

The Grammatical Realization of Temporal Expressions in Tsou

Chia-jung Pan

2010
LINCOM EUROPA

Published by LINCOM GmbH 2010.

LINCOM GmbH
Gmunder Str. 35
D-81379 Muenchen

LINCOM.EUROPA@t-online.de
www.lincom-europa.com

webshop: lincom.eu

All rights reserved, including the rights of translation into any foreign language. No part of this book may be reproduced in any way without the permission of the publisher.

Printed in E.C.
Printed on chlorine-free paper

Die Deutsche Bibliothek - CIP Cataloguing-in-Publication-Data

A catalogue record for this publication is available from Die Deutsche Bibliothek (<http://www.ddb.de>)

LINCOM EUROPA academic publications
are a product of LINCOM GmbH.

To the memories of Hsien-hua Pan Huang (1925-1980)

Wan-te Pan (1925-1983)

and Lien-tzu Huang Tai (1922-2007).

**I wish all the earthly human beings could be a little more eternal
and live in perpetual happiness.**

ACKNOWLEDGEMENTS

Of the many people I would like to thank for their advice, enthusiasm, and encouragement, I should mention Dr. Henry Yungli Chang first. His attitudes towards linguistics and his tireless assistance as my thesis supervisor have provided me with standards of rigor and diligence. I am really fortunate to have a teacher like him. My deepest gratitude also goes to Professor Elizabeth Zeitoun for her patience, inspiration, enduring encouragement, and academic supports. I am truly fortunate to meet an Austronesian linguist like her. From Dr. Niina Ning Zhang and Professor Dylan Wei-tian Tsai who are also the members of my master thesis committee, I have learned a great deal to look for solutions that attempt the ‘whys’ and not just the ‘hows’.

I am greatly thankful to Professor Alexandra Y. Aikhenvald and Professor R.M.W. Dixon, for their encouragement and support in publishing my thesis.

I am also indebted to the following linguists for their generous academic sharing: Dr. József Szakos, Dr. Joy Wu, Dr. Marie M. Yeh, and Dr. Stacy Fang-ching Teng.

I gratefully acknowledge financial support for field trips and fieldwork expenses from the National Science Council in Taiwan (NSC 95-2411-H-001-014, a project which is directed by Dr. Henry Yungli Chang).

I am truly grateful to my informants, in particular, Pasuya ‘e Tiaki’ana and Paicu ‘e Tosku for their patience and hospitality during the period of data collection.

My three years at National Chung Cheng University have been an exciting and interesting experience. I am thankful to all my classmates, Hui-ju Chuang, Chien-hung Lin, Chih-wei Chang, Yun-wei Lee, Yu-guang Ko, Tsung-ying Chen, Shih-chun Kuo, Fang-yu Lin, Ju-ching Hsiao, and especially Hui-shan Kao for going through this long process with me; misery loves company. I have also profited a lot from discussions on Austronesian linguistics with the following senior graduate students: Chun-ming Wu, Yu-ying Su, and Chao-lin Li. I also thank the following senior graduate students for their help over the years: Peggy Hsieh, Chien-pang Wang, and Shiou-Fen Su. Many thanks also go to all the junior graduate students for their help during the period of the Fourth Workshop on Formal Syntax & Semantics (FOSS-4).

Thanks are also due to Dr. Anjum Saleemi, Dr. Chiu-Yueh Lai, Dr. Loren Billings, Dr. Mary Wu, Dr. Lyih-Peir Luo, Yin-tung Wang, Pei-yi Hsiao, Carla Chuang, and Yi-chia Huang for their constant help during my stay at NCNU.

My family have been of invaluable support over the years. I am immensely indebted to my dearest parents, Jhen-wang Pan and Siu-ying Huang, for bringing me

up and giving endless love all the time. I am truly grateful to my sisters, Yan-fen Pan, Shu-wan Pan and Shu-ju Pan, for their understanding and for their contributions to the family. I am also thankful to my deceased family members, Shu-yi, Shu-er and Syong-syong for showing me the meaning of life and the meaning of love. This thesis is dedicated, with love, to all of them.

