## PACIFIC LINGUISTICS

Series B - No. 84

# THE SYNTAX AND MORPHOLOGY OF THE VERB IN CHEPANG 

by<br>Ross Charles Caughley



Department of Linguistics

PACIFIC LINGUISTICS is issued through the Linguistic Circle of Canberra and consists of four series:

SERIES A - Occasional Papers
SERIES B - Monographs SERIES C - Books SERIES D - Special Publications

EDITOR: S.A. Wurm

ASSOCIATE EDITORS: D.C. Laycock, C.L. Voorhoeve, D.T. Tryon, T.E. Dutton

## EDITORIAL ADVISERS:

B.W. Bender

University of Hawaii
David Bradley
La Trobe University
A. Capell

University of Sydney
Michael G. Clyne
Monash University
S.H. Elbert

University of Hawaii
K.J. Franklin

Summer Institute of Linguistics
W.W. Glover

Summer Institute of Linguistics
G.W. Grace

University of Hawaii
M.A.K. Halliday

University of Sydney
E. Haugen

Harvard University
A. Healey

Summer Institute of Linguistics
L.A. Hercus

Australian National University
Nguyến Đăng Liêm
University of Hawaii

John Lynch
University of Papua New Guinea
K.A. McElhanon

University of Texas
H.P. McKaughan University of Hawaii
P. Mühlhäusler

Linacre College, Oxford
G.N. O'Grady

University of Victoria, B.C.
A.K. Pawley

University of Auckland
K.L. Pike University of Michigan; Summer Institute of Linguistics
E.C. Polomé

University of Texas
Gillian Sankoff
University of Pennsylvania
W.A.L. Stokhof National Center for Language Development, Jakarta; University of Leiden
E.M. Uhlenbeck

University of Leiden
J.W.M. Verhaar

Gonzaga University, Spokane

All correspondence concerning PACIFIC LINGUISTICS, including orders and subscriptions, should be addressed to:

The Secretary
PACIFIC LINGUISTICS
Department of Linguistics
Research School of Pacific Studies
The Australian National University
Canberra, A.C.T. 2600
Australia.
Copyright (c) The Author
First Published 1982
Typeset by Mrs Judy Wise Printed by A.N.U. Printing Service
Covers by Patria Printers Bound by Adriatic Bookbinders Pty. Ltd.
The editors are indebted to the Australian National University for assistance in the production of this series.
This publication was made possible by an initial grant from the Hunter Douglas Fund.
National Library of Australia Card Number and ISBN 085883278 X

## table of contents

Page
Acknowledgements ..... ix
Abbreviations ..... x
Maps ..... xiv
CHAPTER I: INTRODUCTION ..... 1
1.1. BACKGROUND INFORMATION ..... 1
l.l.l. Location ..... 1
1.1.2. Language Name ..... 2
1.l.3. Population ..... 3
1.1.4. History of Contact ..... 3
1.1.5. Economy ..... 5
1.l.6. Trade ..... 5
l.l.7. Social and Political Organisation ..... 5
l.l.8. Religion ..... 6
l.l.9. Previous Studies ..... 6
l.l.l0. Source of Data ..... 8
l.l.ll. Classification ..... 8
l.l.l2. Dialects ..... 8
1.2. MOTIVATION AND SCOPE ..... 10
1.3. THEORETICAL APPROACH ..... 12
1.3.1. Functions of Speech ..... 14
1.3.2. Requirements of Effective Communication ..... 15
1.3.3. Functional Systems of Language ..... 17
1.3.3.1. Modality ..... 17
1.3.3.2. Referential Identification ..... 17
1.3.3.3. Role Identification ..... 18
1.3.3.4. Cohesion ..... 21
1.3.3.5. Background and Deictic Information ..... 32
Page
1.3.4. Structure of the Work ..... 33
1.4. OUTLINE OF PHONOLOGY ..... 34
1.4.1. Phoneme Inventory ..... 34
1.4.2. Phonetic Realisation ..... 34
1.4.3. Tone and Stress ..... 38
1.4.4. Vowel System ..... 39
1.5. OUTLINE OF SYNTAX AND MORPHOLOGY ..... 39
1.5.1. Typology ..... 39
1.5.1.1. Order of Constituents ..... 39
1.5.1.2. Morphological Typology ..... 41
1.5.1.3. Functional Typology ..... 42
1.5.1.4. Phonaesthetic Forms ..... 44
1.5.2. Verb Types ..... 46
1.5.3. Morphology ..... 48
1.5.4. The Verb as a Unit ..... 51
CHAPTER II: THE VERB IN RELATION TO CONTENT ..... 53
2.l. REFERENTIAL INFORMATION ..... 53
2.l.l. Verbal Cross-reference ..... 53
2.1.2. Pronominal Categories ..... 54
2.1.3. Reduplication ..... 56
2.1.4. Double Cross-reference ..... 56
2.1.5. Possessor Cross-reference ..... 56
2.1.6. Choice for Cross-reference ..... 57
2.2. THE VERB AND ROLE INFORMATION ..... 57
2.2.1. Perspective Role Features ..... 58
2.2.2. Role Encoding ..... 58
2.2.3. The Relation of Perspective Cases to Semantic Roles ..... 62
2.2.4. Variation of Perspective ..... 66
2.2.5. Constraints on Choice of Perspective ..... 69
2.2.6. Participant Addition and Reduction ..... 71
2.2.7. Co-ordinate and Comitative Participants ..... 74
2.2.8. Summary ..... 75
2.3. SELECTION FOR CROSS-REFERENCE ..... 75
2.3.1. Cross-reference and Perspective ..... 75
2.3.2. Case ..... 77
2.3.3. Communicative Role ..... 77
2.3.4. Semantic Category (Animacy) ..... 79
2.3.5. Pragmatic Factors ..... 80
2.3.6. The Function of Cross-reference ..... 82

## Page

CHAPTER III: THE VERB IN RELATION TO CONTEXT ..... 83
3.1. INFORMATION FLOW ..... 83
3.1.1. Introduction ..... 83
3.1.2. Primary Functions ..... 83
3.1.3. Distribution and Secondary Functions ..... 87
3.1.4. Pronominal Functions of -te? ..... 89
3.2. MODAL FUNCTIONS ..... 90
3.2.1. Declarative ..... 90
3.2.1.1. Marking and Function ..... 90
3.2.1.2. Emphatic Assertion ..... 90
3.2.1.3. Uncertainty ..... 92
3.2.1.4. Hypothetical Statements ..... 93
3.2.1.5. Necessitatives ..... 94
3.2.l.6. Negation ..... 95
3.2.1.7. Emotive Expression ..... 97
3.2.2. Interrogative ..... 98
3.2.3. Jussive ..... 100
3.2.3.1. Jussive Types ..... 100
3.2.3.2. Imperatives ..... 100
3.3. THE VERB AND THE CONTEXT OF UTTERANCE ..... 104
3.3.1. Tense and Aspect ..... 104
3.3.2. Aspectual Functions ..... 105
3.3.3. Stative Situations ..... 107
3.3.4. Auxiliary Roots and Aspect ..... 107
3.3.5. Summary of Tense and Aspect Marking ..... 110
3.3.6. Other Auxiliary Roots ..... 112
3.3.7. Lexical Origins of the Auxiliary Roots ..... 113
3.3.8. Reduplication and Aspect ..... 113
CHAPTER IV: THE VERB AND COHESION ..... 115
4.1. CROSS-REFERENCE AND COHESION ..... 115
4.l.1. The Noun Phrase in Cross-reference: Subject, Topic or ..... 115
4.1.2. Subject ..... 116
4.1.3. Top1c ..... 119
4.1.4. Theme ..... 120
4.1.5. Pragmatic Peak ..... 121
4.1.6. Summary ..... 122
4.2. REDUCED CLAUSE HIERARCHIES AND INTERCLAUSAL RELATIONS ..... 122
4.2.1. Reduced Clauses ..... 122
4.2.2. Unreduced or Primary Clauses ..... 123
Page
4.2.3. Complex Predicate Hierarchy ..... 124
4.2.3.1. Levels and Function ..... 124
4.2.3.2. Secondary Clauses ..... 124
4.2.3.3. Tertiary Clauses ..... 126
4.2.3.4. Compound Verb Clauses ..... 128
4.2.3.5. The Complex Predicate Hierarchy: A Summary ..... 129
4.2.4. Nouniness Hierarchy ..... 130
4.2.4.1. Structure and Function ..... 130
4.2.4.2. Nominalised Clauses ..... 130
4.2.4.3. Nominal Compounds ..... 136
4.2.4.4. The Nouniness Hierarchy: A Summary ..... 137
4.2.5. Setting Hierarchy ..... 138
4.2.5.1. Justification ..... 138
4.2.5.2. Repetitive Setting Clauses ..... 138
4.2.5.3. Conditional Reduced Clauses ..... 139
4.2.5.4. Resultative ..... 141
4.2.5.5. Summary of Contrasts within the Setting Hierarchy ..... 142
4.2.6. Interclausal Linking of Unreduced Clauses ..... 142
CHAPTER V: THE DEVELOPMENT OF PRONOMINAL AFFIXATION ..... 145
5.1. THEORIES OF DEVELOPMENT ..... 145
5.1.1. The Problem in Relation to Tibeto-Burman ..... 145
5.l.2. Topic Shift and Afterthought Hypotheses ..... 146
5.2. THE GENERAL DEVELOPMENT OF PRONOMINAL AFFIXATION IN CHEPANG ..... 147
5.2.1. Problems with the TS and AT Hypotheses ..... 147
5.2.2. The Modified Topic Shift Proposal ..... 148
5.2.3. The Explanatory Power of the MTS Hypothesis ..... 154
5.2.4. General Features of the Paradigm in Relation to TS Hypotheses ..... 158
5.2.4.1. Introductory ..... 158
5.2.4.2. Double Cross-reference ..... 158
5.2.4.3. Plural Reduplication ..... 159
5.2.4.4. Verbal Case Marking ..... 160
5.2.4.5. Possessive Cross-reference ..... 162
5.2.4.6. Second Person Dual ..... 163
5.2.4.7. Past Tense Forms ..... 164
5.2.5. Summary of Topic Shift Hypotheses ..... 165
5.3. ALTERNATIVE PROCESSES OF DEVELOPMENT ..... 165
5.3.1. General ..... 165
5.3.2. Characterisation Clause Process ..... 166
5.3.3. Possessive Analogy ..... 167
Page
5.4. DEVELOPMENT OF THE CHEPANG PRONOMINAL SYSTEM IN DETAIL ..... 168
5.4.1. Pronominal Elements and Rules of Change ..... 168
5.4.1.l. Proposed Pronominal Group Elements ..... 168
5.4.1.2. Proposed Order of Elements ..... 169
5.4.1.3. Proposed Rules of Change ..... 169
5.4.1.4. Ordering of Combinations and Changes ..... 171
5.4.2. Examples of Development ..... 172
5.4.2.1. Method ..... 172
5.4.2.2. Free Pronouns ..... 172
5.4.2.3. Development of Verbal Affixes ..... 173
5.5. CONCLUSIONS ..... 178
CHAPTER VI: COMPARATIVE MORPHOLOGY ..... 181
6.1. INTRODUCTION ..... 181
6.2. DIALECTS OF CHEPANG ..... 182
6.2.1. General Discussion ..... 182
6.2.2. Eastern Dialect ..... 182
6.2.2.1. Northern Subdialect of Eastern Chepang ..... 182
6.2.3. Western Dialect ..... 184
6.2.3.1. General Features of Pronominal Affixation ..... 184
6.2.3.2. Bujheli Subdialect ..... 188
6.2.4. South-western Dialect ..... 190
6.2.5. Summary ..... 190
6.3. OTHER TIBETO-BURMAN LANGUAGES ..... 192
6.3.1. Types of Pronominal Systems ..... 192
6.3.2. Comparison of Pronominal Systems ..... 193
6.3.2.1. Classification ..... 193
6.3.2.2. Bodic Division ..... 194
6.3.2.3. Burmic and Baric Divisions and Gyarong ..... 201
6.2.3.4. Distinctive Features of Chepang Pronominal Affixation ..... 202
6.3.2.5. Comparison with Bauman's Reconstruction ..... 204
6.3.3. Origins of Tibeto-Burman Pronominal Affixation ..... 206
6.4. NON TIBETO-BURMAN LANGUAGES ..... 208
6.4.1. Language Affiliation ..... 208
6.4.2. Indo-Aryan Languages ..... 208
6.4.3. Munda Languages ..... 210
6.4.4. Kusunda ..... 212
6.5. CONCLUSIONS ..... 213
APPENDICES

1. Pronominal Charts ..... 215
2. Sample Text ..... 243
Page
3. Fossil Prefixes and Suffixes ..... 257
4. Swadesh lists for Eastern and Western Chepang. ..... 261
BIBLIOGRAPHY ..... 263
TABLE 1. Pronominal Affixes (Basic forms only) ..... 54
5. Independent Pronoun Forms ..... 55
6. Perspective Cases (for Intentive Actions) ..... 59
7. Contrast between Levels of the Complex Predicate Hierarchy ..... 129
8. Contrast between Levels of the Nouniness Hierarchy ..... 138
9. Contrasts within the Setting Hierarchy ..... 142
10. Distribution of Pronominal Features ..... 191
11. Typological Classification of Tibeto-Burman Pronominalisation ..... 193
12. Pronominal Elements in West-central Himalayish ..... 195
13. Pronominal Elements in West Himalayish ..... 197
ll. Pronominal Elements in East Himalayish ..... 200
14. Pronominal Elements in Burmic, Baric and Bodish ..... 203
15. Reconstructed Tibeto-Burman and Chepang Pronominal Elements ..... 204
16. Pronominal Elements of Santali ..... 210
CHART 1. Consonant Combinations ..... 38
17. Communicative Role and Cross-reference ..... 78
18. Use of the CIF Affix ..... 86
19. Tense and Aspect Marking ..... 111
20. Distribution of na and -te? ..... 155
21. Limbu Prefixes ..... 198
22. Distribution of Chepang te? and -təyh ..... 199
23. Distribution of Rawang è-, Tiddim -te? and Gyarong ta/kə- ..... 201
24. Reconstructed Paradigm for Tibeto-Burman ..... 205
25. Reconstructed Paradigm for Chepang ..... 205
ll.- 35. Pronominal Charts - see Appendix 1. ..... 215
Figure 1. General Relationships for Pronominalised and Other Representative Tibeto-Burman Languages ..... 218

## ACKNOWLEDGMENTS

This present monograph was originally written as a partial fulfilment of the requirements for the degree of Doctor of Philosophy at the Australian National University. It is presented here in a slightly revised form for publication.

I would like to express my appreciation for all those who have helped in its preparation, in particular Professor S.A. Wurm and the staff of the Department of Linguistics, Institute of Advanced Studies, especially Drs. D.C. Laycock and C.L. Voorhoeve for their criticism and suggestions.

I would also like to thank Mrs. Judy Wise for her work in doing the typesetting of the text and many charts, and my wife Kathleen for helping with the proofreading.

Finally I would like to express here my gratitude to Mr. Bhabikan Chepang for the many hours he spent in teaching me about his language, culture and people.

## ABBREVIATIONS

| Gloss | Basic Form | Description |
| :---: | :---: | :---: |
| Ab | -s əy | Ablative 'from' |
| Ag | -? 1 | Agent Case (NP) |
| " | -? ${ }^{\text {u }}$ | " " (Verbal) |
| " | -n | " " |
| All | -tan | Allative 'to' |
| Alt | -ya | Alternative, Interrogative |
| Ass | -bras | Associative or Co-ordinate |
| Aug | -cak | Augmentative |
| Cer | -bay | Certainty |
| Cess | -ta? | Cessative Imperative |
| CIF | -te? | Contrary Information Flow |
| Cmp | -10 | Comparative |
| Cns | -taga | Consequence |
| Co | -ma | Co-ordinator 'and, also' |
| Com | -kus | Comitative |
| Con | -khe | Contrastive reference |
| CPl | -may? | Collective Plural |
| Cs | -tak | Causative |
| Ct | -bhenan | Continuative |
| DIF | -pay | Direct Information Flow (see Chart 3) |
| D1m | -co?/-cok | Diminutive |
| D1 | -co | Dual Number |
| " | -nls | " " |
| DLc | - ${ }^{\text {a }}$ | Directional Locative |
| Dur | -da | Durative |
| ECs | -si? | Emotional Causative (causing mental state, emotion.) |


| Gloss | Basic Form | Description |
| :---: | :---: | :---: |
| Em | -? a | Referential Emphatic |
| Ev | -ja/-je? | Expressive (expressing feeling concerning participant) |
| Eq | -to | Equative 'such' |
| Eqv | -jam | Equivalence |
| Exc | l aw | Exclamation |
| Fin | - Je? | Finality |
| Fel | -gar | Feeling |
| Gen | -ko? | Genitive |
| Gl | -kay | Goal (NP) |
| " | -ta | " (Verbal) |
| HNg | - Iam | Negative, Imperative Prohibitive |
| Hor | -pa? | Hortative |
| Hyp | -dik | Hypothetical |
| Icp | -khay* | Inceptive |
| Idf | - lan(?) | Indefinite |
| IFu | -ca? | Indefinite Future |
| IIF | -tan? | Indirect Information Flow (see Chart 3) Reportative |
| ILc | -ka/kha | Inessive Locative |
| ImE | - ? ${ }^{\text {a }}$ | Imperative Emphasis |
| Imm | -khe? | Imminency |
| ImP | -na | Imperative Plural |
| IN | -sa | Irrealis Nominal |
| INc | -han | Indefinite Necessative |
| Ind | - jok | Individual 'each separately' |
| Int | -lak | Intentive |
| Ins | -? 1 | Instrument |
| Inst | -kade | Instantaneous |
| Lim | -cyuk | Limit 'this much' |
| Loc | -han? | Locative (general) |
| ML | -ka? | Mobile Locative |
| Mns | -dharna | Means |
| Neg | -la | Negative |
| NFu | -dhan | Near Future (or Limited Present) |
| NN | -10 | Negative Nominal |
| Nom |  | Bound Nominal |
| NPt | -na? | Non-past, Non-terminated |
| NrPt | -?ata? | Near Past |
| NSmS | -makha | Negative, Simultaneous Setting |


| Gloss | Basic Form | Description |
| :---: | :---: | :---: |
| PAs | ba | Propositional Assertion |
| Pl | -s $\boldsymbol{\text { a }}$ | Plural |
| " | - I am | Plural (NP) |
| " | -? 1 | Plural |
| PLc | -ganə | Proximal Locative 'near, at the surface of' |
| Pos | -bat | Possessive Cross-referencing |
| Pt | -?aka | Past |
| " | -?ala | " |
| PtPf | -t a | Past Perfective |
| PSmS | -bale | Progressive Simultaneous Sequence |
| Prv | -ma?sl | Privative |
| Pur | - Ian | Purposive |
| Rep | -kay | Reciprocal |
| REm | - le? | Referential Emphatic (Contrastive) |
| Rep | -jhun | Repetitive |
| Res | -he | Restrictive |
| Resl | -dharna | Result |
| Rfl | -? 1 | Reflexive |
| RN | -? 0 | Realis Nominal |
| RNg | -ma? | Reduced Clause Negative |
| RPt | -?ak | Relative Past |
| SmS | -tokhan | Simultaneous Setting |
| SqS | -?aktlko | Sequential Setting |
| SRf | t 1 | Switch Reference |
| Sub | -may | Subjunctive |
| TAb | -gote | Temporal Ablative 'from then on' |
| Tem | -kala | Temporal |
| Unc | -yado/IIm | Uncertainty |
| Voc | -уә | Vocative |
| 1 E | -ワə | First Person Exclusive of Addressee |
| 1 In | -tayh | First Person Inclusive of Addressee |
| 2 | -nam | Second Person |
| 2D1 | -jo | Second Person Dual |
| 2 ry | -to | Secondary Link |
| $2 \mathrm{~S}-1 \mathrm{~S}$ | -cl | Second Person Singular Agent, First Person Singular Goal |
| 3Ct | -da | Tertiary Continuous |
| 3 Ng | -t ${ }^{\text {a }}$ | Tertiary Negative |
| 3 Pr | -?ak | Tertiary Precedent |
| 3 ry | -t 1 | Tertiary Link (Unspecified) |
| 3Sm | -dhay | Tertiary Simultaneous |


| Kinship |  |
| :--- | :--- |
| YoBro. | Younger Brother |
| OBro. | Older Brother |
| Bro. | Brother |
| Fa. | Father |
| Mo. | Mother |
| KN. | Kin (Related person) |
|  |  |
| Other Common Abbreviations |  |
| AT | Afterthought (process) |
| MTS | Modified opic-shift (process) |
| TS | Topic-shift (process) |
| C | Consonant |
| V | Vowel |
| App | Appendix |
| TG | Transformational Generative |
| CH | Chapter |
| EX | Example |
| \# | Word boundary |



THE NEPAL LINGUISTIC AREA



THE LINGUISTIC AREA

## CHAPTER ONE

## INTRODUCTION

### 1.1. BACKGROUND INFORMATION

### 1.1.1. LOCATION

Almost all of the people who can be identified as Chepang by language and culture live in a roughly rectangular area of south-central Nepal, bounded to the north by the Trisuli River, in the west by the Narayani River, to the south by the Rapti River and in the east by the main highway from Kathmandu to India. Another group whose language is in fact Chepang, but who call themselves Bujheli, and their language Gharti, live across the Narayani to the west.

Included within these boundaries are the southern sections of the administrative districts of Gorkha and Dhading, as well as western Makwanpur and northern Chitwan districts (see Map 2.). The area, which lies immediately west and slightly south of Kathmandu, is about 40 miles long and 15 miles in breadth, covering approximately 600 square miles of rugged hills that form part of the Mahabharat Range. The altitude varies from under 1,000 feet in the Rapti Valley to over 8,000 feet above sea level for the main range itself. However very few Chepang live above the 5,000 foot level and, until the last $15-20$ years, not many lived below 2,000 feet because of the danger of malaria. The largest concentrations of houses are between 2,000 and 4,000 feet, on the sides of the main ranges or on spurs branching from them.

The region has, in the past, been heavily forested (Hodgson, l848), but the forest cover is rapidly disappearing and there is much erosion in some parts. The vegetation is very varied, changing from deciduous rainforest at low levels to oak and rhododendron forest at higher altitudes. The climate is mild with snow uncommon below 6,000 feet and
and frost rarely encountered below 4,000 feet. Because of the mildness of the climate the Chepang in most areas can grow bananas as well as the staple crops of maize and millet. Various types of tubers grow in the forest, including wild yams, and these form an important addition to the food supplied by agriculture.

Although I have made many enquiries $I$ have not been able to find any tradition suggesting that the Chepang have lived in locations other than their present one. Evidence from external historical sources is also lacking. It seems likely therefore, that they were the earliest inhabitants of the region, as claimed by Hodgson (1848) and Jest (1966).

### 1.1.2. LANGUAGE NAME

The term 'Chepang' is the one used by Nepali speakers (the nonChepangs) and has associations with the Nepali cepto 'flat-nosed' and cepang 'frog' which are demeaning so the word is not in common use amongst the people themselves. It has, however, become the standard name used in linguistic and anthropological literature and so there is little choice but to use it here. Their own term is 'cyo?bang', of which the Nepali is evidently a corruption. The lexical decomposition of the word is simple enough, but unfortunately, as far as determining its meaning is concerned, each of the two morphemes has more than one sense. I have not been able to find any Chepang explanation for the name. The first syllable cyo? basically means 'tip', with the extended meanings of 'tailend', 'end (of story)', 'descendant', and the additional emotive sense of less important as compared to tur? 'base'. The second morpheme ban means both 'stone' and 'a curse' (these from *ban 'ordure', compare Tibetan sbans). The combination could therefore mean either 'tip of rocks', referring to mountainous habitation of the Chepang in comparison with the lowland valleys, or it could mean 'cursed to be at the tailend' in reference to their low social position. Neither of these explanations is very satisfactory. The first uses the component words in a nonregular way - ban is not normally applied to large scale geographic features such as mountains and hills while cyo? is not used for the top of rocks. The second term is open to the objection that people do not usually refer to themselves by derogatory terms. Instead (at least in Nepal) there is a tendency to use exalted names, sometimes including the title of 'king'. The Kusundas, for instance call themselves 'ban raja' or 'forest kings' while the Raji of west Nepal and the Rai of east Nepal have names which appear to derive from the same root. A third possibility is that the term comes from co? 'person' (as in goyco? 'man', mom?co? 'woman'), together with an ending formed on the basis of the pa suffix used for Tibetan peoples (such as Khampa
and Horpa). Note also Dimasa shubāng 'person, man', Grierson (1909, vol. 3.2.).

### 1.1.3. POPULATION

The 1952 Census gave the number of people declaring themselves to be Chepang as 14,261, while the 1961 Census showed a considerable apparent reduction in numbers, putting the figure at 9,274. Bista (1967) estimated the population at 15,000. My own view is that Bista's figure is nearest to the mark (with, in addition, perhaps 2,000 Bujheli), the apparent drop between 1952 and 1961 shown in the Census being the result of differing claims made by the resident population concerning identity and mother-tongue. With respect to the present figures it is interesting to note that one hundred and twenty-five years ago Hodgson remarked that he thought that two Nepalese tribes, the Chepang and the Kusunda, were heading towards extinction (Hodgson l848). The Kusunda have indeed nearly disappeared, with only a few speakers known to be left (Reinhard, 1976). In contrast however, as the figures above show, the Chepang have survived very well. The difference appears to result from the fact that, while originally both groups were nomadic, the Chepang were able to adapt to a settled agricultural life while the Kusunda were not able to make this transition.

As well as the Chepang there are at present several other ethnic groups resident in the area - indeed in total these now outnumber the Chepang. Fairly generally scattered over the region, but particularly south of the Mahabharat Range are the Tamang, while north of the range are to be found Magar settlements. Around the borders and along the larger river systems of the area are established the Indo-Aryan castes of Brahmin and Chetri, while members of the ironworking Kami caste are more widely located, though restricted in number. Along the roads which border the region are small roadside markets or 'bazaars' and the shopkeepers here are often Newari speakers. Some Newaris have also settled in the interior.

### 1.1.4. HISTORY OF CONTACT

According to the testimony of the Chepang themselves, supported by that of Hodgson, it is only within the last two or three generations that they have as a group begun to settle and practice permanent field agriculture. Prior to this they lived a nomadic or semi-nomadic life, subsisting by hunting and gathering, supplemented by slash-and-burn agriculture. At this stage, while the hills were still forested, they must have had the territory almost completely to themselves, with the
exception perhaps of the more fertile valley floors. Westward, across the Narayani River, was the traditional area of the Magars, while across the Trisuli to the north-west were Gurungs and to the north-east, the Tamang. In the Rapti Valley, towards the west are settlements of the Tharu, a people who today speak an Indo-Aryan language.

At times the Chepang must have come into contact with the totally nomadic Kusunda, a hunting people whose language affiliation is unknown. The Chepang traditionally regard them as hostile, saying that the Kusundas would shoot them at sight. This tradition may be an indication of the earlier relations between the two groups. It is possible that the Chepang used to capture women from the Kusunda (and perhaps also the Kusunda from the Chepang). Such a practice would account for hostile relations between the two peoples. Until recently marriage by capture has been common amongst the Chepang, though this normally involved only Chepang women. Within living memory the Kusunda have not been found in the main Chepang territory and the few remaining survivors of the Kusunda live today across the major rivers to the north and west. If there was indeed inter-marriage between the Chepang and Kusunda then traces of this relationship may be still present in the two languages.

The country to the south, and immediately to the east, is very rugged and sparsely populated, apart from a river valley which formed part of the old route to Kathmandu from India, before the present road was constructed in 1956. The nearest indigenous peoples to the east are the Danuwar Rai, who, like the Tharu, now speak an Indo-Aryan language.

The first group to move permanently right in to where the Chepang lived were probably the Magars, being pushed eastwards themselves by migrations of Indo-Aryan peoples in the west. It is in areas where Magars have settled that the Chepang are most advanced agriculturally and are least distinctive in language and culture. Over the past few centuries, possibly even before the arrival of the Magars, the Nepali speaking Brahmin and Chetri groups were infiltrating along the river valleys into the more accessible parts of the interior. However because of their caste restrictions, and widely differing ethnic backgrounds, they did not settle closely with the Chepang as did the Magars, but kept themselves apart socially and culturally, inter-relating with the forest dwellers mainly as employers of labour. Unlike many other ethnic groups in Nepal and India the Chepang do not employ Brahmins for religious ceremonies. The Tamang are evidently much more recent arrivals, having entered from the north in the past few generations only. But their intrusion has been much deeper than that of the Indo-Aryan groups, and even that of the Magars, since the Tamang have settled in poorer areas formerly occupied only by Chepang. As a result there are few
villages or communities remaining which are purely Chepang, the nonChepangs always being the economically dominant group. The Tamang have had very little linguistic or cultural influence on the Chepang, presumably because of the recentness of the contact.

Another movement of significance in the past 20 years is a reverse migration of people, especially Brahmin and Chetri, out of the hill regions to the rich, but formerly malarial Terai lowlands. This has resulted in some districts becoming almost entirely Chepang in population again, though more often the place of the former landowners is taken by members of other groups, such as Tamangs and Newaris.

### 1.1.5. ECONOMY

Over the past two or three generations the Chepang have changed from a semi-nomadic to a settled way of life, with the result that they rely for food supplies more on the produce of permanent fields than on the forest. Some slash-and-burn agriculture is still practiced however, and the forest is still a very important supplementary source of food, especially for wild yams. The marked deforestation that has occurred in recent years has meant that this supplementary source is dwindling and the Nepal goverment is now seeking ways to 1mprove the Chepang agriculture to counter this loss.

The main food crop that is grown is maize, with millet, buckwheat, pulses, and mustard being both food and cash crops. Wealthier Chepang have cattle for ploughing, milking and supplying dung as fertiliser. Most families have fowls and many have goats and sometimes pigs. Meat is supplied by both the domestic animals and also by fishing, bird catching and on rare occasions, the hunting of wild deer.

### 1.1.6. TRADE

Unt1l the advent of the roads in the last twenty years, and the subsequent development of roadside market towns, the main centres of trading were Kathmandu and nearby border towns in India, such as Thori and Raxaill in North Bihar state. The main items of trade were timber, oil of the cyuri tree (Bassea butynacea), grains and dried fish, in return for which they obtained salt, cloth, ornaments and metal vessels. Earthenware was obtained from the nearby Hadi Bazaar, in the Tharu area.

### 1.1.7. SOCIAL AND POLITICAL ORGANISATION

I can find no evidence to indicate that the Chepang had in the past any social organisation at a level higher than that of the family, or extended family. There are no terms for any social hierarchy other
than that of the kinship system for dealing with social infringements. This agrees with the tradition that the Chepang originally lived in isolated huts or temporary shelters deep in the forest, with at most two or three dwellings of related families grouped in any one place. For defence they relied on flight into the jungle, not on mutual assistance. Even today they do not live in closely-built villages, the nearest thing to such a settlement being a number of houses scattered along a ridge, with small sub-groupings of $2-4$ houses within this. There is no Chepang word for village, they use instead the loan word gaw (from the Nepali gaũ).

Once the Chepang began to settle permanently, the Nepali rulers of the districts appointed representatives from among them, to be responsible for collecting taxes and keeping law and order. These men gained a measure of wealth, and power over the Chepang from their position. With the setting up of the village 'panchayat' administrative system in the early l960s these men lost their official power (though not all their prestige) to the elected members of the panchayat. This last system, using elected local representatives to supervise tax collecting and administer everyday matters of law and order, is that operating today.

### 1.1.8. RELIGION

The Chepang are basically animistic, practising a form of shamanism similar to that described by Watters (1975) for the Kham people of Nepal, though of a less ritually complex nature. More recently the Chepang have begun to keep some of the major Hindu festivals, such as Desai and Tiwar. One feature of note is that every (extended) family has at least one shaman, possibly a reflection of the time when they moved about in small groups.

