td>auxiliary</td>
</tr>
<tr>
<td>AF</td>
<td>actor focus</td>
</tr>
<tr>
<td>AN</td>
<td>verbs affixed with -an</td>
</tr>
<tr>
<td>AV</td>
<td>actor voice</td>
</tr>
<tr>
<td>C</td>
<td>causative</td>
</tr>
<tr>
<td>CaRed</td>
<td>Ca-reduplication</td>
</tr>
<tr>
<td>Cl</td>
<td>classifier</td>
</tr>
<tr>
<td>Coll</td>
<td>collective</td>
</tr>
<tr>
<td>Comp</td>
<td>complementizer</td>
</tr>
<tr>
<td>Conj</td>
<td>conjunction</td>
</tr>
<tr>
<td>Cont</td>
<td>continuative aspect</td>
</tr>
<tr>
<td>CF</td>
<td>centrifugal</td>
</tr>
<tr>
<td>Det</td>
<td>determiner</td>
</tr>
<tr>
<td>Dat</td>
<td>dative</td>
</tr>
<tr>
<td>Dur</td>
<td>durative aspect</td>
</tr>
<tr>
<td>Erg</td>
<td>ergative</td>
</tr>
<tr>
<td>EXIST</td>
<td>existential</td>
</tr>
<tr>
<td>Fem</td>
<td>feminine gender</td>
</tr>
<tr>
<td>Fut</td>
<td>future</td>
</tr>
<tr>
<td>Gen</td>
<td>genitive</td>
</tr>
<tr>
<td>intrns</td>
<td>intransitive</td>
</tr>
<tr>
<td>Irr</td>
<td>irrealis</td>
</tr>
<tr>
<td>IC</td>
<td>inchoative</td>
</tr>
<tr>
<td>IMPF</td>
<td>imperfective</td>
</tr>
<tr>
<td>IN</td>
<td>verbs with affixed with -in</td>
</tr>
<tr>
<td>IND</td>
<td>indicative</td>
</tr>
<tr>
<td>LIG</td>
<td>ligature</td>
</tr>
<tr>
<td>Loc</td>
<td>locative</td>
</tr>
<tr>
<td>M</td>
<td>verbs affixed with -um-</td>
</tr>
<tr>
<td>Masc</td>
<td>masculine</td>
</tr>
<tr>
<td>Multi</td>
<td>multiplicative</td>
</tr>
<tr>
<td>MV</td>
<td>motion verb</td>
</tr>
<tr>
<td>Neut</td>
<td>neutral</td>
</tr>
<tr>
<td>Nom</td>
<td>nominative</td>
</tr>
<tr>
<td>NAF</td>
<td>non-actor focus</td>
</tr>
<tr>
<td>NAV</td>
<td>non-actor voice</td>
</tr>
<tr>
<td>NC</td>
<td>nominalized clause</td>
</tr>
<tr>
<td>NCM</td>
<td>noun class marker</td>
</tr>
<tr>
<td>NP</td>
<td>noun phrase</td>
</tr>
<tr>
<td>Obl</td>
<td>oblique</td>
</tr>
<tr>
<td>pass</td>
<td>passive</td>
</tr>
<tr>
<td>perf</td>
<td>perfective aspect</td>
</tr>
<tr>
<td>prdc</td>
<td>predicate</td>
</tr>
<tr>
<td>prnn</td>
<td>pronoun</td>
</tr>
<tr>
<td>prsn</td>
<td>personal</td>
</tr>
<tr>
<td>PI</td>
<td>plural</td>
</tr>
<tr>
<td>Pos</td>
<td>possessive</td>
</tr>
<tr>
<td>Pst</td>
<td>past tense</td>
</tr>
<tr>
<td>POL</td>
<td>polite marker</td>
</tr>
<tr>
<td>rel</td>
<td>relative clause marker</td>
</tr>
<tr>
<td>Red</td>
<td>reduplication</td>
</tr>
<tr>
<td>RC</td>
<td>relative clause</td>
</tr>
<tr>
<td>RECIP</td>
<td>reciprocal</td>
</tr>
<tr>
<td>REQ</td>
<td>request</td>
</tr>
<tr>
<td>sttv</td>
<td>stative</td>
</tr>
<tr>
<td>SUF</td>
<td>suffix</td>
</tr>
<tr>
<td>trns</td>
<td>transitive</td>
</tr>
<tr>
<td>Ten</td>
<td>tentative aspect</td>
</tr>
<tr>
<td>TNS</td>
<td>tense</td>
</tr>
<tr>
<td>TOP</td>
<td>topic</td>
</tr>
<tr>
<td>Que</td>
<td>question marker</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

1.1 GENERAL BACKGROUND

Thao, with perhaps 15 fluent speakers, all aged 65 or above, is one of the moribund languages of Taiwan. It has fewer remaining speakers (other than Pazeh) of the fifteen remaining indigenous languages of the country (Blust 2003).1 Today the Thao language continues to be used as a tool of communication by fewer than 10 speakers in Tehua village (Thao: Barawbaw), a mixed Taiwanese-Thao community on the southeast shore of Sun-Moon Lake,2 and by a few other individuals in Ta-p’ing-lin (Thao: Twapina), some 14 km. from Sun-Moon Lake. Both communities are located at an altitude of some 1,000-1,200 meters, on the western fringe of the great Central Mountain Range in Taiwan.

1.2 LINGUISTIC STUDIES OF THAO

Although previous linguistic studies of Thao may not be numerous, they provide us with some preliminary understanding of Thao with respect to its linguistic position (i.e., genealogical classification/subgrouping), phonology, morphology, semantics, syntax, and lexicography.

---

1 As of this writing the fifteen languages that are still actively used or at least remembered by a few elderly persons include: 1) “Mountain tribes”: Atayal, Seediq, Tsou, Kanakanabu, Saaroa, Bunun, Rukai, Puyuma, Paiwan, Amis, and Saisiyat, 2) “Plains tribes”: Kavalan, Pazeh, and Thao, and 3) Philippine language: Yami/Tau (spoken on Orchid Island, or the Batanes Islands). Among these, Pazeh with only one speaker left (Blust 1999b, Li and Tsuchida 2001), is the most seriously endangered.

2 Sun-Moon Lake is located in Nantou County, near the geographical center of Taiwan.
1.2.1 The Linguistic Position of Thao

In this section I will discuss the various proposals that have been made for the position of Thao vis-à-vis other Formosan languages. In section 1.2.1.1, I will cover publications that constitute what I am calling “The Traditional Period”. In 1.2.1.2, I will discuss the more recent publications that constitute “The Modern Period”.

1.2.1.1 The traditional period

Studies in the classification of Formosan languages go back almost seventy years. In his study of the language of the Yami people on Botel Tobago Island, Erin Asai (1936) proposed a classification of the Formosan languages, in which there are five groups: (1) the Northern group including Atayal, Seediq, and Saisiyat; (2) the Bunun group; (3) the Tsou-Paiwan group including Tsou, Saaroa, Kanakanavu, Paiwan, and Rukai; (4) the Amis group; and (5) the Batan group including Yami of Botel Tobago Island and Batan of the Philippines. However, Thao is not mentioned in his classification.

Work by Dyen (1963) is the first serious attempt to subgroup Austronesian native languages in Taiwan, but Thao is not included in the discussion. Two years later, as summarized by Blust (1999a), Dyen (1965), based on lexicostatistical evidence, proposed a classification of “Proto-Formosan,” in which Thao together with Amis, Paiwan, and Bunun were classified as members of the “East Formosan Hesion,” while Atayal and Seediq were grouped together in the Atayalic subfamily.

Shortly thereafter, also based on lexicostatistical evidence, Ferrell (1969:23-26) proposed a tripartite classification of all Formosan languages (extinct and extant), in which Atayal and Seediq form an ATAYALIC group; Tsou, Kanakanabu, and Saaroa form
a TSOUIC group, and all other languages such as Thao and Yami belonged to a PAIWANIC group. It is clear, as noted by Blust (1998a), that the term “Paiwanic,” as used by Ferrell (1969), does not label a demonstrable linguistic subgroup, but is rather a cover term referring to a heterogeneous collection of languages that probably began to diverge from one another shortly after the Austronesian settlement of Taiwan about six thousand years ago. This can be seen in the case of Yami, which is closely related to the languages (e.g., Ivatan and Itbayaten) of the Batanes and Babuyan Islands in the northern Philippines (Ho 1990, Asai 1936, Moriguchi 1980). As for Thao, in the absence of any detailed historical study of the language, Ferrell (1969) simply lumped it with other Formosan languages that do not cluster closely with either Atayalic or Tsouic, as a member of the Paiwanic group. In fact, even Ferrell (1969:74) himself clearly expressed his reservations regarding the reality of Paiwanic as a genetic unit when he further subdivided “Paiwanic” into two major branches, “Paiwanic I” and Paiwanic II”. Therefore, it is apparent from the beginning that “Paiwanic” is more a temporary convenience than a label for a seriously defended hypothesis about linguistic history (Blust 1996, 1998a).

1.2.1.2 The modern period

The issue of the classification of Thao has been controversial for at least the past two decades.

1.2.1.2.1 Li’s early classification of Thao

Ferrell’s (1969) tripartite classification of the Formosan languages continued to serve as a convenient model for many scholars until Li (1985) first challenged the reality of Ferrell’s Paiwanic group. He suggested that the Atayalic languages should be combined
with Saisiyat and Pazeh into a larger “Northern Formosan” group. This scheme does not affect the classification of Thao, compared with Ferrell’s (1969) classification. Li placed Thao in an internally undifferentiated subgroup of “Paiwanic” which he called “TBAPP” (Thao, Bunun, Amis, Puyuma, Paiwan). However, later Li (1990), based entirely on numbers of shared vocabulary, further proposed a subgrouping of the existing Formosan languages, in which Thao and Bunun form a branch of “Southern Formosan” coordinate with a second branch that includes Amis, Kavalan, Tsouic, Puyuma, and Rukai in the nesting relation shown in figure 1.1.

![Diagram of Southern Formosan Languages](image)

**Figure 1.1. A classification of Southern Formosan languages after Li (1990) (cited from Blust 1996:273)**

### 1.2.1.2.2 Blust’s classification of Thao

Li’s (1990) results were first questioned by Starosta (1990:838-839), who pointed out that pairs of languages with maximal lexical similarity as observed by Li (1990) almost always are geographically contiguous, and that unobserved borrowing thus appeared to be an alternative explanation for the unexpectedly large lexical similarity.

Not long after, Blust (1996, 1998a) showed that Starosta’s objection to Li’s results was justified, at least for the Thao-Bunun unity. What Blust (1996) found, among others, is that Thao and Bunun are NOT a unity, in that there are no exclusively shared
lexical innovations observed in a comparison of basic vocabulary between the two languages. Rather, the fact that they share more vocabulary than either does with any other language reflects a history of heavy borrowing from Bunun into Thao, with minor borrowing in the opposite direction (Blust 1996:279).

Based on exclusively shared lexical innovations, Blust (1996) suggested that Thao should subgroup with four extinct languages of the western plains including Taokas, Favorlang-Babuza, Papora, and Hoanya, which were first identified as a genetic unit by Tsuchida (1982:9-10) and later recognized by Li (1985) as “TBPH”. Blust (1996:279) refers to this group as “Western Plains” (WP), and suggests that Thao subgroups with Taokas and Favorlang-Babuza apart from the other languages, as follows, “The relatively small number of lexical items shared exclusively by Thao and WP languages suggests a rather distant relationship. Since the available material also suggests that Thao subgroups with Taokas and Favorlang-Babuza apart from the other languages, the larger number of features shared exclusively by WP languages may themselves be partly a product of borrowing” (Blust 1996: 281). Finally, Blust (1996: 281) also suggests that Western Plains may divide into two primary branches, one containing Thao and the WP nuclear group, and the other consisting of Pazeh alone.3

The linguistic position of Thao in the “Western Plains” group is further confirmed in Blust (1998a) with evidence from shared innovations in phonology. In addition, he also finds that many of the lexical items that are exclusively shared by Thao and Bunun exhibit phonological irregularities, which points to a history of unidirectional borrowing

3 The evidence that suggests Pazeh may be included in the WP group is the single word ‘sand’; the form is bunat in Pazeh, bunat in Taokas, bonad in Babuza, and bunaz in Thao.
from Bunun into Thao. Another important contribution in Blust (1998a) is that he recognizes a number of active phonological processes that give rise to the rich alternations of Thao but which had not been mentioned in earlier studies (e.g., F-K. Li et al. 1956, Li 1976). His work makes the description of Thao phonology more complete, and reveals that Thao shares several previously undescribed phonological processes with Austronesian languages outside Taiwan.

Blust (1999a) proposes a classification of the Formosan languages based on shared innovations in phonology, in which Thao together with the “Central West Plains” languages (the four extinct languages) are members of the “Western Plains” group, as schematized in figure 1.2.
However, in this study, Blust (1999a) does not mention that Thao is closer to Taokas and Favorlang-Babuza than other languages as in his previous work (Blust 1996), but simply states that, “it now seems reasonably clear that Thao must be added as a member of this group, although its exact position within it remains undecided” (Blust 1999a:52). As for Pazeh, without following his previous suggestion (1998a:281) that it may “form a
coordinate branch of a larger group that includes WP-Thao,” Blust (1999a) places it with Saisiyat in the “Northwest Formosan” group, based on what appears to be “equivocal phonological evidence,” acknowledging that the evidence for such a grouping is weak.

However, later in the same year Blust (1999b) proposed a certain amount of lexical evidence indicating that Pazeh is a member of the Western Plains group. His subgrouping of Western Plains appears to be reasonably clear to this point, as stated in Blust (1999b:330), “tentatively I assume that Pazeh and Thao are independent branches of the Western Plains group, which contains the more closely related languages Taokas, Babuza, Papora, and Hoanya as its core,” as shown in figure 1.3.

![Figure 1.3. Western Plains Group (Blust 1999b:339)](image)

1.2.1.2.3 Li’s revision of the classification of Thao

Recently Li (1999, 2001) has agreed with Blust’s identification of Thao with the four/five extinct languages of western plains, and admitted his mistake regarding Thao and Bunun as a unit, but at the same time suggested some revisions to Blust’s assumptions and reconstructions. For instance, on the one hand, based on oral tradition, Blust (1996:281, 287) suggests that the Thao were located on the western plains in the area of Chia-yi and Lu-kang somewhat over 350 years ago, and that perhaps under the pressure from increasing Chinese immigration, they began to move eastward into the
western foothills of the Central Mountains, probably 350-400 years ago. On the other hand, Li (1999, 2001), based on several written historical Chinese documents, argues that the Thao people must have settled in Sun-Moon Lake areas much longer than 350 years ago (or no less than 800 years). Also, Li (1999, 2001) points out that the several pieces of evidence that Blust (1996, 1998a) uses to show the relationships between Thao and the four western plains languages are problematic with respect to both exclusively shared phonological innovations and exclusively shared lexical innovations. If the problematic evidence were excluded, there would be no strong evidence pointing to Thao’s subgrouping with Taokas and Favorlang-Babuza apart from other. In addition, Li (1999, 2001) also suggests that compared with Pazeh, Thao shows a closer relationship with the four nuclear WP languages. Here is Li’s (2001:184) statement:

I have to agree with Blust when he concludes that “the relatively small number of lexical items shared exclusively by Thao and WP languages suggests a rather distant relationship. However, I would rather follow Tsuchida’s (1982:9-10) position that the four WP languages constitute a subgroup, instead of the Blust’s assumption that “(Since the available material also suggests that) Thao subgroups with Taokas and Favorlang-Babuza apart from the other languages, the larger number of features shared exclusively by WP languages may themselves be partly a product of borrowing (p.281). Despite the fact that Pazeh is located in the WP area, the linguistic evidence indicates that it has a close relationship with neither the four WP languages nor Thao (Li 1999, 2001:184).

Figure 1.4 shows the internal relationships within the Western Plains group, with a broken line representing a more distant relationship.

---

4 Li (1999:127, 2001:171) notes that the idea that Thao must have settled in Sun-Moon Lake areas for no less than 800 years is from his discussion with Mr. Shi-Lang Jian, who has devoted several years recently to understanding the culture and language of Thao.
In conclusion, whether Thao has a closer relationship with any of the four core extinct western plains languages, it is clear now that Thao and Pazeh together with the four extinct nuclear languages of western plains all belong to the Western Plains group based on evidence from exclusively shared innovations in vocabulary and phonology.

1.2.2 Literature Review

In the previous section, I discussed the classification of Thao in the Austronesian family by different scholars. In this section, I will summarize other linguistic studies of Thao, beginning with early descriptive work in section 1.2.2.1. Discussion of phonological and morphological studies will be given in section 1.2.2.2, syntactic studies in section 1.2.2.3, and lexicography in section 1.2.2.4. Finally, a description of educational materials that have recently appeared for Thao is given in section 1.2.2.5.

1.2.2.1 Pioneering work

As noted by Li (1976), early works that mention Thao are limited exclusively to short vocabulary lists and most of them appear to be inaccurate in terms of transcription.
(e.g., Collingwood 1868, Steere 1874, Bullock 1874-5, Alvarez 1915/24, and Abe 1930:430-35).

Although during the Japanese occupation lasting for about fifty years and ending with the end of World War II, Japanese scholars such as Ogawa and Asai (1935) produced meticulous ethnological and linguistic accounts of many Formosan indigenous groups, yet they only mentioned Thao in their monumental work (1935:4), but made no field study of it.  

The first serious attempt to describe Thao is that of F-K. Li et al. (1956:23-51), which provides two short texts and a brief description of Thao phonology, morphology, and vocabulary. His recorded lexical items (about 800 in number) have become the main source of Thao for comparative Austronesian studies (e.g., Dyen 1963, 1965, 1971; Dahl 1976, Tsuchida 1976) during that time.

1.2.2.2 Phonological and/or morphological studies

Based on the pioneering work of F-K. Li et al. (1956), Li (1976) presents a more complete and general introduction to the distributional phenomena of Thao phonology with data from his fieldwork notes (Li 1975). However, the two studies (F-K. Li et al. 1975 and Li 1976) show differences in the phonological inventories in two details: (1) the earlier work wrote only /θ/; whereas the later work writes two contrasting phonemes, /s/ and /θ/, (2) the earlier work recognized four vowels, /i/, /u/, /a/, and /e/, while the later work recognized just the first three.

---

5The work of Ogawa and Asai (1935) includes Atayal, Seediq, Rukai, Paiwan, Puyuma, Amis, Bunun, Tsou, Kanakanabu, Saaroa, Saisiyat, and Yami languages, including syntactic analyses and many texts.
Li's (1976) work was later challenged by Blust (1998a), who agreed with Li's (1976) phoneme inventory, but pointed out several problems that he encountered when comparing the description of Thao phonology in Li (1976) with his experience of the language in the field. In general, Blust (1998a) recognizes and adds several active phonological processes in Thao such as stress shift under suffixation, and allomorphy of the infix -/um/- that are not mentioned in earlier publications. This more complete description in turn shows that Thao share several previously undescribed phonological processes with other Austronesian languages.

After seven years, Li (1983) reported that Thao has two dialects, with one spoken in the village of Barawbaw, and the other in Twapina. The Thao people of Barawbaw refer to those of Twapina as “Shtafari,” where they originally lived. The main difference, as observed by Li (1983), is that the trilled r in the Barawbaw dialect is generally replaced by the semivowel y in the Shtafari dialect, except for the environment u_u. He also points out that Barawbaw r is replaced by Shtafari h before i, and lost between i and i:.

M. L. Chang (1998) finds that Thao exhibits extremely rich reduplication patterns, including full reduplication, Ca-reduplication, and suffixed (“rightward”) reduplication, claiming that the last two patterns appear to present a substantial challenge to the claims of “Optimality Theory” (OT).

Blust (1998c) discusses Ca-reduplication in Thao as well. Later in Blust (2001), he reports that in addition to the three reduplication processes reported in (M. L. Chang 1998), Thao also has a CV-reduplication pattern. Moreover, Blust (2001) reports another productive morphological process: triplication in Thao and one example of quadruplication. He suggests that a fundamental distinction between the semantics of
reduplication and semantics of triplication in Thao is that reduplication may or may not be “iconic,” while triplication is “necessarily iconic,” with the former freely marking iconic distinctions such as repetitive or durative, and non-iconic functions such as tense or nominalization; while the latter only occurring in verbs adding semantic nuances of intensity or continuation of an activity.

1.2.2.3 Syntactic studies

The first study of Thao syntax was provided by Li (1978), who gave a description of the case-marking system for the four less-known Formosan languages including Thao (1978:591-600), Pazeh, Kavalan, and Saisiyat. His brief outline of the case-marking system in Thao is repeated in Li (1997).

Later, Huang (2000) wrote a reference grammar of Thao, including elementary descriptions of its phonology, morphology, and clause structures.

In the same year, two master’s theses that compared Thao and Tsou were published. One is the work by Chen (2000), who provided a descriptive study of negative constructions with respect to the semantic and distributional properties that each exhibits. In addition, he also looked into the various negators in Thao within the framework of the Principles and Parameters Theory (Chomsky 1995).

The other is that of Weng (2000), who examined Thao clauses in terms of time, aspect, and mood systems. She suggested that Thao uses a mood system (i.e., realis vs. irrealis) not a tense system (i.e., past, present, and future) to encode the time of an event or state in a clause.
1.2.2.4 Lexicography

The long awaited dictionary of Thao by Blust (2003) has finally appeared. This is an indispensable tool for the linguistic study of Thao. It not only provides an exhaustive historical background, but also includes thousands of lexical items with examples, the most detailed description of Thao phonology and morphology ever published, and five invaluable short and long texts. In addition, Blust also touches on some of the syntactic aspects of Thao, leaving many interesting unanswered research questions for future study.

1.2.2.5 Educational materials

Encouraged and supported by the Taiwan government, Jian and Shi (2001) wrote a textbook of Thao for educational use, especially for the Thao people who are aware of the highly endangered status of their language and show interest in learning it. The book includes phonetics of Thao, lexical items classified by semantics, basic daily conversation, and one text.

1.3 GOAL OF THE DISSERTATION

The aim of this study is to provide a thorough and understandable description of Thao clause structure. A descriptive study of the clause structure of Thao is of great importance for the following three reasons.

First, it is important for the field of comparative Austronesian studies. The Austronesian languages of Taiwan have in recent years attracted a lot of attention from linguists, because they represent some of the earliest branches in the family, and our
understanding of them should facilitate a clearer understanding of the nature of Proto-Austronesian. Although there has been extensive work on lexical and phonological comparison and reconstruction, there has been relatively little work done on reconstructing their syntax, because not many of the languages have good grammatical descriptions. Thus, a thorough description of Thao clause structures will provide an immensely important treasure trove of information to scholars working in the history of Austronesian languages.

Second, this dissertation will demonstrate that Thao has a pure ergative actancy system, although heavily influenced by Taiwanese, an accusative language. This is contrary to casual statements about Thao, that it is either a split ergative or an accusative language. Most (but not all) Taiwan syntacticians working on Formosan languages have recognized the fundamental distinction drawn by Tsuchida (1976) between actor-focus (AF) and non-actor focus (NAF, i.e., patient-focus, goal-focus, instrument-focus, etc.) verbs. However, with a couple of notable exceptions (Ho 1990, 1993, Huang 1994, Rau 1997, 2000, and Liao 1998, 1999/2000, 2002, 2004), linguists in Taiwan have failed to recognize that this distinction is one of transitivity: NAF verbs are syntactically transitive and AF verbs are syntactically intransitive. When NAF structures are compared with single-argument intransitive structures, the S of intransitive clauses is found to match the O of transitive clauses, and almost all Formosan languages (except Rukai) turn out to be ergative. Careful examination of the Thao data shows that Thao, like other Formosan languages, has a similar dichotomy with AF verbs (-um-/m- verbs) being intransitives and NAF (-in/-an verbs) being typically canonical transitives. This essential finding then leads to the conclusion that Thao is an ergative language.
Third, Thao has been described as a moribund language, with only a handful of old, living speakers. This dissertation will contain a body of analyzed texts from the fieldwork done by other linguists as well as myself, with several of the last speakers of the language. Given the current emphasis on the need to document these moribund languages, it should be apparent that this work is of importance.

1.4 DATA SOURCES AND LANGUAGE CONSULTANTS

The examples of Thao in this dissertation come from a variety of sources including those in print such as Huang (2000), Chen (2000), Weng (2000), and Blust (2003), and those unpublished such as Li (1976).

Examples from my own field research (Wang 2000) are also incorporated into this dissertation. This field research began at Sun-Moon Lake, Taiwan, from February through March of 2000. Mr. A-Song Shi (Kilash), Mr. Chang-Feng Kao (Lujan), and Mrs. Qiu-Xiang Liu Mao (Puni) were the three major language consultants during that time. All of them are seniors (between 60-80 years old at the time the field work was conducted) who grew up around Sun-Moon Lake area during the era of Japanese occupation. Although all of them are fluent in Taiwanese and Thao, Taiwanese is now the primary language spoken in their daily lives. Mr. Kao also speaks fluent Mandarin, and Mr. Shi and Mrs. Mao know some Japanese, Mandarin, and a little Bunun.

1.5 THAO PHONEME INVENTORY AND ORTHOGRAPHY

Throughout this dissertation, I use the Thao phoneme inventory represented in the practical orthography developed by Blust (2003:18). The vowel system is the classic
triangle: /i/, /u/, and /a/, as shown in Figure 1.5, although there is some marginal evidence for a mid-central vowel.\(^6\)

![Triangle Diagram](image)

**TABLE 1.1 THAO CONSONANTS**

<table>
<thead>
<tr>
<th></th>
<th>Labial</th>
<th>Dental</th>
<th>Palatal</th>
<th>Velar</th>
<th>Uvular</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stops</strong></td>
<td>vl.</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td>q</td>
<td></td>
</tr>
<tr>
<td></td>
<td>vd.</td>
<td>b</td>
<td>d</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nasals</strong></td>
<td>m</td>
<td>n</td>
<td></td>
<td>(g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fricatives</strong></td>
<td>vl.</td>
<td>f</td>
<td>c,s</td>
<td>sh</td>
<td></td>
<td>h</td>
</tr>
<tr>
<td></td>
<td>vd.</td>
<td></td>
<td>z</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Laterals</strong></td>
<td>vl.</td>
<td></td>
<td>lh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>vd.</td>
<td></td>
<td>l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flap</strong></td>
<td>(vd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r</td>
</tr>
<tr>
<td><strong>Glides</strong></td>
<td>(vd)</td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td>y</td>
</tr>
</tbody>
</table>

The symbols in the above table have their customary phonetic values except for /\j/ = [ʔ], /\g/ = [ŋ], /c/ = [θ], /\sh/ = [ʃ], /\z/ = [ð], and /\lh/ = voiceless fricative [ɬ]. The velar nasal is shown in parentheses in that it appears to be phonemic only in names, onomatopoeic words, and loans. In addition, in this system of contrasts, /b/ and /d/ occur only syllable-

\(^6\) Please see Blust (1998a, 2003) for a discussion of Thao phonology.
initially and are always preglottalized, while the glottal stop and the velar nasal are marginal to the system.

1.6 ORGANIZATION OF THE DISSERTATION

This dissertation is organized as follows. Chapter 2 briefly introduces the theoretical orientation of the study, discusses the notion of transitivity, and studies different types of actancy system that have been observed in the world's languages, including accusative, ergative, active, and three-way systems. Chapter 3 reviews previous analyses of Thao with respect to its transitivity and actancy structure from a broad typological perspective, and later attempts to determine the canonical transitivity of Thao by applying a number of transitivity tests. The results suggest that Thao is best analyzed as an ergative language. Chapter 4 demonstrates that Thao is a language that exhibits an ergative actancy structure at both morphological and syntactic levels. Chapter 5 provides a sketch grammar of Thao, including word order, pronominal systems, the tense/aspect/mood system, as well as the structures of non-verbal as well as verbal clauses, noun phrases, and deictics. In addition, various non-basic structures are examined, such as a dynamic intransitive agentless construction, imperative, existential, possessive, negative, topicalization, causative, and Wh-questions. Different types of verbs are also looked into, including impersonal meteorological verbs, extension verbs, speech verbs, see/hear verbs, and adverbal verbs. Chapter 6 is the conclusion.
CHAPTER 2
TRANSITIVITY AND ACTANCY STRUCTURE

2.1 INTRODUCTION

The purpose of this chapter is to provide a concise introduction to the notion of transitivity and to the different types of actancy system discussed in the linguistic literature. Section 2.2 primarily argues that the concept of transitivity is best defined when it is considered to be a combination of morphosyntactic and semantic factors. Section 2.3 deals with four of the main types of actancy system that have been observed in the world’s languages: accusative, ergative, active, and three-way systems.

2.2 TRANSITIVITY

There are three main questions that I hope to provide answers to in this section. First, what constitutes transitivity? Second, what is so important about transitivity? Third, how can a linguist determine a verb’s transitivity in a given language? Since identifying the actancy system of a language (i.e., whether it is accusative, ergative, or something else) always requires comparing transitive and intransitive clauses, it is important for one to understand what is meant by “transitivity” before doing any serious syntactic analysis. Traditionally, transitivity has been understood notionally, i.e., any expression that encodes an action in which one participant acts on another has been said to be transitive. Thus, transitivity, in the traditional view, appears to involve at least two participants. Although this is often true, in that all true transitive constructions involve two participants, yet a verb’s transitivity cannot in general be predicted from the number of
arguments that it has. Two participants/arguments do not make clauses syntactically transitive, in that many verbs that take two arguments are not necessarily transitive and verbs that have fairly similar meanings may differ in terms of transitivity. The pairs of examples in (1) and (2) illustrate this point (O'Grady 1999:56).

(1) a. Harry saw Mary. (transitive)  
    b. Harry looked at Mary. (intransitive)

(2) a. Maxine considered the problem. (transitive)  
    b. Maxine thought about the problem. (intransitive)

As seen above, although each of the verbs in (1) and (2) takes two arguments, only (1)a and (2)a are grammatically transitive. Also, although the verbs in each pair have similar meanings, only one of each pair is transitive. Thus, the traditional view of transitivity, which only involves the number of the arguments that a verb takes, appears to be problematic and needs to be redefined. For this reason, linguists such as Dixon and Aikhenvald (2000:3) point to the importance of distinguishing between valency and transitivity. I will discuss the difference between the two notions in terms of their theory in section 2.2.1. However, before doing that, I would like to briefly characterize their theory, since it is crucial to an understanding of the discussion throughout this dissertation.

2.2.1 Theoretical Orientation

Following the Basic Linguistic Theory, the major clause type in any language consists of a predicate and a variable number of predicate arguments. The predicate most frequently has a verb as its head. The arguments of the predicate include core arguments and peripheral arguments (i.e., adjuncts). They are distinct from each other, as described in what follows. The number and nature of core arguments is usually determined by the choice of which verb is the predicate head. In order for a clause to be acceptable, the core arguments have to be stated (or understood from the context). On the other hand, the peripheral arguments, being less dependent on the head of a clause, can optionally be included to express location, time, cause, purpose, and the like.

The core arguments that the Basic Linguistic Theory categorizes are S, A, O, and E. Based on Liao’s (2002) revised version, they can be defined as follows. S is the sole argument of a canonical intransitive verb, or one of the two core arguments of a dyadic intransitive verb that has the same morphological marking as the sole argument of a canonical intransitive verb. A is the more active core argument of a canonical transitive verb. O is the less active core argument of a canonical transitive verb. E (standing for ‘extension to core’) is the second argument of a dyadic intransitive verb that does not have the same morphological marking as the sole argument of a canonical intransitive verb.

With these four distinct core arguments, Dixon and Aikhenvald (2000:3) highlight the difference between “valency” and “transitivity,” with the former having to do with the number of core arguments that a verb takes, and the latter with whether those arguments

\[1\] It is also possible for a noun to function as a predicate head (Dixon and Aikhenvald 2000:2), as well as other categories, such as prepositional phrases and even interjections.
include S, A, O and/or E. That is, in terms of valence, a verb that takes just one core argument is said to be monadic or monovalent, as in (3)a below; a verb that takes two core arguments is called dyadic or bivalent, as in (3)b and (3)c; and a verb that takes three core arguments is called triadic or trivalent, as in (3)d. From a transitivity perspective, a verb that takes one core argument S heads a canonical or plain intransitive clause, as in (3)a below. A verb that takes two core arguments, S and E, heads an extended intransitive clause, as in (3)b. A verb that takes two core arguments, A and O, heads a canonical or plain transitive clause, as in (3)c. A verb takes three core arguments, A, O, and E, heads an extended transitive clause, as in (3)d. The distinction between valence and transitivity can be seen in (3).

(3) Transitivity vs. Valency (adapted from Liao 2002:142)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. canonical/plain intransitive</td>
<td>S</td>
<td>(monadic)</td>
</tr>
<tr>
<td>b. extended intransitive</td>
<td>S</td>
<td>E</td>
</tr>
<tr>
<td>c. canonical/plain transitive</td>
<td>A</td>
<td>O</td>
</tr>
<tr>
<td>d. extended transitive</td>
<td>A</td>
<td>O</td>
</tr>
</tbody>
</table>

(3) clearly shows that valence is different from transitivity. A verb with two core arguments can be either dyadic transitive or dyadic intransitive, conditional on whether the core arguments include A and O, or S and E. Such a difference can be simply illustrated by the two pairs of examples (1) and (2) mentioned earlier, which are repeated here again.
(4) Dyadic transitive vs. dyadic intransitive
a. Harry saw Mary.
   \[ A \quad V^{[+\text{tms}]} \quad O \]
b. Harry looked at Mary.
   \[ S \quad V^{[-\text{tms}]} \quad E \]

(5) a. Maxine considered the problem.
   \[ A \quad V^{[+\text{tms}]} \quad O \]
b. Maxine thought about the problem.
   \[ S \quad V^{[-\text{tms}]} \quad E \]

As shown above, each pair of examples is dyadic (i.e., having two core arguments) and is rather similar in meaning. However, only (4)a and (5)a are transitive clauses because they take the core arguments \( A \) and \( O \), while (4)b and (5)b are intransitive because they take \( S \) and \( E \) core arguments.

Although Dixon and Aikhenvald (2000) point to the importance of distinguishing valency from transitivity; however, they do not explicitly show how to make a distinction between dyadic transitive verbs and dyadic intransitive ones. This is especially important in the study of Formosan, Philippine, and other western Austronesian languages, where certain two-argument clause patterns are ambiguous regarding transitivity. For these languages, choosing one as the canonical transitive clause out of the two potential transitive clauses may result in different conclusions regarding whether a clause structure is ergative or accusative. Therefore, the question as to how to distinguish dyadic transitive verbs from dyadic intransitive ones with linguistic evidence has been a major topic in the study of transitivity in the last two decades. Works by Gibson and Starosta (1990), Starosta (1997, 1998, 1999a, 2002), Ho (1990, 1993), and Liao (1998, 2002, 2004) have made efforts in showing how this question can be successfully coped with
once the notion of transitivity is considered to be the integration of both morphosyntactic and semantic factors, as first discussed by Hopper and Thompson (1980). As a result, morphological, semantic, syntactic and discourse tests are used to determine canonical transitivity in a given language. These tests will be discussed in the following section.

2.2.2 Determination of Transitivity

As mentioned earlier, it is essential to be able to distinguish dyadic transitive verbs from dyadic intransitive ones, especially for Formosan and Philippine languages, because these languages exhibit certain two-argument clause patterns that are considered to be ambiguous regarding transitivity. Several studies (Gibson and Starosta 1990, Starosta 1997, 1998, 1999a, 2002, Ho 1990, 1993, and Liao 1998, 2002, 2004) have shed light on how this distinction can be made when morphological, syntactic, and semantic properties are integrated into the definition of transitivity. Powerfully influenced by Hopper and Thompson’s paper (1980), they have all demonstrated with different languages (such as Atayal, Yami, Tsou, and Kavalan) that the notion of “transitivity” is not just related to the number of core arguments that a verb takes. It also has to do with the morphological, semantic, and syntactic properties that a clause exhibits. Under such a concept of transitivity, a transitive verb is regarded as a verb that has two or more core arguments and that exhibits the signs of transitivity in its morphological, semantic, and syntactic properties. An intransitive verb is a verb that has one or more core arguments and that shows signs of low transitivity or intransitivity in its morphological, semantic, and syntactic properties (Liao 2004). I will start with the relevant morphological properties in section 2.2.2.1.
2.2.2.1 Morphological transitivity

Transitivity may interact with verbal morphology or other morphological marking. It has been observed that languages may use different morphological marking (form or shape) to encode a verb's transitivity (Gibson and Starosta 1990, Ho 1990, 1993, Starosta 1997, 1998, 1999a, 2002). Thus, it is necessary to include a verb's morphological properties in the definition of transitivity.

Gibson and Starosta (1990) propose a set of criteria that can be used for distinguishing canonical transitive clauses from passive or antipassive\(^2\) constructions (i.e., dyadic intransitive clauses in this study). One of the criteria is the 'morphological identification' test,\(^3\) which makes the following prediction. If a language has three verbal clause patterns: one monadic and two dyadic patterns, and the verbs in the three clause patterns are all morphologically complex, then the dyadic pattern that has the identical morphological marking (or verbal morphology) as the monadic pattern (i.e., apparently the intransitive pattern) counts as intransitive, while the other dyadic pattern is transitive. This test stems from the fact that in general, when languages have two different ways of encoding dyadic clauses, and one of the two alternative encodings shares more linguistic properties with monadic intransitive clauses than the other, then this one should be

\(^2\) As noted in Liao (2004), cross-linguistic studies (Nichols 1982, Tsunoda 1988, Liao 2002) have already demonstrated that antipassivization is not necessarily a "valency-decreasing" device, although it is a detransitivization operation. For example, Nichols (1982) observes that antipassivization in Ingush (Caucasus) does not reduce valency. Tsunoda (1988) also reports that antipassivization is not a valency-decreasing process in Warrungu (an Australian language). In addition, they are called "pseudo-transitives" (Starosta 1997, 1998, 1999a, 2002) or "dyadic intransitives" (Liao 2002) without reference to any valence-decreasing process.

\(^3\) The other criteria are markedness, productivity, subject, middle voice, and semantic transitivity. See Gibson and Starosta (1990:198-205) for discussion.
analyzed accordingly as grammatically intransitive, while the other counts as canonically transitive.

The following data from Yami (Ho 1990, 1993) illustrates the application of the morphological identification test.

(6) Yami; Austronesian, Orchid island, data from Ho (1990), cited by Starosta (1997:144)

a. Monadic verb with -um- form
   \[ Ya=\sigma \quad tumava \quad si \quad Mapapu. \]
   \[ Aux=3s.Nom \quad intrns.get.fat \quad Nom \quad Mapapu \]
   'Mapapu is getting fat.'

b. Dyadic verb with -um- form
   \[ Ya=\sigma \quad kuman \quad si \quad Mapapu \quad su \quad suli. \]
   \[ Aux=3s.Nom \quad ?.eat \quad Nom \quad Mapapu \quad Gen \quad taro \]
   'Mapapu is eating taros.'

c. Dyadic verb with -en form (-en is phonologically zero, when the perfective ni-is present)
   \[ Ya=na \quad nikan \quad ni \quad Mapapu \quad u \quad suli. \]
   \[ Aux=3s.Gen \quad ?.eat \quad Gen \quad Mapapu \quad Nom \quad taro \]
   'Mapapu has eaten up the taros.'

As seen in (6), Yami has three basic verbal clause patterns. (6)a is a clear intransitive clause, but (6)b and (6)c are ambiguous regarding transitivity. Adopting the morphological identification test, Ho (1990) considers (6)b to be a dyadic intransitive clause while (6)c is a canonical transitive clause, in that both (6)a and (6)b share the identical morphological form -um- on the verb, but (6)c has a different morphological shape. Based on this test along with other tests,\(^4\) Ho (1990) concludes that verbs with -en (and -an) are transitive while those with -um- are intransitive (i.e., one-argument intransitive and antipassive in her study).

\(^4\) Ho (1990:67-77) also applies semantic tests in order to draw this conclusion.
In addition to Yami already discussed, other Philippine languages such as Tagalog (De Guzman 1988:340-42) and Bontok (Reid, personal communication) are also reported to display a similar kind of dichotomy in which intransitive verbs (monadic and dyadic) use the morphological form \( m- \) or \(-um-\), while transitive verbs have the morphological shape \(-in\) (in Tagalog), \(-an\) or \(i\). The Bontok examples in (7) illustrate how the morphological identification test can be used to distinguish a canonical transitive verb from a dyadic intransitive one.

(7) Bontok; Austronesian, Philippine, data from Reid (personal communication)
   a. Monadic verb with \(-um-\) form
      \[ \text{Uminóm=ak.} \]
      *intrns.drink=1S.Nom*
      ‘I am drinking.’
   
   b. Dyadic verb with \(-um-\) form
      \[ \text{Uminóm=ak as itda as ábong.} \]
      *?drink=1S.Nom Loc tea Loc house*
      ‘I am drinking tea in the house.’
   
   c. Dyadic verb with \(-en\) form
      \[ \text{Inomek}^7 \text{ nan itda.} \]
      *?drink.1s Nom tea*
      ‘I am drinking the tea.’

As shown above, like Yami, Bontok has three basic verbal clause patterns. (7)a is clearly an intransitive clause, but (7)b and (7)c are ambiguous regarding transitivity. Following the morphological identification test, (7)b is regarded as dyadic intransitive while (7)c is canonical transitive, because both (7)a and (7)b have the same morphological form \(-um-\) on the verb, while (7)c has a different morphological shape \(-en\), with stress shift.

---

5 Yami, spoken in Orchid Island, which politically belongs to Taiwan, is considered to be genetically closely related to Philippine languages than to Formosan languages.

6 \(-in\) is the reflex of PAn *\(-en\).*

7 In Bontok, the formative \(-en\) loses its final nasal when it occurs with a first, second, or third person singular agreement feature (Reid 2001).
The examples from Yami and Bontok seem to suggest that the morphological identification test is legitimate. However, it is not without problems. As Liao (2004) points out, when applying this test to language data particularly from the Philippines (e.g., Ilokano, Tagalog, and Sorsoganon) and Formosa (e.g., Siraya), one must be very careful to specify which subtype of monadic clauses that the dyadic clause patterns are being compared with. The reason is that these languages have two subtypes of monadic intransitive constructions: one with the morphological form -um- and the other with -en (e.g., Ilokano and Siraya), -in (e.g., Tagalog), or -un (e.g., Sorsoganon). The former (i.e., -um-) occurs in most verb classes, while the latter (i.e., -en/-in/-un) in a restricted verb classes. Because both monadic intransitive morphological shapes -um- and -en/-in/-un happen to have exactly the same forms as those of the two dyadic clause patterns, comparing the two distinct dyadic clause patterns with different subtypes of monadic clauses (-um- or -en/-in/-un) would end up with different results. The following Ilokano examples illustrate this problem. Ilokano has similar basic verbal clause patterns to many other Philippine and Formosan languages, as shown in (8).

   a. Monadic verb with -um- form
      Uminûm ti áso.
      intrns.drink TI dog
      ‘The dog drinks.’

   b. Dyadic verb with -um- form
      Uminûm=ak iti danûm.
      ?.drink=1s.Nom TI water
      ‘I drink water (any kind of water).’

---

8 In addition to the -um- form, many Philippine languages also have mang-, mag-, or ag- as non-completive forms, occurring in intransitive clauses and one of the dyadic clause patterns.
c. Dyadic verb with -en form

*I broke a mirror.

\[\text{Inumek} \quad \text{ti} \quad \text{damúm}.\]

I drink.1s TI water

‘I drink the water (any kind of water).’

However, in addition to the -um- shape, Vanoverbergh (1955:147) also notices that the morphological form -en is also found in intransitive verbs which exhibit the meaning of “be infested/afflicted with/by,” as in (9)a-b, the meaning of “have the quality of what the stem implies,” as in (9)c, and the meaning of “a certain animal or insect has started eating or consuming something,” as in (9)d.


a. *Gaddilén ti ubing=ko.*

intrns.itch TI child=1s.Gen

‘My child gets itch.’

b. *Bakrängen ti anák=ko.*

intrns.painful.side TI child=1s.Gen

‘My child has pain in its side.’

[bakrängen ‘to feel pain in the side of the body’ < bakräng ‘side of body’]

c. Babadoén dayá lipot.

intrns.for.coat that cloth

‘That cloth is good for coats.’

[badoén < bádo ‘dress; coat; shirt; jacket; clothes, attire’]

d. Kutonen ti inapiy.

intrns.ant TI rice

‘The rice is full of ants.’

As seen above, it appears that Ilokano has two intransitive morphological shapes: -um- and -en. As a result, when we apply the morphological identification test, we can compare the two distinct dyadic clause patterns with either the -um- or -en monadic intransitive clause pattern, and this will then lead to two completely different conclusions.

On the one hand, if we compare the two distinct dyadic clause patterns with the
intransitive -um- clause pattern, the -um- dyadic clause pattern would count as intransitive while the -en dyadic ones would be canonical transitive. This is the same result as we have concluded for languages like Yami and Bontok. On the other hand, if we compare the two distinct dyadic clause patterns with the intransitive -en/-in/-un clause pattern, the -en/-in/-un dyadic clause pattern would count as intransitive while the -um- dyadic ones would be canonical transitive. This result is totally opposed to what we have found for languages such as Yami and Bontok. As already known, it is very important to choose the correct canonical transitive clause pattern, in that if the wrong one is chosen, the determination of the actancy structure comes out wrong too. Therefore, the morphological identification test needs to be revised to keep its validation.

Liao (2004) notes that the occurrence of monadic -en/-in/-un verbs is much more restricted than that of the monadic -um- verbs. Most of the monadic -en/-in/-un verbs have the meaning ‘be infested/afflicted with/by’. Hence, she proposes a modified version of the morphological identification test and restates it as follows. Assuming that the verbs in all verbal clauses are all morphologically complex, Liao (2004) claims:

"If a language has two (or more) dyadic clause patterns but only one of them is intransitive, the verb of the dyadic clause pattern that has the same verbal morphology as the verb in the MAJOR MONADIC INTRANSITIVE CLAUSE PATTERN is considered to be intransitive. The major intransitive pattern refers to the monadic intransitive clause pattern that can appear in most verb classes rather than just a limited number of verb classes."

With the revised version of the morphological identification test, the difficulty that was discussed before is eliminated. Applying the revised test, we come to the conclusion that in many Formosan and Philippine languages, intransitive verbs (monadic and dyadic) have the morphological form -um-, while transitive verbs have the morphological
shape -en. Other affixes are also found in most languages which can be uniquely identified with either intransitive or transitive verbs.

In summary, the determination of transitivity needs to consider not only the number of participants in a clause but also the morphological features of the verbs that head them. The evidence comes from the fact that languages such as Formosan and Philippine languages may encode a verb’s transitivity with different morphological markings. The (revised) morphological test can be applied to distinguish canonical transitive verbs from dyadic/extended intransitive ones when there are two potential transitive clause patterns. In the following section, I will discuss the semantic factors involved in determining transitivity.

2.2.2.2 Semantic transitivity

It has long been observed that transitivity interacts with a number of semantic factors. Many linguistic studies of transitivity have actually characterized transitivity largely or entirely in semantic terms (e.g., Robins 1964, Lakoff 1977, and Richards et al. 1985). They essentially agree that a prototypical transitive verb has an “agentive participant” and a “theme participant” whose referent is visibly “affected” by the action denoted by the verb, as shown in (10).

(10) a. Hawaiian; Polynesian, Hawaii, data from O’Grady (1999:53)

\( \text{Ua ‘ai ke kanaka i ka poi.} \)

‘The man ate the poi.’


\( \text{Yumiko-wa sono kodomo-o sikat-ta.} \)

‘Yumiko scolded the child.’
As illustrated in (10), semantically the prototypical transitive verb has an agentive participant and a theme participant whose referent is discernibly affected by the action denoted by the verb.

Among the studies on the issue of (semantic) transitivity in the linguistic literature, work by Hopper and Thompson (1980) is one of the most influential and insightful works written in recent times. It explicitly illustrates that while semantic transitivity and morphosyntactic transitivity are not the same thing, there is a correlation between the two, and that if two closely similar constructions differ in semantic transitivity, the one that is more transitive semantically is likely to be more transitive syntactically (Starosta 1998). One of their findings is that semantically transitive situations tend to be encoded by morpho-syntactically transitive clauses, and that the notion of transitivity should be considered to be a combination of semantic, morphological and syntactic factors cross-linguistically.

Hopper and Thompson (1980) create ten “transitivity parameters” with a number of properties of clauses which they label as semantically more or less transitive as seen in table 2.1. That is, each of the transitivity parameters constitutes a scale, ranging from high to low as seen in table 2.1, with which clause structures can be ranked.

**Table 2.1 Hopper and Thompson’s Parameters of Transitivity (1980:252)**

<table>
<thead>
<tr>
<th>A. Participants</th>
<th>High transitivity</th>
<th>Low transitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Kinesis</td>
<td>2 or more participants</td>
<td>1 participant</td>
</tr>
<tr>
<td>C. Aspect</td>
<td>action</td>
<td>Non-action</td>
</tr>
<tr>
<td>D. Punctuality</td>
<td>telic</td>
<td>atelic</td>
</tr>
<tr>
<td>E. Volitionality</td>
<td>punctual</td>
<td>Non-punctual</td>
</tr>
<tr>
<td>F. Affirmation</td>
<td>volitional</td>
<td>Non-volitional</td>
</tr>
<tr>
<td>G. Mode</td>
<td>affirmative</td>
<td>negative</td>
</tr>
<tr>
<td>H. Agency</td>
<td>realis</td>
<td>irrealis</td>
</tr>
<tr>
<td>I. Affectedness of the O (theme)</td>
<td>A (agent) high in potency</td>
<td>A (agent) low in potency</td>
</tr>
<tr>
<td>J. Individuation of the O (theme)</td>
<td>O (theme) totally affected</td>
<td>O (theme) not affected</td>
</tr>
<tr>
<td></td>
<td>O (theme) highly individuated</td>
<td>O (theme) not individuated</td>
</tr>
</tbody>
</table>

32
Hopper and Thompson use these transitivity parameters to examine clause structures from a number of languages and find that the semantic properties closely correlate with the coding of morphosyntactic transitivity. According to Hopper and Thompson (1980:255), if semantic parameters co-vary with morphosyntactic manifestations of transitivity, clauses that exhibit high semantic transitivity are more likely to be encoded morphosyntactically transitive, as schematized in figure 2.1. For example, clauses exhibiting a totally affected theme tend to be encoded as morpho-syntactically transitive, while those exhibiting a non-affected theme tend to be encoded as morphosyntactically intransitive.

It should be noted here that their semantic scale is characterized in terms of the “situational” categories “A” (i.e., agent) and “O” (i.e., theme) in a two-argument clause (dyadic intransitive/transitive clause) and the degree to which the “A” is seen as affecting the “O” (e.g., is the “O” definite, totally affected, single or is the action complete?). Therefore, it is clear that their usage of “A” and “O” is different from that of Dixon and
Aikhenvald’s (2000), in that for Dixon and Aikhenvald, both “A” and “O” are considered to be the two core arguments in a canonical transitive clause.

Now let us look at examples from different languages such as Kalkatungu, Greenlandic Eskimo, and Samoan to illustrate the correlation between semantic transitivity and morphosyntactic transitivity found by Hopper and Thompson (1980). The examples from Kalkatungu in (11) below illustrate that semantic properties such as aspect can interact with transitivity.

(11) Kalkatungu; Pama-Nyungan, W. Queensland, data from Blake (1976:286)
      old.man-Erg here young.man hit-perf
      ‘The old man hit the young man.’
   b. KapuNuru caa kalpin-ku lai-mina.
      old.man here young.man-Dat hit-imperf
      ‘The old man is hitting the young man.’

According to Hopper and Thompson (1980), perfective (completive) aspect favors high transitivity; imperfective (non-completive) aspect is more likely to be associated with low transitivity or even intransitivity. In Kalkatungu, as seen in (11), the verb has a perfective interpretation when the ergative marker -tu is present, as in (11)a, which signals the verb is transitive, but it has an imperfective interpretation when -tu is absent and the theme is followed by an oblique marker -ku, as in (11)b, which then indicates the verb is intransitive.

Another semantic factor that interacts with transitivity is individuation of the theme (definiteness/specificity/referentiality), which has to do with how distinct and how definite it is. According to Hopper and Thompson (1980), the definite argument tends to be associated with a high degree of transitivity, while the indefinite theme argument is
likely to be associated with a low degree of transitivity. This can be illustrated by the following Greenlandic Eskimo examples as in (12).


a. *Angut-ip arnaq-o untar-paa.*  
   man-Erg woman-Abs beat-IND.trns.3s.3s  
   ‘The man beat the woman.’

b. *Angut-o arnaq-mik untar-a-vuq.*  
   Man-Abs woman-Obl beat-Antipass-IND.3s  
   ‘The man beat a woman.’

As seen above, the theme argument is definite in (12)a, the sentence is encoded as morphosyntactically transitive. This can be seen from the fact that the verb in (12)a agrees with both A and O, and that it has the ergative marker -ip, which is reserved for the A of transitive verbs. On the other hand, in (12)b, the theme argument is indefinite, and the sentence is encoded as morphosyntactically intransitive, with the verb agreeing with S only, but not E. It has the intransitive (antipassive) form a-, the ergative marker -ip being absent. Furthermore the theme argument carries the oblique marker indicating it is an E.

The last semantic property to be discussed here is degree of volitional agency.

According to Hopper and Thompson (1980), a verb is more likely to be encoded as morphosyntactically transitive if it has a more volitional agent. This can be demonstrated by the Samoan examples in (13).

(13) Samoan; Polynesian, Samoa, data from Hopper and Thompson (1980:270)

a. *Na-fasi-e le tama le teine.*  
   Tns-hit-Erg the boy the girl  
   ‘The boy hit the girl.’

b. *Na-va'ai le tama i le teine.*  
   Tns-see the boy Obl the girl  
   ‘The boy saw the girl.’
As shown in (13)a, the verb *fasi* ‘hit’ whose agent is a volitional agent is encoded as morphosyntactically transitive, taking an ergative marker -e, which is reserved for the A of transitive verbs. On the other hand, the verb *va’ai* ‘saw’ in (13)b, being an experiencer agent, is encoded as morphosyntactically intransitive, with the theme argument following an oblique marker i, while the ergative marker -e is not present.

Each of the examples from (11) to (13) suggest that Hopper and Thompson’s transitivity hypothesis is valid, in that if semantic parameters co-vary with morphosyntactic manifestations of transitivity, clauses that exhibit high semantic transitivity are more likely to be encoded morphosyntactically transitive.


---

*However, linguists do not agree on the issue as to whether all the parameters are equally relevant to the morphosyntactic manifestations of transitivity. For example, Tsunoda (1999:4) suggests that the most important and relevant semantic factor is affectedness of the theme, while volitionality and agency are much less important/relevant.*
section 2.2.2.1, that she uses the morphological identification test (Gibson and Starosta 1990) to count verbs with \(-en\) (and \(-an\)) as transitive and those with \(-um\) as intransitive in Yami. In addition, she further verifies this conclusion by applying the semantic test with the parameter of individuation of the theme, as illustrated in (14).

(14) Yami; Austronesian, Orchid island, data from Ho (1990:75)
   a. Definite theme with \(-an\) form
      \(Ya=na\) bakbakan ni ama u anak=na.
      Aux=3s.Gen ?hit Gen father Nom child=3s.Gen
      ‘Father is hitting his child.’
   b. Indefinite theme with \(-um\) form
      \(Ya=\theta\) mamakbak si ama su kanakan.
      Aux=3s.Nom ?hit Nom father Gen child
      ‘Father is hitting a child.’

As seen above, (14)a and (14)b are both potentially canonical transitive clauses. However, the theme NP in the dyadic \(-an\) clause as in (14)a is definite, while the theme NP in the dyadic \(-um\) clause as in (14)b is indefinite. According to Hopper and Thompson (1980), clauses with a definite/referential/individuated theme are considered semantically more transitive than clauses with an indefinite/non-referential/non-individuated theme. Therefore, (14)a is considered to be more transitive than (14)b semantically. This then provides a piece of semantic evidence confirming that \(-um\) verbs are intransitive and \(-en/-an\) verbs are transitive (Ho 1990, 1993).

In conclusion, examples (11) to (14), demonstrate a significant correlation between semantic transitivity and grammatical/morphosyntactic transitivity, with semantically more/less transitive situations tending to be encoded with morphosyntactically transitive/intransitive clauses, respectively. As summarized in Starosta (1997:129-131), even though connected with each other in a remarkable way, semantic transitivity and morphosyntactic transitivity are NOT the same thing. Semantic or functional transitivity
is a SCALAR property (i.e., a continuum; high/more vs. less/low), while grammatical or morphosyntactic transitivity is a POLAR property (i.e., binary; [+trns] vs. [-trns]). This can be depicted in figure 2.2 below, based on Starosta (1997) and O'Grady and Starosta (1999).

![Figure 2.2: Semantic vs. Syntactic Transitivity (Starosta 1997:129, O'Grady and Starosta 1999)]

Moreover, because the semantic scale is categorized in terms of “situational” or semantic properties of the clause as well as its agent and theme arguments, the determination of semantic transitivity can be made rather quickly, based on a limited knowledge of the language in question. The identification of syntactic transitivity, however, requires a more careful language-specific and/or cross-linguistic syntactic and morphological analysis. The issue of syntactic transitivity will be dealt with in the following section.

### 2.2.2.3 Syntactic transitivity

Transitivity interrelates with syntax in many precise and specific ways. Languages may use two distinct grammatical patterns to encode two different dyadic (two-argument) clause patterns. In this situation, one of the two alternative encodings shares more
syntactic properties (e.g., word order, personal pronominal markings, case marking, relativization, etc) with the monadic clause pattern than the other, and this one should be analyzed accordingly as grammatically intransitive. The other counts as canonically transitive. Therefore, the identification of syntactic transitivity in a given language requires a careful examination of the syntactic properties that clauses exhibit.

Identifying syntactic transitivity from syntactic evidence has been demonstrated with a number of languages from Formosa in many of Starosta’s works (1997, 1998, 1999a, 2002). He shows that syntactic transitivity can be manifested by syntactic properties such as clitic pronouns, contrastive word order and case frames of a verb in these languages. He uses these syntactic features as clues to the syntactic transitivity of clause types and as tests to distinguish a canonical transitive verb from an extended intransitive one especially for languages (such as Formosan languages) with two possible transitive clause patterns.

The manifestation of syntactic transitivity in clitic pronouns that he discusses can be illustrated with the same Yami examples in (6), repeated here again in (15).

(15) Yami; Austronesian, Orchid island, data from Ho (1990), cited by Starosta (1997:144)

a. Monadic -um- clause with a 3s clitic pronoun =∅
   \[ Ya=∅ \quad tumava \quad si \quad Mapapu. \]
   Aux=3s.Nom intrns.get.fat Nom Mapapu
   ‘Mapapu is getting fat.’

b. Dyadic -um- clause with a 3s clitic pronoun =∅
   \[ Ya=∅ \quad kuman \quad si \quad Mapapu \quad su \quad suli. \]
   Aux=3s.Nom ?.eat Nom Mapapu Gen taro
   ‘Mapapu is eating taros.’
c. Dyadic -en clause with a 3s clitic form =na

Ya=na nikan ni Mapapu u sufi.

Aux=3s.Gen ?eat Gen Mapapu Nom taro

‘Mapapu has eaten up the taros.’

As shown above, sentence (15)a is a clearly intransitive clause, while (15)b and (15)c are possible transitive clauses because they both have two distinct arguments. However, there is difference between (15)b and (15)c in the clitic pronoun forms that the verbs take. As seen in (15)c, the auxiliary verb ya in the dyadic -en clause pattern is cliticized by the third person (genitive)\(^{10}\) pronoun =na, marking the actor of the dyadic -en verb, while this clitic pronoun =na is not present in the dyadic -um- clause pattern as in (15)b nor in the intransitive clause pattern as in (15)a. The absence of the third person clitic pronoun in (15)a and (15)b actually implies that the third person clitic pronoun that marks the actors of -um-/m- verbs is zero/unmarked. Thus it appears that there are two different sets of clitic pronouns in Yami, with one (i.e., the genitive set) marking the actors of dyadic -en/-an verbs (non-actor focus or NAF verbs in several earlier analyses of Formosan language), and the other (i.e., the nominative set) marking the actors of monadic and dyadic -um-/m- verbs (AF verbs). This thus leads us to count the dyadic -en/-an clause pattern as canonical transitive and the dyadic -um-/m- clause pattern as extended intransitive, in that the dyadic -um-/m- clause pattern shares the same syntactic behavior (the same set of clitic pronouns) with the monadic intransitive one, separating them from the dyadic -en/-an clause pattern. This conclusion is consistent with the result of the morphological and semantic transitivity tests discussed in sections 2.2.2.1 and 2.2.2.2. Once this dichotomy is established, Yami is analyzed as an ergative

\(^{10}\) This set of clitic pronouns is also found in genitive constructions.
language; with the genitive (or ergative) set of clitic pronouns occurring with transitive verbs and the nominative (or absolutive) set occurring with intransitive verbs (Starosta 1997:143).

Another syntactic property used as a test by Starosta (2002) to determine transitivity is the distribution of clitic pronouns (i.e., the relative word order between clitic pronouns and the verbs they to which they are cliticized), as illustrated by the Paiwan examples in (16).

(16) Paiwan; Austronesian, Taiwan, data from Starosta (2002:448)
a. Monadic -um- clause with an actor/undergoer clitic pronoun following a verb
Mipuruk=aken.
intrns.jump=1s.Nom
‘I jump.’
b. Dyadic -um- clause with an actor clitic pronoun following a verb
Dumukur=aken ta imadu.
?.hit=1s.Nom Loc 3s
‘I hit him.’
c. Dyadic -um- clause with an actor clitic pronoun following a verb
Dumukur=timadu ta nusun.
?.hit=3s.Nom Loc 2s
‘He hit you.’
d. Dyadic -in clause with an actor clitic pronoun preceding a verb
Ku=dukurin=su.
1s.Gen=?.hit=2s.Nom
‘I hit you.’

As shown above, (16)a is a clearly intransitive clause, while (16)b-(16)c and (16)d are ambiguous regarding transitivity in that they have two distinct arguments. However, syntactically there are at least three differences between (16)b-(16)c and (16)d: the number of clitic pronouns that the verbs take, the forms of the verbs’ clitic pronouns, and the relative word order of the clitic pronouns to the verbs. As seen in (16)d, the dyadic -en clause pattern has two types of clitic pronouns, with the first person genitive
singular *ku= marking the actor and the second person nominative singular =*su marking the theme of the verb. On the hand, (16)b-(16)c as well as (16)a only have one type of clitic pronoun (the first person nominative singular =*aken, or the third person nominative singular =*timadu), marking the actor of the dyadic and monadic -*um-/m-* clause patterns, respectively. In addition, in terms of word order, in (16)d the genitive set of clitic pronouns has to precede the dyadic -*en* verb, while in (16)a-(16)c the nominative set has to follow the -*um-/m-* verbs. Thus, based on the syntactic evidence above, the dyadic -*en* clause pattern as in (16)d is considered to be the canonical transitive pattern, while the dyadic -*um-/m-* clause pattern is the extended intransitive pattern, as in (16)b-(16)c, in that the dyadic -*um-/m-* clause pattern shares the same syntactic behavior (the same set and number of clitic pronouns, and the same relative word order between the clitic pronouns and verbs) with the monadic intransitive one, separating them from the dyadic -*en* clause pattern. This conclusion is further confirmed by the fact that theme arguments in dyadic intransitive clauses such as (16)b-(16)c are marked by the locative case *ta*.

All the examples in (15) and (16) illustrate that clitic pronouns may be used as a syntactic test to identify syntactic canonical transitivity.

Other syntactic phenomena can also be used to help identify syntactic transitivity. Thus, phenomena such as causativization and passivization can also be used as tests of syntactic transitivity as well. For example, in languages such as Japanese, the A of a transitive verb MUST be marked by the dative case after causativization, while the S of an intransitive verb may be marked by either the dative or the accusative, depending on its lexical semantics, as illustrated in (17) (O'Grady and Starosta 1999).
(17) Japanese; Japan, data from O'Grady and Starosta (1999)
   a. Causativization of a transitive verb
      \[\text{Taroo-ga Ziroo-ni/\^{*}o hon-o yom-ase-ta.}\]
      Taroo-Nom Ziroo-Dat/Acc book-Acc read-C-Pst
      \('Taroo made Ziroo read a book.'\)
   
   b. Causativization of an intransitive verb
      \[\text{Taroo-ga Ziroo-o/ni ik-ase-ta.}\]
      Taroo-Nom Ziroo-AcclDat go-C-Pst
      \('Taroo made Ziroo go.'\)

In French, as in (18), only transitive not intransitive verbs can be passivized.

(18) French; Indo-European, France, data from O'Grady and Starosta (1999)
   a. Transitive active
      \[\text{Les professeurs ont discuté le problème.}\]
      \('The professors talked about the problem.'\)
   
   b. Passive counterpart
      \[\text{Le problème a été discuté par les professeurs.}\]
      \('The problem was talked about by the professors.'\)
   
   c. Intransitive active
      \[\text{Les professeurs ont parlé du problème.}\]
      \('The professors talked about the problem.'\)
   
   d. Passive counterpart
      \[**\text{Le problème a été discuté parlé (de) par les professeurs.}\]
      \('The problem was talked about by the professors.'\)

The tests discussed so far appear to be language specific. However, there are some other syntactic tests with cross-linguistic validity, including (but not limited to) agreement, depictive predicates (or resultative predicates) (O'Grady and Starosta 1999).

Both verbal agreement and depictive predicates, typologically, are more likely to be associated with the core arguments S, A, and O than any other arguments including adjuncts. The implicational universal is as follows. If a verb agrees with adjuncts or arguments other than the three core arguments S, A, and O in some features, it would be

---

\(^{11}\) Two asterisks (**) before an example indicate that the example is not a grammatically acceptable expression in the language.
expected to agree with S, A and O in those features, and not vice versa. In the same way, if a depictive predicate (or resultative predicate) can be associated with adjuncts or arguments other than the three core arguments S, A, and O, it would also be expected to agree with S, A, and O, and not vice versa (Whaley 1997:153, 164-165, Dixon 1994:45).

The following examples from Greenlandic in (19), illustrate that transitivity can be determined by looking into verbal agreement.

   a. Plain intransitive with the verb agreeing with S
      \textit{Angut-o veri-vuq.}
      Man-Abs eat-intrn.$\ S$
      ‘The man eats.’
   
   b. Canonical transitive with the verb agreeing with A and O
      \textit{Angut-ip arnaq-o untar-paa.}
      man-Erg woman-Abs beat-IND.$\ S$.$\ S$
      ‘The man beat the woman.’
   
   c. Antipassive with the verb agreeing with S
      \textit{Angut-o arnaq-mik untar-a-vuq.}
      Man-Abs woman-ObI beat-Antipass-IND.$\ S$
      ‘The man beat a woman.’

As seen above, in Greenlandic Eskimo, although (19)b and (19)c are both dyadic, their verbal agreements are different. In (19)b the dyadic verb agrees with both agent and theme arguments, while in (19)c the dyadic verb agrees with only the agent argument. According to the agreement implicational universal, the theme argument in (19)b should be an O, while the one in (19)c is an E. This suggests that (19)b is a canonical transitive construction, while (19)c is a dyadic intransitive construction.

Now let us turn to the depictive predicate test, which can be illustrated by examples from Pashto, as in (20) and (21).
(20) Pashto; Indo-Iranian, Pakistan, data from O'Grady and Starosta (1999)
a. Canonical intransitive
   Zo goř/gorzed-om.
   1s.Nom walk/walked-1s
   ‘I am/was walking.’
b. Canonical transitive
   Ma to wə-lid-e.
   1s.Erg 2s.Nom perf-saw-2s
   ‘I saw you.’
c. Dyadic intransitive
   Zo ta goř-om.
   1s.Nom 2s.Obl see-1s
   ‘I see you.’

As seen above, in Pashto, (20)a is a canonical intransitive construction, but (20)b and (20)c are both dyadic, so they are ambiguous regarding transitivity. The depictive predicate test can be applied to distinguish the canonical transitive construction from the dyadic intransitive construction in cases such as this. By adding a depictive predicate to (20)b and (20)c, sentences (21)a and (21)b are formed.

(21) Pashto; Indo-Iranian, Pakistan, data from O'Grady and Starosta (1999)
a. Depictive predicate with nominative pronoun
   Ma to nisa wə-lid-e.
   1s.Erg 2s.Nom drunk perf-saw-2s
   ‘I saw you drunk.’ (you are drunk)
b. Depictive predicate with oblique pronoun
   Zo ta nisa goř-om.
   1s.Nom 2s.Obl drunk see-1s
   ‘I see you drunk.’ (I am drunk)

As shown above, the depictive predicate nisa ‘drunk’ can only be associated with the second person singular nominative to in (21)a, but not with the second person singular oblique ta in (21)b. Following the implicational universal, this suggests that the pronominal form to in (21)a functions as the O of a transitive construction, while the
form \( ta \) in (21)b is the E of a dyadic intransitive construction. This in turn suggests that (20)b is a canonical transitive construction, while (20)c is a dyadic intransitive construction.

In conclusion, along with the morphological and semantic tests discussed in the previous sections, syntactic evidence for transitivity can also be adduced from various syntactic tests, as demonstrated by the examples from (15) to (21). The transitivity of a construction then depends not simply on the number of core augments that the verb takes, but also on a combination of morphological, semantic and syntactic factors.

Having discussed what constitutes transitivity and the applicable semantic and syntactic tests that have been used to determine transitivity, I would like to discuss, in the next sections, two further tests which can be used to distinguish canonical transitive verbs from intransitive verbs for a given language. They are the discourse grounding test and the textual frequency test.

2.2.2.4 Discourse grounding transitivity

As discussed already, Hopper and Thompson (1980) broadened the traditional notion of transitivity in grammar, showing that languages universally possess morphosyntactic structures which can reflect the degree of semantic transitivity of a clause. In addition to this finding, conducting the discourse study of three English narrative texts, they also find that there is a correlation between the degree of transitivity and the discourse functions of grounding as well, with the foreground of narrative discourse tending to be encoded by more transitive clauses, and the background of narrative discourse tending to be encoded by less transitive clauses.
This finding not only points to the importance of the background/foreground distinction in discourse functions, but also implies that the discourse-grounding study of a narrative text can be regarded as a reliable cross-linguistic test for distinguishing a more transitive construction from a less transitive construction for a given language. That is, from a discourse perspective, in a given narrative text the type of construction tending to be associated with the foreground is considered to be a more transitive construction, while the type of construction tending to be associated with the background is considered to be a less transitive construction.

Before continuing to discuss how Hopper and Thompson demonstrate the significant correlation between transitivity and discourse grounding, I shall provide a preliminary introduction to the characteristics of foreground and background, based on Hopper and Thompson’s (1980:280-281) work. Pragmatically, users of languages tend to design their utterances based on their own communicative goals and on their perception of their listeners’ needs. However, in any speaking situation, some parts of what is uttered are more pertinent than others. That part of a discourse which does not immediately and crucially contribute to the speaker’s goal, but which merely assists, amplifies, or comments on it, is referred to as background. They put flesh on the skeleton, but are not ordered with respect to each other. On the other hand, the material that supplies the main points (or thread/backbone) of the discourse is known as foreground. They are typically ordered in a temporal sequence. Background and foreground together fill in settings, clarify details and explain things of a narrative.

With the defining characteristics of foreground and background, Hopper and Thompson (1980: 284-288) investigate three English narrative texts, with each of the
semantic properties (see section 2.2.2.2) being computed separately for its occurrence in foreground and background clauses. The result is that in each case, the incidence of the transitive feature is much greater in foregrounding than in backgrounding, as seen in table 2.2, which lists the percentage of features of high transitivity found in both foreground and background clauses.

<table>
<thead>
<tr>
<th>.</th>
<th>Foregrounded</th>
<th>Backgrounded</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Participants</td>
<td>76%</td>
<td>18%</td>
</tr>
<tr>
<td>B. Kinesis</td>
<td>88%</td>
<td>49%</td>
</tr>
<tr>
<td>C. Aspect</td>
<td>88%</td>
<td>27%</td>
</tr>
<tr>
<td>D. Punctuality</td>
<td>55%</td>
<td>10%</td>
</tr>
<tr>
<td>E. Volitionality</td>
<td>76%</td>
<td>36%</td>
</tr>
<tr>
<td>F. Affirmation</td>
<td>100%</td>
<td>92%</td>
</tr>
<tr>
<td>G. Mode</td>
<td>100%</td>
<td>66%</td>
</tr>
<tr>
<td>H. Agency&lt;sup&gt;12&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I. Affectedness of the O (theme)</td>
<td>39%</td>
<td>12%</td>
</tr>
<tr>
<td>J. Individuation of the O (theme)&lt;sup&gt;13&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Average for all features</td>
<td>78%</td>
<td>39%</td>
</tr>
</tbody>
</table>

Hopper and Thompson (1980:251, 294) conclude therefore that transitivity is a central property of language use and that the grammatical and semantic prominence of transitivity can be derived from its characteristic discourse function: high transitivity is correlated with foregrounding, and low transitivity with backgrounding.