ABSTRACT

This study proves an in-depth investigation of the grammatical realization (including semantic functions, temporal markers, grammatical roles, grammatical categories, and syntactic relationships) of temporal expressions in Tsou, an Austronesian language of Taiwan. Temporal expressions examined in this study are based on Haspelmath's (1997) classifications of time adverbials and, meanwhile, with the addition of *frequency expressions* and *miscellaneous temporal expressions*, in order to scrutinize the semantic functions and their corresponding markings. Among the twenty-three subtypes of semantic functions, it is found that five temporal markers are employed in the markings with different types of semantic functions of temporal expressions: *ne-*, *ho-*, *ta*, *to*, and *no*. Besides, some semantic functions of temporal expressions in Tsou even take the form of *ne* or *ho* clause. These five markers and the *ne* or *ho* clause possess their own distinguishing temporal characteristics. It is also shown that the markers *ta*, *to*, and *no* are virtually oblique case markers, thereby suggesting that in addition to spatial and psychological distinctions, case markers in Tsou can distinguish temporal meanings as well.

Following Croft's (1991) function-indicating morphosyntax, it is shown that the categorial statuses of twenty-three subtypes of temporal expressions fall under the grammatical categories *verb* and *noun*. This analysis challenges the claim that adverbial concepts tend to be realized as verbs in Formosan languages (Starosta 1988). Nevertheless, the analysis towards *frequency expressions* is largely consistent with Zeitoun (1992) and H. Chang (2004); that is to say, frequency expressions surface as verbs.

Given idiosyncratic distributional properties, temporal expressions in Tsou can be divided into three groups. In group one, temporal expressions projected as NP and CP are restricted to occur in the position immediately before the subject, in the sentence-initial position, and in the sentence-final position. In group two, temporal expressions projected as VP are constrained to follow the preverb and simultaneously precede the main verb. In group three, the temporal expressions projected as TP are restricted to precede or follow the *ho/ne* clause. In addition, following Lehmann (1988) and Diessel (2001), temporal expressions in Tsou involving bi-clausal constructions (projected as CP (group one) and TP (group three)) are in a relation of clause linkage *subordination*, which is further treated as ADV-clause rather than COMP-clause and REF-clause.

This study organized as follows. Chapter one introduces the background of this study. Chapter two provides a sketch of Tsou grammar. Chapter three scrutinizes the

semantic functions and the markers of each of the temporal qualifications in Tsou. Chapter four discusses and analyzes the syntax of temporal expressions in Tsou, including grammatical roles, grammatical categories, and syntactic functions of temporal expressions. Finally, chapter five concludes this study.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	i
ABSTRACT.....	iii
TABLE OF CONTENTS.....	v
LIST OF TABLES.....	xi
LIST OF FIGURES.....	xiii
LIST OF ABBREVIATIONS.....	xiv
CHAPTER ONE: INTRODUCTION.....	1
1.1 General Background.....	1
1.2 The Tsou Language.....	2
1.3 Motivation and Research Questions.....	5
1.4 Data Sources.....	9
1.5 Organization of the Study.....	10
CHAPTER TWO: A SKETCH OF GRAMMAR IN TSOU.....	11
2.1 Introduction.....	11
2.2 The Phonemic Inventory and Orthography.....	11
2.3 Word Order.....	13
2.3.1 Basic Word Order.....	13
2.3.2 Word Order Variation.....	14

2.3.2.1 Topicalization.....	15
2.3.2.2 Equational Sentences.....	16
2.3.2.3 Double Object Constructions.....	18
2.4 Case Marking System.....	19
2.5 Pronominal System.....	23
2.5.1 Personal Pronouns.....	23
2.5.2 Demonstrative Pronouns.....	26
2.5.3 Possessive Pronouns.....	27
2.6 Focus System.....	28
2.7 Negations.....	29
2.8 Questions.....	32
2.8.1 Yes-no Question.....	32
2.8.2 Alternative Question.....	33
2.8.3 Wh-word Question.....	33
2.9 A Brief Introduction of Temporal Interpretations in Tsou.....	35
2.9.1 Tense.....	36
2.9.2 Aspect.....	41
2.9.2.1 Inchoative Aspect: <i>cu/c'u</i>	42
2.9.2.2 Change of State Aspect: <i>cu/c'u</i>	42
2.9.2.3 Continuous Aspect: <i>n'a</i>	42
2.9.2.4 Perfective Aspect: <i>cu/c'u</i>	43
2.9.2.5 Habitual Aspect: <i>la</i>	43
2.9.2.6 Experiential Aspect: <i>la</i>	43
2.9.3 Verb Types.....	44
2.10 Summary.....	46