### 1.1.9. PREVIOUS STUDIES

Linguistic: The earliest known work on Chepang is that of B. H. Hodgson, a former British Resident in Nepal, who carried out a considerable amount of investigation on the non Indo-Aryan languages of the Indian subcontinent. His first paper, 'On the Chepang and Kusunda Tribes of Nepal' (1848), contains brief ethnographic notes and a wordlist of 356 items, with Chepang glosses for 313 of these, other entries being empty or giving non-Chepang words. His second paper 'Comparative Vocabulary of the Languages of the Broken Tribes of Nepal' (1957) contains a wordlist of 282 items, most of which were included in the earlier list but with about 17 additional words with Chepang glosses. In total therefore he gave Chepang glosses for some 330 items, though some words are repeated
for different entries and a few are, in fact, short sentences. Hodgson did not record the distinction that $I$ have described as the glottal stop/ falling tone phoneme (see Section l.4.), although it almost certainly was present, as it is found today throughout the Chepang area and is unlikely to have been an innovation since his time. In spite of these problems his work is generally accurate and shows a close correspondence between the lexical forms of Chepang used 150 years ago and those of today - only about ten of the Chepang words in his list do not appear to correspond to the present forms and these may well be due to errors in elicitation. For a similar number of his entries, for which the glosses appear to be Chepang, no present Chepang equivalents have been found. These last include the numbers from six to ten.

Other vocabularies, based on those of Hodgson, are given in Hunter (1868) and Forbes (1877, 1878, 1881). Konow (in Grierson 1909), Shafer (1966), Benedict (1972) and Voegelin and Voegelin (1974) have discussed the classification of Chepang, using Hodgson's data. Their findings (for Tibeto-Burman in general) are summarised in Hale (1973) and in Bradley (1979a). Glover (1974) gives a lexicostatistical analysis of 36 Tibeto-Burman languages, including Chepang, using data from Caughley (in Hale, l973).

The remaining linguistic studies of the language are those produced under the auspices of the Summer Institute of Linguistics in conjunction with the Institute of Nepal and Asian Studies, Tribhuvan University of Nepal.

These include the following:

1. A preliminary analysis of Chepang segmental phonemes, Bandhu, Dahal and Caughley (1970).
2. A more detailed phonemic summary, Caughley (1969).

1i1. A description of phonemic segments, Caughley (1970a).
iv. A description of suprasegmentals, Caughley (1970b).
v. Chepang texts, Caughley (1970c).
vi. An analysis of Chepang Whistle talk, Caughley (1971).
vii. A vocabulary of about 2,000 items in Hale (1972).
vii1. A study of the relation between semantic category and the choice of participants for verbal cross-reference, Caughley (1978).

There is some discussion of Chepang verb morphology by Bauman (1974, 1975) based on data from some early mimeographed papers of mine (Caughley 1971a, b, c).

Ethnographic: The most detailed ethnographic studies are those by Jest (1966), and Bista (1967). Other, more brief descriptions of the

Chepang are found in Hodgson (1848), Nebesky-Wojkowitz (1959), and Caughley, Dahal and Bhandu (1971).

### 1.1.10. SOURCE OF DATA

The data on which this thesis is based comes almost entirely from Maiserang village in the Makwanpur district (see Map 2), and was collected over a period of eight years (1968-1976) while $I$ was involved in a linguitic project jointly sponsored by the Tribhuvan University of Nepal and the Summer Institute of Linguistics. The Maiserang dialect is taken as the standard for this thesis. However further material was obtained from villages to the north, west and east of Maiserang, which itself lies in the southern and central part of the Chepang region and also from Bujheli (collected in January 1980). This material has been incorporated into this present work under the discussion of dialects (see l.l.12., 6.2.).

### 1.1.11. CLASSIFICATION

For details of the linguistic classification of the Chepang language see the references given above. For an overall summary of the language situation in the main area in which Tibeto-Burman languages are found see Bradley (1979a). In brief the views regarding the classification of chepang are as follows:

1. Konow (in Grierson, 1909) described Chepang as a complex pronominalised language of the Himalayan section of Tibeto-Burman. Its position within the Complex Pronominalised group is unclear.
ii. Shafer (1966) placed Chepang, along with Magar and Hayu (Vayu), in the West-Central Himalayish section of the Bodic division of SinoTibetan. Shafer did not have a Tibeto-Burman subdivision (see Fig.l., App.1.).

1i1. Benedict (1972) places the language in the Bahing-Vayu nucleus of Tibeto-Burman. Chepang, along with Vayu, forms a subgroup within this nucleus, separate from the Kiranti (Rai-Limbu) languages. Newari stands in an uncertain relationship to these two subgroups (see Fig.l., App.l.).
iv. Glover (1974) generally supports Shafer's classification and places Chepang, Magar and Raji in a separate substock of West Himalayish. It is worth noting however that Glover did not include Burmese in his data, which consisted of 100 word Swadesh lists for 36 languages, including Tibetan. A comparison of Chepang with written Burmese (Benedict, 1976) shows that these two languages appear to have at least as many shared cognates as would Chepang and Tibetan, thus supporting Benedicts's observation that Chepang may be a link between the Northern (Tibetan) and Southern (Burmese) sections of Tibeto-Burman (Benedict, l972:l.,
fn.4). The results would appear to indicate also that the lexicostatistical findings must be used with caution.

### 1.1.12. DIALECTS

On the basis of morphological evidence (see section 6.2.) the language can be divided into at least three dialects, eastern, including the form spoken in Maiserang together with a northern sub-dialect, south-western (the Kayar river region), and western, with Bujheli as a sub-dialect. The most noticeable differences from the eastern (Maiserang) dialect are:

## I. Phonological

1. The front and back non-high vowels /e/ and /o/ are much higher in all other dialects, and the central mid-vowel /ə/ lower and further back than the corresponding vowels in Maiserang. Even the northern variant of the eastern dialect differs from the standard in this respect. This shift of vowel position represents a movement towards that of the equivalent Nepali vowels (Nepali, like Chepang, has a six vowel system) and almost certainly is due to the influence of that language. This reflects the fact that the settlement of the Maiserang area by nonChepangs is much more recent than it is generally elsewhere, hence the reduced influence of Nepali.
ii. The western and northern dialects allow the consonant cluster dental stop plus $r$ in syllable-initiial position. This combination does not occur in the Maiserang dialect (see l.4.2.).

1i1. Bujheli has what appears to be a phonemic glottal occurring before nasals, semivowels and $r$, as in ?yon 'stomach'. Such a combination is not found elsewhere in Chepang.
iv. The glottal phoneme is often realised as a high-falling pitch on the following syllable in the western dialect (compare this with realisation of glottal in Maiserang speech - section l.4.).
v. Initial, partly voiced resonants of the eastern dialect correspond to breathy initials in other dialects, that is, eastern [RR] /hR/ corresponds to [R] /Rh/ as in: [rrus] eastern, [rus] other dialects, /hrus/ 'bone'.

## II. Lexical

As might be expected there is also some lexical variation between dialects, though this variation tends to form a continuum from east to west. In the northernmost areas there appears to be a greater substitution of Nepali loanwords. Indeed in some villages north of the Mahabharat Range, Chepangs claimed that they no longer spoke the language, though they clearly did know it to some extent.

Comparison of lexical material (the 100 word Swadesh list used by Glover) showed $96 \%$ cognacy between the eastern and western dialects (see App.4.). I do not have complete data to compare between subdialects, but examination of texts would suggest that the cognacy rate is much higher between the sub-dialects, approaching $100 \%$.

In contrast with the continuous variation lexically across the Chepang area, and the high degree of sharing, there is a marked discontinuity when the lexical material is compared with the distinct languages of Tibeto-Burman. Even though the Magar areas geographically overlap the western and northern Chepang territory this language shows only $34 \%$ cognacy with Chepang (Glover, 1974). Western Tamang, also now spoken in the region has $31 \%$ of cognates, while the language of the geographically remote Raji shows $32 \%$ cognacy. Other Tibeto-Burman languages fall below the $30 \%$ level.

### 1.2. MOTIVATION AND SCOPE

The original motivation for this study came from attempts several years ago to understand the workings of the verb in the Chepang language. However the more I sought to investigate this area the greater the complexities that I uncovered, reaching a peak perhaps with the finding of the double cross-referencing verb forms (section 2.1.4.).

At the same time I became aware of the complex verbs found in some Munda languages and mentioned this parallel complexity in an early unpublished paper (Caughley, l97la). Bauman, in his thesis on pronominal verb morphology in Tibeto-Burman (Bauman, 1975), sought to show that this morphology had origins that were independent of the Munda languages. He commented that the observations in my paper were not sufficiently detailed to uncover the fundamental differences in the syntactic structures of the verb that occur between the two languages mentioned (Mundari and Chepang). It is certainly true that the observations that $I$ made were of a fairly superficial nature, since they merely noted the presence of certain morphosyntactic features common to both languages. But just what are truly fundamental differences in verb structure? Features that might appear at first sight to be significant are the presence or absence of pronominal affixation, the presence or absence of prefixing and, for languages with pronominal morphology, the representation of the object or indirect object in the verb. Yet it turns out that the diversity in respect to these features is as great within a language family (and even within a single language, see chapter 6) as it may be between language families. Clearly a much deeper study is required to discover which differences are of real
typological significance and which are merely superficial. Such a study would need to examine the function of morphological elements in the light of the total semantic, pragmatic and grammatical framework of the languages concerned and, in conjunction with this, seek to determine how these elements came to be combined within the verbal unit. In contrast to such an approach present morphological studies (such as Pinnow, l966, Bauman, 1974, 1975) tend to concentrate largely on the forms of the morphological elements and on labelling their basic semantic distinctions, without fitting these into the wider linguistic context to any great extent.

This thesis represents an attempt to avoid this more narrow emphasis by providing for one language, Chepang, a description of the verb, and the part played by the verb in fulfilling the basic functions of the language, at the same time relating these functions to the verbal morphology, both synchronically and diachronically. By generalising the results of this study it is possible, I believe, to make some suggestions as to which of the features of verbal structure come from deep-seated differences between languages and which arise from more superficial causes. This in turn should throw some new light on the question of the origins of pronominal affixation in the various language families of the North Indian area (Indo-Aryan, Tibeto-Burman and Munda), and the relevance of diffusion, sub-stratum influence and independent development to this. Chepang proves to be a very suitable language to investigate in this way since its highly agglutinative nature makes it easy to relate function to particular formal elements.

There are also other reasons why a detailed study of the verb may be valuable. Matthews (1974:3) has pointed out that "the analysis of words is a subject which is momentarily out of fashion in linguistic theory." This lack of interest in morphology is partly, as Matthews himself observes, because many syntactic investigations have been at a level of abstraction in which the difference between bound and free formatives was irrelevent. And it is surely also partly because much of the analysis has been of languages such as English, with relatively simple word structure and little inflectional morphology. More recently there has been a trend away from abstract analyses of European languages towards more functionally and typologically-based descriptions of languages from widely different language families (as for instance articles in the 'Syntax and Semantics' series, especially in Shibatani, 1976, also in Li, 1976). This work, based as it is on a non-European language with a complex verb structure, is in line with this trend and will hopefully contribute something towards correcting the imbalance noted by Matthews.

Although the scope of this thesis is limited to the verb, and verb derived constituents, it does in fact cover a good deal of the area that would be found in a general descriptive grammar. This is because Chepang is what might be called a 'verb centred' language, one in which the verb plays an important part in determining role and reference, and in establishing inter-clausal relations, cohesion and setting. Moreover all but a very small number of adjectives and adverbs are derived from lexical roots that may be categorised essentially as verbal - that is, roots which, without formal derivation, may take tense and pronominal affixes. In addition many processes that are commonly described by transformational rules such as reflexivisation, complement formation, and so forth, are effected in Chepang simply by changes in the verb, the remainder of the clause being unchanged except possibly for deletion. So a third reason for this work is that it presents a description of a not inconsiderable portion of Chepang grammar.

A final motivation is the desire to develop a particular functional approach (see section l.3.), based to a considerable extent on the work of Foley and Van Valin (forthcoming), as a method of language description. For this reason a good deal of space is given, in the introductory chapter (chapter l), to a discussion of concepts involved in such an approach for language in general, not just for Chepang.

### 1.3. THEORETICAL APPROACH

The general theoretical approach underlying the analysis and presentation of this work may best be described as functional - that is, it is an approach in which language structures are "analyzed primarily in terms of functional role in a linguistic system (parole), and only secondarily in terms of their formal properties." (Van Valin and Foley, 1979:1). A functional analysis of language then will consider the basic functions of speech and examine the mechanisms by which that language carries these out. And a description resulting from such an analysis will naturally be divided into sections according to the various speech functions, such as the establishment of role, reference, and cohesion, rather than syntactic level or unit (word, phrase, clause and so on) as in a Tagmemic grammar, or type and level of rule, as in a Transformational grammar.

A functional approach it is true, does not easily lead to a generative grammar, one which can be used to determine all, and only, the grammatical structures in a language. But there are problems with the notion of grammaticality as contrasted with meaningfulness, especially in Chepang and similar languages. Grammaticality for instance, has a
lot to do with acceptable orderings of constituents. In a language such as Chepang, however, the ordering of constituents above the phrase level is generally 'free' for a sentence in isolation. That is, the ordering of constituents is not determined by intrasentential context (see section 2.3.5.). The wider the context that must be referred to, the more difficult it is to specify formally and exactly the rules of formation of grammatical constructions. Another problem that would be faced in seeking to use a Transformational-Generative approach for Chepang is the difficulty of motivating phrase structure syntactically. Hope (1974:4ff.) notes this problem for another Tibeto-Burman language, Lisu, and proposes instead a Case grammar approach. This latter type of analysis is in fact, closer to a functional one, in that it takes a particular function, the assignment of role, and uses this as a basis of (deep) structure. Transformational rules are then used to relate this basic structure to actually occurring surface forms. In my analysis however I have avoided pre-supposing a deep level of structure, and deal with the various ways of giving expression to a particular situation under the heading of the functional basis for such variation - commanding, enquiring, the relating of one situation to another and so forth.

Another descriptive method that claims to be generative, at least to a considerable degree, is Tagmemics (Longacre, 1964:31, Pike and Pike, 1977:75ff.). But there are difficulties inherent in this type of approach also. Central to tagmemic theory is the notion that tagmemic units are form-meaning composites (Pike and Pike, 1977:4). This notion however, leads to problems when constituent units are only sometimes overtly expressed in certain constructions, as for instance object NPs in transitive clauses - is then optionality defined by formal or semantic presence and absence? If the formal criterion is taken then it may be difficult to contrast various constructions, such as Intransitive and Transitive clauses, especially in languages where almost any constituent may be unexpressed formally. More recently there has been a tendency to use the semantic criterion, particularly in treatments which view the tagmeme as a matrix which includes semantic information (e.g. Becker, 1967:116, Pike and Pike, 1977:35). This certainly enables the constructions within a language to be contrasted, but at the expense of reducing crosslinguistic contrast, since the constructions are determined more ty the semantics of the situations being described than by features of individual languages. The use of the matrix tagmeme also leads to considerable redundancy, as noted by Bruce (1979).

A further notion that is important to Tagmemics is that of level (Longacre, 1964:16ff, Pike and Pike, 1977:3ff.). While the concept of an overall hierarchy is a useful one, the usual Tagmemic practice of subdividing the description according to the various levels, and con-
fining the discussion of each unit largely to one level, may obscure important features of the language. For instance in Chepang certain verb forms, (those that I have called Tertiary verbs - see sections 1.5.2. and 4.2.), sometimes act as verbal modifiers of an adverbial nature, as in the English 'He spoke hurriedly', compare with 'He hurried'. At other times their relationship to the main verb is one of temporal sequence, as in 'He COOKED and ate the food'. In such a case, should the Tertiary verbs be treated at the phrase level as constituents of, say, a verb phrase or should they be treated as conjoined clauses at the sentence level, or at both levels? With the functional approach adopted in this thesis, Tertiary verbs are treated in terms of their function of indicating situations that are conceptually closely linked with those expressed by the main verb (see section 4.2.).

The use of levels as a basis of description also means that important functions, such as role encoding are not dealt with adequately. Role encoding for instance typically involves forms at one level (case affixes at the word or phrase level) with functions on a higher level (role marking at the clause level). A description of this function therefore would be spread over two levels.

It is possible, of course, to come to some solution of the problems outlined above, but such solutions are not based clearly on the theory itself and tend to be idiosyncratic, making individual languages sometimes appear more different than in fact is the case. The functional approach used for this study seeks to avoid these problems as far as is possible, while at the same time fulfilling its main aim, that of relating the verbal morphology to the wider linguistic framework. In addition this description should have some typological value, many of the more recent typological studies being explicitly or implicitly functional in approach (such as those of Givón, 1975; Shibitani, 1976; Comrie, l976b) and therefore easily related to it.

### 1.3.1. FUNCTIONS OF SPEECH

If a functional approach seeks to describe a language in terms of the systems it possesses in order to carry out the various functions of speech, what then are these functions?

Halliday, in an important article, "Language structure and language function" (1970a:143) describes three broad functions of language: (i.) the ideational (or contentive) function, (ii.) the interpersonal function, (ii1.) the textual or cohesive function.

The ideational aspect of language is that which is concerned with the expression and communication of the speaker's experience of the world, both the external world in which he finds himself and the inner
world of his own consciousness and feelings. The interpersonal aspect of language is that which involves the establishing and maintaining of social relations, and of achieving effects through the use of language. Obviously a single utterance can have more than one function, a command for instance, is both a description of a certain (desired) situation and an exercise in interpersonal relations.

Halliday's third function, the textual or cohesive aspect of language, is more a facility or mechanism that is required by a successful language, rather than a function of language itself. Since, in our perception, situations 'cohere' (that is, they are linked by relations such as sequentiality, cause and effect, and common participant entities) language must be able to signify these relations by linking a number of individual situations together to form a unified whole. The observation that certain situations are linked is itself part of the content aspect of speech, as in 'He went home because he was ill'.

Although the interpersonal function of language is at least as important as the ideational, most descriptions of actual languages deal largely with the latter. There is good reason for this, since the basic mechanisms of speech are designed mostly to carry out the ideational function. That is, the formal structure of language is most directly and simply related to the idealogical function. The interpersonal function of speech is carried out, to a considerable extent, by the use of content expression forms. Modal information, such as that which distinguishes imperatives and interrogatives, is however, more closely linked with the interpersonal function.

### 1.3.2. REQUIREMENTS OF EFFECTIVE COMMUNICATION

In communicating our experience of the world around and within us, we are primarily involved with describing things, their perceived characteristics and inter-relations, and with conveying attitudes towards them. The 'things' spoken about include of course, abstract entities, such as 'fear', 'idea'. 'the time when I fell', and so forth, as well as internally undifferentiated groups such as 'the couple', 'the crowd'. These are grouped under the inclusive notion of 'participant' ${ }^{l}$ as it proves useful to have a single term which includes abstract entities. Indeed languages of ten treat them formally in a similar way to concrete entities: 'This cake is for Linda/for tonight/for when Martin comes home'.

[^0]The actual experiences that are desired to be communicated are usually highly complex, involving many participants and inter-relations. In order to express these in speech the complex situation is broken down into elemental units, each consisting of a single participant and its attribute, or a small set of participants (normally only two or three) in some perceived inter-relation. These elemental units of experience are to be termed '(basic) situations' and are expressed in speech by basic or simple clauses. These situations may be either actions (those situations that are changing over time) or states (situations viewed as unchanging over time). Each basic situation is related by using marked expressions (such as definite NPs), when referring to common participants.

For a speaker to be able to effectively communicate his experience of a complex situation to another person therefore, there are several criteria which must be met. Among the most important of these are:

1. The speaker must identify the type of speech act he is seeking to carry out - whether he is imparting information, making a request, and so on. This function is covered in part by modal information.

1i. He must identify the participants for the hearer to a sufficient degree of specificity, the latter being determined by the context and purpose of utterance, and by internal cohesive factors. In other words the speaker must give appropriate referential information.

1i1. The speaker must identify the particular class of interrelation or attribute perceived as applying to the participants in the situation. This is also a type of referential information, although it identifies actions and states rather than entities.
iv. He must also relate each basic situation to its context or setting. That is, he must relate it both to the world at large, and to the contextual scene that he has built up with other situations described in the present discourse. Relationship to the real world is achieved most directly by the use of deictic and background information, particularly that supplying spatial and temporal location, and also through proper names and referring expressions which allow identification of real world participants. The relationship of a basic situation to others already described is indicated by cohesive information.

The speaker will also usually indicate his attitude and feelings toward the content of his utterance, whether by speech or gestural forms - exclamations and expletives being perhaps partway between speech and gesture.

### 1.3.3. FUNCTIONAL SYSTEMS OF LANGUAGE

### 1.3.3.1. Modality

One of the systems in language by which a speaker indicates the type of speech act he is performing is the modal system. The term 'mood' itself is usually restricted to certain syntactic categories, often indicated by verbal inflection. The concept of modality however, has been used to describe the common functions underlying the various moods - basically the indication of the speaker's attitude to the situation being referred to (Lyons, 1977:452, also Halliday, l970b:349).

A definition that will be used in this work is that the modal system is one of the means by which the speaker relates himself, and the addressee to the content of his utterance. The different modal functions therefore will be discussed under the differing ways in which the speaker relates the content to himself and the hearer. These include indications by the speaker that:

1. He desires to communicate information through the content of his utterance (by a Declarative expression). Related to this is the degree to which the speaker is prepared to back the assertions he is making he may be emphatic or uncertain about their truth.
2. He is seeking information in response to his utterance (Interrogative).
3. He desires the hearer and/or other persons to act in response to his utterance (Jussive).

In addition the speaker often expresses his feelings in relation to the content. This is usually done indirectly by intonational nuance, or by expletives in English, and grammars often say little about it. In Chepang however there are certain enclitics and affixes whose function is to indicate feeling (see section 3.2.1.7.).

### 1.3.3.2. Referential Identification

Identification of participants is accomplished primarily by noun phrases (NPs), and pronominal and deictic forms. Identification of the general interrelation holding between participants in a situation is essentially the function of verbs and their modifiers. The identification of states may be carried out either by verbs (as in Chepang) or by adjectives (as in English). Modification of inter-relations is performed in English mainly by adverbs and auxiliaries, while in Chepang these same functions are carried out by particular verb forms (section 4.2.), phonaesthetic elements, and verbal affixation.l

[^1]
### 1.3.3.3. Role Identification

The specific part that any participant plays in an inter-relation is its (case) role - the term 'case' being used where necessary to distinguish this from the interlocutory roles (speaker, addressee or a third person). Notice that this definition of case role cannot strictly be applied to single participant situations (usually states, as in 'The water is cold.') and roles need to be identified only in multiparticipant situations.

The analysis of case role presented in this thesis is developed from the notion of roles and perspective proposed by fillmore (1968, 1977) and more recently, by Van Valin and Foley (1979). Van Valin and Foley's treatment of perspective differs somewhat from mine (given below), in that they discuss it largely in relation to the verb, whereas the discussion given here is in terms of the choices open to the speaker (one of these being, in fact, the choice of verb).

The assignment of role by the speaker involves three main aspects. These are:

1. The real world situation being described, in which some things are changing in their relationship to others, to themselves, and to the environment in general.

1i. The way in which a speaker chooses to describe a particular situation. This especially includes the way in which he describes the part played by each participant, that is, his choice of viewpoint or perspective.

1i1. The formal methods by which the speaker encodes his assignment of role.

## Semantic Role

As far as the real world situations are concerned it is useful, in order to talk metalinguistically about relationships and their changes, to classify these under semantic role headings such as actor, agent and patient. These terms are, in turn, based on various semantic role features such as control, affecting, affected. It is not my purpose to discuss these in detail here; there have been many treatments of this subject elsewhere (the references cited above, also Chafe 1970, Longacre l976, to name a few).

## Perspective

For a given real world situation the amount of variation possible in its description may be considerable, as the following examples show:
la. Joe hit Mike on the head.
b. Mike received a blow on the head from Joe.

Note that, as Van Valin and Foley point out, this variation differs from the variation possible in choice of subject, since we can also have:
2. Mike was hit on the head by Joe.

The semantic implications of the change from la. to lb. are greater than those which follow from the change to example 2.

For a particular situation some semantic roles (for instance the agent and patient roles in la., lb.) may be described in a number of different ways according to the speaker's perspective. These I term 'perspective' roles. Other, less central, semantic roles (such as the location in la., lb.) are much more limited in terms of choice, the physical facts of the situation largely controlling the description of the role. The variation in perspective that is possible depends on the selection of lexical items (verbs) available to appropriately describe the situation, and also on the case marking system. Hence the degree of variation is language specific. However it would seem that there are certain universal or near universal features which speakers may ascribe to participants in order to vary the perspective. Although these features are semantically defined their ascription to participants is much more a matter of choice by the speaker than is the case for situationally governed features. The perspective varying features I term 'perspective' features, in order to distinguish them from the latter.

Van Valin and Foley use features such as 'initiation' and 'control' in their discussion of perspective (1979:7). However in my examination of role and perspective in Chepang (section 2.2.1.) I have found that perspective is determined by whether or not a participant is viewed as: (i). initially involved in the situation, (ii.) affected by the situation, (iii.) intending to affect something through the situation, (iv.) essentially involved in the situation. These give the features of initial involvement, affectedness, intention (to affect), and nuclearity.

The first two of these features, initial involvement and affectedness, appear to apply to other languages. In an English Active clause for instance, the pre-verbal position with most verbs indicates that the NP refers to a participant which is viewed as initially involved in the situation, while an NP without case marking, and which is in immediate post-verbal position usually refers to a participant which is viewed as affected. To give an example, the verb 'hire' allows the following descriptions of a particular commercial transaction:

3a. The mountaineers hired porters from the agency.
b. The agency hired porters to the mountaineers.

The post-verbal position of 'the porters' in both examples means they are [+affected] but [-initiating], which in a hiring transaction means
they were more or less passive participants in the situation. In example 3a. the pre-verbal position of 'the mountaineers' indicates that they are regarded as initiators, while the fact that 'the agency' is marked as source (by the semantic case marking preposition 'from'), implies that the mountaineers must be therefore the recipients in the transaction. Thus the total situation is conveyed to the hearer through the encoding of perspective and non-perspective features.

In English, and probably in many other languages, a participant that is affected is regarded as affected as a whole entity unless otherwise indicated. Thus the holistic-partitive distinction between the following two examples is explained:

4a. Philip loaded the cart with the hay.
b. Philip loaded the hay on the cart.

In the first example it is implied that the cart is filled, since it is marked as affected and not just as a location of the loading, as in $4 b$.

The difference between:
5a. Bill shot the duck.
b. Bill shot at the duck.
is also accounted for by the affected-non-affected distinction. In 5a. the lack of overt case marking for the NP 'the duck' indicates that the duck is affected, by being hit. In 5b. the duck is not indicated as affected and so the result of the shooting is not known (though it is usually assumed that Bill missed, otherwise the form of 5 a. would have been used).

Intention is not an explicitly indicated perspective feature in English, instead intention is inferred from the nature of the participant and the situation described by the verb.

Another aspect of variable perspective is whether or not the speaker views a participant as essential or central to the situation. An essential participant may be regarded as having the perspective feature of nuclearity. Note that a participant with a perspective role (such as 'Joe' in example la., lb. above), may nevertheless be viewed as non-nuclear (as with 'Joe' in lb.), and is either omitted or given a case marking that is usually for non-perspective roles. The difference between a non-perspective role and a non-nuclear perspective role is that, for the former, case marking is largely decided by the physical situation, not by the speaker himself, whereas for the latter the speaker chooses to mark a participant with a non-perspective case marking. In the situation described in lb. the speaker could have viewed Joe as a nuclear participant by assigning him the feature
[+ Initial], in which case the description would be as in la. However, as expressed in lb., the speaker has chosen to make Joe non-nuclear and has used a non-perspective case marking 'from' to indicate his role. The same choice is not available for 'head' in this situation. The difference is therefore one of potentiality.

A clearer example perhaps would be the following:
6a. Bill sprayed paint on the wall in the classroom.
b. Bill sprayed the wall in the classroom with paint.

Here Bill, the wall and the paint have perspective roles, the classroom a non-perspective role. However in 6 . the paint has a nuclear role with the feature [+Affected] and the wall a non-nuclear role, while in 6b. the reverse is true. To vary the viewpoint in relation to Bill's role would require, for this situation, a different choice of lexical items in English:
7. The wall received a spraying of paint from Bill.
which is an odd, though just possible way of varying perspective for this situation.

## Role Encoding and Case

In the real world situations that are described in speech there is an infinite variety of roles or relations that a participant may have. In order to describe these roles efficiently a speaker groups together those seen as having certain elements or features in common. Each feature, or combination of features, that groups a number of roles together defines what $I$ will call a 'case'. If these features are perspective features then they define a perspective case, if not, then they define a non-perspective case. It is the case system of a language that is directly related (though not necessarily in a one-to-one fashion) to the formal encoding. Underlying semantic roles are therefore encoded via the case system. Because the combinations of features that define cases vary from language to language, cases, and case systems, are language specific.

### 1.3.3.4. Cohesion

There are several systems in language which contribute to the way in which one situation is linked to another to give cohesion to speech. In particular cohesion is achieved through the referential system, inter-clausal linkage and clausal setting.

## Referential Cohesion

The referential contribution to cohesion is mainly through the indication of commonality of participants between situation. A conversation or narrative which has totally new participants in every situation that is described will lack coherence. It is of course possible to do this in poetry, but here the cohesion is provided by the association of feelings, impressions and so forth.

## Definiteness

One of the means by which a speaker indicates that a participant is not totally new to the hearer is the use of definite expressions. The marking of a referring expression as definite is an indication that the speaker expects the hearer to be able to uniquely identify the referent of the expression, as an entity (or as conventionally associated with an entity) that the hearer has already encountered, whether in real life, or through some previous reference to it. Occasionally the entity is yet to be encountered, as in: 'The man who wins will...' or 'The mayor of a small town...'. Mayors are commonly associated with towns and so 'mayor' is marked as definite in reference to the latter, though it is in fact expressed first. If association with a previously encountered entity is the basis of definitemess then this association must be felt to be conventionally accepted. To say 'The bishop of a factory...' is odd, even though such a person could conceivably exist.

With regard to definiteness in English it is important to note that a participant referred to by a definite expression does not have to have been encountered by reference in the present conversation, it only requires that the hearer be able to uniquely make the identification with something he has encountered somewhere in his experience. It is therefore possible to begin a conversation with 'The sun will be eclipsed by the moon today.', in English. In some languages, including Chepang, definite marking extends only to entities which have been encountered in the present conversation, or which are present in the immediate context. Definite marking is often by the use of demonstratives in such languages.

## Specificity

Specificity is closely connected with definiteness; a definite referring expression has to be specific enough for the hearer to make the identification with the correct referent. This does not, of course, mean that the hearer can identify the real world entity being referred to (if this exists). In 'A man shot Jackson yesterday. The assassin escaped.' neither the speaker nor the hearer may ever be able to identify the assassin. For this reason any definition of definiteness
(such as that of Foley and Van Valin (1979b), following Chafe, 1976) is incomplete if it does not state explicitly just what the hearer is expected to identify the referent with.

## Givenness

Another cohesive factor that is involved in the referential systems of language is what has been termed 'givenness' (as in Chafe, 1976). Givenness differs from definiteness in that it is not usually marked explicitly in speech. Rather it is a factor which is taken into account in the organisation of referential material, particularly in respect to the ordering, and completeness or specificity, or referential expressions. The notion of givenness has been defined in several different ways, usually linking it with 'old' information (cf. Allerton, 1978). The definition used in this work will be based on that of Chafe (1976). Chafe, however defines givenness in relation to information in general, whereas here it will be defined specifically in relation to participants, inter-relations and roles. Moreover the term 'immediately given' will be used to indicate that this particular type of givenness is dependent (as will be seen below) on the immediate context of the utterance.

The definition of 'given' then is: A participant or interrelation is immediately given if this participant or interrelation can be assumed by the speaker to be in the consciousness of the hearer at the time of utterance. In other words, the participant is part of the scene which the hearer is directly aware of through observation of the immediate context, or is mentally reconstructing from the speaker's discourse.

It is immediate givenness, the assumed presence in the hearer's consciousness, which plays an important part in determining the appropriate use of the pronouns, or proforms, in English and probably in other languages. For instance, it is completely acceptable to say to someone, concerning a previously unknown and unmentioned person who rushes out of the room; "HE'S in a hurry!". The pronoun is acceptable here because the speaker can assume the hearer is also aware of the person referred to, because of his act, and its acceptability is not conditional upon any previous reference or encounter. Conversely a participant may be regarded as 'old' in the sense of having been previously mentioned and known to the hearer (and hence may be referred to by a simple definite NP, such as 'the dog') but this does not mean that the participant is in the hearer's consciousness at the time of utterance. The difference between 'old' and 'immediately given' is clearly seen in the differing degrees of appropriateness of saying, to a child who is watching an actor on television, "Johnny, feed the dog now" and "Give him his dog food now".. The second command is consider-
ably less appropriate than the first, even though Johnny would have little difficulty in interpreting what was intended by it.