<sup>12</sup> Because agency is considered to be a continuous property, Hopper and Thompson (1980:287) do not draw an arbitrary line between agentive vs. non-agentive agent. Instead, they calculate an “index of agency” for both foregrounded and backgrounded clauses. The index of agency is based on the four most relevant features for the passages under scrutiny: 3<sup>rd</sup> pers. Human Pronoun > Proper Name > Human N > Inanimate N. Clauses are assigned scores of 1 to 4, the highest A receiving 4, and the lowest A receiving 1. The result of the index of agency shows that foregrounding has a higher figure than backgrounding (3.33 vs. 1.98).

<sup>13</sup> In testing the relevance of individuation to discourse, Hopper and Thompson (1980:287) score the theme in foregrounded and backgrounded discourse according to whether they are referential and definite. A theme is given 2 points for being both definite and referential, 1 for being either, and 0 for being neither. The average score can be referred to as the "index of individuation". The result of the index of individuation is 1.5 in foregrounded clauses and 1.2 in backgrounded clauses.
For this reason, the discourse grounding study can be considered a cross-linguistic test for transitivity. In fact, it has been attested with different languages. For example, according to Payne (1982:95), Hopper (ms) notes that in narrative discourse Tagalog actor-topic clauses (i.e., extended intransitive clauses in my analysis, AF in Formosan studies of most Taiwan linguists) and Inuktitut Eskimo antipassive clauses have a strong tendency to encode backgrounded information (e.g., introductory events), while Tagalog “goal-topic” clauses (i.e., canonical transitive clauses in my analysis, NAF in Formosan languages) and Inuktitut Eskimo ergative clauses are more likely to encode foregrounded information (i.e., the narration of on-going events). Along with this finding and the results of “markedness” tests, Payne (1982) considers Tagalog “goal-topic” and Yup’ik ergative constructions as the least marked constructions (i.e., basic/canonical transitive constructions). A similar phenomenon is also found in Atayal. Rau (1997), following Hopper and Thompson (1980), conducts a discourse study of an Atayal narrative text, and finds that the AF constructions tend to encode backgrounded information, while NAF constructions foregrounded information. This then suggests that Atayal NAF constructions are considered to be more transitive while AF constructions are less transitive.

To sum up, Hopper and Thompson (1980) have shown that high transitivity is correlated with foregrounding and low transitivity with backgrounding. Thus, the discourse study of narrative texts appears to be a cross-linguistically reliable test for

---

14 The test of “markedness” construction derived from Comrie (1978) and Givón (1979) includes the complexity of verbal morphology test, textual frequency test, distribution test, and acquisition test (Payne 1982).

15 Rau (1997) also looks into other linguistic features which can be correlated with discourse functions, such as individuation of theme and perfective vs. non-completive, etc.
distinguishing a more transitive construction from a less transitive construction in a given language.

In the following section, I will talk about another reliable test of transitivity: the textual frequency test.

2.2.2.5 Textual frequency tests

Textual frequency has been shown to be a reliable cross-linguistic test to distinguish a less marked construction from a more marked one in a given language. According to the textual frequency test proposed by Payne (1982), a less-marked construction has a higher textual frequency than a more marked construction. This test has been demonstrated to have cross-linguistic validity in many studies (see Svartvik 1966; Givón 1979; Comrie 1981; Cooreman et al. 1984; Shibatani 1988; Tsunoda 1994). For example, with texts from two accusative languages, English and Japanese, and three ergative languages, Warrungu, Dyirbal, and Kalkatungu, Tsunoda (1994) finds that the canonical transitive (i.e., less marked) occurs much more frequently than the passive (more marked) construction in accusative languages and that the canonical transitive (less marked) occurs more frequently than the antipassive (more marked) construction in ergative languages.

16 Based on the principles that Comrie (1978) and Givón (1979:58) use for characterizing the “markedness” nature of English passives, Payne (1982:96-98) proposes “markedness tests” for identifying the more marked construction (e.g., the passives in accusative languages and the antipassives in ergative languages) in a language. These tests include the textual frequency test, the morphological complexity test, the distribution test, and the acquisition test. Liao (2004) has evaluated each of these tests, and shown that all the tests are valid except for the morphological complexity test. In this dissertation, I only discuss the textual frequency test, which I use to determine Thao’s transitivity along with other ones (such as morphological, semantic, and syntactic tests) in the next chapter. As for the distribution test and the acquisition test, there are certain difficulties in applying them now due to the fact that the language is in danger of extinction, and facts about acquisition can no longer be obtained. However, there is still the possibility for future research on the distribution test, in that Blust’s (2003) “Thao dictionary” has already appeared, with a large amount of data that can be tested.
Although the textual frequency test has been shown to be a reliable test for distinguishing a marked construction from an unmarked construction cross-linguistically, there are two factors, text types and construction types, which one should be aware of when employing the test, because the result of textual frequency counting may vary in different types of texts and/or in different types of constructions (Liao 2004).

Works by Svartvik (1966), Shibatani (1988), and Reid (2002b) have shown that the genre of texts plays an important role in textual frequency. That is, the same construction type may have fairly different frequency results, depending on their occurrence in different text genres. For example, it has been observed that active constructions occur much more frequently than passive constructions in English novels than in academic texts (Svartvik 1966). In his corpus of English writing, Svartvik (1966) finds that in the learned sciences 32% of the sentences occur as passives and 68% are actives, while in novels, only 5-7% of the sentences are passives, and 73-95% are actives. A similar kind of finding is also reported in the study of Japanese passives (Shibatani 1988). Shibatani (1988) finds that passives occur much more frequently in newspaper and scientific writing of Japanese (25-32%) than in novels and essays (5-7%). In addition, Reid (2002b) also observes that the transitive constructions in Bontok procedural texts (70-80%) occur more frequently than those in activity and narrative texts (40-50%). Therefore, when one applies the text frequency test to a language in question, one should be careful not to jump to conclusions without taking the factor of text type into consideration.

In addition to genre of texts, the other factor that may influence the result of text frequency counting is construction type. Liao (2004) notices that in conducting a text
frequency study, linguists should base the study on “construction types” rather than on “formatives” or “morphology”. This is particularly essential for Philippine type languages in that they are known to have many homophonous forms. If one only looks at the formatives, the homophonous ones are likely to be mistakenly chosen for comparison, and this may affect the accuracy of the results. For example, a verb with the morphological shape *m-/-um-* can refer to the following three types of constructions: a monadic intransitive construction with only one agentive phrase, a monadic intransitive construction with one agentive phrase and a locational phrase, or a dyadic construction with one agentive phrase and one (indefinite) theme phrase. Therefore, the result of textual frequency counting will certainly vary depending on whether when one treats the three types of constructions as one, two or three different groups.

In conclusion, as long as linguists keep an eye on the two factors, genre of texts and construction types, in conducting the textual frequency study, the test would appear to be cross-linguistically valid in distinguishing a more marked construction (such as an extended intransitive construction) from a less marked construction (such as a canonical transitive one).

### 2.2.2.6 Summary

In section 2.2, I have shown that transitivity should be considered to be a combination of the morphological, semantic and syntactic properties that a clause exhibits. More specifically, a transitive verb can be defined as a verb with two or more core arguments, exhibiting the signs of high transitivity with reference to morphological, semantic, and syntactic properties. An intransitive verb, on the other hand, is a verb with one or more
core arguments, showing signs of low transitivity or intransitivity with reference to
morphological, semantic, and syntactic properties.

In addition, I also discussed some tests of transitivity including the revised
morphological identification test (Liao 2004), the semantic test (Hopper and Thompson
the discourse-grounding test (Hopper and Thompson 1980), and the textual frequency test
(Payne 1982). Each of these tests is useful in distinguishing a canonical transitive verb
from a dyadic intransitive one out of two distinct dyadic clause patterns. Such a
distinction is important when determining the actancy structure of a language.

I now proceed to discuss the other main issue: actancy structures, in section 2.3.

2.3 ACTANCY STRUCTURE

As mentioned already, once the question of transitivity for a clause construction is
settled in a given language, the question as to whether the language is accusative,
ergative, or some other type can be answered. In fact, determining the “actancy
structure”\(^{17}\) (Lazard 1997:247-249, 262, referring to the system of coding of grammatical
relations) for a language has been a major subject in typological studies in the past three
decades. I will discuss four main types of actancy structures in the following sections
and will lay emphasis on the ergative system for it is one of the important issues in this
dissertation.

\(^{17}\) Lazard (1997:247-249) mentions that the term “actancy” stems from Tesnière (1959).
2.3.1 Accusative vs. Ergative Actancy Structure

Adopting the three core arguments S, A, and O in the revised Basic Linguistic Theory (Liao 2002), a language is characterized as having an accusative system if the S of an intransitive verb and the A of a transitive verb are treated with the same grammatical relation coding such as case-marking/case inflection, verbal agreement/cross-referencing on the verb, or word order, but the O of a transitive verb has distinct grammatical relation coding. On the other hand, a language is characterized as having an ergative system if the S of an intransitive verb and the O of transitive verb are treated with the same grammatical relation coding such as case-marking/case inflection, verbal agreement/cross-referencing on the verb, or word order, but the A of a transitive verb has distinct grammatical relation coding (Comrie 1978, 1981, Dixon 1997, 1994, Payne 1997, Whaley 1997). The contrast between the two systems can be schematized in figure 2.3 below.

![Figure 2.3. Accusative vs. Ergative Systems](image)

Two points are to be noted here. First, following Anderson (1976), Dixon (1979, 1994) considers that the S/A-O or S/O-A contrast shown by the grammatical relation coding strategies is "morphologically or intra-clausal accusativity/ergativity," while the
S/A-O or S/O-A contrast manifested in syntactic processes, such as coordination, relativization, questioning etc., is "syntactic or inter-clausal accusativity/ergativity". In a "morphologically ergative" language, the "morphological/intra-clausal" marking (case marking/inflection, verbal agreement system, word order) is ergative but syntactic processes continue to operate in an accusative pattern, while in a "syntactically ergative" language, both syntactic processes as well as grammatical relation coding operate in an ergative pattern. Second, languages may exhibit "morphological accusativity/ergativity" in one, two, or all of the three grammatical-relation coding devices: nominal case marking, verbal agreement, or word order; and this is the main subject of this section.

Let us start with accusative type of languages. The following Quechuan examples illustrate an accusative actancy structure manifested by nominal case marking and verbal agreement.

(22) Huánuco Quechua; Quechuan, South America, data from Weber (1989), cited by Payne (1997:134, 136)
   a. *Juan-* away-n.
      Juan-Nom go-3s
      'Juan goes.'
   b. *Juan-* Pedro-ta maqa-n.
      Juan-Nom Pedro-Acc hit-3s
      'Juan hits Pedro.'
   c. Away-a.
      go-1s
      'I go.'
   d. Maqa-ma-n.
      hit-1s-3s
      'He hits me.'

As seen in (22)a and (22)b, the S (the third person singular) of an intransitive verb and
the A (the third person singular) of a transitive verb are both marked by nominative case -ο, while the O (the third person singular) of a transitive verb is marked by the accusative case -τα. Moreover, the S and the A have the same verbal agreement form -n for the third person singular as in (22)a and (22)d, while the S and the O have different verbal agreement forms -a and -ma, respectively, for the first person singular as in (22)c and (22)d. Thus, the accusative actancy structure of Quechuan is manifested by nominal case marking and verbal agreement.

Now let us look at the ergative type of languages. Similar to Quechuan, languages should also be able to exhibit an ergative actancy structure in nominal case marking and verbal agreement, as shown in the following Yup'ik examples.

(23) Yup'ik; Eskimo-Aleut, Alaska, data from Payne (1997:135-136)
   a. *Doris-aq ayalruu-aq.*
      Doris-Abs traveled-3s
      ‘Doris traveled.’
   b. *Tom-am Doris-aq cingallru-a.*
      Tom-Erg Doris-Abs greeted-3s
      ‘Tom greeted Doris.’
   c. *Ayalruu-nga.*
      traveled-1s
      ‘I traveled.’
   d. *Cingallru-a-nga.*
      greeted-3s-1s
      ‘He greeted me.’

As shown in (23)a and (23)b, the S (the third person singular) of an intransitive verb and the O (the third person singular) of a transitive verb are both marked by the absolutive case -aq, while the A (the third person singular) of a transitive verb is marked by the ergative case -am. In addition, the S and the O have the same verbal agreement form -nga for the first person singular as in (23)c and (23)d, while the S and the A have
different verbal agreement forms -q and -a, respectively for the third person singular as in (23)a and (23)d. Thus, the treatment of S together with O as distinct from A in the nominal case marking and verbal agreement defines Yup’ik as having an ergative system.

In addition, there are languages using constituent order and nominal case marking to exhibit ergativity, as illustrated in the following Kuikúro example.19

(24) Kuikúro, Cariban, Brazil, data from Franchetto (1990), cited by Payne (1997:138)

a. SV order
   Karaihá kacun-tárâ.
   Non-Indian work-Cont
   ‘The non-Indian is working.’

b. OVA order
   Kuk-aki-sâ ta-lâîgo léha karaihá-héke.
   1Pin-word-Pos hear-Fut Asp non-Indian-Erg
   ‘The non-Indian will hear our words.’

As seen in (24), in terms of the word order, the S and the O are grouped together, separating them from the A, in that the S/O precedes the verb, while the A follows the verb. In terms of case-marking system, the S and the O are unmarked (i.e., absolutive NPs), while the A is marked with the ergative case suffix -héke. Therefore, Kuikúro shows an ergative pattern both in its word order and its nominal case-marking system.

Two points are to be noted regarding constituent order here. First, the manifestation of accusativity or ergativity in word order is only possible for verb-medial languages (i.e., SV/AVO or VS/OVA for accusativity; SV/OVA or VS/AVO for ergativity). In all other logically possible word order types including verb-initial or verb-final languages, there can be no grouping of S with A against O or S with O against A because all the core arguments either precede the verb or follow the verb. Second, languages that exhibit an

---

19 It should be noted that Kuikúro is not a pure ergative language. Following Dixon (1994:105), Kuikúro exhibits “split-ergativity” (see section 2.3.2) conditioned by the factors: mood of the clause (“interactive” versus “descriptive”) and reference of the A NP.
ergative system by constituent ordering commonly also have ergative/absolutive case marking (Payne 1997:137) and allow alternative orders. Therefore, as noted by Dixon (1994:52), we would hesitate to characterize a language as ergative solely on the basis of word order.

There are languages such as Yalarnnga using case marking system alone20 as a grammatical relation device to exhibit its ergativity, as illustrated in (25).

(25) Yalarnnga; Pama-Nyungan, Queensland, data from Blake (1977:8)
   a. Kupi waya kunhu-ŋka.
      fish.Abs that water-Loc
      ‘That fish is in the water.’
   b. ŋia waka-mu.
      1s.Abs fall-Pst
      ‘I fell.’
   c. ŋatu kupi waŋa-mu.
      1s.Erg fish.Abs kill-Pst
      ‘I killed a fish.’
   d. Kupiŋku ŋia taca-mu.
      fish.Erg 1s.Abs bite-Pst
      ‘A fish bit me.’

As seen above, the S and the O (either common nouns or personal nouns) are all unmarked (i.e., absolutive case), while the A is marked by ergative case, with common noun suffixed by -ŋku and first person singular: ŋatu.

Since there are languages such as Yalarnnga exhibiting its ergativity in its case-marking system alone, there are, not surprisingly, languages manifesting ergativity solely on the basis of its verbal agreement system as well. They are commonly referred

20 Blake (1979:139) notes that Yalarnnga has almost no “bound pronoun” forms except for -ŋku used to mark the plural S or A of imperatives. It is the only example of an accusative system marking in this language.
to as "head-marking,"\(^{21}\) opposed to "dependent marking" languages (Nichols 1986, Whaley 1997, Song 2001). It has been observed this type of language is not rare, being found among North West Caucasian languages such as Abkhaz and Abaza (Allen 1956) and the Mayan languages of Mexico such as Tzotzil (Foley and Van Valin 1984:312) and Central America such as Sacapultec Maya (Du Bois 1987) and Quiché (Campbell 1976).

Consider the following Sacapultec Maya examples in (26).


a. Š-at-ak-ek.
   Completive-2s-enter-intrns
   'You (sg) entered.'

b. Š-o-ak-ek.
   Completive-3s-enter-intrns
   'S/he entered.'

c. Š-o-a:-č'i-y-aŋ.
   Completive-3s-2s-hit-trns
   'You (sg) hit him/her.'

d. Š-at-ri-č'i-y-aŋ.
   Completive-2s-3s-hit-trns
   'S/he hit you.'

Based on the examples above, the verbal agreement system in Sacapultec Maya is summarized in table 2.3.

<table>
<thead>
<tr>
<th>Agreement marking forms on verb</th>
<th>2SG</th>
<th>3SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>S of an intransitive verb</td>
<td>-at-</td>
<td>-o-</td>
</tr>
<tr>
<td>O of a transitive verb</td>
<td>-at-</td>
<td>-o-</td>
</tr>
<tr>
<td>A of a transitive verb</td>
<td>-a:ri-</td>
<td>-r:ri-</td>
</tr>
</tbody>
</table>

\(^{21}\) In head-marking languages, it is the head (e.g., the verb) that indicates the morphological marking of a head-dependent relationship, while in dependent-marking languages; it is the dependents (e.g., determiners) that show the morphological marking of a head-dependent relationship.
As shown in the table 2.3, the agreement forms referring to the S and the O are the same, while the agreement forms for the O are different. Therefore, the examples in (26) show that Sacapultec Maya exhibits an ergative pattern in its verbal agreement system.

To sum up, in this section, I have discussed how grammatical relation-coding devices (i.e., the case-marking system, the verbal agreement system, and/or word order) are used to manifest accusativity or ergativity. In the next section, I will discuss another type of actancy structure: "split actancy structure" (Lazard 1997, 1998), "split-ergativity," or "split-accusativity" (Dixon 1979, 1994).

2.3.2 Split Actancy Structure

The term "split actancy structure" or "split-ergativity" is referred to a combination of accusative and ergative systems that occurs in a language. The kind of factors that condition "split-ergativity," following Dixon (1994), can relate to the semantic nature of the core NPs, to the tense, aspect, or mood of the clause, or to the grammatical status of a clause, whether it is main or subordinate, etc.

Let us start with the kind of split that is conditioned by the semantic nature/referents of the core NPs. One of the clearest and classic examples is found in Dyirbal. When the core NPs are common nouns, they are inflected ergatively, as illustrated in (27). In contrast, when the core NPs are first or second person pronouns, they are inflected accusatively, as illustrated in (28).

(27) Dyirbal; Pama-Nyungan, Queensland, data from (Dixon 1972, 1994:10)
a. ŋuma-ŋ  banaga-nu.
father-Abs returned-NONFUT
‘Father returned.’
b. Yabu-ŋ banaga-nŋu.
   mother-Abs returned-NONFUT
   ‘Mother returned.’

c. ṭuma-ŋ yabu-ŋgu bura-n.
   father-Abs mother-Erg see-NONFUT
   ‘Mother saw father.’

(28) Dyirbal; Pama-Nyungan, Queensland, data from (Dixon 1972, 1994:14)

   1p-Nom return-NONFUT
   ‘We returned.’

   2p-Nom return-NONFUT
   ‘You all returned.’

c. nyura-ŋ ngana-na bura-n.
   2p-Nom 1p-Acc see-NONFUT
   ‘You all saw us.’

d. ngana-ŋ nyura-na bura-n.
   1p-Nom 2p-Acc see-NONFUT
   ‘We saw you all.’

As shown in (27), common nouns such as ṭuma ‘father’ and yabu ‘mother’, are inflected along ergative-absolutive lines, with the ergative case-marking form -ŋgu used for the A and a null absolutive case marker for the S and the O. However, as seen in (28), the first and second pronouns are inflected along nominative-accusative lines with a null nominative case marker for the S and A, and the accusative case-marking form -na for the O. Table 2.4 shows the split actancy structure in Dyirbal, conditioned by referents of the core NPs.
TABLE 2.4 SPLIT ACTANCY STRUCTURE IN DYIRBAL

<table>
<thead>
<tr>
<th>Case forms</th>
<th>Common nouns</th>
<th>1s/2s</th>
</tr>
</thead>
<tbody>
<tr>
<td>S of an intransitive verb</td>
<td>-Ø (absolutive)</td>
<td>-Ø (nominative)</td>
</tr>
<tr>
<td>O of a transitive verb</td>
<td>-Ø (absolutive)</td>
<td>-na (accusative)</td>
</tr>
<tr>
<td>A of a transitive verb</td>
<td>-ŋgu (ergative)</td>
<td>-Ø (nominative)</td>
</tr>
</tbody>
</table>

In fact, this type of split is very common in ergative languages such as Warrungu (Australian, Tsunoda 1988). Dixon (1979, 1994:85) suggests that such a split type essentially follows a general principal or universal as follows. If a language exhibits split ergativity conditioned by the referents of the core NPs, the ergative pattern is in general more likely for elements toward the right-hand end of the Nominal Hierarchy first proposed by Silverstein (1976), as in figure 2.4, while the accusative pattern is more likely for elements toward the left end of the hierarchy.

Dyirbal exactly complies with this hierarchy, in that it uses the accusative system for first and second person pronouns and the ergative system for third person pronouns and common nouns.

There are languages exhibiting a split between the case-marking system and the verbal agreement system, which Dixon (1979, 1994:94) considers to be a “secondary

---

22 The Nominal Hierarchy has been called an animacy/empathy hierarchy (Kuno 1976).
23 According to Dixon (1972, 1994:86), third person pronouns also follow an ergative pattern.
phenomenon" that can be explained in terms of the Nominal Hierarchy. According to Dixon (1994:95), cross-referencing/verbal agreement systems are basically pronominal\(^{24}\) (with the affixes probably having developed from free-from pronouns historically), so they are expected to be on a nominative-accusative pattern in terms of the Nominal Hierarchy. On the other hand, case marking on NPs is under no such constraint, and can be either nominative-accusative or absolutive-ergative. Hence, what one can predict is that if there is a split between the verbal agreement system (presumably “bound” forms) and the nominal case-marking system (on “free” forms), then the former will follow the accusative pattern and the latter the ergative pattern, but never the other way around (Dixon 1994:95-96). This type of split can be exemplified with the following Managalasi examples in (29).

(29) Managalasi; Trans-New Guinea, Papua New Guinea, data from (Payne 1997:154)

\[\begin{array}{ll}
a. & A-\sigma \ va?-ena. \\
 & 2s-Abs \ go-Fut.2s \\
 & \text{‘You will go.’} \\
b. & Na-\sigma \ va?-ejo. \\
 & 1s-Abs \ go-Fut.1s \\
 & \text{‘I will go.’} \\
c. & Na-ra \ a-\sigma \ an-a?-ejo. \\
 & 1s-Erg \ 2s-Abs \ hit-2s-Fut.1s \\
 & \text{‘I will hit you.’} \\
d. & A-ra \ na-\sigma \ an-i?-ena. \\
 & 2s-Erg \ 1s-Abs \ hit-1s-Fut.2s \\
 & \text{‘You will hit me.’} \\
\end{array}\]

\(^{24}\) Dixon (1994:950) notes that “cross-referencing affixes index a limited amount of information. They can make choices from a number of grammatical systems: basically person, number and gender. These systems provide a full characterization of pronouns, but supply only quite limited data on nouns. Verbal cross-references makes free-form pronouns in core functions virtually redundant; but at best it can only indicate the gender and number of a noun in a core syntactic function".
As shown here, Managalasi employs an ergative case-marking system for pronouns, with the pronominal S and O being unmarked, but with the pronominal A being marked with ergative form -ra. Verb agreement, however, uses an accusative system, with -ejo and -ena agreeing with first and second person singular S and A, but with -i?- and -a?- agreeing with O. Table 2.5 shows the split actancy structure between the case-marking system and the verbal agreement system in Managalasi.

**TABLE 2.5 SPLIT ACTANCY STRUCTURE IN MANAGALASI**

<table>
<thead>
<tr>
<th>Pronominal case marking</th>
<th>Verbal agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s/2s</td>
<td>1s</td>
</tr>
<tr>
<td>S of an intransitive verb</td>
<td>-Ø (absolutive)</td>
</tr>
<tr>
<td>O of a transitive verb</td>
<td>-Ø (absolutive)</td>
</tr>
<tr>
<td>A of a transitive verb</td>
<td>-ra (ergative)</td>
</tr>
</tbody>
</table>

Another factor, according to Dixon (1979, 1994), conditions the kind of split involving tense, aspect or mood of the clause. He finds that if a language exhibits a split system conditioned by tense/aspect/mood, ergativity would be expected in the past tense, perfective aspect and/or indicative mood, where a series of completed events could be related to O and S as pivots. On the other hand, accusativity would be expected in the non-past, imperfective aspect and/or interactive mood (e.g., imperative, hortative, intentional, etc.), in that something that has not yet happened is best thought of as a propensity of the potential agent (‘That man might hit someone’, rather than ‘That person might get hit by someone’), which may involve A and S as pivot (Dixon 1994:99-101).

This type of split is commonly found in the Indo-Aryan family, in languages such as Hindi and Pashto. Consider the following Pashto examples.
As seen in (30)a-b, the verb agrees with the S and the A in the nonpast/imperfective clause, which exhibits an accusative pattern. However, Pashto also exhibits an ergative system by the manifestation of case-marking and verbal agreement systems in past/perfective clauses. As seen in (30)c-d, the verb agrees with the S and the O in the past/perfective clause. In addition, the S and O are unmarked, while the A is inflected with the ergative case.

Thus, it appears that an ergative system is most likely to be found in clauses that describe some definite result, in past tense or perfective aspect, but is less likely to be used in clauses that refer to something that has not yet happened (in future tense), or is

25 Starosta (1999b) analyzes clauses in the present tense (e.g., the example in (30)b as intransitive in languages such as Pashto and Hindi, and considers the languages to be pure ergative languages, not “split-ergative”. In section 2.2.2.3, the type of construction in Pashto illustrated above appears to be a dyadic intransitive construction, according to the depictive predicate test of transitivity. Thus, it may be possible that Pashto and Hindi do not exhibit split-ergativity as often described in the linguistic literature. Here, following traditional fashion, I present them as languages with split actancy structure.
not complete (imperfective aspect) or did not happen (negative polarity), or where there is emphasis on the agent’s role (imperative or hortative moods) (Dixon 1994:101).

The last factor that conditions a split relates to the grammatical status of a clause, whether it is main or subordinate, etc. According to Dixon (1994:102), if a language exhibits a split in morphological marking between main and purposive clauses, the subordinate clause would be expected to show accusativity, while the main clause would require an ergative pattern. However, if the split occurs between main and relative clauses, the relative clause would be expected to show ergativity, while the main clause would follow an accusative pattern. The explanation for this by Dixon (1994:102) is that purposive clauses are like future tense/imperfective main clauses because they express some potential events as a propensity of the (A/S) agent, and thus demand an accusative marking, while relative clauses are like past tense/perfective main clauses because they simply describe something that has happened or is happening, and thus demand an ergative marking.

Languages with a split actancy structure determined by the grammatical status of clauses are less commonly found in the world. The following examples from Pāri, illustrate the type of split between main and purposive clauses, with ergativity exhibited in independent indicative clauses by constituent order, nominal case marking, and person marking forms on verbs (verbal agreement/clitics)\(^26\) as well, as in (31), and accusativity shown in purposive clauses as in (32).

\(^{26}\) It appears that Anderson (1988) does not determine whether the person marking forms attached either before or after the verbs in Pāri are verbal agreement affixes or clitics. However, he notes that “in transitives, pronominal subjects (S in this study) are expressed by absolutive pronouns preceding the verb or by prefixes, which should perhaps rather be considered absolutive proclitics” (Anderson 1988:296), but later he mentions that the same sets of preverbal pronouns and prefixes/proclitics are used for expressing
(31) Pâri; Western Nilotic, southern Sudan, data from Anderson (1988:292, 293, 297)

a. Main clause: intransitive, SV order
   Ûbûr-ø á-tûuk.
   Ubur-Abs Completive-play
   ‘Ubur played.’

b. Main clause: intransitive, SV order
   Dhâagø-ø á-mîel’.
   woman-Abs Completive-dance
   ‘The woman danced’

c. Main clause: OVA (unmarked) order
   Dhâagø-ø á-ỳâŋj Ûbûrr-ì.
   Buffalo-Abs Completive-insult Ubur-Erg
   ‘Ubur insulted the woman.’

d. Main clause: OVA (unmarked) order
   Ûbûrr-ø á-pîot dhâag-è.
   Ubur-Abs Completive-beat woman-Erg
   ‘The woman beat Ubur.’

e. Main clause: S verbal agreement/clitic preceding verb
   á-kwalâŋj-ò.
   1s-Completive-swim.Multi-SUF²⁷
   ‘I am swimming.’

f. Main clause: A verbal agreement/clitic following verb
   Dhâagò á-cëñnd-à.
   woman-Abs Completive-call.Multi-1s
   ‘I called the woman.’

The examples (31)a-d show that Pâri manifests ergativity both in its nominal

case-marking system and word order, with the S of an intransitive verb and the O of a
transitive verb being marked with the same absolutive case -ø, but with the A of a
transitive verb being marked with the ergative case suffix -ì. Moreover, for transitives,
the unmarked order is OVA as (31)c-d. When this order is compared with the intransitive

²⁷ Anderson (1988:290) does not discuss the use or the meaning of optional “suffixes” on verbs as in (31)e,
but it is clear that the “suffix” he uses does not refer to the person-marking forms as such.
clause (SV order) as in (31)a-b, the S and O are grouped again, preceding the verb, the A is different, following the verb. Finally, examples (31)e-f suggest that the person marking forms on verbs also follow an ergative pattern, with S/O verbal agreement forms/clitics preceding the verbs, and the A verbal agreement forms/clitics following the verbs, even though the two sets of the forms happen to be the same.

Although the main clauses in Päri exhibit an ergative pattern, however, the purposive/subordinate clauses appear to follow an accusative system, as shown in the following examples.

(32) Päri; Western Nilotic, souther Sudan, data from Anderson (1988:316)
   a. Purposive clause-intransitive
       Ñáän á-ci [kù kwáAt-á].
       1s Completive-go.Loc [Conj steal.CF.Antipass-Is]
       ‘I went to steal.’

   b. Purposive clause-transitive
       Ñáän á-ci [kù kwâl-á dhök].
       1s Completive-go.Loc [Conj steal-1s cows]
       ‘I went to steal the cows.’

As seen in (32) above, in Päri, contrasting with main clauses having an ergative pattern as in (31), purposive/subordinate clauses exhibit an accusative system, with S/A verbal agreement forms following the verb, and the O following the verb.

So far, following Dixon (1979, 1994), I have discussed the factors that condition the splits for “split-ergative” or “split-actant” languages: the referents of core NPs, the tense/aspect/mood of the clause, and the grammatical status of the clause. One point to be noted here is that most languages that show a “split-ergative” system operate with just one of the above conditioning factors, but there are some that involve a combination of two or even three conditioning factors. For instance, Päri shows two types of splits: a
split between main and subordinate clauses as already discussed, and a split between indicative and imperative mood, as illustrated in (33).

(33) Päri; Western Nilotic, southern Sudan, data from Anderson (1988:316)
a. Imperative clause-intransitive
   \[Párr-i'!\]
   jump-2s
   ‘Jump!’

b. Imperative clause-intransitive
   \[Páryy-u'!\]
   jump-2p
   ‘Jump!’

c. Imperative clause-transitive
   \[Máath' cáa'k!\]
   drink milk
   ‘Drink (2s) the milk!’

d. Imperative clause-transitive
   \[Máath'-t' cáa'k!\]
   drink-2p milk
   ‘Drink (2p) the milk!’

As seen above, in addition to purposive clauses, imperative clauses in Päri show an accusative system as well, with the verbs only suffixed with S and A person-marking forms, and with the person-marking forms always following the verb. Therefore, Päri appears to show a combination of two types of split, conditioned by tense/aspect/mood, and by whether the clauses are main or subordinate. In Päri, ergativity occurs in main indicative clauses, while accusativity occurs in imperative clauses and subordinate clauses.

In summary, languages discussed so far show “morphological or intra-clausal accusativity/ergativity” in grammatical relation coding such as case-marking system, verbal agreement system, and/or word order. In the following section, I will discuss
languages that exhibit accusativity/ergativity with respect to syntactic processes/phenomenon.

2.3.3 Syntactic Accusativity/Ergativity

As mentioned earlier, Dixon (1979, 1994), following Anderson (1976), distinguishes two types of ergativity: “morphological or intra-clausal accusativity/ergativity,” where S/A-O or S/O-A contrast is shown in grammatical relation coding, and “syntactic or inter-clausal accusativity/ergativity,” where S/A-O or S/O-A contrast is manifested in syntactic processes such as coordination, relativization, questioning, clefting etc. A language is a “morphologically ergative” language, if it shows “morphological/intra-clausal ergativity,” but “syntactic accusativity”. A language is “syntactically ergative”; if it displays both syntactic processes well as “morphological” marking operating in an ergative pattern.

Three points are to be noted here. First, it has been observed that most ergative languages are “morphological ergative,” and that ergative languages showing “syntactic ergativity” are less commonly found in the world (Dixon 1979, 1994). Second, “syntactic ergativity” entails “morphological ergativity” (Dixon 1994:172, Manning 1996:8). That is, no language is known that is ergative at the syntactic but not at the morphological level; however, a language can exhibit “morphological ergativity” without “syntactic ergativity”. Third, certain syntactic processes/phenomena such as reflexivization and equi-NP deletion appear to be universally sensitive to the accusative pattern, while others such as relativization and clefting are sensitive to the ergative

---

28 In every language, the controller of reflexivity (i.e., “antecedent”) is A (or S, where it is extended to intransitives) (Dixon 1994:139).
pattern in some languages, and the accusative pattern in others. Still others such as coordination are sensitive to neither in some languages. There are no processes/phenomena that are universally sensitive to the ergative pattern (Payne 1997:166).

"Morphologically ergative" languages and "syntactically ergative" languages will be discussed in sections 2.3.3.1 and 2.3.3.2, respectively.

2.3.3.1 "Morphologically ergative" languages

According to Anderson (1976) and Dixon (1979, 1994:2, 172), the majority of ergative languages are "morphologically ergative," with grammatical relation coding following an ergative pattern and syntactic phenomena/processes following an accusative pattern. However, this claim is not fully convincing for the following three reasons. First, Anderson (1976) does not use consistent syntactic phenomena/processes in establishing the "syntactic accusativity" of a given language. For instance, Anderson (1976) applies four syntactic phenomena to illustrate that Basque,29 Tongan, Kâte, and Abkhazian are "morphologically ergative" languages in terms of equi-NP deletion, subject raising, coordination, and reflexivization, respectively. Second, out of the four syntactic phenomena, the phenomena of equi-NP deletion and reflexivization may not be valid tests to examine the "syntactic accusativity" of a language, in that they are universally sensitive to an accusative pattern (i.e., S/A grouping). Third, Anderson (1976) does not incorporate other syntactic phenomena such as relativization, Wh-question formation, and clefting, into the test of "syntactic accusativity/ergativity".

29 Basque actually exhibits an active system.
One of the potentially effective phenomena that Anderson (1976) applies involves coordination. It is found to be sensitive to an accusative pattern in some languages such as English, or to an ergative pattern in other languages such as Dyirbal (Dixon 1979, 1994). In addition, it has also been reported to be “neutral” (not sensitive to S/A/O) in languages like Inuit, Tagalog, and Samoan (Manning 1996, Tsang 1999, DeLacy 1996).

Let us look at the Kâte examples provided by Anderson (1976), as in (34).

(34) Kâte; Trans-New Guinea, Papua New Guinea, data from Anderson (1976:14)

a. \(S_1 = A_2\)

\[
\text{Vale-la } be?-ko \text{ nana na-ve?.} \\
\text{come-Pst pig-Erg taro eat-3s.Pst}
\]

‘The pig came and ate taro.’

b. \(S_1, A_2 = S_3\)

\[
\text{Vale-la nana na-la be? guy fo-ve?.} \\
\text{come-Pst taro eat-Pst pig sleep lie-3s.Pst}
\]

‘The pig came, ate taro and lay down to sleep.’

c. \(O_1 \neq S_2\)

\[
**Go-ki (be) hone-la (be?) gesa2ke-ve. \\
2s-Erg (pig) see-Pst (pig) run-3s.Pst
\]

‘You saw a pig and he ran.’

As seen here, in Kâte, the nominal case-marking system follows an ergative system, with the S of an intransitive verb and the O of a transitive verb unmarked, while the A of a transitive verb is marked with -ko. On the other hand, the phenomenon of coordination follows an accusative system. In Kâte, a series of verbs may be coordinated, but the coreferential NP is expressed immediately before the last one, and this verb alone is marked for person agreement. As shown in (34), S can be coreferential with A, not with O in coordination. Therefore, Anderson (1976) considers Kâte to be a “morphologically ergative” language (without exhibiting “syntactic ergativity”).

72
Also based on the phenomenon of linking two clauses, Dixon (1979, 1994:172) regards Walmatjari as a “morphologically ergative” language because it shows an S/A grouping with respect to its three types of clause-linking constructions (-ula, -u, and tjia:).

It may be true that Kâte and Walmatjari show “syntactic accusativity” with respect to the phenomenon of clause combination, however, it is still too early to conclude that the two languages are “morphologically ergative,” in that there are still other syntactic phenomenon such as relativization, clefting and Wh-question formation that can be applied to determine the “syntactic accusativity/ergativity” of a language. I will discuss these syntactic phenomena in the following section.

2.3.3.2 “Syntactically ergative” languages

As already mentioned, in a “syntactically ergative” language, both syntactic processes as well as grammatical relation coding operate in an ergative pattern. One point to be noted is that most surveyed “syntactically ergative” languages still show accusative syntax in the syntactic phenomena that are sensitive to S/A grouping such as equi-NP deletion and reflexivization. In this section, I will provide examples of languages that show signs of “syntactic ergativity” in syntactic phenomena such as coordination, relativization, quantifier floating, questioning, clefting, topicalization and subject raising.

---

30 Walmatjari has a split system, with its nominal case marking showing ergativity and its verbal agreement system showing accusativity.

31 In addition to the phenomenon of coordination, Walmatjari also lacks an antipassive construction, which is another piece of evidence, according to Dixon (1979, 1994), that the language is not syntactically ergative. Dixon (1979, 1994) observes that an antipassive is necessary in “syntactically ergative” languages, because of the propensity of humans to wish to talk about the actions of a certain actor. “A language with thoroughgoing ergative syntax must have an antipassive derivation, to feed its S/O pivot, otherwise it could not operate” (Dixon 1994:174).
Let us start with the phenomenon of coordination.

This can be exemplified by the following Dyirbal examples. Recall that Dyirbal exhibits a split system in its case-marking system, with nouns and third person pronouns following an ergative pattern, but first and second person pronouns following an accusative pattern. However, it shows signs of "syntactic ergativity" with S/O grouping in terms of coordination, as illustrated in (35)-(36).

(35) Dyirbal; Pama-Nyungan, North Queensland, Australia, data from Dixon (1994:62)

a. \( S_1 = S_2 \)
   \[ yuma-\theta \ banaga-\theta u \ miyanda-\theta u. \]
   father-Abs return-NONFUT laugh-NONFUT
   ‘Father returned and laughed.’

b. \( O_1 = O_2 \)
   \[ yuma-\theta \ yabu-\eta gu \ bura-n \ jaja-\eta gu \ yamba-n. \]
   father-Abs mother-Erg see-NONFUT child-Erg hear-NONFUT
   ‘Mother saw father and the child heard (him/father).’

c. \( S_1 = O_2 \)
   \[ yuma-\theta \ banaga-\theta u \ yabu-\eta gu \ bura-n. \]
   father-Abs return-NONFUT mother-Erg see-NONFUT
   ‘Father returned and Mother saw (him).’

d. \( O_1 = S_2 \)
   \[ yuma-\theta \ yabu-\eta gu \ bura-n \ banaga-\theta u. \]
   father-Abs mother-Erg see-NONFUT return-NONFUT
   ‘Mother saw father and (he) returned.’

As shown in (35)a, when we combine two intransitive clauses, with the Ss in the two clauses being the same, the second S is suppressed. In (35)b, when we combine two transitive clauses, with the Os in the two clauses being the same, the second O is suppressed. In (35)c, when we combine an intransitive first clause with a transitive second clause, with the O of the transitive clause being the same as the S of the intransitive clause, the O is suppressed. In (35)d, when we combine a transitive first
clause and an intransitive second clause, with the S of the intransitive clause being the same as the O of the transitive clause, the S of the intransitive clause is suppressed.

However, if we want to combine two clauses, with the second clause being transitive and the A of this clause being the same as the S or the O of the first clause, it is necessary to apply antipassivization, as illustrated in the following examples.

(36) Antipassivization in Dyirbal coordination clauses
a. $S_1 \neq A_2$; $A_2$ needs to be converted into $S_2$ by antipassivization
   $yuma-\sigma$ banaga-n'u bural-ŋa-n'u yabu-gu.
   father-Abs return-NONFUT see-Antipass-NONFUT mother-Dat
   'Father returned and saw mother.'

b. $O_2 \neq A_2$; $A_2$ needs to be converted into $S_2$ by antipassivization
   $yuma-\sigma$ jaja-ŋgu ŋamba-n bural-ŋa-n'u yabu-gu.
   father-Abs child-Erg hear-NONFUT see-Antipass-NONFUT mother-Dat
   'The child heard father and he (father) saw mother.'

As seen above, if we want to combine the first intransitive/transitive and second transitive clauses, with the A of the second clause matching the S/O of the first one, we need to apply antipassivization to detransitivize the verb of the second clause, and thereby to convert the A into the S, as in (36)a-b. Thus, as illustrated in (35) and (36), in Dyirbal, two clauses may only be coordinated if they have a common NP which is in S/O function; the occurrence of this NP in the second clause is then generally omitted.

Therefore, Dyirbal, being a split ergative language in its case-marking system, shows "syntactic ergativity" with respect to coordination.

Similarly, the following Tongan examples also show a syntactically ergative pattern respect to coordination (i.e., S is coreferential with O, but not with A).
(37) Tongan; Polynesian, Tonga, data from Otsuka (2002)

a. Pea-coordination: S₁= S₂
   *Na‘e ‘ita ‘a Sione pea tangi ___.
   Past angry Abs Sione and cry ___.
   ‘Sione was angry and cried.’

b. Pea-coordination: S₁= O₂
   *Na‘e poto ‘a Sione pea filil ___ ‘e Pila.
   Past clever Abs Sione and choose ___ Erg Pila
   ‘Sione was clever and Pila chose (him).’

c. Pea-coordination: S₁≠A₂
   **Na‘epoto ‘a Sione pea fili ___ ‘a Pila.
   Past clever Abs Sione and choose ___ Abs Pila
   ‘Sione was clever and chose Pila.’

d. Pea-coordination: O₁= S₂, A₁≠ S₂
   Na‘e fili ‘e Sione ‘a Mele pea fieia ___.
   Past choose Erg Sione Abs Mele and happy ___
   ‘Sione chose Mele and (she/**he) was happy.’

e. Pea-coordination: O₁= O₂, A₁≠ O₂
   Na‘e fili ‘e Sione ‘a Mele pea fakalangilangi‘i
   Past choose Erg Sione Abs Mele and praise
   ‘e he pule ___.
   Erg the boss ___
   ‘Sione chose Mele and the boss praised (her/**him).’

As shown in (37), coordination by the sequential conjunction *pea* in Tongan
demonstrates an ergative pattern. In coordinated clauses, the S/O can be a coreferential
pair as (37)a, (37)b, (37)d, and (37)e, but never with the A as in (37)c-(37)e.

The Dyirbal and Tongan examples above have illustrated that the two languages
exhibit “syntactic ergativity” in terms of coordination, with S/O grouping together,
distinguishing them from A.32

---

32 On the other hand, in a “syntactically accusative” language such as English, O is distinguished from S/A
with respect to coordination. S and A can be coreferential, whereas neither S nor A can be coreferential
with O, as illustrated in the following examples.

(a). The man, came in and e1 saw the woman.

76
The second syntactic phenomenon to be discussed here involves relativization. In a
“syntactically ergative” language relativization can only be applied to S and O
(absolutive NPs), but not to A (ergative NPs). This can be illustrated by the following
examples from Dyirbal, Tagalog, and Tongan as in (38)- (40).

(38)  Dyirbal; Pama-Nyungan, North Queensland, Australian, data from Dixon
(1979:127-28)
a.  Relativization of the S in an intransitive clause
\[ yuma-ŋu \ yabu-ŋ \ [ _ \ duŋgara-ŋu-ru \ ] \ bura-n. \] (Gap strategy)
father-Erg  mother-Abs  [ _  cry-Rel-Abs]  see-NONFUT

Mother, who was crying, saw father.’
b.  Relativization of the O in a transitive clause
\[ yuma-ŋ \ [ yabu-ŋu \ _ \ bura-ŋu \ ] \ duŋgara-n'u. \] (Gap strategy)
father-Abs  [ mother-Erg  _  see-Rel  ]  cry-NONFUT

Father, who mother saw, was crying.’
c.  Relativization of the A in a transitive clause
\[ *yuma-ŋ \ [ \ _ \ bura-ŋu \ yabu-ŋ ] \ duŋgara-n'u. \] (Gap strategy)
father-Abs  [ _  see-Rel  mother-Abs  ]  cry-NONFUT

‘Father, who saw mother, was crying.’
d.  Relativization of the A after antipassivization
\[ yuma-ŋ \ [ \ _ \ bura-ŋa-ŋu \ yabu-gu \ ] \ duŋgara-n'u. \] (Gap strategy)
father-Abs  [ _  see-Antipass-Rel  mother-Dat  ]  cry-NONFUT

‘Father, who saw mother, was crying.’

In Dyirbal, only the S of an intransitive clause and the O of a transitive clause can be
relativized by a gap strategy as shown in (38)a and (38)b. However, it is not possible to
directly relativize the A of a transitive clause as in (38)c. Rather, it is first necessary to

(b).  **The man, came in and the woman saw e.
(c).  The man, saw the woman, and e,** laughed.
(d).  **The man likes the woman and John hates e.

As seen above, (a) is grammatical, with the gapped A of the second clause being coreferential with the S of
the first clause. In contrast, (b) is ungrammatical because the gap, being the O of the second clause, cannot
be coreferential with the S of the first clause. Furthermore, (c) shows that when the gap is the S, it can only
be coreferential with the A of the first clause. Moreover, (d) illustrates that a combination of O with O is
also prohibited in English. Hence, the generalization is that the gap can only be S/A and not O in an
accusative language.
apply antipassivization, detransitivizing the verb and thereby converting the A into the S of an intransitive verb, so it now can be relativized, as in (38)d. Thus, in addition to coordination as already discussed, Dyirbal shows signs of “syntactic ergativity” with respect to relativization as well.

A similar phenomenon can be observed in Tagalog as well as illustrated in (39).

(39) Tagalog, Western Malayo-Polynesian, Philippines, data from O’Grady (1999:165)

a. Relativization of the S in an intransitive clause
   \[ \text{ang lalaki=ng [ tumakbo nang mabilis \underline{___}].} \]
   \[ \text{the man=LIG [ intrns.run Adv.AF fast \underline{___}]} \]
   ‘the man who ran fast.’

b. Relativization of the O in a transitive clause
   \[ \text{ang lalaki=ng [ itinulak ng babae \underline{___}].} \]
   \[ \text{the man=LIG [ trns.push Erg woman \underline{___}]} \]
   ‘the man whom the woman pushed.’

c. Relativization of the A in a transitive clause
   \[ **\text{ang lalaki=ng [ itinulak \underline{___} ang babae}.} \]
   \[ \text{the man=LIG [ trns.push Abs woman \underline{___}]} \]
   ‘the man who pushed the woman’

d. Relativization of the A after antipassivization
   \[ \text{ang lalaki=ng [ tumulak sa babae \underline{___}].} \]
   \[ \text{the man=LIG [ trns.push Loc woman \underline{___}]} \]
   ‘the man who pushed the woman’

Like Dyirbal, Tagalog allows S and O to be relativized directly by utilizing the gap strategy as shown in (39)a and (39)b. However, it does not allow A to be relativized directly as in (39)c. Instead, the verb needs to be detransitivized first (i.e., by antipassivization) in order to convert the A into S, then the S can be relativized, as in (39)d.

Tongan is also found to show “syntactic ergativity” relating to relativization, with the relativization of S/O by the gap strategy and A by the resumptive pronoun strategy, as illustrated in (40).
As seen above, in Tongan S and O can be relativized by the gap strategy as in (40)a and (40)b, while A cannot be relativized by the gap strategy, but by utilizing the resumptive pronoun strategy as in (40)c and (40)d. Thus, Tongan exhibits “syntactic ergativity” with respect to relativization.

As illustrated in (38)-(40), Dyirbal, Tagalog, and Tongan all exhibit “syntactic ergativity” (i.e., S/O-A contrast) in terms of relativization.

Another phenomenon that relates to “syntactic ergativity” is quantifier floating.

Quantifiers usually occur within an NP, but they may be floated from the NP to a position outside the NP (Perlmutter and Postal 1974). An ergative language may show “syntactic ergativity” in terms of quantifier floating, with floated quantifiers always understood to be associated with S/O not A. This can be illustrated by the following Tagalog examples, where a floated quantifier is always being associated with S/O (i.e., the ang-marked, or absolutive NP), not with the A (i.e., ergative NP).
(41) Tagalog, Western Malayo-Polynesian, Philippines, data from Schachter and Otanes (1972:148)

a. A floated quantifier associated with the S of an intransitive verb

Natutulog lahat [ang mga batà].

intrns.sleep all [Abs PI child]

‘All of the children are sleeping.’

b. A floated quantifier associated with the O of a transitive verb

Binasa lahat [ng mga batà] [ang mga libro].

<trns.Pst>read all [Erg PI child] [Abs PI book]

‘The children read all the books.’

c. A floated quantifier associated with the A of a transitive verb

**Binasa=ng lahat [ng mga batà] [ang libro].

trns.Pst.read all [Erg PI child] [Abs book]

‘All the children read the book’

d. After antipassivization:

Bumasa=ng lahat [ng libro] [ang mga batà].

intrns.read all [Obl book] [Abs PI child]

‘All the children read a book.’

As illustrated here, it is possible for a floated quantifier to be associated with the S and O as in (41)a-b, but not with the A, as in (41)c. In (41)a, the quantifier lahat ‘all’ is associated with S (i.e., the absolutive NP) ang mga batà ‘the children’ and with O (i.e., the absolutive NP) ang mga libro ‘the books’ in (41)b. However, it is not possible to allow the quantifier lahat ‘all’ to be associated with the A (i.e., the ergative NP) ng mga batà ‘children’ in (41)c. Instead, it is necessary to apply what is known as ‘antipassivization’ to (41)c, first detransitivizing the verb, thereby converting the A into S, so that the floated quantifier can be associated with this S as shown in (41)d. Notice in (41)c the verb carries a non-future affix -in-. 33 However (41)d, this transitive verb becomes intransitive bumasa ‘read’ by changing the affixation into an intransitive

---

33 The infix -in- is the marker of non-future aspect for all transitive verbs in Tagalog. This affix does not allow the co-occurrence on the verb of the suffix -in, which with future aspect “Patient Focus” verbs are marked.
affix -um- by antipassivization). The fact that the NP libro ‘a book’ is marked as oblique with ng, while the NP mga batà ‘children’ is marked as absolutive with ang in (41)d shows that the verb has been detransitivized. The quantifier can now be associated with ang mga batà ‘the children’. These examples show that Tagalog exhibits “syntactic ergativity” with respect to the phenomenon of quantifier floating.

Another phenomenon that can be applied to test “syntactic ergativity” involves clefting. An ergative language may show “syntactic ergativity” in cleft clauses, in which only S/O, not A can be the cleft NP. This can be exemplified by the following Kavalan examples.

(42) Kavalan; Austronesian, Taiwan, data from Chang (1997:155-156)

a. Clefting of the S in an (extended) intransitive clause

\[ Ti \ Utay \ ya \ qeman \ tu \ Raaq. \]
Nom Utay Nom intrns.eat Obl wine

‘It is Utay who is drinking wine.’

b. Clefting of the O in a transitive clause

\[ Raaq \ ya \ qanan \ ni \ Utay. \]
wine Nom trns.eat Gen Utay

‘It is the wine that Utay drank.’

c. Clefting of the A in a transitive clause

\[ **Ti \ Utay \ ya \ qanan \ ya \ Raaq. \]
Nom Utay Nom trns.eat Nom wine

‘It is Utay who is drinking wine.’

As seen in (42), Kavalan only allows S/O, but not A to be the cleft NP in clefted sentences, indicating that Kavalan shows signs of “syntactic ergativity” with respect to the phenomenon of clefting.

A similar phenomenon is also found in Malagasy, as illustrated in the following examples.

34 The affix -um/-m- is commonly analyzed as “Actor Focus” in the study of Philippine type of languages.
Malagasy; Austronesian, Madagascar, data from Keenan (1976:268); Travis and Williams (1983:58, 75)

a. Clefting of the S in an (extended) intransitive clause
   
   *Rasoa no man-asa ny lamba amin 'ity savony ity.*
   Rosoa cleft intrns-buy the clothes with this soap this
   'It is Rosoa who is washing clothes with this soap.'

b. Clefting of the O in a transitive clause
   
   *Ny vary no vidi-n'-ny lehilahy.*
   the rice cleft buy-trns-Gen man
   'It is the rice which the man bought.'

c. Clefting of the A in a transitive clause
   
   **Ny lehilahy no vidi-n' ny vary.**
   the man cleft buy-trns the rice
   'It is the man who bought the rice.'

As seen above, like Kavalan, Malagasy also allows S/O, but not A to be a cleft NP. This demonstrates that Malagasy shows "syntactic ergativity" with respect to cleft clauses as well.

Next, I discuss the phenomenon of Wh-question formation.

It has been reported that the formation of *Wh*-questions is subject to a variety of constraints across languages. Some of these constraints pertain to the grammatical relation of the *wh*-word itself. An ergative language may exhibit "syntactic ergativity" in terms of *Wh*-questions, with a *wh*-word only being S/O, not A. This can be illustrated by the following Tagalog examples of the *Wh*-clef pattern. 35

(44) Tagalog, Western Malayo-Polynesian, Philippines, data from O'Grady (1999:176)

a. A *wh*-word is the S of an intransitive clause
   
   *Sino ang pumasok?*
   who Comp intrns.enter
   'Who entered?'

---

35 In Tagalog, *Wh*-questions can be formed in two ways: the *Wh*-clef pattern (NP_{wh}-NP) and the *Wh*-in-situ pattern. The former requires *wh*-words to be S/O, not A, but the latter has no such constraint (the *wh*-word can be S, A, or O).
b. A *wh*-word is the O of a transitive clause
   
   \[ \text{Ano ang binili ng tao?} \]
   
   what Comp trns.buy Erg man
   
   ‘What did the man buy?’

c. A *wh*-is the A of a transitive clause
   
   \[ **Sino ang bumili ang damit?** \]
   
   who Comp trns.buy Abs dress
   
   ‘Who bought the dress?’

d. After antipassivization:
   
   \[ Sino ang bumili ng damit? \]
   
   who Comp intrns.buy Obl dress
   
   ‘Who bought the dress?’

Like the phenomenon of clefting already discussed, (44)a-b show that in the *Wh*-cleft pattern, a *wh*-word can be either S or O (the absolutive NP), respectively in Tagalog.

Example (44)c is ungrammatical because a *wh*-word in such a pattern can not be an A of a transitive verb (i.e., the ergative NP). In order to question the A of a transitive verb, it is necessary to detransitivize the verb by antipassivization, converting the A into the S of an intransitive verb as in (44)d. The S can then be a *wh*-word. Tagalog thus exhibits “syntactic ergativity” in its *wh*-cleft pattern of question formation.

Finally, let us consider the phenomenon of topicalization, in which the prominent NP is dislocated to the leftmost of a sentence. An ergative language may show “syntactic ergativity” in terms of topicalization, in which only S and O, but not A can be topicalized. This can be illustrated by the following Seediq examples.

(45) Seediq; Austronesian, Taiwan, data from Chang (1997:166-67)
   
a. Topicalization of the S of an intransitive clause
   
   \[ Pawan ge mekan ido. \]
   
   Pawan Top intrns.eat rice
   
   ‘Pawan, (he) is eating rice.’
b. Topicalization of the O of a transitive clause
\[ \text{Ido ge puq-un na Pawan.} \]
rice Top trns.eat Gen Pawan

'As for the rice, Pawan will eat (it).'

c. Topicalization of the A of a transitive clause
\[ **\text{Pawan ge puqun ka ido.} \]

Pawan Top trns.eat Nom rice

'Pawan, (he) will eat rice.'

The examples above illustrate that Seediq shows "syntactic ergativity" in terms of topicalization, in that only S/O, not A can be topicalized.

In addition to Seediq, Tagalog also exhibits "syntactic ergativity" with respect to topicalization as illustrated in the following examples.

(46) Tagalog, Western Malayo-Polynesian, Philippines, data from Shibatani (1988:130) and Manning (1996:18)

a. Topicalization of the S of an intransitive clause (Gap strategy)
\[ \text{Ang mga bata, naglalaro.} \]
Det Pl child intrns.play

'As for the children, they are playing.'

b. Topicalization of the O of a transitive clause (Gap strategy)
\[ \text{Ito=ng tasa, binili ko sa pamilihan.} \]
this=LIG cup trns.Pst.buy 1s.Gen Loc market

'This cup, I bought it at the market.'

c. Topicalization of the A of a transitive clause (Resumptive pronoun strategy)
\[ \text{Si Juan, linuto niya ang pansit.} \]
Nom Juan trns.cook 3s.Gen Det noodles

'Juan, he cooked the noodles.'

As seen above, in Tagalog, S, O and A can all be topicalized. However, there remains an S/O-A contrast in terms of the strategy of topicalization. As in (46)a and (46)b, the topicalized S and O are fronted and correspond to the gaps in the clauses, while the topicalized A requires a resumptive pronoun in the clause. Thus, in terms of the phenomenon of topicalization, Tagalog also exhibit "syntactic ergativity".
I have so far discussed examples of languages that exhibit “syntactic ergativity” with respect to syntactic phenomena such as coordination, relativization, quantifier floating, Wh-question formation, cleft sentences, and topicalization. As mentioned earlier, “syntactically ergative” languages still show an accusative syntax in phenomena sensitive to S/A grouping like equi-NP deletion and reflexivization.

Moreover, some languages may combine “syntactic ergativity” (or “S/O pivot”) and “syntactic accusativity” (or “S/A pivot”) in phenomena other than equi-NP deletion and reflexivization. This can be illustrated from Tongan. Recall earlier that Tongan exhibits “syntactic ergativity” in the phenomenon of coordination when the sequential conjunction pea is used. However, there is another coordination, where the clauses are linked by the simultaneous conjunction mo. In this type of coordination, an accusative pattern is found, as illustrated in (47).

(47) Tongan; Eastern Malayo-Polynesian, Tonga, data from Otsuka (2002)
a. Mo-coordination: $S_1 = S_2$
   $Na'e$ 'ita 'a Sione mo tangi ___
   Pst angry Abs Sione and cry ___
   'Sione was angry and cried.'

b. Mo-coordination: $S_1=A_2$
   $Na'e$ poto 'a Sione mo fili ___ 'a Pila.
   Pst clever Abs Sione and choose ___ Abs Pila
   'Sione was clever and chose Pila.'

c. Mo-coordination: $S_1 \neq O_2$
   **$Na'e$ poto 'a Sione mo fili ___ 'e Pila.
   Pst clever Abs Sione and choose ___ Erg Pila
   'Sione was clever and Pila chose (him).'</n
d. Mo-coordination: $O_1 \neq S_2, A_1 = S_2$
   $Na'e$ fili 'e Sione 'a Mele mo fiefia ___
   Pst choose Erg Sione Abs Mele and happy ___
   'Sione chose Mele and (he/**she) was happy.'
The examples in (47) illustrate that Tongan also exhibits “syntactic accusativity” with respect to mo-coordination. In coordinated clauses, S/A can be a coreferential as in (47)a, (47)b, and (47)e. However, S or A can never be coreferential with O as shown in (47)c-(47)e. Therefore, in Tongan, clauses coordinated by mo use an accusative system (“S/A pivot”), while those linked by pea use an ergative system (“S/O pivot”).

To sum up, all the languages discussed in this section have ergativity manifested in both their grammatical relation coding and syntactic phenomena. It has been observed that “syntactic ergativity” entails “morphological ergativity” (Dixon 1994:172, Manning1996:8). No language is known that is ergative at the syntactic but not at the morphological level; however, a language can exhibit “morphological ergativity” without “syntactic ergativity” as discussed in section 2.3.3.1. On the other hand, there are no examples of languages that are “morphologically accusative” with “syntactic ergativity” except where there is a split, as in Dyirbal, where the first and second person pronouns follow an accusative system, but other NP and third person pronouns follow an ergative system.

Having discussed the two main types of actancy structures: accusative system and ergative system (including “split-ergativity” and “syntactic ergativity”), I will turn to the other two types of actancy structure, active and three-way (or tripartite) systems in the following sections 2.3.4 and 2.3.5, respectively.
2.3.4 Active Actancy Structure

In an active (or agentive or dual actancy) system, some S arguments are treated in the same way as A arguments and other S arguments as O arguments. That is, in such a system, the single actant of an intransitive verb can have the same grammatical relation coding as either the A or the O of a transitive verb, depending on the semantics/pragmatics of intransitive verbs. In general, when an intransitive verb has a volitional reading, its single core argument $S_a$ (usually understood to be agent-like) would have the same grammatical relation coding as the A of a transitive verb. On the other hand, when an intransitive verb has a non-volitional reading, its single core argument $S_o$ (usually understood to be theme-like) would have the same grammatical relation coding as the O of a transitive verb. Figure 2.5 illustrates such a system.

![Figure 2.5 Active System](image)

Three points are to be noted here. First, there appears to be a fairly obvious semantic basis for the distinction between the two types of S arguments, although the basis can vary subtly from language to language (Mithun 1991). For example, in modern colloquial Gurani (Tupi-Guarani, Paraguay), intransitive verbs that describe dynamic events fall into the $S_a$ class, while those that describe dynamic states fall into the $S_o$ class.
In Lakhota (Siouan, upper Midwestern United States), intransitive verbs in which the S is a “doer” take S_a, while those in which the S is an “undergoer” take S_o. In Central Pomo (Hokan, California), the S_a- S_o contrast is sensitive to whether or not the event is under the control of the S. Second, there are no languages for which S_o is treated like A, while S_a is treated like O. This universal makes sense in terms of identifying function of grammatical relations. S_a is functionally more like a prototypical A, in that both act with volition and control. Similarly, S_o is functionally more like a prototypical O in that both receive or undergo the action expressed by the verb. It would be dysfunctional for S_a to share grammatical relation coding with O, while S_o shares grammatical relation coding with A. Third, some languages can treat the S of certain intransitive verbs as either A or O depending on the semantics of each particular context of use. For example, the concept expressed in English as to fall can either be conceived as something the S ‘does’ or as something that the S ‘undergoes’.

Thus, an active system can be divided into two types: a split active (or split-S) system, in which each intransitive verb has fixed class membership, either S_a (of unergatives) or S_o (of unaccusatives), generally on the basis of its prototypical meaning, and a fluid active (or fluid-S) system, in which each intransitive verb has the possibility of two kinds of markings for its core NPs: S_a used when the referent of the S controls the activity, and S_o when control is lacking (Dixon 1979, 1994:71-83). In a split active system, if one wants to use a verb which deals with a prototypically non-control activity to describe that activity done purposely, then it would still take the S_o marking.

36 An unergative verb is an intransitive verb that takes an agent-like core argument, while an unaccusative verb is an intransitive verb that takes a theme-like core argument.
Similarly, for a verb describing a prototypically controlled activity used to refer to that activity happening accidentally, the S<sub>a</sub> marking would still be used. On the other hand, in a fluid active system, (certain) intransitive verbs can take either S<sub>a</sub> or S<sub>o</sub>, depending on whether or not the S can control the action expressed by the verb (i.e., in terms of semantics of each particular context of use). If the S controls the activity, it would be marked the same as the A of a transitive verb, while if the S does not control the activity, it would be marked as the O of a transitive verb.

A split active system manifested in verbal agreement can be illustrated by the Lakhota examples in (48).

(48) Lakhota; Siouan, USA, data from Van Valin (1985:365-6), cited from Palmer (1994:66)

a. Transitive verb
   Ma-yá-kté.
   1s-2s-kill
   ‘You killed me.’

b. Transitive verb
   o-wa-kté.
   3s-1s-kill
   ‘I killed him.’

c. Transitive verb
   Ni-o-kté.
   2s-3s-kill
   ‘He killed you.’

d. Unergative intransitive with an S<sub>a</sub>
   Wa-hí.
   1s-arrive
   ‘I arrived.’

37 As noted by Dixon (1994:79), in practice, some verbs refer to activities that are always likely to be controlled and these are always likely to be marked as S<sub>a</sub>; other verbs refer to activities or states that are likely never to be controlled and these are always likely to be shown as S<sub>o</sub>. However, there will be many verbs in a middle region, referring to activities where there can either be control or not, and these may accordingly be marked either as S<sub>a</sub> or S<sub>o</sub> (Dixon (1994:79).
e. Unergative intransitive with an $S_a$
   \textit{Yu-2ú}.
   2s-come
   'You are coming.'

f. Unaccusative intransitive with an $S_o$
   \textit{Ma-kwiže}.
   1s-sick
   'I am sick.'

g. Unaccusative intransitive with an $S_o$
   \textit{Ni-hāke}.
   2s-tall
   'You are tall.'

As shown in $(48)a$, $(48)b$, $(48)d$, and $(48)e$, the $S_a$ of an unergative intransitive verb and the A of a transitive verb use identical verbal agreement forms for the first and second person singular, \textit{wa-} and \textit{ya-}, respectively. On the other hand, as in $(48)a$, $(48)c$, $(48)f$, and $(48)g$, the $S_o$ of an unaccusative intransitive verb and the O of a transitive verb use identical verbal agreement forms for the first and second person singular, \textit{ma-} and \textit{ni-}, respectively. Thus, Lakhota exhibits a split active system with respect to its verbal agreement, as summarized in table 2.6.

\textbf{TABLE 2.6 VERBAL AGREEMENT FOR 1S AND 2S IN LAKHOTA}

<table>
<thead>
<tr>
<th></th>
<th>Verbal agreement form</th>
</tr>
</thead>
<tbody>
<tr>
<td>A of a transitive verb</td>
<td>$wa$- $ya$-</td>
</tr>
<tr>
<td>$S_a$ of an unergative verb</td>
<td>$wa$- $ya$-</td>
</tr>
<tr>
<td>O of a transitive verb</td>
<td>$ma$- $ni$-</td>
</tr>
<tr>
<td>$S_o$ of an unaccusative verb</td>
<td>$ma$- $ni$-</td>
</tr>
</tbody>
</table>

A similar sort of contrast is found in Eastern Pomo as in $(49)$, where the first person singular pronoun has the form \textit{hār} when it functions as A of a transitive verb or as $S_a$ of an unergative verb, and the form \textit{wí} when it functions as O of a transitive verb or as $S_o$ of an unaccusative verb.
a. Transitive verb
   \textit{Xá:su:là wi ko:k'óya.}
rattlesnake 1s bit
   ‘A rattlesnake bit me’

b. Transitive verb
   \textit{Há· mi-pal ša·k’a.}
1s him killed
   ‘I killed him.’

c. Unergative intransitive verb with an \textit{Sa}
   \textit{Há· wá-du-kiya.}
1s go
   ‘I’m going.’

d. Unaccusative intransitive verb with an \textit{So}
   \textit{Wi pečkiya.}
1s sneezed
   ‘I sneezed.’

In addition to the split active system, Eastern Porno also exhibits a fluid active system in certain intransitive verbs, as illustrated in (50).

a. Intransitive verb with a volitional reading
   \textit{Há· c’e-xéľka.}
1s slip
   ‘I’m sliding (actively, voluntarily).’

b. Intransitive verb with a non-volitional reading
   \textit{Wi c’e-xéľka.}
1s slip
   ‘I’m slipping (involuntarily, accidentally).’

As seen in (50)a, when the intransitive verb \textit{c’e-xéľka} ‘slip’ has a volitional reading, \textit{há·} is used. This is the same form used for the \textit{A} of a transitive verb. On the other hand, as seen in (50)b, when the intransitive verb \textit{c’e-xéľka} ‘slip’ has a non-volitional reading, \textit{wi} is used. This is the same form for the \textit{O} of a transitive verb. Therefore, the examples in
(49) and (50) show that Eastern Pomo exhibits a split-S and fluid-S systems, in that it has some intransitive verbs that require $S_a$, others that require $S_o$, and still others that allow either $S_a$ or $S_o$, suggesting that split-S and fluid-S languages do not constitute two mutually exclusive language types. The pronominal forms for first person singular are shown in table 2.7.

**TABLE 2.7 PRONOMINAL FORMS FOR 1S IN EASTERN POMO**

<table>
<thead>
<tr>
<th></th>
<th>1s</th>
</tr>
</thead>
<tbody>
<tr>
<td>A of a transitive verb</td>
<td>$há$</td>
</tr>
<tr>
<td>$S_a$ of an unergative verb</td>
<td>$há$</td>
</tr>
<tr>
<td>$S_a$ of an intransitive verb with a volitional reading</td>
<td>$há$</td>
</tr>
<tr>
<td>O of a transitive verb</td>
<td>$wí$</td>
</tr>
<tr>
<td>$S_o$ of an unaccusative verb</td>
<td>$wí$</td>
</tr>
<tr>
<td>$S_o$ of an intransitive verb with a non-volitional reading</td>
<td>$wí$</td>
</tr>
</tbody>
</table>

In conclusion, in both split active and fluid active systems, $S_a$ is treated like A and $S_o$ like O. However, there is a fundamental difference between the two (which are often confused). As Dixon (1994:82) points out, in a split active system, intransitive verbs are divided into two sets, generally on semantic grounds, but each still has a single syntactic frame available, according to its prototypical assignment. On the other hand, in a fluid active system, each intransitive verb has the potentiality of taking either A or O marking, to directly reflect its context of use.

Having discussed the active system, I will turn in the following section to an even more unusual actancy structure: the three-way system.
2.3.5 Three-way Actancy Structure

In a three-way (or tripartite) system, the S of an intransitive verb, and the A and O of a transitive verb are different from one another in terms of grammatical relation coding, as sketched in figure 2.6.

FIGURE 2.6 THREE-WAY OR TRIPARTITE OR SYSTEM

A three-way system can be illustrated by the following Antekerrepenhe examples.

(51) Antekerrepenhe; Arandic, Central Australia, data from Bittner and Hale (1996:51), cited in O'Grady (1999:80)

a. *Arengke-le aye-nhe ke-ke.*
   dog-Erg me-Acc bite-Pst
   ‘The dog bit me.’

b. *Arengke-o nterre-ke.*
   dog-Nom run-Pst
   ‘The dog ran.’

As shown above, Antekerrepenhe exhibits a three-way system in its case marking, with S, A and O each having distinct case marking. The S of an intransitive verb is unmarked, the A of a transitive verb is marked with –le, and the O of a transitive verb is marked with –nhe.
Languages exhibiting a three-way system are very rare. A group of Australian languages from southeast Queensland, including Wangkumara (Breen 1976, Whaley 1997:158) and Galali (McDonald and Wurm 1979) have been reported to have distinct marking for S, A and O across all NP constituents (Dixon 1994: 41). In addition, the Mayan language, Chorti, (Quizar and Knowles-Berry 1988) has been found to have different sets of verbal affixes for each of S, A, and O in imperfective aspect, with set A used for A, set B for O and set C for S (Dixon 1994:45).

2.3.6 Summary

To conclude, I have discussed four types of actancy structure including an accusative pattern, an ergative pattern, an active system, and three-way system. In an accusative system, S and A have the same grammatical relation coding (i.e., case marking/inflection, cross-referencing on verb/verbal agreement, and/or constituent order), distinct from O. In an ergative system, however, S and O are treated in the same way with respect to grammatical relation coding, separating them from O. In an active system, the Sa of an intransitive verb and an A have the same grammatical relation coding, while the So of an intransitive verb is treated like an O. Finally, in the three-way system, S, A, and O each has a distinct grammatical relation coding. Table 2.8 summarizes the grouping of S, A, and O for each of the four systems with respect to grammatical relation coding.

---

38 However, in Chorti, perfective clauses follow an ergative pattern, with set B used for both S and O, and set A for A.
In addition to the four types of actancy structures, the split actancy structure has also been discussed. In such a system, accusative and ergative patterns combine with each other in a split way, conditioned by the following factors: the semantic nature of the core NPs, to the tense, aspect, or mood of the clause, or to the grammatical status of a clause, whether it is main or subordinate, etc.