CHAPTER THREE: THE SEMANTIC FUNCTIONS AND THE

MARKERS OF TEMPORAL EXPRESSIONS IN TSOU48

3.1 Introduction.....48

3.2 What Is TIME48

3.3 Categorization of Temporal Expressions49

3.4 Categorization of Temporal Expressions Based on Semantic Functions.....51

3.5 Temporal Expressions in Tsou Based on Semantic Functions.....55

 3.5.1 Location in Time55

 3.5.1.1 Simultaneous Location55

 3.5.1.1.1 Hour56

 3.5.1.1.2 Day Part56

 3.5.1.1.3 Day64

 3.5.1.1.4 Month67

 3.5.1.1.5 Season70

 3.5.1.1.6 Year74

 3.5.1.1.7 Festival.....76

 3.5.1.1.8 Interim Summary and Cross-linguistic Evidence ...79

 3.5.1.2 Sequential Location83

 3.5.1.2.1 Anterior84

 3.5.1.2.2 Posterior88

 3.5.1.2.3 Interim Summary.....93

 3.5.1.3 Sequential-durative Location93

 3.5.1.3.1 Anterior-durative94

 3.5.1.3.2 Posterior-durative96

 3.5.1.3.3 Interim Summary and Cross-linguistic Evidence...98

3.5.1.4 Temporal Distance	100
3.5.1.4.1 Distance-future	100
3.5.1.4.2 Distance-past	103
3.5.1.4.3 Interim Summary and Cross-linguistic Evidence.....	105
3.5.2 Temporal Extent.....	107
3.5.2.1 Atelic Extent.....	107
3.5.2.2 Telic Extent.....	112
3.5.2.3 Interim Summary	115
3.5.3 Summary of Location in Time and Temporal Extent.....	115
3.5.4 Frequency Expressions	117
3.5.4.1 Quantifying Frequency Expressions	118
3.5.4.2 Cardinal Frequency Expressions	121
3.5.4.3 Proportional Frequency Expressions.....	123
3.5.4.3.1 Proportional High Frequency Expressions.....	123
3.5.4.3.2 Proportional Medial Frequency Expressions	126
3.5.4.3.3 Proportional Low Frequency Expressions	128
3.5.4.4 Interim Summary	129
3.5.5 Miscellaneous Temporal Expressions	130
3.5.5.1 Durational Temporal Expressions	131
3.5.5.2 Punctual Temporal Expressions	133
3.5.5.3 Sequential Temporal Expressions.....	135
3.5.5.4 Repetitive Temporal Expressions.....	137
3.5.5.5 Others.....	139
3.5.5.6 Interim Summary	141
3.6 Summary.....	142

CHAPTER FOUR: THE SYNTAX OF TEMPORAL EXPRESSIONS IN	
TSOU	145
4.1 Introduction	145
4.2 Previous Studies on Temporal Expressions	145
4.2.1 Previous Studies on Temporal Expressions in the World's Languages	
.....	146
4.2.2 Previous Studies on Temporal Expressions in Formosan Languages	
.....	149
4.3 Grammatical Roles of the Markers of Temporal Expressions in Tsou	155
4.3.1 Grammatical Roles of <i>ta+X⁰/to+X⁰/no+X⁰</i>	155
4.3.2 Grammatical Roles of <i>ne+X⁰/ho+X⁰</i> and <i>ne+XP/ho+XP</i>	160
4.4 Grammatical Categories.....	162
4.4.1 Previous Studies on Grammatical Categories.....	163
4.4.1.1 The Nature of Grammatical Categories.....	163
4.4.1.2 Criteria for Categorizing Words	165
4.4.1.3 Previous Studies on Grammatical Categories in Tsou	167
4.4.2 Grammatical Categories in Tsou	169
4.4.2.1 Characterization of Nouns in Tsou.....	170
4.4.2.2 Characterization of Verbs in Tsou	172
4.4.2.3 Categorial Status of Temporal Expressions in Tsou.....	175
4.4.2.3.1 Simultaneous Locations as Nouns	175
4.4.2.3.2 Sequential Locations as Nouns	178
4.4.2.3.3 Sequential-durative Locations as Verbs	179
4.4.2.3.4 Temporal Distances as Nouns	181
4.4.2.3.5 Temporal Extents as Verbs	183
4.4.2.3.6 Interim Summary.....	184