As a statement of the requirement for the appropriate use of third person pronouns, immediate givenness is not strong enough, since it does not include role. The requirement for pronoun use is better stated in terms of what $I$ term the 'selective' givenness of a participant. This is defined as: A participant is selectively given, for a particular situation being described, if a speaker can assume that (i.) the participant is immediately given, (ii.) the hearer can assign that participant its correct role in this situation. ${ }^{1}$

The requirement that a participant must be selectively given for a situation, if it is to be referred to by a pronoun, comes very close to explaining all instances of the appropriate use of third person pronouns in English. That selective, and not merely immediate, givenness is the requirement can be seen from the following:
8. Philip, Martin and Linda arrived Zate. $\mathrm{x}_{\mathrm{He}}$ /?she/Philip went straight on in while the others parked the car.

Although all three participants, Philip, Martin and Linda, may be regarded as immediately given, there is no means of determining (for a limited context) who went in and who parked the car. Pronouns are more acceptable if the hearer can reconstruct the correct roles as in:

## 9. The porter gave Joe his bags at the hotel entrance. He tipped him and went straight to his room.

On some occasions pronouns may be used for non-selectively given participants in order to achieve certain affects, such as attracting the hearer's attention by deliberately delaying identification:
10. Although he was a great scientist Newton...

Another reason for delaying identification is the desire to avoid naming the referent until a condition is expressed:
ll. If I ask him John may do it.
As far as the interlocutory situation is concerned, it can be assumed that both the speaker and the hearer are in the latter's consciousness and hence may always be referred to by pronouns. Selective givenness is not required in this case, since the forms for the first and second person pronouns convey categorial information that unambiguously identifies their referents.

## Non-given and Contrastive Information

A participant or interrelation that is not immediately given may be termed 'non-given'. It is important to note that non-given is a wider

[^2]term than 'new' (that is, not previously encountered) since participants and interrelations may be non-given simply because they are no longer in the hearer's consciousness, not because they are new. All new participants and interrelations are however non-given, since they cannot be in the hearer's consciousness if they have never been encountered. Chafe (1974:113-114) associates new information (which includes new participants and interrelations) with the intonation peak ("high pitch") in English. And certainly it is true that when a non-given participant or interaction is introduced, or when a participant is not selectively given, this information is signalled by an intonation peak. However, as Chafe himself points out, a verb referring to a new interaction does not have a high pitch if it precedes a noun referring to a non-given participant - only the latter has an intonation peak. This restriction evidently results from the fact that grammatical units are broken up into 'information blocks' by intonation, in order to package the information (cf. Halliday, l970a). A division into information blocks is especially necessary if the construction is a lengthy one, containing a good deal of new information. There is only one peak per block, and the juncture between blocks occurs only (or is highly preferred) at certain positions in the construction. Thus a subject NP can be split off from the following verb, to give two information blocks, each with its own peak. However a simple object NP cannot be separated from the preceding verb, and, as an NP, is marked as a peak in preference to the verb. Hence we can have:

12a. The BUTTER MELTED.
b. He broke the GLASS.
(where the upper case indicated the intonation peak) but not:
13. $\mathrm{x}_{\mathrm{He}}$ BROKE the GLASS, even if the verb 'broke' represents a non-given action (Chafe, 1974:114).

Chafe also points out that even a (selectively) given participant can be marked by a peak, as in:
14. Mary, Joan and a person called Sue were at the party. I knew everyone but HER.

Hence it is fairly clear from the context that Sue is the unknown person and the pronoun does not refer to a non-given participant. Chafe states that here we have a contrastive use of information and claims that the pitch contour may differ from that used to signal new information (1974: ll8). Unfortunately his examples in support of the latter claim are somewhat obscured by the fact that pairings of contrastive items are involved. His examples are of the form:

15a. Well folks, I have brought MATTHEW a BOOK.
b. I have brought MATTHEW a BOOK and MARY a GAME.

In the first example, as Chafe points out, with both 'Matthew' and 'book' non-given, there is a higher pitch on both words with little pitch drop between them. In contrast, there is a considerable pitch drop between 'Matthew' and 'book' in the second example, which Chafe feels results from the contrastive situation. However it is more likely that this drop in pitch results from the breaking up of the more complex construction into information blocks. It is not clear that there is any significant peak contour difference between the following pair:

16a. Hey waiter, a FLY fell in my soup:
b. The FLY fell in my soup (not the spider).

What seems to be the case in English, therefore, is that the intonation peak singles out a participant, role or interaction as significant in some way, usually because it is non-given, but in some cases, such as example 14. above, because the contrast is important. In Chepang however the status of some particular item as non-given, more especially as new, is signalled not by intonation but by the presence of enclitic forms (see section 2.3.5.).

## Pragmatic Structures

Foley and Van Valin (forthcoming) describe a 'pragmatic' structure of language which operates in conjunction with role structure, and accounts for differences between constructions of the type illustrated by examples la. and 2. (repeated here as $\left.l^{\prime} a ., 2^{\prime}.\right)$ that are not attributable to varying perspective.
l'a. Joe hit Mike on the head.
2'. Mike was hit on the head by Joe.
Central to the notion of pragmatic clause structure is the presence of a salient NP, the 'pragmatic peak' which is identified by features such as word order position, case marking and agreement, and is selected on the basis of factors such as givenness and definiteness. Foley and Van Valin claim that the subject in English is a pragmatic peak, its salience being signalled by its pre-verbal position and also by verb agreement. It was suggested earlier that the pre-verbal position in English also signals the perspective feature of initial involvement for an Active clause (section 1.3.3.:19). The English Passive, which assigns the pragmatic peak (and hence pre-verbal position) to a patient participant, does not appear to have perspective features, perhaps because the pre-verbal position can no longer perform the two functions. The
lack of perspective role features means that the semantic roles must be more explicitly indicated, for instance agents are signalled with the preposition 'by', recipient with 'to' etc. as in:
17. The girl was given to Joe by her father.

Note that if the preposition 'to' is omitted in the above example the feature 'affected' can be ascribed to Joe, probably by analogy with the Active construction. But it is not clear whether he is affected as an object or as a recipient - in some dialects the latter interpretation is possible.

Another feature of English Passives that may be related to their lack of true perspective roles (which basically apply only to actions) is that they are formally, and perhaps semantically, more like stative situations than are the corresponding active constructions. Compare, for instance, 'The chair is broken' where this is a description of the state that the chair is in, and 'The chair is broken (by Pete as he falls)', which may be viewed as the bringing about of a state.

Foley and Van Valin note that pragmatic peaks are different from topics. For instance, if Mike were the topic as well as the pragmatic peak of example 2., then we would have:
l'c. (As for) Mike, he was hit on the head by Joe.
Pragmatic peaks contribute to the cohesive structure of a language and are often involved in a number of grammatical processes, (see Van Valin and Foley, 1979:12ff.) in contrast to topics.

The significance of notions such as givenness, definiteness, and pragmatic peak, in relation to the verb in Chepang, is discussed in sections 2.3. and 4.1.

## Interclausal Linkage

Not surprisingly, the various systams that link clauses together make an important contribution to the cohesion of the discourse as a whole. Much of the signalling of the various interclausal relations in Chepang is handled by verbal affixes, rather than by free relational forms such as conjunctions. Those free relational elements which do occur often appear to be loans or calques from Nepali. It is the verbal encoding system for interclausal relations which is relevant to this study.

The analysis of interclausal relations in Chepang is most easily dealt with using the notion of 'reduced $:$ lause hierarchies', where a reduced clause is one which does not exhibit the full clause potential in regard to the explicit indication of role relations, tense, aspect mood and so forth. Since the degree of reduction varies according to the closeness with which the clause is linked to neighbouring clauses,
it is possible to set up reduced clause hierarchies with independent and unreduced clauses at the top, and the most reduced forms at the bottom, the latter being highly dependent on nominalised constituents.

The notion of reduced clause hierarchies has its basis in two completely independent papers - one on "Nouniness" (J.R. Ross, 1973) and the other "A nontransformational account of serial verbs." (Schachter, 1974). In his article Ross proposed that complements in English could te arranged in a hierarchy of 'nouniness', with the most fully sentential types ('that + Sentence' constructions) at the top, and the least sentential ones (derived nominals) at the bottom. The position of any complement type in the hierarchy was determined by a number of syntactic tests, the results of which showed whether the completment acted more like a noun or a full sentence.

Schachter, when discussing problems encountered in the analysis of serial verb constructions in African languages, suggested that these might best be dealt with by having sentences with multiple verb phrases in the base, rather than regarding them as derived from conjoined separate sentences in the deep structure. That is, he proposes a base rule of the form $S \rightarrow N P A U X V P(V P) *$, where ( )* indicates that the included item may be optionally repeated an indefinite number of times. An alternative, but less preferred analysis gave two base rules i. $S \rightarrow N P$ AUX VP ii. VP $\rightarrow$ (VP)*.

Although Ross and Schachter were investigating different problems they are in fact dealing with what are called here 'reduced' clauses, where the term reduced does not necessarily imply that a transformational type process has taken place, but simply that the clause contains less explicit information than is potentially possible. Schachter does not refer to any hierarchy of serial linkage but, in investigating similar constructions in Chepang, it is clear that there are formally marked degrees of closeness of linkage (cf. Olson, l979) which are related to the degree of reduction of the clauses. I therefore have proposed setting up a second hierarchy, separate from that involving nouniness, which I will call the 'complex predicate hierarchy'. There is in fact evidence, discussed in section 4.2 , for the existence of a third hierarchy involving clause reduction for setting.

Each reduced clause hierarchy has a different function to perform in respect to inter-relating clauses, and the constructions in each hierarchy may be expected to show formal differences separating them from members of the other hierarchies. In the case of the nouniness, which I will call the 'complex predicate hierarchy'. There is in fact evidence, discussed in section 4.2., for the existence of a third hierarchy involving clause reduction for setting.

Each reduced clause hierarchy has a different function to perform in respect to inter-relating clauses, and the constructions in each hierarchy may be expected to show formal differences separating them from members of the other hierarchies. In the case of the nouniness hierarchy the reduced clauses form part of the referential system of the language, and are embedded as referring expressions in a higher matrix clause. In contrast, reduced clauses of the serial verb type form part of the system of linking situations and combine to form what might be called a 'complex predicate' - hence the name of their hierarchy.

For any hierarchy a lower level means greater reduction, and the absence of explicit marking for role, tense, aspect and similar categories results in the reduced clauses losing their ability to stand alone in discourse. In other words they lose their independence and must be related formally and semantically to more complete clauses. Consider for example:

## 18a. John scolded Mary and she was unhappy all day. <br> b. John's scolding made Mary unhappy all day.

In the second example, l8b., the first clause 'John's scolding...' contains no explicit indication of tense, nor of John's role. In Ross's hierarchy this clause is called a 'Poss-ing' structure (possessive NP+ ing) and is about halfway between a full sentence and a nominal form. The situation expressed by it is treated as a participant in the main clause, since it was the action of scolding that made Mary unhappy. The equivalent clause in 18a. however 'John scolded Mary...' carries tense and role marking and could stand as an independent sentence.

Reduced clauses of the complex predicate type are much less easy to 1llustrate in English. It is interesting to note that, while English has a well developed (multi-level) nouniness hierarchy, as shown by Ross, it has a relatively meagre complex predicate hierarchy. For languages of other families, including Chepang, the opposite is true - the complex predicate hierarchy is well developed but the nouniness hierarchy is minimal. The number and relative development of hierarchies that a language possesses may well turn out to be a feature of typological significance. The best examples in English of complex predicate reduced clauses are perhaps the adverbial participles:

19a. While John walked home he ate fish and chips.
b. John walked home eating fish and chips.

In this instance also the second clause of the second example, l9b., is reduced in comparison with its equivalent in 19a. But unlike the reduced clause of 18 b . this second clause one is not acting as a participant of the main first clause. Instead it expands the activity of the
situation to combine walking and eating, and allows the introduction of a new participant, the 'fish and chips'. Examples of a range of reduced clauses in the complex predicate hierarchy of Chepang can be seen in section 4.2.3..

## Complex Clause

Because a reduced clause, by definition, lacks certain explicit marking of information, it is almost always linked with a clause which does carry this information (though exceptions may occur when the hearer can supply this information himself). The clause carrying the extra information is conveniently called the 'main' clause, though in fact it may not be semantically more significant than any of the reduced clauses linked to it - often its verb refers to a fairly general activity of motion or performing. A sequence of reduced clauses linked to a main clause, plus any other elements which serve to bind these into a unit, is called here a 'complex' clause. The use of a complex clause, instead of a sequence of conjoined unreduced clauses, is an indication that the situations represented by these clauses is conceptually a situational unit. This unit is considerably more tightly knit than an overall situation represented by sequential independent clauses. The lower in the hierarchy the reduced clauses are, the more the whole complex clause represents a conceptual unit that might be lexically rather than syntactically defined. Indeed complex clauses are used in some languages where English would use a single lexical item (a verb) and a simple clause. An example from Bena Bena cited in Young (1971) is:

```
20. no-ho fllilibe
    me-hit die(Fut)
    'He will kiZZ me.'
```

The situations represented by a complex clause always share setting and, where the reduced clauses are of a lower level, at least one participant.

## Sentence

More inclusive than a complex clause is a sentence (defined here as a unit containing at least one unreduced clause) with all unreduced clauses being linked by conjunctions or similar relational forms. Usually the clauses within a sentence share setting, but this is not a strict requirement. Sentences are often co-terminal with clauses of either a simple or complex structure, and for many discussions in this work the terms sentence and clause are mutually interchangeable.

Reduced clauses of the setting hierarchy, described for Chepang in section 4.2 .5 ., actually serve as elements linking sentences, by using the situations of the previous sentence to provide setting for the next.

## Aspect

The aspectual systems of languages also play a part in the interrelating of clausal situations. Comrie, in his monograph on aspect (1976a:3), states that "aspects are different ways of viewing the internal temporal constituency of a situation:. However it seems clear that aspect (in English and other languages) involves more than just an explication of internal temporal constituency. In particular aspect plays an important part in temporarily relating events. That such a relational function is part of aspectual systems can be seen from the fact that, in English, if a situation is referred to by an expression using a Perfect or Progressive construction, the utterance is incomplete unless a second situation is mentioned or clearly understood. This can be seen in the Past forms:

2la. Simple Past: John went home.
b. Progressive Past: John was going home (when...)
c. Perfect Past: John had gone home (when...)

The first sentence is essentially complete in itself while the last two are not, and require some further statement to complete them. The use of a Perfect in an expression concerning a situation 'A' indicates that it took place before some event ' $B$ ', the latter requiring to be stated if it is not understood. Similarly the use of the Progressive for a situation $A$ implies that a second situation $B$ occurred while $A$ was taking place.

The relational function of these aspects is not so clear with the Present and Future forms, since there is a convention that if no second event $B$ is explicitly mentioned, then this second event is understood to be the situation of utterance:

22a. Simple: John goes.
b. Progressive: John is going (as I speak).
c. Perfect: John has gone (now).

Comrie does describe the relational function of what he calls the "Perfect" (though he is hesitant about it being truly aspectual, 1976a:6) and distinguishes the Perfect from the 'Perfective' (which is a form that is unmarked in respect to internal temporal constituency). However he does not stress the similar relational function of the Progressive. Yet the common confusion between Perfect and Perfective, for English which he notes (1976a:llff.), arises from the fact that the Progressive is in opposition to the Perfect in regard to temporal relations (simultaneity versus precedence) and in opposition to the Perfective in regard to internal temporal constituency (incomplete versus complete).

As far as Chepang is concerned, relational aspect (relative tense) for closely linked clauses will be dealt with under the heading of 'Inter-clausal Relations' (section 4.2.), since it forms an integral part of the inter-clausal system. Non-relational aspect is discussed along with tense, with which it is closely involved (section 3.3.).

### 1.3.3.5. Background and Deictic Information

Although background information was distinguished from cohesive information in the discussion in section l.3.2. the functions of supplying these two types of information are clearly closely connected. For if one clause has explicit background information included in it, then all clauses linked with 1t, no matter how loosely, will be related to this background unless otherwise explicitly stated. An example of shared background is:
23. John went into the Ritz Hotel. He ordered two steaks for himself.

Here the hotel is part of the background of the second sentence.
It is not surprising, therefore, to find that closely linked clauses often obligatorily share background setting material. Moreover a participant in one clause may become the setting of another, as in:
24. Alan climbed to the top of the hill. THERE he rested for awhile.

The 'top of the hill' is a locative participant in the first clause but a locative setting in the second.

Most direct background information found within a clause is given by spatial and temporal constituents. Non-deictic background elements have little relevance to verbal syntax and are not discussed further in this work.

Deixis
One important way of relating the content of speech to the real world context of utterance is through deixis. Primary deictic systems in speech relate participants, locations and, time to entities actually observable at the time of utterance and are often accompanied by gestural indication. Deictic referring expressions include first and second person pronouns.

In Chepang, as in many languages, demonstrative pronouns vary in form according to the proximity of the referent, and demonstrative locatives are often formed simply by combining a demonstrative pronoun with a locative affix. Tense systems are a form of temporal deixis and are especially relevant to verbal morphology.

Many languages also employ what might be termed 'secondary' deixis, whereby primary deictic forms are used to refer, not to directly observable entities, but those which are simply constructs of speech as in:
25. Once a wood cutter lived in a deep forest. THIS forest was...
where the demonstrative 'this' does not refer to anything visible to either the speaker or the hearer. Often secondarily deictic forms are used with NPs to fulfill the function of definite articles or, on their own, to act as third person pronouns. Tense systems may be used in a secondary way to give 'relative' tense, that is, to give the time of a situation in relation to a time reference point set by the speech itself. This is in contrast to 'absolute' tense where the reference point is the act of utterance itself.

### 1.3.4. STRUCTURE OF THE WORK

The arrangement of this work, especially the description of verbal syntax, will be based on the required functions of speech, describing for each of these the part played by the verb in fulfilling them.

The section dealing with syntax is spread over three chapters. The first chapter describes the part which the verb plays in communicating content, particularly with respect to the establishment of role and reference.

The second chapter looks at the part played by the verb in relating the content to the context, especially the speaker-hearer (interlocutory) situation. This chapter has three sub-divisions. The first of these has to do with the sources of information and the direction which it is being passed (the 'information flow' pattern). The second subdivision deals with those functions of the verb which relate the content to the speaker. This includes those functions which may come under a broad classification of modality - the type of speech act being carried out, the stand the speaker takes in respect to the truth of what he says, and his feelings concerning this. The third subdivision of the chapter describes those functions of the verb which relate the content to the spatial and temporal context of utterance. This basically involves tense information, and also, for Chepang, aspectual marking, since the two are inextricably linked.

The third chapter deals with the verb in relation to cohesive factors such as the indication of common participants and the inter-relating of clauses.

It must be realised, of course, that the actual systems employed by a language may be multi-functional and consequently there is some
overlap between sections of the description. For instance some cohesive functions are carried out by the referential system, and, as noted, tense is combined with aspect marking and, to some extent, mood. In spite of the problems associated with this overlap a functional outline for the description does, $I$ feel, have considerable merit, especially in view of the alms of the work. Because of this I have used it as a basis for the analysis and presentation of material in the following chapters.

### 1.4. OUTLINE OF PHONOLOGY

### 1.4.1. PHONEME INVENTORY

The phonology of Chepang is discussed in considerable detail in the references given in section l.l.9., especially in Caughley 1970a, 1970b. It will be sufficient here to give a summary of the orthographic conventions and some major points of phonetic realisation.
Consonants

|  | Labial | Dental | Palato Alveolar | Velar | Glottal |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Stops Vl | p | t | c | k | ? |
| Vd | b | d | j | g |  |
| Spirants |  |  | s |  | h |
| Nasals | m | n |  | 0 |  |
| Lateral |  | I |  |  |  |
| Trill |  | r | y |  |  |
| Semivowels | w |  |  |  |  |

Vowels

|  | Front | Central | Back |
| :--- | :---: | :---: | :---: |
| H1gh | i |  | $u$ |
| M1d | e | $a$ | $\circ$ |
| Low |  | $a$ |  |

### 1.4.2. PHONETIC REALISATION

## Glottal Stop

One of the major points of interest is the phonetic realisation of the glottal stop. Although there are contexts where the phoneme is realised by full glottal closure, in the majority of environments complete closure does not take place and the phoneme is instead manifested by a falling pitch, laryngealisation, re-articulation, or by lengthening of the preceding segment. It is not possible to specify exactly the contexts in which a particular realisation will occur, but a list of
environments graded according to probability of occurrence can be given for syllable-initial and syllable-final /?/:

Phonetic Realisation of /?/ Phonemic Probability of Environment Occurrence
SYLLABLE INITIAL

1. Full closure [?
ii. Re-articulation [<]

| / \# |  |
| :--- | :--- |
| / \# |  |
| / V | Medium |
| / V? | Medium |
| High |  |
| $\mathrm{C}_{\mathrm{ng}}-$ | High |
| High |  |

SYLLABLE FINAL

1. Full closure
2. Laryngealisation

/ V ?
All other cuntexts
High
Medium
High
$C_{n g}=$ Non-glottal consonant
$C_{v l}=$ Voiceless consonant
Examples: (Only phonetic details relevant to /?/ are given in the square brackets).

| [?əknu/̧knu] | /?əknu/ | 'Raise it.' |
| :--- | :--- | :--- |
| [siák] | /si?ak/ | 'After dying.' |
| [jea ] | /je?.?a/ | 'He ate.' |
| [wan:ak] | /wan.?ak/ | 'After coming.' |
| [me?] | /me?/ | 'taiZ' |
| [je?tl.jêti] | /je?ti/ | 'eating' |
| [jêləl | /je?la/ | 'He does not eat,' |

Note that if a syllable consisting of a glottal plus a vowel follows an identical vowel [i.e. if $V_{i}+? V_{i}$ ) then the glottal may be realised as re-articulation, but often it is lost completely and the two vowels coalesce to give a long vowel, or even a single vowel of normal length, in which case all trace of the glottal syllable is lost:
[gi<i], [ni:] or [ni] /nl.?i/ 'we (Agent)'
All syllables are regarded as having an initial consonant, either glottal stop or some other consonant phoneme.

Glottal Spirant
The phoneme that is termed here a glottal spirant, /h/, is also realised in several different ways, although the environment for any particular realisation is much more predictable than it is for a glottal stop.

## Phonetic Form and Symbol

## Environment

(Not across syllable boundary)

1. Voiceless equivalent of contiguous segment. [ ]
2. Strong aspiration $\left[{ }^{h}\right]$
/Cōvi
3. Breathy, almost voiceless phonation of initial part of the syllable [.] $/ \mathrm{C}_{\mathrm{O}} \overline{\mathrm{vd}}$
where $C_{\text {no }}=$ Non-obstruent,
$C_{\text {Ovl }}=$ Voiceless obstruent, $C_{\text {Ovd }}=$ Voiced obstruent.
iv. When the glottal spirant /h/ follows /y/ and precedes /c/ (in a following syllable) then in fast speech it may become [s], when 1t is contiguous to /y/ and precedes /?/ it may become a fricative [x].

Examples: (Only phonetic details relevant to the realisation of /h/ are given.)

| 1. | [aal] | /hal/ | 'spoor' |
| :---: | :---: | :---: | :---: |
|  | [mme? ] | /hme?/ | 'fire' |
|  | [noroksa] | /horoksa/ | 'to snore' |
|  | [paa] | /pah/ | 'container' |
|  | [samm] | /samh/ | 'fuzz of bamboo' |
|  | [kayy] | /kayh/ | 'fish-trap' |
| 11. | [ $p^{h} e k$ ] | /phek/ | 'broom' |
|  | [tshar] | /char/ | 'shelf' |
| 111. | [gan] | /ghay/ | 'hole' |
|  | [dzap] | /jhan/ | 'scrub, bush' |
| 1v. | [pays.cə] | /payh.ca/ | 'Let's return (Dual)' |
|  | [pay. $\mathrm{Xi}^{\text {] }}$ | /payh.?l/ | 'Let's return (Plural)' |

Sibilants and Affricates
The sibilant /s/ varies from a palato-alveolar [s] before front vowels $/ e /, / I /$ and /y/ to an alveolar [s] before other vowels or when syllable final. The sibilant release of the affricates /c/ and /j/ varies in the same manner, though the range of movement is less. Examples giving phonetic details of initial margin only are:

| [stipyu] | /sipru/ | 'snake' |
| :---: | :---: | :---: |
| [ Šo ] | /syo/ | 'stranger' |
| [so] | /sol | 'vein' |
| [ its] | /lis/ | 'boiz' |
| [pas] | /pas/ | 'tuber' |
| [ $\ddagger$ ¢ $\mid k$ ] | /clk/ | 'knot' |
| [さ̌yo?] | /cyo?/ | 'tip' |


| ［tso？］ | ／co？／ | ＇child＇ |
| :---: | :---: | :---: |
| ［dzıksa］ | ／jlksal | ＇to be sick＇ |
| ［dza？］ | ／ja？／ | ＇Zeopard＇ |

A／y／following a sibilant or affricate tends to coalesce with it， especially if the syllable has several segments，so that the semi－vowel is realised as a brief palatal release of the preceding segment，as in ［syanh］／syanh／＇tomorrow＇．
velars
The velars／k／，／g／and／ヵ／are fronted when contiguous to front vowels and／y／，and backed when contiguous to low and backed vowels． Examples：

Semivowels
The semivowel／w／is realised as a bilabial or labiodental approxi－ mant［w］when contiguous to front vowels，and as the more open semi－ vowel elsewhere．
Examples：
［win？］／w／n？／＇bat＇［was］／was／＇a wasp＇［kew］／kew／＇Zayer＇
vowels
Vowels tend to be fronted and raised following non－initial／y／（the front vowels cannot follow this segment）and／o／tends to become less rounded，especially in a closed syllable with several segments．They are phonetically long in open syllables．
Examples：

| ［ y $_{\text {¥ヵ刀 }}$ ］ | ／syanh／ | ＇tomorrow＇ |
| :---: | :---: | :---: |
| ［と̌ẏı］ | ／cyul／ | ＇handle＇ |
| ［ry\％p］ | ／ryop／ | ＇an insect＇ |
| ［tyem］ | ／tyam／ | ＇chin＇ |
| ［gu：］ | ／gu／ | ＇friend＇ |

In multisegment syllables the sequence／ya／may be realised as either ［ya］or［e］，as in［hlyaw－，hlew－］／hlyaw－／＇toss＇．The sequence and segment contrast phonemically in short syllables：
［tyo－］／tya－／＇pull＇，［te－］／te－／＇beg＇．

## Consonant Clusters

Allowable consonant combinations in the initial and final margins of a syllable are as indicated in the following chart：

CHART 1
CONSONANT COMBINATIONS

*Western dialects only
A consonant from any column may combine with segments from any or all of the following columns within the same margin, provided that these segments are not from a higher row. Thus /r/ (row 7) can co-occur with /y/, (row 13) but not with /w/ (row 2). Similarly /m/ and /n/ can co-occur with this segment. The inclusion of /h/ in the rectangle for Column I of the initial margin indicates that it can follow any consonant (except /s/ and /?/) in front of the rectangle and precede any consonant after the rectangle, without any restrictions concerning row height. Thus /h/ can follow /k/, /J/ etc. and can precede /m/, /I/, /y/ and so on.

The chart gives all and only the allowable clusters.

### 1.4.3. TONE AND STRESS

The phonological analysis summarised in the previous section views Chepang as a non-tonal language, one of the minority in Tibeto-Burman that includes its immediate neighbours, Magar and Newari. Pitch is contrastive in Chepang only in restricted environments for certain syllable types. The glottal stop, for which the contrastive falling pitch may be a realisation, evidently derives historically from former
affixes. If the falling pitch occurred in all environments then the language would be tonal. Chepang today therefore is in an intermediate stage, between an earlier non-tonal form of the language, with affixes, and a possible later development to a fully tonal language.

Stress is non-contrastive and occurs on the first of a sequence of combined syllables - that is, word initially.

### 1.4.4. THE VOWEL SYSTEM

There is some evidence to suggest that originally Chepang had a system of three vowels instead of the present six. The three vowels would have been $1, u$, and $\theta$, representing a high front vowel, a high back rounded vowel and a central vowel that was mid to low in height. The other three vowels of the present system are $e, 0$, and a. Of these three, e comes from a fusion of 2 with a contiguous $i$ or $y$, o comes from a fusion of $a$ with $u$ or $w$, while a has resulted from a split of the central vowel. Stress may have been a conditioning factor for this vowel split (section 5.4.l.3.) and possibly also in determining whether or not fusion took place. Because stress is word-initial the former presence of prefixes (now lost or merged with the root - see Wolfenden, 1929, also App.4) would have assisted or inhibited the vowel changes.

The present fluctuation between yo and $e$ in certain environments mentioned earlier ( p .37 ) supports the possibility of vowel fusion. A similar fluctuation between wo and o has been observed in the western dialect (as in: [gwot]~[got]/got-/ 'call'). Moreover there are very few minimally contrastive pairs for yə versus e and wo versus o.

Evidence for the vowel split comes from the pronominal suffixes (section 5.4.), and from reduplication (section 3.3.8.) where both ə and a reduplicate as ə, as in hnənə- 'wobble', but hoakə-'saw (to cut)'.

### 1.5. OUTLINE OF SYNTAX AND MORPHOLOGY

1.5.1. TYPOLOGY
1.5.1.1. Order of Constituents

## Clause

Chepang may be described as an SOV language in that its basic ordering appears to follow this pattern. The example below is taken from the opening sentence of a narrative, so it is presumably subject to a minimum of contextual factors which might affect order:
26. ?uyhle kəsya?-?l manta -kay may? Je?-?o khe?-to
formerly deer -Ag person-Gl meat eat-RN be -2ry
'Formerly deer used to eat people (lit. people's flesh).'
However such a statement about word order presupposes:

1. a basic word order can be determined,
2. that it is possible to define a subject and object for the language. Neither of these two conditions is easily satisfied for Chepang. It is therefore more appropriately described as a 'verb final' (or OV) language, since it is true that the verb does follow the NPs and other constituents to which it is related, in the majority of cases. It is not uncommon however, to find in text one, or even two, NPs following the verb, fulfilling an 'afterthought' function. That is, an NP is left unexpressed in its expected position before the verb, but is then stated after the verb, presumably to correct what the speaker feels may be a lack of clarity in reference:
```
27. budhl-kay Jan -?aka-n budha - ? 1
    wife-Gl scold-Pt -Ag husband-Ag
    'He scolded his wife, the husband (did).'
```

Such sentences, with an Afterthought construction, are not regarded as basic since they are contextually determined, and the post-verbal $N P$ is set off intonationally from its preceding sentence.

Given that Chepang is essentially an OV language it turns out to be a completely well behaved example of this type, fulfilling all Greenberg's (Greenberg, 1963) predictions for an OV language (assuming that case suffixes are equivalent to post-positions). Indeed Chepang exemplifies perfectly the more general structural principle stated by Lehmann (Lehmann, 1973:48) "Modifiers are placed on the opposite side of a basic syntactic element from its primary concomitant." The compliance of Chepang with this principle is exemplified in the structure of the NP and the verb.

## Noun Phrase

The order of NP constituents can be predicted from Lehmann's principle. Since the primary concomitant of an object NP is its verb, then it follows from the principle that object NP modifiers, (and indeed the modifiers of all NPs, since all have the same structure) will precede their head noun in an OV language. And this is in fact the case for Chepang. In addition the order of modifiers follows that predicted by Greenberg, namely that demonstratives precede quantifiers and both of these precede adjectival type modifiers. Genitives also precede the head noun (cf. Greenberg's universals 2,20):

```
28a. ?ow? nisjyo? ?ay kim
    that two old house
    'Those two old houses.'
    b. na-ko? row nay
    I-Gen new clothes
    'My new clothes.'
```

Relative clauses always occur before the head noun:
29. Tow? sumjyo? ?apa -? 1 wan? -?o pyak
'Those three pigs that father brought...'
Note that the case forms are suffixed to the NP, (cf. Greenberg's universal 4).

Verb
The primary concomitant of a verb is an Object NP, therefore according to Lehmann's principle verbal modifiers (more strictly 'qualifiers', to use Lehmann's term) such as Causative, Negative, Interrogative and Reciprocal markers, should follow the verb in an OV language. Chepang obeys this principle completely in that all of these occur as verbal suffixes - there is in fact no prefixing in the language at all. In doing this it provides an unusual example of obedience to the principle amongst Tibeto-Burman languages since they characteristically form the Negative by a prefix or pre-verbal particle, even though OV is the standard pattern (Benedict, 1972:95,97). The Kuki Chin language of the Indo-Burmese border however form the Negative in a manner similar to Chepang, (Grierson, l909, vol. 3.3).