I have also paid attention to the two types of ergativity, "morphological ergativity" and "syntactic ergativity". The former refers to ergativity that is exhibited in grammatical relation coding, while the latter is manifested in syntactic processes or phenomena such as relativization, coordination etc. The fact that some syntactic phenomena can be sensitive to the ergative system (e.g., relativization in Dyirbal) illustrates that ergativity need not necessarily be merely a surface morphological phenomenon.

Finally, having discussed transitivity and actancy structures in this chapter, it now is time to turn to the discussion and description of Thao with respect to these issues. In the next chapter, I will deal with transitivity in Thao.
CHAPTER 3
TRANSITIVITY IN THAO

3.1 INTRODUCTION

In studies of Formosan, Philippine, and other western Austronesian languages,\(^1\) the distinction between “valency” and “transitivity” has often been neglected. Linguists working on these languages often analyze clause structures based mainly on valency or translation instead of (grammatical) transitivity. That is, they simply consider monadic clauses as intransitive clauses, and dyadic clauses as transitive clauses without looking into the relevant morphosyntactic and semantic properties that each exhibits. As a result, many such languages are analyzed as having two distinct types of transitive constructions and an unconditional split-ergative system, something that is typologically uncommon. Thao, being no exception, has been commonly analyzed in this way. Thus, in this chapter I review from a broad typological perspective two analyses (i.e., the passive and split-ergative analyses) that have been made concerning Thao transitivity and actancy structure. In addition, applying transitivity tests including morphological, semantic, syntactic, discourse grounding, and textual frequency tests, I demonstrate that there is only one canonical transitive construction, that found in two-argument \(-in/-an\) clauses. The two-argument \(m\)-clauses, commonly analyzed as canonical transitive in most previous studies, are treated as extended intransitive constructions. This leads to the conclusion that Thao is best analyzed as an ergative language.

\(^1\) “Western Austronesian languages” here is used in a geographic sense rather than in a genetic one, referring to all Austronesian languages spoken in Taiwan, the Philippines, mainland Southeast Asia, western Indonesia, Borneo, and Madagascar, and also including Palauan and Chamorro.
I will begin by introducing the three basic verbal clause patterns of Thao in section 3.2. In section 3.3, I will discuss the three possible analyses regarding transitivity of Thao: accusative, split, and ergative analyses. Section 3.4 evaluates the previous analyses (i.e., passive and split analyses). Section 3.5 demonstrates that the ergative analysis is the best, with the application of morphological, semantic, syntactic, discourse-grounding, and textual frequency tests. Section 3.6 is the conclusion.

3.2 THAO VERBAL CLAUSE PATTERNS

Three basic verbal clause patterns are commonly found in Thao texts: Pattern 1: monadic intransitive m- clauses (headed with m- verbs), Pattern 2: dyadic m- clauses (headed with m- verbs), and Pattern 3: dyadic -in/-an clauses (headed with -in/-an verbs).

In section 3.2.1, the morphology of verbs occurring in each of the patterns will be described with particular reference to the concept of “focus,” while in section 3.2.2, alternate word order patterns will be covered.

3.2.1 Verb Morphology and “Focus”

Typically, m- verbs in either monadic or dyadic clauses refer to the verb with the morphological shape -(u)m-, or m- (i.e., the affix of “Actor Focus” in many studies of Austronesian languages, the reflex of PAN *-um-). In this dissertation, however, other affixes which begin with the form m-, such as ma-, mak-, maka-, mapa-, mi-, min-, mu-, and mun-, also fall into the same category in that they are all syntactically equivalent, but with different semantic interpretations. All of these m- verbs can be either monadic or dyadic. In monadic intransitive constructions, they take a core argument S and may also allow an optional peripheral argument (an adjunct), so they are considered to be plain
intransitives. In dyadic constructions, although \( m \)-verbs take two arguments: the actor NP and the theme NP in terms of semantics, the latter will be demonstrated to be an oblique NP (the E) based on evidence from morphology, syntax, semantics, discourse grounding, and textual frequency tests throughout this chapter, so this type of construction is considered to be a dyadic/extended intransitive construction in Thao.

As for \(-in\) verbs and \(-an\) verbs (i.e., the affixes of “Patient Focus” and “Locative Focus”; the reflexes of PAN \(*-en\) and \(*-an\) in much of the Austronesian linguistic literature), they occur in dyadic (or triadic) constructions (except for the ‘restricted’ classes of \(-in/-an\) verbs discussed in section 3.5.1) taking two (or three) arguments, the actor NP and the theme/location/beneficiary/instrument NP depending on the combination of verb class and verbal morphology. They will be demonstrated to be canonical transitive verbs in Thao in this chapter, based on the same tests used to prove that \( m \)-verbs are intransitive. Since \(-in\) and \(-an\) verbs are often syntactically and semantically almost indistinguishable in Thao, I use the slash symbol “/” to indicate that they are in the same category.

One point to be noted here is that I do not use the term “AF” (Actor Focus) to label \( m \)-verbs, and “NAF” (non-Actor-Focus) to label \(-in/-an\) verbs in this dissertation, although these terms have been used in much of the Austronesian linguistic literature to describe the languages of Taiwan, the Philippines, northern Borneo and Sulawesi, and some other areas (Madagascar, Marianas), which have been called “Philippine-type languages”. The reason is that many Austronesianists commonly incorrectly describe verbal “focus” as inflectional, even though it has been clearly shown to be derivational based on various types of evidence (Reid 2000, Starosta 2002). Thus, to avoid such
confusion, I will just use *m*- verbs and *-in/-an* verbs to describe so-called “AF” and “NAF” verbs.

The system of verbal “focus” is typically characterized by the use of a series of verbal affixes (“focus affixes”) to indicate the thematic role of the argument bearing the absolutive marker. Therefore, the “focus affixes” (e.g., *m*- as AF, *-in/-an* as PF/LF in Thao) are commonly described either as “voice-marking” affixes or as a kind of “agreement affix” on the verb, with the verb agreeing with the grammatical subject (the focused NP) in theta-role (Reid 1992, 2002b, Starosta 2002). Whether they are “voice-marking” or “agreement” affixes, both of them are often treated as inflectional, with the relevant forms creating paradigms (Reid 2002b, Starosta 2002). However, according to Reid (1992:67-68, 2002b), “focus” affixes themselves are clearly DERIVATIONAL in origin, with some being prefixes, others infixes or suffixes, and some being a combination of these. Here are pieces of evidence that he uses for supporting the claim.

1. Inflectional affixes are productive, occurring on all verbs and form syntactic paradigms, however, focus affixes are restricted, with very few verbs in any Philippine language being able to carry the full set of affixes.  
2. Two different inflectional affixes from the same paradigm cannot co-occur on the same verb, they are necessarily mutually exclusive, however, some “focus” affixes can co-occur on the same verb.  
3. Inflectional affixes do not change the word class of the form to which they are attached, however, most ‘actor focus’ verbs are clearly intransitive, while ‘non-actor focus’ verbs are usually transitive. Similarly, while some “focus” affixes attach to verbs, others attach to nouns, to create verbs, and all can be also used to derive nouns from verbs.  
4. Inflectional affixes do not carry over when the verb is derived as a noun, “focus” affixes do.

In addition, Starosta (2002) adds evidence from nominalization to argue that “focus” is derivation, so the inflectional analysis such as voice or subject-verb agreement is incorrect. In this chapter, I will also show that *m*- verbs (AF) are grammatically intransitive and *-in/-an* verbs (NAF) are transitive, which suggests that “focus” relates
verbs in different syntactic classes, so focus cannot be inflection and can only be derivational.

3.2.2 Thao Alternative Word Orders

As already mentioned, Thao exhibits three basic verbal clause patterns: Pattern 1: monadic intransitive *m-* clauses (headed with *m-* verbs), Pattern 2: dyadic *m-* clauses (headed with *m-* verbs), and Pattern 3: dyadic *-in/-an* clauses (headed with *-in/-an* verbs). These three clause patterns can have two alternative basic word orders: verb-initial and verb-medial,\(^2\) as represented schematically in figures 3.1 and 3.2, respectively.

<table>
<thead>
<tr>
<th>Pattern 1</th>
<th>*m-*V</th>
<th>NP</th>
<th>Nom/Abs?</th>
<th>agent/theme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[-trns]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[\text{Pattern 2} \quad \begin{array}{|l|}
\hline
m-V [?trns] \quad \text{NP} \\
\text{Nom/Abs?} \\
\text{Agent} \\
\hline
\end{array}\]

\[\text{Pattern 3} \quad \begin{array}{|l|}
\hline
V-\text{-in/-an} [?trns] \quad \text{NP} \\
\text{Erg/obl?} \\
\text{agent} \\
\hline
\end{array}\]

FIGURE 3.1 VERB-INITIAL CLAUSE PATTERNS IN THAO

---

\(^2\) See section 5.2 for a detailed discussion of word order in Thao.
Regardless of the word order, pattern 1 typically consists of \( m \)-verbs that expect an NP (agent/theme), as illustrated in (1) through (9) with different shapes of \( m \)-verbs.

(1) Pattern 1: \(-um\)-verbs (dynamic/active verbs)
   a. \textit{Yaku mundadán}.
      \begin{tabular}{ll}
      Is & M.walk \\
      & \textquoteleft I was walking.	extquoteright \ (Blust 2003:645)
   
      b. \textit{Caycuy cminanit tu ikahi}.
      \begin{tabular}{ll}
      3p & M.perf.cry Det a.moment \\
      & \textquoteleft They were crying a while ago.’ (Blust 2003:356)
   
      c. \textit{Mulhbus=iza sa ruza}.
      \begin{tabular}{ll}
      M.sink=already Det boat \\
      & \textquoteleft The boat sank.’ (Blust 2003:740)
   
      d. \textit{Niwan yaku kminan}.
      \begin{tabular}{ll}
      NEG 1s & M.perf.eat \\
      & \textquoteleft I haven’t eaten yet.’ (Blust 2003:944)
   
(2) Pattern 1: \( ma \)-verbs (many of the verbs with \( ma \) are stative)
   a. \textit{Yaku mashuru=iza}.
      \begin{tabular}{ll}
      1s & M.hungry=already \\
      & \textquoteleft I’m hungry.’ (Blust 2003:944)
b. *Haya*³ *caw* *makaha*.
   that person M.angry
   ‘That person is angry.’ (Blust 2003:395)

c. *Saran* *malunduz*.
   road M.straight
   ‘The road is straight.’ (Blust 2003:518)

d. *Tamazun* *malalawa*.
   rooster M.speech
   ‘The rooster is crowing.’ (Blust 2003:962)

e. *Atu* a *hugi* *maqaqiaqia*.
   dog LIG baby M.CaRed.whine
   ‘The puppy is whining.’ (Blust 2003:790)

(3) Pattern 1: *mak-* verbs
a. *Haya* wa *binanau*’az *ayuzi* *makshashdu*.
   that LIG woman man M.CaRed.suitable
   ‘That man and woman are well-matched.’ (Blust 2003:906)

b. *Minu* sa *izuhiy* a *caw* *makzazamzam*.
   why Det that LIG person M.CaRed.chew
   ‘Why! That person is chewing a lot.’ (Blust 2003:1062)

(4) Pattern 1: *maka-* verbs
a. *Nak* a *azazak* *makaama*.
   1s.Pos Gen child M.resemble.father
   ‘My child resembles his father.’ (Blust 2003:289)

b. *Cicu* a *ruzic* *makadamdam*.
   3s.Pos Gen mouth M.taste/savor.food
   ‘His mouth is chomping away.’ (Blust 2003:356)

c. *Makadu* *caycuy*.
   M.good 3p
   ‘They get along well together.’ (Blust 2003:365)

---

³ Deictics (e.g., *haya* ‘this/that’, *huya* ‘that’, *inay* ‘this’, *izal(ha)y* ‘that’, *izu(hu)y* ‘that over there’, etc.) in Thao are complicated. Because they are not the main question here and do not influence the analysis in this chapter, I tentatively label them for convenience with a simple English translation such as ‘this/here’ or ‘that/there’. The full discussion of deictics is presented in section 5.4.
(5) Pattern 1: *mapa-* verbs (reciprocal/collective verbs)
a. *Numa mapaapaw=iza sa qalimasaz.*
   and M.appear=already Det head
   ‘And all the (rice) heads are appearing.’ (Blust 2003:299)

b. *Haya azazak mapacanit.*
   that child M.cry
   ‘Those children are crying together.’ (Wang 2000)

c. *Caycuy minapalhufu.*
   3p M perf. embrace
   ‘They embraced one another.’ (Blust 2003:551)

(6) Pattern 1: *mi-* verbs
a. *Yaku inay milhugqu.*
   1s here M.sit
   ‘I’m sitting here.’ (Blust 2003:374)

b. *Huya laturu isúy migilha.*
   that LA.three there M.drink
   ‘Three of them are drinking over there.’ (Blust 2003:294)

c. *Ani yaku amiqilha.*
   NEG 1s Irr.M.drink
   ‘I won’t drink.’ (Blust 2003:670)

(7) Pattern 1: *min-* verbs (inchoative verbs)
   wow now M.drizzle
   ‘Wow, it’s starting to drizzle.’ (Blust 2003:937)

b. *Mimbuqnur yaku.*
   M. angry 1s
   ‘I’m getting angry.’ (Blust 2003:334)

c. *Haya wa sharitunu mimbulnu=iza.*
   that LIG papaya M.soft=already
   ‘That papaya is very soft already.’ (Blust 2003:330)

d. *Haya wa caw kahiwan mapaqaqitan, cuini mimpazish.*
   that LIG person before M.CaRed.good now M.enemy
   ‘That person (and I) used to be on good terms (but) now we have become enemies.’ (Blust 2003:701)
(8) Pattern 1: *mu-* verbs (motion verbs)
   a. *Hulus muliqiq, rima muruqit.*
      clothes M.torn arm M.peel.off.skin
      ‘(His) clothes are torn and (his) arm is scratched.’ (Blust 2003:282)
   b. *Cicu muapaw=iza.*
      3s M.appear=already
      ‘She has come out already.’ (Blust 2003:299)
   c. *Haya wa azazak antu mubuhat.*
      that LIG child NEG M.work.in.the.field
      ‘That child is not working.’ (Wang 2000)
   d. *Amulhilhi=iza yaku.*
      Irr.M.stand=already 1s
      ‘I will stand up.’ (Blust 2003:536)

(9) Pattern 1: *mun-* verbs (motion verbs)
   a. *Haya wa qrus muntunuq.*
      that LIG post M.fall.down
      ‘That post fell down.’ (Wang 2000)
   b. *Mihu a sazum muntilhush.*
      2s.Pos Gen water M.spill
      ‘Your (sg.) water spilled.’ (Blust 2003:989)
   c. *Yaku munruza.*
      Is M.boat
      ‘I was sailing.’ (Blust 2003:477)

The examples from (1) to (9) illustrate that monadic clauses headed with *m-* verbs take a single NP (the core argument S). In addition, *m-* verbs in pattern 1 appear not to carry any person or number agreement.

In some cases, the *m-* verbs in pattern 1 may also allow an optional peripheral argument (or adjunct), i.e., a locative NP/PP to express the location of the event, as shown in (10).

(10) Pattern 1: monadic *m-* verbs with an optional oblique NP
   a. *Huya wa kawi i sa sazum lhumbaha.*
      that LIG wood Loc Det water M.float
      ‘That wood is floating on the water.’ (Blust 2003:399)
b. *Yaku malhimpapia i sa pruq.*
   1s M.sit.cross.legged Loc Det ground

   ‘I’m sitting on the ground.’ (Wang 2000)

c. *Cicu munay nak a taun.*
   3s M.here 1s.Pos Gen house

   ‘He came to my house.’ (Blust 2003:475)

Therefore, as seen in (1)-(10), monadic \(m\)-verbs are prototypical intransitive constructions in that they require one core argument (S) and may allow an optional peripheral argument, i.e., a locative NP/PP.

Pattern 2 are clauses with \(m\)-verbs that appear to be semantically transitive in that they expect two core arguments, one actor-like, and the other theme-like, as illustrated in the following examples from (11) to (16).

(11) Pattern 2: \(-um\)-verbs

a. *Kmalawa cicu nak a dawaz.*
   M.repair 3s 1s.Pos Gen net

   ‘He repaired my net.’ (Blust 2003:439)

b. *Yaku kmaytutu sa balis.*
   1s M.press.down Det nail

   ‘I’m pounding a nail.’ (Wang 2000)

c. *Haya wa caw kman fizfiz.*
   that LIG person M.eat banana

   ‘That person is eating bananas.’ (Blust 2003:445)

d. *Yaku magqiqi sa patashan.*
   1s M.carry.in.one.hand Det book

   ‘(I’m) carrying a book in one hand.’ (Blust 2003:284)

e. *Yaku hmadu fatu.*
   1s M.hold stone

   ‘I am holding a stone.’ (Blust 2003:394)

f. *Ihu miarain hmadu yakin.*
   2s always M.hold 1s

   ‘You (sg.) are always holding onto me.’ (Blust 2003:673)
g. *Huya wa caw mrigaz itan.*
   that LIG person M.see 1pin
   ‘That person saw us.’ (Blust 2003:370)

(12) Pattern 2: *ma-* verbs
a. *Mafazaq yaku mihu a lhanaz.*
   M.know 1s 2s.Pos Gen name
   ‘I know your name.’ (Blust 2003:379)

b. *Yaku malalawa ihun.*
   1s M.call.out 2s
   ‘I called out to you.’ (Blust 2003:1032)

c. *Haya wa atu macuaw mabuqnur yakin.*
   that LIG dog really M.hate Is
   ‘That dog really hates me.’ (Blust 2003:395)

(13) Pattern 2: *maka-* verbs
a. *Makaparaw yaku jalhaza.*
   M.jump.over 1s ditch
   ‘I’m jumping across a ditch.’ (Blust 2003:677)

b. *Cicu makarunu qmu.*
   3s M.pound sticky.rice
   ‘She is pounding sticky rice (to make a confection).’ (Blust 2003:847)

(14) Pattern 2: *mi-* verbs
   *Cicu miqilha sazum.*
   3s M.drink water
   ‘He is drinking water.’ (Blust 2003:792)

(15) Pattern 2: *min-* verbs
   *Yaku minskin izahay a ayuzi.*
   Is M.hate that LIG man
   ‘I hate that man.’ (Blust 2003:509)

(16) Pattern 2: *mu-* verbs
   *Yaku muruquit nak a rima.*
   1s M.peel.off.skin Is.Pos Gen arm
   ‘I scratched my arm.’ (Blust 2003:848)

As shown in (11) to (16), the *m-* verbs in pattern 2 are dyadic verbs, consisting of two core arguments: an actor-like argument and a theme-like argument. Like *m-* verbs in
pattern 1, *m*-verbs in pattern 2 also do not carry any person or number agreement features.

Pattern 3 consists of clauses with -\textit{in/an} verbs that take an actor-like NP and a theme-like NP, as shown in (17) and (18) below.

(17) Pattern 3: -\textit{in} verbs

a. \textit{Pdisin} suma inay a kukulay.
   crush.IN someone this LIG bug
   ‘Someone crushed this bug.’ (Wang 2000)

b. \textit{Shinawin} ti ina inay a baruku.
   wash.IN Det.prsn mother this LIG bowl
   ‘Mother is washing these bowls.’ (Wang 2000)

c. \textit{Yaku} kaytunun ama.
   1s beat.IN father
   ‘Father beat me.’ (Blust 2003:1014)

d. \textit{Yaku hadanan} nak a tantuqash a minlhafut.
   1s raise.IN 1s.Pos Gen elder LIG sibling
   ‘I was raised by my elder sibling.’ (Blust 2003:393)

e. \textit{Rabu} kzin suma.
   ember pick.up.something.with.tongs.IN someone
   ‘Someone picked up an ember with tongs.’ (Blust 2003:507)

(18) Pattern 3: -\textit{an} verbs

a. \textit{Kinarian} caw haya buhat.
   perf.dig.AN person that field
   ‘A person dug up that field.’ (Blust 2003:450)

b. \textit{Apán} cicu haya azazak.
   carry.AN 3s that child
   ‘He is carrying that child.’ (Blust 2003:298)

c. \textit{Yaku} psaqan cicu.
   1s kick.AN 3s
   ‘He kicked me.’ (Blust 2003:731)

\footnote{The formative -\textit{in} becomes -\textit{n} when it occurs with bases that end in a vowel.}

\footnote{The formative -\textit{an} has become -\textit{n} accompanied by accent shift when it occurs with bases that end in -\textit{a}, as in (18)b.}
d. *Qilha cputan suma.*
   rice.wine filter.AN someone

   ‘Someone filtered the rice wine (in making it).’ (Blust 2003:348)

e. *Yaku paruan ama.*
   1s beat.AN father

   ‘Father beat me.’ (Blust 2003:681)

The examples above show that when -in/-an verbs are in sentence-initial position, the
postverbal actor-like NP always precedes the theme-like NP, as in (17)a-(17)b and (18)a-(18)b, just as with m- verbs in dyadic clauses when they are in sentence-initial position, as in (11)a, (12)a, and (13)a. However, the two types of dyadic clauses show contrast in verb-medial word order. When m- verbs in dyadic clauses are in the medial position of the clause, an actor-like NP always occurs before the verb, while a theme-like NP follows the verb, as in (11)b-(11)g. In contrast, when -in/-an verbs are in the medial position of the clause, a theme-like NP always occurs in preverbal position, whereas an actor-like NP always follows the verb, as in (17)c-(17)e and (18)c-(18)e.

In addition, -in/-an verbs in pattern 3 have verbal agreement for first person singular actor -k, and second person singular actor -nu, as illustrated in (19)-(20).6

(19) Pattern 3: -in/-an verbs with first person singular actor agreement -k7
   a. *Lhirikik nak a shashuazi.*
      poke.IN.1s 1s.Pos Gen younger.sibling

      ‘I poked my younger sibling.’ (Blust 2003:540)
   b. *Patnaik funush.*
      use.IN.1s knife

      ‘I used a knife.’ (answer to the question ‘How did you kill the pig?’) (Blust 2003:697)

---

6 See section 5.3.2 for detailed discussion of -k and -nu.

7 The first person singular agreement marking form -k has fused with the ending of the -in/-n verbs as -ik/-k, and with -an verbs as -ak/-k, losing the nasal.
c. *Numa cuini karik.*
   but now dig.IN.1s
   ‘But now I have dug (it) up.’ (Blust 2003:699)

d. *Haya caw kaytumuk.*
   that person beat.IN.1s
   ‘I beat that person.’ (Wang 2000)

e. *Cicu a kuskus psaqak.*
   3s.Pos Gen leg kick.AN.1s
   ‘I kicked his leg.’ (Blust 2003:731)

f. *Izay a kukulay akanqcak.*
   that LIG bug Irr.step.on.AN.1s
   ‘I will step on that bug.’ (Blust 2003:784)

g. *Kinariak=iza buna.*
   perf.dig.up.AN.1s=already sweet_potato
   ‘I’ve dug up the sweet potatoes.’ (Blust 2003:450)

h. *Paruak fahi.*
   beat.AN.1s pig
   ‘I beat the pig.’ (Blust 2003:681)

(20) Pattern 3: -in/-an verbs with second person singular actor agreement -nu

a. *Numa akaninu?*
   what Irr.eat.IN.2s
   ‘What have you done?’ (Wang 2000)

b. *Numa kalawanu?*
   what do.IN.2s
   ‘What have you done?’ (Wang 2000)

c. *Cuini numa kalawánu?*
   now what do.AN.2s
   ‘What are you doing now?’ (Wang 2000)

In conclusion, among the three verbal clause patterns found in Thao, pattern 1 is a
plain intransitive construction, but pattern 2 and pattern 3, being dyadic clauses, require
careful analysis to determine their transitivity. Section 3.3 deals with this issue.

---

8 The second person singular agreement marking form -nu has fused with the ending of the -in/-n verbs as -inu in (20)a, or as -nu in (20)b, and with -an/-n verbs as -ánu in (20)c.
3.3 THREE POSSIBLE ANALYSES OF THAO TRANSITIVITY

As shown in the previous section, there are two dyadic clause patterns whose status with respect to transitivity is unclear. Varying in their interpretation of the two patterns, at least three possible analyses can be proposed to deal with Thao transitivity and actancy structure: a passive analysis, a split-ergative analysis, and an ergative analysis. However, only the first two analyses have been (explicitly or implicitly) proposed in previous studies of Thao; the ergative analysis of Thao has never been discussed.

The passive analysis, adopted by Li (1978, 1997), treats the theme NP in pattern 2 (m-verbs) as an “accusative” object of a transitive construction and the actor NP in pattern 3 (-in/-an verbs) as the demoted agent of a passive construction. By treating pattern 1 as intransitive, pattern 2 as canonical transitive, and pattern 3 as passive, Thao is analyzed as an accusative language. The passive analysis of Thao can be summarized schematically in figure 3.3.

Pattern 1  | NP  |  $m$-V  
|---|---|---|
| SV$^9$ | agent/theme | [-trns]
| Nom  |               |     |

Pattern 2  | NP  |  $m$-V  
|---|---|---|
| AVO | agent | [+trns]
| Nom  | theme | Acc

Pattern 3  | NP  |  V-in/-an  
|---|---|---|
| SVAdjunct | theme | [-trns] (passive)
| Nom  | agent | Obl

**Figure 3.3 Thao as an accusative language$^{10}$**

---

$^9$ Notice that the categories S, A, and O are defined according to Liao’s (2002) revised Basic Linguistic Theory.

$^{10}$ Although Thao exhibits two alternative basic word orders, I will only use the verb-medial word order in this section, in that it makes evident the contrast between the dyadic $m$- clauses and the dyadic -in/-an clauses.
The split-ergative analysis, adopted by most Formosanists (such as Huang 2000, Weng 2000, Chen 2000, and Blust 2003), treats the theme NP in pattern 2 as an "accusative" object of one type of transitive construction (m-clause), and the actor NP in pattern 3 as an agent of the other type of transitive (-in/-an clause). By treating pattern 1 as intransitive and both pattern 2 and pattern 3 as canonical transitives, Thao is analyzed as a split-ergative language, manifested in verb-medial word order. It follows an accusative system because the S of pattern 1 is grouped together with the A of pattern 2, with both occurring before the verb, while the O of pattern 2 is in the postverbal position. On the other hand, it also follows an ergative system because the S of pattern 1 is also grouped together with the O of pattern 3, with both occurring before the verb, while the A of pattern 3 is in the postverbal position. The split-ergative analysis is summarized in figure 3.4.

I have classified Huang's (2000), Weng's (2000), Chen's (2000), and Blust's (2003) analyses as 'split-ergative', even though they do not call it such in their studies. This can be inferred from the following facts. They all seem to agree that Thao has two different types of transitive clauses, an ‘AF/AV’ type, in which the theme NP (O) is treated as an ‘accusative’ NP, and the actor NP (A) as a nominative NP; and an NAF/NAV type, in which the actor NP (A) and the theme NP (O) are realized with the same "neutral" case. In terms of word order (verbs in medial position), the actor NP (A) in the AF/AV type is in the preverbal position, just like the sole argument (S) of AF/AV intransitive clauses, which thus groups S/A together, and distinguishes them from O. On the other hand, the theme NP (O, or a 'neutral' NP in their terms) in the NAF/NAV type is in the preverbal position, just like the sole argument (S) of AF/AV intransitive clauses, which thus groups S and O together, and distinguishes them from A (the actor NP) in the postverbal position. Therefore, a split-ergative system can be inferred from their analyses.
FIGURE 3.4 THAO AS A SPLIT-ERGATIVE LANGUAGE

The ergative analysis treats the theme-like NP in pattern 2 as an oblique extended core argument E of an extended intransitive construction, but the actor-like NP in pattern 3 as an agent of a canonical transitive construction. By treating pattern 1 as intransitive, pattern 2 as extended intransitive, and pattern 3 as canonical transitive, Thao is analyzed as a pure ergative language. The ergative analysis is summarized schematically in figure 3.5.

FIGURE 3.5 THAO AS AN ERGATIVE LANGUAGE

As illustrated in figures 3.3, 3.4, and 3.5, all three analyses agree in treating pattern 1 as an intransitive structure, but disagree as to whether pattern 2 and/or pattern 3 should be treated as transitive structures. Such disagreement exists because both pattern 2 and
pattern 3 are dyadic structures that might be considered to be transitive. Because both pattern 2 and pattern 3 are possible candidates for transitive constructions, it is crucial to determine which of the two, or whether both, should count as the canonical transitive for deciding Thao actancy.

I will evaluate the passive and split-ergative analyses from a broad typological perspective in section 3.4, and proceed to argue that the ergative analysis is a better analysis of Thao transitivity based on evidence from morphological, semantic, syntactic, discourse grounding, and textual frequency tests in section 3.5.

3.4 AN EVALUATION OF THE PASSIVE AND SPLIT-ERGATIVE ANALYSES

As already discussed, pattern 2 (i.e., dyadic m-clauses) has been analyzed as transitive in both passive and split-ergative analyses of Thao, while pattern 3 (i.e., dyadic -in/-an clauses) as intransitive in a passive analysis and transitive in a split-ergative analysis. It appears that the determination of transitivity in the two analyses is based primarily on semantics and/or translation equivalents. Thus, when a clause is translatable as transitive in Taiwanese, Mandarin Chinese, English, or some other accusative language, it has been automatically treated as transitive in Thao (e.g., pattern 2 in a passive analysis; pattern 2 and 3 in a split-ergative analysis). When a clause is translatable as a passive in these languages, it has been automatically treated as passive in Thao (e.g., pattern 3 in a passive analysis). Such analyses, based primarily on semantics and/or translation equivalents, fail to identify transitivity as a notion that combines morphosyntactic and semantic properties, as discussed in the previous chapter.
The following sections evaluate the two analyses from a broad typological perspective.

3.4.1 Fundamental Problems of Previous Analyses

Broadly speaking, the fundamental problem in previous analyses is this: A theme NP is not necessarily accusative, and dyadic clauses are not necessarily transitive clauses. As mentioned earlier, previous studies of Thao, whether the passive analysis (Li 1978, 1997), or the split-ergative analysis (Huang 2000, Weng 2000, Chen 2000, and Blust 2003), plainly regards the theme NP of Pattern 2 (dyadic m- verb) as “accusative” without first determining the transitivity of the clause. They label the theme NP of a dyadic m-clause (or Actor Focus/Actor Voice in their terms) as ‘Patient’, or ‘direct object’ and then conclude that whatever marks the ‘Patient’, or ‘direct object’, if any, is an accusative case marker.

Therefore, following this assumption and apparently depending primarily on translation, Li (1978:592, 1997:372) first proposes a passive analysis for Thao. Consider the following examples from Li (1978:592), with my emphasis in bold.

(21)  a. *Azazak k-m-an (sa/tu) rusaw.*
     child <active>eat Acc fish
     ‘The child ate the fish.’ (Li 1978:592)

     b. *Rusaw kan-in azazak.*
     fish eat-pass child
     ‘The fish was eaten by the child.’ (Li 1978:592)

The example (21)a shows that the passive analysis treats the theme/patient NP of dyadic m- verbs in Thao as “accusative,” so the two optional forms, *sa* and *tu*, occurring before the theme/patient NP are considered to be accusative case markers by Li (1978). In addition, the m- verbs (AF/AV verbs) are thus considered to be transitives in such
constructions, as stated in Li (1978:592): “An active transitive sentence can be a straightforward Agent-Verb-Patient without case-marking particles.” Example (21)b shows that Li (1978:592) treats -in/-an verbs as passive sentences in Thao, with the promoted theme rusaw ‘fish’ as the nominative NP (the S), and the demoted agent azazak ‘child’ as an oblique NP (an adjunct) in the passive construction. As Li states in his paper, “the passive verb may take the following suffixes: -in if the stem is consonant-final...” Thus, it is obvious that the passive analysis treats dyadic -in/-an clauses as passive sentences in Thao, whose corresponding active sentences are the dyadic m- verbs.12

The split-ergative analysis, like the passive analysis, also treats dyadic m- clauses as transitive primarily based on semantics and translation, without determining their transitivity from a morphosyntactic perspective (Huang 2000, Weng 2000, Chen 2000, and Blust 2003). But unlike the passive analysis, instead of treating dyadic -in/-an clauses as passive constructions, the split-ergative analysis treats them as another type of canonical transitive construction. Like the passive analysis, the split-ergative analysis treats the theme NP of Pattern 2 (dyadic m- verb) as “accusative,” so what is associated with the theme NP of Pattern 2 is considered to be an “accusative” case marker. For example, Huang (2000:78-79) regards tu as an “accusative” marker (without discussing sa) in that it marks the theme NP of dyadic m- clauses, as in (22), with my emphasis in bold.

12 In addition, Li (1978:570) also clearly states that “the active-passive dichotomy seems valid in describing the Formosan languages under examination. There is both morphological and syntactic evidence for such a dichotomy.”

115
Other Formosanists adopting the split-ergative analysis do not claim sa/tu as accusative case markers. For instance, Blust (2003:855, 1006) simply describes sa as ‘concerning, as for, with regard to; and topicalization particle’, and tu as ‘... appears to have multiple functions, not all of which are understood’. Weng (2000) and Chen (2000) even opposed the idea of treating the forms sa/tu as accusative case markers in Thao.¹³ However, like Li (1978), Huang (2000), and Blust (2003), they all treat the theme/patient NP of dyadic m- clauses (AF verbs) as accusative. This can be inferred from their categorizing the set of pronouns that substitutes in the position of the full theme/patient NP as ‘accusative’ as well, such as yakin ‘me’, ihun ‘you’, and itan ‘us’. The following examples in (23) can illustrate their analyses, with my emphasis in bold.

(23) a. Caycuy m-(p)atatara yakin.
    3P.Nom AF-gossip.about IS.Acc
    ‘They are gossiping about me.’ (Blust 2003:694)

b. Minu ihu m-in-aula yakin.
    how.come 2s.Neut AV-perf-forget IS.Acc
    ‘How come you’ve forgotten me?’ (Weng 2000:31)

c. A-k<m>aytutu sa shput itan.
    Irr-beat<AV> NCM person 1Pin.Acc
    ‘That person will beat us (in.).’ (Chen 2000:31)

As shown above, by treating the pronouns yakin ‘me’ in (23)a and (23)b and itan ‘us’ in (23)c as ‘accusative’ forms, Blust (2003), Weng (2000), and Chen (2000) basically imply

¹³ Weng (2000:20-22) and Chen (2000:23-24), following Chang et al. (1998) argue that sa is not a case maker, but a ‘noun-class marker’ marking common nouns (opposed to ti marking proper nouns) in that it ‘can precede NPs with various grammatical function: nominative, accusative and oblique’. As for tu, they both notice its complexity in terms of syntactic functions and distributions, and agree that tu is in fact rarely used as an accusative marker.
that the theme NPs of dyadic m- clauses in Thao are also accusative. This is explicitly stated by Blust (2003:1057) with my emphasis, “yakin: 1s accusative and absolute possessive: me and mine,” by Weng (2000:31), “the accusative pronouns occur in the object position of actor voice,” and by Chen (2000:31), “accusative forms mark patients of an event”.

In conclusion, most previous studies of Thao (as well as other Formosan languages except Starosta 1997, 1998, 1999a, 2002, Ho 1990, 1993, Huang 1994, Rau 1997, Liao 1998, 2002, 2004), whether the passive analysis or the split-ergative analysis, commonly treat the ‘patient/theme’ or ‘direct object’ of a dyadic clause as an “accusative” NP before establishing the transitivity of a clause. However, simply equating the ‘accusative’ NP with the ‘Patient’ of a dyadic clause without considering the transitivity of a clause provides an unreliable syntactic analysis in that not all dyadic clauses are transitive and a theme NP is not necessarily accusative. As discussed in the previous chapter, Gibson and Starosta (1990), Dixon (1994:122-124), and Dixon and Aikhenvald (2000:3) have pointed out that even intransitive verbs can be dyadic in some languages (‘pseudo-transitive’ in Starosta’s terminology, and ‘extended intransitive’ in Dixon’s, and Dixon and Aikhenvald’s terminology). The following pair of English sentences illustrates this point.

(24) a. Harry shot the bird.
    agent theme
    A V[+trns] O

    b. Harry shot at the bird.
    agent theme
    S V[-trns] E
As shown in (24), even though the verb shot in (24)a and its homophonous form in (24)b are both dyadic; and take one agent NP and one theme NP, only the verb in (24)a is transitive. Moreover, the theme NP can function as an accusative ‘direct object’ as in (24)a, or as an oblique in (24)b. Therefore, it is incorrect to simply label a theme NP as “accusative” and thus analyze the form occurring before the theme NP as an “accusative” case maker without considering the transitivity of a clause in doing syntactic analysis for a given language.

After discussing the fundamental problem that both passive and split-ergative analyses share, I will turn to the problems that each encounters from syntactic and typological perspectives.

3.4.2 An Evaluation of the Passive Analysis

My evaluation of the passive analysis reveals three major problematic areas. The first, discussed in section 3.4.2.1, is related to the analysis of two of the forms that introduce NPs. The second, dealt with in section 3.4.2.2, highlights certain atypical syntactic phenomena resulting from this analysis that require explanation. The third, examined in section 3.4.2.3, discusses problems related to verbal agreement with the passive analysis.

3.4.2.1 Problem 1: The grammatical status of sa and tu

The passive analysis, analyzing sa/tu as accusative case markers, treats -in/-an clauses as passive sentences and the m- clauses as the corresponding active canonical transitive sentences (Li 1978, 1997). However, a careful study of Thao data shows that unlike many other Formosan languages, Thao does not have a clear/complete
(morphological) case-marking system that provides information about an NP’s function within a sentence. Like Weng (2000) and Chen (2000), I cannot find any piece of independent grammatical evidence to validate their status as case makers because *sa* can optionally occur before any NP (except for kin terms used as personal names and personal names, using *ti*) and *tu* has a variety of functions other than its use as a potential case marker. The misanalysis of *sa* and *tu* lies in overlooking some important data and incorrectly associating the “accusative” case with the “patient/theme” NP of a dyadic clause without first establishing transitivity of a clause. The following examples in (25) illustrate the general distribution of *sa*.

\[(25)\]
\[\begin{array}{ll}
\text{a. } [\text{NP } (\text{Sa}) \text{ ayuzi}] & \text{shmiwat} \\
\text{[ Det man ] M.cut.down.underbrush} & \text{[NP } \text{sa hudun }] \\
\text{‘The men cleared the side the mountain.’} & \text{(Wang 2000)}
\end{array}\]

\[\begin{array}{ll}
\text{b. } [\text{NP } (\text{Sa}) \text{ pitaw}] & \text{qdupak=iza.} \\
\text{[ Det door ] close.AN.1s=already} & \\
\text{‘I closed the door already.’} & \text{(Blust 2003:446)}
\end{array}\]

\[\begin{array}{ll}
\text{c. } \text{Yamin qaquilhin } [\text{NP } (\text{sa}) \text{ cumay}] \\
\text{1Pex chase.IN} & \text{[ Det bear ]}
\end{array}\]

‘We were being chased by a bear.’ (Blust 2003:513)

The examples above show that the form *sa* can optionally occur before an agent NP as well as a theme NP in either dyadic *m*- clauses, as in (25)a, or dyadic *-in/-an* clauses, as in (25)b and (25)c. Such a distribution demonstrates that it is premature to conclude that *sa* is an accusative marker. Li (1978) notices this and actually claims that *sa* can be an accusative marker and/or a nominative marker. This still remains problematic. In Li’s passive analysis, (25)c is a passive sentence, so *sa* should also be considered as an

14 The case-marking system for common nouns has been lost in Thao; however, there is still a residue of it in the pronoun system (see section 5.3.2).
15 The discussion of *sa* and *tu* is presented in section 5.7.1.
oblique case form marking the oblique NP (an adjunct/a demoted agent) of -in/-an clauses. It is not clear why Li does not discuss this function, but based on his approach toward the passive analysis, the use of the form *sa* as an oblique case marker can be inferred. Thus, it is questionable to claim that *sa* can mark the case of nominative, accusative, and oblique NPs at the same time because this means it does not provide any information about an NP’s grammatical function within the sentence. One function of a nominal case-marking system is to indicate grammatical relations and to mark the contrast between either nominative/accusative or ergative/absolutive in a language. Therefore, the form *sa* should not be analyzed as a case maker.

What about *tu₁*? In fact, unlike what Li (1978, 1997) notes, the data from Blust (2003) shows that *tu₁* rarely occurs before the ‘theme/patient’ NP of dyadic *m*-clauses. Rather, the form *tu₁* can mark noun phrases with a variety of grammatical functions, as illustrated in (26) below.

(26) a. **Tu** sasuma wa maca lhumbulhruq.
   TU someone Gen eye swollen
   ‘Some people’s eyelids are swollen.’ (Blust 2003:331)

b. **Hayā wa pitaw, lakusa**  **tu** guliush?
   that LIG door how.much TU height
   ‘That door, how high is it?’ (Blust 2003:811)

c. **Musha=iza**  **tu** ikahi.
   M.leave=already TU a.moment
   ‘(He) left just now.’ (Blust 2003:415)

d. **Yaku mutusi buhat mubhat,**  **untarawin**  **tu** qusaz.
   IS M.there field M.work.in.field UN.pour.IN TU rain
   ‘I was going there to the fields to work (when) the rain poured down on (me).’
   (Blust 2003:973)

The examples in (26) suggest that *tu* exhibits a rather complicated distribution and has several functions. *Tu* can introduce the S of monadic intransitive verbs, including a
common noun *sasuma wa maca* ‘someone’s eyes, as in (26)a, the measurement noun *quliush* ‘height’, as in (26)b, and the temporal noun *ikahi* ‘a moment’, as in (26)c. *Tu* also marks an (inanimate) actor of a dyadic *-in/-an* clause, as in (26)d. Thus, *tu₁* appears to have different functions and distributions in these examples and cannot simply be characterized as an accusative marker.

To sum up, the Thao data has shown that the forms *sa* and *tu* should not be simply categorized as (accusative) case markers as Li (1978, 1997) claims.

### 3.4.2.2 Problem 2: Unanswered questions of a syntactic nature

If the passive analysis were correct, there would be some atypical syntactic phenomena requiring explanation. For instance, in the passive analysis, the agent NP in pattern 3 (dyadic *-in/-an* clauses) is treated as an adjunct. First, an explanation is needed as to why the agent NP (i.e., an adjunct in the passive analysis) is typically present in the “passive” constructions (i.e. pattern 3), even when the referent is known, such as an understood second person singular in an imperative construction, as illustrated in (27)

(27) Imperative constructions of dyadic *-in/-an* verbs

a. *Parui* *ihu inay a atu!*
   beat.IMP.IN 2s this LIG dog
   ‘Beat this dog!’ (‘This dog is to be beaten by you!’??) (Blust 2003:681)

b. *Shifulhi=uan* *ihu nak a rikus!*
   massage.IMP.IN=please 2s 1s.Pos Gen back
   ‘Please rub my back!’ (‘My back is to be rubbed by you please!’??) (Blust 2003:908)

---

16 Cross-linguistic studies show that agentless passives are actually much more common than those with an agent (Svartvik 1966, Givón 1979, Yamamoto 1984, Foley and Van Valin 1984, Siewierska 1984, Shibatani 1988, Comrie 1988). In addition, as noted by Liao (2004), many languages (e.g., Latvian, Urdu, Kupia, Pijian, Atjinamathanha, Cupeño, Cora, Huichol, Cahuilla, Shoshoni, and Pepecano) only allow agentless passive constructions (Siewierska 1984).

17 In Thao, the imperative form of dyadic *-in/-an* verbs is *-i*. See section 5.3.2 for a discussion.
Second, Thao data show that imperative constructions are more often “passive” (pattern 3) than “active” (pattern 2) in Thao, when there is a theme/patient NP, as in (27) above. Such passives do not act like the typical passive of Indo-European languages.

Third, there is not always a clear semantic match between “active” and “passive” constructions, as shown in (28).

(28) a. Cicu kmaytutu sa balis.
    3s M.beat Det nail

   ‘He is pounding a nail.’ (Wang 2000)

b. Sa balis kaytutun cicu.
    Det nail beat.IN 3s

   ‘**A nail is pounded by him’; but ‘He is pounding the nail.’ (Wang 2000)

As shown above, when the “active” construction has an indefinite theme NP, as in (28)a, there is no way to derive a “passive” from the “active” construction in Thao, as in (28)b in that Thao does not allow an indefinite theme NP occurring as the nominative NP in dyadic -in/-an constructions. (28)b would only be acceptable if the theme NP has a definite interpretation.

Last, the text frequency test shows that “passives” are far more frequent in texts than would be expected if they were true passives. In Thao “procedural” texts, the assumed “passive” constructions (-in/-an constructions) constitute 60–70% of the verbal constructions, and in activity texts, they constitute 30%–40% of the verbal constructions. All these questions need answers from the passive analysis.

---

18 Please see section 3.5.5 for discussion.
3.4.2.3 Problem 3: The passive analysis and verbal agreement

In addition to the two problems mentioned above, the passive analysis also has a dilemma from a typological perspective. Typologically speaking, agreement is a property that is more likely associated with the core arguments S, A, and O than with any other arguments and/or adjuncts (Whaley 1997:153, 164-165; Dixon 1994:45). If a verb agrees with adjuncts or arguments other than the three core arguments S, A, and O in some features, we would expect that it would also agree with S, A, and O in those features, and not vice versa.

Therefore, if the passive analysis were correct, we would expect that the verb would agree with the actor NP of pattern 3 (an adjunct in this type of analysis), if, and only if, it also agrees with the S, the A, and the O. However, the Thao data show that the verb only agrees with the ‘adjunct’ NP (the agent NP of pattern 3), but never agrees with S, A, and/or O. Both the first and second person singular actor agreement forms (-k and -nu) (i.e., the adjunct NP in the passive analysis), are only affixed to dyadic -in/-an verbs.

Consider the examples in (29).

(29) a. Pattern 3: dyadic -in/-an clause with agreement
   Azaik=uan   Laguy ‘Sasi=wak zashuq’.
   Irr.tell.IN.1s=please   Laguy send.IN.IMP=1s rice
   ‘I am going to tell Laguy “Send me some rice.”’ (Blust 2003:865)

b. Pattern 1: monadic m- clause without agreement
   Yaku amaraz.
   1s   Irr.M.swim
   ‘I will swim.’ (Blust 2003:827)

c. Pattern 2: dyadic m- clause without agreement
   Mzai yaku ‘Piasazaq nak a qumqum patashan’.
   M.say 1s   C.know 1s.Pos Gen grandchild book
   ‘I say “Make my grandchild studious.”’ (Lit. ‘Make my grandchild know books.’) (Blust 2003:379)
d. Pattern 2: dyadic m-clause without agreement

*Cicu amazai yakin.*

3s Irr.M.tell 1s

‘He will tell me.’ (Blust 2003:1060)

e. Pattern 3: dyadic -in/-an clause without agreement

*Yaku paruan suma.*

1s hit.AN someone

‘Someone hit me.’ (Wang 2000)

Example (29)a illustrates that -k marks the first person singular actor of the dyadic -in/-an clause, azailk ‘I will tell’. In the passive analysis, it would need to be considered to be an agreement-marking form for an adjunct. However, there are no agreement forms for the first person singular associated with the actor NP of monadic or dyadic m-clauses (i.e., the S/A of active clauses in the passive analysis), the theme NP of dyadic m-clauses (i.e., the O of active clauses in the passive analysis), and the theme NP of dyadic -in/-an clauses (i.e., the S of passive clauses in the passive analysis) in Thao data. As shown in (29)b, (29)c, and (29)e, the full pronoun *yaku* ‘I’ is used to express the actor NP of monadic or dyadic m-clauses (the S/A of active clauses in the passive analysis) and the theme NP of dyadic -in/-an clauses (the S of the passive clauses in the passive analysis), and as in (29)d, yakin ‘me’ is used to express the theme NP of dyadic m-clauses (the O of active clauses in the passive analysis). Therefore, as mentioned above, typologically speaking, if the agent NP of pattern 3, an adjunct in the passive analysis, allows agreement, then the S/A (the actor NP of m-clauses) and the S (the theme NP of dyadic -in/-an clauses) and the O (the theme NP of dyadic m-clauses) should do so as well. As shown in (29)b-e, there is no agreement associated with the S, A, and the O at all. From a typological perspective, such an analysis would be undesirable because it would make
Thao (as well as many other Formosan languages) typologically unusual. Let us turn certain problems that the split-ergative analysis raises in the following section.

3.4.3 An Evaluation of the Split-Ergative Analysis

The split-ergative analysis, adopted by most Formosanists (such as Huang 2000, Weng 2000, Chen 2000, and Blust 2003), treats pattern 1 as intransitive and both pattern 2 and pattern 3 as canonical transitives, with the former (dyadic \(m\)-clauses) following the accusative pattern, whereas the latter (dyadic \(-in/-an\) clauses) the ergative pattern, as illustrated in (30).

(30) a. \textit{Ina kmilhim yakin.}  
    \textit{mother M.look.for 1s}  
    ‘Mother is looking for me.’ (Blust 2003:467)

b. \textit{Yaku mundadán.}  
    \textit{1s M.walk}  
    ‘I was walking.’ (Blust 2003:645)

c. \textit{Yaku mapa sa buna.}  
    \textit{1s M.carry Det sweet.potato}  
    ‘I was carrying sweet potatoes.’ (Blust 2003:366)

d. \textit{Yaku qirqiran garupiac.}  
    \textit{1s bite.AN centipede}  
    ‘A centipede bit me.’ (Blust 2003:779)

e. \textit{Cicu a kuskus psaqak.}  
    \textit{3s.Pos Gen leg kick.AN.1s}  
    ‘I kicked his leg.’ (Blust 2003:731)

By analyzing the theme NP of dyadic clauses as “accusative,” the split-ergative analysis automatically treats \textit{yakin} ‘me’ as an “accusative” pronoun, as in (30)a. Similarly, such an analysis of (30)b and (30)c would suggest that Thao exhibits an accusative pattern for the following reason. In verb-medial sentences, the form \textit{yaku} ‘I’, occurring before the verb, represents the S of monadic \(m\)-clause, as in (30)b, and the A of a dyadic \(m\)-clause,
as in (30)c, while the form *yakin* ‘me’, occurring after the verb, represents the O of a dyadic *m*-clause, as in (30)a. Thus, an accusative pattern is manifested by word order and different pronoun forms, grouping S and A together, and distinguishing them from O.

However, (30)b, (30)d, and (30)e may be seen as illustrating an ergative pattern for the following reasons. First, the same form *yaku* is used to mark both the S of a monadic *m*-clause and O of a dyadic -*in/-an* clause, as in (30)b and (30)d, respectively, distinguishing them from the agreement form *-k* that marks the first person singular actor (A) of a dyadic -*in/-an* clause, as in (30)e. Second, the S of monadic *m*-clauses and the O of dyadic -*in/-an* clauses always occur before the verb in verb-medial sentences, as in (30)b and (30)d, whereas the A of dyadic -*in/-an* clauses always occurs after the verb.

Based on word order and distinct pronominal form (i.e., the ‘*yakin*’ set vs. the ‘*yaku*’ set), the split-ergative analysis seems to be more probable than the passive analysis in terms of syntax. However, it is not without problems. The following sections discuss the difficulties that this analysis encounters from a morphosyntactic and typological perspective.

In the following two sections, other problems associated with the split ergative analysis are discussed. Section 3.4.3.1 deals with the analysis of certain pronominal forms in Thao. Section 3.4.3.2 discusses facts related to the nature of verbal agreement in split ergative systems.

19 Typically, the agreement form *-k* is used to indicate the first person singular actor of dyadic -*in/-an* clauses. Thao rarely uses a full first person singular pronoun *yaku* in this type of clause, as in the following example.

* Apuy sunutin yaku.
  fire smother.IN 1s
  ‘I smothered/am smothering the fire.’
3.4.3.1 Problem 1: Case marking of the yakin pronominal set

The split-ergative analysis considers the theme NP of dyadic m- clauses as accusative without considering the transitivity of clauses. However, not all dyadic m- clauses are transitive (Starosta and Gibson 1990, Dixon and Aikhenvald 2000). Consider the following examples in (31).

(31)  a. Cicu munay yakin.
     3s   M.here  1s
     'He came to me.' (Blust 2003:574)

     b. Cicu munay nak a taun.
     3s   M.here  1s.Pos Gen house
     'He came to my house.' (Blust 2003:475)

As seen above, the m- verb munay 'come', can take two arguments, the actor NP cicu 'he' and the locative NP yakin 'me', as in (31)a, as well as nak a taun 'my house', as in (31)b. Therefore, the so-called "accusative" pronoun in the split-ergative analysis, such as yakin 'me' can occur in the same position as a locative NP (an oblique) such as nak a taun 'my house', following the m- verb such as munay 'come'. Consider more examples of the "accusative" set of pronouns in (32).

(32)  a. Cicu qmauriwa fizfiz lhay yakin.
     3s   M.throw banana for 1s
     'He threw a banana for me.' (Blust 2003:690)

     b. Yaku mat ihun amaparfu.
     1s    with 2s    Irr.M.wrestle
     'I will wrestle with you.' (Blust 2003:594)

     c. Yaku marutaw mat ihun.
     1s   M.tall than 2s
     'I am taller than you.' (Blust 2003:594)

     d. Inay a patashan yakin.
     this LIG book 1s
     'This book is mine.' (Blust 2003:1057)
(32)a shows that the “accusative” pronoun set can also occur after the preposition *lhay* ‘for’ as a beneficiary. In addition, the “accusative” pronoun can occur after the comitative form *mat* ‘and/with’ as the actor NP of a monadic *m*- clause, as in (32)b. Furthermore, the “accusative” pronoun can occur after the comparative form *mat* ‘than’, as in (32)c. Finally, the “accusative” pronoun can also occur after a possessed NP and functions as a predicate possessor, as in (32)d.20

As illustrated in these examples, the “accusative” pronouns can occur in a wide range of distributions with different grammatical functions. It can occur not only in the O position of dyadic *m*- clauses, but also in the locative noun phrase position, in the position after the comitative/comparative form, and in the position of a predicate possessor. Thus, although similar distributions are found with accusative forms in languages that have an accusative actancy system, this does not provide evidence that the *yakin* set in Thao is “accusative”.

### 3.4.3.2 Problem 2: The split-ergative analysis and case-marking system as well as verbal agreement

If the split-ergative analysis were correct, the theme NP in pattern 2 would be an “accusative” NP, and the actor NP in pattern 3 would be an “ergative” NP. However, from a typological perspective, if the split-ergative analysis were the correct characterization of Thao transitivity, we would run into the following problems.

Typologically speaking, if a language exhibits a split case-marking system, it is commonly conditioned by one or more of the following factors: the semantic nature of

---

20 This type of case is rare, though.
the main verb, the semantic nature of the core NPs (e.g., pronominal vs. full noun phrases), the tense/aspect/mood of the clause, and the grammatical status of a clause (i.e., whether it is a main or subordinate clause) (Dixon 1979, 1994). However, none of these factors seems to condition the supposed split case-marking system described in the split-ergative analysis of Thao. From a typological point of view, such an analysis would be undesirable because it would make Thao (as well as many other western Austronesian languages) typologically unusual in that it would show an idiosyncratic type of split case-marking system, one that had none of the usual motivations for such a split.

Moreover, if the split-ergative analysis were correct, Thao would have a split agreement system in which -k would be the first person singular agreement form in one type of transitive construction (dyadic -in/-an clauses), but there is no verbal agreement form in the other type of transitive construction (dyadic m- clauses). Consider the following examples in (33).

(33) a. Izay a qnuan cpiqik.
   that LIG carabao whip.IN.1s
   ‘I whipped that carabao.’ (Blust 2003:347)

   b. Yaku kman sa bahat.
   1s M.eat Det pumpkin
   ‘I ate a pumpkin.’ (Blust 2003:915)

The examples in (33) show that if the split-ergative analysis were correct, the first person singular agreement form -k would agree with the actor of one type of transitive construction (the dyadic -in/-an clauses), as in (33)a, while there is no agreement for the other type of transitive construction (the dyadic m- clauses), as in (33)b, where the full pronoun yaku ‘I’ has to be used to express the actor NP. Therefore, like the supposed split case-marking system, the supposed split agreement system seems not to be
conditioned by any of the four factors cited earlier. From a typological perspective, such an analysis would be undesirable in that Thao would become typologically unusual for it would show an idiosyncratic type of split agreement system, one that is without any of the usual motivations.

3.4.3.3 Problem 3: The split-ergative analysis and syntactic processes

In addition to the two problems mentioned above, the split-ergative analysis also has difficulty in explaining why the theme NP of one type of transitive construction (the dyadic *-in/-an clauses) can undergo syntactic processes such as relativization and quantifier association, but the theme NP of the other type of transitive construction (the dyadic *m*-clauses) cannot. This can be illustrated by the following examples.

(34) a. Relativization of the theme NP of a dyadic *-in/-an* clause: possible

\[
[\_ f\text{inariw} \text{ binanaw} 'az] a \ h\text{lulus}
\]

LIG clothes

‘the clothes that the woman bought’ (Wang 2000)

b. Relativization of the theme NP of a dyadic *m*-clause: prohibited

\[
**[az\text{azak} \text{ kminan } \_ ] a \ f\text{izfiz}
\]

LIG banana

‘the bananas which the child ate’ (Wang 2000)

(35) a. A quantifier associated with the theme NP of a dyadic *-in/-an* verb: possible

Azaz \text{ buna } \text{ kanin} \text{ azazak}.

all sweet.potato eat.IN child

‘The children ate all the sweet potatoes.’ (Wang 2000)

b. A quantifier associated with the theme NP of a dyadic *m*-verb: prohibited

\[
**\text{Azazak} \text{ kman } \text{ azaz} \text{ buna}.
\]

child M.eat all sweet.potato

‘The children ate all the sweet potatoes.’ (Wang 2000)

The examples in (34) illustrate that Thao allows the theme NP in a dyadic *-in/-an* clause to be relativized, such as *hulus* ‘clothes’ in (34)a, but not the theme NP in a dyadic *m*-clause, such as *fizfiz* ‘banana’ in (34)b. Also, the examples in (35) show that it is possible
for a quantifier to be associated with the theme NP of -in/-an verbs, as in (35)a, but not with the theme NP of m- verbs, as in (35)b.

Like the supposed split case-marking system and the supposed split agreement system, the split system with respect to the syntactic processes seems not to be conditioned by any of the four factors cited earlier. Thus, such an analysis would be undesirable from a typological perspective, in that Thao would become typologically unusual for it would show an idiosyncratic type of split system with reference to syntactic processes, one that is without any of the usual motivations.

3.5 THE ERGATIVE ANALYSIS

The ergative analysis of Thao has never been proposed in the study of Formosan languages. In this dissertation, contrary to the previous analyses of Thao, I will conclude that Thao is best analyzed as a pure ergative language based on the following evidence: the morphosyntactic and semantic properties that Thao clauses exhibit, discourse grounding, and textual frequency tests. I will argue that although both dyadic -in/-an clauses and dyadic m- clauses are potentially canonical transitives, only the former are canonical transitive constructions in Thao, whereas the latter are intransitive (extended intransitives or pseudo-transitives), with the theme NP being an oblique, or extended core argument. By treating pattern 1 as intransitive, pattern 2 as extended intransitive, and pattern 3 as canonical transitive, Thao is analyzed as a pure ergative language, rather than an accusative or a split-ergative language.

In the following sections, various tests will be discussed which have been used to gain insight into the nature of transitivity. Section 3.5.1 deals with a test that attempts to
associate verbal morphology with transitivity. Section 3.5.2 discusses tests which relate semantic and syntactic transitivity. Section 3.5.3 discusses certain syntactic phenomena which are relevant to the determination of transitivity. Section 3.5.4 examines discourse factors that reveal transitivity. Finally, section 3.5.5 examines statistical data relating to the frequency of transitive vs. intransitive constructions in texts.

3.5.1 The Morphological Identification Test

The morphological identification test, proposed by Starosta and Gibson (1990), is a means to help distinguish the dyadic canonical transitive from dyadic intransitive clauses. However, as mentioned in the previous chapter, Liao (2004) points out some major problems while applying this test to language data from the Philippines and Formosa. She argues that while applying this test, it is important to specify what kind of monadic clauses that the dyadic clause pattern is being compared with in that comparing the dyadic clause patterns with different subtypes of monadic clauses will produce totally different results. Therefore, assuming that the verbs in all verbal clause patterns are all morphologically complex, Liao (2004) restates the morphological identification test as follows. “If a language has two (or more) dyadic clause patterns but only one of them is intransitive, the verb of the dyadic clause pattern that has the same verbal morphology as the verb in the MAJOR MONADIC INTRANSITIVE CLAUSE PATTERN is considered to be intransitive. The major intransitive pattern refers to the monadic intransitive clause pattern that can appear in most verb classes rather than just a limited number of verb

21 Please see section 2.2.2.1.
classes”. In this section, I will apply Liao’s revised morphological identification test to examine the transitivity of Thao clauses.

Thao is commonly described as having three verbal class patterns as discussed earlier: (i) Pattern 1: monadic intransitive $m$- clauses, (ii) Pattern 2: dyadic $m$- clauses, and (iii) Pattern 3: dyadic -$in$/-$an$ clauses. However, a careful study of Thao data shows that, like many Philippine and Formosan languages, Thao actually has two types of monadic intransitive clause: (i) the major pattern: $m$- clauses, and (ii) the restricted pattern: -$in$/-$an$ clauses. Most of the previous studies of Thao (except Blust 2003) do not describe nor discuss the limited -$in$/-$an$ intransitive pattern. Consider the following examples illustrating both types of intransitive pattern in (36) and (37), respectively.

(36) Monadic intransitive clauses: $m$- clause pattern
a. monadic -$um$- verb
   *Haya azazak cmanit.*
   that child M.cry
   ‘That child is crying.’ (Blust 2003:1015)

b. monadic $ma$- verb
   *Izay a saran matubu.*
   this LIG road M.wet
   ‘This road is wet.’ (Blust 2003:560)

c. monadic $mak$- verb
   *Itiza na ruza, makbaburuqbuq.*
   arrive Det boat M.CaRed.bubble.up
   ‘When the boat arrives, it chums up the water.’ (Blust 2003:336)

d. monadic $maka$- verb
   *Ligki makabukay.*
   longan.tree M.bloom
   ‘The longan tree is flowering.’ (Blust 2003:328)

e. monadic $mapa$- verb
   *Ita latusha mapariqaz.*
   1Pin LA.two M.see
   ‘The two of us are looking at each other.’ (Blust 2003:835)
f. monadic mi- verb

_Huya_ laturu isúy _miqilha._

that LA.three over.there M.drink

'Three of them were drinking over there.’ (Blust 2003:294)

g. monadic min- verb

_Izay a atu minhaha._

that LIG dog M.furious

'That dog is becoming furious.’ (Blust 2003:395)

h. monadic mu- verb

_Amutaun yaku._

Irr.M.house 1s

'I'm going home.’ (Blust 2003:979)

i. monadic mun- verb

_Baruku a sazum munsuriz._

cup Gen water M.spill

'The cup of water spilled.’ (Blust 2003:885)

(37) Monadic intransitive clauses: -in/-an clause pattern

a. _Wazaqan harbukin._

lake fog.IN

'The lake is covered with fog (fogged in).’ (Blust 2003:397)

b. _Nak a buhat lhatazin._

mine Gen field hailstone.IN

'My fields were pelted with hailstones.’ (Blust 2003:527)

c. _Hay wa qrus (kit)ayazin=iza._

that LIG post KIT.termite.IN=already

'That post is termite-eaten.’ (Blust 2003:309)

d. _Hay wa wazish (kit)kukulayin=iza._

that pork KIT.bug.IN=already

'That pork is infested with bugs.’ (Blust 2003:490)

e. _Cicu macuaw kitlhulhukin._

3s lots.of KIT.pimple.IN

'He has a lot of pimples.’ (Blust 2003:553)

f. _Nak a rima fcuan._

1s.Pos Gen hand callous.AN

' My hands are calloused.’ (Blust 2003:381)
g. *Haya atu ugalhuan.*
that dog UN.scabies.AN

‘That dog has a skin disease.’ (Blust 2003:492)

h. *Ya azazakan ihu?*
YA child.AN 2s

‘Are you expecting a child?’ (Blust 2003:311)

As shown above, both monadic *m*- clauses and *-in/-an* clauses in (36)-(37) are plain intransitive clauses taking an obligatory NP. Notice that examples in (37) show that the monadic *-in/-an* clause pattern seems to be derived from nouns only, with the meaning of “being affected/infected with/by X”. For instance, (37)a-(37)b illustrate weather phenomena and/or natural processes which are derived by attaching *-in/-an* to nouns to form intransitive verbs, as *harbukin* ‘be fogged-in’ in (37)a, and *lhatazin* ‘to be hailstone-beaten’. Examples (37)c and (37)d show that nouns that designate insects may occur as bases of *-in* verbs to express the meaning of ‘being infested with the specified insect,” as *ayazin* ‘infested with termites’ in (37)c, and *kukulayin* ‘infested with bugs’ in (37)d.

Similarly, when the formative *-in* together with *kit-* occurs with the names of bodily substances or afflictions, it means ‘being covered with X’ as *kitlhulhukin* ‘covered with pimples’ in (37)e. Likewise, when the formative *-an* appears with physical conditions, it expresses the meaning ‘being afflicted with/having X’, as *fcuan* ‘be calloused’ in (37)f, *ugkulhuan* ‘have scabies’ in (37)g, and *azazakan* ‘expect a child’ in (37)h.

In Thao, there is an additional intransitive *-in/-an* clause type that is not described in other Philippine or Formosan languages. In many respects it resembles an agentless passive, but lacks any distinctive morphological features that would mark it as such. This construction type, called “dynamic agentless intransitive” is discussed in detail in Chapter 5 (section 5.3.1)
As illustrated in (36) and (37), both monadic \( m \)-clauses and -in/-an clauses are plain intransitive clauses taking an obligatory NP. Following Liao (2004), only the monadic \( m \)-clause pattern should be considered as the "major intransitive pattern" in that it appears with most classes of verbs, as in (36). In contrast, the monadic -in/-an clause pattern is regarded as more restricted in that it only occurs with a very restricted set of verbs (most having the meaning 'the actant is (negatively) affected by \( X \)'), and all such verbs seem to be derived from nouns, as in (37). Therefore, when the morphological identification test is applied to Thao clauses, it is the monadic \( m \)-clauses that the two dyadic clauses patterns are compared with in that it is considered to be the major intransitive pattern. Now consider the following three basic verbal clause patterns in Thao.

(38) a. Pattern 1: monadic \( m \)-clauses
   *Haya azazak cmanit.*
   that child M.cry
   'That child is crying.' (Blust 2003:1015)

b. Pattern 2: dyadic \( m \)-clauses
   *Cicu tmiktik aqtalha.*
   3s M.chop pork
   'She is chopping pork.' (Blust 2003:987)

c. Pattern 3: dyadic -in/-an clauses
   *Aqtalha tiktikin ina.*
   pork chop.IN mother
   'Mother is chopping up the pork.' (Blust 2003:987)

As seen above, (38)a is clearly an intransitive clause, but (38)b and (38)c are ambiguous in terms of transitivity. Adopting the morphological identification/verbal morphology test (Gibson and Starosta 1990, and Liao 2004), (38)b is considered to be a dyadic intransitive sentence, whereas (38)c is transitive because the verbs in (38)a and (38)b have the same morphological shape -\( m \)-. However, the verbal morphology test can only
be considered as a supporting piece of evidence; other evidence from semantic and syntactic tests should be taken into account as well. I will proceed to discuss the question of Thao clause transitivity from these two perspectives in sections 3.5.2 and 3.5.3, respectively.

3.5.2 The Semantic Transitivity Test

In the preceding section, I have shown that evidence from morphology suggests that dyadic m- clauses are better analyzed as intransitive while dyadic -in/-an clauses are transitive in Thao. In this section, I will demonstrate that semantic evidence converges with this suggestion.

Hopper and Thompson (1980) propose that the notion of ‘transitivity’ can be considered to be a combination of semantic, morphological, and syntactic factors. They demonstrate how semantic properties correlate with the coding of morphosyntactic transitivity cross-linguistically by exploiting a scale of “transitivity parameters” on which clauses can be ranked. Starosta (1997:129-130, 138, 143, 147) further notes that although semantic transitivity and syntactic transitivity are not the same thing, they are linked together in a very interesting way: semantically more transitive situations (perfective aspect, definite theme, etc.) tend to be encoded by grammatically or morphosyntactically transitive clauses and vice versa.

Ten semantic parameters are considered to be relevant to the morphosyntactic manifestations of transitivity in Hopper and Thompson’s work. Here I consider one of the semantic parameters, ‘individuation of the theme,’ as most relevant to the morphosyntactic manifestations of Thao transitivity. Based on Thao textual data, I will
show that dyadic \(-in/-an\) clauses (pattern 3) are semantically more transitive while the
dyadic \(m\)-clauses (pattern 2) are semantically less transitive, in that the theme NP in
pattern 2 tends to be indefinite/non-referential, whereas the theme NP in pattern 3 tends
to be definite/referential/specific.

One point to be noted here is that textual data, not elicited data, is examined because
language consultants typically tend to use more natural speech in describing an event in a
text, whereas speakers tend to be influenced by Taiwanese clause structure when
responding to questions (given to them in Taiwanese) for eliciting data. Moreover, the
definiteness of NPs is typically crucial in determining the transitivity of clauses in
Formosan and Philippine languages, but neither Taiwanese nor Mandarin has definite or
indefinite articles (i.e., the/a), making a precise translation of definiteness/indefiniteness
from Thao into English problematic when Taiwanese is used for eliciting data. Thus,
alyses based on textual data presumably are more reliable than those based only on
elicited data, because definiteness/indefiniteness of NPs can usually be easily inferred
from contexts.

The text studied here is a narrative of catching fish and how to make fish traps. I only
compare dyadic \(m\)-verbs with dyadic \(-in/-an\) verbs in either main clauses, or subordinate
clauses. Notice that the so-called “\(m\)-clauses” refer to three construction types: monadic
\(m\)-clauses taking only one agentive phrase, monadic \(m\)-clauses taking one agentive
phrase and one location phrase, and dyadic \(m\)-clauses taking one agentive phrase and one
theme phrase. Only the dyadic \(m\)-clause pattern is taken into account because it is this
pattern that causes ambiguity in transitivity with the \(-in/-an\) dyadic clause pattern. Now
consider first some of dyadic \(m\)-clauses in the text, as illustrated in (39).
(39) Dyadic m- clauses; data from (Wang 2000)

a. *Yaku tu mimparhaway, sminapusapuk sa rusaw.*
   M.IC.young.man M.perf.Red.catch Det fish
   ‘When I became a young man, I used to catch fish.’ (1.1)^22

b. *Numa ya faglhu=uan, niwan tu lamara sa rusaw.*
   then when new=still NEG Det fish
   ‘When (they were) still new, they would not yet catch fish.’ (1.14)

c. *Mara sa hukduq, numa shinat numa tatruqz, numa masa sunda rusaw masa taur, numa masa palapishaz, alulay, rubisu, tawahi...*
   M.get Det fish.name and fish.name and fish.name then and fish.name fish and fish.name then and fish.name fish name fish name
   ‘(They) would catch hukduq, shinat, tatruqz, sunda, taur, palapishaz, alulay, rubisu, and tawahi fish...’ (1.16)

d. *Numa ti apiq mara sa funush tmihas rusaw.*
   then Det.prsn daughter-in-law M.take Det knife M.clean fish
   ‘Then daughter-in-law would take a knife to clean the fish.’ (1.27)

It should be noted that almost any NP in Thao can be “dropped” (i.e., understood from context). When the agent NP and/or the theme NP are mentioned previously, there is no need for speakers to refer to them at all, because their referents are easy to identify from the context. The examples in (39) show that the theme NPs of dyadic m- clauses are best interpreted as plural nouns, such as *rusaw* ‘fish’ in (39)a and (39)b, and a variety of fish names, as in (39)c, or non-referential nouns such as *funush* ‘a knife’ in (56d). Such nouns are generally considered to be non-individuated. Now consider the examples of dyadic -in/-an clauses in the same text, as in (40).

---

^22 The example reference numbers following the free translation are organized according to the order that they appear in the appendix. For example, (1.2) means that the example is the second sentence of Thao text 1.
Dyadic -in/-an clauses; data from Wang (2000)

a. **Pasayin lhalhuzu pulhalhuzu.**
   use.IN baited.bamboo.fish.trap C.put.out.lhalhuzu.trap.to.catch.fish
   ‘(I) would use *lhalhuzu* (a kind of trap) to catch fish.’ (1.2)

b. **Tmala sa gaulh, lhiklhikin.**
   M.cut Det bamboo saw.into.pieces.IN
   ‘(I) would cut bamboos, (then) saw (them) into pieces.’ (1.4)

c. **Numa fqatin ya nauran**
   then break.off.cleanly.IN when do.something.habitually
   *mlalas.*
   M.peel.off (shave.them.into.stick)
   ‘Then (I) would peel them into strips.’ (1.5)

d. **Numa pasansanin pashaiqalhiw.**
   then C.heat.IN dry.something.out
   ‘Then (I) would roast (them) on a fire to dry (them) out.’ (1.6)

The examples in (40) demonstrate that the theme NPs of -in/-an clauses tend to have a specific interpretation, such as *lhalhuzu* ‘a kind of baited bamboo fish trap’ in (40)a, or a definite interpretation that can be inferred from the context, such as the missing noun phrase *sa gaulh* ‘the bamboos’ in (40)b-(40)d. Now consider the examples in (41), where the two types of dyadic construction appear together.