4.4.2.3.7 Frequency Expressions as Verbs.....	185
4.4.2.3.8 Miscellaneous Temporal Expressions as Nouns and Verbs	189
4.4.2.3.9 Interim Summary	194
4.5 The Syntactic Relationships of Temporal Expressions in Tsou	196
4.5.1 The Distribution of Temporal Expressions in Tsou	196
4.5.1.1 The Contexts Where Temporal Expressions Occur.....	196
4.5.1.2 The Contexts Where Temporal Expressions Do Not Occur	201
4.5.1.3 Interim Summary	204
4.5.2 Explaining the Distribution of Temporal Expressions in Tsou	205
4.5.2.1 Mono-clausal or Di-clausal?.....	205
4.5.2.2 Coordination or Subordination?	208
4.5.2.3 ADV-clause, COMP-clause or REL-clause?.....	212
4.6 Summary	216
CHAPTER FIVE: CONCLUSIONS	221
REFERENCES	224

LIST OF TABLES

Table 1.1 Background Information of the Informants	10
Table 2.1 Chart of Consonant Phonemes in Tsou	12
Table 2.2 Chart of Vowel Phonemes in Tsou	12
Table 2.3 Chart of Orthography and Phonemes in Tsou	13
Table 2.4 Case Markers in Tsou	20
Table 2.5 Personal Pronouns in Tsou	24
Table 2.6 Demonstrative Pronouns in Tsou	26
Table 2.7 Possessive Pronouns in Tsou	27
Table 2.8 Focus System in Tsou	28
Table 2.9 Negation System in Tsou	30
Table 2.10 Wh-words in Tsou	34
Table 2.11 Tense Forms Based on Reichenbach's Analysis	37
Table 2.12 The Tense and Aspect System in Tsou	38
Table 2.13 Temporal Properties of Verb Types	44
Table 3.1 Semantic Functions of NP-based Time Adverbials	54
Table 3.2 Summary of Markers of Location in Time: Simultaneous Location	80
Table 3.3 Summary of Markers of Location in Time: Sequential Location	93
Table 3.4 Summary of Markers of Location in Time: Sequential-durative	98
Table 3.5 Summary of Markers of Location in Time: Temporal Distance	106
Table 3.6 Summary of Markers of Temporal Extent	115
Table 3.7 Summary of Markers of Temporal Expressions in Tsou: Location in Time and Temporal Extent	116
Table 3.8 Summary of Markers of Frequency Expressions in Tsou	130
Table 3.9 Summary of Markers of Miscellaneous Expressions in Tsou	142

Table 3.10 The Semantic Functions and the Markers of Temporal Expressions in Tsou	144
Table 4.1 The Distribution of Case Markers.....	156
Table 4.2 The Distribution of Case Markers Involving Temporal Distinctions.....	158
Table 4.3 The Morphological Markings of Temporal Clauses in Tsou.....	161
Table 4.4 Function-indicating Morphosyntax.....	166
Table 4.5 English Examples of Marked and Unmarked Correlations	167
Table 4.6 Grammatical Categories of Location in Time and Temporal Extent in Tsou	185
Table 4.7 Grammatical Categories of Frequency Expressions and Miscellaneous Temporal Expressions in Tsou	195
Table 4.8 Distributional Properties of Temporal Expressions in Tsou.....	205
Table 4.9 Criteria Distinguishing Adverbial, Complement, and Relative Clauses	213
Table 4.10 Syntax of Location in Time in Tsou.....	218
Table 4.11 Syntax of Temporal Extent and Frequency Expressions in Tsou	219
Table 4.12 Syntax of Miscellaneous Temporal Expressions in Tsou.....	220

LIST OF FIGURES

Figure 1.1 The Genetic Subgrouping of Proto-Austronesian and the Tsou Language ..4	
Figure 1.2 The Genetic Subgrouping of Austronesian Languages4	
Figure 3.1 The Time Line49	
Figure 3.2 Categorization of Temporal Expressions.....51	
Figure 3.3 Classification of NP-based Time Adverbials.....53	
Figure 3.4 Reclassification of Temporal Expressions..... 117	

LIST OF ABBREVIATIONS

1S	first person singular
2S	second person singular
3S	third person singular
1P	first person plural
2P	second person plural
3P	third person plural
AF	agent focus
ASP	aspect marker
AV	actor voice
BF	benefactive focus
CAUS	causative
CL	classifier
COMPA	comparative
CONJ	conjunction
DEM	demonstrative
FUT	future tense
GEN	genitive
IF	instrument focus
IMP	imperative
IRR	irrealis
LF	locative focus
LNK	linkage marker
LOC	location
NAF	non-agent focus

NOM	nominative case marker
OBL	oblique case marker
PAST	past tense
PERF	perfective marker
PF	patient focus
PV	patient voice
POSS	possessive
REA	realis
RECI	reciprocal
RED	reduplication
REL	relative clause marker
TOP	topicalization marker