The order of affixation in Chepang also follows that suggested by Lehmann, with derivational affixes (Causative, Reciprocal) always preceding the Negative, while the Interrogative is in verb-final position (see 1.5.2.).

### 1.5.1.2. Morphological Typology

Chepang, like many other OV languages (Lehmann, 1973) is highly agglutinative - there are only two morphemes which combine categories that are elsewhere distinct. These are cl-, which indicates a 2nd Person Agent and lst Person Goal, and -Jo which indicates 2nd Person Dual. There are however a few affixes that have phonologically conditioned variants (see 1.5.3.).

### 1.5.1.3. Functional Typology

Role Encoding
Chepang has two systems of encoding role, the first uses NP case marking, the second a verbal system. The NP case marking is essentially Ergative-Absolute in type, with the agent of a transitive verb having a case marking (-?i) which is distinct from that of the patient, the latter having the same case marking (Ø) as the actor (or subject) of an intransitive verb. In the verbal system however three cases are marked, the intransitive actor (by Ø), the agent of a transitive verb (by $-(?) u /-n)$, and the patient (by -ta/tha), though the latter can only appear in the verb when the cross-referencing $N P$ is explicitly marked as Goal (see section 2.2.2.).

```
30a. Intransitive ?amapa-nls wan -na?-co
                                    parent-Dl come-NPt-Dl
                                    'The parents come.'
    b:Transitive ?amapa-nis-?| ran chyap-na?-c -u
        (Agent marked) parent-Dl -- Ag field clear-NPt-Dl-\overline{A}g
                                'The parents clear the field.'
    c. Transitive ?amapa-nis-?l co? -ləm-kay ghan-na?-tha-sə
        (Goal marked) parent-Dl -Ag child-Pl -\overline{Gl beat-NPt-\overline{Gl}}-\textrm{Pl}
                                'The parents beat the children.'
```


## Relativisation Strategy

Chepang relativises using the 'gap' strategy (Givon, l975). In this method, the participant in the relative clause which coincides with that referred to by the head noun, is left unexpressed in the relative clause. Apart from this, and the fact that a Nominal form of the verb is used, the relative clause is identical to an independent clause. Examples of relativisation are: (with the relative clause underlined)

```
3la. ?ow? yom -?l joyk-?o manta
    that bear-Ag bite-RN person
    'The person whom the bear bit.'
    < yom -?l manta -kay joyk-?a-thəy
        bear-Ag person-Gl bite-Pt-Gl
        'A bear bit a person.'
    b. ?ow? wa? sat -?o manta
    that bird kill-RN person
    'The person who killed the bird.'
    < manta -?l wa? sat-?aka-n
        person-Ag bird kizz-Pt -Ag
            'A person killed a bird.'
```

c. ?ow? klm -tan ?al-?o manta that house-Al go -RN person 'The person who went to the house.'
< manta klm- tan ?al-?a person house-Al go-Pt
'A person went to a house.'
Accessibility to relativisation extends to Locatives and Instruments, but not to Genitives:

```
32a. ?ow? gopal mu -?o kim
        that Gopal stay-RN house
        'The house in which Gopal stayed.'
        < gopal kim -han mu -?a
        Gopal house-Loc stay-Pt
        'Gopal stayed in a house.'
    b. ?ow? ?apa -? yom -kay sat -?o rama
        that father-Ag bear-Gl kill-RN sickle
        'The sickle with which father killed a bear.'
        < ?apa -? 1 rama -? yom -kay sat -?aka-n
        father-Ag sickle-In bear-Gl kilz-Pt -Ag
        'Father killed a bear with a sickle.'
    c. \(x_{\text {yom-?l }}\) sat -?o co?- ko? manta
        bear-Ag kill-RN child-Gen person
        'The person whose child was killed by a bear.'
        < manta -ko? co? yom -? 1 sat -?aka-n
        person-Gen child bear-Ag kill-Pt -Ag
            'A person's child was killed by a bear.'
```


## Complementation

No indirect forms of speech are possible in Chepang so therefore the complements of verbs of saying, thinking, knowing and so on must be expressed directly. Such complements, almost without exception, precede the reference to the speaker and the verb to which they belong. The direct speech is usually terminated by to 'such' and/or by a Tertiary form (section l.5.2.) of the verb to say, think and so forth:
$33 a$.

> na payh -na-n? to dayh-t 1 gopal dayh-?a return-NPt-1E Eq say-3ry Gopal say-Pt '"I wizl return." Gopal said.'
b. na-ko? co? -kay sat -ti way -ca-ŋ to -te? hmar -to $I$-Gen chizd-Gl kitl-3ry get rid-IF-1E Eq -CIF think-2ry 'For my child, you thought "I will get rid of it".'
or 'You thought you would get rid of my child.'
c. Row?-nəm din na sl-ca-n tə ?ama ci?-?aka-n that-day day I die-IFu-IE Eq mother know-Pt -Ag 'That day the mother knew she would die.'

The nearest construction to indirect speech is a very abbreviated form of direct quotation which omits NPs and pronominal reference and which could be taken at first sight as indirect:
34. nap-kay sat -sa to dayh-t 1 mu -na?-cə you-Gl kill-IN Eq say -3ry stay-NPt-Pl
'About you "To kill (is necessary)" they are saying.'
or 'They are saying that they must kill you.'
However it seems likely that nan-kay sat-sa is a contraction of an NP, nan-kay, in apposition with a direct speech clause (?ow?-kay)sat-sa 'It is necessary to kill him.' rather than a single indirect clause. There are plenty of examples of such apposition in text material (as in ex. 33b. above), whereas there is no other indication of indirect speech. It is possible that this contracted form will eventually be interpreted by speakers as indirect speech and that it will then be used in a much more general way.

## Other Functions

Other important speech functions are dealt with in the succeeding chapters (2-4) and will only be summarised here, with references:

1. Subordination: Subordination of clauses is carried out by reduced clause constructions (see section 4.2.),

1i. Causativisation: Causativisation is indicated by a derivational affix in the verb, -tak, (see section 2.2.6.).
iii. Reciprocal: Verbs referring to reciprocal action carry a reciprocal derivational affix, -kay (section 2.2.6.).
iv. Reflexivisation: Reflexive actions are indicated by a reflexive pronominal affix, sə (sections 1.5.3., 2.2.6.).
v. Benefactive: The Benefactive is included in the Goal case (see section 2.2.3.).

### 1.5.1.4. Phonaesthetic Forms

Chepang makes considerable use of phonaesthetic forms, of which there are a very large number. Their main use is to modify or add colour to the content of the main verb, though they may occasionally be used adjectivally. When used with a verb they are often followed by the enclitic to 'such, in such a way', which serves to identify phonaesthetic forms.

Examples are:

```
35a. Tow? manta cin?can?-tə mu -na?
    that person quiet -Eq stay-NPt
    'That person remains quiet.'
    b. hlun cukucuku -ta hmor -na?
    heart palpitate-Eq think-NPt
    'He is worried (lit. thinks with a fluttering heart).'
    c. mik-ma pruphuprughu-tə mu -?aka-ca
    eye-Co large-eyed -Eq stay-Pt -Dl
    'They stayed there large-eyed (as a small child).'
    d. kesya? pyalolololo-tә ?al-?a
    deer trotting -Eq go -Pt
    'A deer went trotting off.'
e. srat srut-dhay tyut-dhəy wan? -?o
    srat jerk-3Sm pull-3Sm bring-RN
    'Srat! jerking and pulZing they are brought out.'
```

It can be seen that it is often difficult or impossible to gloss these phonaesthetic forms. However they are always completely regular as far as the phonological system of the language is concerned - they introduce no new segments or clusters. They are often centres for marked intonation contours and may be greatly lengthened, raised in pitch and attenuated. The words are commonly reduplicated. Basically these forms are imitative, that is the flow of sound of the word imitates the flow of the action it stands for, where this is possible. For instance, the regular pattern of the deer's footfall (ex. 35d.) or the palpitating of the heart (ex. 35b.) is imitated by the alternation of consonant and vowel. Clearly this is not possible in examples such as 35c. since no movement is involved. They vary considerably in form, being sometimes monosyllabic (35e.), often a rhyming or repeated pair of words (exx. 35a., b., c., cf. English 'heZter-skeZter, peZZmeZて'), at other times indefinitely long, with one or more syllables repeated many times (ex. 35d.).

It is interesting to note that, for Chepang, phonaesthetic forms as a class merge completely with verbs, in a few cases a phonaesthetic form and a semantically related verb root are identical in form, in other cases very similar (such as srat and srut-in example 35e. above), also cio?can? and the verb clo? 'be quiet'. An example of a form that is both a verb and a phonaesthetic form is hlyum- 'bury itself' (exx. 36a.,b.,), while tyop is a noun as well (exx.36c.).

36a. ?ow? dull hlyum-tə kawruk-tan pok -?a that tortoise bury -Eq shell -Al enter-Pt 'The tortoise withdrew rapidly into its shell.
b. ?ow? la? -ko? may? -han hlyum-?a
that arrow-Gen flesh-Loc bury-Pt
'The arrow buried itself in the flesh up to the barbs.'
c. tyopok tyopok-tə ya?-?a tyop-ko? dhər -tan? tyopo-tak-nə -w drip drip -Eq one-Em drop-Gen shake-IIF drip-Cs -NPt-Ag 'Drip, drip, with a shake he caused it to drip one drop at a time.!

### 1.5.2. VERB TYPES

It proves useful for Chepang to distinguish three major types of verb according to structural and functional criteria. These three types I have termed Primary, Secondary and Tertiary. Their properties are summarised below, with further details in section 4.2 .

## Primary Verbs

These occur as the main or final verbs of clauses. Their general morphological structure is:

Root (InF) (Conj) (Der) (Aux) $\left\{\begin{array}{ll}\text { Tense Prong } \\ \text { Pron Neg }\end{array}\right\}$ (Int)
where Der $=$ Derivational affix, Conj $=$ Conjunction, Aux $=$ Auxiliary Root (with Aspect-like functions - see section 3.3.4.). InF = Information Flow class (see section 3.l.), Pron $=$ Pronominal affix, Int = Interrogative. The order of the first four optional elements may vary and Emphatic forms may be interposed at any position between the root and the Tense affix (see section 3.2.1.2.). Examples of possible Primary verbs are:

```
37a. ?ap -tak-ma -khe?-tan?-?aka-c -u -ya
    shoot-Cs -Co -Im -IIF -Pt -Dl-Ag-Int
    'Are the two also about to cause to shoot (it is said)?'
    b. nay?-ma -?ak-te?-jə -lə -ya
    hit -Co -Rpt-CIF-2Dl-Neg-Int
    'Did not you two first also hit it?'
```

Characteristics of Primary verbs:

1. Morphological
a. Have Absolute Tense markers (when in the positive form).
b. Have pronominal suffixes.
c. Use -lə as a Negative suffix.
d. May have a compound root.
2. Syntactic-Semantic
a. Semantically and syntactically independent of following verbs.
b. In the basic order are sentence final.
c. Do not occur with the Direct information flow marker -pay.

## Secondary Verbs

These are intermediate in structure and form between Primary and Tertiary verb forms:


Examples of possible Secondary verbs:

```
38a. bəy?-tak-tan?-tha-to -ma
    give-Cs -IIF -Gl -2ry-Co
    'He had also caused him to give (it is said).'
    b. wan -dhan-ma?-tan?-to
    come-NFu -RNg-IIF -2ry
    'He had not yet come (it is said).'
```

Characteristics of Secondary verbs:
i. Morphological
a. Have no Absolute Tense marking.
b. May have pronominal affixes.
c. Use -ma? as a Negative.
d. The Root is always simple.
e. Only one secondary affix (-to).
ii. Syntactic-Semantic
a. Semantically linked to following Primary verb.
b. Are not required to share a participant with this Primary verb.
c. Cannot take the Direct information flow marker -pay.

An example of linked Secondary and Primary verb forms is:
39. kəsya?-?l ti? tun -?u-to can-?l jayk-?a-thay deer -Ag water drink-Ag-2ry crab-Ag bite-Pt-Gl 'The deer was drinking water when (unexpectedly) a crab nipped him.'

## Tertiary Verbs

These contrast sharply with Primary verbs. Their structure is relatively simple:

where 3 ry indicates a Tertiary verb form of temporal relator (see section 4.2.3.3.). Examples are:

Characteristics of Tertiary verbs:

1. Morphological
a. Have no Absolute Tense markers.
b. May not have Pronominal affixes.
c. Use -ma? as a Negative.
d. Root is simple, never compound.
e. Tertiary affix may vary according to temporal relation to be indicated.

## 11. Syntactic-Semantic

a. Closely linked semantically with the following Primary verb.
b. They must share at least one participant with this Primary verb.
c. May occur with the Direct Information flow marker -pay.

An example of linked Primary and Tertiary verbs is:

```
41. ni-ci-? cuy khan-tl bo -tl Je?-na -o?-c -u
    we-Dl-Ag rice cook-3ry serve-3ry eat-NPt-1E-Dl-Ag
    'Cooking and serving the rice we two eat it.'
```

The form and function of Primary, Secondary and Tertiary verbs is discussed in greater detail in section 4.2.

### 1.5.3. MORPHOLOGY

Because of the highly agglutinative nature of the language there is little fusion or morphemic variation. Indeed such complexities are limited to the Pronominal and associated affixes (Tense, Jussive, Primary Negative, and Secondary affix), which form a tight-knit unit (the Pronominal Group) within the verb structure - they are not permutable, nor can they be interrupted by Emphatic or Information Flow affixes.

A full list of the grammatical morphemes is given in the Appendix. This list includes free and enclitic forms as well as affixes, and gives a brief description together with the standard text gloss. A more detailed description of the functions of the grammatical morphemes is given in chapters 2-4. It will be sufficient here to outline the categories and varients of the Pronominal group of affixes which form the core of the verbal affix system, and which contain most of the
complexity. Charts showing the full paradigms for this group of affixes are given in the Appendix (charts ll-14., App.l.).

## Pronominal Group Affixes

Note that the basic forms of the affixes, used when making reference to a particular morpheme, are listed first in order.

Person

lst (Inclusive) -təyh
2nd $\quad$ naŋ $\sim n i n / \ldots \quad C i \sim n a l \_$nan (2S-lS form is -ci)
3rd $\varnothing$
Number
Singular $\quad \varnothing$
Dual $-c ə \sim c l / \quad$ ? $1 \sim c / \_$(?)V (2nd Dual is -Jə)
Plural

1. Ist Prı Agent -so $\sim$ s/ $\qquad$ (?) V or 2NS-lS and Reflexive
1i. Elsewhere -?i $\sim y ? / C_{n v} V \quad \# \sim i / n$ Reflexive
2. Word final -so ~ si/i $\qquad$
3. Elsewhere -? $\sim 1 / C$ $\qquad$
Case
Agent
4. Non lst-3rd -n
5. Elsewhere -?u~u/C_~ w?/CV__ \#

Goal -ta $\sim$ thal___ $\left\{C_{v i}(\sim\right.$ thəy/___\#)
Tense
Non-Past -na? ~nal__C\# ~nal__ SV n ne?/___nan
Future $-c a ? \sim c a l \_C \# \sim c e l \_\quad S V \sim c e ? / \_\ldots n a \eta$ (Indefinite)
Past
-?aka ~ ?alal $\qquad$ n ~ ?al $\qquad$
Negative (Primary)
Secondary Affix
$-1 ə \sim 1 V_{h} / V_{h}$
Abbreviations: $V=$ Vowe
Abbreviations: $V=$ Vowel, $C=$ Consonant, $S V=$ Semivowel, $V_{h b}=H i g h$ back vowel, $C_{0}=$ Non-glottal obstruent/lateral, $C_{v l}=$ Voiceless consonant, \# = word break or end of Pronominal Group, $C_{n v}=$ Non-velar consonant. An abbreviation of the type $2 S-1 S$ is taken throughout this work to indicate the Person and Number categories of the Agent (left of the hyphen) and of the Goal it is acting upon (right of the hyphen) in this case a Second Person Singular Agent acting on a First Person singular Goal.

It is important to note, in respect to variation of the Pronominal Group affixes, that the environment stated as causing this variation only extends to that provided by other members of the group itself. In other words no morpheme which is not a member of this group can condition morphemic variation within it. This rule is especially important for pronominal affixes which have an initial glottal stop, since this phoneme is completely lost from such affixes whenever they follow another Pronominal Group member. However when one of these affixes follows any other morpheme the glottal is not entirely lost, though it may be realised, not as a full glottal stop, but as re-articulation or lengthening of the previous consonant and so on, according to the general phonemic rules for glottal stop (section l.4.2.). Thus the pronominal elements no+?l gives -øl, but with the root wan- 'come', we have wan+? $\rightarrow$ wan?l [wan刀l] 'Let's come'.

Most of the phonologically conditioned variation results from (i.) vowel assimilation, especially progressive assimilation within the Pronominal Group elements, (ii.) loss of initial glottal as exemplified above, (ii1.) resyllabification, such as -?aka+?i $\rightarrow$ ?a.kay?, where the symbol . indicates a syllable break.

## Order of Pronominal Affixes

The order of the strictly pronominal affixes (those representing Person, Number and Case) relative to one another depends on which case affix is present:

1. Agent Case

## a. -?u the order is: Person Number Case

b. -n Case Number (there are no Person elements with this affix)
2. Goal Case
-ta Case Person Number
Examples are:
42a. nl-?l bay?-nu-s -u -1u
we- Ag give-1E-Pl-Ag-Neg
'We do not give.' (Agent case -?u)
b. nl-?l bay?-na -n?-s -u
we-Ag give-NPt-1E-Pl-Ag
'We give.'
c. ?ow?-məy? bay?-na -n -1
that-CPl give-NPt- $\overline{\mathrm{Ag}-\mathrm{Pl}}$
'They give.'
(Agent case -n)
d. ni-ci-kay bay?-na?-ta- ŋ?-ca
we-Dl-Gl give-NPt-Gl-lE-DI
'We two are given.' (Goal case)
With Jussives even the Agent Case affix - ?u may precede the pronominal affixes:
43. bəy?-?u-su
give-Ag-Pl
'Give to them:'
The question as to which participant or participants are represented by Pronominal affixes in the verb, is a complex one and is dealt with in chapters 2 and 4.

### 1.5.4. THE VERB AS A UNIT

Certain examples, such as 44. below, cast doubt on the integrity of the verb as a single unit or word:

```
44. nin-? na-ko? kam Janh-lan "wan-te?-te?-nan-?a-nan-so-
    you-Ag I -Gen work do -Pur come-CIF-CIF-2 -Pt-2 -Pl
    "bot-te?-te?'jhun-?a-nan-sə
    Pos-CIF-CIF-Rep -Pt-2 -Pl
    'You all often came to do my work.'
```

where heavy stress is indicated by (") before the syllable and lighter stress by (').

Phonologically there are at least two words in the string of syllables beginning with wan 'come', with the second word beginning at bat 'Possessive'. This is supported by the fact that there are two sets of Pronominal Group affixes, one set terminating each phonological word. Yet the second unit is not independent - it could never stand alone and, in the great majority of cases, there is only a single phonological and grammatical unit which acts as the verb, even if -bot is part of this unit:

$$
\begin{aligned}
& \text { 45. Ia-ko? mokay'dun-na -bot-ta-ŋ? } \\
& I \text {-Gen maize grow-NPt-Pos-Gl-lE } \\
& \text { 'My maize is growing.' }
\end{aligned}
$$

As far as speaker reaction is concerned Chepang writers seem to have few intuitions concerning natural word units - even those who have been literate for several years show no consistency in writing word breaks. They do make breaks in writing, on the pattern of Nepali, but the example of this language does not seem to have conditioned the placement of these breaks. For a while, one man who was transcribing text simply broke it up so that it formed neat columns down the page, presumably
in imitation of word lists that $I$ had been using. The one inviolable unit is the syllable, this was never split up between 'words'.

It seems then, that Chepang speech consists of strings of syllables combined into word-like units which generally coincide with phonological stress groups and which tend to permute as a whole, rather than be subject to internal permutation, with their borders being the most likely place for hesitation. In this respect Chepang is partway between languages such as Lisu and Akha, which have grammatical elements closely associated with separate particles, and others such as Limbu, where the word is a fairly tightly-knit group of syllables, as evidenced by degrees of strength, the tightest morpheme junctures being those between the elements of the Pronominal Group (shown by phonological processes that have taken place), while the weakest bonds are those of enclitic forms such as to 'such'. In between are those junctures of the type exhibited by -bot in (examples 44. and 45. above).

In the remainder of this work the verb is usually treated as a single word, at least when viewed synchronically, but the qualification mentioned above should be kept in mind.

## THE VERB IN RELATION TO CONTENT

### 2.1. REFERENTIAL INFORMATION

### 2.1.1. VERBAL CROSS-REFERENCE

The verb in Chepang plays a part in supplying referential information, in that it provides a potential second reference, or 'cross-reference', to certain participants by means of the pronominal affixes. A given participant may therefore be referred to twice, firstly by an NP or pronoun, secondly by the verbal cross-reference. In practice, however, the referential system is much less redundant than might appear at first sight, since the verb provides referential information basically for only one participant, the remainder being supplied by NPs or free pronouns where necessary. Moreover NPs and free pronouns are often omitted from clauses, so that the verbal pronominal affixes may be the only explicit reference to one participant.

Only certain verb forms may have pronominal affixation. These are the Primary and Secondary verb forms described earlier (section l.5.2.), and some Jussive forms. The latter, in their positive form, are similar to Positive Primary verbs, except that the Jussives do not have Information Flow or Tense affixes. Of the Negative Jussives only Cessatives (commands to stop an action) have pronominal affixes. Jussives are discussed in detail in section 3.2.3. There is also one clause type, which I have called a 'Characterisation' clause, that includes pronominal forms attached to the verb, though they appear to be enclitic to the construction as a whole rather than true verbal affixes. These clauses are described in section 4.2.4.2.:134.

### 2.1.2. PRONOMINAL CATEGORIES

Referential information supplied by free and bound pronominal forms is given in terms of certain categories applying to the participant referred to. Among these categories are those based on the participant's interlocutory role (Person category), the internal composition of the participant (Number category), and, for Chepang, the case role of Participant (Case category). Chepang is unusual as a language in that more categories are distinguished in the verbal affixes than in the free pronouns (see Grimes, 1975:491), since only the former make the Exclusive-Inclusive distinction for First Person Non-singular.

As far as the basic categories of Person and Number are concerned, in a pronoun system such as that of Chepang, with three Number categories (Singular, Dual and Plural) and four Person categories (First, First plus Second, and Third Person), there are optimally eleven different forms (compare Silverstein, 1976). This is because one of the twelve Person-Number combinations, First Person Inclusive Singular, is logically impossible. And in fact Chepang does have eleven separate verbal affix forms. The system is as follows:

TABLE 1
PRONOMINAL AFFIXES (BASIC FORMS ONLY)

|  | Singular | Dual | Plural |
| :--- | :---: | :---: | :---: |
| lst (Exclusive) <br> lst plus 2nd <br> (Inclusive) <br> 2nd <br> 3rd | -na | - -nə-cə | $-\eta-\left\{\begin{array}{l}i \\ \text { sə }\end{array}\right.$ |

These can be broken down into separate Person and Number elements: First Person -пə, First and Second -təyh, Second -nan, Third $\phi$, Singular $\phi$, Dual -cə, Plural -?i/sə.

The independent pronoun system has less distinctions:

TABLE 2

## INDEPENDENT PRONOUN FORMS

|  | Singular | Dual | Plural |
| :---: | :---: | :---: | :---: |
| lst | na | $\left\{\begin{array}{l}\text { D\|c } \\ n \mid c i\end{array}\right.$ | 01 |
| 2nd | nan | nloji |  |
| 3rd | (20w?) | (202nis) |  |

Note that there is considerable similarity between the free and bound pronoun systems, but that the former lacks the Inclusive-Exclusive distinction. The two different forms for the lst Person Dual free pronoun do not correspond to such a distinction but apparently are simply variants between speakers. The $3 r d$ Person forms are strictly demonstratives and hence are enclosed in parentheses. They are composed of the demonstratives - ?ow? 'that', or ?i 'this' plus the normal NP Number affixes -nis 'two', -ləm 'Plural' and -məy? 'Collective or Class Plural'l (used only for Personal entities-humans and spirits).

The actually occurring forms of the Pronominal affixes, plus Tense and Case, may be seen in Charts ll-15 in the Appendix. These forms, and the free pronouns, are related to the basic forms, (such as those given above for Person and Number, ) by a few fairly simple phonological and morphological rules (see section 5.4.l.3.).

## Second Person Reference

An examination of the charts will show that they include the affix -te? in some forms involving the 2nd Person. This affix is strictly part of the Information Flow marking system (section 3.l.) but its presence implies that the addressee is involved in the situation being described. It therefore has a function similar to that of 2nd Person pronouns, though formally and systemically it is clearly different from the true pronouns. Because it often is the only marker of 2nd Person cross-reference in the verb, this affix has been included in the charts. It also differs from the true Pronominal elements in that it always precedes the Tense affix:

[^3]\[

$$
\begin{array}{ll}
\text { 1. } \quad \text { ten } \text { ?al-te?-na? } \\
\text { today go-CIF-NPT } \\
& \text { 'Today you go.' }
\end{array}
$$
\]

### 2.1.3. REDUPLICATION

One of the features of Chepang pronominal affixation is that part of the 2nd Person form may be repeated once, or even twice in the verb, as in the following example:

```
2. nio-kay па-?i bәy?-ne?-nə-nə-na-\eta-sə
    you-Gl I -Ag give-NPt-2 -2 -2 -1E-Pl
    'I will give to you all.'
```

This reduplication probably has its origins in deictic repetition as in the English 'You, you, and you go:'. Its use is restricted to the 2nd Person forms and the Information Flow marker -te?. However it is possible that the alternative Plural form, -?l, may also have arisen from a similar deictic repetition of the demonstrative ?l 'this'. The nature of glottal syllables is such that the repeated forms would rapidly be condensed into a single syllable again, but this time with a Plural meaning.

### 2.1.4. DOUBLE CROSS-REFERENCE

Although essentially only one participant is cross-referenced in the verb, I have elicited, on a number of occasions, verb forms which clearly and fully cross-reference two participants. I have never found any examples in unelicited speech or text however, so that the status of these forms is somewhat unclear. A possible explanation for them is given in section 5.2.4.2. Examples of double cross-reference are:

3a. $\frac{\text { ni-kay }}{\text { we-Gl }} \frac{\text { ?ow?-moy?-?i ghan-na?-s -u -na?-ta }-n-1}{\text { that-CPI-Ag beat-NFt-P1-Ag-NPt-Gl-1E-P1 }}$
'They beat us.'
b. $\frac{\text { ?i }-n i s-k a y}{\text { this-DI -GI }} \frac{\text { ?ow?-məy?-? }}{\text { that-CPI -Ag }}$ ghan-na?-s -u -na?-tha-cə
'They beat these two.'

### 2.1.5. POSSESSOR CROSS-REFERENCE

Chepang is also unusual in that the Possessor of a participant may be cross-referenced in the verb, instead of the participant itself. The fact that the cross-referenced entity is a Possessor is signalled by the use of the form -bot before the relevant Pronominal affixes, these last being always marked with the Goal case form:

4a. na-ko? co? rya?-na?-bat-ta-n?
$\bar{I}-\overline{G e n}$ child cry -NPt-Pos-Gl-IE
'My child is crying.'
b. yam way -?a-bot-ta-o?
rice destroy-Pt-Pos-Gl-lE
'My rice is destroyed.'
c. na-ko? co? wan -?o-bot-ta-n?
$\bar{I}-\mathrm{Gen}$ child come-RN-POS-Gl- $\overline{\mathrm{IE}}$
'My child has come.'
When the Possessed, not the Possessor, is the given participant in the conversation then the latter is not cross-referenced, and the affix -bot is now placed before the Tense affix and before any Information Flow marker:

> 5. nan-ko? kuy?-?l ram-kay joyk-bot-na?-thay you-Gen dog-Ag Ram-Gl bite-Pos-NPt-Gl
> 'Your dog bit Ram.'

### 2.1.6. CHOICE FOR CROSS-REFERENCE

Since, in a multi-participant situation, only one participant (except for the double cross-referencing noted in 2.1.4. above) is represented in the verb by cross-referencing Pronominal and Case affixes, there is necessarily some means of selecting which participant is to be represented. It turns out that the basis of selection of this participant is quite complex, and involves several factors, among them being participant role. The question of how the selection is made will therefore be deferred until the case role system of Chepang has been described (in the following section, 2.2.).

### 2.2. THE VERB AND ROLE INFORMATION

Because the pronominal affixation includes case marking affixes, the verb therefore plays a significant part in the role encoding system of the language. In order to discuss in detail the contribution of the verb it is necessary to describe the total case role system, including the part performed by NPs, since the verbal and NP sub-systems are interdependent to some extent. Both may be required in certain circumstances to correctly assign roles to participants.

The analysis of case role that follows is in terms of the perspective role features that were outlined in the introductory chapter (section 1.3.3.3.).

### 2.2.1. PERSPECTIVE ROLE FEATURES

The case marking system in Chepang, as no doubt in most languages, is primarily designed to disambiguate case roles for multi-participant active situations. In contrast, the roles of participants in stative situations are indicated by active case markers used in an extended or non-basic sense. The discussion in this section therefore applies only to actions, and the question of case roles for stative situations is dealt with later (2.2.2:61).

The perspective role features that apply to Chepang are:

1. Initial Involvement. A dynamic situation (or action) is viewed as involving one participant from the outset, while others are involved at a later stage. The participant viewed as involved from the outset may be regarded as having the feature [+Initial], the others have the feature [-Initial]. Obviously initial involvement is restricted to active situations and is most easily definable for those in which the movement of one participant, the 'Initiator' or 'Actor', causes it to change its physical relationship to another participant, possibly affecting it.

1i. Intention. Certain active situations, especially those with animate initiators, are viewed as including one participant who intends to affect another through the situation. These are termed here 'Intentive' situations, and correspond approximately to the more familiar notion of transitive actions. Intentive situations involve two key participants, the intender and the intentionally affected, both of which may be regarded as having the feature [+ Intent]. The intender is also necessarily an Initiator, since the action originates with him. Participants not seen as being directly involved in the intention may be regarded as [- Intent].

1ii. Nuclear. Certain participants are viewed as essential to the situation and are therefore assigned a nuclear role. These participants may be regarded as [+ Nuclear]. Those participants which are [+ Initial] or [+ Intent], or both, are of necessity also nuclear. Non-nuclear participants are peripherai to the description, and have case markers that are more directly derived from the underlying semantics of the situation than are the case markers of perspective role participants.

### 2.2.2. ROLE ENCODING

## Nuclear Roles

The type of situation with the highest number of Nuclear perspective roles is an action to which is attributed Intention, as defined above. Because such a situation has the highest number of roles which can be
viewed in various ways, it requires the most complete set of case markers in order to describe the parts played by the participants with a minimum of ambiguity.

Since we are only concerned with Nuclear roles at the moment (those that involve participants which are [+ Nuclear]), there are four possible combinations of the remaining binary perspective role features [+/- Intent], [+/- Initial]. Each combination defines a separate perspective case which has its own distinctive combination of NP and verbal case affixes. The names and gloss abbreviations for each perspective case, and their respective verbal and NP case markings, are shown in Table 3 below, for Intentive situations:

TABLE 3
PERSPECTIVE CASES (FOR INTENTIVE ACTIONS)

|  | + Initial |  | - Initial |  |
| :--- | :--- | :--- | :--- | :--- |
|  | + Intent | - Intent | + Intent | - Intent |
| CASE NAME | Agent (Ag) | Instrument(In) | Goal(Gl) | Object(Obj) |
| SYSTEM |  | -21 | -kay <br> Noun Phrase <br> Verbal | -21 |

Examples of the case marking are (with underlining of crossreferencing elements):

$\frac{\text { Gopal-Ag child-Pl -Gl bird-Dl(Obj) give-Pt }-\overline{\mathrm{A} g}}{}$
'Gopal gave the children a bird.' Agent Cross-reference
b. gopal-?l haw -lam-kay wa? -nls bəy?-?a-tha-so

Gopal-Ag child-Pl -Gl bird-Dl(Obj) give-Pt-Gl -Dl
'Gopal gave the children a bird.' Goal Cross-reference
c. $\begin{aligned} & \text { gopal-?l haw -lam-kay wa? -nls } \\ & \text { Gopal-Ag child-Pl-Gl bird-Dl(Obj) }\end{aligned}$ give-?a-tha-sa
d. gopal-? sya?-nls-?l ran yaw -na -w?