Combination of dyadic *m*- clause and -in/-an clause; data from Wang (2000)

a. **Tmala sa gaulh, lhiklhikin.**
   M.cut Det bamboo saw.into.pieces.IN
   ‘(I) would cut bamboos, (then) saw (them) into pieces.’ (1.4)

b. **Numa mara sa qruzi, pasayin qruzi lhmiza.**
   then M.take Det plant use.IN plant M.plait
   ‘Then (I) would get *qruzi* plants and use them for plaiting.’ (1.8)

Again, as seen above, indefinite theme NPs tend to occur with *m*- clauses, such as *gaulh* ‘bamboos’ in (41)a, and *qruzi* ‘plant name’ in (41)b, whereas the definite theme NPs (understood from the context) with -in/-an clauses.
As shown in (39) to (41), my textual analysis points out that the theme NP of a dyadic
m-clause usually has an indefinite/nonindividuated interpretation, while the theme NP of
a dyadic -in/-an clause usually has a definite/specific/individuated interpretation.\(^{23}\)

Semantically, clauses with a definite or individuated theme (i.e., dyadic -in/-an clauses)
are considered more transitive than clauses with an indefinite or non-individuated theme
(i.e., dyadic m-clauses).\(^{24}\) This seems to indicate that the theme NP in Thao may be an E
of an extended intransitive construction rather then an O of a canonical transitive
construction.\(^{25}\) However, the semantic contrast between the two dyadic clause patterns is
not always shown in elicited data. In this type of data, particularly simple sentences, the
theme NP of a dyadic m-clause may be interpreted as either definite or indefinite, as
illustrated in (42).

(42) a. Cicu lhniklhik qaulh.
   3s M.saw bamboo
   'He is sawing bamboo.' (Blust 2003:535)

b. Ranaw tunrik yakin.
   chicken M.peck 1s
   'A chicken pecked me' (Blust 2003:1006)

c. Cicu kmalawa nak a dawaz.
   3s M.repair 1s.Pos Gen net
   'He repaired my net.' (Blust 2003:439)

d. Yaku gmucucu inay a aniamin.
   Is M.tie this LIG thing
   'I tied these things.' (Blust 2003:534)

\(^{23}\) As a matter of fact, the statistical test (see section 3.5.5.2) shows that the definite theme NPs tend to be
associated with the dyadic -in/-an clauses, while indefinite theme NPs the dyadic m-clause.

\(^{24}\) The contrast between the two seems to parallel the common characterization of the contrast between the
theme in an antipassive construction and the theme in a canonical transitive construction (see Cooreman

\(^{25}\) See section 3.5.5.2 for more discussion from the frequency test regarding the definiteness of the theme
NPs in these two types of dyadic clauses.
Example (42)a shows that the theme NP *gaulh* ‘bamboo’ of a dyadic *m*-clause is indefinite in elicited data just like other theme NPs discussed in the textual data. However, (42)b–(42)d show that the theme NP of a dyadic *m*-clause in elicited data, especially in simple sentences, can be definite/individuated, such as the pronoun *yakin* ‘me’ in (42)b, possessive pronoun phrases *nak a dawaz* ‘my net’ in (42)c, and demonstrative noun phrases *inay a aniamin* ‘these things’ in (42)d. Therefore, it appears that speakers tend to keep the association of *m*-clauses with an indefinite theme NP in textual data, but may not necessarily keep this association in non-textual data (i.e., in spontaneous simple sentences).

Why does this happen? The fact that Thao is in danger of extinction, influenced by Taiwanese for a long time, and that many Philippine and Formosan languages still show the contrast (i.e., indefinite/definite theme NPs) between the two dyadic clauses may suggest that Thao once had the contrast, but being seriously contaminated by Taiwanese, it has started to lose this feature, especially in elicited data. Since most of the textual data still retain the contrast between the two dyadic clauses (i.e., *m*-clauses and -*in/-an* clauses) and the textual data presumably display more genuine traits of Thao than the elicited data, it is plausible to argue that from the semantic evidence (i.e., the degree of individuation of the theme), the dyadic -*in/-an* clauses are semantically more transitive and the dyadic *m*-clauses are semantically less transitive. If we correlate this semantic property with the morphosyntactic properties discussed in the preceding two sections, we will find that semantically more transitive -*in/-an* clauses are manifested grammatically as more transitive than semantically less transitive dyadic *m*-clauses.
3.5.3 The Syntactic Transitivity Test

Thao exhibits at least two types of syntactic evidence for distinguishing canonical transitive structures from dyadic intransitive ones: relative clauses and quantifier association. Let us look at relative clauses first.

Languages differ from each other in systematic ways in terms of the positions that can be relativized. Based on data from about fifty (primarily accusative) languages, Keenan and Comrie (1977) posit the following Noun Phrase Accessibility Hierarchy, an implicational scale that expresses the relative accessibility to relativization of an NP, as in (43). (The symbol ‘>’ means ‘is more accessible’ to relativization.)

(43) The Noun Phrase Accessibility Hierarchy (AH)
Subject > Object > Indirect Object > Oblique > Genitive > Object of Comparison

According to the AH, if a language can form relative clauses on a given position on the hierarchy, then it can also form relative clauses on all positions higher (i.e., to the left of AH). Moreover, for each position on the hierarchy, there is some possible language that can relativize on that position and all positions to the left, but on no position to the right. The AH also claims that a language must be able to relativize subjects (i.e., the relativized position can be a subject). However, relativization in ergative languages does not always interact with Keenan and Comrie’s hierarchy in the expected way. Their hierarchy predicts that if it is possible to relativize the direct object, it should also be possible to relativize the “subject.” However, in ergative languages, it is possible to relativize the “subject” of an intransitive clause, or the “direct object” of a transitive clause, but not the “subject” of a transitive clause directly. Thus, Fox (1987) and Liao
(1999/2000) suggest for ergative languages that the hierarchy should be revised as in (44)
(with the absolutive relation occupying the leftmost position):

(44) Absolutive > Ergative > Indirect Object > Oblique > Inalienable Genitive >
    Alienable Genitive > Object of Comparison

Now how do these two versions of the AH help us to distinguish canonical transitive
structures from dyadic intransitive ones in Thao? Either Keenan and Comrie’s AH or
Fox’s Absolutive Hypothesis predicts that it is easier to relativize the theme NP of a
transitive clause (“object” in Keenan and Comrie’s version, “absolutive” in Liao’s
version) than the oblique NP. Therefore, the fact that it is possible to relativize the theme
NP of -in/-an clauses, but not the theme NP of m- clauses in Thao is connected with the
claim that the former is the O, while the latter is an E. Consider the following examples
in (45) and (46).

(45) Relativization of the theme NP of a dyadic -in/-an clause: gap strategy is possible
a. *Hulus finariv binanaw’az.*
   clothes IN.perf.buy woman
   ‘The woman bought the clothes.’ (Wang 2000)

b. [ _ finariv binanaw’az ] a hulus
   [ _ IN.perf.buy woman ] LIG clothes
   ‘the clothes that the woman bought’ (Wang 2000)

(46) Relativization of the theme NP of a dyadic m- clause: prohibited
a. Azazak kminan fizfiz.
   child M.perf.eat banana
   ‘The child ate bananas.’ (Wang 2000)

b. **[azazak kminan _ ] a fizfiz
   [child M.perf.eat _ ] LIG banana
   ‘the bananas which the child ate’ (Wang 2000)

The examples above illustrate that Thao allows the theme NP in a dyadic -in/-an clause to
be relativized, such as *hulus* ‘clothes’ in (45)b, but not the theme NP in a dyadic m-
clause, such as *fizfiz* ‘banana’ in (46)b. This suggests that the theme NP in (45)a is the O,
but the theme NP in (46)a is an E (oblique). This in turn suggests that dyadic -in/-an clauses are canonical transitive constructions, while the dyadic m- clauses are extended intransitive ones.

In addition to the evidence from the relativization of NPs discussed above, the association of quantifiers with NPs can also help us to distinguish canonical transitive structures from dyadic intransitive ones. Quantifiers can occur with an NP, but they are not always unselective as to the NPs with which they are associated. Like relativization of an NP, languages also differ from each other in systematic ways in terms of which NP can be associated with a (floated) quantifier. Following the AH (Keenan and Comrie 1977) mentioned earlier, it is also predicted that quantification of the “object” (the theme NP of transitive clauses) is easier than that of an oblique NP. Thus, the fact that in Thao it is possible for a quantifier to be associated with the theme NP of -in/-an verbs, but not with the theme NP of m- verbs suggest that the former is the O while the latter is an E, as shown in (47).

\[(47)\]

a. A quantifier associated with the theme NP of a dyadic -in/-an verb

\[
\text{Azaz buna kanin azazak.}
\text{all sweet.potato eat.IN child}
\]

‘The children ate all the sweet potatoes.’ (Wang 2000)

b. A quantifier associated with the theme NP of a dyadic m- verb

\[
\text{**Azazak kman azaz buna.}
\text{child M.eat all sweet.potato}
\]

‘The children ate all the sweet potatoes.’ (Wang 2000)

The examples in (47) seem to suggest that the theme NP in the -in/-an clause is the O, but the theme NP in the m- clause is an E (oblique) in that the quantifier azaz ‘all’ can be associated with the theme NP of a dyadic -in/-an clause, such as buna ‘sweet potato’ in (47)a, but not with the theme NP of a dyadic m- clause, such as buna ‘sweet potato’ in
This then in turn suggests that dyadic $m$- clauses are intransitive structures while dyadic -$in/-an clauses are canonical transitive ones.

In conclusion, based on the syntactic evidence from relativization and quantifier association, I have shown that dyadic -$in/-an clauses are canonical transitive constructions, while the dyadic $m$- clauses are extended intransitive ones.

3.5.4 The Discourse Grounding Test

Hopper and Thompson (1980) broaden the traditional notion of transitivity in grammar. One of the main suggestions they made is that degree of transitivity can be correlated with the discourse functions of grounding: highly transitive expressions provide the foreground of narrative discourse, and less transitive expressions, the background. According to Hopper and Thompson (1980), the material that supplies the main points (or thread/backbone) of the discourse is known as foreground. They are ordered in a temporal sequence. By contrast, background refers to that part of a discourse that does not immediately and crucially contribute to the speaker’s goal, but which merely assists, amplifies, or comments on it. They put flesh on the skeleton, but are not ordered with respect to each other. The following examples from (48)a to (48)j are the beginning of the story ‘The monkeys who were sawing wood’ (Blust 2003:248). The foregrounded clauses are in italic bold type.

(48) a. *Kahiwan tata wa taun a caw latusha sa parhaway,*
   long.ago one LIG house LIG person LA.two Det young.person
   numa sa ama’ina miaqawan itia.
   then Det parents M.still EXIST
   ‘Once upon a time, in a house, there lived two brothers with (their) parents who were still alive.’ (4.1)

26 See appendix (text 4).
b. *Macuaw latusha wa minlha fut mapaqitan.*
   M.very LA.two LIG sibling M.get.along.well
   ‘They got along well.’ (4.2)

c. *Mashtay=iza sa izahay a parhaway minara sa binanau’az,*
   M.every=already Det that LIG young.person M.perf.take Det wife
   *numa mashtay=iza yanan sa azazak.*
   then M.every=already EXIST Det child
   ‘Each young man was married, and had children.’ (4.3)

d. *Numa tu ikahin amakashiqa sa taun.*
   then when a.little.while Irr.M.build.an.extension.on.a.house Det house
   ‘Then, after awhile (they) would renovate the house.’ (4.4)

e. *Numa sa izahay a parhaway kmilhim izahay a kawi*
   then Det that LIG young.people M.search that LIG wood
   a mintaun.
   LIG make.house
   ‘So these two young men went to search for wood to make a house.’ (4.5)

f. *Mutusi tanasaya kan tatusha, mriqaz sa kawi.*
   M.there uphill step TA.two M.see Det tree
   ‘The two (of them) went up into the mountains (and) spotted a tree.’ (4.6)

g. *Numa tu itia sa riniqazan cicu a kawi,*
   then when EXIST Det perf.see.AN 3s LIG wood
   *lhiklhikin cicu punctunuq, lhintutanin cicu.*
   saw.IN 3s C.fall.down LHIN.cut.horizontally 3s
   ‘Then when they spotted some wood, (they) sawed it until it toppled to the
   ground, and cut it into cross sections,’ (4.7)

h. *Numa simaq=iza kmacu=iza maquliush a lhalhiklik.*
   then next.day=already M.bring=already M.big LIG saw
   ‘And the next day they brought a long saw.’ (4.8)

i. *Numa sa izahay a kawi alhindazumzumin a miggrus,*
   then Det that LIG wood Irr.LHIN.cut.into.small.pieces.In LIG M.make.posts
   a mimpinazim.
   LIG M.become.walls
   ‘And (they) would cut that wood into small sections lengthwise to make house
   posts and to make walls.’ (4.9)
j. Numa izahây a latusha wa minlha fut mimpiza wa qali miaqay
then these LIG two LIG sibling M. several LIG day M. often
mutusi tanasaya lhimiklhik sa a mintaun a kawi.
M. go there uphill M. saw one LIG M. make house LIG wood

"For several days the two brothers made frequent trips up the mountain,
sawing away at the tree which was to become their house." (4.10)

This running text clearly shows that dyadic m- clauses have a tendency to encode
introductory events, ‘backgrounded information’, in which new participants are being
introduced, while the dyadic -in/-an clauses are more likely to encode ‘foregrounded’
information, i.e., the narration of on-going events. Therefore, following Hopper and
Thompson’s hypothesis (1980), the dyadic -in/-an clauses are considered to be more
transitive and the dyadic m- clauses less transitive.

3.5.5 The Text Frequency Test

Counting the text frequency of constructions is another reliable way for
distinguishing a marked construction from an unmarked construction cross-linguistically
(Liao 2004). Many studies have shown that cross-linguistically more-marked
constructions have lower textual frequency than less-marked constructions (see Svartvik
In sections 3.5.5.1 and 3.5.5.2, I compare the frequency of dyadic m- clauses with dyadic
-in/-an clauses, and the frequency of association of definiteness with dyadic m- clauses
and with dyadic -in/-an clauses in different types of Thao texts, as a way of
distinguishing less marked constructions from more marked ones.

27 The claim is based only on the first ten sentences in one text. A statistically based study of discourse
grounding involving more clauses is required in the future.
3.5.5.1 Frequency of dyadic m-clauses vs. dyadic -in/-an clauses

Although typically m-clauses consist of a variety of construction types: a construction taking only one agentive phrase, or a construction taking one agentive phrase and one location phrase, or a construction taking one agentive phrase and one theme phrase, I only count the latter construction type, i.e., the dyadic m-clauses, because among the various m-clauses, these are the only ones which are potentially canonical transitive candidates in Thao. Similarly, -in/-an clauses consist of both monadic as well as dyadic types as discussed previously, but in the test conducted here, it is only the dyadic type that is compared with dyadic m-clauses, because among the various -in/-an clauses, these are the only ones that are potentially canonical transitive candidates in Thao.

As mentioned in the previous chapter, Liao (2004) has pointed out, when conducting a text frequency study, two factors need to be considered: (i) genre, and (ii) construction type. Since I have focused my attention on the dyadic m-clause and the dyadic -in/-an clauses, it is the genres of the texts that should be looked into. Seven Thao texts (see Appendix) were analyzed, with four texts (1-4) being dictated by A-Song Shi (Kilash), and three texts (5-7) by Ms. Qiu-Xiang Liu Mao (Puni). In terms of genre, they appear to involve narrative and/or activity (e.g., text 3, 4, 5, and 7), or a combination of narrative and/or activity with procedural texts (e.g., text 1, 2, and 6). Therefore, I also count the two dyadic clause patterns with respect to the two different types of texts (i.e., narrative and/or activity, and procedural).

Table 3.1 and 3.2 summarize the study of frequency of the two types of dyadic clauses used by the two consultants in the two different types of texts.
Table 3.1 Frequency of dyadic *m*-clauses vs. dyadic *-in/-an* clauses in Mr. Shi’s narrative and/or activity and procedural texts

<table>
<thead>
<tr>
<th>Text</th>
<th>Narrative and activity</th>
<th>Procedural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td><em>m</em>- clauses</td>
</tr>
<tr>
<td>1</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>69</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>59 (54.6%)</td>
</tr>
</tbody>
</table>

Table 3.2 Frequency of dyadic *m*-clauses vs. dyadic *-in/-an* clauses in Ms. Mao’s narrative and/or activity and procedural texts

<table>
<thead>
<tr>
<th>Text</th>
<th>Narrative and activity</th>
<th>Procedural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td><em>m</em>- clauses</td>
</tr>
<tr>
<td>5</td>
<td>19</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>15 (48.4%)</td>
</tr>
</tbody>
</table>

Tables 3.1 and 3.2 show that the two consultants do not have a great difference in the frequency between the two dyadic clause patterns in narrative and activity texts (*m*-clauses: 54.6% vs. *-in/-an* clauses: 45.4% in Mr. Shi’s texts, and *m*-clauses: 48.4% vs. *-in/-an* clauses: 51.6% in Ms. Mao’s). However, there is a considerable difference in the consultants’ procedural texts (*m*-clauses: 25% vs. *-in/-an* clauses: 75% in Mr. Shi’s texts, and *m*-clauses: 0% vs. *-in/-an* clauses: 100% in Ms. Mao’s). Notice that what is presented in the two tables is purely descriptive, with no inferential statistical analysis. I use the Chi-square ($\chi^2$) one-group test to determine whether there is a significant
difference between the frequencies of the two dyadic clause patterns in the two different types of texts. Tables 3.3 and 3.4 summarize the result.

**Table 3.3 Observed Dyadic M-Clauses and Expected Dyadic M-Clauses in Narrative and/or Activity Texts**

<table>
<thead>
<tr>
<th>Consultants</th>
<th>Observed dyadic m-clauses</th>
<th>Expected dyadic m-clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Shi</td>
<td>59</td>
<td>(59+49)/2=54</td>
</tr>
<tr>
<td>Ms. Mao</td>
<td>15</td>
<td>(15+16)/2=15.5</td>
</tr>
<tr>
<td>Result</td>
<td>$\chi^2 = .47909$; p-value = .4883</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3.4 Observed Dyadic M-Clauses and Expected Dyadic M-Clauses in Procedural Texts**

<table>
<thead>
<tr>
<th>Consultants</th>
<th>Observed dyadic m-clauses</th>
<th>Expected dyadic m-clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Shi</td>
<td>5</td>
<td>(5+15)/2=10</td>
</tr>
<tr>
<td>Ms. Mao</td>
<td>0</td>
<td>(0+7)/2=3.5</td>
</tr>
<tr>
<td>Result</td>
<td>$\chi^2 = 6$; p-value = .0143</td>
<td></td>
</tr>
</tbody>
</table>

As seen in table 3.3, the p-value is greater than the critical value .05. Thus, the result shows that for both consultants, the frequencies of observed dyadic m-clauses and expected dyadic m-clauses in narrative and/or activity texts are not significantly different from each other on a statistical basis. This in turn suggests that there is no significant difference between the frequencies of dyadic m-clause and dyadic -in/-an clause patterns in narrative and/or activity texts.

On the other hand, table 3.4, with p-value less than the critical value .05, shows that the frequencies of observed dyadic m-clauses and expected dyadic m-clauses are statistically significantly different from each other.\(^\text{28}\) Thus, this implies that for the two consultants there is a significant difference between the frequencies of dyadic m-clause and dyadic -in/-an clause patterns in procedural texts on a statistical basis.

\(^{28}\) However, it should be noted that for both consultants, the numbers of clauses in procedural texts are very small, so additional data is required for future study.
To sum up, if the text is narrative, both dyadic \( m \)-clauses and dyadic \(-in/-an\) clauses occur and the frequencies are not significantly different from each other. In contrast, in procedural, the dyadic \(-in/-an\) clauses are significantly more likely to occur than the dyadic \( m \)-clauses.

Now, let us see if there is a significant difference between the frequencies of the two dyadic clause patterns in all of the texts, without dividing them into the two types.

Again, the Chi-square one-group test is used. Table 3.5 summarizes the result.

<table>
<thead>
<tr>
<th>Consultants</th>
<th>Observed Dyadic ( m )-clauses</th>
<th>Expected Dyadic ( m )-clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Shi</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Ms. Mao</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Result</td>
<td>( \chi^2 = .84211; p)-value = .3588</td>
<td></td>
</tr>
</tbody>
</table>

As seen in table 3.5, the \( p \)-value is greater than .05. This suggests that there is no significant difference between the frequencies of dyadic \( m \)-clauses and dyadic \(-in/-an\) clauses in Thao texts. Therefore, based on the above frequency test, the question remains unanswered as to which of the two dyadic clause patterns should count as the less-marked construction (with a significant higher frequency). Additional data is required for a future study.

### 3.5.5.1.1 Correlation between text genre and dyadic \( m \)-clauses and dyadic \(-in/-an\) clauses

As already discussed in the previous section, the frequencies of the dyadic \( m \)-clauses and the dyadic \(-in/-an\) clauses are significantly different from each other in procedural texts, but not in narrative and/or activity texts. This suggests that if the text is narrative,
both dyadic *m*- clauses and dyadic *-in/-an* clauses occur and the frequencies are not significantly different from each other. However, if it is procedural, the dyadic *-in/-an* clauses are significantly more likely to occur than the dyadic *m*- clauses. We can also use Fisher’s exact test to support the correlation between the two dyadic clause patterns and genre of the Thao texts. Tables 3.6 and 3.7 summarize the result.

**TABLE 3.6 Clause types in Mr. Shi’s narrative/activity and procedural texts**

<table>
<thead>
<tr>
<th>Genre of texts</th>
<th>Clause types</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dyadic <em>m</em>- clauses</td>
<td>Dyadic <em>-in/-an</em> clauses</td>
</tr>
<tr>
<td>Narrative/activity</td>
<td>59</td>
<td>49</td>
</tr>
<tr>
<td>Procedural</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td><em>p</em>-value</td>
<td>.026</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 3.7 Clause types in Ms. Mao’s narrative/activity and procedural texts**

<table>
<thead>
<tr>
<th>Genre of texts</th>
<th>Clause types</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dyadic <em>m</em>- clauses</td>
<td>Dyadic <em>-in/-an</em> clauses</td>
</tr>
<tr>
<td>Narrative/activity</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Procedural</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td><em>p</em>-value</td>
<td>.029</td>
<td></td>
</tr>
</tbody>
</table>

As seen in table 3.6 and 3.7, the *p*-value calculated by Fisher’s exact test is less than .05, so the difference between dyadic *m*- clause and dyadic *-in/-an* clause patterns is statistically significant. Dyadic *m*- clauses and dyadic *-in/-an* clauses both tend to appear in narrative and/or activity texts, while dyadic *m*- clauses appear less frequently in procedural texts.
3.5.5.2 Definiteness association of *m-* clauses and *-in/-an* clauses

Recall that Hopper and Thompson (1980) and Starosta (1997) point out that semantic transitivity and syntactic transitivity are linked together in a way that semantically more transitive situations (e.g., perfective aspect, definite theme, etc.) tend to be encoded by grammatically or morphosyntactically transitive clauses and vice versa. Therefore, I count the frequency of definiteness of the theme associated with dyadic *m-* clauses and that with dyadic *-in/-an* clauses in two different types of texts, narrative/activity and procedural. Table 3.8 and 3.9 summarize the result.

**Table 3.8 Definiteness of Theme NPs in Mr. Shi's Texts**

<table>
<thead>
<tr>
<th>Definiteness of theme NP</th>
<th>Clause types</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dyadic <em>m-</em> clauses</td>
</tr>
<tr>
<td>Definite</td>
<td>16</td>
</tr>
<tr>
<td>Indefinite</td>
<td>43</td>
</tr>
<tr>
<td><em>p</em>-value</td>
<td>&lt; .00000001</td>
</tr>
</tbody>
</table>

**Table 3.9 Definiteness of Theme NPs in Ms. Mao's Texts**

<table>
<thead>
<tr>
<th>Definiteness of theme NP</th>
<th>Clause types</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dyadic <em>m-</em> clauses</td>
</tr>
<tr>
<td>Definite</td>
<td>0</td>
</tr>
<tr>
<td>Indefinite</td>
<td>15</td>
</tr>
<tr>
<td><em>p</em>-value</td>
<td>&lt; .00000001</td>
</tr>
</tbody>
</table>

By applying Fisher’s exact test, it appears that definite theme NPs are more likely to be associated with dyadic *-in/-an* clauses, while indefinite theme NPs are more likely to be associated with the dyadic *m-* clauses. As seen in tables 3.8 and 3.9, the *p*-value calculated with Fisher’s exact test is less than .05, so the difference between dyadic *m-* clause and dyadic *-in/-an* clause patterns is statistically significant. For both consultants, the number of definite theme NPs associated with dyadic *-in/-an* clauses is higher than
that with dyadic $m$- clauses; and the number of indefinite theme NPs associated with
dyadic $m$- clauses is higher than the number associated with dyadic -$in/-an$ clauses.
Therefore, definite theme NPs tend to be associated with the dyadic -$in/-an$ clauses, while
indefinite theme NPs tend to be associated with dyadic $m$- clauses. Following Hopper
and Thompson (1980), this in turn suggests that semantically the dyadic $m$- clauses are
less transitive and the dyadic -$in/-an$ clauses are more transitive.

3.6 SUMMARY

For the past decades, Formosan languages have been variously analyzed and
discussed as accusative, ergative, and split-ergative in either descriptive or theoretical
linguistics regarding their actancy system. These different conclusions stem from the fact
that certain two-argument clause patterns are ambiguous in terms of transitivity. Many
Formosan syntacticians have neglected the distinction between valency and transitivity,
equating monadic clauses with intransitive clauses, and dyadic clauses with transitive
clauses without considering the relevant morphosyntactic and semantic properties that
each exhibits. This kind of neglect has resulted in many of these languages being
analyzed as having two distinct types of transitive construction, and an unconditioned
split-ergative system, something that is typologically unusual. Therefore, the primary
goal of this chapter has been to unravel the transitivity of Thao and to distinguish
canonical transitive clauses from dyadic intransitive clauses. I have shown that dyadic $m$-
clauses should be analyzed as extended intransitives, while dyadic -$in/-an$ clauses are
canonical transitives, based on morphosyntactic, semantic, discourse grounding, and text
frequency tests. These findings lead to the conclusion that Thao is best analyzed as an ergative language.
CHAPTER 4

ERGATIVITY IN THAO

4.1 INTRODUCTION

The purpose of this chapter is to discuss ergativity in Thao with respect to grammatical relation coding and syntactic phenomena.

Having determined the canonical transitive construction in Thao in chapter 3, I can now demonstrate that Thao is a language that exhibits an ergative actancy structure at both morphological and syntactic levels. Section 4.2 discusses morphological ergativity in Thao in terms of two types of grammatical relation coding, word order and cross-referencing system. Section 4.3 discusses syntactic ergativity as it is manifested in Thao syntactic phenomena including relativization, quantifier association, topicalization, nominalization, clefting, and coordination.

4.2 MORPHOLOGICAL ERGATIVITY

“Morphological ergativity” in Thao is exhibited in the following two grammatical relation coding strategies, constituent order and cross-referencing system. Both strategies treat S and O the same, but A differently.

4.2.1 Constituent Order

Recall that Thao has three basic verbal clause patterns: Pattern 1: plain/monadic intransitive \( m \)-clauses (headed with \( m \)-verbs), Pattern 2: extended/dyadic intransitive \( m \)-clauses (headed with \( m \)-verbs), and Pattern 3: canonical/dyadic transitive \(-in/-an\) clauses
(headed with \textit{-in/-an} verbs). It follows an ergative system in the verb-medial word order, with 
S and O occurring in preverbal position, while A occurs in postverbal position, as in figure 4.1, and 
followed by the examples in (1).

<table>
<thead>
<tr>
<th>Pattern 1</th>
<th>Pattern 2</th>
<th>Pattern 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>S</td>
<td>O</td>
</tr>
<tr>
<td>agent/theme</td>
<td>agent</td>
<td>theme</td>
</tr>
<tr>
<td>Nom/Abs(^1)</td>
<td>Nom/Abs</td>
<td>Nom/Abs</td>
</tr>
<tr>
<td>\textit{m-V}</td>
<td>\textit{m-V}</td>
<td>\textit{V-in/-an}</td>
</tr>
<tr>
<td>[-trns]</td>
<td>[-trns] (antipassive)</td>
<td>[+trns]</td>
</tr>
<tr>
<td>E</td>
<td>theme</td>
<td>A</td>
</tr>
<tr>
<td>Obl</td>
<td></td>
<td>agent</td>
</tr>
<tr>
<td>Erg</td>
<td></td>
<td>Erg</td>
</tr>
</tbody>
</table>

\textbf{FIGURE 4.1 THAO VERBAL CLAUSE PATTERNS}

(1) S/O-A contrast by word order
a. SV
\textit{Yaku mundadán.}  
1s.Nom/Abs intrns.walk  
'I was walking.' (Blust 2003:645)

b. SVE
\textit{Yaku sminapusapuk sa rusaw.}  
1s.Nom/Abs intrns.perf.catch Det fish  
'I used to catch fish.' (1.1, Wang 2000)

\(^1\) Traditionally, in an ergative language, the S of intransitive clauses and the O of transitive clauses has been categorized as 'absolutive'. However, it should be recognized that 'nominative' is the typologically more general term, in that it captures more cross-linguistic generalizations; more specifically, the nominative NP (S/A) in an accusative language shares similar syntactic properties with the absolutive NP (S/O) in an ergative language. For example, the nominative/absolutive NP tends to be the least marked NP, and the one that is most likely to undergo deletion under conditions of coreference in a relative clause, whether transitive or intransitive. I will thus use Nom/Abs to represent this typologically more general term in this dissertation.
As shown above, in the verb-medial word order, the S of a plain or extended intransitive clause and the O of a transitive clause occur before the verb, while the A of a transitive verb occurs after the verb. Therefore, Thao shows “morphological ergativity” in its constituent order.

4.2.2 Verbal Agreement and Clitic Pronouns

Losing most nominal and pronominal case-marking forms, Thao can still show ergativity from the three remnants, first and second person singular agreement form -k and -nu, and first person singular clitic pronoun =wak. The first and second person singular actor agreement form -k and -nu only agree with the A of a transitive verb, but not with S and O, while the first person nominative/absolutive singular clitic pronoun =wak can only refer to S/O (i.e., nominative/absolutive) but not to A, as illustrated in (2) and (3), respectively.

(2) Verbal agreement with A, not with S/O
   a. Tubarak cicu a rikus.
      trns.beat.1s.actr 3s.Pos Gen back
      ‘I beat him on the back’ (Lit., ‘I beat his back.’) (Blust 2003:1007)
   b. Numa kalawanu?
      what      trns.do.2s.actr
      ‘What have you (s.g.) done?’ (Wang 2000)
(3) Clitic pronoun =wak encoding S/O, not A
a. *Amarauz=wak.*
   intrns.Irr.swim=1s.Nom/Abs
   ‘I am going to swim.’ (Blust 2003:827)
b. *Nak a fukish maqulis. amakishkish=wak.*
   Is.Pos LIG hair intrns.long intrns.Irr.cut=1s.Nom/Abs
   ‘My hair is long, I’ll cut (it).’ (Blust 2003:1051)
c. *Fanuzi=wak simaq.*
   wake.IMP.trns=Is.Nom/Abs tomorrow
   ‘Wake me up tomorrow.’ (Blust 2003:373)

As in (2), the first and second person singular agreement forms -k and -nu only agree
with the A of a transitive clause. There is no verbal agreement for the S of an intransitive
verb, nor for the O of a transitive verb. As in (3), the first person singular clitic pronoun
=wak marks the S of an intransitive verb and the O of a transitive verb, but not the A of a
transitive verb. Thus, in addition to word order, Thao follows an ergative system in its
verbal agreement and clitic pronoun as well.

4.3 SYNTACTIC ERGATIVITY

In previous sections, I have shown that Thao exhibits “morphological ergativity” in
the two grammatical relation coding strategies: (i) word order, and (ii) pronominal-related
verbal agreement and clitic pronouns. As discussed in chapter 2, in addition to
“morphological” ergativity, there is also “syntactic ergativity,” in which the S/O-A
contrast is manifested in various syntactic phenomena such as relativization, quantifier

---

2 This type of ergative agreement system is rare but typologically plausible. As Dixon (1994:46) notes,
“what is much less common, across the language of the world, is for the verb to cross-reference just one
core argument.” However, he also points out that “The Nilotic language Pári shows a number of ergative
features, including A being cross-referenced on the verb in one type of construction, but never S or O...
However, I do not know of any accusative language that consistently cross-references O, but not S or A”
(Dixon 1994:44).
association, topicalization, nominalization, clefting, and coordination. A careful study of Thao shows that it follows an ergative pattern at its syntactic level as well.

4.3.1 Relativization

In Thao, only S/O (i.e., the nominative/absolutive NP), but not A (i.e., the ergative NP) can undergo the syntactic process of relativization by using the gap strategy, as illustrated in (4)-(7).

(4) Relativization of the S of a plain intransitive clause: possible
   a. \[\text{RC } \_ \text{ cminanit tilha } \_ \text{ wa azazak} \]
      \[\_ \text{ intrns.perf.cry yesterday} \_ \text{ LIG child} \]
      'the child who was crying yesterday' (Wang 2000)
   b. \[\text{RC } \_ \text{ mabiskaw malalia } \_ \text{ wa caw} \]
      \[\_ \text{ intrns.fast intrns.run} \_ \text{ LIG person} \]
      'the person who is running fast' (Wang 2000)
   c. \[\text{RC } \_ \text{ itau malhus } \_ \text{ a atu} \]
      \[\_ \text{ at.home intrns.sleep} \_ \text{ LIG dog} \]
      'the dog that is sleeping at home' (Wang 2000)

(5) Relativization of the S of an extended intransitive clause: possible
   a. \[\text{RC } \_ \text{ kman fiefiz } \_ \text{ a azazak} \]
      \[\_ \text{ intrns.eat banana} \_ \text{ LIG child} \]
      'the child who is eating bananas' (Wang 2000)
   b. \[\text{RC } \_ \text{ kminay tunu=s(a) binanaw'az } \_ \text{ a ayuzi} \]
      \[\_ \text{ intrns.perf.hit=Det woman} \_ \text{ LIG man} \]
      'the man who hit the woman' (Wang 2000)

(6) Relativization of the O of a transitive clause: possible
   a. \[\text{RC } \_ \text{ finariw binanaw'az } \_ \text{ a hulus} \]
      \[\_ \text{ tran.perf.buy woman} \_ \text{ LIG clothes} \]
      'the clothes that the woman bought' (Wang 2000)
   b. \[\text{RC } \_ \text{ kay pacayin parhaway } \_ \text{ a fafuy} \]
      \[\_ \text{ tran.kill young.man} \_ \text{ LIG pig} \]
      'the pig that the young man killed' (Wang 2000)
The examples above demonstrate that only the S of an intransitive verb and the O of a transitive verb can be relativized directly by the gap strategy in Thao. However, it is not possible to relativize the A of a transitive verb directly by leaving a gap inside the relative clause, as in (7).

(7) Relativization of A of a transitive clause: prohibited
   a. \[[R_{C} \text{ay pacayin } \text{fafay}] \quad \text{parhaway}\]
      \[[\text{trans.kill } \text{pig}] \quad \text{young.man}\]
      ‘**the young man who killed the pig’, but ‘the young man whom the pig killed’ (Wang 2000)
   b. \[[R_{C} \text{fariw } \text{hulus}] \quad \text{binanaw’az}\]
      \[[\text{trans.buy } \text{clothes}] \quad \text{woman}\]
      ‘the woman who bought the clothes’ (Wang 2000)
   c. \[[R_{C} \text{qinaqutilh } \text{qaruta}] \quad \text{atu}\]
      \[[\text{trans.perf.chase } \text{cat}] \quad \text{dog}\]
      ‘**the dog that chased the cat’, but ‘the dog that the cat chased’ (Wang 2000)

Rather, it is necessary to first apply antipassivization to detransitivize the verb and thereby to convert the A of a transitive clause into the S of an intransitive clause, then it can be relativized, as in (8).

(8) After antipassivization
   a. \[[R_{C} \text{kmay pacay } \text{fafay}] \quad \text{parhaway}\]
      \[[\text{intrns.kill } \text{pig}] \quad \text{young.man}\]
      ‘the young man who killed the pig’ (Wang 2000)
   b. \[[R_{C} \text{fariw } \text{hulus}] \quad \text{binanaw’az}\]
      \[[\text{intrns.buy } \text{clothes}] \quad \text{woman}\]
      ‘the woman who bought the clothes’ (Wang 2000)
   c. \[[R_{C} \text{qmaqutilh } \text{qaruta}] \quad \text{atu}\]
      \[[\text{intrns.perf.chase } \text{cat}] \quad \text{dog}\]
      ‘the dog that chased the cat’ (Wang 2000)
Therefore, Thao displays "syntactic ergativity" in the phenomenon of relativization in that, as illustrated in (4)-(8), both the S of an intransitive clause and the O of a transitive clause behave the same with respect to relativization, whereas the A of a transitive clause behaves differently.

4.3.2 Quantifier Association

Another syntactic phenomenon that manifests syntactic ergativity in Thao involves quantifier association of core arguments. In Thao, the quantifier azaz ‘all’ is always associated with S/O, but never with A, as in (9) and (10).

(9) a. A quantifier associated with the S of an intransitive verb
   Mapacanit azaz azazak.
   intrns.Coll.cry all child
   ‘All of the children are crying.’ (Wang 2000)

   b. A quantifier associated with the O of a transitive verb
   Azaz buna kanin azazak.
   all sweet.potato trns.eat child
   ‘The children ate all the sweet potatoes.’ (Wang 2000)

As illustrated in (9), the quantifier azaz ‘all’ is associated with the S of an intransitive verb or the O of a transitive verb.

However, it is not possible for azaz to be associated with the A of a transitive verb. It is necessary to first apply antipassivization to detransitivize the verb and thereby to convert the A of a transitive clause into the S of an intransitive clause, and then it can be associated with the quantifier azaz ‘all’, as illustrated in (10).

(10) a. A quantifier associated with the A of a transitive verb
   **Buna kinan azaz azazak.
   sweet.potato trns.perf.eat all child
   ‘All of the children ate the sweet potatoes.’ (Wang 2000)
b. After antipassivization

\[ Azaz \text{ azazak kman buna.} \]
\[ \text{all child intrns.eat sweet.potato} \]

‘All of the children eat the sweet potatoes.’ (Wang 2000)

In addition to \textit{azaz}, Thao has syntactically verbal quantificational expressions, including the two intransitive/transitive verbal pairs, \textit{mulhckiz/lhckizin} ‘entirely, completely’ and \textit{mashtay/pashtán} ‘all, every’. The interpretation of the intransitive verbal quantifier can only be associated with the S of an intransitive clause, while the interpretation of the transitive verbal quantifier can only be associated with the O, rather than the A, of a transitive clause, as illustrated in (11) and (12).

\begin{enumerate}
\item (11) a. Quantificational intransitive verb \textit{mulhchiz} associated with the S
\[ Mulhckiz \text{ ita latusha mapakabuqnur.} \]
\[ \text{intrns.all 1Pin.Nom/Abs LA.two intrns.Coll.KA.hate} \]

‘We (in.) two hate each other’s guts.’ (Lit., ‘We (in.) hate each other utterly/to the bitter end.’) (Blust 2003:334)

b. Quantificational intransitive verb \textit{lhckizin} associated with the S
\[ Nak a hinadana wa ranaw mulhckiz macay. \]
\[ \text{ls.Pos Gen trns.perf.raise LIG chicken intrns.all intrns.die} \]

‘All the chickens that I raised died.’ (Blust 2003:393)

c. Quantificational transitive verb \textit{lhckizin} associated with the O
\[ Haya wa madahun lhckizik kman. \]
\[ \text{that. one LIG sweets trns.all.1s.actr intrns.eat} \]

‘I ate up all the candy.’ (Blust 2003:530)

d. Quantificational transitive verb \textit{lhckizin} associated with the O
\[ lhckizin \text{ ihu kman.} \]
\[ \text{trns.all 2s.Erg intrns.eat} \]

‘You at (it) all up.’ (Blust 2003:530)
\end{enumerate}

\begin{enumerate}
\item (12) a. Quantificational intransitive verb \textit{mashtay} associated with the S
\[ Mashtay \text{ ita mabuqiw.} \]
\[ \text{intrns.all 1Pin.Nom/Abs intrns.full.belly} \]

‘We (in.) all have full bellies.’ (Blust 2003:333)
\end{enumerate}
b. Quantificational transitive verb *pashtán* associated with the O
   
   *Numa ya mukaktun=iza lhmiza sa lhibu,*
   
   then when intrns.finish=already intrns.plait Det lower.part.of.trap

   *pashtán=iza putu sa lhibu masa pitaw.*
   
   trns.all=already C.putthere Det lower.part.of.trap and door

   ‘Then when the lower parts of the traps were finished being plaited, (I) would place all the lower parts and the doors (in their positions).’ (1.11, Wang 2000)

   All the examples from (9)-(12) show that quantificational expressions can only be associated with the S of an intransitive clause and the O of a transitive clause, but never with the A. Thus, quantifier association with NPs in Thao also suggests syntactic ergativity.

4.3.3 Topicalization

   Thao also displays syntactic ergativity in the phenomenon of topicalization. The S of an intransitive clause and the O of a transitive clause can be topicalized without a resumptive pronoun, as in (13) and (14), while the A undergoes topicalization only when a resumptive pronoun follows the verb, as in (15).

(13) Topicalization of the S of an intransitive clause (without a resumptive pronoun)
   
   a. *Sa azazak a mihu, macuaw maania.*
      
      Det child Gen 2s.Pos intrns.very intrns.intelligent

      ‘As for that child of yours (sg.), (he/she) is very intelligent.’ (Blust 2003:855)

   b. *Haya wa shput, kminan jizijiz.*
      
      that LIG person, intrns.perf.eat banana

      ‘As for that person, (he) has eaten bananas.’ (Wang 2000)

(14) Topicalization of the O of a transitive clause (without a resumptive pronoun)
   
   a. *Kawi, talahak.*
      
      tree trns.cut.down.1s.actr

      ‘As for the tree, I cut (it) down.’ (Wang 2000)

   b. *Haya wa fizfiz, kinanan ti Kilash.*
      
      that LIG banana trns.perf.eat Det.prsn Kilash

      ‘As for that banana, Kilash has eaten (it).’ (Wang 2000)
(15) Topicalization of the A of a transitive clause (with a resumptive pronoun)
   a. *Haya wa shput, kinanan=iza cicu sa fizifiz.*
      that LIG person, trans.perf.eat=already 3s.Erg Det banana
      'As for that person, he has already eaten the bananas.' (Wang 2000)

   b. *Yaku, fariwik patashan.*
      1s.Erg trans.buy.1sactr book
      'As for me, I bought the book.' (Wang 2000)

As shown above, Thao follows an ergative pattern (S/O-A contrast) with respect to the
phenomenon of topicalization.

4.3.4 Nominalization

In Thao, a verb can be converted into a noun by using the syntactic process of “zero-
derived” nominalization to convert it into a noun. The deverbal NP can only refer to the
S of a nominalized intransitive verb and to the O, but not to the A, of a nominalized
transitive verb, as illustrated in (16) and (17).

(16) Deverbal NP referring to the S of a nominalized intransitive verb
   a. *Itia sa [NC mapiqa].*
      EXIST Det [ intrns.lame]
      'There are those who are lame.' (Wang 2000)

   b. *Azazak smiraq [NC madahun].*
      child intrns.lick [ intrns.sweet]
      'The child is licking the candy.' (Blust 2003:872)

   c. *Yaku ya rigazan sa [NC mrigarigaz] sa but,*
      1s.Nom/Abs when trans.see Det [ intrns.Red.see ] Det body
      *tmazán cicu sa paku.*
      trans.listen.to 3s.Erg Det chest
      'When I go for a physical examination, he (the doctor) listens to my chest.'
      (Blust 2003:654)

(17) Deverbal NP referring to the O, not the A, of a nominalized intransitive verb
   a. *Qpiti=uan ihu sa [NC patashan]!*
      carry.under.arm.IMP.trans=POL 2s Det [ trans.write ]
      'Please hold the book (written words) under your (sg.) arm!' (Blust 2003:804)
b. *Mashpiz=iza sa [NC tinalahan ].*  
intrns. closed/healed=already Det [ trns.perf.cut ]  
‘The cut has healed already.’ (Blust 2003:935)

c. *Kundumdum sa [NC riniqaz ].*  
intrns.KUN. suddenly.grow.obscure Det [ trns.perf.see ]  
‘The view suddenly darkened.’ (Lit., ‘What was seen suddenly grew obscure.’) (Blust 2003:368)

As seen above, the phenomenon of nominalization also follows an ergative system in Thao, with the deverbal noun only referring to the S/O, but not to the A of a nominalized clause. This provides further evidence for “syntactic ergativity” in Thao.

4.3.5 Clefting

Cleft clauses in Thao are educational constructions consisting of two NPs, a nominative/absolutive NP, and a nominalized structure, with the former being coreferential with the missing NP of the nominalized structure. Thao shows syntactic ergativity with respect to the phenomenon of clefting, with the cleft NP only coreferential with the missing S/O, but not with the A of the nominalized clause.

There are two types of clefting clauses, pseudo-cleft and cleft types. In a pseudo-cleft clause, the cleft NP is a nominative/absolutive NP and the nominalized clause introduced by a determiner is the predicate. In a cleft clause, the cleft NP is a nominalized clause introduced by a determiner and the nominative/absolutive NP is the predicate. Syntactic ergativity is observed in both types of cleft clauses. Let us first consider the pseudo-cleft clauses, as illustrated in (18) and (19).

(18)  
a. Cleft NP coreferential with the missing S of a nominalized intransitive clause  
*Lujan [NC sa macakaw ].*  
Lujan [ Det intrns.greedy ]  
‘Lujan is the one who is greedy.’ (Blust 2003:338)
b. Cleft NP coreferential with the missing O of a nominalized transitive clause

\[ Yaku \quad \text{[NC sa pinacay sa izay a shput]}. \]
1s.Nom/Abs \[ \text{Det tms.perf.beat Det that LIG person} \]

'I am the one who was beaten by that person.' (Blust 2003:282)

(19) a. Cleft NP coreferential with the missing A of a nominalized transitive clause

\[ Yaku \quad \text{[NC sa kay tunun sa izay a azazak]}. \]
1s.Nom/Abs \[ \text{Det tms.beat Det that LIG child} \]

'**I’m the one who beat that child’, but ‘I am the one who was beaten by that child.’ (Wang 2000)

b. After antipassivization

\[ Yaku \quad \text{[NP sa kminay tunu sa izay a azazak]}. \]
1s.Nom/Abs \[ \text{Det intrms.perf.beat Det that LIG child} \]

'I’m the one who beat that child.' (Wang 2000)

As shown above, Thao allows S and O to be cleft directly (as in (18)a and (18)b), but not the A (as in (19)a). In order for the A to be clefted, it is necessary to apply antipassivization, detransitivizing the verb by converting the A of a transitive verb to the S of an extended intransitive verb, and then it can be cleft as in (19)b.

Now let us turn to the other type of cleft clause. It can be best exemplified by \textit{wh}-cleft clauses in Thao, which involve a \textit{Wh}-word, such as \textit{tima} ‘who’ and \textit{numa} ‘what’ as the cleft NP. In such a structure, \textit{Wh}-words, which are considered to be indefinite elements, function as the nominal predicate, occupying the position available for new information, whereas the nominalized clause is the nominative/absolutive NP. The questioned/cleft NP (i.e., the \textit{Wh}-word) can be coreferential with the missing S/O of the nominalized clause, as in (20)-(21), but not with the A of the nominalized clause, as in (22).

(20) \textit{Wh}-word coreferential with the missing S of a nominalized intransitive clause

a. \[ Tima sa munsahay? \]
\[ \text{who Det intrms(MV).here} \]

‘Who came by/who went past?’ (Blust 2003:857)
b. *Tima sa kminitr cicu a patuk?*
   who Det intrn.perf.pinch 3s.Pos Gen cheek
   ‘Who pinched his cheek?’ (Wang 2000)

c. *Tima sa paru ti Tikic?*
   who Det intrns.beat Det.prsn Tikic
   ‘Who beat Tikic?’ (Wang 2000)

(21) Wh-word coreferential with the absent O of a nominalized transitive clause

a. *Tima sa riqazan ti ina?*
   who Det trns.see Det.prns mother
   ‘Who did Mother see?’ (Wang 2000)

b. *Tima sa kay tunun Lujan?*
   who Det trns.beat Lujan
   ‘Who did Lujan beat?’ (Wang 2000)

c. *Numa sa araran Lujan?*
   what Det trns.take Lujan
   ‘What did Lujan take?’ (Wang 2000)

d. *Numa sa jinariw=uhu?*
   what Det trns.perf.buy=2s.Neut
   ‘What did you buy?’ (Wang 2000)

As illustrated in (20)-(21), a Wh-word, functioning as the predicate of a cleft sentence can be coreferential with the absent S/O of a nominalized clause. However, it cannot be coreferential with the absent A of a nominalized clause as in (22).

(22) Wh-word coreferential with the absent A in a nominalized transitive clause

a. **Tima sa ina riqazin?**
   who Det mother trns.see
   ‘Who saw mother?’ (Wang 2000)

b. **Tima sa kintiran cicu a patuk?**
   who Det trns.perf.pinch 3s.Pos Gen cheek
   ‘Who pinched his cheek?’ (Wang 2000)

c. **Tima sa Tikic paruan?**
   who Det Tikic trns.beat
   ‘Who beat Tikic?’ (Wang 2000)
Rather, the syntactic process of antipassivization must be applied in order to
detransitivize the verb, and thereby converting the A of a transitive clause to the S of an
intransitive clause, so that the actor of such a pattern can be questioned, as illustrated in
(23).

(23) After antipassivization
  a. *Tima sa mriqaz ira?
     who Det intrms.see mother
     ‘Who saw mother?’ (Wang 2000)
  b. *Tima sa paru ti Tikic?
     who Det intrms.beat Det.prsn Tikic
     ‘Who beat Tikic?’ (Wang 2000)
  c. *Tima sa kmintir cicu a patuk?
     who Det intrms.perf.pineh 3s.Pos Gen cheek
     ‘Who pinched his cheek?’ (Wang 2000)

Therefore, Thao also exhibits an ergative system in terms of the phenomenon of
clefting, with the clefted NP being coreferential with the S/O, but not with the A of a
nominalized clause.

4.3.6 Coordination

Thao shows signs of syntactic ergativity with respect to the phenomenon of
coordination as well. In Thao, two clauses can be combined without any overt
conjunction. However, two clauses can only be coordinated if the coreferential NPs are
in S/O function. The occurrence of this NP in the second clause is then generally
omitted, as illustrated in (24)-(26).

(24) $S_1 = O_2$
  a. *Haya binanau’az maqiriz, apák.
     that woman intrms.tired trns.carry.1s.actr
     ‘That woman got tired, (so) I am carrying (her).’ (Wang 2000)
b. Ḍava inay milhugqu _ imbəbawən nak a binanau'az.
1s.Nom/Abx here intrns.sit _ trns.call 1s.Pos Gen wife

‘I was sitting here (and) my wife called (me)’ (Blust 2003:417)

(25) O₁ = S₂, A₁ ≠ S₂

a. Ḥaya qatumu agirqiran rumfaz, _ mushuqish
that caterpillar Irr.trns.bite bird _ intrns.come.back
mutmaz.
intrns.enter.a.hole.or.cave

‘The bird was about to eat the caterpillar, (and the caterpillar/**the bird) crawled back inside.’ (Blust 2003:780)

b. Azazak shuruzik, _ miaqay makitshuqish.
child trns.pull.1Sactr _ intrns.frequently intrns.slowly.back.up

‘I pulled the child, (and he/**I) pulled back (resisted).’ (Blust 2003:945)

c. Nak a ranaw linum yaku,
1s.Pos Gen chicken trns.perf.enclose 1s.Erg
_ muhapal _ musha.
intrns.go.off.aimless.in.every.direction intrns.go

‘I cooped up my chickens, (but they/**I) wandered off in every direction.’ (Blust 2003:397)

(26) O₁ = O₂, A₁ ≠ O₂

Numa pusayin baruku, lhimpania'anin, putuan shnir,
then trns.C.there bowl trns.mix.vegetables trns.C.there soup
qtilha numa suksuk.
salt and ginger

‘Then (we would) put them in a bowl, mix (them) with vegetables, and put soup, salt and ginger in (them).’ (6.4, Wang 2000)

As seen above, coordination in Thao demonstrates an ergative pattern. In coordinated clauses, the S/O can be a coreferential pair, as in (24) and (25), but never with the A, as in (25) and (26). It is impossible to combine two clauses, in which the S of the first clause is coreferential with the A of the second clause. Rather, it is necessary to apply antipassivization to detransitivize the verb, and thereby convert the A of the second clause into the S of an intransitive clause, then the S of this clause can be coreferential with the S of the first clause, as illustrated in (27).
Therefore, as illustrated in (24)-(27), Thao shows syntactic ergativity with respect to coordination.

4.4 CONCLUSION

In this chapter, I have shown that Thao exhibits an ergative system with respect to grammatical relation coding, including word order and cross-referencing system, as well as syntactic phenomena, such as relativization, quantifier association, topicalization, nominalization, clefting, and coordination. Therefore, Thao is an ergative language.
CHAPTER 5
A SKETCH OF THAO GRAMMAR

5.1 INTRODUCTION

The purpose of this chapter is to provide a more detailed view of Thao grammar than
was provided in the previous chapters. It includes details of the structure of clauses,
including word order, pronominal systems, and grammatical elements, followed by a
discussion of the structure of noun phrases. This sketch is included in the dissertation for
its descriptive interest; independent of the theoretical analyses that may be based upon it.
As a description of the language it should be useful to Thao people who wish to study
their own language, as well as to scholars in the field of Austronesian studies and to
general linguists seeking to extend their coverage of linguistic theory to a variety of
languages and language types.

5.2 BASIC CLAUSE STRUCTURE

5.2.1 Word Order

Because Thao, unlike many other Formosan languages, does not have a clear nominal
case-marking system that provides information about an NP's function within a sentence,
word order becomes one of the formal devices to encode its grammatical relations. In
Thao, there are two basic word orders, predicate-initial and predicate-second. These will
be discussed in sections 5.2.1.1 and 5.2.1.2, respectively.
5.2.1.1 **Predicate-initial word order constructions**

Historically, Thao clause structure, like many other Formosan languages, was typically right-branching. That is to say, heads of constructions appeared in the initial position in a construction. Thus, in clausal constructions, the predicate occurred first, followed by nominal complements, adjuncts and other modifiers of the predicate. Causal predicates could be headed by one of a variety of lexical categories, nouns, prepositions, or verbs, each being modifiable by the dependents normally allowed by these categories. This word order is now only one of two possible word orders in Thao. This section provides details of the predicate-initial word order.

5.2.1.1.1 **Nominal predicate clauses**

Because Thao does not utilize copula verbs, predicate nouns constitute the head of nominal clauses. Thao being an ergative language, the nominative/absolutive case form expresses the non-predicate nominal argument. Figure 5.1 schematizes the nominal predicate word order.

```
NP   NP
prdc Nom/Abs
```

**Figure 5.1 Nominal predicate-first word order**

There are several types of such clauses, depending on the modification or lack of it, of the predicate noun. Consider the following examples illustrating different types of nominal predicate clauses in (1).
(1) Nominal predicate appearing clause initially
   a. Classificational
      Binanau'az yaku.
      woman 1s.Nom/Abs
      ‘I am a woman.’ (Wang 2000)
   b. Identificational
      Ti Shawi cicu.
      Det.prsn Shawi 3s.Nom/Abs
      ‘She is Shawi.’ (Wang 2000)
   c. Possessive
      Nak a shinshi sa izahay.
      1s.Pos Gen teacher Det that.one
      ‘That (one) is my teacher.’ (Blust 2003:913)

As shown above, (1)a is a classificational type of nominal predicate clause in which the
predicate classifies the entity expressed in the nominative/absolutive noun phrase of the
clause. (1)b is an identificational type of nominal predicate clause, in which the predicate
provides specific identification for the entity expressed in the nominative/absolutive
phrase of the clause. Example (1)c is a possessive nominal predicate in which a
possessive construction occurs in the predicate position.

5.2.1.1.2 Prepositional predicate clauses

In Thao, a prepositional phrase may constitute a clausal predicate. Thao exhibits a
location preposition i ‘in, at’, which can be the prepositional head of a clausal predicate.
Figure 5.2 schematizes the prepositional predicate word order.
The following examples illustrate the locational type of prepositional predicate in Thao.

(2) Prepositional predicate appearing clause initially
   a. *I taun nak a binanau'az.*
      Loc house 1s.Pos Gen wife
      ‘My wife is at home/in the house.’ (Blust 2003:978)
   b. *I magkaci ihu.*
      Loc the.other.side 2s.Nom/Abs
      ‘You are over there,’ or ‘you live over there.’ (Blust 2003:560)

5.2.1.1.3 Verbal predicate clauses

Verbal clauses have verbs as their lexical heads. Since all verbs carry a predicate feature, in predicate initial clauses, they appear at the beginning of a clause, and dependents of verbs, such as nominal and verbal complements, follow them. In the description that follows I distinguish between two major classes of verbal construction, intransitive (with *m-* verbs) and transitive (with -*in/-an* verbs). In this section I am only concerned with the word order of simple verbal clauses. Later sections will provide a detailed description of complex constructions having dependent verbal clauses.

As discussed in chapter 3, evidence from morphosyntactic, semantic, discourse grounding, and textual frequency tests have suggested that *m-* clauses (either monadic or dyadic) are best analyzed as intransitive structures while dyadic -*in/-an* clauses are canonical transitives in Thao. Hence, following this finding, I will label the former as
intransitive (including extended intransitive) and the latter as transitive in the glosses of Thao clauses structures.

5.2.1.1.4 Intransitive constructions

A verb that expects only one nominal argument is intransitive, and the construction of which it is a part is therefore intransitive. Since Thao is an ergative language, in an intransitive construction, this argument is the nominative/absolutive NP, interpreted as either the agent (in dynamic structures) or the theme (in stative structures). An intransitive construction can be either plain/canonical or extended/dyadic intransitive. The former requires the nominative/absolutive NP to follow the predicate. If the nominative/absolutive NP is a pronominal clitic,¹ it attaches to the end of the verb, and occurs before an oblique NP (theme/patient; i.e., extended argument E) in an extended intransitive sentence. Figure 5.3 schematizes the word order of plain intransitive clauses in Thao, followed by examples in (3) below.

---

¹ See section 5.2.2.2.1 for a detailed discussion of clitics in Thao.
FIGURE 5.3 PLAIN INTRANSITIVE VERBAL PREDICATE-FIRST WORD ORDER

(3) Monadic/plain intransitive (m-clauses; VS order)

a. *Musha* cicu.
intrans.go 3s.Nom/Abs

‘Then he left.’ (Wang 2000)

b. *Mashuru* =iza tiaz.
intrans.hungry=already upper abdomen

‘I’m hungry already.’ (Lit., ‘My stomach is hungry.’) (Blust 2003:944)

c. *Amarauz* =wak.
intrans.Irr.swim=1s.Nom/Abs

‘I am going to swim.’ (Blust 2003:827)

The examples in (3) are plain intransitives with the S such as *cicu* ‘he’ in (3)a, and *tiaz* ‘upper abdomen/stomach/belly’ in (3)b, occurring after the verbal predicates *musha* ‘left’ and *mashuru* ‘hungry’, respectively. The verb *marauz* ‘swim’ in (3)c is followed by the first person singular nominative/absolutive enclitic pronoun =wak. Now consider figure 5.4 schematizing the word order of extended intransitive clauses in Thao, followed by the examples in (4) below.
The examples in (4) are extended intransitive clauses, in which verbal predicates occur clause-initially and followed by NPs with S preceding E, as in (4)a and (4)b. In (4)c, the intransitive verb *makakikalhi* ‘ask’ is followed by the first person singular nominative/absolutive enclitic pronoun =*wak*. Constructions of this sort (extended intransitive) in ergative languages are often referred to as “antipassive” or “pseudo-transitive” constructions.

5.2.1.1.5 Transitive constructions

A verb that expects two nominal arguments, one of which is an A (agent NP), and the other an O (theme NP), is transitive, and the construction of which it is a part is a transitive construction. Since Thao is ergative, it is the theme NP (O) that is expressed by
the nominative/absolutive case form while the agent NP (A) is expressed either by the ergative case form or is expressed as an actor agreement form on the verbs. In Thao, in verb-initial clauses, as shown in figure 5.5, either an ergative NP (agent) occurs before the nominative/absolutive NP (theme/patient) or the verb is suffixed with an agent agreement form.

![Figure 5.5 Transitive Verbal Predicate-First Word Order](image)

The examples in (5) illustrate the basic transitive clause structures with a verb occurring initially in Thao.

(5) Dyadic/canonical transitive -in/-an clauses (VAO)

  - trns.douse 3s.Erg fire
  - ‘He doused the fire.’ (Blust 2003:504)

- b. *Paruan ama yaku.*
  - trns.beat father 1s.Nom/Abs
  - ‘Father beat me’ (Blust 2003:681)

- c. *Hulhulik=iza sa tamaku.*
  - trns.tear/break.into.fragments.1s.actr=already Det cigarette
  - ‘I have torn the tobacco leaves to shreds.’ (Blust 2003:405)

- d. *Paruak fafuy.*
  - trns.beat.1s.actr pig
  - ‘I beat the pig.’ (Blust 2003:681)
Examples (5)a and (5)b show that the word order of verb-initial transitive clauses without agreement marking in Thao requires the ergative NP (agent) to precede the nominative/absolutive NP (theme/patient). Examples (5)c and (5)d illustrate that when there is actor agreement on the verb, a full ergative noun phrase is not present, and so the nominative/absolutive NP (theme/patient) directly follows the verb in the clause.\(^2\)

In addition to predicate-initial sentences, Thao, probably because of influence from Taiwanese, has started to exhibit a word order in which predicates follow the nominative/absolutive NPs. This will be discussed in the following section.

5.2.1.2 **Predicate-second word order constructions**

Although Thao has been in contact with Taiwanese perhaps less than a century, it has been significantly influenced by Taiwanese syntactic properties such as constituent word order. As discussed earlier, historically Thao was a right-branching language with predicates occurring at the beginning of sentences, but it now exhibits an alternative word order in which predicates follow the nominative/absolutive NPs, as in Taiwanese. In clauses with this word order, the nominative/absolutive (S/O) NP strictly precedes the predicate (nominal, prepositional, or verbal) regardless of whether the clauses are intransitive or transitive. In verbal clauses, both the extended oblique NP (theme) in

\(^2\) In Thao, we do not find full pronouns co-occurring with agreement features as seen in some other languages, in which the corresponding forms are clearly agreement markers; full noun phrases typically only co-occur with the third singular or plural agreement markers. However, Thao has lost third person agreement marking forms. Thao does however have one case where a full pronoun co-occurs with a first person singular agreement marker (see the examples in (27)), in which case, the agreement marker \(-k\) replaces the nominative/absolutive clitic pronoun \(=wak\).
dyadic/extended intransitive clauses and the ergative NP (agent) in transitive clauses always occur after the verb.

5.2.1.2.1 Nominal predicate clauses

In nominal predicate clauses, the non-predicate nominal (i.e., the nominative/absolutive NP) precedes the nominal predicate, as schematized in figure 5.6.

![Figure 5.6 Nominal Predicate-Second Word Order](image)

FIGURE 5.6 NOMINAL PREDICATE-SECOND WORD ORDER

There are different types of such clauses, as illustrated in (6).

(6) Nominal predicate following nominative/absolutive NP
a. Classificational
   *Cicu* azazak=uan.
   3s.Nom/Abs child=still
   ‘He/she is still a child.’ (Blust 2003:1031)

b. Identificational
   *Haya ayuzi* ti *Lujan.*
   that man Det.prsn Lujan
   ‘That man is Lujan.’ (Wang 2000)

c. Possessive
   *Haya nak* a *taun.*
   that 1s.Pos Gen house
   ‘That (one) is my house.’ (Blust 2003:398)

5.2.1.2.2 Prepositional predicate clauses

In Thao, prepositional predicates also follow the nominative/absolutive NP in predicate-second clauses, as shown in figure 5.7.
The only clear prepositions found in Thao so far are the locative preposition *i* 'in, at', and *lhay* 'for', as illustrated in (7).

(7) Prepositional predicate following nominative/absolutive NP

a. *Nak a azazak i Qariwan.*
1s.Pos Gen child Loc Pu.li

‘My child is in Pu-li.’ (Blust 2003:409)

b. *Ti Bob a pinatash lhay ti Kilash.*
Det.prsn Bob Gen written.words for Det.prsn Kilash

‘Bob’s written words are for Kilash.’ (Blust 2003:528)

c. *Numa sa fafuy lhay cicu a tuqatuqash.*
then Det pig for 3s.Pos Gen Red.older.people

‘Then a pig would be for her parents.’ (Blust 2003:528)

5.2.1.2.3 Verbal predicate clauses

Verbal clauses have verbs as their lexical heads. In Thao, the preverbal position in predicate-second clauses is strictly reserved for the nominative/absolutive NP (S/O) regardless of whether it is an intransitive or a transitive clause, as shown in figure 5.8.
As shown above, both intransitive and transitive constructions require the nominative/absolutive NP to occur before the predicate, and other nominal complements to follow the predicate. Therefore, the oblique NP (theme/patient; i.e., extended argument E) in the extended intransitive constructions, and the ergative NP (agent) in transitive constructions follow the verbs. As already discussed in chapter 4, verb-second (medial) clauses in Thao exhibit morphological ergativity in that both S and O occur before the verb, whereas A after the verb. Examples (8)-(10) illustrate the three basic clause patterns with verbal predicate-second word order.

(8) Monadic/plain intransitive m- clauses (SV)
   a. *Yaku *mundadán.
      ls.Nom/Abs  intrns.walk
      ‘I was walking.’ (Blust 2003:380)
   b. *Hayā azazak cmanit.
      that child  intrns.cry
      ‘That child is crying.’ (Wang 2000)
(9) Dyadic/extended intransitive \textit{m-} clauses (SVE)

a. \textit{Haya wa caw kman fizfiz.}
\hspace{1cm} that LIG person intrns.eat banana

‘That person is eating bananas.’ (Blust 2003:445)

b. \textit{Yaku kmalawa pagka.}
\hspace{1cm} 1s.Nom/Abs intrns.make chair

‘I made a chair.’ (Blust 2003:439)

(10) Dyadic/canonical transitive -\textit{in/-an} clauses (OVA)

a. \textit{Inay a baruku shinawin ti ina.}
\hspace{1cm} this LIG bowl trns.wash Det.prsn mother

‘Mother is washing these bowls.’ (Blust 2003:912)

b. \textit{Yaku paruan ama.}
\hspace{1cm} 1s.Nom/Abs trns.beat father

‘Father beat me.’ (Blust 2003:681)

c. \textit{Inay a kukulay pdisik.}
\hspace{1cm} this LIG bug trns.crush.ls.actr

‘I crushed this bug.’ (Blust 2003:702)

d. \textit{Mihu a kuskus kanqcak.}
\hspace{1cm} 2s.Pos Gen leg tms.kick.l s.actr

‘I stepped on your foot.’ (Blust 2003:446)

The examples in (8) show that in plain intransitive clauses, the nominative/absolutive NP (S), such as \textit{yaku} ‘I’ in (8)a, and \textit{haya azazak} ‘that child’ in (8)b, appear before verbs. Examples in (9) are extended intransitive constructions with the nominative/absolutive NP (S) such as \textit{haya wa caw} ‘that person’ in (9)a, and \textit{yaku} ‘I’ in (9)b, occurring before verbs, and the oblique NP (E, i.e., the theme NP in dyadic intransitive clauses) \textit{fizfiz} ‘banana’ in (9)a, and \textit{pagka} ‘chair’ in (9)b, following the verbs. The examples in (10) illustrate that transitive clauses also require the nominative/absolutive NP (S), such as \textit{inay a baruku} ‘those bowls’ in (10)a, and \textit{yaku} ‘I’ in (10)b, to occur before the verbs. (10)a and (10)b also show that a full ergative NP (agent), such as \textit{ti ina} ‘mother’ in (10)a,
and *ama* 'father' in (10)b, occurs after the verb. When a verb takes an agreement pronoun, such as *-k* (first person singular actor), in (10)c and (10)d, a full NP is not present in the clause.

### 5.2.1.3 The effect of animacy on word order

Although in verb-initial clauses the agent NP usually occurs before the theme/patient NP regardless of transitivity, this constraint can be relaxed when there is no ambiguity regarding animacy. In this case, the order of NPs in verb-initial clauses can be freer when an animate NP and an inanimate NP cooccur, because the animate NP is always interpreted as the actor regardless of whether it is a nominative/absolutive NP (S) or an ergative NP (A). Therefore, an animate NP interpretable as an actor can follow an inanimate NP (theme) in verb-initial clauses, as shown in (11) and (12).

(11)  
| (a) Amakan *yaku* s(a) *afu*.  
| intrns.Irr.eat  1s.Nom/Abs  Det  rice  
| 'I will eat rice.' (Chen 2000:18)  
| (b) Amakan s(a) *afu* *yaku*.  
| intrns.Irr.eat  Det  rice  1s.Nom/Abs  
| 'I will eat rice.' (Chen 2000:18)

(12)  
| (a) Akanin *cicu* sa *buna*.  
| trns.Irr.eat  3s.Erg  Det  sweet.potato  
| 'He will eat the sweet potato.' (Wang 2000)  
| (b) Akanin sa *buna* *cicu*.  
| trns.Irr.eat  Det  sweet.potato  3s.Erg  
| 'He will eat the sweet potato.' (Wang 2000)
In some cases, even though both NPs in a verbal clause are animate, it is clear which is more likely to be interpreted as an actor, and which as a theme/patient, as illustrated in (13).

(13)  
\[ \text{a. } \textit{Pinashbalisan zazinis cicu.} \]
\[ \text{trans.perf.sting bee 3s.Nom/Abs} \]
‘He was stung by a bee.’ (Wang 2000)

\[ \text{b. } \textit{Pinashbalisan cicu zazinis.} \]
\[ \text{trans.perf.sting 3s.Nom/Abs bee} \]
‘He was stung by a bee.’ (Blust 2003:686)

As seen above, both NPs are animate in (13), but since only a bee (zaninis) stings, it has to be interpreted as an actor, regardless of its position in relation to cicu ‘he’. Thus, the constituent order of these two NPs can be switched in a verb-initial clause. All these examples from (11) to (13) suggest that the word order of NPs in verb-initial clauses is free, when the actor and the theme are semantically unambiguous.

5.2.2 The Personal Pronominal Systems of Thao

In Thao, most personal pronouns are full forms. Most clitic pronouns found in other Formosan languages have been lost in Thao. Only three clitic forms remain. In addition, there are two remaining (actor) person agreement forms appearing as verbal suffixes. The actor agreement forms have apparently developed by a process of grammaticalization from earlier ergative clitic pronouns. Full pronouns in Thao may have different forms, depending on the grammatical cases they carry. Tables 5.1 and 5.2 summarize the full pronouns and bound person-marking forms in Thao.
**TABLE 5.1 FULL PRONOUNS IN THAO**

<table>
<thead>
<tr>
<th>Person/number</th>
<th>Neutral: Nominative</th>
<th>Neutral: Absolutive/Extended</th>
<th>Dative</th>
<th>Possessive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>yaku/yak yakin*</td>
<td>yaku</td>
<td>nakin</td>
<td>nak</td>
</tr>
<tr>
<td>2s</td>
<td>ihu</td>
<td>ihu</td>
<td>mihun</td>
<td>mihu</td>
</tr>
<tr>
<td>3s</td>
<td>cicu</td>
<td>cicun</td>
<td>cicu</td>
<td></td>
</tr>
<tr>
<td>1p(incl.)</td>
<td>ita</td>
<td>itan</td>
<td>mitan</td>
<td>mita</td>
</tr>
<tr>
<td>1p(excl.)</td>
<td></td>
<td>yamin</td>
<td>nam</td>
<td>yamin*</td>
</tr>
<tr>
<td>2p</td>
<td></td>
<td>manium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3p</td>
<td></td>
<td>caycuy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* indicates that the frequency of the form in the given function is rare.

3 Normally, the form yakin is an oblique or a dative pronoun; however, in a few examples, it occurs before a transitive verb (dyadic -in verb), functioning as a nominative/absolutive pronoun, as in the following example.

a. **Yakin** qaquitihin cicu.
   1s.Nom/Abs trn.beat 3s.Erg
   ‘He chased me.’ (Blust 2003:771)
TABLE 5.2 BOUND PERSON-MARKING IN THAO

<table>
<thead>
<tr>
<th>Person/number</th>
<th>Actor agreement marking form</th>
<th>Transitive verbs</th>
<th>Absolutive/Nominative</th>
<th>Ergative</th>
<th>Genitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(=ku)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1s</td>
<td>-k</td>
<td>=wak</td>
<td>(=ku)$^4$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2s</td>
<td>-nu</td>
<td>=uhu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3s</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>na$^3$</td>
</tr>
<tr>
<td>1p (incl.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1p (excl.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2p</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3p</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.2.2.1 Full pronouns

Full pronouns are free forms (as opposed to phonologically bound clitics, and agreement-marking forms) that function alone to fill the position of a noun phrase in a clause. They normally have all the distributional properties of noun phrases. As seen in table 5.1, again, probably due to influence from Taiwanese (which has no overt nominal case marking system), Thao has almost lost all contrast between the ergative and absolutive/nominative full pronouns, so I refer to these two sets as 'neutral'. In fact, none of the plural person pronoun forms (except for the first person plural inclusive) still maintains any differentiation between the ergative, absolutive/nominative, oblique, and

---

$^4$ In Thao, the form =ku appears to function as an ergative clitic pronoun, in that it attaches to the perfective form of a transitive verb, but it only appears once in my data, as shown in the following example.

a. Azazak inapa=ku.
   child trns.perf.carry=1s.Erg
   'I carried the child.' (Wang 2000)

Further examples of this form are needed to clarify its function.

$^5$ The other homophonous forms of na are the determiner na$^1$, and the ligature na$^2$. Please see sections 5.5.1.1 and 5.5.2 for discussion.
dative cases, a phenomenon commonly considered as syncretism in morphology (Matthews 1991). Therefore, word order and verbal morphology are the most important grammatical devices to encode the relations that hold between a verb and its arguments in Thao. First, let us consider the examples in (14), illustrating the first person singular neutral full pronouns in Thao, and then the other neutral pronouns in (15).

(14) Neutral: 1s
   a. Nominative/absolutive (S of a monadic intransitive clause)
      \[ Yaku \hspace{1em} malalia. \]
      IS.Nom/Abs intrns.run
      ‘I’m running.’ (Blust 2003:658)

   b. Nominative/absolutive (S of a dyadic intransitive clause)
      \[ Yaku \hspace{1em} sminapusapuk \hspace{1em} sa \hspace{1em} rusaw. \]
      IS.Nom/Abs intrns.perf.Red.catch Det fish
      ‘I used to catch fish.’ (Wang 2000)

   c. Nominative/absolutive (O of a dyadic transitive clause)
      \[ Yaku \hspace{1em} paruan \hspace{1em} ama. \]
      IS.Nom/Abs trns.beat father
      ‘Father beat me.’ (Blust 2003:681)

   d. Ergative (A of a dyadic transitive clause)
      \[ Fafuy \hspace{1em} kinay \hspace{1em} paca=iza \hspace{1em} yaku. \]
      pig trns.perf.beat C.die=already IS.Erg
      ‘I killed the pig.’ (Blust 2003:282)

(15) Neutral: pronouns which are other than 1s
   a. Nominative/absolutive (S of a monadic intransitive clause)
      \[ Matigqaran \hspace{1em} ita. \]
      intrns.make.merry 1Pin.Nom/Abs
      ‘We (in.) are all happy.’ (Blust 2003:772)

   b. Nominative/absolutive (S of a dyadic intransitive clause)
      \[ Cicu \hspace{1em} qmucque \hspace{1em} fukish. \]
      3s.Nom/Abs intrns.tie hair
      ‘She is tying her hair.’ (Blust 2003:811)
As shown in (14) and (15), word order and verbal morphology help to determine the grammatical function of the “neutral” pronoun. Take the first person singular neutral pronoun yaku for example. While the form yaku in (14)a-(14)c, being in the position of the S or the O, is nominative/absolutive, it is ergative in (14)d, because it occurs in the position of the agent (A) of a transitive verb.

Now consider the oblique pronouns in (16).

(16) Oblique: (E of a dyadic intransitive clause)

a. *Nak a minlhafut ihmirik yakin.*
   1s.Pos Gen brother intrns.poke 1s.Obl
   ‘My brother poked me.’ (Blust 2003:541)

b. *Cicu munay yakin.*
   3s.Nom/Abs intrns.come 1s.Obl
   ‘He came to me.’ (Blust 2003:574)

c. *Yaku mabuqnur ihun.*
   1s.Nom/Abs intrns.hate 2s.Obl
   ‘I hate you (sg.).’ (Blust 2003:334)

d. *Caycuq atusua mapacacawa itan.*
   ‘The two of them laughed at us (in.).’ (Blust 2003:344)

As shown in (16), Thao exhibits a set of oblique pronouns, which typically mark the E of a dyadic intransitive clause.
Now consider the dative pronouns in Thao, as in (17).

(17) a. Cicu kmacu sa pinansha a lhay nakin.
   3s.Nom/Abs intrns.bring Det trns.perf.give LIG.Comp give 1s.Dat
   a lhay mihun.
   LIG.Comp give 2s.Dat
   ‘He brought presents to give to me and to you (sg.).’ (Blust 2003:1057)

b. Mihu a ama shmigqa sa pruq a=lha(y) mihun?
   2s.Pos Gen father intrns.perf.leave Det land LIG.Comp=give 2s.Dat
   ‘Did your (sg.) father leave his lands for (to give to) you (sg.)?’ (Blust 2003:935)

The prototypical function of the dative case is to mark the NP that often corresponds to the goal (or recipient) of verbs of transfer. This is also found in Thao, as shown in (17), the dative set of pronouns always occurs after the verb lhay ‘give’.

Now consider the possessive pronouns in (18).

(18) a. Haya wa atu antu nak.
   that LIG dog NEG 1s.Pos
   ‘That dog isn’t mine.’ (Blust 2003:445)

b. Haya wa patashan nam.
   that LIG book 1pex.Pos
   ‘That book is ours (ex.).’ (Blust 2003:634)

c. Izaháy nak a hulus.
   those 1s.Pos Gen clothes
   ‘Those are my clothes.’ (Blust 2003:1060)

The examples (18)a and (18)b illustrate the possessive pronouns nak ‘mine’ and nam ‘ours’ functioning as nominal predicates. In (18)c, the possessive pronoun nak ‘mine’, followed by the genitive marker a, functions as a possessor.6

6 This genitive form a appears to have developed from the ligature a, which functions to connect nominal and verbal heads with their modifiers, such as relative clauses and complement clauses. See section 5.5.2 for detailed discussion.
So far I have discussed the full personal pronouns in Thao with different case forms, and now I will turn to the bound person-marking forms Thao in the following section.

5.2.2.2 Bound person-marking forms

Bound person-marking forms consist of actor agreement markers and clitic pronouns in Thao. As for the person-marking forms suffixed to verbs, Thao does not have a full set; it only has a first and a second person singular actor agreement marker, as seen in table 5.2 above. Both of these (-k and -nu) developed from earlier ergative clitic pronouns marking the agent (A) of transitive verbs, and even these are now being sporadically replaced with full pronouns. There are three clitic pronouns remaining in Thao (apart from two recorded instances of =ku as an ergative and/or absolutive/nominative first person singular clitic pronoun); they are the first person singular absolutive/nominative =wak, the second person singular neutral =uhu, and the third person singular genitive na3=.

5.2.2.2.1 Clitic pronouns

Thao still maintains three clitic pronouns: the first person singular nominative/absolutive =wak, the second person singular neutral =uhu, and the third person singular genitive na3=. The form =wak, being a nominative/absolutive clitic pronoun in an ergative language, is expected to encode the S of intransitive verbs and the O of transitive verbs, and presumably it cannot mark the A of transitive verbs. This is supported by the present data. The form =wak encodes only the S of intransitive verbs.
and the O of (imperative) transitive constructions, but never the A of transitive verbs, as illustrated in (19) and (20), respectively.

(19) a. *Amarauz=wak.*
    intms.Irr.swim=1s.Nom/Abs
    ‘I am going to swim.’ (Blust 2003:827)

b. *Amakan=wak.*
    intms.Irr.eat=1s.Nom/Abs
    ‘I’m going to eat.’ (Blust 2003:1051)

c. *Nak a fukish maquliush, amakishkish=wak.*
    1s.Pos LIG hair intms.long intms.Irr.cut=1s.Nom/Abs
    ‘My hair is long, I’ll cut (it).’ (Blust 2003:1051)

(20) a. *Fanuzi=wak simaq!*
    wake.IMP.tms=1s.Nom/Abs tomorrow
    ‘Wake me up tomorrow!’ (Blust 2003:373)

b. *Pishfazaqi=wak ya amara ihu sa binanau’az!*
    C.know.IMP.tms=1s.Nom/Abs if intms.Irr.take 2s.Nom/Abs Det wife
    ‘Notify me when you (sg.) want to take a wife!’ (Blust 2003:380)

c. *Sasi=wak zashuq!*
    send.IMP.tms=1s.Nom/Abs rice
    ‘Send me some rice!’ (Blust 2003:865)

The examples above show that the first person singular clitic pronoun =wak encodes the S of intransitive verbs, (as in (19)a-(19)c) and the O (e.g., the theme NP) of the (imperative) transitive construction, (as in (20)).

In addition, being a second-order clitic, =wak must attach to a preverbal negator, if there is any in a clause, as illustrated in (21).

(21) a. *Ani=wak tu afariw sa pania’an.*
    NEG=1s.Nom/Abs Det Irr.buy Det vegetables
    ‘I’m not going to buy vegetables.’ (Blust 2003:293)
b. *Ata=wak* *tu parui!*
   \(\text{NEG.IMP=1s.Nom/Abs Det beat.IMP.trns}\)
   ‘Don’t beat me!’ (Wang 2000)

These examples all suggest that *=wak* should be considered to be a nominative/absolutive clitic pronoun in Thao.

The other clitic pronoun found in Thao is the second person singular neutral form *=uhu.* The form *=uhu* occurs only after verbs. Its equivalent full form, which can occur in other positions in a sentence, is either *yuhu* or *ihu.* Consider the following examples in (22).

(22) a. *Mafazaq=uhu* *sa izaháy a caw?*
   \(\text{intrns.know=2s.Neut Det that LIG person}\)
   ‘Do you (sg.) know that person?’ (Blust 2003:1033)

b. *Haya wa aniamin kublucin=uhu.*
   \(\text{those LIG thing trns.KU.ferment=2s.Neut}\)
   ‘You (sg.) fermented those things.’ (Blust 2003:325)

c. *Kayawik=uhu.*
   \(\text{trns.K.embarrass.1s.actr=2s.Neut}\)
   ‘I embarrass you (sg.).’ (Blust 2003:309)

As shown above, *=uhu* encodes either S/O (nominative/absolutive) as in (22)a and (22)c, or A (ergative) as in (22)b. The question as to whether it is an agreement-marking form or a clitic pronoun needs to be answered. Consider more examples of *=uhu* in (23) below.

(23) a. *Pishkamuni=wak=uhu aqtalha!*
   \(\text{C.make.spicy.IMP.trns=1s.Nom/Abs=2s.Neut pork}\)
   ‘Spice the pork for me!’ (Blust 2003:444)

---

7 While *=uhu* is categorized as a neutral clitic pronoun, it rarely marks O (the theme NP of transitive verbs). The example (22)c is the only recorded instance in the data.
The examples above show that the form =uhu follows a clitic when there is one, such as the first person clitic pronoun =wak in (23), and the polite marker =uan \(^8\) ‘please’ in (23). Therefore, =uhu is more likely to be a clitic than an agreement-marking form, in that affixes (e.g., agreement features) always precede clitics in morphology (Zwicky and Pullum 1983). \(^9\)

Another clitic remaining in Thao is the third person singular genitive proclitic na\(_3\)=. It attaches to the beginning of an NP to form a genitive NP, as illustrated in (24).

\[(24)\]
\begin{itemize}
  \item a. Pinrniksik \(na=maca\) maqa macuaw miarain
      trns.C.perf.blind.1s.actr 3s.Gen=eye because intrns.very intrns..often
      kmakay tunu yakin.
      intrns.beat 1s.Obl
      ‘I blinded his eyes because he very often beats me.’ (Blust 2003:837)
  \item b. Minu sa inay a binanau'az pishmamumu \(na=maca\)?
        why Det this LIG woman C.CaRed.close.eye 3s.Gen=eye
        ‘Why is that woman blinking her eyes constantly?’ (Blust 2003:627)
  \item c. Haya ruza muqazus, maqa hmurqu \(na=qinuq\).c.
        that boat intrns.drift.away because intrns.come.apart 3s.Gen=mooring
        ‘That boat drifted off because it broke loose from its moorings.’ (Blust 2003:407)
\end{itemize}

In conclusion, it is clear that Thao still retains three clitic pronouns, =wak, =uhu, and na\(_3\)=.

---

\(^8\) See section 5.2.3.2.4 for discussion of the form =uan ‘please’.

\(^9\) Affixes typically occur closer to the root than clitics in that cliticization is typically considered to be a postcyclic operation.
5.2.2.2 Actor agreement-marking on verbs

In Thao, what were earlier ergative clitic pronouns have now become incorporated as actor agreement features on the verbs (see section 5.2.2.2 for discussion). The present data show that in Thao the only remnants of agreement-marking pronouns are the first and second person singular agreement forms: -k and -nu. Both of them mark the agents of transitive verbs, as in (25) and (26), respectively.

(25) 1s actor agreement marking on transitive verbs
   trns.beat.1s.actr 3s.Pos Gen back
   ‘I beat him on the back.’ (Lit., ‘I beat his back.’) (Blust 2003:1007)

b. *Cumay* kay pacayik=iza.
   bear beat trns.C.death.1s.actr=already
   ‘I killed the bear already.’ (Blust 2003:282)

c. *Tinamak*=iza sa pitaw.
   trns.perf.open.1s.actr=already Det door
   ‘I opened the door.’ (Blust 2003:965)

(26) 2s actor agreement marking on transitive verbs
a. *Numa* kalawanu?
   what trns.do.2s.actr
   ‘What have you (sg.) done?’ (Wang 2000)

b. *Tima* sa alhayanu izay hulus?
   who Det trns.Irr.give.2s.actr that clothes
   ‘To whom will you (sg.) give those clothes?’ (Wang 2000)

Examples in (25) and (26) show that the form -k marks the first person singular actor of transitive verbs and -nu marks the second person singular actor of transitive verbs.

However, it appears that the form -k has started to mark the actor of intransitive verbs as well, but the examples are very rare, as illustrated in (27).

197
Although examples in (27) show that the actor agreement marker -k has begun to extend its function to mark actors of intransitive verbs as well (sometimes in combination with a following coreferential full form pronoun, as in (27)b), yet such examples are extremely rare. However, it is possible that Thao is losing its ergative agreement pattern and the verb is beginning to agree with its actor regardless of transitivity.

5.2.2.2.2.1 Evidence for -k and -nu as actor agreement-marking forms

Previous studies of Thao have never clearly analyzed -k and -nu as actor agreement-marking forms (of transitive verbs). Li (1978) and Huang (2000) consider -k/-ak/-ik to be alternative forms of the first person enclitic pronoun in Thao. Li (1978:599) does not recognize the relation between the forms -ak/-ik and the formatives -an/-in. He suggests that there is a systematic contrast between -ak and -ik, with the former having the interpretation of ‘shall’ and the latter ‘must’, as in a rigaz-ak ‘I shall see (it)’ and a rigaz-ik ‘I must see (it)’. However, this is not supported by any of the data in Blust (2003), Huang (2000), Weng (2000), Chen (2000), and Wang (2000). Huang (2000) does not give any further discussion of these alternative forms.
Weng (2000) and Chen (2000) consider -k alone as a bound person-marking form. Chen (2000:31) implies that =k is a first person neutral clitic pronoun in that he uses the equals symbol “=” before it. He states that =k is attached to affixes with n-endings (such as -an, -in, -n, and =uan) and then the n-endings are deleted in actual speech (Chen 2000:33).\(^{10}\) Weng (2000:31-32) only describes -k and -nu as bound person-marking forms without further subcategorizing them. She states that -k and -nu only appear in Patient-Focus (i.e., -an/-in clauses) and imperative clauses, but never in Actor-Focus (m-clauses). In Patient Focus, they mark the semantic agent, but in imperative clauses, the first person bound pronoun marks the goal role, and the second person bound pronoun marks the agent.

Blust (2003) considers -k/-ak/-ik to be verb suffixes marking the first person singular actor. This implies that they are actor agreement markers in his analysis. However, even though he notices the relation between -ak/-ik and -an/-in, he does not consider that it is

\(^{10}\) Chen (2000:26) analyzes =uan as a ‘durative, or tentative aspect marker’, cliticizing to the first predicate. When =uan occurs before =k, it becomes =uak, as in the following examples (Chen 2000:33-34).

a. K< m> an = uak.  
K< m> an = uan = k  
eat< AV> = Dur = 1 s  
‘I’m still eating.’

c. Tusuqik = uan cicu.  
trns. instruct. 1 s. actr = still 3 s. Nom/ Abs  
‘I am still instructing him.’ (Blust 2003:1026)

d. Fariwi = wak = uan hulus.  
buy. IMP. trns = 1 s. Nom/ Abs = please clothes  
‘Please buy clothes for me.’ (Blust 2003:285)
only the form -k that is the agreement-marking form, and that -ak/ik are derived from the incorporation of -k into transitive verbs (dyadic -an/-in verbs). He states that “the vagueness of the distinction between -/ak/ and -/ik/ mirrors the vagueness of the distinction between -/an/ and -/in/: although these affixes reflect the historical Locative Focus and Patient Focus markers, they have begun to lose any distinguishing syntactic or semantic characteristics in Thao, and have become largely interchangeable” (Blust 2003:92).

Therefore, none of the previous studies claim that only -k and -nu are actor agreement-marking forms of transitive verbs, which developed from earlier ergative clitic pronouns in the history of Thao. In the following sections, I will show that -k and -nu are first and second person singular actor agreement-features in Thao, and that when transitive verbs (with what were originally derivational endings -in/-an) carry -k and -nu, they lose their final nasal.

5.2.2.2.2.1.1 The morphological status of -ak/-ik

As mentioned earlier, Li (1978), Blust (2003), and Huang (2000) consider that -ak and -ik to be alternative forms of the first person singular bound pronouns. However, the following examples show that -ak and -ik are morphologically complex, and that they are not simply first person singular pronouns, as illustrated in (28) and (29).

(28)  a. Yaku mara sa kawi tmubar azazak.
    1s.Nom/Abs intrns.take Det stick intrns.beat child
    ‘I fetched a stick (and) thrashed the child.’ (Blust 2003:1007)
b. *Tubarak cicu a rikus.*
   beat.? 3s.Pos Gen back
   ‘I beat him on the back.’ (Blust 2003:1007)

c. *Tubaran cicu nak a rikus.*
   trns.beat 3s.Nom/Abs 1s.Pos Gen back
   ‘He beat me on the back.’ (Blust 2003:1007)

(29) a. *Yaku smakup ranaw.*
   1s.Nom/Abs intrns.catch chicken
   I caught a chicken.’ (Blust 2003:861)

b. *Ya madundun=iza, asakpik.*
   when intrns.tame=already Irr.catch.? ’When it is time, I will catch it.’ (Blust 2003:861)

c. *Inay a ranaw sakpin suma.*
   this LIG chicken trns.catch someone
   ‘Someone caught/is catching this chicken.’ (Blust 2003:861)

Examples (28)a and (29)a are intransitive clauses in that they carry the formative *m*.-.

Examples (28)b and (28)c form a neat pair which show that -ak is probably a ‘portmanteau’ form indicating the combination of the formative -an and the first person singular actor. Similarly, examples (29)b and (29)c form a neat pair which show that -ik is morphologically complex, indicating the combination of the formative -in and the first person singular actor. In other words, -ak/-ik in Thao are resulted from the loss of the final nasal of the suffixes (-in/-an) of transitive verbs, as the first person singular actor agreement marking form -k merged with it.

Another piece of evidence which shows that -ak/-ik are not simply first person singular bound pronouns but a combination of the formative -an/-in and the pronominal-related form -k is that they do not cooccur with either dyadic transitive verbs.
(i.e., dyadic m- verbs), or dyadic transitive verbs (i.e., dyadic -in/-an verbs), as illustrated in (30) and (31), respectively.

(30) Dyadic intransitive verbs cooccurring with -ak/-ik
   a. **Tmubarak/tmubarik cicu a rikus.
      intrns.beat.? 3s.Pos Gen back
      ‘I beat him on the back.’ (Wang 2000)
   b. **Ranaw smakupak/smakupik.
      chicken intrns.catch.?
      ‘I caught the chicken.’ (Wang 2000)

(31) Dyadic transitive verbs cooccurring with -ak/-ik
   a. **Tubarinak/tubarink/tubaranak/tubaranik cicu a rikus.
      trns.beat.? 3s.Pos Gen back
      ‘I beat him on the back.’ (Wang 2000)
   b. **Ranaw sakpinak/sakpinik/sakpanak/sakpanik.
      chicken trns.catch?
      ‘I caught the chicken.’ (Wang 2000)

The ungrammaticality of (30) and (31) further confirms that the -ak/ik forms are morphologically complex.

Now consider the following examples that appear, at first glance, to be counterexamples of the above analysis.

(32) a. Nak a gnuan qinucucik.
      1s.Pos Gen buffalo trns.perf.tie.?
      ‘I tied my buffalo.’ (Blust 2003:811)
   b. Haya wa takic linumik.
      that LIG barking.deer trns.perf.cage.?
      ‘I caged the barking deer.’ (Blust 2003:517)

The examples in (32) seem to suggest that -ik form is the first person singular bound pronoun in that it can cooccur with verbs carrying the formative -in-. However, as noted in Blust (1998b, 2003), although in Proto-Austronesian, the perfective form of Patient
Focus verbs (transitive verbs in the present analysis) loses the *-en suffix appearing in non-perfective forms, with the infix *-in- serving as a portmanteau morpheme to mark both focus and aspect, yet Thao, uniquely among Austronesian languages, allows a reflex of *-en to cooccur with the infix *-in-, as illustrated in (33).

(33)  

   a. *Azazak kintirin ina.*  
   child trns.perf.pinch mother  
   'The mother pinched her child.' (Blust 2003:486)

   b. *Nak a hulus finluqin nak a binanau'az.*  
   1s.Pos Gen clothes trns.perf.wash 1s. Pos Gen wife  
   'My wife washed my clothes.' (Blust 2003:386)

Therefore, the form *-in- in (32) is better analyzed as simply a perfective form, and *-ik is better analyzed as the form resulting from the combination of the formative *-in and the actor agreement *-k, as repeated in (34).

(34)  

   a. *Nak a qnuan qinucqucik.*  
   1s.Pos Gen buffalo trns.perf.tie.1s.actr  
   'I tied my buffalo.' (Blust 2003:811)

   b. *Haya wa takic linumik.*  
   that LIG barking.deer trns.perf.cage.1s.actr  
   'I caged that barking deer.' (Blust 2003:517)

Consequently, all the examples suggest that it is *-k alone, rather than *-ik/-ak, that is the bound person-marking form.

5.2.2.2.1.2 *-k and *-nu as agreement-marking forms rather than clitics

In the preceding section, I argued that it is *-k, rather than *-ak/-ik, that should be counted as the bound person-marking form in Thao. However, this is only part of the answer. Determining whether *-k and *-nu are clitics, or have lost their syntactic
independence and become further grammaticalized as part of the word to which they were formerly phonologically attached is a more difficult task, and has more intriguing theoretical implications. The problem of determining whether a phonologically bound form in a language is a clitic or an affix was the topic of Zwicky and Pullum's (1983) article. They suggest a series of tests from which evidence for one or another analysis could be adduced. In this section, I attempt to apply some of the tests proposed in Zwicky and Pullum's (1983) paper to determine whether the bound person-marking forms in Thao are actually clitics or agreement features.

Of the various criteria listed in Zwicky and Pullum (1983:503-504), at least two of them are applicable to the forms under discussion. These are:

(i) Clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems.

(ii) Morphological idiosyncrasies are more characteristic of affixed words than of clitic groups.

With respect to (i), the bound forms -k and -nu are restricted in their distribution. Both of them typically only attach to transitive verbs, as shown in (35); and they do not co-occur with intransitive verbs in simple clauses except for the atypical examples presented in (27) (see section 5.2.2.2.2 for details).

(35) a. \textit{Kinarik}=iza \textit{buna}.
   trns.perf.dig.up.1s.actr=already sweet.potato
   ‘I’ve dug up the sweet potatoes.’ (Wang 2000)

b. **\textit{Kminarik}=iza \textit{buna}.
   intrns.perf.dig.up.1s.actr=already sweet.potato
   ‘I’ve dug up the sweet potatoes.’ (Wang 2000)
c. **Apák.**  
trns.carry.1s.actr  
‘I am carrying (it).’ (Wang 2000)

d. **Mapak.**  
intrns.carry.1s.actr  
‘I am carrying (her).’ (Wang 2000)

e. **Zazinis patinhinanu.**  
bee trns.play.2s.actr  
‘You (sg.) were playing with the bee.’ (Wang 2000)

As shown in (35), the first and second person singular bound forms -k and -nu can only cooccur with the transitive verb (such as *kinarin* ‘dig up’ in (35)a, *apán* ‘carry’ in (35)c, and *patinhina* ‘play with’ in (35)e), but not with the intransitive verb, e.g., *kminari* ‘dig up’ as in (35)b, *mapa* ‘carry’ as in (35)d, nor with *matinhina* ‘play with’ as in (35)f.

In addition, the bound forms -k and -nu must remain with the ‘main’ lexical verb when there is a preverbal auxiliary verb, such as a negator, as illustrated in (36).  

(36)  
a. **Ani pdisik** inay a *kukulay.*  
NEG trns.crush.1s.actr this LIG bug  
‘I didn’t crush this bug.’ (Wang 2000)

b. **Anik pdisin** inay a *kukulay.*  
NEG.1s.actr trns.crush.1s.actr this LIG bug  
‘I didn’t crush this bug.’ (Wang 2000)

---

11 In other Philippine-type languages, such as Central Cagayan Agta (Liao 2004), the corresponding first and second ergative clitic pronouns can occur in the second position immediately following auxiliary verbs such as negators.

205
The examples in (36) show that when a clause is headed by an auxiliary verb, such as the negator *ani* in (36)a and (36)b, and *antu* in (36)c to (36)f, both -*k* and -*nu* remain with the transitive verb, and do not attach to the preverbal negator (the first verb). In this way, -*k* and -*nu* are unlike second-order clitics, which typically immediately follow the first verb even if it is an auxiliary verb. Therefore, as illustrated in (35) and (36), the first and second person singular forms -*k* and -*nu* are similar to Zwicky’s (1977) ‘special’ clitics, and are more affix-like in their distribution.

With respect to (ii), there are pieces of evidence that suggest that the first and second person bound forms (-*k* and -*nu*) exhibit morphological idiosyncrasies that make them more affix-like than clitic-like. First, only first and second person singular have the shortened forms -*k* and -*nu* (all other pronominal forms do not have corresponding short forms). Second, the fact that transitive verbs lost their final -*n* when they carry these shortened forms (-*k* and -*nu*), makes the forms more affix-like than clitic-like. Finally, comparative evidence, and the few remaining examples of the first-person clitic =*ku* in
Thao, show that the first person agreement form has also lost its original final vowel. These morpho-phonological idiosyncrasies are clearly of the kind which show that what were once ergative (genitive) pronouns have become incorporated into the verb and now function only to mark agreement features (number and person) on the verb.

In fact, Thao is not the only language that exhibits such a development this among Austronesian languages. Another Austronesian language Kavalan (Zeitoun 1997:327) also has a similar situation, as shown in (37).

(37) a. *pukun-an-ku-pa* sunis. [pukunaka sunis]
   beat-P/1S.Gen-will child
   ‘I will beat the child.’

b. *pukun-an-na.* [pukunana]
   beat-P/1S.Gen
   ‘He beat (s.o.).’

Zeitoun (1997) does not discuss the conditions that may have brought about this situation. Although she notices that in Kavalan, the final nasal of an -an suffix is lost before what appear to be -k ‘1S’ and -na ‘3S’ agreement marker, but she still describes these, in the traditional manner, as Genitive bound pronouns.

In addition, the northern Philippine language Bontok (Reid 2001) also displays a similar phenomenon. In Bontok, what were originally derivational endings, -en and -an, lose their final nasal when they carry either first, second, or third person singular agreement feature (1sg: -ek/-ak, 2sg: -em/-am, 3sg: -ena/-ana). Following the Lexicase (word-based) framework, Reid (2001) provides an explanation for this innovation. He claims that this situation arose as a result of the incorporation of a reduced form \( n \) of what was originally a genitive case-marking preposition \( ni \) onto vowel-final verbs and
their nominal counterparts. An analogy was then established between these final forms and derived forms with en] and an] endings, so that the latter were also perceived as being vowel-final for the purpose of substituting the k], m], and na] agreement endings. Therefore, Thao and Bontok exhibit a similar innovation, in which -in and -an lose their final nasal when they carry the first person singular agreement *-ku (PAN form). Reid (2001) has provided a convincing explanation for Bontok (by analogy); however, an explanation for the phenomenon in Thao remains unclear and requires future study. It should be noted that up to this point, I have used the term ‘affix’ to refer to the forms -k and -mu. This is only a convenient way of referring to forms that have been grammaticalized one step beyond their earlier status as clitics, and which in addition to becoming phonologically part of their host now contribute some of their original semantic and syntactic features to it.

5.2.3 Tense/Aspect/Mood

Tense, aspect, and mood (TAM) are grammatical devices that anchor or ground the information expressed in a clause along with its sequential, temporal, or epistemological orientation (Payne 1997). These three categories are closely interrelated, and they are sometimes difficult to tease apart.

Both tense and aspect denote temporal notions. Tense is the grammatical expression of the relation of the time of an event to some reference point in time (i.e., whether the event occurs before, simultaneously, or after that reference point), usually the moment the clause is uttered (Payne 1997). Aspect describes the internal temporal shape of
events or states (Comrie 1976:6); whether the event is completed or continuing, beginning or progressing, simulactive (occurring once), or iterative (or habitual), etc. The two differ from each other in that tense relates an event with an external reference point, whereas aspect provides an internal view. However, they are also interrelated, which can be evidenced by the fact that a completed event (perfective aspect) tends to be past, whereas a continuing event (imperfective aspect) tends to be present or future (see Comrie 1976, 1985; Chung and Timberlake 1985).

Mood describes the speaker’s attitude toward a situation, including the speaker’s belief in its reality, or likelihood. It sometimes describes the speaker’s estimation of the relevance of the situation to him/herself. Although tense and mood appear to be quite different, they are also interrelated. It has been noted that events that were observed (in the past) or the ones that are being observed (in the present) tend to be associated with realis mood, whereas the ones that have not been observed (primarily because they are yet to take place, i.e., future events) tend to be associated with irrealis mood (Palmer 1986:208).

Apparently because of this interrelatedness of tense, aspect, and mood, some languages choose one of them as the primary notion to be encoded in their verbal system (Bhat 1999). For instance, the notion of past tense and realis mood can be denoted indirectly by a form which represents primarily the aspektual notion of completion (and vice versa), whereas the notion of future tense or irrealis mood can be denoted by a form whose primary denotation is the aspektual notion of non-completion (and vice versa).
As for Thao, previous studies have shown that unlike English, it does not use a tense system to denote the temporal location of an event (or a situation), although it may use temporal adverbials such as yesterday, today, tomorrow to make temporal grounding explicit. However, it is clear that Thao uses grammaticalized aspects and mood to express temporal and modal notions (Huang 2000, Weng 2000, Chen 2000).

5.2.3.1 Tense vs. mood

It has been observed that Thao does not use a tense system, but a mood system to ground the information expressed in a clause along with its sequential, temporal, or epistemological orientation (Huang 2000, Weng 2000, Chen 2000). Mood interacts with the reality of an event, i.e., whether the event’s occurrence is a reality or only a possibility. It also refers to the kind of evidence that can be adduced in support of the claim that it occurred (or is going to occur). In Thao, mood is primarily divided into two categories, realis and irrealis. Realis mood is typically unmarked morphologically, and asserts that a specific event or state of affairs has actually happened, or actually holds true, so it appears to be used in sentences that have present or past time reference, as seen in (38).

(38) Realis: unmarked morphologically

a. *Qusazin=iza.*
   rain.IN.intrns=already
   ‘It’s raining already.’ (Blust 2003:816)

b. *Yaku kman lapat.*
   1s.Nom/Abs intrns.eat guava
   ‘I was eating a guava.’ (Blust 2003:971)
On the other hand, irrealis mood, marked with the formative *a*-, does not necessarily assert that an event did not take place or will not take place. It simply makes no claims with respect to the actuality of the event or situation described. Therefore, it can be used not only in contexts with future time reference, as in (39), but also in contexts with non-future time reference, provided the reference is not restricted to our actual world (i.e., provided there is mood involved, such as subjunctive, potential, hypothetical, conditional, deontic, and epistemic moods), as in (40).

(39) Irrealis marked with prefix *a*- in future time
   a. *Aqusazin.*
      Irr.rain.IN.intrns
      ‘It’s going to rain.’ (Wang 2000)
   b. *Haya wa shput atufilik.*
      that LIG person trns.Irr.beat.1s.actr
      ‘I’m going to beat that person.’ (Blust 2003:1010)

(40) Irrealis marked with prefix *a*- in nonfuture time
   a. Subjunctive
      *Ya antu zain=uhu, ani cicu amabuqnur yakin.*
      if NEG trns.tell=2s.Neut NEG 3s.Nom/Abs intrns.Irr.angry 1s.Obl
      ‘If you hadn’t told him, he wouldn’t have been angry with me.’ (Blust 2003:1061)
   b. Potential
      *Malhinuna=iza na lalay, amaquaz=iza painan.*
      intrns.speak=already Det cicada intrns.Irr.rain=already maybe
      ‘The cicada is calling already; it might rain.’ (Blust 2003:815)
   c. Potential
      *Tilha maqa aqusazin macuaw minfari sa qali.*
      yesterday because Irr.rain.IN.intrns intrns.very intrns.blow Det weather
      ‘Yesterday, because it was going to rain, it got very windy.’ (Blust 2003:374)
d. Hypothetical

\textit{Yaku ya rumfuz, amarfaz yaku.}

\textit{1s.Nom/Abs if bird intrns.Irr.fly 1s.Nom/Abs}

‘If I were a bird, I would fly.’ (Wang 2000)

e. Conditional

\textit{Yaku ya qirqiran sa krasa, aminura=iza.}

\textit{1s.Nom/Abs if trns.sting Det yellow.jacket intrns.Irr.pass.out=already}

‘If I am stung by a yellow jacket, I will pass out.’ (Blust 2003:485)

f. Deontic (obligation)

\textit{Yamin tu kahiwan amunsulan sazum a shannasayin tahamish. water.jar}

‘In the old days, we (ex.) had to go fetch water to fill the water jar.’ (Blust 2003:744)

g. Deontic (desire)

\textit{Yaku aminfazaq satu caw a lalawa.}

\textit{1s.Nom/Abs intrns.Irr.know Det Thao LIG speech}

‘I want to learn Thao.’ (Wang 2000)

h. Deontic (intention)

\textit{Amunay yaku Kilash a taun, muririw, yaku mrataq.}

\textit{intrns.Irr.here 1s.Nom/Abs Kilash Gen house intrns.wrong 1s.Nom/Abs intrns.pass}

‘I was planning to go to Kilash’s house, (but) (1) took the wrong way and passed it.’ (Blust 2003:825)

i. Epistemic (probability)

\textit{Haya azazak mimparaw, amalhacoq, numa pashtapuqik.}

\textit{that child intrns.jump intrns.Irr.fall so trns.catch.1s.actr}

‘That child was jumping and he might have fallen, so I caught him.’ (Blust 2003:691)

A careful examination of the Thao data shows that the basic distinction is a

realsis/irrealis mood distinction, not a tense distinction.
5.2.3.2 Aspect

There are at least four aspects found in Thao. Unmarked verbs are typically interpreted as non-perfective (e.g., habitual and progressive), although in appropriate temporal contexts they can be interpreted as perfective. However, perfective aspect is formally marked with the infix -in-. Iterative aspect is marked by partial/full reduplication of the verb. In addition, there are two adverbial clitics which mark aspect, =iza ‘already/now’ and =uan ‘still/yet/awhile’.

5.2.3.2.1 Non-perfective aspect

In the non-perfective aspect, the situation is viewed from “inside” as an ongoing action or state. In Thao, the non-perfective aspect including habitual and progressive aspects are not formally marked, the appropriate interpretation often being suggested by the presence of adverbial verbs, such as miaqay ‘often’, as in (41) and (42).

(41) Imperfective aspect: habitual
   a. Cicu miaqay cmapu pruq.
      3s.Nom/Abs intrns.often intrns.sweep ground
      ‘She often sweeps the ground (in front of the house).’ (Blust 2003:342)
   b. Yaku miaqay kmanqca cicu a kuskus.
      1s.Nom/Abs intrns.often intrns.step 3s.Pos Gen foot
      ‘I often step on his foot.’ (Blust 2003:602)

(42) Imperfective aspect: progressive
   a. Yaku hmadu fatu.
      1s.Nom/Abs intrns.hold stone
      ‘I’m holding a stone.’ (Blust 2003:394)
   b. Yaku magqaqili sa azazak.
      1s.Nom/Abs intrns.carry Det child
      ‘I was carrying a child on my hip.’ (Blust 2003:283)
5.2.3.2.2 Perfective aspect

In the perfective aspect, the situation is viewed in its entirety, independent of tense (Payne 1997). In Thao, perfective aspect can be unmarked, especially in narrative discourse, or when there is an appropriate past time adverb, such as yesterday, last night etc, as in (43). However, perfective aspect is formally marked with the infix \(-in-\), as in (44).

(43) Unmarked perfective aspect

a. \textit{Yaku shmutun sinay.} \\
1S.Nom/Abs intrs.break thread \\
‘I broke the thread (by pulling it).’ (Blust 2003:946)

b. \textit{Cicu mishur fatu.} \\
3S.Nom/Abs intrs.pry stone \\
‘He pried up a stone.’ (Blust 2003:425)

c. \textit{Nak a hulus shuliqliqin cumay.} \\
1S.Pos Gen clothes trns.tear bear \\
‘My clothes were torn by a bear.’ (Blust 2003:516)

d. \textit{Tilha ihu kmilhim yakin.} \\
yesterday 2S.Nom/Abs intrs.look.for 1S.Obl \\
‘You (sg.) were looking for me yesterday.’ (Blust 2003:316)

e. \textit{Yaku lhuan macuaw ishqala.} \\
1S.Nom/Abs last.night intrs.very intrs.drunk \\
‘Last night I was very drunk.’ (Blust 2003:424)

(44) Perfective aspect marked with the infix \(-in-\)

a. \textit{Yaku kminan bahat.} \\
1S.Nom/Abs intrs.perf.eat pumpkin \\
‘I ate a pumpkin.’ (Blust 2003:493)

b. \textit{Caycuy cminanit tu ikahi.} \\
3p.Nom/Abs intrs.perf.cry Det a.while \\
‘They were crying a while ago.’ (Blust 2003:356)
5.2.3.2.3 Iterative aspect

Iterative aspect describes a punctual event which takes place several times in succession (Payne 1997). In Thao, iterative aspect can be marked with reduplication as shown in (45).

(45) Iterative aspect
   a. Yaku cacumpiq sa rikish.
      1s.Nom/Abs intrs.CaRed.swat Det mosquito
      ‘I keep swatting mosquitoes.’ (Blust 2003:347)
   b. Yaku mrafiraf ir maqa macuaw mahnar.
      1s.Nom/Abs intrs.Red.fan because very intrns.hot
      ‘I’m fanning myself because it’s very hot.’ (Blust 2003:819)
   c. Hayaw azazak, miaqay shuzashuzapik punuq.
      that LIG child intrms.often trns.caress.1s.actr head
      ‘As for that child, I often caress (his) head.’ (Blust 2003:947)

It should also be noted that iterative aspect can cooccur with perfective aspect in a clause, as illustrated in (46).

(46) Iterative aspect cooccurring with perfective aspect
   a. Yaku tilha qmimpipit maqusum.
      1s.Nom/Abs yesterday intrs.perf.Red.cut cloth
      ‘Yesterday I cut the cloth.’ (Blust 2003:804)
   b. Ihu minzaizai.
      2s.Nom/Abs intrs.perf.say
      ‘You’ve told (me) many times.’ (Blust 2003:1061)

12 There are several different types of reduplication. Please see Blust (2003:190-196).
c. *Inay a bukhaz cinapucapuan suma.*  
this LIG floor trns.perf.Red.sweep someone  
'Someone swept this floor.' (Blust 2003:342)

5.2.3.2.4 Aspectual adverbial clitics

There are two aspectual adverbial clitics found in Thao, =iza ‘already/now’ and =uan¹³ ‘still/awhile/yet’. The clitic =iza ‘already/now’ can be used with either a perfective interpretation like *I ate already* or an inceptive interpretation like *It’s going to rain already*. The clitic =uan ‘still/yet/awhile’ marks durative aspect ‘still/continue to’ in an affirmative clause. When it attaches to a negator, it is interpreted as ‘yet’.¹⁴ These two forms are categorized as clitics in that the hosts to which they attach are not selective. They usually attach to the first element of a clause: a predicate, a conjunction, or even an exclamation. However, when a nominative/absolutive NP precedes the predicate, =iza attaches to the predicate, rather than to the clause-initial NP. Examples (47)-(51) illustrate the aspectual adverbial clitic =iza attaching to different types of word classes.

(47) aspectual adverbial clitic =iza attaching to a pronoun  
   a. *Yaku=iza.*  
      1s.Nom/Abs=already  
      ‘It’s my turn already.’ (Chen 2000:29)

¹³ A homophonous form of this clitic is =uan ‘please’, a polite register form, often appearing in imperative constructions, as in (a) below (see section 5.3.2 for a detailed discussion).

a. *Cniti=uan mihu a kulambit!*  
   wring.out.IMP.trns=POL 2s.Pos Gen towel  
   ‘Please wring out your (sg.) towel!’

¹⁴ Weng (2000) argues that -iza is a suffix emphasizing an ‘end-point’ (either in the beginning or the end) of an event and expressing ‘change of state’, while -uan emphasizes an on-going progressive/tentative situation.
b. *Ina=iza* cicu.
mother=already 3s.Nom/Abs

‘She is a mother already/she has become a mother already.’ (Wang 2000)

c. *Tima=iza sa amaqaquyas?*
who=already Det intrns.lrr.Red.sing

‘It’s whose turn to sing already?’ (Chen 2000:29)

(48) aspectual adverbial clitic *=iza* attaching to a verb

a. *Furaz muapaw=iza.*
moon intrns.rise=already

‘The moon has risen already.’ (Blust 2003:299)

b. *Agusazin=iza.*
lrr.rain.IN.intrns=already

‘It is going to rain already.’ (Wang 2000)

c. *Yaku qmalhuqtu=iza ihu.*
1s.Nom/Abs intrns.catch=already 2s.Obl

‘I’ve already caught up with you (sg.).’ (Blust 2003:767)

d. *Nak a tuali aqriu’in=iza sa suma.*
1s.Pos Gen money trns.lrr.steal=already Det someone

‘Someone will steal my money.’ (Blust 2003:804)

(49) aspectual adverbial clitic *=iza* attaching to a negator

a. *Ani=iza cicu (tu) amakan.*
NEG=already 3s.Nom/Abs Det intrns.lrr.eat

‘S/he will not eat anymore.’ (Chen 2000:65)

b. *Ata=iza (tu) zai!*
NEG.IMP=already Det tell.IMP.trns

‘Don’t tell him!’ (Blust 2003:1061)

c. *Uka=iza sazum.*
NEG.EXIST=already water

‘There is no more water.’ (Blust 2003:311)
(50) aspectual adverbial clitic =iza attaching to a conjunction
a. Maqa=iza haya shahitan mumuqmuq malhinuna,
because=already that other.mountain.aborigine intrns.talk.nonsense intrns.speak
pshiqan nak a binanau’az.
trns.splash.with.water 1s. Pos Gen wife
‘Because that Bunun person talked nonsense (to her), my wife splashed him with water.’ (Blust 2003:732)
b. Numa=iza kinalawa=iza buhat apatiklhunan=iza.
then=already trns.perf.make=already field trns.Irr. plow=iza
‘Then the fields that had already been made would be plowed with an animal.’ (Blust 2003:987)

(51) aspectual adverbial clitic =iza attaching to an exclamation
wow wow=already Det bird intrns.a.lot intrns.multiply
‘Wow! The birds are really multiplying.’ (Blust 2003:635)
b. Minu=iza, mabashbash na pinansha.
wow=already intrns.full/overflowing Det trns.perf.give
‘My gosh! The gifts are overflowing!’ (Blust 2003:322)

Like =iza, the adverbial clitic =uan ‘still/for a while/yet’ can also attach to a predicate, a conjunction, or a prepositional phrase, as seen in (52)-(56).

(52) Aspectual adverbial clitic =uan attaching to a pronoun
a. Yaku=uan.
1s.Nom/Abs=still
‘It’s still my turn.’ (Chen 2000:29)
b. Ihu parhaway=uan.
2s.Nom/Abs young.man=still
‘You (sg.) are still youthful.’ (Blust 2003:679)
c. Tima=uan sa amaqaquyash?
who=already Det intrns.Irr.Red.sing
‘Who still wants to sing?’ (Chen 2000:29)

(53) Aspectual adverbial clitic =uan attaching to a verb
a. Nak a lhuzush madishlum=uan.
1s.Pos Gen plum intrns.S.green=still
‘My plums are still green.’ (Blust 2003:364)
b. *Yaku amalhus=uan.*
   1s.Nom/ABS intrs.Irr.sleep=a.while
   ‘I am going to sleep for a while.’ (Blust 2003:442)

c. *Tusugik=uan cicu.*
   trns.instruct.1s.actr=still 3s.Obl
   ‘I am still instructing him.’ (Blust 2003:1026)

(54) Aspectual adverbial clitic *=uan* attaching to a negator
   a. *Ani=uan cicu (tu) amakan.*
      NEG=still 3s.Nom/ABS Det intrn.Irr.eat
      ‘S/he will not eat yet.’ (Chen 2000:65)
   b. *Ata=uan (tu) palhuiza lhuqu.*
      NEG.IMP=still Det plant.Imp.intrn banana.tree
      ‘Don’t plant the banana tree yet!’ (Blust 2003:664)
   c. *Uka=uan sa nak a tulai.*
      NEG.EXIST=still Det 1s.Pos Gen money
      ‘I don’t have money yet.’ (Chen 2000:57)

(55) Aspectual adverbial clitic *=uan* attaching to a conjunction

Maqa cicu pinanshizan, numa=uan mariqus maca.
because 3s.Nom/ABS perf.sick.AN.intrn then=already intrn.sttv.blind eye

‘Because he got sick, he became blind.’ (Blust 2003:921)

(56) Aspectual adverbial clitic *=uan* attaching to a prepositional phrase

Sa azazak ya i sa tiaz=uan, magitan cicu
Det child when Loc Det womb=still intrn.S.good 3s.Nom/ABS
mashiamuzkuz.
intrn.bent.over

‘When the child was still in my womb, it was curled up gracefully.’ (Blust 2003:290)

Having discussed basic verbal structures, including the three main verbal clause patterns, word order, the pronominal system, and tense/aspect/mood, I will turn to the discussion of other types of clause constructions, such as imperatives, topicalized constructions, existential/possessive, negative, and causative constructions, etc.
5.3 OTHER TYPES OF CONSTRUCTIONS

5.3.1 Dynamic Agentless Constructions

Thao exhibits a construction which in many respects resembles the -in/-an "infested" type intransitive construction discussed in section 3.5.1, in which the S (i.e., the nominative/absolutive NP) is always interpreted as being affected (usually negatively) by the activity, as illustrated in (57).

(57) Monadic intransitive clauses: -in/-an 'infested' type

a. Wazaqan harbukin.
   lake fog.IN.intrns
   'The lake is covered with fog (fogged in).' (Blust 2003:397)

b. Nak a buhat lhatazin.
   1s.Pos Gen field hailstone.IN.intrns
   'My fields were pelted with hailstones.' (Blust 2003:527)

c. Haya wa qrus (kit)ayazin=iza.
   that LIG post KIT.terme.IN.intrns=already
   'That post is termite-eaten.' (Blust 2003:309)

d. Haya wazish (kit)kukulayin=iza.
   that pork KIT.bug.IN.intrns=already
   'That pork is infested with bugs.' (Blust 2003:490)

f. Nak a rima fcuan.
   1s.Pos Gen hand callous.AN.intrns
   'My hands are calloused.' (Blust 2003:381)

Although the structures to be discussed in this section are monadic intransitive constructions and are headed by verbs with the same affixation as the "infested" type of clause, there is a clear difference between them. First, all of the "infested" type of sentences is headed by verbs that are derived from nouns. Second, they do not have corresponding transitive constructions in which the actor is expressed.
Consider the following pair of examples in (58).

(58) Corresponding transitive and intransitive dynamic clauses

a. *Apalhuizán caycuy sa tipur.*
   trns.Irr.plant 3p.Nom/Abs Det corn
   ‘They will plant the corn.’ (Blust 2003:665)

b. *Kalup a puqu apalhuizán.*
   peach Gen seed Irr.plant.AN.intrns
   ‘The peach seed will be planted.’ (Blust 2003:665)

As shown above, the intransitive construction differs from its transitive counterpart only in that the actor is unexpressed. In many respects this construction functions as a passive construction, but it does not have all the syntactic features that are necessary for it to be so classified. In particular there is no morphology that is distinctly passive. Neither is the structure stative. An alternate analysis would be to consider that the verb is actually functioning as a noun in these examples. Another possible analysis could be that the function of the formative *-in/-an* in the “infested” type of clause is extended to the major verbal/nominal classes, with an emphasis on the theme being affected. Therefore, the agent, being irrelevant, does not occur in such constructions. However, until a better solution appears, I label this construction as a dynamic agentless intransitive construction. Figure 5.9 below schematizes the structure of these constructions, followed by examples in (59).
(59) Dynamic intransitive agentless construction

a. *Fininshiq=iza fafinshiq.*
   perf.IN.intrs=sow=already CaRed.sow (seed)
   ‘The seed has been sown.’ (Blust 2003:383)

b. *Pulaunin=iza pazay.*
   C.shade.IN.intrs=already rice
   ‘The rice has been put in a sheltered place/in storage.’ (Blust 2003:512)

c. *Pinatashaninan=iza nak a lhanaz.*
   perf.write.AN.intrs=already Is.Pos Gen name
   ‘My name has been written down.’ (Blust 2003:694)

d. *Tinaninan=iza pitaw.*
   perf.open.IN.intrs=already door
   ‘The door has been opened.’ (Blust 2003:965)

e. *Anwailin Kilash.*
   AN.take.up.AN.intrs Kilash
   ‘Kilash was taken away.’ (Blust 2003:1051)

5.3.2 Imperative Constructions

Imperative constructions are used to directly command the addressee to perform some action, e.g., *Sit down!* Usually imperatives are understood to refer to second persons as agents. Because the second person actor of an imperative clause is expected to be the addressee, it is typically not expressed. Like many languages in the world, imperatives in
Thao allow no tense. Thao exhibits both affirmative and negative imperative constructions as described in the following sections.

5.3.2.1 Affirmative imperative constructions

Like declarative constructions (basic verbal clauses), affirmative imperative constructions also have three types, monadic intransitive imperatives, dyadic intransitive imperatives, and transitive imperatives. The first two types (intransitive imperatives) are formed by zero affixation of a verb which does not have m- or -in/-an affixes; while the last type (transitive imperatives) are typically formed by suffixation of –i to a verb which does not have m- or -in/-an affixes. Thao exhibits both direct and polite imperative constructions. The former are plain imperatives, and the latter are imperatives formed with the addition of the polite enclitic form =uan ‘please’ to the verb. Since the addressee of imperatives is often understood to be either second person or first person plural inclusive, it can be omitted. When the addressee is present in the construction, the full pronoun (ihu ‘2s’, ita ‘1pin’) or the enclitic pronoun (=uhu ‘2s’) can be used.

5.3.2.1.1 Intransitive imperative constructions

Intransitive imperative constructions contain both monadic and dyadic types. Figure 5.10 shows the word order patterns of intransitive imperative constructions in Thao, followed by the examples in (60)–(63).
(60) Direct monadic intransitive imperatives: V-∅

a. Kalhus!
sleep.IMP.intrns

‘Go to sleep!’ (e.g., said to a child who wants to stay up) (Blust 2003:442)

b. Paza!
walk/go.IMP.intrns

‘Go!’ (Wang 2000)

c. Iraurairiuq!
I.Red.quiet.IMP.intrns

‘Be quiet!’ (Blust 2003:826)

d. Utaun!\(^{15}\)
MV.house.IMP.intrns

‘Come indoors!’ (Wang 2000)

e. Piaqitan ihu!
C.good.IMP.intrns 2s

‘Be helpful/good!’ (Blust 2003:798)

f. Pashintirtir ihu!
C.shiver.IMP.intrns 2s

‘Shiver!’ (e.g., command to an actor) (Blust 2003:914)

g. Paza ita!
walk/go.IMP.intrns 1fin

‘Let’s go!’ (Blust 2003:699)

\(^{15}\) A bare stem prefixed with *u*- seems to form a motion verb in Thao.
(61) Polite monadic intransitive imperatives (with the enclitic polite form =uan):

V-0=uan

a. \textit{Pagqa}=uan!
    sleep.IMP.intrns=POL
    ‘Please take a break (for a few minutes)!’ (Blust 2003:649)

b. \textit{Kan}=uan!
    eat. IMP.intrns=POL
    ‘Please eat!’ (Blust 2003:444)

c. \textit{Ilhugqu}=uan!
    s1.sit down.IMP.intrns=POL
    ‘Please sit down!’ (Blust 2003:551)

d. \textit{Piatdik}=uan!
    C.make.steep.IMP.intrns=POL
    ‘Make it steep (as a roof under construction)!’ (Blust 2003:984)

e. \textit{Riqaz}=uan \textit{ihu}!
    see.IMP.intrns=POL 2s
    ‘Please take a look (if someone is coming)!’ (Blust 2003:835)

f. \textit{Qiwin}=uan=uhu!
    s1.step aside.IMP.intrns=POL=2s
    ‘Please step aside!’ (Wang 2000)

g. \textit{Ulhilhi}=uan=uhu!
    MV.stand up.IMP.intrns=POL=2s
    ‘Please stand up!’ (Wang 2000)

h. \textit{Unay}=uan=uhu, \textit{ama}!
    MV.here.IMP.intrns=POL=2s father
    ‘Father, please come here!’ (Blust 2003:642)

i. \textit{Palhkakca}=uan \textit{ita}!
    discuss.IMP.intrns=POL 1Pin
    ‘Let’s talk it over!’ (Blust 2003:663)

(62) Direct dyadic intransitive imperatives: V-ø

a. \textit{Kan} \textit{afu}!
    hit.IMP.intrns  rice
    ‘Eat your rice!’ (said to a child who won’t eat) (Blust 2003:444)
b. Qauriwa sa aniamin!
throw.out.IMP.intrns Det thing
’Throw out these things!’ (Blust 2003:781)

c. Ilhugqu pagka!
l.sit.IMP.intrns chair
’Sit on a chair!’ (Blust 2003:552)

d. Pashbalis kawi!
C.nail.IMP.intrns wood
’Nail wood!’ (Blust 2003:317)

e. Qaur ihu cicu a punuq!
hook.IMP.intrns 2s 3s.Pos Gen head
’Hook its head (as in pinning the head of a snake)!’ (Blust 2003:781)

f. Ktun ita sa klhiw!
break.IMP.intrns 1pin Det rope
’Let’s break the rope!’ (Blust 2003:487)

(63) Polite dyadic intransitive imperatives (with the enclitic polite form =uan):
V-σ=uan

a. Kilhim=uan mihu a ama!
look.for.IMP.intrns=POL 2s.Pos Gen father
’Look for your (sg.) father!’ (Blust 2003:807)

b. Tulhuk=uan rusaw!
catch.fish.by.trapping.IMP.intrns=POL fish
’Please catch some fish!’ (Blust 2003:1012)

c. Fariw=uan shawiki!
buy.IMP.intrns=POL betel.nut
’Please buy some betel nut!’ (Blust 2003:375)

d. Qpit=uan ihu sa patashan!
hold.under.arm.IMP.intrns=POL 2s Det book
’Please hold the book under your (sg.) arm!’ (Blust 2003:803)

e. Luslus=uan=uhu shaglaw!
massage.IMP.intrns=POL=2s vegetables
’Please massage the vegetables!’ (Blust 2003:519)
5.3.2.1.2 Transitive imperative constructions

Typically, transitive imperative constructions are formed by affixation of \(-i\) to the verb stems. There are two alternative word orders for this type of transitive imperative constructions, as shown in figure 5.11.

<table>
<thead>
<tr>
<th>a.</th>
<th>V-i [IMP.trns]</th>
<th>(NP) addr</th>
<th>NP Nom/Abs</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.</td>
<td>NP Nom/Abs</td>
<td>V-i [IMP.trns]</td>
<td>(NP) addr</td>
</tr>
</tbody>
</table>

**Figure 5.11 Word order of V-i transitive imperative constructions**

Examples (64) to (67) illustrate direct and polite transitive imperative constructions with verb-initial word order in Thao.

(64) Direct dyadic transitive imperatives: V-i

a. *Damrizi cicu a lharina!*  
squeeze.and.twist.IMP.tms 3s.Pos Gen ear  
‘Twist his ear!’ (Blust 2003:356)

b. *Shirgalhiwi sa inay a rusaw!*  
dry.IMP.trns Det this LIG fish  
‘Dry this fish!’ (Blust 2003:766)

c. *Qdupi (sa) pitaw!*  
close.IMP.trns Det door  
‘Close the door!’ (Blust 2003:790)

d. *Shinawi baruku!*  
wash.IMP.trns bowl  
‘Wash this bowl!’ (Blust 2003:912)

e. *Pakani azazak!*  
C.eat.IMP.trns child  
‘Feed the child!’ (Wang 2000)
f. Kacui=wak tusha wa shaba!
   bring.IMP.trns=1s.Nom/Abs two LIG hundred
   ‘Bring me 200 (dollars)!’ (Blust 2003:575)

g. Parui ihu inay a atu!
   beat.IMP.trns 2s this LIG dog
   ‘Beat this dog!’ (Blust 2003:681)

h. Ilhugqui sa izay a pagka!
   l.sit.IMP.trns Det that LIG chair
   ‘Sit in that chair!’ (Blust 2003:952)

(65) Polite dyadic transitive imperatives (with the enclitic polite form =uan): V-i=uan
a. Caniti=uan!
   cry.IMP.trns=POL
   ‘Please cry!’ (e.g., so as to get something ‘off your chest’) (Blust 2003:340)

b. Pashbalisi=uan kawi!
   C.nail.IMP.trns=POL wood
   ‘Please nail the wood!’ (Blust 2003:317)

c. Shquruni=uan mihu a punuq i pagka!
   rest.head.IMP.trns=POL 2s.Pos Gen head Loc table
   ‘Please rest your (sg.) head on the table!’ (Blust 2003:936)

d. Qpiti=uan ihu sa patashan!
   hold.under.arrn.IMP.trns=POL 2s Det book
   ‘Please hold the book under your (sg.) arm!’ (Blust 2003:804)

e. Sasi=uan=uhu afu lhay ama!
   take.IMP.trns=POL=2s rice give/for father
   ‘Please take the rice/meal to father!’ (Blust 2003:899)

In addition to verb-initial word order, like other clause types in Thao, imperative constructions can be verb-medial as well. The following examples (66) and (67) show direct and polite transitive imperatives with verb-medial word order in Thao.

(66) Direct dyadic transitive imperatives: V-i
a. Qaripuhut a shapa lalasi!
   pumpkin Gen skin scrape.off.IMP.trns
   ‘Scrape off the pumpkin skin!’ (Blust 2003:509)
b. *Haya lhuzush lhilhiqi!*  
that plum.tree pull.up.IMP.tms

‘Pull up that plum tree!’ (Blust 2003:537)

c. *Mihu a barimbin pupunishi sa aniamin!*  
2s.Pos Gen car Red.fill.up.IMP.tms Det thing

‘Fill your car up with the things!’ (Blust 2003:744)

d. *Haya wa ranaw shagqabisi ihu!*  
that LIG chicken scald.IMP.tms 2s  

‘Put that chicken in scalding water!’ (to remove the feathers preparatory to cooking) (Blust 2003:888)

(67) Polite dyadic transitive imperatives (with the enclitic polite form =uan): V-i=uan

a. *Nak a qalhafa shifulhi=uan!*  
1s.Pos Gen shoulder massage.IMP.tms=POL

‘Please massage my shoulders with stroking motions!’ (Blust 2003:908)

b. *Haya atu tuqari=uan!*  
that dog call/invite.IMP.tms=POL

‘Please call that dog!’ (Blust 2003:1018)

c. *Pushawil putui=uan ladadu a madahun!*  
tea C.there.IMP.tms=POL a.little LIG intrns.sttv.sweet

‘Please put a little sugar in the tea!’ (Blust 2003:1048)

d. *Haya zashuq tapshi=uan ihu!*  
that rice winnow.IMP.tms=POL 2s

‘Please winnow that rice!’ (Blust 2003:968)

e. *Haya wa kawi runsuzi=uan ihu!*  
that LIG wood roll. IMP.tms=POL 2s

‘Please roll that log!’ (Blust 2003:847)

f. *Nak a azazak lhufui=uan=uhu!*  
1s.Pos Gen child hold.in.the.arms.IMP.tms=POL=2s

‘Hold my child in your (sg.) arms, please!’ (Blust 2003:551)

5.3.2.1.3 Transitive constructions as ‘requests’

It should be noted that in Thao transitive verbs (suffixed with -in/-an) are used unchanged to express ‘requests’ (e.g., ‘Would you (please) wrap it up?’). Although they
may appear to be semantically similar to imperatives, they are syntactically 
(structurally/formally) different from imperatives, in that they retain the normal verb 
affixation found in simple declarative constructions. These may be mistakenly 
considered to be imperatives because the addressee can also be absent as well, as shown 
in figure 5.12, and examples (68)-(69).

<table>
<thead>
<tr>
<th>V-in/-an</th>
<th>(NP)</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>[IMP.tms]</td>
<td>addr</td>
<td>Nom/Abs</td>
</tr>
</tbody>
</table>

**FIGURE 5.12 WORD ORDER OF V-IN/-AN TRANSITIVE REQUEST CONSTRUCTIONS**

(68) **V-in** dyadic transitive construction as a request
a.  *Haya wa grus macuaw mara’in*,
    that LIG post intrns.very intrns.big
    *lhinlaggisusayin cicu a piaqrusin.*
    LHIN.small.REQ.trns 3s.Nom/Abs LIG tms.C.post
    ‘That post is very big, (so would you) make it smaller to be made into a
    housepost?’ (Blust 2003:508-509)

b.  *Qaurin cicu.*
    hook.REQ.trns 3s.Nom.Abs
    ‘(Would you) hook him?’ (Blust 2003:781)

(69) **V-an** dyadic transitive constructions as requests
a.  *Butiquan.*
    wrap.up.REQ.trns
    ‘(Would you) wrap (it) up?’ (Blust 2003:336)

---

16 Blust (2003:236) analyzes this type of construction as imperative (‘PF imperatives’ in his analysis) as well. He also notes that one of the language consultants (Mr. Kao) regularly uses Actor-focus (i.e., intransitives in my analysis) as imperatives, too, as shown below, whereas others (Mr. and Mrs. Shih) would not allow it. However, such constructions appear to be polite requests, rather than imperatives, as in (a) below.

a.  *Lhumput=uan ihu qilha.*
    intrns.brew=POL 2s.Nom/Abs wine
    ‘(Would) you (sg.) please brew the wine?’ (Blust 2003:330)
b. Kaytunuan izay a rikish.
   hit.REQ.trns that LIG mosquito
   ‘(Would you) slap that mosquito?’ (Blust 2003:1015)

c. Kacuan ihu sa nak a palanan.
   Bring.REQ.trns 2s Det 1s.Pos Gen carrying.basket
   ‘(Would) you (sg.) bring me my carrying basket?’ (Blust 2003:430)

d. Patutuan ihu sa azazak.
   C.breast.REQ.trns 2s Det child
   ‘(Would) you (sg.) nurse (your) baby?’ (Blust 2003:1028)

e. Patashan=uan ihu.
   write.REQ.trns=POL 2s
   ‘(Would) you (sg.) please write (it) down?’ (Blust 2003:694)

f. Pihganizuan=uhu.
   C.look.at.one’s.reflection.at.mirror.REQ.trns=2s
   ‘(Would) you (sg.) look (at yourself) in the mirror?’ (Blust 2003:547)

g. Paparfuan ita.
   Red.wrestle.REQ.trns 1Pin
   ‘Let’s wrestle.’ (Blust 2003:678)

5.3.2.1.4 Affixation on imperative verbs

In the previous sections, I did not discuss the reasons why I analyze the suffix -i as the transitive imperative form and -0 as the intransitive imperative form. Here are pieces of evidence supporting this claim. Consider the following examples in (70) and (71).

(70) Affirmative
   a. Dyadic intransitive imperative construction
      Fanufamuz yakin ya shashanu!
      Red.wake.up.IMP.intrns 1s.Obl Det morning
      ‘Wake me up in the morning!’ (Wang 2000)

   b. Dyadic transitive imperative construction
      Fanuzi=wak simaq ya shashanu!
      wake.up.IMP.trns=1s.Nom/Abs tomorrow Det morning
      ‘Wake me up tomorrow morning!’ (Blust 2003:373)
The examples (70)a and (71)a are intransitive imperative constructions, in that when the imperative verb is suffixed with the form –ə, it requires the oblique pronoun yakin ‘me’ as the theme. In contrast, when the imperative verb is suffixed with –i, it requires the nominative/absolutive full pronoun yaku ‘me/I’ or clitic pronoun =wak ‘me/I’ as the theme, as in (70)b, (71)b and (71)c, giving evidence that the imperative verb affixed with –i is transitive.

5.3.2.2 Negative imperative constructions

Thao can negate either verbal or nominal imperative constructions to form prohibitive constructions by adding an imperative negator ata ‘don’t’ in the sentence-initial position.17 Like affirmative imperative constructions, negative imperative constructions can be either direct or polite. The former is simply a plain negative imperative, while the

17 The recorded instances of negative nominal imperative constructions may suggest that it is possible to form nominal imperative clauses; although they are not found in the present data, this may be an accidental gap.
latter can be expressed by cliticization of $=uan$ ‘please’ to $ata$ ‘don’t’ to soften the force of a command, making it less abrupt.

5.3.2.2.1 Negating verbal imperative constructions

Verbal imperative constructions are those discussed in the preceding sections, including monadic/dyadic intransitives and dyadic transitives. Figure 5.13 shows the word order patterns of negative verbal imperative constructions in Thao. These are illustrated by examples (72)-(75).

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>ATA</td>
<td>(NP)</td>
<td>V-∅</td>
</tr>
<tr>
<td></td>
<td>NEG.IMP</td>
<td>addr</td>
<td>[IMP.intrns]</td>
</tr>
<tr>
<td>b.</td>
<td>ATA</td>
<td>(NP)</td>
<td>V-∅</td>
</tr>
<tr>
<td></td>
<td>NEG.IMP</td>
<td>addr</td>
<td>[IMP.intrns]</td>
</tr>
<tr>
<td>c.</td>
<td>ATA</td>
<td>(NP)</td>
<td>V-i/-i$^{18}$</td>
</tr>
<tr>
<td></td>
<td>NEG.IMP</td>
<td>addr</td>
<td>[IMP.trns]</td>
</tr>
<tr>
<td>d.</td>
<td>ATA</td>
<td>(NP)</td>
<td>V-i/-i</td>
</tr>
<tr>
<td></td>
<td>NEG.IMP</td>
<td>addr</td>
<td>Nom/Abs</td>
</tr>
</tbody>
</table>

**FIGURE 5.13 NEGATIVE INTRANSITIVE IMPERATIVE CONSTRUCTIONS**

(72) Negative monadic intransitive imperatives

a. $Ata$ $lhqaushin!$
   NEG.IMP sneeze.IMP.intrns
   ‘Don’t sneeze!’ (Blust 2003:547)

b. $Ata$ $lhaulhin!$
   NEG.IMP swing.IMP.intrns
   ‘Don’t swing!’ (Blust 2003:527)

$^{18}$ See Blust (2003:38-40) for a detailed discussion of the stress shift of -$i/-i$ in imperative constructions.
c. *Ata tulhaq!*  
NEG.IMP snore.IMP.intrns  
‘Don’t snore!’ (Blust 2003:1012)

d. *Ata canit!*  
NEG.IMP cry.IMP.intrns  
‘Don’t cry!’ (Blust 2003:339)

e. *Ata ihu kasalpu!*  
NEG.IMP 2s KA.worry.IMP.intrns  
‘Don’t worry!’ (Blust 2003:862)

f. *Ata=uan usha!*  
NEG.IMP=POL go.IMP.intrns  
‘Please don’t go!’ (Blust 2003:1043)

(73) Negative dyadic intransitive imperatives
a. *Ata sin’an qilha!*  
NEG.IMP drink.IMP.intrns wine  
‘Don’t drink wine!’ (Blust 2003:871)

b. *Ata ishqurun nak a bantac!*  
NEG.IMP 1s.Pos Gen thigh
‘Don’t rest your head on my thigh!’ (Blust 2003:936)

c. *Ata pafilhaq pash ‘uzu!*  
NEG.IMP C.spit.up.IMP.intrns phlegm  
‘Don’t spit up phlegm!’ (Blust 2003:382)

d. *Ata kan shawiki!*  
NEG.IMP eat.IMP.intrns betel.nut  
‘Don’t chew betel nut!’ (Blust 2003:444)

e. *Ata ihu patatara sa suma!*  
NEG.IMP 2s gossip.about.IMP.intrns Det others  
‘Don’t gossip about other people!’ (Blust 2003:694)

(74) Negative dyadic transitive imperatives, with a nominative/absolutive NP following an imperative verb
a. *Ata parui cicu!*  
NEG.IMP punch.IMP.trns 3s.Nom/Abs  
‘Don’t punch him!’ (Blust 2003:681)
b. *Ata kaytunui (cicu)!*
   NEG.IMP beat.IMP.trns 3s.Nom/Abs
   ‘Don’t beat him (with an instrument)!’ (Wang 2000)

c. *Ata cpiqi sa shaqish!*
   NEG.IMP slap.IMP.trns Det face
   ‘Don’t slap (his) face!’ (Blust 2003:347)

d. *Ata lhipiri qahil!*
   NEG.IMP fold.IMP.trns paper
   ‘Don’t fold the paper!’ (Blust 2003:540)

(75) Negative dyadic transitive imperatives, with the nominative/absolutive NP preceding the imperative verb

a. *Ata sa azazak pinalashi!*
   NEG.IMP Det child C.spin.IMP.trns
   ‘Don’t spin that child around!’ (Blust 2003:712)

b. *Ata sa baruku kuplhiqi!*
   NEG.IMP Det cup KU.break.IMP.trns
   ‘Don’t break the cup!’ (Blust 2003:728)

5.3.2.2.2 *Negative transitive constructions as negative suggestions*

As discussed earlier, Thao can use transitive verbs (suffixed with *-in/-an*) unchanged to express requests. This type of construction can also be negated by the imperative negator *ata* ‘don’t’ to express a negative suggestion as well, as seen in (76).

(76) *Ata lhigqarimusuzin fukish!*
   NEG.IMP LHIN.make.into.a.ball.IMP.trns hair
   ‘You shouldn’t tie your hair in a bun.’ (Blust 2003:774)

5.3.2.2.3 *Negating nominal imperative constructions*

In addition to simply negating verbal imperative constructions, the imperative negator *ata* can also negate a nominalized imperative construction. This type of construction usually contains two NPs (NP-NPIMP); the second of which is a nominalized imperative
clause introduced by the determiner tu₁/sa.¹⁹ When the nominalized imperative clause is dyadic intransitive, it contains an Oblique NP.²⁰ The addressee (actor) is often omitted because it is commonly understood in the context. When the nominalized imperative clause is transitive, the addressee²¹ or the nominative/absolutive NP, coreferential with the missing NP of the nominalized structure appears between ata and tu₁ in the sentence. Figure 5.14 schematizes this type of prohibitive construction. They are illustrated by examples (77)-(80).

---

¹⁹ See section 5.5.1 for a detailed discussion. Both tu and sa can optionally be reduced to =t or =s and attach to the end of the previous word ata.