Gopal- $\overline{\mathrm{Ag}}$ ox -Dl -In field(Obj) plough-NPt- $\overline{\mathrm{Ag}}$
'Gopal ploughed the field with two oxen.'

Note that the verbal system only marks case for participants that are [+ Intent], that is Agents or Goals. No verbal cross-referencing
is possible for other participants in Intentive situations (the examples marked by ${ }^{\mathrm{x}}$ ). The difference between Agent and Goal cross-reference is discussed in sections 2.3., and 4.1.

Non-perspective Roles
The case marking of non-perspective or peripheral roles is, as suggested earlier (2.2.1.), fairly directly related to the features of physical situation being described. The main non-perspective case affixes for peripheral roles are:

| -han General Locative | -ka? Mobile Locative |  |  |
| :--- | :--- | :--- | :--- |
| -tan Allative 'towards' | -kus Comitative 'with' |  |  |
| -say Ablative 'from' | -gana Proximal Locative |  |  |
| -kha | Inessive 'in' |  | 'near, on, upon' |

These and other less frequent peripheral case affixes are listed in the List of Abbreviations. The Mobile Locative is used with animate or moving objects (such as a bus) and is often combined with other locational affixes. The Genitive -ko? is not included with the case roles because it does not relate a Possessor. Since peripheral roles have little to do with the verb in Chepang they will not be discussed further.

## Non-intentive Situations

In Non-Intentive situations the features of [+ Initial] and [+ Nuclear] usually coincide (except where a Comitative Participant is involved - see 2.2.7.). This redundancy is not surprising since the features primarily apply to Intentive situations. It is useful to have a term for the participant which is most highly marked with respect to positive perspective role features, for any situation. This participant will be termed the 'Actor'. In an Intentive situation the most highly marked participant is the Agent or Agentive Actor (+ Initial, + Intent, + Nuclear). In a Non-Intentive action the participant that is both [+ Initial] and [+ Nuclear] will simply be called the Actor, or the Non-Agentive Actor, if it is necessary to distinguish it from an Agent. A Non-Agentive Actor is indicated by zero case marking on the NP representing it, and by pronominal affixes, also with zero case marking, in the verb:

```
7a. gi-cl ?al-na -n?-c0 bajar -tan
    we-Dl go -NPt-lE-Dl bazaar-Al
    'We two go to the bazaar.'
    b. ?o?-nls sin?-say dyas-na?-ca
        that-DI tree-Ab fall-NPt-DI
        'Those two fall from a tree.'
```


## States

The only perspective feature that can be applied to states is that of nuclearity, though even this is largely irrelevant since many stative situations have only one participant, and it is probably better to regard perspective features as non-applicable to states. Nevertheless, by analogy with Non-Intentive actions, one participant is represented by cross-referencing affixes in the verb, without there being any case affixation. This participant I will term a 'Statant'.

```
8a. \(\frac{\text { ?ow? nis-cak }}{\text { that two-person tall-NPt-DI }}\)
    'Those two are tall.'
    b. \(\quad\) i ro du -na?
        this flower red-NPt
    'This flower is red.'
```

If other participants are included in a state then they are either given the appropriate non-perspective case affixes (as in Existential situations, ex.9a. below), or are given perspective cases - the latter being defined strictly only for actions. The two perspective case affixes that are used in this manner are those for Instrument and Goal. The Instrumental affix is used to indicate a Non-Intentive entity that was involved in bringing about the state being described (ex.9b.). The Goal affix is used to indicate an entity for which the state was brought into being (ex.9c.).

```
9a. bon -han ro na?-na?
    forest-LOc flower be -NPt
    'In the forest there are flowers.'
b. kuy?-nls hme?-?i hyum-?aka-ce
    dog -Dl fire-Ins burn-Pt -Dl
    'The two dogs suffered burns from fire.'
c. nam-kay ?amh mu -na?
    you-Gl food stay-NPt
    'There is food for you.'
```

The participants marked as Instrument in 9b. and Goal in 9c. cannot be represented in the verb by Pronominal affixes, indicating that the fire in 9b. cannot be an Agent and that the Goal is 9c. is not a true perspective Goal case, otherwise each could be cross-referenced. It is noteworthy also that Non-Intentive actions cannot have Instrument or Goal participants, since these are defined by feature combinations that include Intent. The situations represented by l0a., lob. must be expressed more explicitly as in lOc. and lOd. respectively:


```
        I stick-Ag walk-NPt-lE
        'I walk with a stick.'
b. Xrja nan-kay ?al-ne?-nan
        I you-Gl go -NPt-2
        'I will go for you.'
c. クa slo? nor?-tl wah-na -п?
        \(I\) stick lean-3ry walk-NPt-1E
        'I walk leaning on a stick.'
d. nan-kay na le?-lan ?al-na -n?
        you-Gl \(I\) get-Pur go -NPt-lE
        'I will go to get it for you.'
```

The fact that states can include Instrument and Goal marked participants is probably another indication that these affixes are not being used to indicate true perspective cases, but are rather being used in an extended or secondary way for situations in which perspective features do not apply.

If a state is viewed as brought into being by the intention of some participant, then a Causative form of the verb is used and the whole situation treated as an action (see 2.2.6.).

It is important to note that certain situations which at first sight might appear to be states, are regarded sometimes as Intentive actions in Chepang:

```
lla. \(\quad\) il slo?-?i na-kay li? -na?-ta-ŋ?
    this wood-Ag I -Gl weigh-NPt-Gl-lE
    'This wood weighs me down.'
    b. nyam-? 1 na-kay raw? -na?-ta-n?
        sun-Ag I-Cl blaze-NPt-Gl-lE
        'The sun blazes down on me.'
```

In both instances the effect on the animate participant increases with time. For this reason, perhaps, the situations are viewed as actions. Also it is significant that the distinction between animate and inanimate entities is much less clear in a Chepang world view. Hence inanimate objects are more often attributed intention in Chepang than might otherwise be expected.

### 2.2.3. THE RELATION OF PERSPECTIVE CASES TO SEMANTIC ROLES

Non-perspective roles, as has been mentioned (2.2.2.), are related fairly directly to the physical situation being described. This is not always the case, however, with perspective roles, and it is necessary therefore to discuss at some length the semantic relationships
covered by perspective roles and the perspective cases which express them.

## Agent

This is the participant initiating an action intended to affect another through this action. It corresponds very closely to the agent participant in a transitive clause. It is typically animate though, as example ll. above shows, an Agent may be sometimes inanimate (according to a non-Chepang point of view), especially if it is an entity that affects humans in a harmful or beneficial manner. Intentive situations are conventially extended to include some situations that are not clearly active or do not obviously affect another participant. These include situations involving seeing or hearing, with the experiencer being regarded as an Agent in Chepang: ${ }^{1}$

```
12. gopal-?l na-kay say?-?a-ta-\eta?
    Gopal-Ag I -Gl hear-Pt-Gl-lE
    'Gopal heard me.'
```

Goal
The perspective case of Goal is not so easily related to common notions of case roles. It indicates the participant to which an action is directed (hence the term 'Goal'), with the intention of affecting it. It is not simply a locational destination, in fact purely locational destinations are excluded from the Goal case in Chepang, since they are not regarded as being affected by the action. Participants which may be marked as Goal include patients (participants which undergo a change of state as a result of the action), objects of perception, recipients, benefactive and malefactive participants, and spatio-temporal goals (the place or time for which the action is carried out - see 13 g . below) - provided always that the participant indicated as Goal is seen as intentionally being affected. Certain Purposive clauses are also marked with the Goal case, if they do not share a common Actor with the main clause (see l3j.).

Examples of the use of the Goal case are:
131. Patients
a. ram-? 1 gopal-kay ghan-?aka-n Ram-Ag Gopal-Gl beat-Pt -Ag
'Ram beat Gopal.'

[^4]```
b. sin-kay pu?con -?l ?ol -?aka-n - I
    tree-Gl brothers-Ag fell-Pt -Ag-Pl
    'The brothers felled the tree.'
c. Ian -?l-te? nin-ji -kay ?al?-na -je
    demon-Ag-CIF you-2Dl-Gl take-NPt-2D1
    'The demon will take you two.'
```

1i. Object of Perception
d. co? -kay lan -?i say?-?a-thoy
child-Gl demon-Ag hear-Pt-Gl
'The demon heard the child.'
iii. Recipient
e. na-? $\quad$ nln-j| - kay tungulln bey?-ne?-na-n-jo
$I$-Ag you-2Dl-Gl drink give-NPt-2-1E-2Dl
'I will give you two drink.'
iv. Locational Goal
f. nis pu?ca? -? 1 sin?-kay ?ap -?aka-c -u
two brothers-Ag tree-Gl shoot-Pt -Dl-Ag
'Two brothers shot (at) the tree.'
v. Temporal Goal
g. dyahməy-kay goy? tyumh -?ala-n?
tonight-Gl yam collect-Pt -lE
'I collected yams for tonight.'
vi. Benefactive
h. nan-?l na-kay na? prek -?a-cl
you-Ag $\bar{I}-\mathrm{Gl}$ fish split-Pt- $\overline{\mathrm{LS}} \mathrm{l}$
'You split the fish for me.'
vii. Malefactive

1. $\frac{\text { nin-kay }}{\text { you-Gl }}$ Ram-? Ra fomh je?-te?-no -y ?
'Ram eats your food.' (literally: 'Against you Ram eats food.')
viii. Purposive
j. ?apa -?l dhyun-sa-kay nis na?ca? -?l yam ra -na?-c-u
father-Ag stand-IN-Gl two sisters-Ag rice cut-NPt-Dl-Ag
'The two sisters cut rice for the father to stand up (for a festival).'

The true Benefactive and Malefactive use of Goal marking is rare normally the manner in which the participant benefits is made explicit with a Purposive clause, as in ex. l3j. A common use of Goal is for situations where the beneficiary or maleficiary is also the possessor, especially the inalienable possessor, of another (Object marked) participant:

```
14. co?dya\eta - kay ?ama -?l myan tis -na?-thoy
    daughter-Gl mother-Ag hair plait-NPt-Gl
    'The mother plaits the daughter's hair.'
    (literally: 'the mother plaits hair for the daughter.')
```

An extended use of the Goal affix is found in some conditional clauses which have, for what is logically the protasis, a Nominalised Alternative clause (see section 4.2.) with a Goal affix:
15. ?l say?-ya-kay daju -nls-?l sat -?a-na?-ta-n?
this hear-Alt-Gl brother-two-Ag kill-Em-NPt-Gl-lE
'If they hear this then (for this reason) the brothers wizl kizZ me.'

Here the use of the Goal affix seems to have been extended from marking the future situation that is the purpose of the main action (its Purposive use, as in example l3j. above) to marking a possible situation that may be the reason for a further subsequent action.

## Instrument

This case covers roles that are usually regarded as instrumental, that is, the roles of non-instigating but effecting participants. It is not, however, restricted to inanimate entities (as with Fillmore, 1968) as example 6d. above indicates. For Chepang the Instrument case marks the participant that is the non-intending, but initially involved, effector of an action.

Object
The Object case in Chepang is rather like Fillmore's semantically neutral Objective case, though the former is restricted to those nuclear participants of an action which are not regarded as initiating it, nor intentionally affected by it - they are viewed as being only incidentally affected, if at all. This case therefore, is used to indicate patients of various types, including object of transfer, which are not the prime targets of the action.

Examples of the use of the Object Case are:
16a. nl-cl-?i ?amh je?-na -п?-c -u we-Dl-Ag food eat-NPt-lE-Dl-Ag 'We two eat food.'
b. ram-kay gopal-?i may? bay?-?aka-n Ram-Gl Gopal-Ag meat give-Pt -Ag
'Gopal gave Ram meat.'
c. gopal-?l kim janh-?aka-n Gopal-Ag house make-Pt -Ag
'Gopal made a house.'

Notice that the Goal of the action need not be expressed, as in examples l6a., l6b. In such cases the unexpressed Goal is usually understood to be the Possessor of the Object participant. This gives the somewhat unexpected result that the Reflexive (for which the Agent and Goal participants are the same entity) form of je?- 'eat' does not mean 'to eat one's self', but 'to eat one's own food'. The first, truly reflexive meaning would have to be expressed by making explicit what was eaten:

```
17. kuy?-?। ləy?-ko? ?a\eta -ko? may? jo?-?aka-se
    dog -Ag own -Gen body-Gen flesh eat-Pt -Rfl
    'The dog ate the flesh of its own body.'
```

Even here of course the Agent (co-referent with the Goal) is still the Possessor of the Object.

## Actor

The Actor, as noted before, (2.2.2.:60) is the most highly marked participant in an action. The Actor in an Intentive situation is the Agent, already discussed above (2.2.3.:63). The Actor in a Non-Intentive action is a Non-Agentive Actor. Chepang does not distinguish formally between Non-Agentive Actors that exercise control or intention in an action, and those which do not:

```
18a. gopal kim -tan ?al-?a
    Gopal house-Al go -Pt
    'Gopal went to the house.'
    b. gopal sin?-say dyas-?a
    Gopal tree-Ab fall-Pt
    'Gopal fell from the tree.'
```

In the first example, l8a., the action would naturally be intended and under the Actor's control. In the second example l8b. the action is presumably not intentional. There is however no formal case marking to distinguish the two different Actor relations. Imperative forms may be used for non-controlled (or partly controlled) actions, as in sl.?e 'die', ?en?.?ə 'sleep'.

### 2.2.4. VARIATION OF PERSPECTIVE

According to the definition given in section 1.3.3.3., the perspective roles in a situation are those which may be described in a variety of ways, depending on the speaker's viewpoint, and the features he sees as being involved in the part each participant plays in the interaction. The particular combination of features that the speaker associates with the role of each participant determines the case marking of that participant. For Chepang, if the feature combination includes nuclearity,
then the combination defines what $I$ have termed a perspective case. If the combination does not include the feature [ + Nuclear] then this gives a non-perspective case. It is important to remember that, as noted earlier (section l.3.3.3.:20), one participant with a perspective role may nevertheless be viewed by the speaker as [- Nuclear] and therefore its role is marked by a non-perspective case affix, (see ex. 22b. below).

## Intentive Versus Non-Intentive

One choice that the speaker may have is whether or not to regard a situation as Intentive, with one participant deliberately affecting another. Certain situations, such as those of eating, holding and beating, can hardly be regarded as not having two participants related in this way and are therefore always treated as Intentive. For other situations, such as those involving laughing, the position is not so clear and a choice is available:

```
19a. ram ni? -?a
    Ram laugh-Pt
    'Ram laughed.'
    b. gopal-kay ram-?l gi? -?a-thəy
        Gopal-Gl Ram-Ag laugh-Pt-Gl
        'Ram laughed at Gopal.'
```

The physical action performed by Ram is the same in both instances and the same verb root is used to express this, but in second example, 19b., intention to affect another is explicitly ascribed to the situation.

Even when a situation is regarded as Intentive there is still often variation possible in the assignment of perspective features. The participant intending to perform an action is also expected to be initially involved, so that the perspective case of Agent is predetermined. There is still scope, however, for varying assignment of the features defining the cases of Instrument, Object and Goal, since Non-Agents can be viewed in differing ways. Within the variation allowable there is some ordering of possibilities on the basis of the actual physical situation. The nearer any Non-Agent participant is to being involved from the outset of the action, the more likely it is that it will be described as an Instrument, the more remote it is from physical initial involvement, and from the action itself, the more likely it is that it will be described as an Instrument, the more remote it is from physical initial involvement, and from the action itself, the more likely it is that it will be described as a Goal. Objects are in a more intermediate or neutral position. The main alternatives therefore, for varying the assignment of perspective features, are between Instrument and Object, and between Object and Goal.

An illustration of the differing choices between Instrument and Object is given in examples 20a. and 20b.

20a. gopal-? $\mathrm{n} \mid \mathrm{s}$ la? -? 1 wa? -kay ?ap -?aka-n Gopal-Ag two arrow-In bird-Gl shoot-Pt -Ag
'Gopal shot (at) a bird with two arrows.'
b. gopal-?l wa? -kay nis la? ?ap -?aka-n

In the first case, ex. 20a., the arrow is marked as an Instrument, signifying that it is regarded as initially involved as part of the means of performing the action. In the second case, ex. 20 b. , the relation of the arrow to the action is strictly unmarked, but it could be taken that the arrow is regarded as being affected, in an incidental way, by the action. Another participant could, in fact be added to 20 . and marked as Instrument, for example, luy?-?i 'with a bow'.

Examples of the choice between Object and Goal are:

```
2la. how -kay pu? -nis-?i sat -?a-thoy
    YoBro.-Gl OBro.-Dl-Ag kizl-Pt-Gl
    'The two older brothers killed the younger brother.'
    (where YoBro. = Younger brother, OBro. = OZder brother)
    b. pu? -nis -? i haw sat -?aka-c -u
    OBro.-Dl -Ag YoBro. kizl-Pt -Dl-Ag
    'The two older brothers killed the younger brother (accidentally).'
    c. pu? -nls-?i nyam? -kay ?ap -tl how sat-?aka-c-u
    Obro.-Dl -Ag cricket-Gl shoot-3ry YoBro. kizl-Pt -Dl-Ag
        'Aiming at the cricket, the two brothers killed the younger brother.'
```

Notice that in $2 l b$. intention to affect something is still implied in the situation, but the Goal of the action was something other than the younger brother (in fact, in the text from which the example was taken, it was a cricket sitting on the boy that was the intended Goal). In such a relatively unusual situation one would expect a complex clause, as in 2lc.

In an action of transfer it is similarly possible to view either the object transferred, or the recipient, as the one intended to be affected:

22a. Pur -nls-?l bəh -kay how dak -?aka-c -u
'The two brothers delivered their younger brother to/for their wacle.'
b. pu? -nls-?l haw -kay bəh -ke?-tan dak -?aka-c -u OBro.-Dl -Ag YBro.-Gl uncle-ML -Al deliver-Pt -Dl-Ag 'The two brothers delivered their yowner brother to their wncle.'

In the first example, 22a., it is indicated that the action was performed for the uncle (at the uncle's request, for his benefit). In the second example, $22 b$., the action is for the younger brother (at his request for his benefit.)

### 2.2.5. CONSTRAINTS ON CHOICE OF PERSPECTIVE

Semantic and Lexical Constraints
It has already been mentioned (2.2.4.:67) that certain actions, such as beating and holding, by their very nature clearly involve intention to affect. Others, such as those involving striking against something, or going to some place, are rarely associated in themselves with intention to affect something. In between are actions such as laughing, which may or may not be associated with intention to affect. There is therefore a continuous range of possibilities for differing types of situation, and the verbs that represent them, between the two extremes of 'never Intentive' and 'always Intentive'. It is not clear that in Chepang any verb belongs completely to one extreme or the other. Verbs such as sat- 'kizl', which rate highly as far as the likelihood of being Intentive is concerned, nevertheless may at least have the intention diverted from the object of the killing, as in example 21 . And, while in general it is not possible to have a Benefactive Goal directly with the verb wan- 'come' or $? a 1-{ }^{\prime}$ 'go', in certain limited contexts it does appear to be possible to associate intention to affect with these verbs. The one example that $I$ have is:

```
23. dyahmay jhya -lan wan -cl
    tonight drumbeat-Pur come
    'Tonight come to drumbeat for me.'
```

The affix -ci indicates a 2nd Person Agent and a lst Person Goal, that is, an Intentive situation with the speaker as Goal. This particular request is one that is very common in Chepang society, being in fact a request for a shaman to come and heal someone, hence perhaps the Intentive viewpoint is allowed. The example is somewhat akin to 'walk the dog' in English, where here also a common context allows an otherwise unacceptable construction.

Within Intentive situations, the freedom to vary assignment of features also depends on the nature of the situation, and on the lexical possibilities of the language. In a situation in which an object is transferred from participant $A$ to participant $B$, it is possible to indicate $A$ as initially involved, and $B$ as non-initially involved, by using say, the verb bəy?- 'give'. Alternatively it is possible to view $B$ as initially involved by using instead the verb tyak- 'take'. Even with an action such as $A$ beating $B$ it may be possible to view $B$ as being initially involved, though at the cost of losing its active status causing the clause to lose its active status.

```
24. ram-səy gopal ghan-?o do?-?a
    Ram-Ab Gopal beat-RN get-Pt
    'Gopal got a beating from Ram.'
```

Such a usage would be rather forced in Chepang. For situations such as eating it Fs difficult to see how initial involvement could be assigned to any participant other than the performer. Certain bodily actions, such as urinating and defaecating, are on the border of being regardable as Intentive. In the standard Maiserang dialect of Chepang these are treated as Intentive, though no Goal participant is in fact stateable:

```
25. co? -?l kll? ?ot -?aka-n
    child-Ag faeces excrete-Pt -Ag
    'The child defaecated.'
```

In the western dialects however this is treated as Non-Intentive, with kIl? effectively incorporated into the verb:

```
co? kll? -?ot- -?a
child faeces-excrete-Pt
'The child defaecated.'
```


## Pragmatic Constraints

As well as the semantic and lexical constraints on freedom of perspective there are also other limiting factors. In particular, when the speaker or addressee is a Non-Agent participant in an Intentive action, this participant must be assigned the feature [+ Intent], or else be outside the perspective case system altogether, with a non-perspective case affix (ex.27c.). A speaker or addressee cannot be treated as an Object, something only incidentally affected by the action.


```
    'A bear bit you.' not optional.
```



```
        'You will be delivered to your uncle.'
    c. Row? co?- kay nan-ke?-tan dak. -na -n?
        that child-Gl you-ML -Al deliver-NPt-1E
        'I will deliver the child to you.'
```

In examples 27a., 27b., the Goal affix is obligatory for the 2nd Person participant, and this would be true also if it were a lst Person participant. Evidently a factor such as interlocutory role places some constraints on freedom of perspective. For participants other than the speaker and addressee, the choice of perspective, and hence the assignment of perspective features and the resulting perspective cases, can vary more freely.

The use of the Goal affix, however, has no necessary connection with definiteness, as the following examples show:

```
28a. ?ow? ?amh je?-?aka-c -u
    that food eat-Pt -Dl-Ag
    'The two ate the food.'
    b. ?uyhle manta -kay Je?-?u-to kesya?-?i
    formerly person-Gl eat-Ag-2ry deer -Ag
    'Formerly the deer used to eat people.'
```

In the first example, 28a., the food is definite and specific, as indicated by the demonstrative form ?ow? 'that', but it has no Goal affix. In the second example, 28 b ., manta 'person' is indefinite and non-specific but has the Goal affix, to indicate that the deer ate people intentionally, out of malevolence.

Nor is the use of the Goal affix necessarily connected with a high degree of animacy. Compare the following examples:

29a. ?ow?-nis-?l hew sat -?aka-c -u
that-Dl-Ag YoBro. kizて-Pt -Dl-Ag
'The two killed their younger brother (unintentionally).'
b. ?i sin?-kay duh -no-to
this tree-Gl bump-1E-2ry
'I bumped this tree (intentionally).'
The use of the Goal affix with an inanimate object in the second example, 29b., and the lack of it in the first example 29a., where there is a definite and specific human object, indicates that it is not animacy which is the primary factor determining the use of the Goal marker.

It can be seen then, that the assignment of perspective features, such as [+/- Intent], depends primarily upon the particular semantic interpretation or perspective that the speaker wishes to place upon the situation, and not upon the pragmatic factors suoh as definiteness, specific or animacy. Nevertheless there is, in fact, a high degree of correlation between these factors and the use of the Goal marker, since the participants intended to be affected by an Agent are very often human, and usually have been introduced in some other role, so that indeed they are definite. At first sight, therefore, it may seem as though the Goal does mark definite or human participants (compare Watters' remarks on a similar affix in Kham, Watters 1973:199).

### 2.2.6. PARTICIPANT ADDITION AND REDUCTION

## Causative Participants

In some circumstances a speaker may wish to introduce another participant to the situation, with the semantic role of causer or permitter. In Chepang this participant is always ascribed the features [+ Intent], [+ Initial], that is, it is always given the Perspective case of Agent.

Because there can only be one of each Perspective case per clause, this means that, to add a causer to situations normally already regarded as Intentive (such as those involving beating, killing and eating), there must be a different assignment of perspective features from the usual. In particular the direct performer of the action can no longer be given the Perspective case of Agent, since this is already assigned to the causer. The speaker therefore has the choice of regarding the performer as an Instrument, Object or Goal, depending on his perspective. For the basic situation given in example 30 a . below, the choices possible when a causer is added are shown in the next three examples (30b., 30c., 30d.).

```
30a. nls-cak -?l win? sat -na?-c -u
    two-person-Ag bat kill-NPt-Dl-Ag
    'Two men kill bats.'
    b. din -?| nls-cak -?| wln?-(kay) sat -tak-no -w?
        spirit-Ag two-person-Ins bat -(Gl) kill-Cs -NPt-Ag
        'The spirit causes the two men to kill bats.'
        xdin -?l nls-cak -?I wln?- kay sat -tak-na?-c-u
        spirit-Ag two-person-Ag bat-(Gl) kill-Cs -NPt-Dl-Ag
    c. dln -?l nls-cak -kay wln? sat -tak-no -w?
        spirit-Ag two-person-Gl bat kizl-Cs -NPt-Ag
        'The spirit causes the two men to kill bats (for their
        benefit).'
or: din -?l nls-cak -kay win? sat -tak-na?-tha-co
        spirit-Ag two-person-Al bat kizl-Cs -NPt-Gl -Dl
    d. din -?l nls-cak wln?-kay sat -tak-na -w?
        spirit-Ag two-person bat -Gl kill-Cs -NPt-Ag
        'The spirit causes the two men to kill bats (to destroy them).'
```

The possible variation of perspective with a causative can be seen in examples 30b. to 30d. In 30b. the two men are regarded as initially involved and are therefore marked as Instruments. They cannot be crossreferenced on the verb. In 30c. the whole action is intended for the benefit of the two men and hence they are marked as Goal. The two men may or may not be in verbal cross-reference, the selection for this being according to other factors (see 2.3. below). In 30d. the action is intended to affect the bats, with the men being regarded as incidental. Such a construction is unusual and 30b., with the bats marked as Goal, would be more common for this interpretation. These constructions may also be given a Permissive rather than a Causative interpretation.

For situations normally treated as Non-Intentive the addition of a causer participant leads to a former Actor or Statant becoming an Object or Goal, again depending on whether it is viewed as being intentionally affected or not. The augmented situation is now treated as Intentive.

```
3la. gopal-kay ram-?l si -tak-?aka-n
    Gopat-Gl Ram-Ag die-Cs -Pt -Ag
    'Ram caused Gopal to die.'
    or: gopal-kay ram-?l sl -tak-?a -thoy
    b. gopal-?l may?-(kay) yar -tak-nə -w?
    Gopal-Ag meat-Gl yelZow-Cs -NPt-Ag
    'Gopal makes the meat yellow.'
    c. ?ow? ba\eta ray -sl?-na?
    that stone fright-ECs-NPt
    'That rock is frightening.'
Emotional Causative
```

In certain Stative clauses in which the Statant is to be described as causing a particular emotion, rather than undergoing it, the suffix -si? is added to indicate this fact. The clause remains Stative in type, as in Ex. 3lc. above.

Possessors
Another way of effectively increasing the number of participants in an interaction is to use the Possessor cross-reference in the verb, as mentioned in 2.1.5. above. This has the effect of relating the Possessor of a participant more closely to the situation. Its use especially seems to imply strongly that the possessor is, or will be, emotionally affected by the situation in which the possessed participant is involved, as in:
32. nl-cl-ko? co? si -?a-bot-ta-ŋ?-cə we-Dl-Gen child die-Pt-Pos-Gl-lE-Dl
'Our child has died.'
Although the verbal Goal case affix is used with this construction it does not indicate that the situation is being treated as Intentive, and the Possessor can only be referred to by an NP with a Genitive affix, not by one with a Goal affix. The reasons for this are described in section 5.2.4.5.

Reflexive Situations
One type of situation in which the total number of participants is reduced is the reflexive one, where one participant is acting in two roles. For Chepang Intentive situations the two coinciding roles are those which would normally be indicated as Agent and Goal. That is, it is the intending participant and the intentionally affected participant which are the one entity, not simply the agentive and patient participants. This gives the somewhat curious result, noted in 2.2.3.:66 above, that the reflexive of a verb such as je?- 'to eat' does not mean
'to eat one's self', but 'to eat one's own food'. Because there is little possibility of ambiguity as to role the NP Agent affix is often omitted. Instead of the regular case marking on the verb there is a Reflexive affix. The Reflexive Pronominal forms can be seen in charts ll-14 in Appendix 1. An example of a Reflexive clause is:

```
33. slta-(?i) hme?mut lyan?-?aka-sa
        Sita-(Ag) ash rub -Pt -Rfl
    'Sita rubbed herself with ash.'
```


## Reciprocal Situations

Another type of situation for which an action that is normally Intentive does not have the full quota of Perspective cases, is that of Reciprocal action. These are treated in Chepang simply as though they were Non-Intentive situations and the verb carries a Reciprocal derivational affix -kay:
34. ram gopal-kus minh -kay-na?-ca

Ram Gopal-Com fight-Rcp-NPt-Dl
'Ram fought with Gopal.'

### 2.2.7. CO-ORDINATE AND COMITATIVE PARTICIPANTS

One kind of Non-Intentive situation for which the feature [ + Nuclear] does not simply coincide with the one participant that is also [+ Initial], is that involving a Comitative. This participant could be regarded as having the features [ + Nuclear], [- Initial], and as such it contrasts with the Actor in the same situation, which is [+ Nuclear], [+ Initial]. The Comitative case is indicated in Chepang by the use of the affix -kus as in example 34. above. In this example, the fact that Ram, but not Gopal, is thereby ascribed the feature [+ Initial], supports the sense of this clause that Ram was the initiator of the action of fighting. Even if Gopal did in fact first attack Ram, the implication is that it was Ram's initiative that led to the fighting.

The Comitative construction linking the two participants is in some ways treated as a type of Co-ordinate construction, in that both these participants may be grouped together for cross-reference - note the Dual Number affix in 34. and the Inclusive Dual in 35.:
35. クa nan-kus krəw-na?-təyh-cə 'I will flee with you.'

A true Co-ordinate construction combines two linked participants into a single compound participant. Features such as initial involvement are assigned to this as a whole, so that neither can be regarded as more of an initiator than the other. A Co-ordinate linking of two participants is indicated by addition of the suffix -ma? to each of the NPs/ pronouns representing the participants:

36a. ram-ma gopal-ma minh -kay-na?-co
Ram-Co Gopal-Co fight-Rcp-NPt-Dl
'Ram and Gopal fight each other.'
b. nan-ma na-ma kraw-na?-t ayh-ca
you-Co I -Co flee-NPt-IIn -Dl
'You and I will flee.'
The symmetry of the Co-ordinate construction, in contrast to the asymmetry of the Comitative, is probably a reflection of the fact that in the former the two participants are completely equal in all their relationships within the clause.

Sometimes the Comitative affix -kus has an additional suffix -?l added to it. The function of this suffix is not completely clear, but it is possibly an extended use of the Instrument marker, in which case it may be signalling that the Comitative participant is to be regarded also as initially involved. The whole construction would therefore be very close to a Co-ordinate one:
37. ?ow?-kus-?i(na) wah-?ala-n?-cə
that-Com-In(I) move-Pt -lE-Dl
'I went about with him.'

### 2.2.8. SUMMARY

The discussion of role encoding presented so far in this section (2.2.) has shown that the verb in Chepang is closely integrated into this system. Indeed some perspective roles, such as that of Instrument, can be distinguished only by taking both the verbal and NP case marking into account (see 2.2.2.:59). In general, as might be expected, the NP subsystem of role encoding is the more complete, and the verbal subsystem carries the load primarily when there are no overt NPs in a clause, as is often the case in connected discourse. The verbal subsystem also makes some more subtle distinctions, such as between Exclusive and Inclusive for lst Person, that are not shown by the NPs. Although there is not always overt case marking in the verb (it is absent in the lst Singular Agent sections of the paradigm, also where the address is Goal) the overall distribution of Agent and Goal case affixes is such that it is always possible to tell, for Intentive situations, whether the participant in cross-reference is an Agent or a Goal (see charts ll-14, App.l.).

### 2.3. SELECTION FOR CROSS-REFERENCE

### 2.3.1. CROSS-REFERENCE AND PERSPECTIVE

The notion of a participant in a perspective role being regarded as non-nuclear, and referred to by an NP with a non-perspective case marking (see section 1.3.3.3.:20, 2.2.4.:67), is somewhat reminiscent of the Relational grammar notion of an NP originally in a 'pure' grammatical relation (Subject, Object or Indirect Object) being demoted to an
'impure' relation (Oblique Object) (Johnson, 1977). However examples such as 38a.-38c. show that there are two essentially independent dimensions of variation which might be thought of as involving promotion or demotion:

$$
\begin{aligned}
& \text { 38a. pu? -nls-?l bəh -kay how dak -?a-thoy } \\
& \text { OBro.-Dl -Ag uncle-Gl YoBro. deliver-Pt-Gl } \\
& \text { 'The two brothers delivered their younger brother to the } \\
& \text { uncle.' } \\
& \text { b. pu? -nis-?l bah -kay haw dak -?aka-c-u } \\
& \text { OBro.-Dl -Ag uncle-Gl YoBro. deliver-Pt - Dl-Ag } \\
& \text { 'The two brothers delivered their younger brother to } \\
& \text { their uncle.' } \\
& \text { c. pu? -nls-?I bah -kə?-tan haw dak -?aka-c-u } \\
& \text { OBro.-Dl-Ag uncle-MLc-Al YoBro. deliver-Pt - } \overline{\mathrm{Dl}-\mathrm{Ag}} \\
& \text { 'The two brothers delivered their younger brother to } \\
& \text { their uncle.' }
\end{aligned}
$$

Notice that, although the English translation is the same for all three examples, the uncle is treated in different ways in each. In the first sentence, 38 a ., the uncle is designated as Goal and is crossreferenced in the verb, as shown by the underlining. In the second sentence, $38 \mathrm{~b} .$, the uncle is still a Goal, but is no longer crossreferenced. In the third example, 38 c ., the uncle is no longer marked with a Perspective case affix. Moreover, while the difference between the last two examples, 38 b . and 38 c. . is the result of the different semantic viewpoint taken by the speaker in each case (see 2.2.4.), this is not true for the first two examples, 38 a . and 38 b . - there is no meaning difference between them. There are therefore two ways in which a participant in a perspective role may be 'demoted'. The first, governed by non-semantic factors, is removal from verbal cross-reference, the second, which has semantic implications, is by it being treated as though it were in a non-perspective role. The only connection between these two kinds of demotion is that a participant with a Non-Perspective case affix cannot be explicitly cross-referenced in the verb.

It is the recognition of the two independent dimensions of variation that is the basis of Foley and Van Valin's Role and Reference grammar variation in perspective being connected with role, and variation in some system such as cross-reference being associated with referential or pragmatic factors. And so, because a recognition of the independence of the two relevant dimensions is essential to understanding Chepang morphology, I have used their approach in this study.

However, if the selection of a participant to be represented in the verb by cross-referencing affixation is not on semantic grounds, then what factors do govern it? It turns out that there are several factors associated with selection for verbal cross-reference and these are discussed below (2.3.2-5.).

### 2.3.2. CASE

For situations regarded as Non-Intentive, the only participants that can be represented by verbal cross-reference are the Actor, for actions, and the Statant for states. The question of selection for crossreference therefore does not arise. For Intentive situations however there is a possibility of choice between participants for crossreference, though this choice is limited to those participants that are indicated either as Agent or Goal. This limitation is presumably partly connected with the significant part that the verb plays in encoding role, together with the fact that there are only two verbal case affixes. If participants other than the Agent or Goal were regularly cross-referenced then the burden of encoding role would fall much more heavily on the NP system to distinguish Intentive and Non-Intentive situations. It is not, of course, pure coincidence that Agent and Goal are the two cases that may be in cross-reference - they are related to two key roles in an interaction, and moreover, the participants in these roles are usually pragmatically important.

Nevertheless it is still possible to avoid cross-referencing either the Agent or the Goal, even for an Intentive situation. This is achieved by simply omitting all Pronominal affixation:
39. hna ?apa -kay kəyk-han penh-na? la
first father-Gl neck-Loc tie -NPt thread
'The thread is first tied around the father's neck.'
In the context from which this example was taken, it is the thread which is the subject of the discourse segment, the discussion being about the way the thread is dyed and then tied around the necks of different persons. The Agents in this action are irrelevent. The lack of cross-referencing therefore indicates the greater pragmatic significance of a participant which cannot, however, be represented in the verb, because it is not an Agent or Goal. This pragmatic significance is discussed further below (2.3.5.).

### 2.3.3. COMMUNICATIVE ROLE

One major factor affecting the selection of a participant for crossreference is the communicative or interlocutory role as a speaker, addressee, or a third person. The influence of communicative role in syntax has been noted, for instance, by Hawkinson and Hyman (1974) and Silverstein (1976). They pointed out the fact, which I had also observed for Chepang (Caughley, l97lc.), that there is a hierarchy of roles, in which the speaker and addressee take precedence over any third person participant in various syntactic processes. In Chepang this hierarchy is seen particularly in the precedence for selection for cross-reference.

The way in which this preference is manifested in Chepang can be demonstrated by means of a chart, based on the actually occurring Pronominal affixes given in charts ll-14 in the Appendix. In this chart (chart 2, below) a number is given to represent the Person category of that participant which dominates for cross-reference in each section of the paradigm.

CHART 2
COMMUNICATIVE ROLE AND CROSS-REFERENCE


Although the numbers give the Person category of the dominant participant (for instance, the lst Person is dominant in both the top right hand corner of the paradigm, and the bottom left hand corner), the dominance as far as cross-referencing Pronominal affixation is concerned is not complete, and Number elements of the recessive participant may sometimes occur along with the Person and Case affixes of the dominant one. This is most common with a lst Person Singular Agent and a NonSingular Goal.
40. na-?i co? - lam-kay boy?-?ala-n?-s -u $\overline{\overline{I-A g}}$ chizd- $\overline{\mathrm{Pl}}-\mathrm{Gl}$ give-Pt $-\overline{\mathrm{IE}}-\overline{\mathrm{P}} 1-\overline{\overline{\mathrm{A}}} \mathrm{g}$
'I gave to the children.'
Here the double underlining represents dominant participant (Person and case) cross-reference, the single underlining recessive participant (Number) cross-reference.

An examination of the chart shows that whenever the speaker or addressee are interacting in a situation with a third participant then the speaker and hearer are preferred for cross-reference. Where both the Agent and Goal are 3rd Person (bottom right hand corner) then of course communicative role cannot affect choice for cross-reference, and other factors must be looked at.

When the speaker is involved in an interaction which includes the addressee, then the latter is dominant when the speaker is Agent and the addressee is Goal (top row, third column). When these roles are reversed however the addressee is only dominant if the lst Person has Singular Number. For lst Person Non-Singular the speaker is preferred for cross-reference.

### 2.3.4. SEMANTIC CATEGORY (ANIMACY)

It was mentioned in the previous section (2.3.3.) that, when 3rd Person participants are both Agent and Goal, factors other than communicative role must be involved in the selection of a participant for cross-reference.

One possible factor is the relative animacy status of the participants in a situation. In an early paper on this question (Caughiey, 1978) I suggested, on the basis of a study of Chepang narratives, that there was a ranking of semantic categories as follows (in descending order):

Human > Spirit > Non-personal Animate > Inanimate
Whichever of the Agent or Goal participants was the highest ranked with respect to these categories was the one which was selected for crossreference, provided there was no difference in communicative role. Hawkinson and Hyman (1974) have proposed a similar ranking or hierarchy for the Shona language, where the animacy hierarchy, along with communicative role, plays an important part in the overriding of certain grammatical processes for assigning case roles. They call this ranking a "Natural topic hierarchy". One interesting difference between the Chepang and Shona hierarchies was the fact that spirits occupied a definite position in the Chepang ordering. In the texts examined, out of all the many situations described as involving human and spirit participants, only in one or two instances were spirits preferred over
humans for cross-reference, and these exceptions could be explained on other grounds. Likewise spirits almost invariably took preference over non-personal animate entities.

Further investigation in Chepang has shown that, while the correlation between animacy rank and the choice for cross-reference is very high, there are instances where a lower ranked participant is selected in preference to a higher ranked one. Also there will, of course, be many instances where both the Agent and Goal participants are equal in animacy status, in particular where both are 3rd Person and human, so the selection must clearly be made on the basis of other factors. The suggestion made in the earlier paper, that social rank might play a part in selection, has not proved valid under further examination.

### 2.3.5. PRAGMATIC FACTORS

Where the animacy ranking is overridden, or cannot apply in regard to selection for cross-reference, then it might be expected that pragmatic factors such as definiteness, and givenness could be involved.

Of the two factors, definiteness, as noted earlier (1.3.3.4.) has more to do with the type of referring expression that a speaker chooses to use, and is not a feature closely linked to the participant itself, except that the use of a definite reference implies that the participant has been encountered by the hearer. Moreover, for many situations described in a discourse such as a narrative, all the main participants are definite, so that definiteness cannot provide a qualification for selection for cross-reference. On the other hand, givenness, as defined in terms of assumed presence in the hearer's consciousness (see 1.3.3.4.), is a feature that a participant acquires largely from the immediate and total context of utterance, both the context of the world at large, and that built up by the discourse itself. Givenness therefore, would seem a more likely candidate as a factor in determining selection for cross-reference.

A psychologically defined feature, such as givenness, obviously is not available for direct measurement. However in narratives it could be expected that the givenness of a participant is closely related to the frequency and recentness of previous mention of this participant (compare Allerton, 1978:142, Chafe, l974:129). That is, if a character has been mentioned often previously, or if it has just been mentioned, it is reasonable to expect that it will be given. And it is possible to keep track of the frequency and recentness of previous mention for any participant in a text. In a study that $I$ made of eight narrative texts (with a total of 1,214 sentences) I examined three syntactic
features, initial position (with respect to other NPs), selection for cross-reference, and the presence of the enclitic -pay (see 3.l.), all of which appeared to related to givenness, and checked to see how often these coincided with recent and frequent mention. Each participant in a particular sentence was given two indices, one indicating how many times it had been referred to previously, the other indicating how far back, in terms of the number of intervening sentences, was the last reference to that participant. Because it was not possible to determine the relative importance of recentness versus frequency, only clear cases were used where a single participant was both most recent and most frequent, or least frequent and least recent. The results showed that, out of the 265 sentences to which the test could be applied, in 200 instances (over 75\%) the participant in cross-reference was also the most frequent and the most recently mentioned one involved in the sentence. In only 36 instances ( $14 \%$ ) the participant in cross-reference was least frequent and least recent, the remaining 29 sentences being indeterminate. There was also a high degree of correlation of recentness and frequency of previous mention with initial NP position, and with the presence of -pay. The three features therefore commonly coincided in the one participant.

In view of these results it seems reasonable to suppose that givenness is the basis for selection for cross-reference. The fact that for some $14 \%$ of the sentences examined the participant in cross-reference was the least frequent and least recent does not make this supposition implausible, since these factors are not expected to be directly, and unfailingly, related to givenness.

If givenness is indeed the basis of selection then this would explain the influence of communicative role, and also the correlation with the animacy hierarchy. The speaker and hearer can always be taken as given in any interlocutory situation (and hence referred to by pronouns) and therefore take preference over all other participants. Also, the likelihood of a participant from a particular category in the animacy hierarchy being given is conceivably related to how easy it is to take note of, or identify, individuals from this category - all other factors being equal. Humans have a highly developed capacity, as well as strong motivation to recognise individuals from their own level, but the motivation and innate ability to recognise individuals lower down the scale of animacy decreases. Spirits, for instance, since they are generally amorphous beings, are less likely to be given than humans, and this explains the result noted earlier (2.3.4.), that they are less preferred than humans for cross-reference.

Silverstein (1976:ll3) seeks to explain the combined hierarchies of communicative role and animacy (giving addressee > speaker > proper NP > human > animate > inanimate) in terms of the "semantic naturalness for a lexically specified $N P$ to function as the agent of a transitive verb". Whatever 'semantic naturalness' means it cannot be taken to refer to the real world probability of agenthood, since all humans, whether the speaker, the addressee or some other, are equally likely to act as agents in real world situations. It must rather refer to the likelihood of being described by the speaker as agents, in other words the likelihood in some egocentric view of the world. This is closer to the notion proposed here, involving the semantic naturalness for an entity to be given.

### 2.3.6. THE FUNCTION OF CROSS-REFERENCE

Although a basis for the selection of a participant for crossreference has been suggested, the function of cross-reference remains to be dealt with. The question of whether the participant in crossreference functions like a subject, topic or theme, will be discussed in section 4.l., under the general heading of cohesion.

## CHAPTER THREE

## the verb in relation to context

### 3.1. INFORMATION FLOW

### 3.1.1. INTRODUCTION

Chepang has an interesting set of three morphemes which form a system relating the informational content of an utterance to the speaker and the addressee, particularly with respect to the direction of flow of information. The three forms which constitute this system are -pay, $-t e ?$, and -tan?. The functions of these morphemes were first described in a preliminary paper called "Some performative markers in Chepang." (Caughley, l97lb), though, as the title indicates, this description was in terms of performative notions rather than information flow. The reason for including this system in a study of the verb is that two of the forms, -te? and -tan?, are found as verbal affixes as well as enclitic to NPs, with -te? also being very closely linked with the pronominal affixation of the verb (3.1.4.). The function of the system as a whole is therefore discussed in some detail here.

### 3.1.2. PRIMARY FUNCTIONS

The primary use of the three morphemes may be illustrated as follows:
la. na-?i-pay boy?-ne?-na-n
I-Ag-DIF give-NPT-2 -IE
'I will give it to you.'
b. nan-kay boy?-te?-?a you-Gl give-CIF-Pt 'He gave it to you.'
c. ram-ko? ?ama sita-tan?-le?

Ram-Gen mother Sita-IIF -REm
'Ram's mother is Sita (he said).'
Of these morphemes the semantically most transparent is -tan?, which clearly has a reportative function. That is, it indicates that the content of an utterance in which it occurs is not original to the speaker, but rather is a repetition of something he has heard. The nearest equivalents in English are '..., it is said.' or 'They say ...', when added to an utterance. Its use does not appear to necessarily imply doubt concerning the truth of the content material. The morpheme -tan? is found in stories and other non-first-hand narratives, as well as in repeated statements (such as the third sentence in example 1 above).

In opposition to -tan? is the form -pay, which is primarily associated with utterances originating with the speaker, and is therefore normally in complementary distribution with tan?. This morpheme emphasises the speaker's personal and direct relation to the utterance content, usually because he is the source of the material. However, the morpheme is also found in folk tales and narratives which are clearly not original. Here its primary function is evidently extended to indicate the speaker's personal identification with the subject matter. Its use in such situations is roughly equivalent to the English 'I tell you...' as in 'I TELL YOU, Jack slid down the beanstalk like greased lightning'. The effect of -pay is, however, weaker in emphatic force than the English construction. The morpheme is commonly found in hortatory speech, as well as in first hand narrative and in answers to questions (ex.l., first sentence).

The third morpheme, -te?, at first sight appears to be somewhat anomalous. It is commonly found in clauses referring to situations in which the addressee is a participant, whether as an Agent, Goal, or in some other role (see ex.lb.). This of course is where one would expect to find a 2 nd Person pronoun (and in fact, $-t e ?$ at times does fulfil the function of this pronoun), but there is considerable evidence to show that -te? does not belong to the pronoun system. In the first place, when outside the verb, -te? is always enclitic, and does not exist as a free form as do all the true pronouns. Moreover there is already a perfectly good 2nd Person pronoun which does occur as a free form. This is nan, which is 1dentical with Benedict's reconstructed form for the Proto-Tibeto-Burman 2nd Person pronoun (Benedict, 1972:93). Indeed -te? may even be enclitic to nan (see ex.3c., p87).

A further argument against a pronominal status for -te? is that it is not used for Imperative utterances, or for situations that involve
the addressee but have the speaker in an Agentive role (though it is used when there is a 3rd Person Agent with the 2nd Person Goal, as in example lb.). In contrast, the pronoun nan is acceptable in these cases:

2a. nan-? $1-\left({ }^{x} t e ?\right)$ bay?-( $\left.{ }^{x} t e ?\right)-$ ?
you-Ag-(CIF) give-(CIF) -Ag
'You give it.' '
b. na-? 1 nan-kay-( $\begin{gathered}\text { te? }) ~ ? a m h ~ b a y ?-n e ?-n a-n ~\end{gathered}$

I -Ag you-Gl -(CIF) food give-NPt-2 -1E
'I give you food.'
Finally -te? has an unusual distribution, very different from that of any pronominal morpheme, but which exactly parallels that of the clearly non-pronominal -tan?, which is enclitic to NPs and also a verbal affix (3.1.3.:87). Indeed $1 t$ was on the basis of this unusual distribution that I originally suggested that -te? and -tan?, together with -pay (which is more or less in complementary distribution with these two), form a single system (Caughley, l97lb).

Bauman, when discussing the use of -te? and similar morphemes in Gyarong and Rawang, stated that they express a spatial orientation that involves movement not under the speaker's control, and suggests that they form part of an evidential system (1975:230). He did not give any reason as to why such a function should form part of an evidential system, ${ }^{1}$ and the notions of control and spatial orientation would seem to belong more naturally to role information. It is possible, however, to define a common function for all three morphemes -pay, -tan? and, -te?, in Chepang, so that the last two are linked in a single system. This function may best be described in terms of a notion of 'information flow', which relates the source of information in an utterance to the speaker-hearer situation. Under this concept -tan? may be described as indicating indirect information flow, in that the information passes to the hearer, not directly from the source, but indirectly via the present speaker (as in the third sentence of example l). In contrast, -pay, in its basic use, represents direct information flow, with the speaker being also the source of the information. The third form -te? therefore indicates a flow of information which is contrary to the expected direction, since a person is normally expected to be the source, not the recipient of information concerning his own actions. In effect it is alerting the addressee to the fact that the utterance concerns him, not someone else. The three morphemes $I$ have consequently labelled the Direct Information Flow marker (DIF, -pay), the Indirect

[^5]Information, Flow marker (IIF, -tan?) and the Contrary Information Flow marker (CIF, te?). ${ }^{l}$

This concept of information flow marking explains why -te? is not used in commands, since here the speaker is the expected source, even though the action involves the hearer. It can also explain why -te? is not used for situations involving the addressee, but with the speaker himself also involved in an initiating role. In such cases the naturalness of the speaker being the source of the information is much higher than for the reverse situation, when the addressee is an Initiator and the speaker is in some other role. In other words, 'I saw you yesterday.' is a much more likely statement than 'You saw me yesterday.' The latter, if it conveys any new information, implies that the addressee lacked knowledge concerning his own performance of a normally volitional act (because of his forgetfulness, or being unaware of the situation). And, in accordance with the CIF function of -te?, it can be used for the reverse situation, where the addressee is the performer of an action which includes the speaker in some other role. The situations for which -te? may be used in Declarative utterances can be shown in chart form as follows:

CHART 3
USE OF THE CIF AFFIX

$\mathrm{I}_{\text {This gives the following system for }}$
Information Flow markers:

It is interesting to note that the geographically very distant Tibeto-Burman language Gyarong, has an almost identical system using the phonologically similar form tə- ( $\sim$ kə-). The forms are prefixes in Gyarong, rather than suffixes, but even in Chepang -te? is commonly found as an enclitic just before the verb (marking new information see 3.1.4. ex.5a.), so that the different position is not especially significant (see also section 6.3.2.3.).

Questions are requests for, rather than transfers of information, but are treated in Chepang in the same way as Declarative utterances, in that the rules for the use of the CIF affix are the same. Indeed questions are formally identical to Declarative forms, except for intonation, and the use of Interrogative pronouns where necessary.

Further examples of the use of the three Information Flow morphemes are: ${ }^{1}$

```
3a. R.C. to T. nan ?en? -te?-bus -na?-ya
        you sleep- \(\overline{\mathrm{CIF}}-c a r r y-N P t-A l t\)
                            '"Are you tired?"'
        T's father nan ?en? -tan?-te?-bus -na?-ya
        to T. you sleep-IIF-CIF-carry-NPt-Alt
                            '"(He asked) 'Are you tired?'"'
        T. replies na-pay ?en? -bus -?a-na - 刀?
            I-DIF sleep-carry-Em-NPt-1E
    '"I am tired."'
```

b. ten -pay ?al-jo dayh-tl -tap? ?apa -?l-tap? ?ama -kay-
today-DIF go-Dl say-3ry-IIF father-Ag-IIF mother-Gl
tap? to -?aka-n
IIF say-Pt -Ag
'"You two go today," the father said to the mother.'
c. doh hay-tl -te? nan-te? gren-tl -te? ?al-te?-?a
what do -3ry- $\overline{\mathrm{CIF}}$ you-CIF thin-3ry- $\overline{\mathrm{CIF}}$ go - $\overline{\mathrm{CIF}}-\mathrm{Pt}$
'Why have you got so thin?'

### 3.1.3. DISTRIBUTION AND SECONDARY FUNCTIONS

It has already been mentioned in the previous section that the two morphemes, -te? and -ta力? (and to a lesser extent -pay), have an unusual distribution, especially in the light of their primary function of indicating information flow for an utterance. Not only are the first

[^6]two forms found both as enclitic to non-verbal constituents, and affixed to verbs, but they also occur many times within a single discourse, and even in a single sentence (see example 3 above, also the text sample, App.2.). With respect to their primary function one might expect them to occur only once per discourse, or at least only once for each section with a single source and uniform involvement (or non-involvement), of the addressee. This, however, is clearly not the case.

The striking potential for repeated occurrence arises, in fact, from the secondary function of the three morphemes, that of indicating the new or given status of information expressed by the constituent to which they are attached. Evidence for this secondary function is noted in section 2.3.5., but it is most easily seen in the distribution of -tan? which is enclitic to most NPs introducing new participants into a nonoriginal discourse. It is also commonly found in verbs, since these normally introduce new information. Because a clause may introduce more than one new participant, especially when it is at the beginning of a discourse, -tan? may occur several times in the clause (as in example 3b., which is from the opening of a narrative). Each occurrence of the morpheme may be regarded as indicating a separate information block (see 1.3.3.4.:25).

The morpheme -te? may similarly be used to mark new information in situations involving the addressee, but its primary function appears to be more dominant. It may, for instance, be enclitic to every constituent of a clause, not because each constituent contains new information, but rather to emphasise that the content involves the hearer (ex. 3c.).

There is nothing to directly fulfil the function of -tan? in original discourse (in which -tan?, as a Reportative marker does not occur), but an inverse function is performed by -pay, which is commonly enclitic to constituents containing non-new (given) information. It usually occurs on only one constituent per clause, including Secondary and Tertiary verbs, but it is never enclitic to Primary verb forms. In narratives it is perhaps most commonly found with Repetitive Setting verb forms (see section 4.2.5.), since these naturally contain given information, repeating as they do a previous clause. An example of this use is:

```
4. ?ow? manta tyaw?-tan lonh -tan?-?a
that person up -Al climb-IIF -Pt
'The man went up (stairs).'
tyaw?-?ə lonh -?aktlko?-pay
up -DL climb-SqS -DIF
    'Having climbed up...'
```


### 3.1.4. PRONOMINAL FUNCTIONS of -te?

The morpheme -te? may in some instances take over the function of the regular 2nd Person pronoun nan, and may indeed be the only indication that the addressee is a participant in the situation:

```
    5a. ten ?al-?a
    today go -Pt
    'Today he went.'
Compare: ten -te? ?al-?a/ten ?al-te?-?a
        today-\overline{CIF go -Pt}
        'TODAY you went./Today you WENT.'
    b. ?anə srəyk mu -na?
        much lice stay-NPt
        'There are many lice.'
Compare: ?anə-te? sroyk mu -na?
        much-\overline{CIF lice stay-NPt}
        'You have MANY Zice.'
    c. Tamh bəy?-nə -w?
    food give-NPt-Ag
    'He gives food.'
Compare: ?amh-te? bəy?-nə -w?/bəy?-te?-nə-w?
        food-\overline{CIF give-NPt-Ag}
        'You give FOOD./You GIVE food.'
also: ?amh-te? bəy?-na?/boy?-te?-na?
        food-\overline{CIF give-NPt}
        'You are given FOOD./You are GIVEN food.'
```

Note that the form -te? is attached to whichever constituent contains significantly new information (underlined in the example). In 5b., for instance, what is significantly new is not that the addressee has head-lice, but that there are many. Thus -te? is enclitic to the qualifier ?anə.

This use of -te?, as a substitute for a pronoun, is common, particularly when it is used as a verbal arfix. For this reason it has been included in the charts of pronominal affixes for Chepang (charts li-14, App.l.). In Tiddim Chin (Henderson, l957), it appears that a form cognate to -te?, has become a largely redundant marker of the Non-lst Person pronoun. It is the secondary function of the Chepang morpheme -te?, which puts it in a clearly non-pronominal system along with -tan?, that has probably prevented it from suffering a similar fate to the Tiddim Chin form.

### 3.2. MODAL FUNCTIONS

### 3.2.1. declarative

### 3.2.1.1. Marking and Function

According to the definition given earlier (1.3.3.1.), modal information concerns the way in which the speaker relates himself, and the hearer, to the content of what he is saying. This information is not, in general, directly marked morphologically in Chepang - Interrogative utterances are often distinguished from Declaratives only by intonation, while Jussives differ from the latter mainly in that they lack Tense affixes.

Declarative utterances are perhaps the most neutral in respect to mood, since they do not overtly indicate the response expected from the addressee, as do Interrogative and Jussive utterances. ${ }^{l}$ An important feature of Declaratives is the way that they indicate the type of assertion that is being made, especially the degree to which the speaker is prepared to assert the truth of what he is stating. There are several morphemes which indicate the type of assertion in Chepang, and most of these can be found within the verb. These, along with the Negative, will be discussed in the remainder of this section.

### 3.2.1.2. Emphatic Assertion

The strongest form of assertion is marked by certain emphatic forms which occur both in the verb, and as enclitics to NPs and other clause constituents. The scope of the assertion emphasised may be the total situation described by the clause, or it may be limited to some element, often a referring expression such as an NP. Emphatic assertion is often found in answers to questions, with the scope of the emphasis corresponding to the scope of the interrogative (see 3.2.2.). The two basic types of emphasis are therefore terms here 'situational' and 'referential' emphasis.

## Situational Emphasis

The main particle used for situational emphasis is ba (sometimes bane or batl). Although this particle follows closely after the verb, it is phonologically separate and cannot be regarded as a suffix or enclitic. Examples of its use are:

[^7]```
6a. nyam yah-?a ba
    sun set-Pt PEm
    'The sun has set!'
b. ?i tyut-sa duk -lə ba
    this pulZ-IN difficult-Neg PEm
    'This is not difficult to extract!''
```

There is a closely related form -bay, however, which is a verbal suffix. Its function is similar to that of ba, but the particle is used more for direct observations, as in example 6, ${ }^{1}$ while the suffix tends to indicate certainty and completeness concerning some situation which may not be any longer observable.

```
7a. co? -kay dut na?-bay-lə
    child-Gl milk be -Cer-Neg
    'There is definitely no milk for the child.'
b. gryokwa? tyaw?-tan mu -bay-na?
        goose above-Al stay-Cer-NPt
    'Geese always remain up high.'
c. gopal-?i to -bay-?aka-n
    Gopal-Ag tezz-Cer-Pt -Ag
    'Gopal spoke to him bluntly.'
```


## Referential Emphasis

Referential emphasis basically involves the speaker's strong assertion of the correctness of identification of participants or their interaction. That is, the speaker is emphasising that, out of all the possible participants, the one referred to by him (and only this one) is the correct participant. This function is somewhat similar to that of cleft sentences in English, where the identity of one participant is emphasised: 'It was John who...'. However the Chepang referential emphatic forms, $-1 e$ ? and - ?a, are much more frequently used than are the cleft constructions in English, and they are weaker in emphasis. They are often found with selectively new expressions, especially where the choice for a particular role in a situation is surprising, or potentially disputable, but they are not directly markers of new information.

The two morphemes -le? and -?a occur both as enclitic to NPs and Non-Primary verbs, and as affixes within the Primary verbs. In the latter case they are usually found directly after the verb stem, though occasionally after an Auxiliary Root. They differ slightly in emphasis, -?a being stronger than -le?, with a sense of finality and definitiveness

[^8]- the correctness of the identification of the participant is not to be questioned. The two forms may be found in conjunction with each other (ex.8c.).

```
8a. na-ko? kim ?\ -le? (khe?-na?)
    I -Gen house this-\overline{REm}(be -NPt)
    'My house (is) THIS one:'
b. ?ow?-ko? rl payh -Ie?-?a
    that-Gen spirit return-\overline{REm}-\textrm{Pt}
    'His spirit has RETURNED.'
c. nan-ko? pe -to -le?-?a mu -na?
    you-Gen good-2ry-REm-Em stay-NPt
    'Yours is GOOD.'
```


### 3.2.1.3. Uncertainty

In opposition to emphatic statements are those for which the speaker expresses doubt concerning the factuality, or certainty, of the situations and participants described. Again the scope of the uncertainty may be the total situation, or it may be simply in regard to the identity of one or more participants, or the interaction. The former is the more general, since referential uncertainty can also be treated as doubt concerning the whole situation. Indeed the main way of expressing uncertainty in Chepang is with reference to the total situation.

## Situational Uncertainty

One of the most common markers of uncertainty is a verbal affix ca?, which belongs to the set that $I$ have labelled the Tense affixes (3.3.1.). Its use indicates either the speaker's uncertainty concerning the occurrence of non-past situations, or else their hypotheticality. Its modal sense therefore is similar to a subjunctive. The affix is commonly used for warnings (exx.9c., 9d.) and this use has been extended to give 1t a Prohibitive function (3.2.3.2.). Examples of its use are:

```
    9a. syaph bajar -tan ?al-ca - - ? 
    'Tomorrow I may go to the market.'
    b. doh lan -?a na?-ca?
        what demon-EM be -\overline{IFu}
    'What demon might there be?'
    c. cuy -pay wa? -?\ Je?-cə -nə -w?
    rice-DIF bird-Ag eat-IFu-NPt-Ag
    'Birds may be eating the rice.'
    d. ja? -?l-te? nay?-ca?
        tiger-Ag-CIF get -\overline{IFu}
        'A tiger may get you!'
```

Another method of expressing situational uncertainty (used especially if the statement is purely speculative, without any warning intended) is by means of post-verbal particles. These particles are yado and lim. The first of these two is evidently a combination of the Alternative Interrogative marker (originally from Indo-Aryan) and the Indefinite or Interrogative pronoun doh. The particle lim is possibly the older Chepang form, and has been replaced by yado, except in a few old songs and stories.

```
10a. ten ti? wa -na? yado
    today rain fall-NPt Unc
    'Today rain will fall perhaps.'
    b. wan? -?o-le? mu -na? lim
        bring-RN-REm stay-NPt Unc
    'It may have been brought perhaps.'
```


## Referential Uncertainty

If the identity of a participant is completely unknown to the speaker then he will use an indefinite pronoun, sometimes with an Indefinite affix -lan(?), to refer to it. Examples are:
lla. gayh $\frac{-1 \text { an nay?-ce?-na-n }}{\text { where-Idf get -IFu-2 -lE }}$
'I will get you somewhere.'
b. $\frac{\text { su }-\frac{1 a \eta ?}{w h o-I d f} \text { wan -na? }}{\text { come-NPt }}$
'Someone is coming.'
If the identity is simply uncertain then the Alternative affix is used, along with an indefinite pronoun (l2a.). If the identity is uncertain, but the fact that something is involved is to be stressed, then the emphatic particle -?a can be used, in conjunction with the particle yado (ex.l2b.).

12a. kam? -tan yom -ya doh -ya Jyal-na?
below-Al bear-AIt what-Altflee-NPt
'Down below a bear perhaps is fleeing.'
b. ten lan - ?a yado wan -na?
today demon-Em Unc come-NPt
'Today something will come - a demon perhaps.'