²⁰ Although tu₁ typically follows an NP (an addressee), introducing a nominalized imperative clause, there is one recorded instance, (a) below, in which tu₁ precedes the second person singular addressee of an imperative intransitive. This is possibly ungrammatical, in that one would expect the nominative/absolutive NP of a nominalized construction to be deleted. An expressed nominative/absolutive NP may function as a coreferential NP of the deleted NP outside the NP containing the nominalized verb, but not between the determiner and the nominalized verb. Another alternative is that our analysis of these structures as containing a nominalized clause is incorrect, in which case an alternate analysis of tu₁ is called for.

a. Ata  tu  ihu  muqmuq!
   NEG.IMP Det 2s  do.something.in.a.socially.unacceptable.way.IMP.intrans
   ‘Behave yourselves (sg.)!’ (Blust 2003:630)

²¹ Normally in an ergative language we would not expect the ergative NP (i.e., the addressee here) to be in the nominative/absolutive NP position, coreferential with the missing NP of the nominalized clause, of an equational/pseudo-cleft construction. However, probably because these are imperative constructions, the case marking of the A (ergative NP) and the S (nominative/absolutive NP) is neutralized, so the A in imperative construction can be in the position usually reserved for the nominative/absolutive NP.
FIGURE 5.14 NEGATIVE NOMINAL IMPERATIVE CONSTRUCTIONS

(77) Negative nominal imperative derived from a monadic intransitive clause

a. *Ata* tu *pakfinzish!*
   NEG.IMP Det sniff.IMP.intrns
   ‘Don’t sniff!’ (Lit., ‘Don’t be the one who sniffs!’) (Blust 2003:654)

b. *Ata* tu *pashakadaw!*
   NEG.IMP Det look.up.IMP.intrns
   ‘Don’t look up!’ (Lit., ‘Don’t be the one who looks up!’) (Blust 2003:685)

c. *Ata* tu *canit!*
   NEG.IMP Det cry.IMP.intrns
   ‘Don’t cry!’ (Lit., ‘Don’t be the one who cries!’) (Blust 2003:339)

d. *Ata* tu *italha!*
   NEG.IMP Det I.wait.IMP.intrns
   ‘Don’t wait!’ (Lit., ‘Don’t be the one who waits!’) (Blust 2003:958)

e. *Ata ihu* tu *agkakakalay!*
   NEG.IMP 2s Det AG.Red.shiver.IMP.intrns
   ‘Don’t shiver!’ (Lit., ‘Don’t you be the one who shivers!’) (Blust 2003:434)

(78) Negative nominal imperative derived from a dyadic intransitive clause

a. *Ata* tu *palhatuzus furaz!*
   NEG.IMP Det point.at.IMP.intrns moon
   ‘Don’t point at the moon!’ (Lit., ‘Don’t be the pointer at the moon!’) (Blust 2003:661)
b. *Ata tu karkar puqu!*

    NEG.IMP Det chew.IMP.intrns bone

‘Don’t chew on bones!’ (Lit., ‘Don’t be the chewer of bones!’) (Blust 2003:452)

c. *Ata tu shiwat inay a lhmir!*

    NEG.IMP Det cut.IMP.intrns this LIG grass

‘Don’t cut this grass!’ (Lit., ‘Don’t be the cutter of this grass!’) (Blust 2003:920)

d. *Ata tu kantup yakin!*

    NEG.IMP Det follow.IMP.intrns 1s.Obl

‘Please don’t follow me!’ (Lit., ‘Don’t be the one who follows me!’) (Blust 2003:1017)

e. *Ata tu ufarit sazum!*

    NEG.IMP Det u.cross.IMP.intrns water

‘Don’t cross the water!’ (Lit., ‘Don’t be the one who crosses the water!’) (Blust 2003:375)

f. *Ata sa pakananay sa kuskus!*

    NEG.IMP Det exceed.1s.boundary.IMP.intrns Det leg

‘Don’t put your foot where it shouldn’t be!’ (Blust 2003:639)

(79) Negative nominal imperative derived from a dyadic transitive clause (with an addressee optionally preceding the nominalized imperative clause)

a. *Ata tu pinhahai sa rucun!*

    NEG.IMP Det C.furious.IMP.trns Det monkey

‘Don’t annoy the monkey!’ (Lit., ‘Don’t be the one who annoys the monkey!’) (Blust 2003:395)

b. *Ata tu ktuni klihw!*

    NEG.IMP Det cut.IMP.trns rope

‘Don’t cut the rope!’ (Lit., ‘Don’t be the one who cuts the rope!’) (Blust 2003:487)

c. *Ata tu qriu’i cicu a tuali!*

    NEG.IMP Det steal.IMP.trns 3s.Pos Gen money

‘Don’t steal his money!’ (Lit., ‘Don’t be the one who steals his money!’) (Blust 2003:804)

238
d. *Ata tu kani izay a rickuy!*
   NEG.IMP Det eat.IMP.trns that LIG citrus
   ‘Don’t eat that citrus fruit!’ (Lit., ‘Don’t be the one who eats that citrus fruit!’) (Blust 2003:444)

e. *Ata tu ilhugqui sa izay a pagka!*
   NEG.IMP Det I.sit.IMP.trns Det that LIG chair
   ‘Don’t sit in that chair!’ (Lit., ‘Don’t be the one who sits in that chair!’) (Blust 2003:952)

f. *Ata ihu tu pakulhgaqlhai nak a hulus!*
   NEG.IMP 2s Det resell.IMP.trns Is.Pos Gen clothes
   ‘Don’t resell my clothes!’ (Lit., ‘Don’t be the one who resells my clothes!’) (Blust 2003:770)

(80) Negative nominal imperative derived from a dyadic transitive clause (with a nominative/absolutive NP preceding the nominalized imperative clause)

a. *Ata sa qaulh tu kuprizif*
   NEG.IMP Det bamboo Det KU.break.IMP.trns
   ‘Don’t break the bamboo!’ (Lit., ‘Don’t be the one who breaks the bamboo!’) (Blust 2003:730)

b. *Ata sa izay a atu tu putaunif*
   NEG.IMP Det that LIG dog Det C.MV.house.IMP.trns
   ‘Don’t let that dog into the house!’ (Lit., ‘Don’t be the one who lets that dog into the house!’) (Blust 2003:979)

c. *Ata sa bizu sa kishkishi!*
   NEG.IMP Det beard Det shave.IMP.trns
   ‘Don’t shave off your beard!’ (Lit., ‘Don’t be the one who shaves off your beard!’) (Blust 2003:325)

5.3.2.2.4 Other negators occurring with imperative constructions

In addition to *ata* ‘don’t’, there are two negators of the same origin that can also co-occur with imperative constructions. They are *igqawan* ‘don’t need yet’ and *igqaiza* ‘don’t need anymore’. Like *ata*, they can also negate either verbal or nominal imperative constructions as well. These two forms appear to be grammaticalized/lexicalized.
sequences of *igqa* ‘don’t’ with =uan ‘still’ and with =iza ‘already/now’, respectively, in that *igqa* cannot be used alone without =uan or =iza, as illustrated in (81)-(83).

(81) *Igqawan*
   a. *Igqawan usha!*  
      NEG go.IMP.intrns  
      ‘(You) don’t need to go yet.’ (Blust 2003:413)
   b. *Igqawan manium parhaway tu iahala kman*  
      NEG 2p.Nom/Abs young men Det IA.first.IMP.intrns intrns.eat  
      *sa rusaw!*  
      Det fish  
      ‘Don’t you young people eat the fish first!’ (Blust 2003:1018-1019)
   c. *Igqawan ihu tu qalush!*  
      NEG 2s.Nom/Abs Det distribute.IMP.trns  
      ‘(You) don’t need to distribute yet!’ (Chen 2000:68)

(82) *Igqaiza*
   a. *Igqaiza tu butiq!*  
      NEG Det wrap.IMP.intrns  
      ‘(You) don’t need to pack (it)!’ (Blust 2003:413)
   b. *Igqaiza tu pashiqcai sa pagka!*  
      NEG Det C.move.IMP.trns Det chair  
      ‘(You) don’t need to move the chair!’ (Blust 2003:786)
   c. *Igqaiza yaku tu qalushi!*  
      NEG 1s.Nom/Abs Det distribute.IMP.trns  
      ‘(You) don’t need to distribute to me anymore!’ (Chen 2000:68)

(83) *Igqa* cannot be used alone
   a. **Igqa ihu tu qalush!*  
      NEG 2s Det distribute.IMP.intrns  
      ‘(You) don’t need to distribute!’ (Chen 2000:68)
   b. **Igqa yaku tu qalushi!*  
      NEG 1s.Nom/Abs Det distribute.IMP.trns  
      ‘(You) don’t need to distribute to me!’ (Chen 2000:68)
5.3.3 Topicalized Constructions

Topicalization is a syntactic process in which the prominent NP is dislocated to the leftmost position of a sentence. The prominent NP is thus an initial nominal constituent which acts as the theme (opposed to the rheme) of the construction. It is coreferential with one of the nominal complements of the main clause. In Thao, ergative, nominative/absolutive, oblique NPs, and possessors all can be topicalized. Topic NPs are separated from the main clause by an intonation break.

5.3.3.1 Topicalization of nominative/absolutive NPs

The nominative/absolutive NP of either a nonverbal or a verbal predicate construction can be topicalized. The coreferential NP is usually deleted in the main clause. Figure 5.15 shows the word order pattern with the nominative/absolutive NP as topic of the sentence, followed by the examples in (84)-(86).
(84) Topicalization of the nominative/absolutive NP in a nonverbal predicate clause
a. *Yaku, caw.*
   IS.Nom/Abs Thao
   ‘As for me, (I) am a Thao.’ (Wang 2000)

b. *Nak a ama, i taun.*
   IS.Pos Gen father Loc house
   ‘As for my father, (he) is at home.’ (Wang 2000)

(85) Topicalization of the nominative/absolutive NP (the S) in an intransitive clause
a. *Sa azazak a mihu, macuaw maania.*
   Det child Gen 2s.Pos intrns.very intrns.intelligent
   ‘As for that child of yours, (he/she) is very intelligent.’ (Blust 2003:855)

b. *Haya wa shput, kminan fizado.*
   that LIG person, intrns.perf.eat banana
   ‘As for that person, (he) has eaten bananas.’ (Wang 2000)

(86) Topicalization of the nominative/absolutive NP (the O) in a transitive clause
a. *Kawi, talahak.*
   tree trns.cut.down.1s.actr
   ‘As for the tree, I cut (it) down.’ (Wang 2000)
b. *Haya wa *fisziz, *kinanan ti Kilash.*  
that LIG banana, trns.perf.eat Det.prsn Kilash  
‘As for that banana, Kilash has eaten (it).’ (Wang 2000)

5.3.3.2 Topicalization of ergative NPs

In addition to nominative/absolutive NPs, it is also possible to topicalize ergative NPs in Thao. A transitive construction with a topicalized ergative NP (the agent) requires a resumptive ergative pronoun (or actor agreement marking) following the verb, and the nominative/absolutive NP can occur either after the resumptive ergative pronoun in verb-initial clauses, or before the verb in verbal-medial clauses, as shown in figure 5.16.

<table>
<thead>
<tr>
<th>a. NP, V Pronoun NP</th>
<th>Topic [+trns] Erg NomlAbs ([actr])</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. NP, V Pronoun NP</td>
<td>Topic NP NomlAbs [+trns] Erg</td>
</tr>
</tbody>
</table>

**FIGURE 5.16 WORD ORDER OF TOPICALIZED CONSTRUCTIONS WITH THE ERGATIVE NP AS THE TOPIC**

The examples below illustrate transitive constructions with topicalized ergative NPs.

(87) Topicalization of the ergative NP (the A) in a transitive clause

a. *Haya wa shput, *kinanan=iza cicu sa fisziz.*  
that LIG person, trns.perf.eat=already 3s.Erg Det banana  
‘As for that person, he has already eaten the bananas.’ (Wang 2000)

b. *Yaku, fariwik patashan.*  
1s.Erg trns.buy.1s.actr book  
‘As for me, I bought the book.’ (Wang 2000)

c. *Lujan, sa rumfaz riqazan cicu.*  
Lujan Det bird trns.see 3s.Erg  
‘As for Lujan, he saw the bird.’ (Wang 2000)
d. *Tikic, buna kinanan cicu.*
Tikic  sweet.potato trns.perf.eat 3s.Erg

‘As for Tikic, he has eaten the sweet potato.’ (Wang 2000)

5.3.3.3 **Topicalization of oblique NPs**

In Thao, the oblique NP of a dyadic intransitive clause may be topicalized, if it is definite. Figure 5.17 schematizes the word order pattern when the oblique NP is the topic in either verb-initial or verb-medial constructions, followed by the examples in (88).

\[
\begin{array}{ccc}
\text{a. NP,} & \text{V} & \text{NP} \\
\text{Topic} & [-\text{trns}] & \text{Nom/Abs} \\
\text{b. NP,} & \text{NP} & \text{V} \\
\text{Topic} & \text{Nom/Abs} & [-\text{trns}] \\
\end{array}
\]

**FIGURE 5.17 WORD ORDER OF TOPICALIZED CONSTRUCTIONS WITH AN OBLIQUE NP AS THE TOPIC**

(88) Topicalization of an oblique NP in a dyadic intransitive clause

a. *Qmu, painan Tikic kman.*
rice.cake perhaps Tikic intrns.eat

‘As for the rice cake, perhaps Tikic ate (it).’ (Wang 2000)

b. *Cicu a hulus, yaku pigqalhiw.*
3s.Pos Gen clothes 1s.Nom/Abs C.intrns.perf.dry

‘As for his clothes, I have dried (them).’ (Blust 2003:765)

5.3.3.4 **Topicalization of the possessor**

The possessor either within a nominative/absolutive NP or an ergative NP can also be topicalized in Thao. A sentence with a topicalized possessor may have an optional
resumptive possessor pronoun either following or preceding the possessed noun. The following examples illustrate the possessor within a nominative NP as the topic.

(89) Topicalization of a possessor within a nominative NP
a. **Haya wa binanau'az, mabuzuq paqi.**
   that LIG woman intrns.round bottom
   ‘As for that woman, (she) has a round bottom.’ (Blust 2003:337)

b. **Haya binanau'az, paqi cicu pishbuzuq.**
   that woman bottom 3s.Pos round
   ‘As for that woman, she has a round bottom.’ (Blust 2003:337)

c. **Haya binanau'az, cicu a ayuzi macay.**
   that woman 3s.Pos Gen man intrns.die
   ‘As for that woman, her husband died.’ (Blust 2003:354)

d. **Huya wa binanau'az, cicu a azazak riqazak.**
   that LIG woman 3s.Pos Gen child trns.see.1s.actr
   ‘As for that woman, I saw her child.’ (Wang 2000)

In addition to the possessor of a nominative NP, the possessor of an ergative NP can be topicalized as well in Thao, as shown in (90).

(90) Topicalization of a possessor within an ergative NP
a. **Haya shput, qriu 'in cicu a azazak nak a tuali.**
   that person trns.steal 3s.Pos Gen child Is.Pos Gen money
   ‘As for that person, his child stole my money.’ (Wang 2000)

b. **Haya ayuzi, pazay finshiqlin cicu a binanau'az.**
   that man paddy.rice trns.sow 3s.Pos Gen woman
   ‘As for that man, his wife is sowing the paddy seed.’ (Wang 2000)

---

22 See section 5.5.3 for discussion of possessive noun phrases.
5.3.3.5 Topicalization in imperative constructions

In addition to simple clauses, in imperative constructions, either a nominative/absolutive NP, an ergative NP, or an oblique NP can be topicalized in Thao as well, as shown in the examples in (91).

(91)  

a. Topicalization of the nominative/absolutive NP (the S; addressee) in an imperative intransitive construction

\[ \text{Ihu, hadu nak a rima pilhkic!} \]  
2s hold.IMP.intrns 1s.Pos Gen hand pull.or.lead.by.the.hand.IMP.intrns

‘As for you (sg.), hold my hand tight!’ (Blust 2003:710)

b. Topicalization of the nominative/absolutive NP (the O) in an imperative transitive construction

\[ \text{Inay a aqtalha, duruki=uan!} \]  
this LIG pork skewer.IMP.trns=POL

‘As for this pork, skewer (it) please!’ (Wang 2000)

c. Topicalization of the ergative NP (the A) in an imperative transitive construction

\[ \text{Ihu, jlhuqi sa rima!} \]  
2s wash.IMP.tms Det hand

‘As for you (sg.), wash (your) hands!’ (Wang 2000)

d. Topicalization of the oblique NP (the E) in an imperative intransitive construction

\[ \text{Haya afu, sas=uan=uhu lhay ama pakan!} \]  
this rice take.IMP.intrns=POL=2s give (to) father C.serve

‘As for this rice, please take (and) give (it) to Father to eat!’ (Blust 2003:865)

5.3.4 Existential Constructions

Existential verbs in Thao, whether affirmative or negative, can have either an indefinite or a definite nominative/absolutive NP with an optional determiner. They are normally used to express situations in which the existence or nonexistence of some

---

23 See section 5.3.2 for a detailed discussion of imperative constructions.
indefinite/definite entity is predicated at some location, which may or may not be expressed.

5.3.4.1 Affirmative existential constructions

There are two affirmative existential verbs found in Thao: itia and yanan. Both can be used to assert or question the existence of an indefinite or definite entity, presumably a nominative/absolutive NP. However, only yanan, not itia, can take a preverbal negator antu to form a negative possessive construction (see 5.3.5.2).

5.3.4.1.1 Existential constructions with an indefinite nominative NP

Existential verbs commonly introduce participants onto the discourse stage, in which case, the nominal complement is often indefinite. Such constructions may have a temporal or local adjunct, either following the indefinite NP complement, or preceding or following the existential verb. Figure 5.18 schematizes this type of construction.

| a. itia  | NP  |
|[] exist | [-def] |
| b. yanan | NP  |
|[] exist | [-def] |

**Figure 5.18 Existential constructions with an indefinite nominative/absolutive NP**

The examples in (92)-(93) illustrate existential constructions with an indefinite nominative/absolutive NP.
Existential construction with an indefinite nominative/absolutive NP: \textit{itia}

a. \textit{Itia manasha wa acan a rusaw}.
\begin{itemize}
\item EXIST intrs.many LIG kind LIG fish
\end{itemize}
‘There were many kinds of fish.’ \cite{Blust2003:280}

b. \textit{Ya mahnar=iza, itia lalay}.
\begin{itemize}
\item when intrs.summer=already EXIST cicadas
\end{itemize}
‘There are cicadas when summer comes already.’ \cite{Blust2003:510}

c. \textit{Maqa itia sa pafciq, nak a lharina kunhuri}.
\begin{itemize}
\item because EXIST Det C.explode Is.Pos Gen ear KUN.suddenly.deafened
\end{itemize}
‘I was suddenly deafened because there was an explosion.’ \cite{Blust2003:555}

d. \textit{Itia sa malalawa pimpulhiz yakin}.
\begin{itemize}
\item EXIST Det intrs.call C.wake.someone.up Is.0bl
\end{itemize}
‘There was someone calling and awakening me.’ \cite{Blust2003:741}

e. \textit{Itia sa mapiqa}.
\begin{itemize}
\item EXIST Det intrs.sttv.lame
\end{itemize}
‘There are lame people.’ \cite{Wang2000}

f. \textit{Itia sa pashaila isay pruq}.
\begin{itemize}
\item EXIST Det C.act that ground
\end{itemize}
‘There is a performance in that place.’ \cite{Blust2003:835}

g. \textit{Itia tilha ulhza}.
\begin{itemize}
\item EXIST yesterday snow
\end{itemize}
‘There was snow yesterday.’ \cite{Blust2003:426}

Existential construction with an indefinite nominative/absolutive NP: \textit{yanan}

a. \textit{Yanan sa lhqaribush, yanan sa rusaw a kanin}.
\begin{itemize}
\item EXIST Det wild.animals EXIST Det fish LIG.Comp trns.eat
\end{itemize}
‘There is game, (and) there are fish to eat.’ \cite{Blust2003:444}

b. \textit{Yanan sa shmulshul sa qnuan, yanan sa shmulshul sa fafiy}.
\begin{itemize}
\item yanan Det intrs.lead Det buffalo yanan Det intrs.lead Det pig
\end{itemize}
‘Some were leading buffalos; some were leading pigs; (while) some carried chickens’ \cite{Blust2003:940}
5.3.4.1.2 Existential constructions with a definite nominative NP

Although existential verbs are typically used to introduce indefinite NPs into a discourse as mentioned before, they can also be used to assert, or question, the existence of a definite entity, as shown in figure 5.19, followed by the examples in (94) and (95).

<table>
<thead>
<tr>
<th>a. <strong>ITIA</strong></th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>[exist]</td>
<td>[+def]</td>
</tr>
<tr>
<td>b. <strong>YANAN</strong></td>
<td>NP</td>
</tr>
<tr>
<td>[exist]</td>
<td>[+def]</td>
</tr>
</tbody>
</table>

**Figure 5.19 Existential constructions with a definite nominative/absolutive NP**

(94) Existential construction with a definite nominative/absolutive NP: *itia*

a. *Itia ti Sapan i taun?*
   EXIST Det.prsn Sapan Loc home
   ‘Is Sapan at home?’ (Wang 2000)

b. *Itia yaku.*
   EXIST 1s.Nom/Abs
   ‘I am here.’ (Wang 2000)
c. *Aitia cicu munay?*
    Irr.EXIST 3s.Nom/Abs intrns.here

    ‘Will he be coming?’ (Blust 2003:465)

(95) Existential construction with a definite nominative/absolutive NP: *yanan*

    *Yanan ita wa hudun*
    EXIST 1Pin.Pos Gen mountain

    ‘Our (in.) mountain is here.’ (Blust 2003:525)

5.3.4.2 Negative existential constructions

Negative existential constructions in Thao are headed by the negative existential verb *uka*. The nominative/absolutive NP in such constructions can also be either indefinite or definite with an optional determiner *sa* or *tu*, as schematized in figure 5.20, followed by the examples in (96) and (97).

![Figure 5.20. Word order of negative existential constructions](image)

(96) Negative existential construction with an indefinite nominative/absolutive NP

a. *Uka sa qusaz, makitkapa wazaqan a sazum.*
    NEG.EXIST Det rain gradually.become.shallower lake Gen water

    ‘Without rain the water in the lake slowly becomes shallower.’ (Blust 2003:449)

b. *Uka=iza sa rusaw, lhckizin yamin kman.*
    NEG.EXIST=already Det fish trns.all 1.Pex.Nom/Abs intrns.eat

    ‘There are no more fishes; we (ex.) have eaten them all.’ (Blust 2003:530-531)

c. *Uka=iza shawashawan.*
    NEG.EXIST=already Red.leisure.time

    ‘There was no break (from work).’ (Blust 2003:903)

d. *Uka tu cawcaw munay.*
    NEG.EXIST Det Red.people intrns.MV.here

    ‘There are no people coming.’ (Blust 2003:1033)
e. *Uka sa kmay na taun*
   NEG.EXIST Det intrns.attach Det house
   ‘There is none who will attack (our) home.’ (Blust 2003:505)

f. *Ama ina masasuqa, uka sa tugkazi*
   father mother intrns.quarrel NEG.EXIST Det intrns.separate
   ‘Father and mother quarreled; no one came to separate (them).’ (Blust 2003:684)

g. *Uka=iza sa iqilhan=uhu*
   NEG.EXIST=already Det trns.I.drink =2s.Neut
   ‘There is no more wine for you (sg.) to drink.’ (Blust 2003:532)

(97) Negative existential construction with a definite nominative/absolutive NP

a. *Uka ihu i taun.*
   NEG.EXIST 2s.Nom/Abs Loc house
   ‘You were not at home.’ (Blust 2003:769)

b. *Uka nak a apu i taun.*
   NEG.EXIST Is.Pos Gen grandfather Loc house
   ‘My grandfather wasn’t home.’ (Wang 2000)

5.3.5 Possessive Constructions

Thao has a means of predicating possession by employing an existential verb. There are also two formal ways to express such a construction. In the first type, the structure of the possessive construction is the same as that of the existential construction. In the case where a possessive NP (i.e. a head noun with a dependent possessive pronoun or NP) is a nominative/absolutive NP, its literal meaning is ‘possessive NP exists’. However, in the case where the existential verb requires a possessor as the nominative/absolutive NP and a possessed noun as a complement, its function is more like ‘have’ in English. Possessive constructions can also be categorized into affirmative and negative ones as well.
5.3.5.1 Affirmative possessive constructions

The affirmative possessive constructions are headed by the two existential verbs in Thao: *itia* and *yanan*. Both of them can take a possessor as the nominative/absolutive NP, but only *itia* is found to take a possessive NP as a nominative/absolutive NP to express the notion of possession.\(^{24}\)

5.3.5.1.1 With a possessive NP as a nominative/absolutive NP

When the existential verb *itia* is utilized to express the notion of possession, it may precede a possessive NP, as shown in figure 5.21, followed by the example in (98).

![Figure 5.21 Possessive Constructions with a Possessive NP as a Nominative/Absolutive NP](image)

(98) A possessive NP as a nominative/absolutive NP
a. *Itia=uan nak a *pania’an.*
   \(\text{EXIST=still Is.Pos Gen vegetables}\\)
   ‘I still have vegetables’ (Lit., ‘My vegetables still exist.’) (Blust 2003:1031)

b. *Itia sa mihu a tuali i sa but?*
   \(\text{EXIST Det 2s.Pos Gen money Loc Det body}\\)
   ‘Do you (sg.) have money on your (sg.) person?’ (Blust 2003:1007)

c. *Itia mihu rarafir.*
   \(\text{EXIST 2s.Pos CaRed.fan}\\)
   ‘Do you (sg.) have a fan?’ (Lit., ‘Does your (sg.) fan exist?’) (Blust 2003:426)

---

\(^{24}\) This may be an accidental gap in examples, and needs further research.
5.3.5.1.2 With a possessor as a nominative/absolutive NP

When an existential verb functions like 'have' in English to predicate possession, it requires the possessor to be expressed as the nominative/absolutive NP and the possessed noun as a nominal complement of the verb. The nominative/absolutive NP may either precede or follow the existential verb, as shown in figure 5.22, followed by examples (99)-(102).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Possessor</th>
<th>Possessed NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td><em>ITIA</em></td>
<td>Nom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[exist]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>Possessor</td>
<td><em>ITIA</em></td>
<td>Possessed NP</td>
</tr>
<tr>
<td></td>
<td>Nom</td>
<td>[exist]</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td><em>YANAN</em></td>
<td>Possessor</td>
<td>Possessed NP</td>
</tr>
<tr>
<td></td>
<td>[exist]</td>
<td>Nom</td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td>Possessor</td>
<td><em>YANAN</em></td>
<td>Possessed NP</td>
</tr>
<tr>
<td></td>
<td>Nom</td>
<td>[exist]</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.22: Possessive Constructions with a Nominative/Absolutive Possessor

(99) A possessor as a nominative/absolutive NP following *itia*

*Itia ihu papasha.*

EXIST 2s.Nom/Abs intestinal.worm

'You (sg.) have intestinal worms.' (Blust 2003:426)

(100) A possessor as a nominative/absolutive NP preceding *itia*

a. *Yaku* *itia latata wa taun.*

1s.Nom/Abs EXIST LA.one LIG house

'I have one house.' (Blust 2003:975)
b. *Nak a taun itia aki.*  
1S.Poss Gen house EXIST god  
‘My house has a household god.’ (Blust 2003:287)

c. *Cicu a punuq itia tusha wa puqmur.*  
3S.Poss Gen head EXIST two LIG bump  
‘His head has two bumps (on it).’ (Blust 2003:748)

(101) A possessor as a nominative/absolutive NP following *yanan*  
*Yanan ihu sa izay a aniamin?*  
EXIST 2S.Nom/Abs Det that LIG things  
‘Do you (sg.) have these kinds of things?’ (Blust 2003:1060)

(102) A possessor as a nominative/absolutive NP preceding *yanan*  
a. *Cicu yanan maramuramu a fafuy.*  
3S.Nom/Abs EXIST intrns.Red.fat LIG pig  
‘He has a very fat pig.’ (Blust 2003:820)

b. *Pania’an yanan kakulhum.*  
vegetables EXIST ant  
‘There are ants on the vegetables.’ (Blust 2003:1058)

c. *Inay baruku yanan samaz.*  
this cup EXIST dreg  
‘There are dregs in this cup.’ (Blust 2003:862)

5.3.5.2 Negative possessive constructions

Just like the affirmative possessive constructions headed by the existential verbs, *itia* or *yanan*, their corresponding negative possessive constructions in Thao are headed by the negative existential verb *uka*. However, it should be noted that possessive constructions headed by *yanan* can also form a negative possessive construction simply by adding a preverbal negator *antu*.  

---

25 See section 5.3.6 for discussion of the negator *antu.*
5.3.5.2.1 The negative form *uka*

Figure 5.23 schematizes the negative existential verb *uka* heading a negative possessive construction in Thao, followed by the examples in (103)-(105).

<table>
<thead>
<tr>
<th></th>
<th>Possessive NP</th>
<th>Possessor</th>
<th>Possessed NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td><em>UKA</em> [neg.exist]</td>
<td>Possessive NP</td>
<td>Possessed NP</td>
</tr>
<tr>
<td>b.</td>
<td><em>UKA</em> [neg.exist]</td>
<td>Possessor</td>
<td>Possessed NP</td>
</tr>
<tr>
<td>c.</td>
<td>Possessor</td>
<td><em>UKA</em> [neg.exist]</td>
<td>Possessed NP</td>
</tr>
</tbody>
</table>

**Figure 5.23 Negative possessive constructions headed by *UKA***

(103) A possessive NP following *uka*

a. *Uka* sa mihu a *tuali.*  
   NEG.EXIST Det 2s.Pos Gen money  
   ‘You (sg.) don’t have money.’ (Wang 2000)

b. *Uka=uan* sa cicu a *taun.*  
   NEG.EXIST=still Det 3s.Pos Gen house  
   ‘He does not have a house yet.’ (Wang 2000)

(104) A possessor as a nominative/absolutive NP following *uka*

a. *Uka=iza* sa *taun* sazum.  
   NEG.EXIST=already Det house water  
   ‘There is no water in the house.’ (Blust 2003:745)

b. *Uka* *yaku* shawan.  
   NEG.EXIST 1s.Nom/Abs time  
   ‘I have no free time.’ (Blust 2003:1034)

(105) A possessor as a nominative/absolutive NP preceding *uka*

a. *Yaku* *uka* tunatuna.  
   1s.Nom/Abs NEG.EXIST Red.strength  
   ‘I am weak.’ (Lit., ‘I am without strength.’) (Blust 2003:1014)
b. *Haya azazak uka amaina.*
   that child NEG.EXIST father.mother
   ‘That child has no parents.’ (Blust 2003:393)

c. *Ba! Sa izuhúy a shput uka=iza nipipipin.*
   wow Det that LIG person NEG.EXIST=already Red.tooth
   ‘Wow! That person over there has no teeth already.’ (Blust 2003:1066)

d. *Haya ranaw uka kupukupur.*
   that chicken NEG.EXIST Red.feather
   ‘That chicken has no feathers.’ (Blust 2003:498)

e. *Taun uka=iza sa sazum.*
   house NEG.EXIST=already Det water
   ‘There is no water in the house already.’ (Blust 2003:744)

f. *Cicu uka tu nanashnash.*
   3s.Nom/Abs NEG.EXIST Det CaRed.foresight
   ‘He/she is ignorant.’ (Lit., ‘He/she has no foresight.’) (Blust 2003:635)

g. *Haya binanau’az uka tu paqipaqi.*
   that woman NEG.EXIST Det Red.buttock
   ‘That woman has a flat bottom.’ (Lit., ‘That woman has no buttocks.’) (Blust 2003:674)

5.3.5.2.2 The negative form antu with the existential verb yanana

Figure 5.24 schematizes negative possessive constructions, which are formed by
negating yanana possessive constructions with a preverbal negator antu, followed by the
types in (106). It is noted that this type of construction appears to only allow a
possessor, but not a possessive NP as the nominative/absolutive NP.26

---

26 This may be an accidental gap in examples as well.
### Figure 5.24 Negative Possessive Constructions Headed by *antu* with *yanan*

<table>
<thead>
<tr>
<th>Possessor Nom</th>
<th>ANTU YANAN [neg] [exist]</th>
<th>Possessed NP</th>
</tr>
</thead>
</table>

(106) a. *Inay a taun antu yayanan sa caw.*

this LIG house NEG Red.EXIST Det people

'This house has no people in it (is abandoned).’ (Blust 2003:1058)

b. *Haya wa taun ya antu yanan sa caw, kitakakatur.*

that LIG house if NEG EXIST Det people KIT.cobweb.IN.intms

'If that house has no people in it, it will be cobweb-infested.' (Blust 2003:434)

### 5.3.6 Negative Constructions

Negative clauses are understood semantically to be those which assert that some event, situation, or state of affairs does not hold. They usually occur in the context of certain presuppositions, and function to negate or counter-assert those presuppositions.

Thao has at least three types of negative constructions: negative imperative constructions, negative existential constructions, and negative declarative constructions. I have discussed the first two types in sections 5.3.2.2 and 5.3.4.2, respectively, so in this section I will focus on the last type only. Two preverbal negators are found in Thao to form negative declarative constructions: *ani* and *antu*. Because they have similar yet different functions and distributions, in some cases they are interchangeable, while in others they are not. I will first discuss *ani* and later proceed to *antu*.
5.3.6.1 Negative declarative constructions with *ani*

One way to negate an affirmative declarative clause in Thao is to add the preverbal negator *ani* in the sentence-initial position before a nominative/absolutive NP in nominal, prepositional, and verbal clauses. Figure 5.25 shows the word order of negative nominal clauses, followed by examples in (107) and (108).

![Figure 5.25 Negative Nominal Predicate](image)

(107) Basic negative nominal predicate clauses
a. *Ani yaku mabuqciw a caw.*
   NEG 1S.Nom/Abs intrns.rich LIG person
   ‘I am not a rich person.’ (Blust 2003:333)

b. *Ani yaku tu caw.*
   NEG 1S.Nom/Abs Det Thao
   ‘I am not a Thao.’ (Blust 2003:293)

(108) Negative nominal predicate clauses containing a nominalized NP
a. *Ani sa baruku tu muplhiq.*
   NEG Det cup Det intrns.break
   ‘The cup didn’t break.’ (Lit., ‘The one that broke is not the cup.’) (Blust 2003:728)

b. *Ani=wak tu afariw sa pania’an.*
   NEG=1S.Nom/Abs Det Irr.buy Det vegetables
   ‘I am not going to buy vegetables.’ (Lit., ‘The one to buy vegetables is not me.’) (Blust 2003:293)

c. *Ani yaku tu qirgiran qlhuran.*
   NEG 1S.Nom/Abs Det trns.bite snake
   ‘I was not bitten by the snake.’ (Lit., ‘The one bitten by the snake was not me.’) (Blust 2003:796)
d. *Ani s(a) afu tu akanik.*
   NEG Det rice Det trms.lrr.eat.1s.actr
   ‘I will not eat the rice.’ (Lit., ‘What I will eat is not the rice.’) (Chen 2000:112)

In addition to nominal predicate clauses, prepositional predicate clauses can also be negated by the negator *ani,* as shown in figure 5.26, followed by example (109).

![Figure 5.26 Negative Prepositional Predicate](image)

(109) Negative prepositional predicate clauses

*Ani cicu i faun.*
NEG 3s.Nom/Abs Loc house
‘He is not at home.’ (Wang 2000)

Finally, the preverbal negator *ani* can also negate verbal predicate clauses. Just like nominal and prepositional clauses, it is normally in sentence-initial position before a nominative/absolutive NP,\(^{27}\) as shown in Figure 5.27, followed by the examples in (110)-(112).

\(^{27}\)Although the majority of Thao data show that the negator *ani* occurs sentence initially, there is one recorded instance, as in (a) below, where *ani* occurs before the main verb and after the nominative/absolutive NP, suggesting that at least in this example, *ani* functions as an auxiliary verb.

a. *Cicu ani a-ma-zai yakin.*
3s.Nom/Abs NEG intrns.lrr.tell 1s.Erg
‘He won’t tell me.’ (Blust 2003:1060)
FIGURE 5.27 NEGATIVE VERBAL PREDICATE

(110) Negative monadic intransitive verbal clauses
   a. Ani cuini aqusazin.
      NEG now Irr.rain.IN.intrns
      ‘It’s not going to rain now.’ (Blust 2003:293)

   b. Ani inay fatu mabric.
      NEG this stone intrns.heavy
      ‘This stone is not heavy.’ (Blust 2003:293)

   c. Ani nak a tuali shdu.
      NEG Is.Pos Gen money intrns.sufficient
      ‘I don’t have enough money.’ (Blust 2003:905)

   d. Ani yaku amiqilha.
      NEG 3s.Nom/Abs intrns.lrr.drink
      ‘I won’t drink.’ (Blust 2003:670)

(111) Negative dyadic intransitive verbal clauses
   a. Ani cicu mushnaw yakin.
      NEG 3s.Nom/Abs intrns.love 1s.Obl
      ‘She didn’t love me.’ (Blust 2003:769)

   b. Ani yaku maminriqaz atu.
      NEG 1s.Nom/Abs intrns.see dog
      ‘I never saw the dog.’ (Blust 2003:835)

   c. Ya antu zain=uhu, anicicu amabugnur yakin.
      If NEG trns.tell=2s NEG 3s.Nom/Abs intrns.lrr.angry 1s.Obl
      ‘If you (sg.) hadn’t told him he wouldn’t be angry with me.’ (Blust 260
Negative transitive verbal clauses

Ani kasuzayik izay a hulus.
NEG trns.KA.unwilling.1s those LIG clothes

‘I’m not willing to give those clothes to others.’ (Blust 2003:886, his translation)

‘I’m not unwilling to give those clothes to others.’ (My translation)

In addition to the basic function of negating predicate clauses, it should be noted that the negator aní can be used as a short answer to its corresponding yes-no question, as seen in the following examples in (113).

(113) a. A: Sa izay a caw ti Tumi qa?
   Det that LIG person Det.prsn Tumi Que
   ‘Is that person Tumi?’ (Chen 2000:64)

   b. B: Ani, antu ti Tumi.
   NEG NEG Det.prsn Tumi
   ‘No, (she) is not Tumi.’ (Chen 2000:64)

Moreover, the negator aní can also have the meaning of ‘don’t want’, as shown in the examples in (114).

(114) Aní with the meaning of ‘don’t want’

a. Ani yaku caw.
   NEG 1s.Nom/Abs Thao
   ‘I don’t want Thao people (e.g., as company).’ (Blust 2003:293)

b. Ani yaku tu amakan.
   NEG 1s.Nom/Abs Det intrns.Irr.eat
   ‘I don’t want to eat.’ (Blust 2003:293)

c. Ani yaku kman shawiki.
   NEG 1s.Nom intrns.eat betel.nut
   ‘I don’t want to chew betel nut.’ (Blust 2003:293)
5.3.6.2 Negative declarative constructions with antu

In addition to ani, the other negator antu is also found to form a negative declarative clause in Thao.

5.3.6.2.1 The distribution of antu

On the whole, antu, like ani, helps to form negative declarative clauses in Thao, including nominal, prepositional, and verbal predicate clauses. In some examples, it occurs immediately before a nominative/absolutive NP, mostly pronouns. In other examples, it occurs immediately before a main predicate. The different distributions may suggest that antu can negate either the predicate(s) that follow it or a nominative/absolutive NP. Consider the following examples where antu precedes the nominative/absolutive NP of different types of predicate clauses, as in (115)-(119).

(115) Antu preceding a nominative/absolutive NP of a basic nominal clause
a. Antu yaku tu caw.
   NEG 1s.Nom/Abs Det Thao
   ‘I’m not a Thao.’ (Blust 2003:295)

b. Antu yaku shput.
   NEG 1s.Nom/Abs Chinese
   ‘I’m not a Chinese.’ (Blust 2003:295)

(116) Antu preceding a nominative/absolutive NP of a nominal clause containing a nominalized NP
a. Antu yaku tu amulhilhi.
   NEG 1s.Nom/Abs Det intrns.Irr.stand.up
   ‘I won’t stand up.’ (Blust 2003:536)

28 It should be noted that there are no recorded instances in the present data where antu precedes the nominative/absolutive NP of a transitive construction. This requires further study.
b. *Antu yaku sa mara, suma painan sa mara.*
   NEG 1s.Nom/Abs Det intrns.take someone maybe Det intrns.take
   ‘I didn’t take it; maybe someone else took it.’ (Blust 2003:990)

c. *Antu yaku sa lhay, Lujan sa lhay ihun tuali.*
   NEG 1s.Nom/Abs Det intrns.give Lujan Det intrns.give 2s.Obl money
   ‘I didn’t give you (sg.) money, Lujan gave you (sg.) money.’ (Blust 2003:295)

(117) *Antu* preceding a nominative/absolutive NP of a prepositional predicate clause

*Antu yaku ai taun.*
   NEG 1s.Nom/Abs Irr.Loc house
   ‘I won’t be at home.’ (Wang 2000)

(118) *Antu* preceding a nominative/absolutive NP of a monadic intransitive clause

*Antu inay fatu mabric.*
   NEG this stone intrns.heavy
   ‘This stone is not heavy.’ (Blust 2003:295)

(119) *Antu* preceding a nominative/absolutive NP of a dyadic intransitive clause

a. *Antu cicu minapacay yakin.*
   NEG 3s.Nom/Abs intrns.perf.fight 1s.Obl
   ‘He is not the one who fought with me.’ (Blust 2003:282)

b. *Antu yaku amakan afu, ti ina sa makan afu.*
   NEG 1s.Nom/Abs intrns.Irr.eat rice Det.prsn mother Det intrns.eat rice
   ‘It’s not me who is eating rice, it’s Mother.’ (Blust 2003:295)

In addition to a nominative/absolutive NP, *antu* can also occur immediately before a predicate, as shown in the examples from (120) to (124).

(120) *Antu* preceding a nominal predicate

a. *Yaku antu caw.*
   1s.Nom/Abs NEG Thao
   ‘I’m not a Thao.’ (Wang 2000)

b. *Antu caw ti Shawi.*
   NEG Thao Det.prsn Shawi
   ‘Shawi is not a Thao.’ (Wang 2000)
(121) *Antu* preceding a prepositional predicate

a. *Yaku* *antu* *ai* *taun.*
   1s.Nom/Abs    NEG     Irr.Loc    house
   ‘I won’t be at home.’ (Blust 2003:446)

b. *Antu* *ai* *taun* *nak* *a* *apu.*
   NEG     Irr.Loc    house    1s.Pos    Gen    grandfather
   ‘My grandfather won’t be at home.’ (Wang 2000)

(122) *Antu* preceding a monadic intransitive verb

a. *Mihu* *a* *taun* *antu* *qurzup.*
   2s.Pos    Gen     house    NEG    flooded
   ‘Your (sg.) house wasn’t flooded.’ (Blust 2003:295)

b. *Ihu* *antu* *miabric.*
   2s.Nom/Abs    NEG    intrns.act.rationally
   ‘You (sg.) are not being rational.’ (Blust 2003:327)

c. *Antu* *shdu* *kanin* *pinit'ia* *wa* *nak.*
   NEG    intrns.sufficient    trns.eat    trns.perf.cook    LIG    1s.Pos
   ‘I didn’t cook enough food.’ (Lit., ‘My cooked food is not sufficient.’) (Blust 2003:905)

d. *Cicu* *antu* *makazaka* *sa* *but.*
   3s.Nom/Abs    NEG    intrns.comfortable    Det     body
   ‘He is not feeling well.’ (Blust 2003:463)

(123) *Antu* preceding a dyadic intransitive verb

a. *Yaku* *antu* *kmiancu* *tuali.*
   1s.Nom/Abs    NEG    intrns.perf.bring    money
   ‘I didn’t bring any money.’ (Blust 2003:430)

b. *Ihu* *antu* *tunmaza* *nak* *a* *lalawa.*
   2s.Nom/Abs    NEG    intrns.perf.listen.to    1s.Pos    Gen    speech
   ‘You (sg.) don’t listen to what I say.’ (Blust 2003:1000)

(124) *Antu* preceding a transitive verb

a. *Haya* *ayuzi* *antu* *kadadu'un* *binanau'az,* *numa* *binanau'az* *musha.*
   that    man    NEG    trns.desire    woman    so    woman    intrns.go
   ‘The woman didn’t want this man, so she left.’ (Blust 2003:431)

b. *Sa* *fizfiz* *antu* *akanik.*
   Det    banana    NEG    trns.Irr.eat.1S.actr
   ‘I won’t eat the banana.’ (Wang 2000)
c. Maniun lhuan inay malhus, antu shanashin sa suma wa
   2p.Nom/Abs last night here intrns.sleep NEG trns.disturb Det some LIG
   shput.
   person
   ‘(While) you (pl.) were sleeping here last night, no one disturbed you (pl.).’
   (Blust 2003:893)

5.3.6.3 More thoughts on ani and antu

5.3.6.3.1 Relation between ani and antu

A careful study of ani and antu seems to show that antu developed from a sequence
of the negator ani and the determiner tu.29 One piece of evidence is the form itself.
Another piece of evidence comes from the fact that the nominative/absolutive NP that is
negated by antu appears not to allow any determiners, while the nominative/absolutive
NP following ani may allow a determiner. This is supported by the following examples
in (125) and (126).

(125) a. Antu before a nominative/absolutive NP without a determiner
   Antu inay fatu mabric.
   NEG this stone intrns.heavy
   ‘This stone is not heavy.’ (Blust 2003:295)

b. Antu before a nominative/absolutive NP with a determiner
   **Antu ti ama amakan.
   NEG Det.prsn father intrns.Irr.eat
   ‘Father will not eat.’ (Chen 2000:113)

29 Chen (2000) also presents a similar argument. As he points out, “the negator antu is lexically derived
from ani + tu” (Chen 2000:113), although he does not think the form tu is a determiner. His evidence is
based on the fact that antu never co-occur with tu in his data. However, there are two recorded instances
as shown in (115)a-(116)a, where antu does co-occur with tu in Blust’s data (2003:536).
c. *Antu* before a nominative/absolutive NP with a determiner

**Antu s(a) afu akanin.**
NEG Det rice tms.lrr.eat

‘S/he will not eat the rice.’ (Chen 2000:113)

As shown above, when the nominative/absolutive NP that follows *antu* does not have any determiner, the sentence is grammatical, as in (125)a. When the nominative/absolutive NP that follows *antu* has a determiner, the sentence is ungrammatical, as in (125)b-(125)c.

On the other hand, since *ani* does not contain any determiner like *tu₁*, we would expect that the nominative/absolutive NP following *ani* should be able to take a determiner, as seen in (126).

(126) *Ani* before a nominative/absolutive NP with a determiner

a. *Ani* sa cicu a binanau’az shmirua isay a ribush
NEG Det 3s.Pos Gen wife intrns.give.permission there LIG mountain
muruza.
intrns.sleep

‘His wife would not give (him) permission to go sleep in the forest over there.’ (Blust 2003:543)

b. *Ani* sa iza azazak tu matinhina sa alushun.
NEG Det those child Det intrns.play Det top

‘Those children are not playing tops.’ (Blust 2003:696)

All these examples suggest that *antu* is historically a combination of *ani* and the determiner *tu₁*.

As discussed so far, when *antu* occurs immediately before a nominative/absolutive NP, the NP is not allowed to take any determiner. However, when it occurs immediately before a predicate, the nominative/absolutive NP is free to take a determiner either before *antu* or after the main predicate, as seen in (127).
(127) Antu before a predicate
   a. Antu ti Maya sa izuy a shput.
      NEG Det.prsn Maya Det that LiG person
      ‘That person is not Maya.’ (Chen 2000:65)
   b. Ti ama antu amakan.
      Det.prsn father NEG intrns.Irr.eat
      ‘Father will not eat.’ (Chen 2000:113)
   c. Antu amakan ti ama.
      NEG intrns.Irr.eat Det.prsn father
      ‘Father will not eat.’ (Chen 2000:113)
   d. S(a) afu antu akanin.
      Det rice NEG trns.Irr.eat
      ‘S/he will not eat the rice.’ (Chen 2000:113)
   e. Antu akanin s(a) afu.
      NEG trns.Irr.eat Det rice
      ‘S/he will not eat the rice.’ (Chen 2000:113)

The examples above show that when *antu* occurs immediately before a predicate, the
nominative/absolutive NP in this construction can take a determiner.

5.3.6.3.2 Semantic differences between ani and antu

   Although both *ani* and *antu* can negate affirmative declarative clauses in Thao, they
may more or less differ from each other in semantic or pragmatic interpretations. The
difference results from the fact that *ani* does not contain the determiner *tu₁*, but *antu*
apparently does. The determiner *tu₁* has at least two properties. One is that it occurs with
NPs in negative constructions including declarative, existential, and imperative clauses;
and the other is that the NP following it may have a specific, contrastive, and/or
demonstrative interpretation. These properties allow the negative construction with *antu* to have a specific or contrastive interpretation in some contexts. Consider the following examples in (128).

(128) *Ani* (neutral) vs. *Antu* (contrastive)

a. *Ani yaku tu shitusi Taipak tilha.*
   NEG 1s.Nom/Abs Det Pst.there Taipei yesterday
   ‘I didn’t go to Taipei yesterday.’ (Blust 2003:233)

b. *Antu yaku sa shitusi Taipak tilha.*
   NEG 1s.Nom/Abs Det Pst.there Taipei yesterday
   ‘It was not me who went to Taipei yesterday.’ (Blust 2003:233)

c. *Haya wa qlhuran maqulhaquilha, antu(*ani)madishlum.*
   that LIG snake intrns.Red.red NEG intrns.green
   ‘That snake is red, not green.’ (Blust 2003:233)

d. *Antu/**Ani mabiskaw cicu malalia, mundadaudausk malalia.*
   NEG intrns.fast 3s.Nom/Abs intrns.run intrns.CaRed.Red.slow
   ‘He isn’t running fast; he’s running slow.’ (Blust 2003:234)

The examples in (128) illustrate that semantically/pragmatically, negative constructions with *antu* have a contrastive interpretation, as in (128)b–(128)d, while those with *ani* have a neutral interpretation, as in (128)a. Now consider more examples in (129).

(129) a. *Mihu a hulus inay?*
   2s.Pos Gen clothes these
   ‘Are these your (sg.) clothes?’ (Blust 2003:634)

b. *Ani(**Antu), antu (**ani) nak.*
   NEG NEG 1s.Pos
   ‘No, (they are) not mine.’ (Blust 2003:634, Wang 2000)

---

30 See section 5.5.1.4 for detailed discussion.
31 Blust (2003:233) also notes that “in statements the two negatives contrast, with *antu* evidently having a topicalizing or contrastive function”.

268
The examples in (129) show first that only *ani*, not *antu*, can be used as a short answer to a yes-no question; probably because *antu* contains *ani* and the determiner *tu*. Second, speaker B uses *antu*, rather than *ani*, to negate or counter the assertion, as in (129); because he probably assumes that speaker A presupposes that these clothes are his, as in (129).

### 5.3.6.3.3 Syntactic differences between *ani* and *antu*

Although both *ani* and *antu* can negate affirmative declarative clauses, they still show some differences in their syntactic behavior. First, as mentioned before, *ani* normally occurs before a nominative/absolutive NP and in a sentence-initial position, while *antu* can occur before either a nominative/absolutive NP or a predicate. Second, only *ani*, not *antu*, can attract pronominal or adverbial clitics in irrealis contexts,\(^{32}\) providing further evidence that *antu* is probably historically complex containing a determiner, as shown in the following examples in (130) and (131).

(130) *Ani* taking clitics

a. *Ani*=\(\text{wak} \) *tu* \(\text{amuntal}, \) \(\text{uka} \) \(\text{yaku} \) *shawan*.

\[\text{NEG} = \text{ls.Nom/Abs} \quad \text{Det} \quad \text{intrns.Irr.follow} \quad \text{EXIST.NEG} \quad \text{ls.Nom/Abs} \quad \text{leisure.time}\]

‘I don’t want to come with you, (as) I don’t have free time.’ (Blust 2003:293)

b. *Ani*=\(\text{uan} \) *yaku* *tu* *amakan*.

\[\text{NEG}=\text{still} \quad \text{ls.Nom/Abs} \quad \text{Det} \quad \text{intrns.Irr.eat}\]

‘I will not eat yet.’ (Chen 2000:66)

c. *Ani*=\(\text{uan} \) *tu* *amusha*.

\[\text{NEG}=\text{still} \quad \text{Det} \quad \text{intrns.Irr.go}\]

‘I am not leaving yet.’ (Wang 2000)

\(^{32}\)In realis contexts, *niwan*, presumably a sequence of *(a)ni* and *=uan*, is used to express the meaning of ‘not yet’. See section 5.3.6.4 for a discussion of *niwan*. Chen (2000) also notices this point.
d. **Ani=za yaku tu amakan.**
   NEG=already 1s.Nom/Abs Det intrns.Irr.eat
   ‘I will not eat anymore.’ (Chen 2000:66)

e. **Ani=za tu aqusazin ya simaq.**
   NEG=already Det lrr.rain.IN.intrns Det tomorrow
   ‘It won’t rain tomorrow.’ (Blust 2003:468)

(131) *antu* taking clitics

a. **Antu=uan cicu amakan.**
   NEG=still 3s.Nom/Abs intrns.Irr.eat
   ‘She will not eat yet.’ (Chen 2000:65)

b. **Antu=iza cicu amakan.**
   NEG=still 3s.Nom/Abs intrns.Irr.eat
   ‘She will not eat anymore.’ (Chen 2000:65)

Third, only *antu*, not *ani*, can co-occur with the conjunction *maqa* ‘so that, in order to, because of’ to introduce a dependent clause, as shown in (132) and (133).

(132) *a maqa antu* ‘so that...not’

a. Shi’a’a‘ili=uan azazak sa kalup
give.something.as.distraction.IMP.trns=POL child Det peach
   a maqa antu amacanit!
   LIG so.that NEG intrns.lrr.cry
   ‘Please give the child a peach, so that it won’t cry!’ (Blust 2003:916)

b. Haya latusha shput anwailik a maqa antu
   that LA.two person trns.separate.1s.actr LIG so.that NEG
   amapacay.
   intrns.lrr.RECIP.fight
   ‘I separated those two people so they wouldn’t fight.’ (Blust 2003:1050)

c. Qarasi=uan izahay buhat a maqa sa qnuan antu
   fence.in.IMP.intrns=POL that field LIG so.that Det buffalo NEG
   amusay buhat kman sa pazay!
   intrns.lrr.there field intrns.eat Det rice
   ‘Please fence in the field so that the buffalos won’t enter it and eat rice!’ (Blust 2003:772)
d. *Pashakada ihu a maqa antu shmurun cicu mihu a*
   look.up.IMP.intrns 2s LIG so that NEG trns.recognize 3s.Erg 2s.Pos Gen

   *shaqish!*

   ‘Look upward so he won’t recognize your (sg.) face!’ (Blust 2003:685)

e. *Haya buna pitmazik pruq, that sweet potato trns.C.put.something.into.something.1s.actr ground*

   *paripupuak a maqa antu ashaktun caw. trns.PARI.cover.1s.actr LIG so.that NEG trns.Irr.see person*

   ‘I put that sweet potato in the ground and covered it up, so that no one would see it.’ (Blust 2003:999)

(133) *Maqa antu ‘because ... not’*

a. *Maqitan qali maqa antu tilhazin, mahaziwhiw. intrns.good day because NEG sun.IN.intrns intrns.cool*

   ‘It’s nice weather, because it’s not too sunny, it is cool.’ (Blust 2003:400)

b. *Haya ayuzi macuaw ktiktirin cicu a binanau’az that. one man intrns.a.lot trns.Red.pinch. 3s.Pos Gen wife*

   *maqa antu tunmaza cicu a lalawa. because NEG intrns.listen.to 3s.Pos Gen speech*

   ‘That man’s wife pinches him a lot because he doesn’t listen to her.’ (Blust 2003:486)

c. *Haya binanau’az maqa antu kadadu’un cicu, numa musha. that woman because NEG trns.choose/desire 3s.Erg then intrns.go*

   ‘Since that woman wasn’t chosen by him, she left.’ (Blust 2003:431)

**5.3.6.4 The negative forms *niwan* and *niza***

In Thao, there are two negative forms related to *ani*: *niwan* ‘not yet’ and *niza* ‘not anymore’. Based on the forms, they appear to be grammaticalized/lexicalized sequences of *ni* ‘not’ and *=uan* ‘still’, and *ni* ‘not’ and *=iza* ‘already’.33 However, the present data

---

33 This may indicate that *ani* in an earlier stage of Thao developed from the affixation of the irrealis mood *a-* to the negator *ni*. However, now the form *a-ni* and *ni=wan/ni=(l)iza* are each single lexical items; *ni* can never be used alone. There is one recorded instance, in which the first person nominative/absolutive clitic pronoun *=wak* attaches to the negator *ni*, as in (a), which also suggests that *ni* ‘not’ was once used alone as
show that \textit{ani}=\textit{uan} 'not yet' and \textit{ani}=\textit{iza} 'not anymore' can only be used in irrealis/future contexts as discussed earlier,\textsuperscript{34} while \textit{niwan} 'not yet' and \textit{niza} 'not anymore' do not have this constraint; they can be used in either realis or irrealis contexts. Moreover, they can precede a nominative/absolutive NP, typically a pronoun or a predicate.\textsuperscript{35} Consider the following examples with \textit{niwan} as in (134)-(137).

(134) Negative nominal clauses with \textit{niwan} preceding a nominative/absolutive NP

a. \textit{Niwan} yaku tu minuayuzi.  
\hspace{1cm} \text{NEG} \hspace{0.5cm} \text{1s.Nom/Abs} \hspace{0.5cm} \text{Det} \hspace{0.5cm} \text{intrns.perf.find.a.husband} 
\hspace{0.5cm} 'I have never been married (woman speaking).' (Blust 2003:310)

b. \textit{Niwan} yamin tu ininay, initusi yamin Lalu.  
\hspace{1cm} \text{NEG} \hspace{0.5cm} \text{1ex.Nom/Abs} \hspace{0.5cm} \text{Det} \hspace{0.5cm} \text{perf.here} \hspace{0.5cm} \text{perf.there} \hspace{0.5cm} \text{1ex.Nom/Abs} \hspace{0.5cm} \text{Lalu} 
\hspace{0.5cm} 'Before we (ex.) were here, we (ex.) were there on Lalu Island.' (Blust 2003:637)

c. \textit{Niwan} cicu tu kminan.  
\hspace{1cm} \text{NEG} \hspace{0.5cm} \text{3s.Nom/Abs} \hspace{0.5cm} \text{Det} \hspace{0.5cm} \text{intrns.perf.eat} 
\hspace{0.5cm} 'S/he has not eaten yet.' (Chen 2000:62)

\hspace{4cm} \text{a negator.}

a. \textit{Ni(=)wak} tu amakan s(a) afu.  
\hspace{1cm} \text{NEG=ls.Nom/Abs} \hspace{0.5cm} \text{Det} \hspace{0.5cm} \text{intrns.Irr.eat} \hspace{0.5cm} \text{Det} \hspace{0.5cm} \text{rice} 
\hspace{0.5cm} 'I will not eat rice.' (Chen 2000:106)

Chen (2000:62) has a similar argument.

\textsuperscript{34} This is probably further evidence suggesting that \textit{ani} originated from the prefixation of the irrealis mood \textit{a}- with the negative form \textit{ni}. Although the present data show that \textit{ani}=\textit{iza} and \textit{ani}=\textit{uan} are usually used in irrealis/future contexts (i.e., it generally requires a verb affixed with irrealis mood \textit{a}-), there is one recorded instance where \textit{aniza} cooccurs with a realis verb, as in (a).

a. \textit{Ani}=\textit{iza} yaku tu munangay.  
\hspace{1cm} \text{Irr.NEG=already} \hspace{0.5cm} \text{1s.Nom/Abs} \hspace{0.5cm} \text{Det} \hspace{0.5cm} \text{intrns.here} 
\hspace{0.5cm} 'I won't come here anymore.' (Blust 2003:432)

\textsuperscript{35} It should be noted that when \textit{niwan} or \textit{niza} precedes a nominative/absolutive NP, the NP is usually a pronoun. This may suggest that \textit{niwan} and \textit{niza} were formerly auxiliary verbs heading negative clauses and attracting pronominal complements.
(135) Negative nominal clauses with *niwan* preceding a nominalized NP (predicate)
   a. *Inay a sharitunu niwan tu mabulaw.*  
      this LIG papaya NEG Det intrns.ripe  
      ‘This papaya isn’t ripe yet.’ (Blust 2003:1022)
   b. *Cicu niwan tu minara sa binanau’az.*  
      3s.Nom/Abs NEG Det intrns.perf.take Det wife  
      ‘He hasn’t yet taken a wife.’ (Wang 2000)

(136) Negative verbal clauses with *niwan* preceding a nominative/absolutive NP
   a. *Niwan yaku amakan.*  
      NEG 1s.Nom/Abs intrns.Irr.eat  
      ‘I haven’t eaten yet.’ (Blust 2003:445)
   b. *Niwan yaku sminakup ranaw.*  
      NEG 1s.Nom/Abs intrns.perf.catch chicken  
      ‘I haven’t caught the chicken yet.’ (Blust 2003:861)
   c. *Niwan cicu minzai yakin.*  
      NEG 3s.Nom/Abs intrns.perf.tell 1s.Obl  
      ‘He hasn’t told me yet.’ (Blust 2003:1060)

(137) Negative verbal clauses with *niwan* preceding a verb
   a. *Haya kawi niwan makabukay.*  
      that tree NEG intrns.blossom  
      ‘That tree hasn’t blossomed yet.’ (Blust 2003:328)
   b. *Haya afu niwan malhacas.*  
      that rice NEG intrns.well.cooked  
      ‘The rice isn’t cooked yet.’ (Blust 2003:686)
   c. *Ihu niwan mukaktun mihu a palhkakrikriw.*  
      2s.Nom/Abs NEG intrns.finish 2s.Pos Gen work  
      ‘You (sg.) haven’t finished your (sg.) work yet.’ (Blust 2003:540)
   d. *Latat=iza wa karitkit, niwan ukaktunin.*  
      LA.one=already LIG curl NEG tms.U.finish  
      ‘There is just one curl; it hasn’t been finished yet (as hair being permed).’  
      (Blust 2003:451)
Now consider the following examples with *niza*, as in (138)-(141).

(138) Negative nominal clauses with *niza* preceding a nominative/absolutive NP
   a. *Niza cicu tu amuqca munay.*
      NEG 3s.Nom/Abs Det intrns.Irr.again intrns.here
      ‘He will never come back again.’ (Blust 2003:643)
   b. *Niza cicu tu kman.*
      NEG 3s.Nom/Abs Det intrns.eat
      ‘S/he did not eat anymore.’ (Chen 2000:62)

(139) Negative nominal clauses with *niza* preceding a nominalized NP
   a. *Cuini niza tu mrigariqaz lhqaribush a qnuan.*
      Now NEG Det intrns.Red.see LHQA.mountain LIG deer
      ‘(We) don’t see deer any more.’ (Blust 2003:643)
   b. *Kahiwan mashcaw ya malhinuna, numa cuini*
      before intrns.speak.Thao when intrns.speak but now
      *niza tu mashcaw.*
      NEG Det intrns.speak.Thao
      ‘(He) used to speak Thao, but he doesn’t speak it any more.’ (Blust 2003:343)

(140) Negative verbal clauses with *niza* preceding a nominative/absolutive NP
   a. *Niza yaku unlhairushan.*
      NEG 1s.Nom/Abs UN.LHA.saliva.AN.intrns (water at mouth)
      ‘I’m not watering at the mouth any more.’ (Blust 2003:422)
   b. *Haywa wa qmu, niza yaku amakan.*
      that LIG rice.cake NEG 1s.Nom/Abs intrns.Irr.eat
      ‘As for that rice cake, I won’t eat (it) any more.’ (Blust 2003:894)

(141) Negative verbal clauses with *niza* preceding a verb
   a. *Numa niza cmanit azazak ya patutun=iza.*
      then NEG intrns.cry child if trns.C.breast=already
      ‘Then the child wouldn’t cry anymore after being nursed.’ (Blust 2003:1028)
   b. *Haywa wa takic pishkundur=iza, niza amusha, macay=iza.*
      that LIG barking.deer sturdy=already NEG intrns.Irr.go intrns.die=already
      ‘That barking deer has stiffened -- it won’t go away (as) it’s dead already.’
      (Blust 2003:494-495)
c. *Niza kubuqnurik.*
   NEG trns.KA.hate/angry.at.1s.actr
   ‘I don’t hate (him) anymore.’ (Blust 2003:333)

5.3.6.5 The negative form *qaiza*

In Thao, there is one more negator, *qaiza*, with the meaning of ‘make sure not/be careful not/must not’. It usually appears in the sentence-initial position, requiring a dependent clause connected with it by the ligature *a*. Consider the following examples with *qaiza* in (142).

(142) Negative verbal clauses with *qaiza*

   a. *Qaiza a muntatara sa mihu a tuali isay qlhup!*
      NEG LIG intrns.lose Det 2s.Pos Gen money here pocket
      ‘Be careful not to lose the money in your (sg.) pocket!’ (Blust 2003:760)

   b. *Qaiza isay qlhup a tuali a muntatara!*
      NEG here pocket Gen money LIG intrns.lose
      ‘Be careful, so that the money in your pocket won’t be lost!’ (Blust 2003:760)

   c. *Qaiza a kanin=uhu!*
      NEG LIG trns.eat =2s.Neut
      ‘Be careful not to eat (it)!’ (Chen 2000:70)

   d. *Qaiza ihu a uka tu munay.*
      NEG 2s.Nom/Abs LIG NEG Det intrns.here
      ‘Make sure that you (sg.) will come here.’ (Chen 2000:70)

   e. *Qaiza a inaurán sa suma wa aniamin.*
      NEG LIG trns.perf.forget Det some LIG thing
      ‘Be sure not to forget anything.’ (Blust 2003:760)

   f. *Inanuru ihu, qaiza a lhirikin sa qacna.*
      watch.out 2s.Nom/Abs NEG LIG trns.pierce Det thorn
      ‘Watch out, be careful not to be pierced by a thorn.’ (Blust 2003:760)
5.3.7 Causative Constructions

Causatives are grammatical devices used to express the general notion of causing a certain agent to perform a certain action. Thao forms its causatives morphologically by deriving them from non-causative,\(^{36}\) basic verbs with one of a number of prefixes usually beginning with \(p-\), such as \(pa-, pia-, pin-, pu-,\) and \(pashi-.\)\(^{37}\) Like basic verbs, causative verbs can be divided into intransitive and transitive types, as described in the following section. Causative constructions differ from non-causative constructions in typically having an argument that expresses the causer of the action.

5.3.7.1 Intransitive and transitive causatives

Generally, intransitive causative verbs refer to intransitive verbs which lose their \(m-\) affix and are prefixed with a \(p\)-form, while transitive causative verbs refer to transitive -\(in\)/-\(an\) verbs which are prefixed with a \(p\)-form. Although it is difficult to determine the derivational counterparts of some verbs to which \(p\)-form causative prefixes are attached, the corresponding non-causative counterparts of others seem clearer. For example, the \(pa-/p\)- causative prefix may be used to form the causative of dynamic verbs, as in

---

\(^{36}\) Morphological causatives involve a productive change in the form of the verb, while syntactic causatives involve a separate causative verb, e.g., make, cause, force, compel, etc. As noted by many linguists (e.g., Shibatani 1973, Lee 1985, Haiman 1983), morphological causatives are used for more direct types of causation, whereas 'syntactic' causatives (such as the word 'make' in English) are associated with indirect causation, including persuasion and sometimes just the granting of permission.

\(^{37}\) There are other \(p\)-form causative prefixes, such as \(pish-, pat-,\) and \(pum-.\) Because they do not occur as often as other causative prefixes in the present data, I have not included them here. See Blust (2003) for examples.
(143)-(144), while the *pia-* causative prefix may be used to form the causative of stative verbs, as in (145)-(146).

(143) Intransitive causative clauses: *pa/-p-X*

a. *Suma painan pashnara nak a taun.*

   someone maybe intrns.C.catch.fire 1s.Pos Gen house

   ‘Someone may have burned my house down.’ (Blust 2003:931)

b. *Yaku amalhupish izay a patashan patmaza ihun.*

   1s.Nom/Abs intrns.Irr.read that LIG book intrns.C.hear 2s.Obl

   ‘I will read the book to you (sg.) (make you hear).’ (Blust 2003:999-1000)

c. *Ata tu macuaw pacacawa yakin!*

   IMP.NEG Det intrns.a.lot intrns.C.Red.laugh 1s.Obl

   ‘Don’t make me laugh so much!’ (Blust 2003:345)

d. *Minu ihu antu apakan fafuy?*

   why 2s.Nom/Abs NEG intrns.Irr.C.eat pig

   ‘Why don’t you (sg.) feed the pigs?’ (Blust 2003:445)

e. *Yaku pakalawa suma pagka.*

   1s.Nom/Abs intrns.C.make someone chair

   ‘I had someone make a chair for me.’ (Blust 2003:439)

f. *Yaku pariqaz cicu patashan.*

   1s.Nom/Abs intrns.C.see 3s.Erg book

   ‘I showed him the book.’ (Blust 2003:836)

g. *Puntal izay azazak!*

   intrns.C.follow/accompany that child

   ‘Let that child accompany (you)!’ (Blust 2003:1040)

h. *Yaku pusha haya wa rumfaz maqa huqi=uan.*

   1s.Nom/Abs intrns.C.go that LIG bird because baby=still

   ‘I let the bird go because it was still a chick.’ (Blust 2003:1043)

(144) Transitive causative clauses: *pa/-p-X-in/-an*

a. *Fafuy pakanin cicu.*

   pig trns.C.eat 3s.Erg

   ‘She is feeding the pigs.’ (Blust 2003:446)
b. *Fafuy* **pinakanin** *cicu.*
   pig      trns.perf.C.eat  3s.Erg
   ‘She fed the pigs.’ (Blust 2003:446)

c. *Nak a rima pakulhawin binanau’az.*
   1s.Pos Gen hand trns.C.scratch woman
   ‘A woman scratched my arm.’ (Blust 2003:492)

d. *Cumay kay pacayik=iza.*
   bear     hit     trns.C.die.1s.actr=already
   ‘I killed the bear.’ (Blust 2003:282)

e. *Pashraki Ali klhiw!*
   C.untie.IMP.trns Ali rope
   ‘Let Ali untie the rope (as in freeing a moored boat)!’ (Blust 2003:937)

f. *Haya ranaw qinalhuqtuak, numa cuini pushák.*
   that bird trns.perf.catch.1s.actr but now trns.C.go.1s.actr
   ‘I caught that bird, but have let it go now.’ (Blust 2003:1043-1044)

(145) Intransitive causative clauses: *pia-X*

a. *Piawalhnaq sa azazak.*
   intrns.C.loud.noise Det child
   ‘The children are causing a commotion.’ (Blust 2003:1052)

b. *Manium latusha piqarman yakin.*
   2p.Nom/Abs LA.two intrns.C.bad 1s.Obl
   ‘The two of you (sg.) mistreated me.’ (Blust 2003:778)

c. *Cicu piaqtit pitaw.*
   3s.Nom/Abs intrns.C.narrowdoor
   ‘He made the door narrow(er).’ (Blust 2003:806)

d. *Ama piadishlum taum.*
   father intrns.C.green house
   ‘Father painted the house green.’ (Blust 2003:364)

e. *Haya aqtalha, piakushtar=uan!*
   that pork intrns.C.thick.IMP=POL
   ‘Please make the pork thick (as when cutting it to serve)!’ (Blust 2003:502)
Transitive causative clauses: pia-X-in/-an

a. Izay azazak piaqarmanin cicu a ina.
   that child trns.C.bad 3s.Pos Gen mother
   ‘That child was abused by its mother.’ (Blust 2003:778)

b. Haya wa azazak piasbutik matash.
   that LIG child trns.C.interest.1s.actr intrns.write
   ‘I made that child take an interest in writing.’ (Blust 2003:869)

c. Ata piasuni pazay!
   IMP.NEG trns.C.gather.IMP rice
   ‘Don’t gather the rice here!’ (Blust 2003882)

In addition to the verbs, pa-/p- and pia- causative prefixes can also attach to nouns to form causative verbs, including intransitive and transitive ones, as in (147).

(147) Pa-/p- and pia- prefixed to nouns as causative verbs

a. Yaku apashizuq ihun lina.
   1s.Nom/Abs Irr.C.necklace 2s.Obl necklace
   ‘I will put a necklace on you (sg.).’ (Blust 2003:922)

b. Pashizuqak ihu lina.
   Trns.C.necklace.1s.actr 2s.Nom/Abs necklace
   ‘I put a necklace on you (sg.).’ (Blust 2003:922)

c. Haya wa kawi lhintushain cicu a piaqrusin.
   that LIG wood trns.LHIN.two 3s.Erg LIG (Comp) trns.C.post
   ‘He split the wood in two to make posts/to be made into posts.’ (Blust 2003:805)

In Thao, there is another causative prefix pin- (having three allomorphs: pin-/pig-/pim-) ‘cause X to become/get’. This appears to be the causative form of the intransitive inchoative prefix min- ‘become X’, as seen in (148)-(150).