### 3.2.1.4. Hypothetical Statements

Hypothetical Statements are expressions concerning potential situations that have not occurred at the time of speaking (or at least they have not occurred as far as the speaker is concerned). They are sem-
antically similar to uncertain statements in that the latter are also concerned with potential situations - those whose factuality is uncertain. It is not surprising therefore, that the same form -ca? is used both for hypothetical statements and for uncertain utterances. Hypothetical forms are found mostly in conditional constructions, which relate the hypothetical condition to some resulting situation. These constructions are dealt with under the heading of Inter-clausal Relations (4.2.5.3.). The less common hypothetical alternative - 'He could have... (but did not)' - does not, for Chepang, require any special verb form. Instead it involves a construction, a double embedding of the hypothetical clause, firstly as a nominal in relation to the abilative verb khay- (or some similar verb). The complex clause formed in this way is then itself treated as a nominal in relation to the verb khe?- 'be, have', used in its Secondary form, with the implication that the state described does not hold at the time of speaking (see 4.2.3.2: 125):

```
13. [[gopal wan -sa] khay-?o] khe?-to
    Gopal come-IN able-RN be -2ry
    'Gopal could have come.' (More literally: 'It was (the
    case) that Gopal was able to come/capable of coming.'
```


### 3.2.1.5. Necessitatives

Necessitatives are forms which convey 'deontic modality' (Lyons: 1977:791). That 1s, they indicate, not the degree of certainty (or lack of it) concerning a situation, but the speaker's feeling that circumstances morally or causally require (or required) the occurrence of a yet unrealised situation. In English several degrees of obligation may be explicitly expressed by the use of different modal auxiliaries have, must, need, ought, should, and so on. In Chepang, variation is achieved by putting the clause expressing the necessary situation into the Irrealis Nominal form (4.2.4.2.), in conjunction with various forms of the verb khe? 'be, have'. The various constructions possible are:

```
14a. na wan-sa-(?a)-(no)
    'I should come/I am to come.'
b. na wan -sa khe?-(no)-to
    I come-IN be -(IE)-2ry
    'I must come.'
c. Ja wan -sa khe?-na (-п)?
    I come-IN be -NPt(-1E)
    'I ought to come/I have to come.'
```

```
d. Ja wan -sa khe?-ca (-ŋ)?
    I come-IN be -IFu(-1E)
    'I might have to come.'
e. na wa\eta -sa khe?-?a(la-\eta?)
    'I had to come.'
```

Note that the use of the different Tense and Aspect affixes with the verb khe? 'be', is not arbitrary, but is related to the functions of these affixes with Stative verbs (3.3.3.). For instance -na? is used for temporary states, while -to signifies permanent ones, and this is reflected in the stronger form of the Necessitative that results when -to is used. The addition of the pronominal affix (here - of) evidently makes the obligation more personal than is the case if it is absent as with the English 'I must...' and 'It is necessary for me to ....'

An indefinite Necessitative is expressed by using the Auxiliary Root -han (see 3.3.6.). This indicates that the obligation is not felt to be immediate, and the construction has the sense 'It will be necessary sometime/later.' as in example l5a.

A past unrealised Necessitative is formed by treating the whole Necessitative situation as being Past Perfect (ex. l5b.):

```
15a. Da wan -sa khe?-han-na -n?
    I come-IN be -INc-NPt-IE
    'I ought to come sometime.'
    b. Ja wan -sa khe?-?o khe?-to
        I come-IN be -RN be -2ry
        'I ought to have come.'
```


### 3.2.1.6. Negation

The use of a Negative form in association with a clause may be regarded as a specific type of assertion, namely one which asserts the non-occurrence of the situation specified by the clause, in some context. In Chepang negation is marked in the verb by one of two affixes -la or ma?. The scope of the Negative cannot be limited to referring expressions in Chepang, as it can be in English (as with 'NO CAT may enter here.'). ${ }^{l}$ The scope of the negation must be the whole clause in Chepang. None of the Tense affixes (-?a, -na? and -ca?) can occur in confunction

[^9]with a Negative affix, so that Negative verbs have no marking for absolute tense.

The form - la is used for negating Primary verbs and stands in ultimate or penultimate position in the verb, after the pronominal suffixes. Chepang belongs to a minority of Tibeto-Burman languages that do not use -ma?, or a related form, as their main negative. Also, in most Tibeto-Burman languages, the negative morpheme is a prefix or pre-verbal particle, not a verb-final suffix as it is in Chepang. An explanation for this unusual feature of Chepang is suggested in section 5.2.3. Examples of the use of this negative form in Chepang are:

16a. Qn. jugan -lə?-te? je?-?u-lu An. jugan Je?-クə-1ə complete-REm-CIF eat-Ag- $\overline{\mathrm{Ne}} \mathrm{g}$ complete eat-lE- $\overline{\mathrm{Ne}} \mathrm{g}$ 'Didn't you eat it at all?' 'I did not eat it at all.'
b. yoh ?al?-n-i - 11
yesterday take-Ag-Fl- $\overline{\mathrm{Ne}}$ g
'Yesterday they did not take it.'
The Negative form -ma? is used to negate Secondary, Tertiary and Nominal verb forms. In the verb it occurs closely after the main and Auxillary Roots and before the marker of verb type.

17a. nan wan -ma?-to bay?-te?-la you come- $\overline{\mathrm{RNg}}-2 r y$ give-CIF-Neg
'Since you did not come he did not give it to you.'
b. che? ka -ma -ma?-ta khan-?u
salt put in-Co - $\overline{\mathrm{RNg}}-3 \mathrm{~N}$ cook-Ag
'Cook it also without putting in salt.'
(literally: 'Not putting in salt, cook it.')
c. nan-?l paysa wan? -ma?-lo-ya
you-Ag money bring- $\overline{\mathrm{RNg}}-\mathrm{NN}-\mathrm{Alt}$
'Have you not brought money?'

## Negative Emphasis

Chepang has a rather curious form of negative emphasis which uses reduplication of the verb root. It is used more often in freely colloquial speech than in a formal style - in fact $I$ have no examples at all from text. Examples of this construction are:

'I have not seen it (at any time).'
b. ?i tanh -?o ghan khe?-na? khe? khe?
this large-RN hole be -NPt be $\frac{\text { be }}{b}$
'This is NOT a large hole.'

Note that the construction has no overt negating element in it at ail. Compare the Mikir Negative form: Root + Reduplicated Root Consonant giving, for example: dam-d̄ 'Not go.' (Grierson, 1909).

### 3.2.1.7. Emotive Expression

The fact that a speaker has certain feelings towards a situation that he is describing is often indicated, in Chepang, by the use of the 'Expressive' forms - ja (used with NPs), and -je? used in the verb. Essentially the use of the first form, -ja, in conjunction with an NP, limits the scope of the feeling particularly to the participant referred to. It indicates affection for this participant (which may be the speaker himself!). The second form, -Je? has the whole situation as its scope and indicates satisfaction and pleasure in respect to this situation. Alternatively these two morphemes may be used ironically to express dissatisfaction and dislike (ex.l9b). Similar expressions of feeling, such as affection, are indicated in English by the use of normally abusive terms (as in 'The little beggar has really taken a liking to me!'), or by diminutives or expletives. Examples of the use of the Expressives are:

```
19a. ?əhe na-ko? co? -ja si -?a-bət-ta-n? ba
    Exc \(I\)-Gen chizd- \(\overline{E v}\) die-Pt-Pos-Gl-lE Cert
    'Oh my chizd has died!'
b. na-kay-ja ne? -je?-?a-ta-ŋ?
    I -Gl -Ev bite-EV-Pt-Gl-lE
    'It has bitten me.'
c. ?ow? wa? -ko? co? jyal-je?-?aka-y?
    that bird-Gen child flee-Ev-Pt -Pl
    'The young birds escaped (luckily).'
```

The situational emotive form -je? also conveys a sense of completion or finality with regard to the situation. This is natural enough, since it is the completion or final resolution of events which most commonly provokes expressions of satisfaction or dismay. The completive sense is often foremost in Imperatives:

```
20a: low ?al-je? ?uya
    right go -Ev therefore
    'Right, go then (for good)!'
    b. low noh - je? je?-je?
    'Take it then and eat it up:'
```

It is possible that the verbal affix -je? derives from the verb root
je? 'eat, devour' via the notion of 'get rid of completely or finally',
the latter leading to an emotive sense. The NP enclitic -ja may come from this same root or, more likely, have a common origin with jhak'Zike, Zove' (from the Proto-Tibeto-Burman *m-ja 'Zove' Benedict 1972: 28).

### 3.2.2. INTERROGATIVE

## Alternative or Situational Interrogatives

In the situational, or yes-no Interrogative the reality (past, present or future) of the situation expressed by the whole clause is what is being questioned. In Chepang the basic method of forming a situational Interrogative is to present the hearer with both the positive and negative expressions of the situation, often with these expressions conjoined by the Alternative affix -ya. The hearer is expected to reply with the correct alternative - he cannot, of course, reply appropriately with the Chepang equivalent of 'yes' or 'no' because of the disjunct nature of the question:

```
2la. Qn. nan kathmandu-tan dah -te?-?a-(ya) dah -te?-lo-(ya)
                                    you Kathmandu-Al arrive-CIF-PT-Alt arrive-CIF-Neg-Alt
                            'Have you been to Kathmandu or not?'
        An. dah -?ala-ŋ?
        arrive-Pt -1E
            'I have been.'
    b. gopal-? I may? wan? -?aka-n -(ya) wan? -?u-lu-(ya)
        Gopal-Ag meat bring-Pt -Ag-Alt bring-Ag-Neg-Alt
        'Did Gopal bring the meat or not?'
```

The full Alternative construction may be shortened by presenting only one alternative, but with the same intonation pattern used for this as would occur on the first clause of the full construction (a rising pitch on the last syllable):
22. gopal-? 1 may? wan? -?aka-n -ya

Gopal-Ag meat bring-Pt -Ag-Alt
'Did Gopal bring the meat?'
It is possible to question the situation expressed by a Non-Primary clause while pre-supposing the truth of the main clause situation:
23. nan je?-ti -te? wan -?a-ya je?-ma?-to wan -?a-ya you eat-3ry-CIF come-Pt-Alt eat-2Ng-NN come-Pt-Alt
'Were you eating when you came or not?'
(literally: 'Did you come eating or not eating?')
If the context is clear enough even this may be reduced to a single clause question:

```
24. na\eta thas -tl je?-nə -w?-ya
    you offer-3ry eat-NPt-Ag-Alt
    'Did you make an offering when you ate?'
    (literally: 'Did you eat making an offering (or not making
    an offering)?').
```

From the context it would be obvious enough as to whether the question concerned the addressee's eating or not eating, or whether it concerned the way in which he ate.

## Referential Interrogatives

If the reality of the overall situation is pre-supposed, but the speaker requires information concerning the identity of a participant, or the interrelation, then a Referential Interrogative is used. This type of interrogative is formed by the use of pronouns belonging to the same set that is used for indefinite reference, together with the appropriate case affix. Apart from the use of these pronouns the structure of the Referential Interrogative, indeed of all Interrogatives, is identical to the equivalent Declarative - there is no word order change.

The pronouns used for Referential Interrogatives are:
doh 'what'
su 'who'
gaw 'which'
ga? 'where'
gala 'when'

Examples of Referential Interrogatives are:
25a. Qn. kam? -tan doh wan -na? An. below-Al what come-NPt valley bird-Em
'What is coming down there?' 'A valley bird.'
b. gaw pe -na? ?- -le?
which good-NPt this-REm
'Which is the best?' 'This one.'
To obtain information concerning an interaction the impersonal pronoun doh is used, together with the pro-verb hay- 'do something' and its appropriate affixes (that is, those that would be used in the equivalent Declarative expression). Because Tertiary verbs often perform a function similar to that of adverbs, the pronoun doh plus the Tertiary form of hay- may be used to express the equivalent of the English Manner Interrogative 'how' (ex.26b.). Alternatively a type of Manner adverbial gat a may be used instead of doh (ex.26c.).

> 26a. Qn. ten gopal-?l doh hay-ne-w? today Gopal-Ag what do-NPt-Ag
> 'What is Gopal doing today?'

$$
\begin{aligned}
& \text { An. sya? gulh -ne -w? } \\
& \text { deer foZZow-NPt-Ag } \\
& \text { 'Hunting deer.' } \\
& \text { b. Qn. doh hay-tI janh-ca -n? } \\
& \text { 'How do I make it?' } \\
& \text { An. la lyas -ti janh-?u } \\
& \text { rope twist-3ry make-Ag } \\
& \text { 'Make it by twisting rope:' } \\
& \text { c. Qn. gote hay-ti japh-ca - how } \\
& \text { 'How do I make it?' } \\
& \text { An. sarh-ti jagh-?u } \\
& \text { care-3ry make-Ag } \\
& \text { 'Make it carefully!' }
\end{aligned}
$$

Notice that there is a slight difference between the Manner Interrogatives of examples 26 b . and 26 c . The first of these (1n ex. 26 b .) expects an answer in terms of the actions required, while the second (ex.26c.) implies a more truly adverbial answer is expected. This may reflect the fact that got $\begin{gathered}\text { was originally a phonaesthetic proform, }\end{gathered}$ composed of a stem go plus the regular phonaesthetic marker to (see 1.5.1.4.).

### 3.2.3. JUSSIVE

### 3.2.3.1. Jussive Types

In Jussive expressions the speaker indicates that he desires the addressee to cause or permit some situation to be realised either directly, (indicated by Imperative utterances), or indirectly, by passing on the command (as with Hortatives). Negative Imperatives are of two kinds, those which require a situation to be not realised (Prohibitions), and those which require an already prevailing situation to cease (Cessatives). The use of the term 'Jussive' to cover all the types of expression mentioned above follows that of Lyons (1977:748).

### 3.2.3.2. Imperatives

## Positive Imperatives

The form of the verb used for positive Imperative utterances is similar to that used for Declaratives, but has no Tense affixes, and the pronominal affixes differ sometwhat (see Chart 14, App.l.). Pronominal affixes representing the Goal participant may be present in the verb, and free pronouns, referring to the addressee as Actor, can occur, but the CIF form -te? is not used (see 3.1.2.). This means that, in
those sections of the verbal paradigm in which -te? is the only indication of 2nd Person involvement (as with Non-Intentives, or with 2nd Person-3rd Person Intentives), there may be no pronominal affixes, if the Goal is also unexpressed (ex. 27 b .). In such cases an Imperative Emphatic affix may be used, but only if the verb has no affixes other than derivational ones (27a.). The Imperative Emphatics are ? o (used with a single addressee) and no (plural addressee - 'you alZ'). The last syllable of an Imperative utterance is stressed, even if it is an affix and not a free particle. Examples of Imperatives are:

```
27a. ?o -han ?al-?ə
    that-LOC go -ImE
    'Go over there!'
    b. ?i -tan wan
    this-Al come
    'Come here!'
    c. nin-ji ?amh khan-j -u day
    you-2Dl food cook-2Dl-Ag Exc
    'You two cook the food please!'
    d. ranh -to bay?-ta-\eta?-ca da
    quick-2ry give-Gl-lE-Dl Excl
    'Bring us (two) the food quickly!'
    e. haw -lam-kay bay?-?u-su
    child-Pl -Gl give-Ag-Pl
    'Give it to the children!''
```

The exclamatory particles, doy and da (exx.27c., 27d.), are often included to take the utterance-final stress, especially if the utterance is lengthy, or is meant to carry over a long distance. The first of these, doy, seems to be the more polite form, hence its translation as 'please' (ex.27c.). Politeness is also expressed sometimes by using the Augmentative form - cak (ex.28a.), or by using the Near Future Auxiliary (3.3.4.), which in this case has the sense of 'for a moment' (ex.28b.). Condescension may be shown by using the Diminutive -cok (ex.28c.):

```
28a. jo?ga bəy?-cak-cl
    food give-Aug-2Sl
    'Please give me food.'
    b. nan-ko? rama boy?-dhan-cl
    you-Gen sickle give-NFu-2Sl
    'Lend me your sickle for a moment.'
    c. jo?ga boy?-cok-cl
    food give-DIm-2Sl
    'Give me food.'
```


## First Person Imperatives

First Person Imperatives are those which include the speaker in the situation. In Chepang, however, the lst Person Inclusive affix -toyh is not used, but only the Number and Case affixes:

```
29a. low dyah ?al-cə
    right now go -Dl
    'Right, let's go now.'
    b. ?ow?-kay bәy?-c -u
        that-Gl give-Dl-Ag
    'Let us two give it to him.'
        dyah je?-n -l mani
        now eat-Ag-Pl all
    'Now let us all eat.'
```

Prohibitions
Prohibitions may be expressed in one of two ways. The first method involves using the verb with the Indefinite Future affix and a 2nd Person Actor. The prohibitive sense of this form is an extension of the use of the Indefinite Future to signal warnings concerning situations in which the addressee is not intentionally involved (ex.30a.). From this warning function the construction has come to be used for situations in which the addressee could have some control (ex.30b.). This has led to its being interpreted as a prohibition and its consequent use for situations where the addressee is clearly intentionally involved (ex. 30c.) :

```
30a. na\eta has -te?-ca?
    you vomit-CIF-IFu
    'You may be sick!'
    b. ban -soy ton -te?-ca?
    stone-Ab fall-CIF-IFu
    'You may fall from that rock!/Don't fall from that rock!'
    c. jugan-ma-te? giyunh-ca?-jo
    ever -Co-CIF go out-IFu-2Dl
    Don't you two ever go out:'
```

This is the only Imperative form which has the CIF affix -te?. Indeed prohibitions almost without exception use this affix to emphasise that the addressee is involved. The fact that -te? is allowed clearly reflects the Non-Imperative origin of this construction.

The second method of expressing prohibition is to use the Hortative Negative affix -lam with the verb, in place of any Pronominal affixes. It is a more polite form of expressing prohibition:

```
3la. how -ləm-kay boy?-lam
    child-Pl -gl give-\overline{HNg}
    'Please don't give it to the children.'
    (literally: 'Don't let the children be given it.')
b. ni-cl brak- -ta wah -lam
    we-Dl together-Eq move-\overline{HNg}
    'Let's not go about together.'
```


## Cessatives

The Cessative construction is formed in a manner different from that of the other Prohibitives, as it uses a non-affixal Cessative particle ta? (sometimes reduplicated) before the regular Imperative negated by the affix -la.

```
32a. ta? ta? dayh - ? \(\frac{\text { a }}{\text { Co }} 10\)
    Ces Ces speak-ImE-Neg
    'Stop talking!'
    ta? boy?-?u-su-lu
    Ces give-Ag-Pl-Neg
    'Stop giving it to them!'
```


## Hortative

The Hortative (or Third Person Imperative) construction expresses an indirect command 'Let him/them do...'. The form of the verb in the Hortative construction is the same as that used for Declarative utterances, except that the Hortative affix -pa is present, usually in place of the Tense affixes. If any of the Tense affixes are used then it is with their aspectual, not their tense marking function (ex.33c., see also 3.3.2.).

The Negative form of the Hortative uses -lam as indicated above. Examples of Hortative expressions are:

```
33a. je?-le?-pa -ta-\eta?
    eat-REm-Hor-Gl-1E
    'Let it eat me!'
    b. how -ləm-?i yo -pa -n -i
    child-Pl -Ag look-Hor-Ag-Pl
    'Let the children look:'
    c. mom?co? wan -lam goyco? wan -pa -na -y
    women come-HNg men come-Hor-NPt-Pl
    'Let the men come but not the women!'
    d. ?al?-te?-pa
    take-CIF-Hor
    'Let him take you.'
```

The use of -te? where the 2nd Person is a Goal, as in example 33d., is probably a reflection of the Declarative origin of these forms, though
it could perhaps be argued that an instruction on behalf of the addressee is contrary to the expected case, where the addressee requests on his own behalf.

## 3.3. the verb and the context of utterance

### 3.3.1. TENSE AND ASPECT

Among the functions of the verb which relate the content of an utterance to the speaker and his act of speaking, one of the most important is the indication of tense. That is, indication of the temporal relation between a situation and the utterance describing it ('absolute' tense) or between the situation and some other understood temporal reference point ('relative' tense).

However, although tense marking is important, Chepang, like many other languages, does not have a pure tense system. Instead, the absolute tense (of Primary clauses) is inferred from the temporal setting constituents of the clause, in combination with one of a set of three affixes which also have aspectual or modal functions. These three affixes are -?a, -na? and -ca?, the last having been described earlier under its modal function (3.2.1.3.). Every positive Primary verb in a Declarative utterance has one of these three forms occurring along with the Pronominal affixes. They do not occur, however in Negative and Imperative verb forms. Because these three affixes play an important part in indicating tense, they are termed here 'Tense' affixes, to distinguish them from other, more purely aspectual forms. Nevertheless in describing them it is easiest to begin with their aspectual functions.

The first of these affixes, - ?a, is perfective in aspect, indicating that the situation referred to is complete with respect to some point in time. If this temporal reference point is the act of describing the situation, then the use of this form implies that the situation is complete at the time of utterance. In other words the situation took place in the past, and the affix -?a is therefore effectively a Past Tense marker (exx.34a., 34b.).

The second affix, -na?, is imperfective in aspect, indicating that the situation referred to is incomplete with respect to some point in time. If this time reference is a following situation, or situations, then that situation which is marked as imperfective is simultaneous with these. However if the reference point is the act of utterance then the imperfective affix marks Non-Past Tense, since it indicates that the situation is not complete at this point in time, regardless of whether or not it has in fact begun.

The third affix, -ca?, as has been mentioned, is used primarily for hypothetical situations, or those for which the speaker is uncertain as to their eventual occurrence. However it is commonly used for future situations (34f.), and is clearly part of the same system as - ?a and -na?, in that it normally functions in opposition to them, and occupies the same position in the verb. Moreover, unlike other aspectual and modal affixes, it is subject to exactly the same restrictions as -?a and -na?, in respect to the verb types in which it may or may not occur. I have termed it here the 'Indefinite Future' affix.

Examples of the use of the Tense affixes, in their tense marking function, are:

```
34a. bhena yoh dah -?a Past
    husband yesterday arrive-Pt
    'My husband arrived yesterday.'
    b. dene ni-ci wan -?a-təyh-cə
        about now we-Dl come-Pt-IIn -Dl
    'We (two) came just now.'
c. nyam yah-na?
    sun set-NPt
    'The sun is setting.'
d. kəsya? cyəw?-na - 刀?
    deer see -NPt-lE
    'I see a deer.'
e. nan-kus ?al-na -n?
    you-com go -NPt-lE
    'I will go with you.'
f. na-? \(i\) go? -ce?-na-n
    I -Ag call-IFu-2 -lE
    'I will/may call you.'
g. ga? -tan ?ol -ca -刀?
    where-Al fall-IFu-lE
    'Where wizl I falz?'
```


### 3.3.2. ASPECTUAL FUNCTIONS

Whether one of the three Tense affixes is primarily indicating tense, or aspect, can usually be determined from the context. In the great majority of cases they are simply indicating tense. A context where the aspectual function is foremost is when one of these affixes occurs in combinations with another, since both could not be marking tense at the same time. For instance -na? is not uncommonly found following -ca?, in which case the former is aspectual in function, with its imperfective sense of indicating a continuing, uncompleted situation:

```
    35a. yatjyo? sin? gata lyun-ca?-na?
    one wood how burn-IFu-NPt
    'How can a single piece of wood ever burn (by itself)?'
    b. ja? yom -?l-te? nay?-ca?-na?
    tiger bear-Ag-CIF get -IFu-NPt
    'Tigers or bears may get you.'
```

The affix -?a may occur preceding either -na? or -ca?. Because of
this position it could alternatively be analysed as the Emphatic affix
(3.2.1.2.), since the overall effect would be similar. Indeed it is
arguable that only one morpheme -?a is in fact involved, with the sense
of completion in the verbal context, and an emphasis of finality of
assertion primarily in the nominal context. Certainly one would not
find -?a used as an Emphatic alongside the affix -?a, with the latter
an aspect marker. However whichever way the morpheme is interpreted,
its use along with -na? or -ca? indicates the completeness of the situ-
ation, which is an aspectual type of function. When this affix is used
with -ca? it appears to signify completeness or definiteness after
previous uncertainty (exx.36c., 36d.):
36a. sat -?a-na?-ta-n?
kill-Pt-NPt-Gl-lE
'I will be killed!'
b. na-pay nuk -?a-na -n?
I -DIF hide-Pt-NPt-1E
'I will hide!'
c. syo -?a-ca -n? ? 1 hme?-kay
blow-Pt-IFu-lE this fire-Gl
'I will indeed blow the fire.'
d. dyah to -?a-ca -n?
now tell-Pt-IFu-1E
'I will indeed now tell him!'

The Non-Past form -na?, in certain contexts, may have a purely aspectual function even when it occurs by itself. This is particularly the case when it is found in a verb that is part of a discourse clearly set in the past. In such an instance, the situation expressed by the verb forms part of the background to the following events - that is, it is an ongoing event that continues while the succeeding events take place.
37. yatkyo? co? -ko? ?ama sl -?a one child-Gen mother die-Pt
'A certain child's mother died.'

```
?ohanseyko? ?apa -?l kanchi?ama-ta\eta?-?a wan? -?aka-n
SCn father-Ag stepmother-IIF -Em bring-Pt -Ag
'Then the father married again.'
?ow? kanchl?ama ?ow? co? -kay ?ane ghan-nə -w?
that step-mother that child-Gl much beat-NPt-Ag
'The step-mother often beat the chizd.'
```

Notice the use of the Non-Past Imperfective form in the last sentence, though the story as a whole is clearly set in the past. Here it is an indication that the step-mother's action is a habitual one, which provides a background for many of the subsequent events.

### 3.3.3. STATIVE SITUATIONS

When used with verbs associated with stative situations, the affix -na? has both its Non-Past and Imperfective functions. Its use is in fact limited to states that are only temporary conditions. It would seem therefore that verbs associated with states are primarily process verbs, describing a change in state, with the use of -na? indicating that the process is not complete or final - in other words the state is temporary (ex.38a.). In contrast, if a state reflects a permanent characteristic of an object, then the Secondary verb affix -to is used, in its Perfect aspectual sense (4.2.3.2.), to indicate that the process bringing about the state has ended, though the results of the process persist (ex.38b.). If the state itself no longer holds, this is indicated by the use of the verb khe?- 'be', also in its Secondary form (ex.38c.). Examples of stative situations are:

```
38a. ten mus ?ane du -na?
    today cloud much red-NPt
    'Today the clouds are very red.'
    b. ?ow? ban bham -to -?a
    that stone white-2ry-Em
    'That stone is white.'
c. yoh mus du -to khe?-to
    yesterday cloud red-2ry be -2ry
    'Yesterday the clouds were red.'
```


### 3.3.4. AUXILIARY ROOTS AND ASPECT

There is a set of forms that occur immediately after the main root of the verb, or close to it, which often are used to give aspectual or tense information. These I have termed 'Auxiliary Roots', since they are semilexical in nature, some of them being similar semantically and formally to fully lexical roots (see below 3.3.7.). They have quite a range of functions, and are distinct from the Tense set of affixes in
that they are found in Negative and Imperative verb forms. Several of these Auxiliary Roots function as temporal modifiers, adding details concerning the time and temporal structure of the situations they refer to. Like the Tense affixes they are not found with verbs expressing permanent states.

The Auxiliary Roots most closely connected with tense and aspect are:

1. -dhan This is essentially a Near Future marker ${ }^{1}$. It is somewhat unusual in that it is found both as a verbal affix and enclitic to NPs, being sometimes in both positions in the one clause (ex.39a.). Because its use implies that the present situation being described will continue for only a short while longer, not indefinitely, it includes a sense of expectancy of change, as is the case with the English 'yet' and 'stizl'. Examples of its use are:
```
39a. na-?l-(dhan) yo -(dhaŋ)-ca -ŋ?
    \(I \quad-\mathrm{Ag}-\mathrm{NFu}\) look-NFu -IFu-1E
    'I am about to Zook./I will now look.'
    b. ?ow? roy? mu -le?-dhan-na?
        that dirt stay-REm-NFu -NPt
        'The dirt still remains.'
    c. nyam Jyal-dhan-lo mu -?a-na?
        sun flee-NFu -Neg stay-Em-NPt
        'The sun has not yet set, it remains.'
```

The parentheses used in example 39a. indicate that the affix may occur optionally in either, or both, of the positions shown. It normally co-occurs with the Indefinite Future Tense form because both refer to future events, but it can also co-occur with the Non-Past form -na? (ex.39b. above). It does not appear to be used with the Past affix -?a, no doubt because of the conflict in tense.

1i. - ?ata? This is evidently a Near Relative Past form with a strong perfective sense. It has the same distribution as the Near Future, being found both as a verbal affix and an NP enclitic, but it is much less common. Originally it was probably a fully operating perfective past form but has fallen into comparative disuse, especially in Primary verbs, because of confusion with the Past Tense plus Goal case combination (5.2.4.7.).

[^10]40a. pun-?ata? le?-tl ?al?-c-u
bark-NrPt get-3ry take-Dl-Ag
'As soon as we have got the bark let's take it.'
sat -?ata?-ma?-to ?al-ce
kiZZ-NrPt -RNg-2ry go -Dl
'Without having killed it just now, let's go!'
iii. - ?ak This morpheme indicates a Non-Perfective Relative Past, that is it indicates a situation that occurred prior to some temporal reference point, but is unmarked with respect to completion. It is found only as a verbal affix, most commonly with Negative and Imperative forms, and, in Declarative utterances, in combination with the Indefinite Future form -ca?. When used with -na? in a Declarative utterance, the Non-Past affix has its imperfective sense (3.3.1., also see ex.4lb.). The same form is also used in conjunction with verb stems to signify a Tertiary situation precedent to the main situation (4.2.3.3.).

```
4la. na-?l dyaw?-?ak-ca - n? ?ohansoy yo -n - - 
    I -Ag dig -\overline{RPt-IFL-IE SCn look-Ag-Pl}
    'I will first dig, then let's look.'
    b. how -ləm ləy?-ləy? ton - ?ak-na? lay?-ləy? rya?-na?
        child-Pl own -own fall-\overline{RPt-NPt own -own cry -NPt}
    'Children first fall over by themselves, then they cry.'
    c. Ia tet -?ak-J -u ?ohansay tun -j -u
    rope break-\overline{RPt}-2Dl-Ag SCn drink-2Dl-Ag
    'You two first break the rope, then drink.'
    d. na wan -?o bela-ha\eta cyok -le?-te?-?ak-la
    I come-RN time-Loc get up-REm-CIF-\overline{RPt}-Neg
    'When I came before you had not got up.'
```

iv. -khe? This morpheme indicates the imminence of a situation the equivalent of the English 'about to'. It normally occurs with the affix - ?a, even though the situation has not yet taken place. This shows that -?a is being used in its perfective aspectual function, with the sense that the action as a completed unit is about to occur, not just that it is about to begin. The latter sense is conveyed by the use of -khe?, together with -na? in its aspectual function (ex. 42 b .).

$$
\begin{aligned}
& \text { 42a. ja? -? } 1 \text { mak }-k h e ?-? a-t h ə y \\
& \text { tiger-Ag devour- } \overline{\mathrm{Imm}}-\mathrm{Pt}-\mathrm{Gl} \\
& \text { 'A tiger is about to devour him.' }
\end{aligned}
$$

b. kim -tan dah -khe?-na?
house-Al arrive- Imm -NPt
'He is about to arrive at the house.'
v. -khay? This affix has an inceptive function, that is, it indicates that an action has begun. It is formally and functionally similar to -khe? and probably has come from the same original morpheme. Because -khay? itself necessarily implies an incomplete situation, when it is used in conjunction with -?a and -na? these last two morphemes function as Tense markers. Any aspectual sense would tend to conflict with the imperfective aspect imposed by -khəy? or be redundant. The Inceptive form is largely being replaced in everyday speech by the calqued construction from Nepali (ex.43c.).

43a. nyam thon -khay?-?a
sun light-Inc -Pt
'The sun began to brighten.'
b. say? gle?-khay?-na?
fruit fall-Inc -NPt
'Fruit are beginning to fall.'
c. say? gle?-sa laga -na?
fruit fall-IN begin(Nep.)-NPt
'Fruit are beginning to fall.'
vi. -jhun This functions as a Repetitive morpheme, equivalent to the English 'often':

```
44. na bajar -tan ?al-jhun-na -n?
    I market-Al go -Rep-NPt-1E
    'I often go to the market.'
```


### 3.3.5. SUMMARY OF TENSE AND ASPECT MARKING

From the discussion in the previous four sections (3.3.1-4) it can be seen that Chepang does not have a very tightly organised system of indicating tense and aspect, but rather there is a considerable degree of overlap and ambiguity. The position may be clarified somewhat by illustrating graphically the initiation, duration and completion of a situation 'S' (as indicated by the various tense and aspect forms), in relation to a time line. In this diagram (chart 4, opposite), the duration of a situation is indicated by a horizontal line (in the case of a non-event (Negative) by a dotted line), while any commitment the speaker makes to the initiation or completion of the situation is indicated by a short vertical line at, respectively, the beginning or end of this line. Three temporal reference points are shown; $T_{o}$ representing the time of utterance of the clause describing $S, T_{x p}$ representing a past variable reference point, and $T_{x f}$ representing a future variable point of reference. The affixes represented by each line are given above 1t, while an approximate English gloss is given underneath.