---

38 These three allomorphs are phonologically conditionally, with pin- occurring before alveolar consonants, pim- labial consonants, and pig- velar consonants.
Intransitive causative clauses: *pin-X*

a. **Cicu pimbuqnur yakin/yaku.**
   3s.Nom/Abs intrns.C.angry Is.Obl
   ‘He made me angry.’ (Blust 2003:334)

b. **Pigkashlay ihu sa mihu a kuskus.**
   intrns C.numb 2s.Nom/Abs Det 2s.Pos Gen leg
   ‘Let your (sg.) leg get numb (I don’t care).’ (Blust 2003:455)

c. **Pimbulaw yaku fizfiz.**
   intrns C.ripe 1s.Nom/Abs banana
   ‘I ripened the bananas.’ (Blust 2003:329)

Transitive causative clauses: *pin-X-in/-an*

a. **Azazak pincanitin sa yaku.**
   child trns.C.cry Det Is.Erg
   ‘I made the child cry.’ (Blust 2003:340)

b. **Ata tu pinhahai sa rucun!**
   NEG.IMP Det C.angry.IMP.trns Det monkey
   ‘Don’t annoy the monkey!’ (Blust 2003:395)

c. **Antu pinfazaqik nak a binanau’az.**
   NEG trns.C.know.Is.actr Is.Pos Gen wife
   ‘I didn’t tell my wife.’ (Lit., ‘I didn’t let my wife know.’) (Blust 2003:379)

*Pin-N* as a causative inchoative verb

a. **Pinapuy ihu?**
   intrns.C.fire 2s.Nom/Abs
   ‘Did you start a fire?’ (Blust 2003:301)

b. **Ina pinlhalhuca pakan sa azazak.**
   mother C.rice.porridge C.eat Det child
   ‘Mother is making rice porridge to feed the children.’ (Blust 2003:523)

c. **Tmala sa mara’in a kawi a pinruzan!**
   cut.IMP.intrns Det intrns.sttv.big LIG wood LIG.Comp trns.C.boat
   ‘Fell a big tree to be made into a boat!’ (Blust 2003:956)
(151) Intransitive causative clauses: *pu*-X
a. *Yaku* purakrak klihv.
   1s.Nom/Abs intrns.C.loosen rope
   ‘I’m loosening the rope.’ (Blust 2003:819)

b. *Hayawawamusunuh*, *pulhilhi* ita!
   that LIG post intrns.fall.down C.stand.up.IMP.intms 1rin.Nom/Abs
   ‘That post fell down, let’s go put it back up!’ (Blust 2003:537)

(152) Transitive causative clauses: *pu*-X-in/-an
a. *Hayawa patashan pusunik*.
   those LIG book trns.C.gather.ls.actr
   ‘I gathered the books together.’ (Blust 2003:882)

b. *Pushrakik* ruza.
   trns.C.untie.1 S.actr boat
   ‘I deliberately untied the boat from its moorings.’ (Blust 2003:937)

c. *Hayawa buhat a rusun pukuzin izay a caw*.
   that LIG field Gen earthen.embankment trns.C.cave.in/destroy that LIG person
   ‘That person destroyed the earthen embankments between the fields (as with a hoe).’ (Blust 2003:488)

(153) *Pu*-N as a causative verb
a. *Apucagiq=*wak.
   intrns.Irr.C.feces=1s.Nom/Abs
   ‘I am going to defecate.’ (Blust 2003:343)

b. *Atasa izay a atu tu putaun!* 
   NEG.IMP Det that LIG dog Det C.house.IMP.trns
   ‘Don’t let that dog into the house!’ (Blust 2003:979)
Another causative prefix found in Thao is *pashi*. Its corresponding non-causative form is unclear, as illustrated in (154)-(156).

(154) Intransitive causative clauses: *pashi*-X
   a. *Cicu* *pashi*bu*qnur* *yaku*.
      3s.Nom/Abs intrns.C.angry 1s.Obl
      ‘He makes me angry.’ (Blust 2003:334)
   b. *Yaku* *miku* *pashicacawa* *ihun*.
      1s.Nom/Abs like intrns.C.Red.laugh 2s.Obl
      ‘I like to make you (sg.) laugh.’ (Blust 2003:345)
   c. *Caycu* *pashishkashkash* *rumfaz*.
      3p.Nom/Abs intrns.C.Red.afraid *bird
      ‘They frightened off the birds.’ (Blust 2003:924)

(155) Transitive causative clause: *pashi*-X-in/-an
   *Iggaiza* *tu* *pashiqcai* *sa* *pagka*!
   NEG.IMP Det C.add/move.IMP tms Det chair
   ‘Don’t (need to) move the chair anymore.’ (Blust 2003:786)

(156) *Pashi*-N as a causative verb
   *Pinashikaritkit* *mihu* *a* *fukish*?
   trns.perf.C.curl 2s.Pos Gen hair
   ‘Have (you) had your (sg.) hair curled?’ (Blust 2003:452)

5.3.7.2 On causativization

In general, like many other languages, Thao also shows that the addition of a causative morpheme forces a significant reorganization of the mapping between thematic roles and grammatical relations. The impetus for these changes stems from the fact that the causative morpheme *p* introduces a new argument, i.e., the causer. In Thao, the causer is realized as the S of an intransitive causative construction or the A of a transitive causative construction unless some other operation intervenes. When a monadic intransitive verb is intransitive-causativized, the S argument (i.e., the
nominative/absolutive NP) is converted into an E argument (i.e., the oblique NP) in order to make way for the causer argument, which now becomes the S, as in (157). However, in Thao a monadic intransitive verb can be transitive-causativized, in which case the S argument (i.e., the nominative/absolutive NP) is converted into an O argument, but keeps the same case form (i.e., nominative/absolutive) in order to make way for the A causer argument, as seen in (157).

(157)  a. Simple plain/monadic intransitive verb before causativization
   \[Kminan=iza \ yaku.\]
   intrns.\perf.\eat=\already \ 1s.\Nom/\Abs
   ‘I have eaten already.’ (Wang 2000)

   b. After intransitive causativization
   \[Cicu \ p\inakan \ yakin/yaku.\]
   3s.\Nom/\Abs \ perf.\C.\eat \ 1s.\Obl
   ‘He fed me.’ (Wang 2000)

   c. After transitive causativization
   \[Yaku \ pakanin \ cicu.\]
   1s.\Nom/\Abs \ trns.\C.\eat \ 3s.\Erg
   ‘He is feeding me.’ (Wang 2000)

As the word order in these examples shows, the former S (the nominative/absolutive NP) of a monadic intransitive verb is realized as the E (the oblique NP) in an intransitive causative construction, and as the O (the nominative/absolutive NP) in a transitive causative construction.

When a dyadic intransitive verb is intransitive-causativized, the S argument (i.e., the nominative/absolutive NP) is converted into an E argument (i.e., the oblique NP) in order to make way for the causer argument, which now becomes the S, as in (158). However, a dyadic intransitive verb can also be transitive-causativized in Thao; in this case the S
argument (i.e., the nominative/absolutive NP) is converted into an O argument, but keeps the same case form (i.e., nominative/absolutive) in order to make way for the A causer argument, as seen in (158).

(158) a. Simple extended/dyadic intransitive verb before causativization
   \[\text{Azazak kman afu.} \]
   child intrns.eat rice
   ‘The child is eating rice.’ (Wang 2000)

b. After intransitive causativization
   \[\text{Yaku pakan azazak afu.} \]
   1s.Nom/Abs C.make child rice
   ‘I fed the child rice.’ (Lit., ‘I made the child eat rice.’) (Wang 2000)

c. After transitive causativization
   \[\text{Azazak pakakanak afu.} \]
   child trns.C.Red.eat.1S.actr rice
   ‘I fed the child rice.’ (Lit., ‘I made the child eat rice.’) (Wang 2000)

What will happen when a transitive verb is causativized? It would be expected that when a dyadic transitive verb is causativized, the A argument (i.e., the ergative NP) would be converted into an E argument (i.e., the oblique NP) in order to make way for the causer argument, which would now become the A; meanwhile the O argument (i.e., nominative/absolutive) would be retained in its original function, as in (159). However, such data has not been found yet. This certainly needs future study.

(159) a. Dyadic transitive verb before causativization
   \[\text{Afu kinan azazak.} \]
   rice trns.perf.eat child
   ‘The child ate the rice.’ (Wang 2000)

b. After causativization
   \[\text{(??)Afu pakanik azazak.} \]
   rice trns.C.eat.1S.actr child
   ‘I fed the child the rice.’
5.3.8 Impersonal Meteorological Verbs

In Thao, the most commonly found impersonal verbs are meteorological verbs. They function as ‘defective’ intransitive verbs, in that, although implying a nominative/absolutive NP (mostly qali ‘sky/weather’), it may be absent. The following examples (160) and (161) illustrate the impersonal meteorological verbs in affirmative and negative constructions.

(160) Meteorological verbs in an affirmative clause
a. *Amaulhza ya simaq.*
   intrns.Irr.snow Det tomorrow
   ‘It will snow tomorrow.’ (Blust 2003:1037)

b. *Qali amashulhza.*
   day/sky/weather intrns.Irr.snow
   ‘It will snow.’ (Blust 2003:1037)

c. *Amaqusaz=iza, minhumhum sa qali, numa tmubarumbun.*
   intrns.Irr.rain=already intrns.IC.dark Det sky then intrns.thunder
   ‘It is going to rain, it is getting dark; then it will thunder.’ (Blust 2003:815)

d. *Mrinuz cuini.*
   intrns.earthquake now
   ‘There is an earthquake now.’ (Blust 2003:834)

(161) Meteorological verbs in a negative clause
a. *Ani cuini aqusazin.*
   NEG now Irr.rain.IN.intrns
   ‘It’s not going to rain now.’ (Blust 2003:293)

b. *Antu painan amaqusaz.*
   NEG perhaps intrns.Irr.rain
   ‘It probably won’t rain.’ (Blust 2003:815)

c. *Maqitan qali maqa antu tilhazin, mahaziwhiw.*
   intrns.good weather because NEG sun.IN.intrns intrns.cool
   ‘It’s nice weather, because it’s not too sunny, it is cool.’ (Blust 2003:400)
5.3.9 Extension Verb: *miku*

There is at least one extension verb (i.e., a verb that require a dependent verb), found in Thao: *miku* ‘want to, like to, feel like’. *Miku* is not considered to be an auxiliary verb in that it does not attract any second-order pronominal or adverbial clitics. It is an intransitive extension verb, requiring a nominative/absolutive noun phrase as the S (agent) and a following verbal complement. In addition, it should be noted that *miku* ‘want to’ seems not to carry any of the affixes, such as tense and aspect, which usually characterize ‘main’ verbs, and it cannot be derived by any applicative affixes, of the type commonly referred to in the literature as ‘focus’, or ‘voice-marking’ affixes. Also, the verbal complement that *miku* ‘want to’ takes is usually non-finite. It is also observed in the present data that *miku* ‘want to’ only takes an intransitive (plain/extended) verbal complement, with the S of the dependent verbal complement being absent when it is coreferential with the S of *miku*.\(^{39}\) *Miku* can occur immediately before its verbal complement or its nominative/absolutive NP, as in (162)-(164).

\(^{39}\) Further research is required to confirm whether *miku* ‘want to’ can take a transitive verbal complement, and whether it can take a verbal complement in which the S is not coreferential with the S of *miku*. 

286
(162) *Miku* preceding a plain/monadic intransitive verbal complement

a. *Ina* miku shaqish.
   mother want  sew
   ‘Mother likes to sew.’ (Blust 2003:898)

b. Cicu miku rauz.
   3s.Nom/Abs want  swim
   ‘He wants to swim.’ (Blust 2003:827)

c. Miku puutaq cicu.
   want  C. vomit  3s.Nom/Abs
   ‘He likes to make people vomit.’ (Blust 2003:1045)

d. Miku kan yaku.
   want  eat  1s.Nom/Abs
   ‘I want to eat/I feel like eating.’ (Blust 2003:607)

(163) *Miku* preceding an extended/dyadic intransitive verbal complement

a. *Ti* ina miku ara sa maqulhaqulha.
   Det.prsn mother want  take Det intrns.Red.red
   ‘Mother wants to take the very red one.’ (Blust 2003:813)

b. Yaku miku kan sa aqtalha.
   1s.Nom/Abs want  eat  Det  pork
   ‘I want to eat pork.’ (Blust 2003:607)

c. Yaku miku kaytunu s(a) azazak.
   1s.Nom/Abs want  hit  Det  child
   ‘I want to hit the child.’ (Wang 2000)

d. Ita latusha miku piahulaw cicu.
   lpin.Nom/Abs LA.two want  C.hoarse  3s.Obl
   ‘The two of us (in.) want to make her hoarse.’ (Blust 2003:405)

e. Yaku miku pakaytunu Lujan sa suma.
   1s.Nom/Abs want  C.hit  Lujan  Det  someone
   ‘I want to have someone hit Lujan.’ (Wang 2000)

f. Miku untal yaku cicu.
   want  follow/accompany  1s.Nom/Abs  3s.Obl
   ‘I want to follow him.’ (Blust 2003:1040)
Miku preceding a nominative/absolutive NP

\[
\text{Nak a taun miku yaku piaharan.}
\]

1s.Pos Gen house want 1s.Nom/Abs C.wide

'I want to widen my house.' (Blust 2003:397)

In addition to the examples above, miku can cooccur with a negator as shown in the following examples in (165).

(165) Miku cooccurring with a negator
a. \text{Azazak antu miku shupilh.}
\begin{align*}
\text{child} & \quad \text{NEG} & \quad \text{want} & \quad \text{study}
\end{align*}

'Children don’t like to study.' (Blust 2003:350)

b. \text{Ani cicu miku fuilh yakin.}
\begin{align*}
\text{NEG} & \quad 3s.Nom/Abs & \quad \text{want} & \quad \text{tell} & \quad 1s.Obl
\end{align*}

'He doesn’t want to tell me.' (Blust 2003:389)

c. \text{Ani yaku tu miku utusi Taipak.}
\begin{align*}
\text{NEG} & \quad 1s.Nom/Abs & \quad \text{Det} & \quad \text{want} & \quad \text{U.there} & \quad \text{Taipei}
\end{align*}

'I don’t like to go to Taipei.' (Blust 2003:607)

d. \text{Yaku niwan tu miku kalhus.}
\begin{align*}
1s.Nom/Abs & \quad \text{NEG} & \quad \text{Det} & \quad \text{want} & \quad \text{sleep}
\end{align*}

'I don’t like to sleep yet.' (Blust 2003:740)

### 5.3.10 Speech Verbs

In Thao, speech verbs (e.g., order, tell, and ask) can take either an indirect or a direct complement such as I told him to study or I told him 'Study!'. A speech verb can be either dyadic intransitive or transitive depending on the verbal morphology (i.e., m-verbs or -in/-an verbs). When a dyadic intransitive speech verb takes an indirect complement, the E of the main clause verb has to be coreferential with the S of the verb in the dependent clause that is always intransitive (plain or extended), as in (166)-(167). When a transitive speech verb takes an indirect imperative complement, the O of the main
clause verb must also be coreferential with the S of the verb in the dependent clause, which always appears to be intransitive (plain or extended), as in (168).

(166) Intransitive speech verbs with a monadic intransitive indirect complement
a. Yaku shugkaful cicu mutusi Qariwan
   1s.Nom/Abs intrns.tell 3s.Obl intrns.MV.there Pu.li
   malhkakakca sa aminapiq.
   intrns.Red.discuss Det intrns.Irr.IC.daughter.in.law
   ‘I asked him to go to Pu-li to discuss the marriage arrangements.’ (Blust 2003:923)

b. Ama lhmucun azazak cmupish.
   father intrns.order child intrns.study
   ‘Father is ordering the child to study.’ (Blust 2003:550)

(167) Intransitive speech verbs with a dyadic intransitive indirect complement
a. Haya wa shput mashkaful yakin kmithim lhmir.
   that LIG person intrns.tell 1s.Obl intrns.look.for medicine
   ‘That person asked me to look for medicine.’ (Blust 2003:922)

b. Ina mzai azazak kman pania’an.
   mother intrns.tell child intrns.eat vegetables
   ‘Mother told the child to eat the vegetables.’ (Blust 2003:1061)

(168) Transitive speech verbs
a. with a monadic intransitive indirect complement
   Yaku shkafulan cicu mutusi Qariwan malhkakakca
   1s.Nom/Abs trns.tell/order 3s.Erg intrns.MV.there Pu.li intrns.Red.discuss
   sa aminapiq.
   Det intrns.Irr.IC.daughter.in.law
   ‘He asked me to go to Pu-li to discuss the marriage arrangements.’ (Blust 2003:922)

b. with a dyadic intransitive indirect complement
   Yaku shkafulin suma pafariw sa qilha.
   1s.Nom/Abs trns.tell/order someone intrns.C.buy Det wine
   ‘Someone ordered me to buy wine.’ (Blust 2003:922)

In addition to an indirect complement, speech verbs in Thao can also take a direct complement, as in (169)-(170).
(169) Intransitive speech verbs with a direct imperative complement  

a. **Yaku shugkful ihun 'Utusi=uan Qariwan fariw**  
   1s.Nom/Abs intrns.tell 2s.Obl U.there.IMP.intrns=POL Pu.li intrns.buy  
   
   *sa fafuy a punuq!*  
   Det pig Gen head  
   ‘I’m telling you (sg.), ‘Go to Pu-li to buy a pig’s head!’ (Blust 2003:923)  

b. **Ama lhmucun azazak ‘Ata tu papacay!’**  
   father intrns.order child NEG.IMP Det C.Red.fight.IMP.intms  
   ‘Father ordered the child, ‘Don’t fight!’’ (Blust 2003:551)  

(170) Transitive speech verbs with a direct imperative complement  

a. **Zaik cicu ‘Pakani=uan nak a fafuy!’**  
   trns.tell.1s.actr 3s.Nom/Abs C.eat.IMP.intrns=POL 1s.Pos Gen pig  
   ‘I told him, ‘Please feed my pigs!’’ (Blust 2003:446)  

b. **Macuaw masha wa azazak zaik ‘Utusi yanan!’**  
   intrns.very intrns.naughty LIG child trns.tell.1s.actr U.there.IMP.intms bed  
   ‘I said to the badly misbehaving child, ‘Go to bed!’’ (Blust 2003:887)  

5.3.11 Other Verbs Taking a Verbal Complement  

*See/hear* verbs can take an NP complement or a verbal complement. When they take verbal complements, similar to speech verbs, they take an intransitive dependent clause as their verbal complement. *See/hear* verbs can be either intransitive or transitive as well, conditional on the verbal morphology (i.e., *m*- verbs or *-in/-an* verbs). When a dyadic intransitive *see/hear* verb takes a verbal complement, the E of the main clause has to be coreferential with the S of the verb in the dependent clause, as shown in (171).

(171) *See/hear* verbs with an intransitive verbal complement  

a. **Haywa wa qaruta mriqaz mashmash munfaaw.**  
   that LIG cat intrns.see mouse intrns.MV.up  
   ‘The cat watched a mouse run upward.’ (Blust 2003:371)  

b. **Yaku tummaza atu hmurhur.**  
   1s.Nom/Abs intrns.hear dog intrns.bark  
   ‘I heard a dog barking.’ (Blust 2003:407)
c. Yaku tilha mriqaz qalhum kman qapizut.
   1s.Nom/Abs yesterday intrns.see pangolin intrns.eat ant
   ‘Yesterday I saw a pangolin eating ants.’ (Blust 2003:769)

d. Miaqay ihu tunmazamaza cicu malhinuna?
   often 2s.Nom/Abs intrns.Red.hear 3s.Obl intrns.speak
   ‘Have you (sg.) often heard him speak?’ (Blust 2003:1000)

When a dyadic transitive see/hear verb takes a verbal complement, the O of the main clause verb must be coreferential with the S of the verb in the dependent clause, as illustrated in (172).

(172) See/hear verbs with an intransitive verbal complement
   a. Numa shashanu riqazak mindadû=iza fciq=iza.
      and morning trns.see.1s.actr intrns.IChief=already intrns.sprout=already
      ‘And this morning I saw (the planted vegetables) sprouting.’ (Blust 2003:383)
   b. Haya yanan tmazak maaishur.
      that bed trns.hear.1s.actr intrns.Red.creak
      ‘I heard that bed creaking.’ (Blust 2003:425)

5.3.12 Adverbial Verbs

Thao exhibits adverbial verbs. They semantically express adverbial concepts, but function as verbs syntactically. These include (but are not limited to) degree verbs, such as ma-cuaw ‘very’, m-iaqay ‘often’, m-iarain ‘often’, and m-uqay ‘only/just’, and manner verbs, such as mu-hiaw ‘quickly’, ma-biskaw ‘fast’, and makit-dau-dauk ‘slowly’. They normally require a following “main” verb, but it remains unclear as to whether they are auxiliary verbs, and thus the heads of their constructions, or whether they are dependents of the verbs which they appear to be modifying. Although they can take adverbial clitics, such as =iza ‘already’, or the irrealis mood prefix a- in appropriate contexts, they have not been found to attract any second-order pronominal clitics. Independent pronouns,
however, can occur between the ‘adverbial’ verb and the ‘main’ verb, as in (173)a, (173)d, (174)c, (176)c, and (177)c. As ‘adverbial’ verbs, they can occur in different positions, but they typically occur before the “main” verb in sentence-initial position as in (173)a, or following a clause initial nominative/absolutive NP as in (173)b-c. The following examples illustrate adverbial degree verbs in Thao in three basic verbal clauses.

(173)  Adverbial degree verbs with a plain intransitive verb  
  a. Macuaw cicu mafazaq.  
      intrns.very/a.lot 3s.Nom/Abs intrns.know  
      ‘He knows a lot.’ (Blust 2003:305)  
  b. Haya wa shput, cicu a mata miaqay makmamarismis.  
      that LIG person 3s.Pos Gen eye intrns.a.lot intrns.Red.blink  
      ‘As for that person, his eyes blink a lot.’ (Blust 2003:621)  
  c. Yaku miarain matash, numa sa rima migkashlay.  
      IS.Nom/Abs intrns.a.lot intrns.write so Det hand intrns.numb  
      ‘I wrote too much, so that my hand became numb.’ (Blust 2003:455)  
  d. Muqay yaku maqarimuzmuz.  
      intrns.only 1s.Nom/Abs intrns.irascible  
      ‘I just have a bad temper.’ (Blust 2003:775)

(174)  Adverbial degree verbs with an extended intransitive verb  
  a. Taqitaqi macuaw kmakan sa funfun.  
      Squirrel intrns.ofen intrns.Red.eat Det funfun.fruit  
      ‘Squirrels often eat the funfun fruit.’ (Blust 2003:390)  
  b. Yaku tu kahiwan miaqay kmari fatu.  
      1s.Nom/Abs Det a.moment intrns.ofen intrns.dig.up stone  
      ‘I used to often dig up stones.’ (Blust 2003:433)  
  c. Miarain yaku miqilha gilha.  
      intrns.a.lot 1s.Nom/Abs intrns.drink wine  
      ‘I often drink wine.’ (Blust 2003:792)
d. *Yaku muqay smapuk mara’in a rusaw.*
   1s.Nom/Abs intrns.only intrns.catch intrns.big LIG fish
   ‘I only caught big fish.’ (Blust 2003:629)

(175) Adverbial degree verbs with a dyadic transitive verb
a. *Nak a binanau’az pakshibun, macuaw titishak na=shibun.*
   1s.Pos Gen wife C.sweat intrns.a.lot trns.wipe.1s.actr 3s=sweat
   ‘My wife is sweating (and) I’m wiping it off a lot.’ (Blust 2003:907)

b. *Haya azazak miaqay kacuk musuhíy farifariw sa aniamin.*
   that child intrns.a.lot trns.bring.1s.actr intrns.MV.there Red.buy Det thing
   ‘I often took that child there to buy things.’ (Blust 2003:952)

As seen above, an adverbial degree verb occurs before the ‘main’ verb it modifies. Now consider the following examples, illustrating that these adverbial degree verbs are able to take mood and/or aspect marking.

(176) Adverbial degree verbs with mood and/or aspect marking
a. Irrealis mood
   *Amacuaw shhumhuman.*
   intrns.Irr.very/a lot SH.dark.AN.intrns
   ‘It will be very late/dark.’ (Blust 2003:699)

b. Perfective aspect
   *Caycuy miniaqay kmay papakpak.*
   3p.Nom/Abs perf.intrns.a.lot intrns.hit Red.clap
   ‘They continued clapping.’ (Blust 2003:602)

c. Iterative aspect
   *Miarairain yaku munay.*
   intrns.Red.a.lot 1s.Nom/Abs intrns.MV.here
   ‘I often come here.’ (Blust 2003:603)

As seen in (176), these adverbial degree verbs function like verbs in that they can take mood and/or aspect. Now consider the examples with adverbial manner verbs, as shown in (177).
(177) Adverbial manner verbs
a. Minu sa jafuy makkitaudauk shikarman?
   why Det pig Red.gradually/slowly thin
   ‘Why are the pigs gradually getting thinner?’ (Blust 2003:360)
b. Caycuy pusha sa atu muhiaw.
   3p.Nom/Abs C.go Det dog intms.quickly
   ‘They let the dogs go quickly.’ (Blust 2003:1043)
c. Amuhiaw yaku musha.
   lIT. fast IS.Nom/Abs intms.go
   ‘I will leave soon.’ (Blust 2003:400)
d. Sa urum macuaw mabiskaw marfaz.
   Det cloud intms.very intms.quickly intms.fly
   ‘The clouds flew rapidly across the sky.’ (Blust 2003:560)

As shown in (177), the adverbial manner verbs can occur before the main verb, as in
(177)a and (177)d, at the end of a clause, as in (177)b, or in the sentence-initial position,
as in (177)c. Like adverbial degree verbs, they can take mood/aspect affixes as well, as
in (177)c.

5.3.12.1 Other miscellaneous adverbial verbs

In addition to adverbial degree and manner verbs, Thao also exhibits some other
adverbial verbs, such as mu-qca ‘again’, and mu-X-z ‘X times’ (i.e., ‘quantificational’
adverbial verbs such as once, twice, three times, etc). Like other adverbial verbs, they
typically require a dependent main verb as well, and they may take adverbial clitics, such
as =iza ‘already’, or the irrealis mood prefix a- in appropriate contexts, but they have not
been found to attract any second-order pronominal clitics. Consider the following
examples with mu-qca ‘again’ and mu-X-z ‘X times’, as in (178) and (179).
(178) Adverbial verb: *muqca* ‘again’

a. *Ihu* *muqca* *munay.*
2s.Nom/Abs intrns.again intrns.here

‘You (sg.) come again.’ (Blust 2003:786)

b. *Cicu* *amuqca*=iza *tmanwari* *nak* *a* *buhat.*
3s.Nom/ Abs intrns.Irr.again=already intrns.trespass.on 1s.Pos Gen field

‘He will trespass on my fields again.’ (Blust 2003:967)

c. *Muqca* *inaurán* *cicu.*
intrns.again trns.perf.forget 3s.Erg

‘He has forgotten (me) again.’ (Blust 2003:933)

(179) Adverbial verb: *muturuz* ‘three times’

a. *Muturuz* *yaku* *lhuggaushin.*
intrns.three.times 1s.Nom/ Abs intrns.sneeze

‘I sneezed three times.’ (Blust 2003:905)

b. *Perfective aspect
Mupushaz* *yaku* *mara* *sa* *binanau’aaz.*
intrns.two.times 1s.Nom/ Abs intrns.take Det wife

‘I married twice.’ (Blust 2003:752)

5.3.13 *Wh*-words

In descriptive linguistics, questions are normally divided into two types: yes-no questions and *wh*-questions. Thao also exhibiting these two types of questions. A declarative clause can be changed into a yes-no question simply by modifying its intonation contour. *Wh*-questions are introduced by *wh*-words, such as (but not limited to) *tima* ‘who’, *numa* ‘what’, and *kaizalha-kaiza* ‘when’, with the first two being nominal predicates and the last one functioning as an adverbial. *Tima* ‘who’ and *numa* ‘what’ typically occur in equational constructions, with the question word functioning as the nominal predicate, in that they are considered as indefinite elements, occupying the position available for new information, as in (180)-(181).
(180) *Tima* ‘who’ as a nominal predicate

a. *Tima sa izahiy?*
   
   who Det that.one
   
   ‘Who is that person?’ (Blust 2003:990)

b. *Tima sa munsahay?*
   
   who Det intrns.there
   
   ‘Who came by/who went past?’ (Blust 2003:857)

c. *Tima sa kmaytutu sa balis?*
   
   who Det intrns.hit Det iron
   
   ‘Who hammered the iron?’ (Blust 2003:1029)

d. *Ina, tima sa riqazan=uhu?*
   
   mother who Det trns.see=2s.Neut
   
   ‘Mother, who did you (sg.) see?’ (Blust 2003:836)

(181) *Numa* ‘what’ as a nominal predicate

*Numa sa iza(y) huya aniamin?*

what Det that that thing

‘What is that thing?’ (Blust 2003:645)

It should be noted that as seen above, *tima* ‘who’ and *numa* ‘what’ can only be co-referential with the absent S/O (the nominative/absolutive NP) of the nominalized clause introduced by the determiner in an equational clause. However, when they occur in a simple verbal clause, they can just stay ‘in-situ’ and appear in the S/O/A position, as in (182) and (183).

(182) *Tima* ‘who’ as the S/O/A of a verbal clause

a. *Tima cmanit?*
   
   who intrns.cry
   
   ‘Who is crying?’ (Wang 2000)

b. *Tima mara nak a tuali?*
   
   who intrns.take Is.Pos Gen money
   
   ‘Who took my money?’ (Blust 2003:303)
c. Kaytunun ti Lujan tima?
   trns.beat Det.prsn Lujan who
   ‘Who did Lujan beat?’ (Wang 2000)

d. Cicu a patuk kintiran tima?
   3s.Pos Gen cheek trns.perf.pinchn who
   ‘Who pinched his cheek?’ (Wang 2000)

(183) Numa ‘what’ as the S/O/A of a verbal clause

a. Numa makirac?
   what intrns.shine
   ‘What is shining?’ (Wang 2000)

b. Numa pigkalunhan mihu a but?
   what C.itchy 2s.Pos Gen body
   ‘What made you (sg.) itchy?’ (Wang 2000)

c. Cuini numa kalawánu?
   now what trns.do.2s.actr
   ‘What are you (sg.) doing now?’ (Wang 2000)

d. Cicu lhirikin numa?
   3s.Nom/Abs trns.piercewhat
   ‘What pierced him?’ (Wang 2000)

The adverbial-like wh-word *kaiza* ‘when’ appears to be used in realis context, while *alhakaiza* ‘when’ is used in an irrealis one. These two wh-words function as an adverbial verb, normally requiring an infinitival “main” verb, as in (184). They may also take a verbal complement that is introduced by *tu* (realis) or *ya* (irrealis). The former usually cooccurs with *kaiza*, while the latter with *alha-kaiza*, as in (185).

---

40 However, there is one recorded instance with *kaiza* co-occurring with the conjunction *ya* to express the irrealis/future context.

a. Kaiza caycuy ya amunay nak a taun?
   when 3p.Nom/Abs when intrns.lrr. here 1s.Pos Gen house
   ‘When will they come to my house?’ (Blust 2003:639)
(184) *Kaiza/alhakaiza ‘when’ taking a main verb

a. *Kaiza ihu pakan ranaw?
   when 2s.Nom/Abs C.eat chicken

   ‘When did you (sg.) feed the chickens?’ (Blust 2003:445)

b. *Alhakaiza maniun latusha amusha=iza?
   Irr.when 2p.Nom/Abs LA.two intrns.lrr.go=already

   ‘When will you (dl.) go?’ (Blust 2003:433)

c. *Alhakaiza mihu a binanau ‘az munay?
   Irr.when 2s.Pos Gen wife intrns.go

   ‘When will your wife come?’ (Blust 2003:433)

It should be noted that independent nominative/absolutive pronouns can occur between

*kaiza/alhakaiza ‘when’ and the ‘main’ verb, as in (184).

(185) *Kaiza/alhakaiza ‘when’ taking a main verb introduced by *tu/y/a

a. *Kaiza ihu tu munay?
   when 2s.Nom/Abs when intrns.come

   ‘When are you (sg.) coming here?’ (Blust 2003:433)

b. *Alhakaiza maniun ya musha?
   Irr.when 2p.Nom/Abs when intrns.go

   ‘When will you (pl.) go?’ (Blust 2003:433)

c. *Alhakaiza azazak ya kman afu?
   Irr.when child when intrns.eat rice

   ‘When will the children eat?’ (Blust 2003:433)

d. *Alhakaiza cicu ya canupin?
   Irr.when 3s.Nom/Abs when trns.bury

   ‘When will he be buried?’ (Blust 2003:341)

e. *Mihiu a binanau ‘az alhakaiza ya munay kilhnaqualh?
   2s.Pos Gen wife Irr.when when intrns.here visit

   ‘When will your (sg.) wife come here for a vacation?’ (Blust 2003:468)

Notice that as ‘adverbial’ verbs, *kaiza and *alhakaiza ‘when’ can occur in a number of
positions in a sentence; they may occur before the “main” verb in a sentence-initial
position (as in (185)a-d), or following a clause-initial nominative/absolutive NP (as in (185)e).

Having discussed the verbal structures of different types of construction, I will now turn to the discussion of the deictics in section 5.4.

5.4 DEICTICS

The system of deictics in Thao is complex. Thao identifies locations by reference to that of the speaker and the hearer. Like many other Austronesian languages, Thao deictics appear to display interaction along two parameters, distance and visibility/nonvisibility parameters. By the distance parameter is meant a distinction between items near the speaker, items at an intermediate distant from the speaker, and items further distant from both the speaker and hearer. By the visibility/non-visibility parameter is meant a distinction between items in sight and items out of sight. This is the general way Thao deictics are organized with respect to semantics.

From a syntactic perspective, Thao deictics can be either nonverbal (including nominal and prepositional) or verbal, based on the syntactic functions and distributions that each exhibits. I will describe the nonverbal type in section 5.4.1, and the verbal type in section 5.4.2.

---

41 In the linguistic literature, deictics can be divided into three types: person deictic expressions, which make essential reference to the speaker or the addressee of the utterance, spatial deictic expressions, that specify the spatial location of an object relative to the location of the speaker or the addressee, and temporal deictic expressions identify the time of an event or state relative to the time at which the utterance occurs (Anderson and Keenan 1985).
5.4.1 Nonverbal Deictics

5.4.1.1 Nominal deictics

Thao exhibits nominal deictics including the semidistal-from-speaker set: *haya* ‘that one’ and *iza(há)y* ‘that one’, and the far-from-speaker set: *huya* ‘that one’ and *izu(hú)y* ‘that one’, as summarized in table 5.3, followed by the examples in (186).

<table>
<thead>
<tr>
<th>Distance From Speaker</th>
<th>Nominal Deictics</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semidistal-from speaker</td>
<td><em>haya</em></td>
<td>‘that one, those, there’</td>
</tr>
<tr>
<td></td>
<td><em>iza(há)y</em></td>
<td></td>
</tr>
<tr>
<td>Far-from-speaker</td>
<td><em>huya</em></td>
<td>‘that one, over there’</td>
</tr>
<tr>
<td></td>
<td><em>izu(hú)y</em></td>
<td></td>
</tr>
</tbody>
</table>

(186) Nominal deictics in Thao

a. **Haya** nak a nipin.
   that.one 1s.Pos Gen tooth
   ‘My tooth is that one.’ (Blust 2003:398)

b. **Huya** amatihaul yakin.
   that.one intrns.Irr.put.a.curse 1s.Obl
   ‘That (person) will put a curse on me.’ (Blust 2003:695)

c. **Nak a shinshi sa iza(há)y.**
   1s.Pos Gen teacher Det that.one
   ‘That one is my teacher.’ (Blust 2003:913)

d. **Haya masa izu(hú)y piazi
cu puggaqaudin.**
   that.one and that.one C.do.as.the.same.way hang.something.up
   ‘Hang this one like that one.’ (e.g., when hanging a series of pictures on the wall, lanterns on a wire, etc.) (Blust 2003:735)

As seen in (186), the deictics are demonstrative pronouns. Being nominal, they can be either the head of a predicate, or the S (nominative/absolutive) of the clause.
Two points are to be noted here. First, these deictics can occur in a modification structure, as in (187). I will leave full discussion of such structures till section 5.5.2, which deals with relative clauses.

(187) Nominal deictics in relative clauses

a. *haya wa azazak*
   that.one LIG child
   ‘that child’ (Wang 2000)

b. *huya wa taun*
   that.one LIG house
   ‘that house’ (Wang 2000)

c. *izah\(\text{h}a\)y a atu*
   that.one LIG dog
   ‘that dog.’ (Wang 2000)

d. *izuh\(\text{h}u\)y a binanau’az*
   that.one LIG woman
   ‘that woman.’ (Wang 2000)

Second, although *haya, huya, izah\(\text{h}a\)y, and izah\(\text{h}u\)y* are all nominal deictics, they may be further divided into two different sets, with *haya* and *huya* as one set, and *izah\(\text{h}a\)y* and *izah\(\text{h}u\)y* the other. On the one hand, *haya* and *huya* share similar shapes, and permit no affixation at all. On the other hand, *izah\(\text{h}a\)y* and *izah\(\text{h}u\)y* historically appear to be formed by affixation of the locative form *i* to the bases, either *za(h\(\text{h}\))y* or *za(h\(\text{u}\))y*, with. The bases can also take the prefix *tushi-*, i.e., *tushi-za(h\(\text{a}\))y* and *tushi-zu(h\(\text{u}\))y* to express the meaning of ‘belong to that one’ (Blust 2003).

5.4.1.2 Prepositional deictics

In addition to nominal deictics, Thao also has prepositional deictics including the proximal form: *inay* ‘here in/at/on/from/by’, visible semidistal and far-distal forms
"isa(há)y ‘there in/at/on/from/by’ and "isu(hú)y ‘over there in/at/on/from/by’, and nonvisible far distal forms: "itusi and "itantu ‘over there in/at/on from/by’, as summarized in table 5.4, followed by the examples in (188).

**Table 5.4 Prepositional Deictics in Thao**

<table>
<thead>
<tr>
<th>Distance/visible or non visible</th>
<th>Preposition</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximal</td>
<td><strong>inay</strong></td>
<td>‘in/at/on/from/by this’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘here in/at/on/from/by’</td>
</tr>
<tr>
<td>Intermediate distance</td>
<td><strong>isa(há)y</strong></td>
<td>‘in/at/on from/by that’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘there in/at/on/from/by’</td>
</tr>
<tr>
<td>Far distance</td>
<td><strong>isu(hú)y</strong></td>
<td>‘in/at/on from/by that over there’</td>
</tr>
<tr>
<td></td>
<td><strong>itusi, itantu</strong></td>
<td>‘over there in/at/on/from/by’</td>
</tr>
</tbody>
</table>
5.4.2 Verbal Deictics

Together with the form *iutu* ‘there, but a short distance from the speaker’, the forms that appear prepositional deictics are also found to have a verbal function, in that they can cooccur with markers of tense (past, future), and aspect (completed, ongoing, repetitive, etc.), as illustrated in (189)-(191). Thao verbal deictics are summarized in table 5.5.

<table>
<thead>
<tr>
<th>DISTANCE/VISIBLE VS. NON-VISIBLE</th>
<th>FORM</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROXIMAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short distance</td>
<td><em>iutu</em></td>
<td>‘be there’</td>
</tr>
<tr>
<td>Intermediate distance</td>
<td><em>isa(há)y</em></td>
<td>‘be there’</td>
</tr>
<tr>
<td><strong>DISTAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Far distance</td>
<td><em>isu(hú)y</em></td>
<td>‘be over there’</td>
</tr>
<tr>
<td>Non visible</td>
<td><em>itüsi, itantü</em></td>
<td></td>
</tr>
</tbody>
</table>

(189) Proximal deictic

a. *Ainay=wak yathuan malhus.*  
   Irr.there=l.S.Nom/Abs Det evening intrns.sleep  
   ‘I’m going to sleep here tonight.’ (Blust 2003:1051)

b. *Rumfaz ininay, marfaz makimahazish=iza.*  
   bird perf.there intrns.fly intrns.move.off.gradually.into.the.distance=already  
   ‘The birds were here, but have flown off into the distance.’ (Blust 2003:399)

As seen in (189)a, the proximal deictic *inay* ‘here’ is a verb since it may be immediately followed by the first person nominative clitic pronoun (S/O) =*wak* ‘I’, which attaches to a verb in a clause. In addition, the verb status of *inay* can be further confirmed by the fact that it can take the irrealis mood affix *a-* in (189)a, and the perfective aspect affix *-in-* in (189)b. Now consider examples of three degrees of distal visible deictics, as in (190).
(190) Distal visible deictics
   a. *Yaku aitutu maniza.*
      1s.Nom/Abs Irr.there fish
      ‘I will fish over there (pointing to nearby location).’ (Blust 2003:1046)
   b. *Haya wa ranaw iutu=uan mundadán.*
      that.one LIG chicken there=still intrns.walk
      ‘That chicken is still walking over there.’ (Blust 2003:1046)
   c. *Yaku aisaháy maniza.*
      1s.Nom/Abs Irr.there fish
      ‘I will fish over there (implying greater distance, but visible).’ (Blust 2003:669)
   d. *Haya caw inisaháy milhugu.*
      that person perf.there intrns.sit
      ‘That person was there sitting (visiting).’ (Blust 2003:415)
   e. *Yaku aisuhúy wazaqan maniza.*
      1s.Nom/Abs Irr.there lake intrns.fish
      ‘I’ll go fishing over there by the lake (farther away, but visible)’ (Blust 2003:669)
   f. *Nak a punuq patanautuan aniamin inisuhúy fafaw.*
      1s.Pos Gen head trns.put.on something perf.there top
      ‘Something that was up there fell on my head.’ (Blust 2003:1047)

Similar to *inay ‘be here’, the form *iutu ‘be there’ is a verb because it can take both *a-
‘irrealis mood’ and/or *=uan ‘still, aspectual adverbial clitic’, as shown in (190)a and
(190)b, respectively. Also, *isa(há)y and *isa(hú)y ‘be there’ are verbs in that they are
permitted to cooccur with the formative *a- ‘irrealis mood’ and the affix -in- ‘perfective
aspect’, as shown in (190)a-(190)d, and (190)e and (190)f, respectively. Now let’s turn
to examples of distal nonvisible deictics, as in (191).

(191) Distal nonvisible deictics
   a. *Aitantu yaku maniza.*
      Irr.over.there 1s.Nom/Abs intrns.fish
      ‘I’ll fish over there (invisible to the speaker and hearer).’ (Wang 2000)
b. *Nak a huruy initantu* Qariwan.
   1s.Pos Gen friend perf.over.there Qariwan/Pu.li
   ‘My friend used to live in Qariwan (Pu-li).’ (Wang 2000)

c. *Nak a huruy ya simaq aitusi* Qariwan a mapariqaz.
   1s.Pos Gen friend Det tomorrow Irr.there Qariwan LIG intrns.RECIP.see
   ‘Tomorrow my friends will go to Qariwan (Pu-li) to see each other.’ (Blust 2003:835)

d. *Initusi kman, unay uggca kman.*
   perf.there intrns.eat intrns.MV.here again intrns.eat
   ‘He ate over there, (and then) came here to eat again.’ (Blust 2003:1022)

As shown above, the distal nonvisible deictics *itusi* and *itantu* ‘be over there, invisible’ are verbs because they can co-occur with either the irrealis mood affix *a-* , as in (191)a and (191)c, or the perfective aspect affix *-in-*, as in (191)b and (191)d.

However, a careful study of the verbal deictics shows that they are canonical/plain “locative intransitive.” A locative intransitive deictic verb takes one core argument S if it is plain. Consider the examples in (192).

(192) Locative plain/canonical intransitive deictic verbs

a. *Inay=iza yaku.*
   Here=already 1s.Nom/Abs
   ‘I’m here already’ (Blust 2003:637)

b. *Yaku aitu* pit’ia.
   1s.Nom/Abs Irr.there cook
   ‘I will cook over there.’ (Blust 2003:792)

c. *Haya atu inisahdy malhus.*
   that dog perf.there intrns.sleep
   ‘The dog was sleeping over there.’ (Blust 2003:855)

d. *Huya qnuan inisuhuy.*
   that cow perf.there
   ‘That cow was over there.’ (Blust 2003:431-432)
All the deictics in (192) are plain intransitive verbs in that they take only one core argument S, i.e., a nominative noun phrase, as a grammatical subject. For example, *yaku* 'I' is the S of the intransitive clauses in (192)a, (192)b, and (192)e. Similarly, *haya atu* 'that dog', and *huya qnuan* 'that cow' are the Ss of the intransitive clauses ((192)c-d).

Also, there is a deleted S, *cicu* 'he', in (192)f as well.

Now consider the examples in (193).

(193) Locative intransitive deictic verb: proximal
a. *Inay a caw ainay nak a taun miquilha.*
   these LIG people Irr.here Is.Pos Gen house intrns.drink
   ‘These people will be in my house for a drink.’ (Blust 2003:1018)

b. *Yaku ininay Barawbaw.*
   Is.Nom/Abs perf.here Te.Hua.village
   ‘I lived in Barawbaw (Te Hua village).’ (Blust 2003:637)

As shown in these examples, the intransitive deictic verb *ininay* ‘be here’ functions as a locative intransitive verb and allows a locative noun *nak a taun* ‘my house’ in (193)a, and *Barawbaw* ‘Barawbaw’ in (193)b as adjuncts. Now consider more examples in (194).

(194) Locative intransitive verbs: distal, visible
a. *Cumay isasahay mabraq.*
   bear Red.there cave
   ‘A bear is staying there in that cave.’ (Blust 2003:856)

b. *Ina sa kminururu sa miniacak inisahay nak a filhaq.*
   mother Det intrns.perf.take.out Det splinter perf.there Is.Pos Gen finger
   ‘Mother removed a splinter, which was in my finger.’ (Blust 2003:849)
c. *Yaku aisuhiy wazaqan maniza.*
   1S.Nom/Abs Irr.there lake intrns.fish
   ‘I’ll go fishing over there by the lake (further away).’ (Blust 2003:669)

d. *Nak a punuq patanautuan aniamin insuhiy fafaw.*
   1S.Pos Gen head trns:put.over.there something perf.there top
   ‘Something that was up there fell on my head over there.’ (Blust 2003:1047)

As seen in (194), the intransitive deictic verbs *isa(ha)y* and *isu(hu)y* ‘be over there, visible’ are locative intransitive verbs, which allow a locative noun as their adjuncts, such as *mabraq* ‘cave’ in (194)a, *nak a filhaq* ‘my finger’ in (194)b, *wazaqan* ‘lake’ in (194)c, and *fafaw* ‘top’ in (194)d. The locative intransitive verb phrase expresses the meaning of ‘be in (on/at/by/from, etc) X place.’

Now consider the examples in (195).

(195) Locative intransitive verbs: distal, nonvisible

a. *Nak a huruy ya simaq aitsi Qariwan a mapariqaz.*
   1S.Pos Gen friend Det tomorrow Irr.over.there Qariwan LIG intrns.RECIP.see
   ‘Tomorrow my friends will go to Qariwan (Pu-li) to see each other.’ (Blust 2003:835)

b. *Yaku tu kahiwan initusi Shtafari mashupish patashan.*
   1S.Nom/Abs Det before perf.over.there Shtafari intrns..study book
   ‘Long ago I studied over there in Shtafari (Tou-she).’ (Blust 2003:350)

c. *Nak a huruy initantu Qariwan.*
   1S.Pos Gen friend perf.over.there Qariwan
   ‘My friend were over there in Qariwan (Pu-li).’ (Wang 2000)

Like the other verbal deictics exemplified earlier, examples in (195) illustrate that *itusi*, *itantu* ‘be over there, nonvisible’ also function as locative intransitive verbs such as *Qariwan* in (195)a and (195)c, and *Shtafari* in (195)b.

In conclusion, the verbal deictics in Thao are plain intransitive locative verbs. However, notice that all of the forms discussed so far are associated either with the
marker of irrealis mood or with the presence of an aspectual clitic form, but there are many examples in which these deictics do not appear with these forms. In these cases, the syntactic category of the deictics is ambiguous, being either a verb or a preposition. Take *isa(há)y* ‘over there’ for example, as shown in (196).

(196) a. *Hayya wa shput isay putut milhalhilhi maqa mayaw.*
    that.one LIG person there corner intrns.Ca.Red.stand because intrns.shy
    ‘That person is standing in the corner because he is shy.’ (Blust 2003:755)

    b. *Rusaw isay wazaqan humbaha.*
    fish there lake intrns.float
    ‘The fish in the lake are floating (belly up).’ (Blust 2003:529)

Finally, two points should be noted. First, verbal deictics in Thao, as also noted in Blust (2003:210-211), carry a reflex of the generic locative form, *i*. We can assume, therefore, that the deictics were originally demonstrative nouns (*nay, utu, say, suy, tantu, and tusi*), which developed as prepositions by cliticization of the old locative preposition to them. Second, the new prepositional deictics were derived as verbal deictics allowing them to carry a variety of verbal affixation. For instance, they can carry the motion prefix *mu-* to express the meaning of ‘go/come here/there/over there’, or the locative causative prefix *pi/pu-* to express the meaning of ‘put here/there/over there’, as shown in table 5.6.
TABLE 5.6 VERBAL DEICTICS PREFIXED WITH *MU*- AND *PI*/PU*-  

<table>
<thead>
<tr>
<th>Distance/visible vs. non-visible</th>
<th><em>mu</em>-</th>
<th><em>pi</em>/pu-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short distance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximal</td>
<td><em>mu-nay</em> 'come here'</td>
<td><em>pi/pu-nay</em> 'put here'</td>
</tr>
<tr>
<td>Intermediate distance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visible</td>
<td><em>mu-sa(ha)y</em> 'go over there'</td>
<td><em>pi/pu-sa(ha)y</em> 'put over there'</td>
</tr>
<tr>
<td>Far distance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonvisible</td>
<td><em>mu-tusi, mu-tantu</em> 'go over there'</td>
<td><em>pi-tusi, pu-tantu</em> 'put over there, send out over there/take away'</td>
</tr>
</tbody>
</table>

To sum up, I have argued that Thao has both verbal and non-verbal deictics, with the interaction of two parameters: distance and visible/non-visible, as shown in table 5.7.

TABLE 5.7 DEICTICS IN THAO

<table>
<thead>
<tr>
<th>Distance/visible or nonvisible</th>
<th>Noun</th>
<th>Preposition</th>
<th>Plain intransitive locative verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximal</td>
<td></td>
<td><em>inay</em></td>
<td><em>inay</em></td>
<td>'this/these, here'</td>
</tr>
<tr>
<td>Semi distal</td>
<td>Short</td>
<td>Visible</td>
<td><strong>haya</strong> <em>iza(ha)y</em></td>
<td><em>iutu</em>79</td>
</tr>
<tr>
<td>Intermediate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distal</td>
<td></td>
<td></td>
<td><strong>huya</strong> <em>izu(ha)y</em></td>
<td></td>
</tr>
<tr>
<td>Non-visible</td>
<td></td>
<td></td>
<td><em>itusi, itantu</em></td>
<td></td>
</tr>
</tbody>
</table>

Having discussed the deictics in Thao, I now turn to the discussion of noun phrase structures in Thao in section 5.5.

It should be noted that *iutu* 'be over there' is the only deictic verb that, from the data at hand, does not take adjuncts. This may be an accidental gap in the data.

309
5.5 THE STRUCTURE OF NOUN PHRASES

Noun phrase elements in Thao include the head noun and typical modifying elements, such as relative clauses,\(^43\) numerals, possessors, demonstratives, and determiners. A determiner, if present, is the only noun phrase constituent that always appears in the initial position of the whole noun phrase in Thao.\(^44\) The structure of noun phrases in Thao can be either head-final or head-initial, with modifiers (other than determiners) either preceding or following heads connected to the head by an element that is often referred to as a ligature, or linker, \(a\) or \(na\).\(^2\). The shape of the ligature is realized as /\(wa\)/ after the low vowel /\(a\)/, and as /\(a\)/ after other vowels. Historically, this form had its origin in the Proto-Austronesian demonstrative \(*(n)a\), and even at the earliest stages of the family must have also had an alternate form \(*a\), probably phonologically conditioned following consonant-final words (Reid and Liao 2004).\(^45\) The general function of the ligature is to introduce dependent structures. It occurs not only before relative clauses that modify the head noun by providing information about its referents but also before sentential complements with verbal heads as a complementizer.\(^46\) Accordingly, they are commonly recognized as ‘linkers’ between heads and their modifiers.

\(^{43}\) Thao does not have a distinctive form class of Adjectives. Most descriptive terms either are unmarked, like nouns, or carry affixation that marks them as a separate class of stative verb, so that an English structure that contains an adjective usually appears in Thao as a relative clause construction. See section 5.5.2.3 for a discussion of ‘adjectival‘ relative clauses.

\(^{44}\) An alternative analysis for “determiner” is to follow Reid’s (2002a) auxiliary noun analysis of similar forms in Philippine languages. It will be an interesting study in the future to see whether Reid’s findings is applicable to Thao.

\(^{45}\) Cognates of this form are found as ligatures in several other Formosan and Philippine languages as well.

\(^{46}\) Ligatures are commonly found in most Philippine languages as well. The determination of its
I will begin by discussing determiners in section 5.5.1, then move on to relative clauses in 5.5.2, and finally possessive/genitive NPs in section 5.5.3.

### 5.5.1 Determiners

A determiner is the only noun phrase element that precedes the whole noun phrase regardless of whether the noun phrase is left or right branching. There is a class of monosyllabic determiners: \( na_1 \), \( ti \), \( sa \), \( tu_1 \), and \( ya \) that may optionally precede noun phrases in Thao. Although they are all categorized as determiners, they show differences in their distributions and functions. So far, the determiner \( na_1 \) is found to mark the S of a plain intransitive verb and the E of an extended intransitive verb. The determiner \( ti \) only marks personal names and kin terms. The determiner \( sa \) may mark any NP (including nominalized clauses), except for personal names and kin terms used as personal names. The determiner \( tu_1 \) also introduces NPs (including nominalized clauses in negative constructions), but it does not precede pronouns, kin terms, and personal names. In some cases, it can also have a specific, contrastive, emphatic, and/or deictic interpretation. The grammatical category has proved to be difficult. Blust (2003:280) describes \( a \) in Thao as follows; 'a-2 (PAN *a ‘linking particle, ligature’): 1. linking particle, ligature, marker of lexical, phrasal, or clausal attribution or modification.' Weng (2000:25-27) labels a\(^{wa'ya}\) as a ‘relativizer’ because its function is to express the ‘relationship’ between the modifiers and their heads (i.e., possessive relationship, and modifying relationship) within a noun phrase. Chen (2000:106) describes a as a ‘linker’ that links modifiers and modifiees.

---

47 A homophonous form, \( na_2 \), functions as a ligature; see section 5.5.2 for discussion. Another homophonous form, \( na_3= \), functions as a third person singular genitive pronoun (see section 5.2.2.2.1 for discussion). The determiners \( na_1 \) and \( sa \) probably originally marked different semantic aspects of the noun, which have now been lost. Guinaang Bontok in the Philippines retains both forms, but with different meanings (Reid, personal communicatio). Consider the following Bontok examples.

- a. \( \text{Pnilak na=n Pásu}. \)
  
  Saw.1s.actr NA=LIG dog
  
  ‘I saw the dog.’

- b. \( \text{Pnilak sa=n Pásu}. \)
  
  saw.1s.actr SA=LIG dog
  
  ‘I saw the dog (the one in our recent experience).’
determiner ya1 marks an oblique/locative NP (i.e., time expressions, as well as the E of dyadic intransitive clauses). In addition to these monosyllabic determiners, Thao also exhibits at least one disyllabic determiner satu. All these determiners are discussed in detail in the following sections.

5.5.1.1 The determiner na1

In Thao the form na1, functioning as a general determiner, normally occurs before simple NPs, as illustrated in (197) and (198).

(197) NA1 cooccurring with the S of monadic intransitive clauses

a. Mahaha na atu.
intrns.furious Det dog

‘The dog is furious.’ (Blust 2003:418)

b. Yaku mataqaz buna, mupriz na puntá
1s.Nom/Abs intrns.carry sweet.potato intrns.break.off Det shoulder.pole
mapaulawashwash na buna.
intrns.Coll.scatter Det sweet.potato

‘I was carrying sweet potatoes with a shoulder pole, when it broke, the sweet potatoes scattered all over.’ (Blust 2003:513)

c. Macuaw marukruk na iutu.
intrns.a.lot intrns.deep Det over.there

‘The (place) over there is very deep.’ (Blust 2003:844)

(198) NA1 cooccurring with the E of dyadic intransitive clauses

Caycuy amakay na taun.
3p.Nom/Abs intrns.Irr.attack Det house

‘They will attack (our) house/village.’ (Blust 2003:462)

The examples above show that the determiner na1 can mark the S (the nominative/absolutive NP) of a monadic intransitive clause, as in (197), and the E (the
oblique NP) of a dyadic intransitive clause, as in (198). It appears that \textit{na}, cooccurs with neither A (the ergative NP), nor O (the nominative/absolutive NP) in a transitive clause.\footnote{These may be accidental gaps in the data. Further study is required to investigate the function of \textit{na}. Chen (2000:25-26), following Li (1978), also notes that the form \textit{na} marks the subject of an intransitive sentence, but he does not recognize that \textit{na} also co-occurs with E.}

\subsection*{5.5.1.2 The determiner \textit{ti}}

Like many other Formosan and Philippine languages, Thao marks the distinction between common and personal nouns with different determiners, with the former commonly marked by 	extit{sa} or \textit{na} and the latter marked by \textit{ti} (from PAn *\textit{si}). The determiner \textit{ti} marks personal names or kin terms, as illustrated in (199).

\begin{itemize}
\item[(199) a.] \textit{Ti} cooccurring with the S of a monadic intransitive clause
\begin{verbatim}
Ti  Shawi  maania.
Det.prsn Shawi  intrns.clever
\end{verbatim}
‘Shawi is clever.’ (Wang 2000)
\item[(199) b.] \textit{Ti} cooccurring with the S of a dyadic intransitive clause
\begin{verbatim}
Ti  ina  shmapalh  shizu.
Det.prsn mother  intrns.unroll  mat
\end{verbatim}
‘Mother is unrolling the mat.’ (Blust 2003:897)
\item[(199) c.] \textit{Ti} cooccurring with the O of a dyadic transitive clause
\begin{verbatim}
Ushnawik  ti  ina.
trns.like.1s.actr  Det.prsn  mother
\end{verbatim}
‘I like Mother.’ (Wang 2000)
\item[(199) d.] \textit{Ti} cooccurring with the E of a dyadic intransitive clause
\begin{verbatim}
Yaku  kmaytunu  ti  Lujan.
1s.Nom/Abs  intrns.beat  Det.prsn  Lujan
\end{verbatim}
‘I beat Lujan.’ (Wang 2000)
\end{itemize}
e. TI cooccurring with the A of a dyadic transitive clause

*Kawi* taqtaqin *ti* ama.

wood trns.chop Det.prsn mother

'Father is chopping the wood.' (Blust 2003:971)

f. TI cooccurring with an NP as a nominal predicate

*Haya wa binanaw'az ti Shawi.*

that LIG woman Det.prsn Shawi

'That woman is Shawi.' (Wang 2003)

g. TI cooccurring with a nominal predicate NP

*Ti* ina sa makan afu.

Det.prsn mother Det intrns.eat rice

'The one who is eating rice is Mother.' (Blust 2003:295)

As illustrated in (199), the personal determiner *ti* can precede any personal name or kin term used as a personal name regardless of whether the head noun is S, A, O, E, a predicate, or a nonpredicate nominative NP in a nonverbal clause. Li (1978, 1997) analyzes the form *ti* as a “nominative” case marker for kinship terms and personal nouns. However, the examples above show that *ti* is not a case marker of its head noun in that it can co-occur with any proper noun, regardless of its grammatical function.

5.5.1.3 The determiner *sa*

The most commonly used determiner in Thao is the form *sa*. Its distribution is less restricted than that of any other determiner. Generally, the determiner *sa* introduces different types of full/complex NPs (except for kin terms and personal names, which are marked by the determiner *ti*, as already discussed in section5.5.1.2), including nominalized clauses (often analyzed as “headless relative clauses”). In most previous studies, *sa* has been analyzed as a ‘case marker’ (Li 1978, 1997) or a ‘noun-class marker’ marking general NPs (distinguishing it from the other noun-class marker *ti* marking
personal names and kinship terms) (Weng 2000, Chen 2000, following Y. L. Chang et al. (1998)). In this section, in contrast to the previous analyses of *sa*, I will argue, based on its complicated distribution and the functions it exhibits, that *sa* is best analyzed as a determiner that introduces full NPs.

5.5.1.3.1 The distribution of *sa*

As mentioned in chapter 3 (section 3.4.2.1), the form *sa* should not be considered to be a case marker in that it can precede NPs with various grammatical functions. Consider the following examples from (200) through (204), in which *sa* precedes common nouns functioning as S, A, O, and E.

(200) SA cooccurs with the S of a monadic intransitive clause
a. *Mapakalhus=iza* [NP *sa* *azazak*].
   intrns.Coll.sleep=already [ Det child ]
   ‘The children are all sleeping.’ (Blust 2003:442)

b. *Numa* [NP *sa* *atu*] *mimbabukbuk*.
   then [ Det dog ] intrns.confuse
   ‘Then the dogs became confused.’ (Blust 2003:314)

(201) SA cooccurs with the S of a dyadic intransitive clause
a. *Mzai* [NP *sa* *tata*] *Talahi!*
   intrns.say [ Det one ] cut.down.IMP.trns
   ‘Then one (of them) said, ‘Cut it down!’’ (Blust 2003:1016)

b. *Numa* [NP *sa* *ayuzi*] *shmiwat* *sa* *hudun*.
   then [ Det man ] intrns.cut.down.underbrush Det mountain
   ‘Then the men cleared the side of the mountain.’ (Blust 2003:328)

(202) SA cooccurs with the O of a transitive clause
a. *Asasak* [NP *sa* *afu*] *ya* *saqazi*.
   trns.prepare.1s.actr [ Det rice ] Det noon
   ‘I am preparing lunch.’ (Blust 2003:305)
b. *Numa* [NP *sa* pitaw] qdupak=iza.
   *then* [Det door] trns.close.1s.actr=already
   ‘Then I closed the door.’ (Blust 2003:446)

(203) SA cooccurs with the A of a transitive clause
   *dog over.there* intrns.sleep trns.Red.tickl [Det child] Det stomach
   ‘The dog over there is sleeping, (and) the child is tickling its stomach.’ (Blust 2003:437)

b. *Yamin* qaquitilhin [NP *sa* cumay].
   1Pex.Nom/Ab Abs trns.chase [Det bear]
   ‘A bear was chasing us (ex.).’ (Blust 2003:513)

(204) SA cooccurs with the E of a dyadic intransitive clause
a. *Magqaqili* yaku [NP *sa* kushuman].
   intrns.carry.under.arms 1s.Nom/Ab [Det purse]
   ‘I was carrying a purse under my arm.’ (Blust 2003:283)

b. *Ama* mapa [NP *sa* cumay].
   father intrns.carry [Det bear]
   ‘Father carried a bear.’ (Blust 2003:298)

These examples have shown that the form *sa* can introduce nominative/absolutive NPs (as in (200)-(202)), ergative NPs (as in (203)), and oblique NPs (as in (204)). Therefore, the form *sa* does not carry any case-marking feature agreeing with the nominal head that it precedes, so it cannot be considered to be a case-marker. Instead, it functions simply as a determiner introducing the NP that it precedes. It is also observed that the determiner *sa* in Thao can mark not only common nouns, as seen in (200)-(204), but also different types of pronouns such as personal pronouns, possessive pronouns, and demonstrative pronouns, as illustrated in (205), (206), and (207), respectively.

(205) SA cooccurs with a personal pronoun, functioning as S or A
a. *kmalawa* [NP *sa* caycuy] lhkiz.
   intrns.make [Det 3p.Nom/Ab] fence
   ‘They are making a fence.’ (Blust 2003:542)
b. *Azazak pincanitin* [\[NP \textit{sa yaku} \]].

child trns.C.cry [ Det 1s.Nom/Abs ]

‘I made the child cry.’ (Blust 2003:340)

(206) SA cooccurs with a possessive pronoun, functioning as the nonpredicate nominative NP in a nominal predicate clause, or E of a dyadic intransitive

a. \[NP \textit{Sa nak} \] ladadu.

[ Det 1s.Pos ] LA.little

‘Mine is little’. (Blust 2003:855)

b. *Ya antu shdu, amara=iza* [\[NP \textit{sa nak} \].

if NEG sufficient intrns.Irr.take=already [ Det 1s.Pos ]

‘If that is not enough, take some of mine.’ (Blust 2003:303)

(207) SA cooccurs with a demonstrative pronoun, functioning as S or E

a. *Numa* [\[NP \textit{sa izahány} \] mupriz.

then [ Det that.one ] intrns.break

‘Then that one broke.’ (Blust 2003:327)

b. *Kmalawa ihu* [\[NP \textit{sa inay} \]?

intrns.make 2s.Nom/Abs [ Det this.one ]

‘Did you (sg.) make this?’ (Wang 2000)

In addition to marking different types of pronouns, as illustrated in (205)-(207), the determiner *sa* can also cooccur with full possessive NPs and full deictic NPs, as shown in (208) and (209), respectively.

(208) SA cooccurs with a possessive noun phrase, functioning as S, O, E, or A

a. *Manasha* [\[NP \textit{sa} [\[NP \textit{mihu a kawiaz} \]].

intrns.a.lot [ Det [ 2s.Pos Gen lover ]]

‘You (sg.) have a lot of sweethearts.’ (Lit., ‘Your (sg.) sweethearts are many.’) (Blust 2003:461)

b. *Kacuan cicu* [\[NP \textit{sa} [\[NP \textit{nak a palanan} \]].

trns.bring 3s.Nom/Abs [ Det [ 1s.Pos Gen basket ]]

‘He brought me my carrying basket.’ (Blust 2003:430)

c. *Tmazai* [\[NP \textit{sa} [\[NP \textit{ti ama a lalawa} \]!]

listen.IMP.trns [ Det [ Det.prsn father Gen speech ]]

‘Listen to what Father says!’ (Weng 2000)
d. *Cunit* yaku [NP *sa* [NP mihu a kulambit]].
   intrns.wring.out 1s.Nom/Abs [ Det [ 2s.Pos Gen towel ]]  
   ‘I am wringing out your (sg.) towel.’ (Answer to the question ‘What are you (sg.) doing?’) (Blust 2003:346)

e. *Numa yaku* canitan [NP *sa* [NP nak a azazak]].
   then 1s.Nom/Abs trns.cry [ Det [ 1s.Pos Gen child ]]  
   ‘So my child wept for me.’ (Blust 2003:974)

(209) SA cooccurs with a deictic noun phrase, functioning as S, O, or E

a. *Miaqay* [NP *sa* [NP izay a azazak]] cmanicanit.
   intrns.often [ Det [ that LIG child ]] intrns.Red.cry  
   ‘Does that child cry often?’ (Blust 2003:340)

b. *Talahi* [NP *sa* [NP izay a parakaz]]!
   cut.down.IMP.trns [ Det [ that LIG parakaz.tree ]]  
   ‘Cut down the *parakaz* tree!’ (Blust 2003:956)

c. *Yaku* shmishi [NP *sa* [NP inay grus]].
   1s.Nom/Abs intrns.shake [ Det [ this post ]]  
   ‘I shook this post.’ (Blust 2003:534)

Examples (208) and (209) illustrate that the determiner *sa* marks full possessive NPs and deictic NPs as well. Therefore, based on the distribution of *sa* in (200)-(209), the form *sa* appears to be a determiner introducing NPs.

Furthermore, it is not surprising that the determiner *sa* also marks an NP modified by an adjectival relative clause,49 as illustrated in (210).

(210) SA cooccurs with an NP modified by an adjectival relative clause

a. *Yaku* kminan [NP *sa* [NP [RC mara’in _] a kalhan]].
   1s.Nom/Abs intrns.perf.eat [ Det [ intrns.big _ ] LIG crab ]]  
   ‘I ate a big crab.’ (Blust 2003:649)

b. *Cicu* hmadu [NP *sa* [NP [RC matici _] a sazum]].
   3s.Nom/Abs intrns.hold [ Det [ intrns.cold _ ] LIG water ]]  
   ‘He was holding cold water.’ (Blust 2003:286)

49 The discussion of adjectival relative clauses is present in section 5.5.2.3.
Finally, the determiner *sa* is also found to mark a nominalized clause in verbal clauses (as in (211)), in existential clauses (as in (212)), in different types of equational constructions, such as pseudo-cleft clause in (213)-(214), and cleft clauses in (215).

(211) SA occurs before a nominalized clause in verbal clauses

a. \[[ NP \textit{Sa} [ NC \textit{pinit’ia }] ] \textit{amuhiaw mimplhu} \]
   \[ \text{Det} [ \text{trns.perf.cook} ] \text{intrns.Irr.soon intrns.IC.boil} \]
   ‘What was cooked will soon begin to boil.’ (Blust 2003:472)

b. \textit{Yaku} \textit{lhimiza} \[ NP \textit{sa} [ NC \textit{aminhlalu} ] \]
   \[ \text{1s.Nom/Abs intrns.weave} \]
   ‘I’m weaving a \textit{hlalu} trap.’ (Lit., ‘I’m weaving something that will become a \textit{hlalu} trap.’) (Blust 2003:523)

(212) SA occurs before a nominalized clause in existential constructions

a. \textit{Yanan} \[ NP \textit{sa} [ NC \textit{mapa sa ranaw} ] \]
   \[ \text{EXIST} [ \text{Det} \text{intrns.carry Det chicken} ] \]
   ‘There were some who were carrying chickens.’ (Blust 2003:940)

b. \textit{Uka} \[ NP \textit{sa} [ NC \textit{kmay na taun} ] \]
   \[ \text{NEG.EXIST} \]
   ‘There is nobody who will attack (our) home.’ (Blust 2003:505)

(213) SA occurs before a nominalized clause in affirmative equational (pseudocleft) constructions

a. \textit{Yaku} \[ NP \textit{sa} [ NC \textit{pinacay sa izay a shput} ] \]
   \[ \text{1s.Nom/Abs} \]
   ‘The one whom that person beat is me.’ (Blust 2003:282)

b. \textit{Yaku} \[ NP \textit{sa} [ NC \textit{kminaytunu sa izay a azazak} ] \]
   \[ \text{1s.Nom/Abs} \]
   ‘The one who beat that child is me.’ (Blust 2003:462)

c. \textit{Numa} \[ NP \textit{sa} [ NC \textit{apalhuizán=uan} ] \textit{bailu} \]
   \[ \text{then} \]
   ‘Then the beans will be still planted.’ (Lit., ‘Then the beans are what will be planted for a while.’) (Blust 2003:665)

---

50 The discussion of nominalization is presented in section 4.3.4.
SA occurs before a nominalized clause in negative equational (pseudocleft) constructions

Antu yaku [NP sa [NC mara ]], suma painan [NP sa [NC mara ]].

'\text{The one who took it was not me; maybe it was someone else who took it.}' 
(Blust 2003:990)

SA occurs before a nominalized clause in interrogative equational (cleft) constructions

a. Numa [NP sa [NC inara cicu ]]? what [ Det [ trns.perf.take 3s.Nom/Abs ]]

'What did he take?' (Lit., 'The thing that he took is what?') (Blust 2003:303)

b. Tima [NP sa [NC munsahây ]]? who [ Det [ intrns.here ]] 

'Who came by?' (Lit., 'The one coming by is who?') (Blust 2003:857)

The examples in (211) and (212) suggest that the determiner sa marks a nominalized clause which functions as an NP in verbal and existential clauses. The examples in (213) and (214) appear to be the usual NP-NP structure of pseudo-cleft/equational constructions. Both the predicates and their single arguments are NPs, with the former being nominalized clauses and the latter being nominative NPs. The examples in (215) are equational/cleft clauses with NP-NP construction as well. As the ‘given information’, the nominalized clauses are the nominative NPs, while the interrogative pronouns are their predicates.

In conclusion, the form sa is best analyzed as a determiner which marks any structure which follows it as an NP.
5.5.1.3.2 Postcliticization of \( s(a) \)

The determiner \( sa \) can become a postclitic \( =s \) to any form that happens to precede it. The form \( =s \) is thus a nonpronominal clitic that has a low degree of selection with respect to its host. It is a so-called ‘simple’ clitic (Zwicky 1977), whose phonological attachment is clearly the result of its prosodically deficient character as a monosyllabic form and subsequent loss of its vocalic nucleus, regardless of the fact that syntactically the determiner is related to what follows it, rather than to what precedes it. This phenomenon can be illustrated by the following examples in (216).

(216) a. Itiza yaku pintata\( =s(a) \) qati a ktalha\( =s(a) \) afu. rice
   'I returned to boil bamboo shoots to eat with rice.' (5.5, Wang 2000)

b. Numa\( =s(a) \) rusaw fariwin lhay shput arán\( =s(a) \) tuwali
   then\( =s(a) \) fish trns.sell to Han.people trns.get\( =s(a) \) money
   a fariw pinugqrum, a fariw ktilha, kamshia, a fariw\( =s(a) \) kurun, a fariw\( =s(a) \) tamuhun, a fariw\( =s(a) \) tapaha, a fariw raincape LIG buy\( =s(a) \) hat LIG buy\( =s(a) \) shoes LIG buy makusum a pighulusin.
   fabric LIG trns.C.clothes
   '(We) would sell the fish to Chinese people, and would take the money to buy quilts, to buy salt, sugar, to buy raincapes, to buy hats, to buy shoes, and to buy fabric to be made into clothing.' (5.13, Wang 2000)

As shown in (216), the determiner \( sa \) can become a postclitic \( =s \) and attach to the right edge of any preceding element.
5.5.1.4 The determiner \textit{tu}$_1$

Another determiner found in Thao is \textit{tu}$_1$.\footnote{A homophonous form, \textit{tu}$_2$ functions as a conjunction ‘when’, that normally occurs before a predicate to introduce a realis clause, as in the following example.}

Generally, like the determiner \textit{sa} discussed earlier, the determiner \textit{tu}$_1$ also introduces NPs. However, unlike \textit{sa}, it does not introduce pronouns, kin terms, and personal names. Like \textit{sa}, it may introduce nominalized clauses, but only in negative constructions.

5.5.1.4.1 The distribution and function of \textit{tu}$_1$

Li (1978, 1997) analyzes this \textit{tu}$_1$ form as an “accusative” case marker; however, this is not supported by any of the present Thao data. Consider the following examples in (217), illustrating that \textit{tu}$_1$ can cooccur with NPs in different distributions.

(217) a. \textit{Tu}$_1$ cooccurs with the S of a monadic intransitive clause

\begin{verbatim}
Haya wa pitaw, lakuza [NP \textit{tu} qultush].
\end{verbatim}

that LIG door how.much [ Det height ]

‘That door, how much is the height?’ (Blust 2003:983)

b. \textit{Tu}$_1$ co-occurs with the S of a monadic intransitive clause

\begin{verbatim}
Tu sasuma\footnote{Notice that the word \textit{sasuma} ‘some people’ could be derived from a combination of the determiner \textit{sa} and the word \textit{suma} ‘some’. Without the determiner \textit{tu}, the sequence \textit{sa suma wa maca} would mean ‘some eyes’. Another possible analysis is to treat \textit{sasuma} as a word derived from the Ca-reduplication of \textit{suma}.} wa maca ] lhumbulruq.
\end{verbatim}

[ Det some.people Gen eye ] swollen

‘Some people’s eyelids are swollen.’ (Blust 2003:331)

c. \textit{Tu}$_1$ co-occurs with the O of a dyadic transitive clause

\begin{verbatim}
Shayshayan [NP \textit{tu} lina ]!
\end{verbatim}

trns.put.on [ Det necklace ]

‘Would you put on the necklace?’ (Blust 2003:904)
d. TU₁ co-occurs with the A of a dyadic transitive clause

\[ \text{Yaku mutusi buhat mubuhat, untarawin [NP tu qusaz].} \]

'I was going there to the fields to work (when) the rain poured down (on me).'</n
(Blust 2003:973)

e. TU₁ co-occurs with the E of a dyadic intransitive clause

\[ \text{Numa yaku antu tmara [NP tu sasuma wa laalawa].} \]

'And I wouldn’t care about others’ talk (gossip).'</n
(Wang 2000)

f. TU₁ co-occurs with an NP as a nominal predicate

\[ \text{Kahiwan shmadia [NP tu caw wa maqitan a rumfaz].} \]

'In former times, owls were considered birds of good omen to the Thao.'</n
(Wang 2000)

The examples in (217) have shown that the form tu₁ can co-occur with
nominative/absolutive NPs (as in (217)a, (217)b, and (217)c), ergative NPs (as in (217)d),
oblique NPs (as in (217)e), and a nominal predicate (as in (217)f). Therefore, tu₁ does not
seem to carry any case agreeing with the nominal head it marks, so it cannot be
considered to be a case marker. Instead, it functions simply as a determiner introducing
the NPs that it precedes.

Unlike the determiner sa, the form tu₁ is not found to co-occur with any personal
pronouns, possessive pronouns, or demonstrative pronouns. However, similar to the
determiner sa, the form tu₁ appears to mark a nominalized clause, but only in negative
constructions, as shown in (218).
(218) Before a nominalized clause in negative equational clauses
a. *Ani yaku [NP tu [NC macakaw ]], Lujan sa macakaw.*
   NEG 1s.Nom/Abs [ Det [ intrns.greedy ]] Lujan Det intrns.greedy
   ‘I’m not greedy, (but) Lujan is.’ (Lit., ‘The one who is greedy is not me; the
   one who is greedy is Lujan.’) (Blust 2003:338)

b. *Ani sa baruku [NP tu [NC mupliq ]].*
   NEG Det cup [Det [ intrns.break ]]  
   ‘The cup didn’t break.’ (Lit., ‘The thing that broke is not the cup.’) (Blust
   2003:728)

c. *Ani yaku [NP tu [NC matatatara sasuma ]].*
   NEG 1s.Nom/Abs [ Det [ intrns.talk.behind.one’s.back other.people ]]  
   ‘I would not talk behind others’ backs.’ (Lit., ‘The one who would talk behind
   others’ backs is not me.’) (Wang 2000)

(219) Before a nominalized clause in negative imperative constructions
a. *Ata [NP tu [NC kalankalan yakin ]]!*
   NEG.IMP [ Det [ Red.tickle.IMP.intrns Is.ObI ]]  
   ‘Don’t tickle me!’ (Lit., ‘Don’t be the tickler of me!’) (Blust 2003:437)

b. *Ata [NP tu [NC ktuni klhiw ]]!*
   NEG.IMP [ Det [ cut.IMP.trns rope ]]  
   ‘Don’t cut the rope!’ (Lit., ‘Don’t be the cutter of the rope!’) (Blust 2003:487)

(220) Before a nominalized clause in negative existential constructions
*Uka [NP tu [NC asaranan ]], maga macuaw*
   NEG.EXIST [ Det [ trns.lrr.walk ]] because intrns.very
   mapucum.
intrns.close.together.of.plants
   ‘There is no path to walk on because it is heavily overgrown.’ (Blust
   2003:993)

The examples from (218) to (220) suggest that the determiner *tu* marks a nominalized
clause which functions as an NP in negative constructions. The examples in (218) appear
to have a negative auxiliary verb in the sentence-initial position, following two NPs, with
one being a common NP, and the other being a nominalized clause marked by the form
*tu*. Example (218)a also illustrates that the determiner *tu* marks the nominalized clause
in a negative construction, contrasting with the determiner *sa* occurring in affirmative constructions. Similarly, the examples in (219) and (220) also show that the form *tu* introduces nominalized clauses in negative imperative constructions and negative existential constructions, respectively. In conclusion, based on its complicated distributions, the form *tu* is best analyzed as a determiner that introduces certain types of NPs, including nominalized clauses in negative constructions.

5.5.1.4.2 The determiner *tu* with a specific, contrastive, deictic interpretation

The form *tu* in some contexts appears to require either a specific, contrastive, and/or deictic interpretation, as illustrated in (221).

(221) Before an NP as a specific/contrastive/demonstrative determiner

a. *Zaik ihu,* ‘Kacui=wak *tusha wa shaba,*
   *muqay ihu kmacu *tu* *tata wa shaba.*
   ‘I said to you (sg.), ‘Bring me 200 (dollars),’ but you (sg.) only brought 100 (dollars).’ (Blust 2003:575)

b. *Tu caw pinudanshir.*
   ‘That person defecated.’ (Blust 2003:357)

c. *Inay *tu* *atu a talhum, numa sa inay fafu* *a talhum.*
   ‘This is dog’s blood, but this is pig’s blood.’ (Blust 2003:960)

d. *Haya tamaku ata *arai, *antu nak,* *tu* *shput!*
   ‘Don’t take those cigarettes (because) they aren’t mine, they belong to another person!’ (Blust 2003:302)
In addition, this $tu_1$ form may also occur with time phrases, having a past interpretation, which contrasts with another determiner $ya$, having a future interpretation, as seen in (222) and (223), respectively.

(222) $tu_1$ before a time phrase
   a. $Musha=iza$ $tu$ $ikahi$.
      intrns.leave=already Det a.moment
      ‘(He) left just now.’ (Blust 2003:415)
   b. $Numa$ $tu$ $simaq=iza$ $mimpulhiz=iza$ $minatiashaq$.
      then Det next.day=already intrns.wake.up=already intrns.perf.dream
      ‘Then the next day he woke up from dreaming.’ (Blust 2003:740)

(223) $ya_1$ before time phrase\textsuperscript{53}
   a. $Aitiiza$ $ya$ $ikahi$.
      irr.arrive Det a.while
      ‘(He) will come in awhile.’ (Blust 2003:1018)
   b. $Numa$ $ya$ $simaq=iza$ $puapawin$ $patilhaz$.
      then Det next.day=already trns.C.expose.to C.expose.to.the.sun.as.to.dry
      ‘Then the next day (they) would be put out to dry in the sun.’ (Blust 2003:299)

The examples above show that when the determiner $tu_1$ cooccurs with a time phrase, the whole NP functions as a temporal adverbial phrase, having a past interpretation, and implying that the event stated has happened already (definite/realis), as in (222). In contrast, when the determiner $ya_1$ co-occurs with the time phrase as a temporal adverbial,

\textsuperscript{53} A homophonous forms of $ya_2$ functions as the conjunction 'if' or 'when', which introduces irrealis clauses, as illustrated in the following example.

a. $Ya$ $itia$ $sa$ $munay$ $nak$ $a$ $taun$ $mala$,
   if EXIST Det intrns.here 1S.Pos Gen home intrns.stay.a.while
   $pashiga$ $mani$.
   have.shaman.to.worship.or.report.to.ancestors also
   ‘When there is someone coming to my house to stay a while, (we) also ask shamans to report to the ancestors.’ (2.3, Wang 2000)
it has a future interpretation, implying that the event may happen in the future (indefinite/irrealis), as in (223).

5.5.1.5 The determiner *ya*₁

The last determiner is one of the homophonous forms of *ya*. It appears to have an oblique/locative function. As mentioned before, it may cooccur with a time phrase to designate a future (irrealis) interpretation, as illustrated in (223) above, and (224) below.

(224) a. *Amusha=iza yaku ya sagazi.*
   intrns.Irr.go=already 1s.Nom/Abs Det mid.day/noon
   ‘I’ll leave this noon.’ (Blust 2003:1043)

b. *Amaulhza ya simaq.*
   intrns.Irr.snow Det next.day
   ‘It will snow tomorrow.’ (Blust 2003:1037)

In addition, the determiner *ya*₁ may also cooccur with a time phrase, simply expressing a routine/habitual interpretation, as in (225).

(225) a. *Ya shashanu macauw wazaqan maharbuq.*
   Det morning intrns.very lake intrns.foggy
   ‘In the morning the lake is very foggy.’ (Blust 2003:398)

b. *Ya tanlhuan=iza sa qali, uka sa tilhaz,*
   Det evening=already Det weather NEG.EXIST Det sun
   *katdaudauk katshimzaw.*
   gradually become.older
   ‘In the evening, when the sun has gone, it gradually gets colder.’ (Blust 2003:911)
c. *Sa but, ya antu makaligkin, minura ya tusuma.*
   Det body if NEG intrns.healthy intrns.pass.out Det sometimes
   ‘As for the body, if it isn’t healthy, you may sometimes swoon.’ (Blust 2003:855)

Moreover, the determiner *ya* is also found to mark the E of a dyadic imperative intransitive clause, as in (226).

(226) a. *Hadana ita=iza ya azazak.*
    adopt.IMP.intrns 1Pim.N=already Det child
    ‘Let’s adopt a child.’ (Blust 2003:393)

b. *Piakamun=uan=iza ya pania’an.*
    C.intrns.make.spicy.IMP.intrns=POL=already Det vegetable
    ‘Please spice up these vegetables.’ (Blust 2003:1057)

Therefore, these examples illustrate that the determiner *ya* has an oblique/locative function.

5.5.1.6 The determiner *satu*

Thao exhibits a disyllabic determiner *satu*, which appears to be grammaticalized from a combination of the two monosyllabic determiners *sa* and *tu*, as shown in (227).

(227) a. *Ihu miarain makikalhiw satu caw a lalawa.*
    2s.Nom/Abs intrns.a.lot intrns.ask Det Thao Gen language
    ‘You (sg.) ask a lot about the Thao language.’ (Blust 2003:465)

b. *Yaku aminfazaq satu caw a lalawa.*
    1s.Nom/Abs intrns.Irr.learn Det Thao Gen language
    ‘I will be learning Thao.’ (Wang 2000)

c. *Tmazai satu ama wa lalawa.*
    listen.to.IMP.trns Det father Gen speech
    ‘Listen to Father’s words.’ (Weng 2000)

---

328

---

54 The word *tusuma* ‘sometimes’, similar to *sasuma* ‘some people’, appears to be the combination of two forms, the determiner *tu* and the word *suma* ‘some’.
In each of these examples, the determiner satu seems to mark an inanimate possessor. However, further research is required to support this hypothesis.

Having discussed the determiners in Thao, I will now discuss relative clauses in section 5.5.2.

5.5.2 Relative Clauses

A relative clause is a clause that modifies a noun by providing information about its referents. In Thao, relative clauses are either prenominal (i.e., preceding the noun that they modify) or postnominal (i.e., following the noun that they modify), with a ligature a/wa or na2 connected it with the head noun. In addition, they can be verbal or nonverbal (either nominal or prepositional). The primary strategy for forming relative clauses in Thao is to relativize upon the S/O (i.e., the nominative/absolutive NP) and to replace it with a gap in the relative clause. The structure of NP with relative clause as the modifier in Thao can be summarized as in figure 5.28.

55 Although it appears that only S and O can be relativized on, there is one recorded instance in which the adjunct is relativized as in the following example.

a. [RC _ azazak mashupilh ] a taun
[ _ child intrns.learn ] LIG house
'school' (Lit., 'house where children learn) (Blust 2003:350)
5.5.2.1 Verbal relative clauses

Verbal relative clauses (intransitive or transitive) are either prenominal or
postnominal and require a ligature \( a \) or \( na_2 \) to connect them with the head noun.\(^{56}\) In
addition, only S and O (nominative/absolutive NP) can be relativized with the gap
strategy, as illustrated in (228)-(230).

(228) Relativization of the S of a plain intransitive clause

a. \([RC \_ \_ cminanit tilha \_ \_ \] \( \_ \_ \) intrns.perf.cry yesterday \]) \( LIG \) child

‘the child who was crying yesterday’ (Wang 2000)

b. \([RC \_ \_ mabiskaw malalia \_ \_ \] \( \_ \_ \) intrns.fast intrns.run \]) \( LIG \) person

‘the person who is running fast’ (Wang 2000)

c. \([RC \_ \_ mapatalhincakcak \_ \_ \] \( \_ \_ \) intrns.fall.down.all.at.once.in.a.large.quantity \]) \( LIG \) clothes

‘clothes that have fallen down’ (Blust 2003:339)

d. \( sa \ izay a \ azazak a \ [RC \_ \_ miarain shmanash \_ \_ \] \( \_ \_ \) intrns.often intrns.disturb \]

‘that child who is often annoying’ (Blust 2003:646)

\(^{56}\) It appears that prenominal relative clauses occur much more frequently than postnominal ones.

330
e. *kawi a [RC — tinalahan=iza*

   tree LIG [ — perf.fell.AN.intrns=already ]

   ‘the tree which has been felled’ (Blust 2003:308)

f. *hulus a [RC — shinaqish]*

   clothes LIG [ — IN.intrns.perf.sew ]

   ‘the clothes that were sewed’ (Blust 2003:457)

(229) Relativization of the S of an extended intransitive clause

a. [RC — kman fizfiz ] a azazak

   [ — intrns.eat banana ] LIG child

   ‘the child who is eating bananas’ (Wang 2000)

b. [RC — kminaytunu s(a) binanaw’az ] a ayuzi

   [ — intrns.perf.hit Det woman ] LIG man

   ‘the man who hit the woman’ (Wang 2000)

(230) Relativization of the O of a transitive clause

a. [RC — finariw binanaw’az ] a hulus

   [ — trns.perf.buy woman ] LIG clothes

   ‘the clothes that the woman bought’ (Wang 2000)

b. [RC — kay pacayin parhaway ] a fafuy

   [ — hit trns.C.die young.man ] LIG pig

   ‘the pig that the young man killed’ (Wang 2000)

c. [RC — sinaranak ] a saran macuaw madaqri

   [ — trns.perf.walk.ls.actr ] LIG road intrns.very intrns.slippery

   ‘the road that I walked on is very slippery’ (Blust 2003:865)

d. *haya [RC — pinalhuiza yaku ] a buna

   that [ — trns.perf.plant 1S.Erg ] LIG sweet.potato

   ‘those sweet potatoes that I planted’ (Blust 2003:331)

e. [RC — tishqulhaqulhan tu tilhaz ] na shaqish

   [ — trns.TISH.Red.red Det sun ] LIG face

   ‘a face reddened by the sun’ (Blust 2003:813)
5.5.2.2 Nonverbal relative clauses

Nonverbal relative clauses (including nominal and prepositional relative clauses) are intransitive, and may be relativized in the same manner as verbal clauses with a gap strategy. Let us look at examples of nominal relative clauses in (231).

(231) Nominal relative clauses57
a. \([\text{RC } \_ \ \text{Inay } ] \ a \ \text{ranaw sakpin suma.} \]  
   [ _ this.one ] LIG chicken trns.catch.someone  
   ‘Someone caught/is catching this chicken.’ (Lit., ‘Someone is catching the chicken that is this one.’) (Blust 2003:861)

b. \([\text{RC } \_ \ \text{Izay } ] \ a \ \text{aqtalha macua makamun.} \]  
   [ _ that.one ] LIG pork intrns.very intrns.spicy  
   ‘That pork is very spicy.’ (Blust 2003:443)

c. \(\text{Shitusi=}wak \ [\text{RC } \_ \ \text{Lujan } ] \ a \ \text{huruy.} \)  
   intrns.Pst.there=1s.Nom/Abs [ _ Lujan ] LIG friend  
   ‘I went to (my) friend Lujan there.’ (Blust 2003:1025)

As seen here, demonstrative pronouns/deictics (such as inay ‘this one’ in (231)a and izay ‘that one’ in (231)b),58 and proper nouns (such as Lujan in (231)c), are the nominal predicates of the relative clauses, in which the S gap is coreferential with the head noun that they modify.

Similar to nominal relative clauses, prepositional relative clauses also have an S gap coreferential with its head noun, as illustrated in (232).

57 Notice that I treat the nouns before the ligature as nonverbal relative clauses in the examples in (231) and (232), simply based on the fact that prenominal relative clauses occur more frequently than postnominal ones. However, it is also possible that the nouns after the ligature are the relative clause, and that the nouns before the ligature are the heads.

58 See section 5.5.2.4 for more examples of this type.
Prepositional relative clauses

a. Yaku malhuiza \[\text{RC } i \text{ sa ripnu}\] a pazay.
   1S.Nom/Abs intrns.plant \[\text{Loc Det wet.rice.field}\] LIG rice
   ‘I was planting rice in the paddy.’ (Blust 2003:324)

b. \[\text{RC } i \text{ magkaci}\] a taun shunara.
   \[\text{Loc the.other.side}\] LIG house intrns.perf.catch.fire
   ‘The house on the other side burned.’ (Blust 2003:560)

5.5.2.3 “Adjectival” relative clauses

Thao does not have a distinct form class of adjectives. Most descriptive terms may be
unmarked, like nouns, or carry affixation such as the stative morpheme ma- or the
morpheme -in/-an that marks dynamic agentless intransitive verbs, so that an English
structure that contains an adjective usually appears in Thao as a relative clause
construction. The “adjectival” relative clauses can be nominal or verbal, and prenominal
or postnominal. The nominal type of “adjectival” relative clauses can be illustrated in
(233).

(233) “Adjectival” nominal relative clause

a. \[\text{RC } \text{binanau'az}\] a azazak / azazak a binanau’az
   \[\text{female}\] LIG child / child LIG female
   ‘daughter’ (Blust 2003:739, 993)

b. \[\text{RC } \text{ayuzi}\] a azazak / azazak a ayuzi
   \[\text{male}\] LIG child / child LIG male
   ‘son’ (Blust 2003:739)

59 Discussion of the dynamic agentless intransitive \text{-in/-an} construction is presented in section 5.3.1.
60 There are examples in which NPs with an “adjectival” relative clause appear to have idiomatic meanings
as in (a) and (b) below (Blust 2003:832).

a. rima wa ina
   hand LIG mother
   ‘thumb’ (‘mother of the fingers’)

b. rima wa huqi
   hand LIG baby
   ‘little finger, pinky’ (‘baby finger’)

333
As seen above, the “adjectival” relative clauses preceding or following their head nouns are nominals, such as common nouns in (233)a-(233)g, proper nouns in (233)h, and numeral nouns in (233)i.

The other type of “adjectival” relative clause is verbal. The most obvious examples of these relative clauses are those with a stative verb affixed with *ma-*,\(^\text{61}\) as illustrated in (234).

\(^{61}\) The -*um-* affix is also found in such relative clauses, as in the following example.

334
(234) “Adjectival” verbal relative clause with a ma stative verb

a. [RC  _  mapanu] a  parhaway
   [ _  intrs.lazy] LIG young.man
   ‘lazy young men’ (Blust 2003:360)

b. [RC  _  matubu] a  saran
   [ _  intrs.wet] LIG road
   ‘a wet road’ (Blust 2003:1008)

c. [RC  _  mara’in] a  hudun
   [ _  intrs.big] LIG mountain
   ‘a big mountain’ (Blust 2003:822)

d. [RC  _  madamadamat] a  caw
   [ _  intrs.CaRed.calm] LIG person
   ‘a calm/composed person’ (Blust 2003:355)

In addition, not surprisingly, relative clauses with a dynamic agentless intransitive verb, where the S is a theme can also be “adjectival”, as illustrated in (235).

(235) “Adjectival” verbal relative clause with a dynamic agentless intransitive verb

a. sa [RC  _  pinarbu] a  buna
   Det [ _  IN.intrms.perf.bake] LIG sweet.potato
   ‘baked sweet potatoes’ (Blust 2003:677-678)

b. sa [RC  _  pinishqati] a  sazum
   Det [ _  IN.intrms.perf.boil] LIG water
   ‘boiled water’ (Blust 2003:724)

c. sa [RC  _  linuslus] a  shaglaw
   Det [ _  IN.intrms.perf.massage.with.salt] LIG vegetables
   ‘vegetables that have been prepared for preservation by massaging salt into them’ (Blust 2003:519)

d. sa [RC  _  pinishqati] a  [NP [RC  _  matici] a  sazum]
   Det [ _  IN.intrms.perf.boil] LIG [ _  intrms.cold] LIG water
   ‘boiled cool water’ (Blust 2003:724)

a. [RC  _  kunlhir] na  fatu
   [ _  intrs.shatter] LIG stone
   ‘a splintered/shattered stone’ (Blust 2003:478)
Finally, it should be noted that although the ligature *a* is commonly present in relative clauses, it can be optional, as illustrated in Error! Reference source not found..

(236) a. *haya wa fatu (a) [RC — mara’in ] that.one LIG stone LIG [ — intrns.big ]

‘that big stone’ (Blust 2003:335)

b. *afu (a) [RC — pinit’ia ] rice LIG [ — IN.intrns.perf.cook ] intrns.grainy/friable

‘The cooked rice is dry and crumbly.’ (Blust 2003:317)

5.5.2.4 Deictic relative clauses

Deictic relative clauses are those noun phrases in which the head nouns are modified by either nonverbal or verbal deictic relative clauses.\(^\text{62}\) Nonverbal deictic relative clauses are either nominal or prepositional. We have seen examples of nominal deictic relative clauses in section 5.4.1.1. Here are more in (237).

(237) Nominal deictic relative clause


‘This person is very clever.’ (Blust 2003:293)

b. *haya ‘this/that one, here or there’* [RC — Haya ] wa pruq miakulhmulhmuz.

‘That earth was in a lump.’ (Blust 2003:405)

c. *iza(há)y ‘this/that one, here/there’*  

‘That stone is very heavy.’ (Blust 2003:327)

---

\(^{62}\) The discussion of deictics is presented in section 5.4.
d. *isa(há)y* ‘that one, there’

\[
\begin{align*}
Sa & \quad [\text{RC } \text{isay}] \quad a \quad \text{hulus} \quad \text{amarikrik} \quad \text{ifazik}? \\
\text{Det} & \quad [ \quad \text{that} \quad ] \quad \text{LIG clothes} \quad \text{intrns.Irr. irritate} \quad \text{trns.wear.1S.actr}
\end{align*}
\]

‘Why will those clothes irritate my skin when I wear them?’ (Blust 2003:830)

e. *huya* ‘that one far from the speaker, over there’

\[
\begin{align*}
[\text{RC } \quad \text{Huya}] & \quad \text{wa} \quad \text{atu} \quad \text{mahaha}.
\text{Det} & \quad [ \quad \text{that.one} \quad ] \quad \text{LIG dog} \quad \text{intrns.vicious}
\end{align*}
\]

‘That dog is a vicious dog.’ (Blust 2003:819)

f. *izu(hú)y* ‘that one far from the speaker, over there’

\[
\begin{align*}
\text{Ba! } \text{Sa} & \quad [\text{RC } \quad \text{izuhy}] \quad (a) \quad \text{shput} \quad \text{uka=iza} \quad \text{nipinipin}. \\
\text{wow} \quad \text{Det} & \quad [ \quad \text{that.one} \quad ] \quad \text{LIG persons} \quad \text{NEG.EXIST=already} \quad \text{Red.teeth}
\end{align*}
\]

‘Wow! That person over there has no teeth.’ (Blust 2003:1066)

Prepositional deictic relative clauses are also found in Thao, as in (238).

(238) Prepositional deictic relative clauses:

a. *inay* ‘here in/at/on/by X place’

\[
\begin{align*}
\text{sa} & \quad [\text{RC } \quad \text{inay} \quad \text{Zintun}] \quad \text{a} \quad \text{pruq} \\
\text{Det} & \quad [ \quad \text{Loc.here} \quad \text{Sun.Moon Lake} \quad ] \quad \text{LIG ground}
\end{align*}
\]

‘the area here at Sun-Moon Lake’ (Blust 2003:842)

b. *itusi* ‘over there in/at/on/by X place’

\[
\begin{align*}
\text{sa} & \quad [\text{RC } \quad \text{itusi} \quad \text{Lalu}] \quad \text{a} \quad \text{caw} \\
\text{Det} & \quad [ \quad \text{Loc.over.there} \quad \text{Lalu} \quad ] \quad \text{LIG Thao}
\end{align*}
\]

‘Thao people there on Lalu island’ (Blust 2003:404)

Finally, verbal deictic relative clauses can be seen in (239).

(239) Verbal deictic relative clauses: *inay* ‘be here’

\[
\begin{align*}
\text{Manasha sa} & \quad [\text{RC } \quad \text{ininay}] \quad \text{a} \quad \text{shput.} \\
\text{intrns.many} \quad \text{Det} & \quad [ \quad \text{perf.here} \quad ] \quad \text{LIG person}
\end{align*}
\]

‘There were a lot of people here.’ (Lit., ‘The people who were here were many.’) (Blust 2003:1043)

As seen in (239), the relative clause is verbal (because the deictic *ininay* ‘was/were here’
can take the perfective aspect *-in-*, with the S gap coreferential with its head noun *shput*‘person’.

337
5.5.3 Genitive/possessive Noun Phrases

Thao no longer has a distinct genitive NP marker,\(^{63}\) introducing possessive noun phrases, of the type found in most other Formosan and Philippine languages, but uses a homophonous form of the ligature \(a\), that is used for relative clauses. This is possibly an influence from Taiwanese. Consider relative clauses and genitive NPs in Taiwanese, as in (240) and (241).

(240) Relative clauses in Taiwanese

a. Relativization of S of an intransitive clause
   \[
   [\text{RC} \quad \text{khia ti hia} \quad e \quad \text{shiaolian} \quad \text{lang} \\
   \text{stand} \quad \text{Loc there} \quad \text{Rel} \quad \text{young man}
   \]
   ‘the young man who is standing there’

b. Relativization of A of a transitive clause
   \[
   [\text{RC} \quad \text{Ahun beh} \quad e \quad \text{chheh} \\
   \text{Ahun buy} \quad \text{Rel} \quad \text{book}
   \]
   ‘the book Ahun bought’

c. Relativization of O of a transitive clause
   \[
   [\text{RC} \quad \text{Ga Amin} \quad e \quad \text{hit chia gau} \\
   \text{bite Amin} \quad \text{Rel that Cl. dog}
   \]
   ‘the dog that bit Amin’

(241) Genitive/possessive NPs in Taiwanese

a. \text{Ahun e papa}
   \text{Ahun Gen father}
   ‘Ahun’s father’

b. \text{i e kha}
   \text{3s Gen foot}
   ‘his foot’

\(^{63}\) Other Formosan and Philippine languages have a genitive set of clitic pronouns to mark ergative NPs (agent of a transitive verb) and genitive/possessive NPs (possessor of possessed noun), but Thao has lost most of the earlier clitic pronouns (see section 5.2.2.2.1).
As in (240), in Taiwanese, the form used to connect the relative clause and its head noun is e. The same shape is also used to link a possessor and a possessee in possessive noun phrases, as in (241).

Recall that the form to link the head noun and a relative clause in Thao is the ligature a. This form is also used to form genitive/possessive noun phrases, as in (242). Thus, the marking of this type of noun phrase seems to be influenced by Taiwanese.

(242) Genitive/possessive NPs in Thao

a. *Amunay yaku [NP Kilash a taun]*.  
   intrns.Irr.here 1s.Nom/Abs [ Kilash Gen house]  
   ‘I was going to go to Kilash’s house.’ (Blust 2003:825)

b. [NP *Ama wa but*] mindishlum.  
   [ father Gen body ] intrns.IC.green  
   ‘Father is showing a sickly pallor.’ (Lit., ‘Father’s body is becoming green.’)  
   It is a calque of Taiwanese) (Blust 2003:364)

c. *Cicu lhmilhq [NP rima wa kupur]*.  
   3s.Nom/Abs intrns.pull.out [ hand Gen hair ]  
   ‘He/she is pulling out arm hairs.’ (Blust 2003:537)

As seen above, like Taiwanese, Thao uses the same shape a, that links a relative clause and the head noun, to form a genitive/possessive noun phrase as well.

Similar to relative clauses, the possessor (except for a proper noun possessor) can either precede or follow the head noun (the possessed noun). The structure of genitive/possessive noun phrases in Thao can be summarized in figure 5.29.
5.5.3.1 Proper nouns and common nouns as possessors

Genitive/possessive noun phrases typically have proper nouns and common nouns as the possessor of possessed nouns. Proper nouns are commonly used to address and identify particular persons or culturally significant personages or places (Payne 1997). In Thao, both human and nonhuman proper nouns (i.e., personal names and place names) are found as possessors within possessive constructions, with the former taking a preceding optional determiner *ti*, and the latter *sa*, as in (243).

(243) Proper nouns as possessor
   a. *ti* Lujan *a* buhat
      Det.prsn Lujan Gen field
      ‘Lujan’s field’ (Blust 2003:1054)
   b. **buhat *a* ti Lujan
      field Gen Det.prsn Lujan
      ‘Lujan’s field’ (Wang 2000)
   c. *sa* Zintun *a* wazaqan
      Det Sun.Moon.Lake Gen sea/lake
      ‘the lake of Sun-Moon Lake (area)’ (Wang 2000)

Notice that if the proper nouns are preceded by the determiner *ti* preceding them, they can only occur before the possessed noun in a genitive noun phrase in that the determiner *ti*
must be in the initial position of the whole NP when present, and that proper nouns like 
*Lujan* in (243)a should always be associated with it.

A common noun as a possessor can either precede or follow the possessed noun with
the optional determiner *sa* in the initial position of the whole noun phrase, as illustrated in
(244) and (245).

(244) Common noun as a possessor: preceding a possessed noun

a. *Haya wa huqi a qnuan tmutu* [NP *sa ina wa tutu*].
   that LIG baby LIG buffalo intrms.nurse [ Det mother Gen breast ]
   ‘That buffalo calf is nursing from its mother’s breast.’ (Blust 2003:1028)

b. *Cicu kmizkiz* [NP *sa ranaw a rumrum*].
   3s.Nom/Abs intrms.slit.open [ Det chicken Gen intestines ]
   ‘She slit open the intestines of the chicken.’ (Blust 2003:477)

c. [NP *Azazak a shaqish*] miggusum.
   [ child Gen face ] intrms.black
   ‘The child’s face is getting black.’ (Blust 2003:816)

d. *parakaz a baggir*
   parakaz Gen base
   ‘the base of the *parakaz* tree’ (Blust 2003:287)

e. *kawi a filhaq*
   tree Gen leaf.like.appendage
   ‘leaf of a tree’ (Blust 2003:280)

f. *patashan a taun*
   book Gen house
   ‘library’ (Huang 200:62)

(245) Common noun as a possessor: following a possessed noun

a. *Yaku kmangca* [NP *caqi a atu*].
   1S.Nom/Abs intrms.step.on [ shit Gen dog ]
   ‘I stepped in some dog shit.’ (Blust 2003:447)

b. *taun a kakulhum*
   house Gen ant
   ‘anthill’ (Blust 2003:436)
5.5.3.2 Personal possessive pronouns as possessors

Unlike many other Austronesian languages, Thao has already lost a distinct genitively marked form to introduce possessive noun phrases.\(^{64}\) Having lost its earlier genitive clitic personal pronoun set, Thao has replaced it with a set of full possessive pronouns, the equivalent of English ‘mine’, ‘yours’, etc. The full possessive pronouns, like common nouns discussed already, can precede or follow possessed nouns in a possessive/genitive noun phrase, as illustrated in (246) and (247), respectively. Such structures are ambiguous, being interpretable either as possessive/genitive NPs, or as NPs containing a relative clause.\(^{65}\)

\(^{64}\) For example, Kapampangan (Mirikitani 1972:135) expresses the phrase ‘my child’ as follows.

\[ a. \text{ anak}=\text{ku} \]
\[ \text{child}=1\text{s.Gen} \]
\[ ‘\text{my child}’ \]

\(^{65}\) The ambiguous interpretations can also be seen in the following examples.

\[ a. \text{ Lujan} \ a \ \text{huruy} \]
\[ \text{Lujan Gen/LIG friend} \]
\[ ‘\text{Lujan’s friend}’ \text{ or ‘Lujan who is a friend}’ \]
\[ (\text{Wang 2000}) \]

\[ b. \text{ binanau’az} \ a \ \text{azazak} \]
\[ \text{woman Gen/LIG child} \]
\[ ‘\text{the woman’s child}’ \text{ or ‘daughter}’ \]
\[ (\text{Wang 2000}) \]

As seen above, both (a) and (b) can be interpreted either as a possessive/genitive NP, or as an NP containing a relative clause.
(246) a possessive pronoun preceding a possessed noun

a. Possessive NP as S

\[
\text{[NP Cicu a hulus] macuaw maharaqhaq.}
\]
\[
[3s.Pos Gen clothes] intrns.very intrns.loose
\]

‘His clothes are very loose.’ (Blust 2003:397)

b. Possessive NP as O

\[
\text{[NP Mihu a zashuq] shinimul yaku.}
\]
\[
[2s.Pos Gen rice] trns.perf.borrow Is.Erg
\]

‘I borrowed your (sg.) rice.’ (Blust 2003:838)

c. Possessive NP as A

\[
\text{Yaku lhufuan [NP nak a ama].}
\]
\[
\text{Is.Nom/Abs tms.embrace [Is.Pos Gen father]}
\]

‘My father embraced me.’ (Blust 2003:551)

d. Possessive NP as E

\[
\text{Shinaw=uan [NP mita wa rima]!}
\]
\[
\text{wash.IMP.intms=POL [Ipin.Pos Gen hand]}
\]

‘Let’s wash our (in.) hands’ (Blust 2003:912)

(247) Possessive pronoun following a possessed noun

a. Possessive NP as S

\[
\text{[NP Aqur a mihu] tagqaqinqin.}
\]
\[
[hoe Gen 2s.Pos] TAG.Red.shake
\]

‘Your (sg.) hoe is shaky.’ (Wang 2000)

b. Possessive NP as S

\[
\text{[NP Ina wa cicu] patutu sa azazak.}
\]
\[
\text{mother Gen 3s.Pos} \quad \text{C.breast Det child}
\]

‘His mother nursed the child.’ (Blust 2003:1028)

c. Possessive NP as O

\[
\text{Shaggabisan matata wa sazum [NP rima wa nak].}
\]
\[
\text{trns.scald intrns.hot LIG water [hand Gen ls.Pos]}
\]

‘My hands were scalded by hot water.’ (Blust 2003:888)

d. Possessive NP as A

\[
\text{Haya wa azazak uggân [NP ina wa cicu].}
\]
\[
\text{that LIG child trns.leave.behind [mother Gen 3s.Pos]}
\]

‘That child was neglected by his mother.’ (Blust 2003:1032)
e. Possessive NP as E

\[ \textit{Atu smirasiraq} \ [\text{NP } \text{kuskus a nak}]. \]

\[ \text{dog intms.Red.lick} \ [\text{foot Gen 1.s.Pos}] \]

‘The dog keeps licking my foot.’ (Blust 2003:872)

One point to be noted here is that Thao does not make a formal distinction based on the semantic difference such as alienable and inalienable, or inherent and non-inherent possession. In systems of alienable/inalienable possession, there are two (or sometimes more) grammatically distinct kinds of possessor coding. Thao shows no signs of such distinction. Each example in (246) and (247) has exactly the same structure regardless of whether the possessed noun is inherently inalienable, as in (246)c-(246)d and (247)b-e or alienable as in (246)a-b and (247)a.

The genitive form \( a \), like the ligature \( a \) already discussed, may be optional, especially with pronouns as possessors, as in (248) and (249).

(248) Possessive pronoun preceding possessee

a. \[ \text{Aitiza} \ [\text{NP } \text{mihu (a) ama}] \text{mutaun}. \]

\[ \text{Irr.return} \ [\text{2.s.Pos Gen father}] \text{intms.enter.home} \]

‘Your (sg.) father will be coming home.’ (Blust 2003:300)

b. \[ \text{NP Mihu (a) azazak (a) binanau’az} \text{makaina}. \]

\[ \text{[2.s.Pos Gen child LIG female]} \text{intms.resemble.one’s.mother} \]

‘Your (sg.) daughter resembles her mother.’ (Blust 2003:418)

(249) Possessive pronoun following possessed noun

a. \[ \text{Pialhilhilhnit=uan} \ [\text{NP } \text{shaqish (a) mihu}]. \]

\[ \text{C.put.on.a.smile.IMP.intms=POL} \ [\text{face Gen 2.s.Pos}] \]

‘Please put on a sunny face.’ (Blust 2003:538)

\[ \text{66 Semantically, alienable possession is the kind of possession that can be terminated, e.g., I can transfer possession of my worldly goods to someone else; hence my relationship to my worldly goods is one of alienable possession. Inalienable possession is the kind of possession that cannot be terminated. Languages that distinguish inalienable possession typically include kinship terms and body parts within the class of inalienable items.} \]

344
b. *Haya* [\text{NP} \text{gilha (a) mihu}] \text{ladadu.} \\
that \text{[wine Gen 2s.Pos]} \text{little} \\
‘That wine of yours (sg.) is little.’ (Blust 2003:964)

5.5.4 Possessed Relative Clauses

In Thao, a relative clause in which the head noun is possessed requires both the A which is coreferential with the Possessor, as well as the O to be gapped. Various word orders are possible, as schematized in figure 5.30.

![Figure 5.30 Possessed Relative Clauses](image_url)

Normally, when the head of a transitive relative clause is not possessed, an A is present in the relative clause, as discussed in section 5.5.2.1, see examples in (230).

However, when the O of a transitive clause is possessed, and the A of the relative clause is coreferential with the noun which is the possessor of the O, both the A and the O are gapped and various word order possibilities exist, as shown in figure 5.30 (a)-(c). In the
first word order possibility of a possessed relative clause, shown in figure 5.30 (a) and illustrated in (250)a-e, the relative clause appears between the possessor and the O. In the second word order possibility of a possessed relative clause, shown in figure 5.30 (b) and illustrated in (250)f, the order of constituents is reversed, with the O appearing before the relative clause and the possessor appearing after it. In the third word order possibility of a possessed relative clause, shown in figure 5.30 (c) and illustrated in (250)g, the possessor precedes the O and the relative clause follows.

(250) Possessor coreferential with the A gap in the relative clause

a. *nak a [RC hinadana ___] wa atu*
   1s.Pos Gen [ tms.perf.raise ___ ] LIG dog
   ‘my dog (which has been raised by me)' (Blust 2003:393)

b. *nak a [RC pinaluhiza ___] a bukay*
   1s.Pos Gen [ tms.perf.plant ___ ] LIG flower
   ‘my flowers that I planted’ (Blust 2003:315)

c. *cicu a [RC pinintata ___] a pania’an*
   3s.Pos Gen [ tms.perf.cook ___ ] LIG vegetables
   ‘his cooked vegetables’ (Blust 2003:1065)

d. *mihu a [RC pinashizup ___] a lina*
   2s.Pos Gen [ tms.perf.put.around.the.neck ___ ] LIG necklace
   ‘the necklace that you (sg.) put around the neck’ (Blust 2003:922)

e. *ti ama wa [RC pinakintutuz ___] (a) fatu*
   Det.pms father Gen [ tms.perf.C.KIN.pile.up ___ ] LIG stone
   ‘father’s stones that he piled up’ (Blust 2003:1030)

f. *kanin (a) [RC pinit’ia ___] wa nak*
   food LIG [ tms.perf.cook ___ ] Gen 1s.Pos
   ‘my cooked food’ (Blust 2003:905)

g. *nak a pazay (a) [RC pinaluhiza ___]*
   1s.Pos Gen rice LIG [ tms.perf.plant ___ ]
   ‘my rice that I planted’ (Blust 2003:364)
5.6 CONCLUSION

This chapter has provided a sketch of Thao grammar. I have discussed predicational constructions including verbal and nonverbal clauses, noting in particular the variation that has probably resulted from contact with Taiwanese with respect to word order. Nominative noun phrases in both transitive and intransitive sentences commonly now occur preceding the verb. In discussing the pronominal system of Thao, I have argued that a transitive verb may carry actor agreement forms, the first and second person singular -k and -mu, the remnants of ergative clitic pronouns which probably existed in the prehistory of the language. In addition, I have also investigated different types of constructions such as dynamic agentless intransitives, imperative, existential, possessive, negative, causative constructions, and WH-questions, with attention also to some special classes of verbs. Finally, I have dealt with the structure of noun phrases, noting again the influence from Taiwanese, particularly with reference to the neutralization of the distinction between the marking of relative clauses and genitive/possessive constructions. Of course, the discussions here by no means exhaust all the syntactic aspects in Thao. There are still many interesting phenomena, such as complex sentences in Thao that require explanation. However, more data needs to be collected, in order to continue this analysis.
CHAPTER 6

CONCLUSION

The ultimate goal of this dissertation is to provide a thorough description of Thao clause structure. In order to adequately fulfill this goal, it has been essential to determine the canonical transitivity and actancy structure of the language. Therefore, these two fundamental requirements have served as a basis on which the whole study is built.

All previous works on Thao syntax, whether descriptive or theoretical, have recognized the fundamental distinction drawn by Tsuchida (1976) between actor-focus (AF: *m-* verbs) and non-actor focus (NAF: *-in/-an* verbs, i.e., patient-focus, goal-focus, instrument-focus, etc.) verbs. However, they have failed to recognize that the distinction between AF and NAF is actually one of transitivity: NAF verbs are syntactically transitive and AF verbs are syntactically intransitive. As a result, Thao has been analyzed as an accusative or split-ergative language. The two different conclusions stem from the fact that there are two distinct dyadic clause patterns (i.e., dyadic *m-* clauses and dyadic *-in/-an* clauses) that are ambiguous in terms of transitivity in Thao.

In this dissertation, unlike the previous analyses of Thao, I have considered the notion of transitivity, following Hopper and Thompson (1980), to be a combination of the morphological, semantic, and syntactic properties that a clause exhibits. More specifically, in the present study, a transitive verb is defined as a verb with two or more core arguments, exhibiting the signs of high transitivity with reference to morphological, semantic, and syntactic properties. An intransitive verb, on the other hand, is a verb with one or more core arguments, showing signs of low transitivity or intransitivity with reference to morphological, semantic, and syntactic properties. Bearing this concept in
mind, I have demonstrated that although there are two distinct dyadic clause patterns in Thao, only one of them is a canonical transitive construction and the other is an extended intransitive construction. As a result, Thao although heavily influenced by Taiwanese turns out to be neither accusative, nor split-ergative, but exhibits a pure ergative system, contrary to the previous analyses of Thao. Thao ergativity is shown to be manifested in both grammatical relation coding strategies, such as word order and cross-referencing system, as well as in syntactic phenomena with respect to relativization, quantifier association, topicalization, nominalization, clefting, and coordination.

Having determined the nature of Thao transitivity and ergativity, I provided a sketch of Thao grammar. Different predicational constructions were examined, including verbal and nonverbal clauses, noting in particular the two distinct word orders for all predicational constructions, probably resulting from influence from Taiwanese. Now Nominative/absolutive noun phrases in both transitive and intransitive clauses commonly occur preceding the verb, although many examples have been found which still retain the predicate-initial older word order commonly found in other Formosan languages. I have also shown that the Thao pronominal system has been greatly influenced by Taiwanese. As a result, case contrast in most pronouns has been lost. Only remnants of earlier case-marked clitic pronouns are retained. Most of the clitic pronouns have been replaced by free form independent pronouns. An actor agreement system, with first and second person singular -k and -nu, remnants of earlier ergative clitic pronouns is identified for the first time for Thao.

In addition, I have also investigated different types of constructions, including dynamic agentless intransitive constructions, imperative, existential, possessive, negative,
causative constructions, and wh-questions, with attention also to some special classes of verbs. Finally, I have dealt with the structure of noun phrases, noting again the influence from Taiwanese, particularly with reference to the neutralization of distinction between the marking of relative clauses and genitive/possessive constructions. Of course, the discussions here by no means exhaust all the syntactic aspects in Thao. There are still many interesting phenomena, such as complex sentences of Thao, that require explanation. However, more data needs to be collected, in order to continue this analysis.

In conclusion, this dissertation provides a description of a moribund language, with only a handful of old, living speakers, that should be useful not only to the Thao people who wish to study their own language, but also to scholars in the field of Austronesian studies and to general linguists seeking to extend their coverage of linguistic theory to a variety of languages and language types.
APPENDIX: THAO TEXTS

Text 1: *Smapuk Rusaw a Lalawa*

M.catch fish LIG tale

‘A Story of Catching Fish’ (Wang 2000)

(1) *Yaku tu mimparhaway, sminapusapuk sa rusaw.*

M.young.man M.perf.Red.catch Det fish

‘When I became a young man, I used to catch fish.’

(2) *Pasayin lhalhuzu pulhalhuzu.*

use.IN baited.bamboo.fish.trap C.put.out.lhalhuzu.trap.to.catch.fish

‘(I) would use *lhalhuzu* (a kind of trap) to catch fish.’

(3) *Numa ya uka sa lhalhuzu, aminanakan lh Zika*

then if NEG Det M.bamboo.trap

sa a minlhalhuzu.

one LIG M.bamboo.trap

‘If (I) had no *lhalhuzu* (traps), I would weave one (like it) by myself.’

(4) *Tmala sa qaulh, lhikhikin.*

M.cut Det bamboo saw.into.pieces.IN

‘(I) would cut bamboo, (then) saw (them) into pieces.’

(5) *Numa fqatin ya nauran mlalas.*

then break.off.cleanly.IN when do.something.habitually M.peel.off (shave.into.stick)

‘Then (I) would peel them into strips.’

(6) *Numa pasansanin pashaigalhiv.*

then C.heat.IN dry.something.out

‘Then (I) would roast (them) on a fire to dry (them) out.’

(7) *Ya maqalhiw=iza, ararán lh Zika.*

M.dry=already Red.take.AN M.bamboo.trap

‘When (they) were already dry, (I) would take (them) for plaiting.’

(8) *Numa mara sa qruzi pasayin qruzi lh Zika.*

M.get Det a.kind.of.plant use.IN a.kind.of.plant M.bamboo.trap

‘Then (I) would get *qruzi* plants and use them for plaiting.’
(9)  *Numa ya lhminiza=iza, kminilhim sa qurt*
then when M.perf.plait=already M.perf.search.for Det a.kind.of.plant
*a migkalirwarwar.*
LIG M.upper.part.of.the.trap

‘Then after plaiting, I would look for *qurt* plants to make the upper parts of the traps’.

(10) *Lhmiza sa a minilhibu masa a mimpitaw.*
M.plait one LIG M.lower.par.of.trap and LIG M.IC.door

‘(Then I) would plait the lower parts of the traps and the doors.’

(11)  *Numa ya mukaktun=iza lhminiza sa lhibu,*
then when M.fmish=already M.plait Det lower.part.oftrap pashtan=iza putu sa lhibu masa pitaw.
all.AN=already C.put there Det lower.part.of.trap and door

‘Then when the lower parts of the traps were finished being plaited, (I) would place all the lower parts and the doors (in their positions).’

(12)  *Ya mukaktun=iza, shaqishin=iza, numa kalawan sa qaqartin.*
if M.finish=already sew.IN=already then make.AN Det handle

‘When that was finished, I would sew (the parts), and then (I) would make the handles (of the traps).’

(13)  *Mukaktun=iza, kacun=iza pulhalhuzu.*
M.fmish=already bring.IN=already C.put.out.lhalhuzu.traps.to.catch.fish

‘When that was finished, (I) would bring (the *lhalhuzu* traps) and put (them) out to catch fish.’

(14)  *Numa ya faqlhu=uan, niwan tu lamara sa rusaw.*
then when new=still NEG Det LA.M.get Det fish

‘When (they were) still new, they would not yet catch fish.’

(15)  *Ya sasaz=iza isisu=iza ya macuaw mara.*
then M.old=already at.that.time=already when M.very M.get

‘When (they) got old, that would be the time for them to catch well.’

(16)  *Mara sa hukduq, numa shinat numa tatruquz, numa masa sunda*
M.get Det fish.name and fish.name and fish.name then and fish.name
*rusaw masa taur, numa masa palapishaz, alulay, rubisu tawahi...*
fish and fish.name then and fish.name fish.name fish.name fish.name

‘They would catch *hukduq, shinat, tatruquz, sunda, taur, palapishaz, alulay, rubisu,* and *tawahi* fish...’
Numa ya macuaw murimpin sa rusaw, macuaw sa lhalhuzu
then if M.very M.spawn Det fish M.very Det fish.trap
mashtay mara.
M.every/all M.get
‘If fish spawned lots of eggs, all the traps would get a lot (of fish).’

Mapunipunish lhalhuzu sa rusaw.
M.Red.full fish.trap Det fish
‘The traps would be full of fish.’

Numa matinhumhum ya shashanu,
then M.dark when dawning
munruza shmuqm sa lhalhuzu,
M.boat M.check Det fish.trap
‘Then when it was dark in the morning, (I) would steer the boat to check the traps.’

Mashtay mara.
M.every/all M.catch
‘All (the traps) would catch (fish).’

Numa ya shminuqm=iza, matilhfaaz ruza sa rusaw.
then when M.perf.check=already M.half boat Det fish
‘Then after (I) had checked (the traps), the boat would be half-full of fish.’

Macuaw maqaran puqtaqumbash makaruza
M.very M.happy make.a.rejoicing.paddling.sound M.paddle.boat
musha=iza makunataun.
M.go.there=already M.come.home
‘(I) would be very happy paddling the boat (making a) rejoicing sound and (it would be time) to go back home.’

Pasáyin kalala m(p)ataqaz sa rusaw makunataun.
use.IN rice.basket M.carry.on.a.shoulder.pole Det fish M.come.home
‘(I) would use a kalala rice basket to carry the fish and go back home.’

Numa tu shanataun=iza, pisaháyin rusaw a
then when come.home=already C.there.IN fish LIG
pinataqaz, patanasaháyin bukhaz.
IN.perf.carry.on.a.shoulder.pole C.there.IN floor
‘After (I) came home, (I) would put the fish which were carried there on the floor.’
(25) Mulhckiz sa lhqataun a caw mriqaz sa rusaw
M.all.together Det in.the.house LIG people M.see Det fish

‘All the people in the house would see the fish.’

(26) Macuaw mapatigqaran, maqa manasha sa rusaw.
M.very M.celebrate.in.a.joyous.spirit because M.many Det fish

‘(They) would celebrate greatly because there were lots of fish.’

(27) Numa ti apiq mara sa funush tmihas rusaw
then Det.prsn daughter.in.law M.take Det knife M.clean fish

‘Then daughter-in-law would take a knife to clean the fish.’

(28) Numa khiklhitin cicu a pintatan a qilhasun kman.
then Red.cut.IN 3s LIG C.boil.AN LIG exclusively M.eat

‘Then she would cut (them) into chunks to boil for eating.’
Text 2:  *Tu Shinshi Ahafuhafuy Ya Itia Antu Makaymahan a Caw*

\[\text{Det shaman Irr.Red.chant when EXIST NEG M.peaceful LIG person}\]

‘The Shaman Will Chant When There is a Person Who Makes a Disturbance.’

(Wang 2000)

(1)  *Kahiwan a shinshi, ya numa s(a) kalawan,\]*
\[\text{in.the.past LIG shaman if/when something Det do.IN}\]

\[\text{palalawan pulalu.}\]
\[\text{C.call.IN C.worship.ancestors}\]

‘The shamans of old time are called to worship ancestors, when something is being done.’

(2)  *Ya miazy a kmalawa sa kalafqaf,\]*
\[\text{when such.as LIG M.build Det house (under construction)}\]

\[\text{ya kmugqca sa tafiq kmufulh,}\]
\[\text{when M.restore Det roof.of.house M.thatch}\]

\[\text{numa ya kmashiqca sa taun, fariw sa pinuqrum, putaun}\]
\[\text{then when M.remodle Det house M.buy Det thick.cotton.quilt C.house}\]

\[\text{sa 'apiq, ya min'anak, finariw sa fafiy,}\]
\[\text{Det daughter.in.law when M.oneself IN.perf.buy Det pig}\]

\[\text{pashiqa.}\]
\[\text{have.shaman.report.to.ancestors}\]

‘For example, when (we) build houses, restore roof thatching, when (we) remodel houses, buy quilts, (or) let a daughter-in-law into a house, or when (we) are about to become independent from the family (separate from other siblings), or sell pigs, we would have shamans report to the ancestors.’

(3)  *Ya itia sa munay nak a taun mala,\]*
\[\text{If/when EXIST Det M.here Is.Pos Gen home M.stay.a.while}\]

\[\text{pashiqa mani.}\]
\[\text{have.shaman.report.to.ancestors also}\]

‘When there is someone coming to my house to stay a while, (we) also ask shamans to report to the ancestors.’

(4)  *Numa sa i taun, ya antu makaligkin,\]*
\[\text{when one Loc home if/when NEG M.healthy}\]

\[\text{pusaran.}\]
\[\text{ritual.performed.by.shamans.to.ask.the.evil.spirits.to.leave}\]

‘Then if (someone) is not healthy at home, (one) asks (the shaman) to do the *pusaran* ritual.’
(5) *Numa ya pusaran, isay tanarikus hmafiy.*
then when *pusaran* over.there in.the.back M.chant

‘Then when the *pusaran*, ritual is being performed, (the shaman) chants over there in the back (of the house).’

(6) *Numa sa pash’amu masa izay funush pisahayin pash’amu,*
then Det basket and that bush.knife C.there.IN basket

miarain hmafiy.
M.often M.chant

‘Then as for the *pash’amu* basket and the bush knife, (we) put (the bush knife) into the *pash’amu* basket, while the shaman keeps chanting.’

(7) *Numa sa izay baruku putuan sa qafu, pisayin mani pash’amu,*
then Det that bowl C.over.there.AN Det ashes C.there.IN also basket

‘Then (we) put the ashes into the bowl, and put (the bowl) in the *pash’amu* basket, too.’

(8) *Maqa sa izay shinshi mashtay shizuqan sa*
because Det that shaman M.all put.something.around.the.neck.AN Det

ihinuc a nan, numa s(a) izay nan, ya
IN.perf.string LIG nan then Det that nan_necklace when

ashizuqin, hmafiy=uan.
Irr.put.around.the.neck.IN M.chant=still

‘Because all shamans wear a necklace strung with nan, when the nan_necklace is about to be put around the neck, the shaman still chants.’

(9) *Numa ya itia sa miakuza, antu makalingkin, pasayin nan,*
then if EXIST Det M.wrong NEG M.healthy use.IN nan

hmafiy ktiran ladadu a nan, pakan sa azazak.
M.chant pinch.with.fingertips.AN a.little LIG nan C.eat Det child

‘If there is something wrong, (a child) is not healthy, (the shaman) will use the nan, chanting and pinching a little nan to feed the child.’

(10) *Hafuya(i)n, ya antu makaligkin a caw, antu makaligkin a azazak.*
chant.AN if NEG M.healthy LIG people NEG M.healthy LIG child

‘(The shaman) chants over either sick adults or children.’

(11) *Ya antu makaligkin, hafuyin mani ladadu a nan,*
if NEG M.healthy chant.IN also a.little LIG nan

ktiran nan pahazup azazak.
pinch.AN nan feed.with.tongue child

‘If (a child) is not healthy, (the shaman) will chant over a little pinched nan, to tongue-feed him.’
(12) *Numa sa azazak ya piniazicu=iza sa shinshi hmafuy,*
then Det child when perf.C.do.it.like.that=already Det shaman M.chant
*pishqitan=iza, makaligkin=iza, makaymahan=iza azazak.*
C.get.well=already M.healthy=already M.peaceful=already child

‘Once the shaman has chanted over the child in that way, he will get well already, and will be healthy and peaceful.’
Text 3: *Lhmaushin a Kazash*

M.swing LIG festival

'The Festival of the Swings' (Blust 2003:246-247)

(1) *Numa ya pina*duq=iza *kmalawa* sa *lhalhaushin*,
Then when perf.pudaq=already M.make Det swing
*marutaw a lhalhaushin.*
M.tall LIG swing

‘After the *Pudaq* festival (for sowing hill rice) (we) made swings, tall swings.’

(2) *Numa sa caw mashtay=iza mukaktun=iza malhuiza sa*
then Det people M.all/every=already M.finish=already M.plant Det
*lhqaribush a pazay.*
things.of forest LIG rice

‘It was when everyone would have finished planting the hill rice.’

(3) *Numa mulhckiz sa caw musun musaháy yanana* sa *lhalhaushin.*
then intrns.all Det people M.gather M.there EXIST Det swing

‘Then all the people would gather together, going to the swing place.’

(4) *Muriut mashtay kmacu sa* *lhqaribush a sinapuk*
M.crowd.around M.all/every M.bring Det live.in.forest LIG INperf.catch
*a lhqaribush a aqtalha, numa mu-sun iatu mashtay*
LIG live.in.the.forest LIG meat then M.gather there M.every
*kman aqtalha.*
M.eat meat

‘Everyone crowded around (the swings), brought the meat caught in the forest, and gathered there eating meat.’

(5) *Numa ya itta sa pinigqilha tu caw a qil*ha, *ansunin isaháy*
then if EXIST Det IN.perf. C.wine Det person LIG wine gather.IN there
yanan lhalhaushin miqilha.
EXIST swing M.drink

‘If there was wine that a Thao person had made, (we) gathered (the wine) at the swings to drink.’

(6) *Yanan sa lhmaushin, yanana sa miqilha matigqaran iatu,*
EXIST Det M.swing EXIST Det M.drink M.merry there
*mapatigquyash.*
M.Coll.sing.in.unison

‘Some were swinging, others were drinking, making merry and singing together.’
(7) Numa sa parhaway ya niwan tu minara sa binanau'az iitu, then Det young.man if NEG Det M.perf.get Det wife there ya matqal sa a minmitawabinanau'az.
YA M.mark one LIG M.ours.Gen.wife
‘Then any young man who hadn’t yet chosen a wife there marked his wife-to-be.’

(8) Numa sa dadü qazi ‘maniun parhaway ya tima sa kadadu’un then Det chief said 2p young.man if who Det desire.IN
ihu a binanau’az, shunasahay ihu lha-lhaushin palhaushin.
2s.Pos Gen wife pull.there 2s swing C.swing
‘Then the chief said, ‘You young men, whoever you find suitable as a wife, pull her over there to the swing and make her swing with you.”

(9) Ya muapaw lhmaushin, mihu=iza wa aminbinanau’az.
if M.come.out M.swing 2s.Pos=already LIG Irr.M.wife
‘If (she) comes out to swing, (she) will become your wife.’

(10) Numa sa suma macuaw ya itia sa shinuruz mashtay kmay then Det someone M.very if EXIST Det IN.perf.pull M.everyone M.hit
pakpak matigqaran.
clap M.merry
‘And if someone was really pulled (to the swing) everyone clapped and celebrated.’

359

(1) 

Kahiwan tata wa taun a caw latusha sa parhaway numa sa
before one LIG house LIG person L.A.two Det young.man then Det
ama'ina miaqawan itia.
parents M.still EXIST

‘Once upon a time, in a house, there lived two brothers with (their) parents who were still alive.’

(2)

Macuaw latusha wa minlhafut mapaqaqitan.
M.very L.A.two LIG sibling M.get along well

‘They got along well.’

(3)

Mashtay=iza sa izaháy a parhaway minara sa binanau’az,
M.every=already Det that LIG young.man M.perf.take Det wife
numa mashtay=iza yanan sa azazak.
then M.every=already EXIST Det child

‘Each young man was married, and had children.’

(4)

Numa tu ikahin amakashiqca sa taun.
then Det a.while Irr.M.build.an.extension.on.a.house Det house

‘Then, after awhile (they) would renovate the house.’

(5)

Numa sa izaháy a parhaway kmilhim izaháy a kawi a mintaun.
then Det that LIG young.man M.search that LIG wood LIG M.make.house

‘So these two young men went to search for wood to make a house.’

(6)

Mutusi tanasaya kan tatusha, mriqaz sa kawi.
M.there uphill step TA.two M.see Det tree

‘The two (of them) went up into the mountains (and) spotted a tree.’

(7)

Numa tu itia sa riniqazan cicu a kawi, lhikhilkhin cicu
then when EXIST Det perf.see.AN 3s LIG wood saw.IN 3s
puntunug, lhintutunin cicu.
C.fall.down LHIN.cut.horizontal 3s

‘Then when they spotted some wood, (they) sawed it until it toppled to the ground, and cut it into cross sections,’

(8)

Numa simaq=iza kmacu=iza maquliush a lhalkihik
then next.day=already M.bring=already M.big LIG saw

‘And the next day they brought a long saw.’
And (they) cut that wood into small sections lengthwise to make houseposts and to make walls.

For several days the two brothers made frequent trips up the mountain, sawing away at the tree which was to become their house.

When they went there to saw that wood, they would take their lunch basket.

And at noon they would eat from it.

They stood the logs for making the house upright to saw them.

And (they) sawed (the logs) for several days.

Then (one day) after they sawed the logs, without completing the work, they stopped to eat lunch.
Numa izaháy a kawi lhinklhik caycuy pasizan cicu sa izaháy
then that LIG wood IN.perf.saw 3p wedge.AN 3s Det that
lhinklhikan a sara, kanuniza ya antu pasizan, niza tu
perf.saw.AN LIG path or.else if NEG wedge.AN NEG Det
maqitan ya lhiklhikin.
M.good if saw.IN

‘As for the wood that they were sawing, (they) wedged it open it in the course of
sawing, since otherwise it would close up.’

Numa caycuy tu kmnsaqazi kman izaháy caycuy shirshir
then 3p when M.perf.eat.lunch M.eat there 3p on.the.side
mapakalhus=uan.
M.Coll.sleep=a.while

‘Then after they ate lunch they took a nap there at the side of the log.’

Numa tu itiza sa izaháy manasha wa rucun musaháy yanan caycuy
then when arrive Det there M.many LIG monkey M.there place 3P
lhinklhik a kawi.
IN.perf.saw LIG wood

‘Then a troupe of moneys arrived, coming to the place they had been sawing
wood.’

Matigqaran caycuy iutu, mrigaz lhinklhik caycuy a kawi, iutu
M.merry/play 3p there M.see IN.perf.saw 3p LIG wood there
cicu matinhina sa lhalklhik.
3s M.play.with Det saw

‘Playing around, they saw the wood that had been sawed, and started to play with
the saw there.’

Numa sa latusha wa minlhafut miqawan m(k)alhus, numa sa izaháy
then Det LA two LIG brother M.still M.sleep then Det those
a rucun manshaish caycuy iutu latusha mapashashuruz lhinklhik
LIG monkey M.take.turn 3p there LA two M.Coll.push M.saw
sa kawi.
Det wood

‘As the two brothers dozed on, the monkeys took turns, two pushing together to
saw the wood.’

Migqaray sa latusha m(k)alhus, numa sa rucun miggaray
M.long.time Det LA two M.sleep then Det monkey M.long.time
matinhina sa lhalklhik.
M.play.with Det saw

‘While the two brothers were sleeping, the monkeys were playing with the saw.’
(22) *Numa sa tata wa rucun, izaháy pinasiz izaháy a kawi shururun* then Det one LIG monkey that wedge that LIG wood pull.IN cicu.
3s
‘Then one of the monkeys pulled the wedge from the wood.’

(23) *Numa sa rucun a fatu qpitin izaháy a kawi.*
then Det monkey LIG stone (testicle) pinch.IN that LIG wood
‘Then the log snapped shut on its testicles.’

(24) *Numa izaháy a rucun macuaw makaqiaqia, numa sa suma wa* then that LIG monkey M.very M.cry.out then Det other LIG rucun muiatu a mashuzay, minshuz qumpit rucun a fatu.
monkey M.there LIG M.separate M.increase M.pinch monkey Gen stone
‘Then he cried out badly and other monkeys went there to separate him, but only squeezed his testicles harder.’

(25) *Numa izaháy latusha wa minlhafut pansaqazi mimpulhiz* then Det those LA two LIG brother take.a.noon.nap M.wake.up
maqa sa izaháy a rucun, qpitin sa kawi cicu a fatu.
because Det that LIG monkey pinch.IN Det wood 3s.Pos Gen stone
‘The brothers awoke from their afternoon nap because the monkey’s testicles were snapped by the log.’

(26) *Numa latusha minlhafut malalia makunasay mriqaz caycuy a* then LA two LIG brother M.run M.there M.see 3p.Pos Gen lhniklhik a kawi.
IN.perf.saw LIG wood
‘Then the two brothers ran to see the log they had been sawing.’

(27) *Numa izaháy a rucun macuaw makaqiaqia numa sakpin* then that LIG monkey M.very M.cry.out then catch.IN latusha wa minlhafut.
LA two LIG brother
‘Then the monkey was howling terrifically and then was caught by the two brothers.’

(28) *Numa rucun a rima quequcan latusha wa minlhafut.*
then monkey LIG hand tie.AN LA two LIG brother
‘And the two brothers tied the monkey’s arms.’
Meanwhile some of the monkeys on the side just watched the monkey that was tied.

That evening the brothers took a break from sawing to go home.

They carried the monkey intending to kill it on returning home.

And when they left, all of the monkeys even including the babies followed them.

All of those monkeys cried together following.

Then the younger brother said, ‘Don’t keep it captive, because all the monkeys are crying.’

The elder brother did not agree with his younger brother, so the two of them began to get angry with each other.
But the younger brother felt compassion for the monkey because they were following after them weeping.'

And that younger brother was still angry.'

He untied the monkey and let him go.'

When he arrived home he told the story to his parents, who said, ‘Don’t capture them; they are like us humans, with the same kind of face.’

‘Then two days later they went back again to saw their wood.’

‘And in the place where they were sawing there were a lot of funfun fruits which had been gathered by the monkeys to give as gifts to the brothers who had been sawing wood there.’
When the brothers saw it they exclaimed, 'What is that pile?'

Then they used their hands to lift up the funfun fruits.

And they spoke to each other, saying, ‘Perhaps they were given to us by the monkeys.”

The two of them really rejoiced to see so many funfun fruits.

The night they took the fruit home.

And when they arrived, their parents asked them, ‘Who gave you the fruit?’

And the brothers answered saying, ‘(They) belonged to the monkey, he gave and put (them) in the place where we were sawing wood. He gathered (the fruit).’
Then their parents lectured them, saying, 'Let us not eat the flesh of monkeys, it is taboo to eat.'
Text 5: *Yaku kahiwan pitu a qamishan*

1s before seven LIG age

“When I was Seven Years Old Before” (Wang 2000)

(1) *Yaku kahiwan pitu a qamishan, mutusi yaku Shtafari shmupilh.*

1s before seven LIG age M.there 1s Tou.She M.study

“When I was seven years old before, I went to Tou-She to study.”

(2) *Numa ya itiza yaku, migqaraqaran.*

then when return 1s M.play.with.something

“When I returned (from school), (I) would play ‘doll-house’.”

(3) *Pin'apuy yamin, pasáyín riaz pit’ia.*

C.fire 1pex use.IN shell cook

“We would start a fire and use a shell (as a pan) to cook with.”

(4) *Mutusi yaku ribush kigqati shiqish a kati.*

M.over.there 1s forest pick.up/collection.bamboo.shoot kind.of.bamboo LIG shoot

“(We) would go to the forest to collect *shiqish* bamboo shoots.”

(5) *Itiza yaku pintata s(a) qati a ktalha s(a) afu.*

return 1s C.boil Det bamboo.shoot LIG.Comp eat.as.side.dish Det rice

“I would come back to boil the bamboo shoots to eat with rice.”

(6) *Ti ina uka i taun, mutusi dawaz smapuk rusaw.*

Det.prsn mother NEG.EXIST Loc home M.over.there fishnet.shed M.catch fish

“My mother would not be at home; (she) would go to the fishnet shed to catch fish.”

(7) *Numa i taun yaku opit’ia, numa amakaru nu s(a) zashiq then Loc home 1s intrns.cook then Irr. M.pound.in.a.mortar Det husked.rice a kacun ti ina mutusi dawaz a kanin caycuy.*

LIG bring.IN Det.prsn mother M.over.there fishnet.shed LIG eat.IN 3p

“Then I would cook at home, and I would pound husked rice for Mother to bring to the fishnet shed there for them to eat.”

(8) *Numa ti ina itiza mutaun kmacu rusaw a then Det.prsn mother return M.home M.bring fish LIG.Comp ktalha yamin.*

eat.as.side.dish.with.rice 1pex

“Then Mother would come home and bring fish for us to eat with rice.”
Then we would come home to get husked rice.'

'Then my father would check the fish traps (to see if any fish had been caught).'

'Then my mother would go net fishing.'

'Then if someone would buy the fish, (we) would take the money to buy clothes.'

'(We) would sell the fish to Chinese people, and would take the money to buy quilts, to buy salt, sugar, to buy raincapes, to buy hats, to buy shoes, and to buy fabric to be made into clothing.'

'Very hard-working.'
Text 6: The Life of Thao People in the Old Times (Wang 2000)

(1) *Kahiwan yamin azazak=uan masa rima ya kman.*

old.times 1Pex child=still M.use hand when M.eat

‘When we were still children before, we would use (our) hands when eating.’

(2) *Afu ya malhalhas=iza, surizin pusäyin fashu.*

rice if M.cooked=already pour.IN C.heat.IN basket

‘If the rice was cooked already, (we would) pour and put (it) in a basket.’

(3) *Numa rusaw a ktalhan yamin pasansanin yamin.*

then fish LIG eat.as.side.dish.with.rice.IN 1Pex C.heat.IN 1Pex

‘Then we would roast the fish that we would eat as a side dish with the rice.’

(4) *Numa pusäyin baruku, lhimpania’anin, putuan shnir, qtilha numa suksuk.*

then C.heat.IN bowl mix.vegetables.IN C.there.AN salt and ginger

‘Then (we would) put them in a bowl, mix (them) with vegetables, and put soup, salt and ginger in (them).’

(5) *Fizuñizuqin, macuaw kumbuqciw kman.*

make.eating.sound.IN M.very KUN.full M.eat

‘(We would) eat noisily and get very full.’

(6) *Ya tanhuan=iza, musuy yanan mulhckiz=iza yamin malhus.*

when evening=already M.there bed M.all=already 1Pex M.sleep

‘When it was evening already, we would all go to bed to sleep.’
REFERENCES


Blust, Robert A. 1999a. Subgrouping, circularity and extinction: Some issues in Austronesian comparative linguistics. In *Selected papers from the Eighth


376


*Indiana University Publications in Anthropology and Linguistics Memoir* 19.


Baltimore: Waverly Press.


Amsterdam and Philadelphia: John Benjamins.


379


Reid, Lawrence A. 2002b. Philippine languages in focus and out of focus. Guest lecture handout. The syntax of Ergative Languages, Department of Linguistics, University of Hawai‘i, September 17, 2002.


385


388