CHART 4
TENSE AND ASPECT MARKING


### 3.3.6. OTHER AUXILIARY ROOTS

Several other affixes occupy the same position in the verb as the Auxiliary Roots discussed above (3.3.4.), but do not have aspectual functions, if aspect is defined as indicating the temporal relations and constituency of situations (see 1.3.3.4.).

They are to be treated here, however, for the sake of completeness. These affixes include:

1. -cak and -co?, which have augmentative and diminutive functions respectively (exx. $45 \mathrm{a} ., 45 \mathrm{~b} ., \mathrm{below}$ ).
2. -han, which indicates indefiniteness with Necessatives ('sometime necessary' - ex.45c.).
3. -bay, which indicates certainty (ex.45d.).
iv. -je?, which indicates finality and is also associated with emotive functions (see 3.2.1.7., also ex.45e.).
v. -gar, which essentially indicates that the speaker feels as though the situation he is describing were indeed the case, (though in fact it may not be), or he is attributing this feeling to a participant. This morpheme fills the function of English verbs such as 'to feel (that)...)', 'to seem', 'to appear (to be...)', (exx.45f., 45g., 45h.).

The Causative and Reciprocal affixes (2.2.6.) may also be regarded as Auxiliary Roots, since they are found in the same position in the verb as the affixes just described and, like these, are semilexical.

Examples of the Auxiliary Roots described above are:
45a. ten tl? wa -cak-?a
today rain fazr-Aug-Pt
'Today much rain felz.'
b. ten tl? wa -co?-?a
today rain fall-Dim-Pt
'Today a little rain fell.'
c. Da ?al-sa khe?-han-na -n?

I go -IN have-INc-NPt-IE
'I must go (sometime).'
d. dyah nak -? je?-bay-?a-thoy
now serpent-Ag eat-Cer-Pt-Gl
'Now the serpent will certainly have devoured him.'
e. syanh ?al-je?-na -
tomorrow go -Fn -NPt-lE
'Tomorrow $I$ will go for good.'
f. ?ama rya?-gar-?a
mother cry -Fel-Pt
'Mother felt like crying.'
g. gopal ?anə me -gar-na? Gopal much sing-Fel-NPt
'Gopal feels like singing a lot.'
h. Tow? ban gal -gar-na?
that stone black-Fel-NPt
'That stone seems black./That stone is blackish (or grey).'

### 3.3.7. LEXICAL ORIGINS OF THE AUXILIARY ROOTS

It is likely that all these Auxiliaries were originally fully independent roots which, because of their frequent use in verb compounds (4.2.), have become functional morphemes. Indeed fully lexical roots still exist which are identical in form to each of these affixes, though any semantic relationship is often obscure. These roots are: khe?'pass bylover quickly, jump', khəy?- 'avoid, ignore', dhan- 'appear in a new state', ?ak- 'begin to split', jhur-'squat', han- 'shine weakly (sun)', bay- 'be attentive', je?- 'eat, ingest', gar?- 'be equal (in girth)', co? 'chizd', -cak 'person' (only as a bound root), kay'argue', tak- 'mend'.

Matisoff (1974) describes, for Kachin, similar functions which are carried out by forms that are clearly lexical roots. Amongst these is ma? 'to use up', or when concatenated, 'to V completely' as in sima? 'be completely dead'. Compare this with the Chepang je?- which, as a full root, means 'eat' as an Auxiliary it indicates completeness or finality as in si-je?-?a 'be completely dead'. The probable cognate of the Kachin ma? is Chepang mak- 'consume, devour'.

### 3.3.8. REDUPLICATION AND ASPECT

For a considerable number of verbs (of the order of one hundred) the root may be partly reduplicated by repeating the vowel, occasionally followed by an added glottal stop as in ?olo?-, compare ?ol-'Zean'. For most cases of verbs describing actions this reduplication is associated with a Continuative or Repetitive aspect, as in:

| tyop- 'drip' | tyopo- 'drip continually' |
| :--- | :--- | :--- |
| ?ol- 'Zean' | ?olo?- 'rock back and forth' |
| hlew- 'toss (of tree in wind)' | hlewe?- 'toss repeatedly' |

For states the sense is evidently Intensive:
lyor?- 'watery (of meat)' Iyoro?- 'very watery'
hyok- 'fit (of size)' hyoko- 'fit welZ'

However there are a considerable number of re-duplicated forms for which the non-reduplicated roat does not now existm as with:
kropo- 'patter (of rain)' lakə?- 'grind with stone'
?ini?- 'wobble' hriki?- 'bend back and forth'
In other cases there has been some semantic shift:
?əр- 'be thirsty' ?əрә- 'be hot (of person)'
bur?- 'burrow' buru- 'cover one's tracks'
ren- 'knock askew' rene- 'vibrate (of wings)'
These last two facts suggest that the process is no longer productive, with the reduplicated roots being frozen as lexical items, rather than the alternative, that the process is still active but restricted in its application to certain verbs.

## CHAPTER FOUR

## THE VERB AND COHESION

### 4.1. CROSS-REFERENCE AND COHESION

4.1.1. THE NOUN PHRASE IN CROSS-REFERENCE: SUBJECT, TOPIC OR THEME?

It was pointed out in section 2.3.5. that the selection of a participant for cross-reference in Intentive clauses appears to be governed by pragmatic factors, in particular by givenness. Because the choice of subjects and topics is presumably also connected with pragmatic and cohesive factors, the question arises: Can the NP referring to the participant that is cross-referenced in the verb (abbreviated from here onward as the NPCR) be equated with the more traditional notions of subject, topic, or theme?

In attempting to answer this question, two points are clear even from a cursory examination of the problem. Firstly, the factors that govern the choice of a participant as a subject in English are certainly not identical to those governing the choice of the NPCR in Chepang. This becomes obvious when translating from one language to another, since it is often not possible to render an English subject as an NPCR in Chepang, and vice versa, as the following example shows (note that the NPCR is underlined):

1. English to Chepang
```
x kuy?-?
\(\frac{\text { dog }}{}-\mathrm{Ag}\)
\(I\)
    \(\frac{\text { na-kay }}{I-G l}\) doy?-?i joyk-ta-n?
```

Although the dog can be the subject in English it cannot be the NPCR in Chepang. The reverse situation similarly holds:
2. co? -kay lan -? $\frac{\text { le?-sa bon?-na?-thay }}{\text { child-Gl demon-Ag eat-IN seek-NPt-Gl }}$ 'A demon sought to devour the child.'
${ }^{\mathrm{X}}$ 'The child was often sought to be eaten by a demon.'
Here the child can be the NPCR in Chepang, but not the subject in the English equivalent.

Secondly, insofar as the formal markings are concerned, the choice for cross-reference is completely symmetrical with respect to the two Intentive roles that can be cross-referenced (the Agent and Goal) - no choice is indicated as marked or unmarked, nor is there any change in NP case markings. This of course is not true for English, where the choice of the patient as subject results in a marked construction, the Passive, and there are also obligatory case marking changes:

3a. $\frac{c o ?-l ə m-? i}{c h i l d-P l-A g ~ p a r e n t-D l-G l ~ s e e k-N P t-~} \overline{A g-P l}$ - Agent as NPCR 'The children seek the two parents.' Agent as subject ?amapa-nis-kay co? -ləm-? 1 bon?-na?-tha-cə Goal as NPCR parent-Dl -Gl child-Pl -Ag seek-NPt-Gl -Dl
'The two parents are sought by the children.' Patient as subject
Note the symmetry of the Chepang pair, in contrast to the definite asymmetry of the English equivalents. The symmetry exhibited by Chepang means that there is no formal motivation within the clause for notions such as 'advancement' to the position of cross-reference. Indeed there is no formal evidence to show which of the two Chepang constructions is the more basic. ${ }^{l}$

### 4.1.2. SUBJECT

To simply show, however, that the factors involved in the choice of the subject in English differ from those governing the choice of the NPCR in Chepang, does not in itself suffice to prove that the NCPR is significantly different from a subject. Keenan (1976:312), for instance, argues that the notion of subject is a 'multi-factor' concept, hence a subject in any given language will not be characterised by the same set of properties as a subject in some other language. His set of proposed subject properties will therefore be discussed briefly here.

A consideration of the 'basic-subject' (b-subject) properties shows that they fall into one of three main classes:

1. Those properties that result from the identification of the b-subject with the role of agent (Keenan's property C.2.1), where the

[^11]term 'agent' presumably corresponds to the term 'Actor' used in this work.
1i. Those properties that result from the identification of the b-subject with the topic (see Keenan's property A.3.8).

1ii. Syntactic properties, such as those involving coreferential deletion (properties A.3.l-4), which are not so easily related to the identification of the b-subject with subject and topic.

As far as the first class of properties are concerned, it may be observed that Actors are, by definition, the participants that are initially involved in an active situption - that is, from the outset. Therefore, for a statement involving an Actor to be, appropriate or meaningful, and true, the Actor must exist independently of the situation, and cannot be created by it. As a result, b-subjects which are Actors will have the properties of independent existence (Keenan's property A.1), and of absolute reference (A.3.5). The position for states is not quite so clear. However it would seem that, in most languages, the entity to which a property is attributed (the Statant participant) is treated formally in a manner analogous to that of an Actor. This is not because a Statant can be said to be 'initially involved' in a state, but because the entity must exist (or at least have been proposed as existing, in some sense), from the beginning of any period for which the property could be said to hold for it. If b-subjects are identified with Actors in active situations, then it follows that they should be identified with Statants in states. And Statants, as noted above, are participants that have properties such as pre-supposed reference (Keenan's property A.3.6).

It is also to be expected that the addressee of an imperative will be an Actor, because only an initially involved participant can perform an action ${ }^{l}$. Therefore the statement that b-subjects normally express the addressee phrase of imperatives (property C.2.2) again results from their actorhood. Moreover the causer, in a situation expressed by a causative clause, is by definition the prime initiator, or Actor in the causing, and caused, situations. It is not surprising therefore, that the causer may be expressed by an NP with a position, case marking, and verb agreement similar to that of an Actor (and hence b-subject) in a non-causative clause (property C.2.3). And since the causer has become the primary Actor, the former Actor of the caused situation (now the causee) may have to change its case marking (property B.2.), especially if only one NP can be marked as Actor in a clause. Finally, indispensability is linked to actorhood in that every (active) clause must have an initially involved participant, and this will be expressed explicitly, unless the clause is 'context dependant' and therefore not

[^12]the fullest basic form (Keenan, l976:308) (compare property A.2).
Properties that follow from the identification of b-subjects with topics include high referentiality (A.3.9), and accessability to relativisation and questioning (A.l3). The ability to launch 'floating quantifiers' is linked by Schachter with definiteness (Schachter, 1977: 286 ff.$)$, and therefore is related through this to topicality.

Schachter, when discussing some of the above topic and actor related properties of subjects in connection with Philippine languages, speaks of these properties being divided between two marked clausal constituents, commonly termed the 'Actor' and the 'Topic' in grammatical descriptions - though these may not coincide with the definitions given here (Schachter, 1977:279). The reason that Schachter can speak of a division, or split, of subject properties lies in the fact that he does not identify basic sentences for these languages. In English Passives, for instance, Keenan's b-subject properties are split between the Passive subject and the agentive NP. But passives do not belong to the set of basic sentences (Keenan, 1976:310) so there is no problem here. If basic sentences were defined for the Philippines languages to be those for which, among other properties, the Actor was also the Topic, then the b-subject properties would indeed be united in the subjects of these sentences. That Schachter does not identify a set of basic sentences presumably results from the fact that there is little or no formal motivation for making this identification. Furthermore a definition of a basic subject might only complicate a description of the language, unless one is prepared to work in terms of subjects at different levels (Schachter, 1977:301). Even if this latter solution were adopted there would still be problems because, as Schachter points out, when the Actor is not the topic (surface subject) it still possesses some subject properties - it is not a 'chomeur' as defined for Relational Grammar.

Chepang is similar to the Philippines languages with respect to the problems mentioned above. Those b-subject properties possessed by the NPCR which do not result from Actorhood, are just those which are characteristic of topics - including the properties of leftmost position in a clause, high referentiality, and so forth. It is therefore possible to speak of a split of b-subject properties for Chepang also, with a similar lack of motivation for defining a basic sentence (or basic clause). And various syntactic constraints, such as those governing the formation of complex clauses using Tertiary verbs (4.2.3.3.), are statable only in terms of their possessing a common Actor, and have no connection with the NPCR. In other words the NPCR does not play any part in defining syntactic constraints.

### 4.1.3. TOPIC

The fact that the characteristics of the NPCR in Chepang which are not role determined are those that are expected of topics, makes it worth considering whether the NPCR is not better regarded as a topic, of the type that has been described for other Tibeto-Burman languages (for instance, Lisu - Hope, 1974). In the same volume that contains Keenan's article, Li and Thompson (1976) discuss the notion of topic, topic prominent languages, and the relation between subject and topic.

Topic prominent languages, such as Lisu, Lahu, and Mandarin, regularly allow explicit reference to a participant (the Topic) which need not itself be directly involved in the clausal situation, but is closely associated (in a non-explicit way) to some participant which is involved. Two Mandarin examples, taken from Li and Thompson are (giving the English only):

4a. 'That fire (Topic), fortunately the fire-brigade came quickly.'
b. 'Those trees (Topic), the trunks are big.'

Li and Thompson give a number of criteria for distinguishing topics. It must be stressed that these properties may not apply to topics in the general sense of the term, but are intended to define a specific topic category found in languages such as Chinese and Lisu. The criteria are:

1. Topics must be definite, while subjects need not be.

1i. Topics need not be selectively related to the verb as arguments of a predicate constituent. In other words they need not be fully involved in the situation described by the verb, whereas subjects are involved.

1i1. Topics are not determined by the verb, whereas subjects are. That is, the verb tends to determine which participant will be subject. If the verb requires an agent, for instance, then this participant will be the subject, unless the construction is marked.
iv. Topics have a constant functional role with respect to the clause - that of specifying the domain within which the predication holds.
v. Topics, unlike subjects, rarely have verb agreement.
vi. Topics are almost invariably sentence-initial, subjects need not be.
vii. Topics play little part in grammatical processes such as reflexivisation, passivisation, verb serialisation, imperative formation and coreferential deletion.

An examination of these properties in relation to the NPCR in Chepang shows that this NP is topic-like with respect to conditions i., iii., vi. and vii., and subject-like with respect to the remainder.

The topicality of the NPCR in regard to the first condition, for instance, results from the fact that this NP is given. Because a participant that is in the hearer's consciousness must have already been encountered by him, a given participant can always be represented by a definite NP in languages where definiteness is marked (though the converse does not necessarily hold). The observed correlation of the participant that is in cross-reference, with givenness, means that the NPCR is very often translatable by a definite NP in English.

Furthermore, the selection of the NPCR is not governed by the particular verb it is associated with (compare condition iii.). It is, however, almost always in initial position (condition vi.). And, as has already been noted (4.1.2.:118), interclausal syntactic constraints are governed by actorhood, not by the NPCR, which is not relevant to any of the processes noted in condition vii.

In other respects the $N P C R$ is subject-like. The cross-referencing is, of course, a type of verb agreement, so that by definition the NPCR always fulfils condition $v$. in respect to subjects. And the participant represented by the NPCR must be more closely involved in the situation described by the clause than is allowable for topics, though the fact that certain possessors can be in cross-reference (2.1.5.) does mean that the involvement may be less direct than is the case for, say, English subjects.

### 4.1.4. THEME

It can be seen that the NPCR falls part-way between subjects and topics in regard to their respective properties, as outlined above (4.1.2., 4.1.3). One category that has been defined as similarly having both subject-like and topic-like properties is that of 'theme'. Allerton (1978:156), following Halliday, defines a theme as "point of departure for the speaker", or the "peg on which the rest of the sentence is hung". He carefully distinguishes theme from the matter under discussion in a section of discourse, and regards theme as being closely paired with the notion of 'rheme' in the informational structure of a sentence (1978:133), equating the theme-rheme pair with 'topic-comment'.

While themes are topic-like in terms of properties such as givenness and leftmost positioning, they are also (at least as exemplified in English) directly involved in the clausal situation - this involvement being indicated by the use of case propositions as in:

5a. 'And WITH the paint, John slathered the walls.'
b. 'And TO Joe, Bill gave the books.'

In this respect an English theme is like the NPCR. The two differ in one important respect however. In English, an NP whose referent is being sought in a question is regularly treated as a theme by being placed in initial position, but in Chepang the referentially indefinite NP need not be in this position, nor need it be the NPCR:

$$
\begin{aligned}
& \text { 6. ?ow? wa? -?i doh-kay rek-ne }-\mathrm{w?} \\
& \text { that bird-Ag what-Gl call-NPt- } \overline{\mathrm{Ag}} \\
& \text { 'What is that bird calling for?' }
\end{aligned}
$$

Here the question concerns the identity of the Goal of the action, hence this could be regarded as the theme, but it is the Agent (the bird) that is represented by the clause-initial NP and by verbal crossreference.

### 4.1.5. PRAGMATIC PEAK

In view of the difficulty of identifying the NPCR with any of the more traditional notions of subject, topic, or theme it seems preferable to follow Foley and Van Valin and separate referential or pragmatic structure from role structure, with the grammatical category of subject resulting from the coincidence of certain role and pragmatic features in the one NP in some languages. This separation of role and pragmatic structures is in accord with the fact mentioned earlier (2.3.1.), namely that there are two major, essentially independent, dimensions of variation in perspective, which affects the role structure, and variation in selection for cross-reference in the verb, the latter being linked with pragmatic factors. In Foley and Van Valin's approach one NP is marked as a 'pragmatic peak' (PrP), that is, an NP which is significant because of pragmatic factors, such as givenness or definiteness, and which is a centre for clause structure (Van Valin and Foley, 1979:10). For Chepang the NPCR clearly fits the definition of a pragmatic peak.

The function of the $\operatorname{PrP}$ varies from language to language. According to Foley and Van Valin, for English and German, participial relativisation, coreferential deletion and equi-NP-deletion are all restricted to PrPs. The $\operatorname{PrP}$ therefore may be regarded as a syntactic 'pivot', a basis for interclausal linkage, in these languages.

For Mandarin, and other topic-prominent languages, the $\operatorname{Pr} P$ (topic) is evidently not a syntactic pivot ( Li and Thompson, 1976) , but is rather a centre for information structure, specifying as it does the referential domain of predication. In contrast the $\operatorname{PrP}$ in Tagalog, though also termed a topic, is apparently a centre for referential cohesive structure, indicating particularly definiteness. Schachter makes it clear that the topic in Tagalong is not keyed to information structure as is the topic in Mandarin (Schachter, 1976:298).

The NPCR in Chepang is not, as has been pointed out earlier, a syntactic pivot (4.1.2.:118), nor is it a centre for informational structure (4.1.4.:120). It is not even a centre for referential cohesion, since it is not obligatorily definite. Rather the NPCR would seem to be functioning, at least at this stage in the history of the language, as a centre for the verbal role encoding. This would explain why, for Intentive situations, the pronominal affixes are usually accompanied by a separate affix to indicate case, in contrast to most other crossreferencing languages, which either do not indicate case, or mark it indirectly, by the position of the pronominal affixes in the verb (as for instance with Kham, see 6.3.2.2.). By marking the role of the most pragmatically significant (that is, the most given) participant via the case affix, the roles of the other participants in the situation can usually be determined. Such a verbal encoding system is by no means a complete and unambiguous way of indicating role, but it is still more explicit than having no overt role marking at all, as in some other Tibeto-Burman languages (such as Lisu - Hope, 1976:6ff). And the verbal system is now supplemented by the NP case system (2.2.).

### 4.1.6. SUMMARY

From the previous discussion it can be seen that the NPCR does not accord well with either of the more traditional categories of subject and topic, instead it has some properties associated with each of these. Moreover the NPCR does not appear to be part of information structure of the theme-rheme type. Rather the NPCR is best regarded as a $\operatorname{Pr} P$ with a pivotal function in the role encoding system of the language. The way in which it might have come to have this somewhat unusual function is discussed in Chapter 5.

### 4.2. REDUCED CLAUSE HIERARCHIES AND INTERCLAUSAL RELATIONS

### 4.2.1. REDUCED CLAUSES

In the introductory chapter (1.3.3.4.:28) it was mentioned that reduced clauses (those exhibiting less than the full potential of marking for tense, aspect, pronominal reference, and so forth) could be placed in one of three formally and functionally different hierarchies, the complex predicate hierarchy, the nouniness hierarchy or, possibly, a setting hierarchy. The formal distinctions between clauses, both vertically within a hierarchy and horizontally across hierarchies, are carried almost entirely by the verbs - NPs are not affected by clause reduction, although in general, the lower a clause is placed within
a hierarchy the fewer the number of explicit NPs that are likely to be associated with it. The discussion of reduced clauses and inter-clausal relations which follows is therefore in terms of the various verb forms which signal them.

### 4.2.2. UNREDUCED OR PRIMARY CLAUSES

At the top of each hierarchy is the independent Primary clause. Its basic structure has already been outlined in section 1.5.2.: 46, but will be repeated here for the sake of convenience:

Root (InF) (Conj) (Der) (Aux) $\left\{\begin{array}{l}\text { Tense Pron } \\ \text { Pron Neg }\end{array}\right\}$ (Int)
(where Conj = Conjunction, InF = Information Flow, Der = Derivational affix, Aux = Auxiliary Root, Pron = Pronominal affixes, Neg = Negative, Int = Interrogative marker.)

There may be more than one Derivational affix or Auxiliary Root and the Information flow marker may also occur after either of these two. Furthermore one or both of the emphatic affixes, $-l e ?$ and - ?a, may be interposed at any position between the root and the Tense affixes. Examples of Primary verbs taken from text or conversation are:

```
7a. mak -tan?-?a-khe?-?a-tha-cə
    devour-IIF -Em-Imm -Pt-Gl -Dl
    'He was about to devour the two.'
    b. rew?-te?-?a-tak-?a-na-n -jo
    evil-CIF-Em-Cs -Pt-2 -1E-2Dl
    'You two caused me evil.
    c. ci? -tan?-tak-?aka-c -u
    know-IIF -Cs -Pt -Dl-Ag
    'The two caused him to know.'
    d. hlok-te?-tak-dhan-cə-w?
    send-CIF-Cs -NFu -Dl-Ag
    'Don't permit it to be sent just yet:'
    e. cyok -te?-dhan-te?-?ak-la
    get up-CIF-NFu -CIF-RPt-Neg
    'You had not yet got up.'
```

Primary verbs are negated by the affix -la, which occurs as the last, or penultimate affix. Primary clauses may be found as independent sentences in discourse, or they may occur in association with one or more reduced clauses. In the latter case the Primary verb follows the associated reduced clauses.

### 4.2.3. COMPLEX PREDICATE HIERARCHY

### 4.2.3.1. Levels and Function

This is the most developed of the hierarchies in Chepang, having the greatest number of clearly defined levels. The three levels below the primary level are signalled by Secondary, Tertiary, and Compound verbs respectively. It is the combining of clauses from various levels of the complex predicate hierarchy which provides interclausal linkages of the sort that are formed in English by constructions involving participles and conjunctions such as 'and', 'but', and 'then'. However the number of individual clauses that can be linked in this way in Chepang may be greater than would be expected in a normal English equivalent.

### 4.2.3.2. Secondary Clauses

Secondary clauses are the least reduced constructions within the complex predicate hierarchy. The structure of Secondary verbs is:

Root (Der) (InF) (Aux) $\left\{\begin{array}{l}\mathrm{Neg} \\ \mathrm{Pron}\end{array}\right\} 2 \mathrm{y}$ (Conj)
where $2 r y=$ Secondary verb marker -to. Emphatic affixes may be interposed anywhere between the Root and the Pronominal affixes, as with Primary Verbs.

These verb forms carry no Tense affix, their tense being the same as that of the Primary verb to which they are linked. They are negated by the affix -ma?, which appears to replace the Pronominal affixes I have no examples of Secondary verbs with both. Some examples of Secondary verb forms:

```
8a. sat -le?-khe?-ta-ŋ?-to
        kilて-REm-Imm -Gl-lE-2ry
    'I was about to be killed.'
b. to -le?-na-n -to
        tell-REm-2 -1E-2ry
        'I told you:'
c. nan wan -dhan-ma?-to na ?al-ŋə-la
    you come-NFu -Ng -2ry I go -lE-Neg
    'Because you had not yet come I did not go.'
```

A Secondary verb, like any other clause constituent except a Primary verb, may have enclitic Emphatic or Information Flow markers attached to it. These markers, therefore, may be internal to the verb, as affixes, or external, as enclitics. A Secondary clause need not share any participant with the following Primary clause.

The function of a Secondary verb is to signal a close semantic relation between the clause to which it belongs and the associated Primary
clause. It does not however specify what this relationship is - it may be adversative (especially when the Primary clause is negative - ex.9c.), or indicate action-consequence (9a.), or simply a close temporal relation (9b.). In this respect its function is to convey what is essentially a perfect, or relational aspect. If the verb represents a state then the Secondary clause is adverbial in function (9d.). Examples of the relationship between Secondary and Primary verbs are:

```
9a. クa ?en? -пə-to sya?-?i yam mak -tak-?ala-ŋ?
    I sleep-lE-2ry cow-Ag rice devour-Cs -Pt -lE
    'I slept (and so) let the cows eat up the rice.'
    b. kasya?-?i tun -?u-to can glyuph -?a
    deer -Ag drink-Ag-2ry crab come out-Pt
    '(as) the deer drank a crab come out.'
    c. ?apa -kay go? -?u-to ?apa tyan -lə
    father-Gl call-Ag-2ry father answer-Neg
    'He called for his father (but) he did not answer.'
d. gopal-?l kim pe -to janh-nə -w?
    Gopal-Ag house good-2ry make-NPt-Ag
    'Gopal makes the house well.'
```


## Implicit Relational Functions

Occasionally a Secondary clause may be found standing alone, without being closely related to a following Primary clause. In such instances, as with English Perfect constructions when they are unrelated to a following clause, the relationship is understood to be with the situation defined by the context of utterance. Again the nature of the relationship is not specified, but must be understood from the context and the particular verb. If the existential verb khe?- 'be, exist' occurs in a Secondary clause standing alone, then the implication is that the state of existence no longer holds (ex.l0c.). This suggests that the verbs commonly associated with states are really process verbs, since states are often expressed by Secondary clauses unrelated to a Primary clause (ex.lob.). In other words the use of the Secondary form of the verb is an indication that the process described by the verb has ceased, though the effect (the resultant state) remains.

Examples of Secondary clauses with their implicit relational function are:

```
10a. yoh -le? to -na-n -to
    yesterday-REm tell-2 -1E-2ry
    'I warned you yesterday! (Now see what has happened!)'
```

b. ?ow? nay du -to -?a that cloth red-2ry-Em
'That cloth is red.'
c. ?l -han kim khe?-to
this-Loc house be -2ry
'There was a house here (but there is no Zonger).'

### 4.2.3.3. Tertiary Clauses

Tertiary verb forms clearly exhibit less of the full verbal potential than do Secondary verbs. Like the Secondary verbs they have no absolute tense marking, their tense being relative to that of the following Primary verb. But unlike Secondary verbs they may not have any pronominal affixes, and the Tertiary clause in which they occur must share at least one participant, the Actor (Agentive or NonAgentive), or Statant, with the following Primary or Secondary clause. Tertiary clauses are therefore less independent, and more tightly linked to the associated higher level clause, than is the case for Secondary clauses. They share setting, for instance, with this higher clause, and the situation expressed by a Tertiary clause cannot in itself be the subject of interrogation, instead the whole clause is questioned (ex.lld.).

The structure of Tertiary verbs is simple, being usually little more than a root plus a Tertiary affix - the latter indicating the temporal relation between the reduced clause and the following Primary or Secondary clause. Occasionally the Tertiary verb may have a Derivational or Auxiliary affix, but Emphatic and Information Flow markers are always external to the verbs, occurring only as enclitics. Their structure is:

Root (Der) (Aux) $\left.\begin{array}{cc}3 \mathrm{yy} & \text { (Conj) } \\ \mathrm{Neg} & \text { (Conj) } 3 \mathrm{Ng}\end{array}\right\}$
where 3 Ng denotes a special Tertiary affix -to that occurs with the Negative (which is -ma?, as with Secondary verbs).

The various Tertiary affixes, indicating essentially relative tense for actions, are as follows (with gloss abbreviations included):

1. -ak? Perfect or Relative Past (RPt) - the Tertiary action was complete before the Primary (or higher level) action took place (ex.lla.).
2. -dhay Simultaneity (3Sm) - the Tertiary and Primary actions were simultaneous (ex.llb.).
3. -da (3Du) Durative - the Tertiary action took place over a considerable time (ex.llc.). A Durative Tertiary verb is often repeated several times.
iv. -ti Unmarked (3ry) - the temporal relation between the Tertiary and Primary actions is unspecified (exx.lle.,f.). This affix is also used when the verb refers to a state rather than an action (ex.lld.).

Examples of the various relations between Tertiary and Primary or Secondary clauses are:
lla. kim phol-?ak ?ama ?al-?a house shut-रिt mother go -Pt
'Having closed the house the mother went off.'
b. Ian -?i wan -dhəy ?o? -nis-kay je?-sa bon?-na?-tha-cə
demon-Ag come-3Sm that-Dl -Gl eat-IN seek-NPt-Gl-Dl
'When the demon comes he seeks to eat the two (persons).'
c. Ian gulh -da gulh -da gulh -da lone kim -tan
demon folzow-3Du foZzow-3Du foZZow-3Du Zater house-Al
dah -?a
arrive-Pt
'The demon followed and followed (the persons) and eventually arrived at the house.'
d. nan gya -ti cum -nə -w?-ya gya -ma?-tə cum you wizling-3ry hold-NPt-Ag-Alt wizling-RNg- $\overline{3 N} g$ hold
-no -w?-ya
-NPt-Ag-Alt
'Do you hold it willingly or not?'
e. tenewa? -?i dol? phu? -ti satl-han naw-ti yuk -kay
woodpecker-Ag grub roast-उुy oil -Loc fry-3ry monkey-Gl
kyan? bəy?-?a-thəy
curry give-Pt-Gl
'The woodpecker, roasting grubs and frying them in oil, gave the curry to the monkey.'
f. Row?-moy? me -tI syah -ti wah -nə -y?
that-CPl sing-3ry dance-3ry move-NPt-Pl
'They go about dancing and singing.'
g. ?amh we -ti bəy?-?u-to krut cum -?a-thəy
food divide-3ry give-Ag-2ry hand hold-Pt-Gl
'As he divided and gave the food his hand was seized.'
Note that in example lle. the Tertiary actions (roasting and frying) are antecedent to the Primary action of giving. In example llf., however, the Tertiary actions of singing and dancing are simultaneous with the Primary action of going about.

Example lle. shows that the participant common to the Tertiary and Primary clauses (in this case the woodpecker) need not be the participant represented by the Pronominal affixes in the verb (here it is the monkey that is cross-referenced, though it is not a participant in the actions of roasting and boiling). Similarly the common participant in the linked clauses of example llb. (the demon) is not the participant in
cross-reference in the Primary verb. The significance of this fact, that the common participant need not be the one in cross-reference, has been discussed earlier in this chapter (4.1.2.).

Example llg. shows a Tertiary clause linked to a secondary clause, with this complex unit in turn related to a Primary situation.

Tertiary Purposive Clause
Another verb form which is similar to Tertiary verbs is found in a particular Purposive construction. It has the same structure as other Tertiary verbs, with a special tertiary affix -lan as in:

```
l2. ten ga? sat -lan ?al-?ala-\eta -1
    today fish kizz-Pur go -Pt -lE-Pl
    'Today we went to fish.'
```

Like other Tertiary clauses, (but unlike the general Purposive construction marked with the Goal affix -kay - see section 2.2.3:64) this Purposive must share the Actor with the associated Primary clause. It cannot however be separately negated - in this respect, and in its function it is more like a compound clause from the next level down in the hierarchy. Indeed it may originally have been part of a compound form but has since been separated off.

### 4.2.3.4. Compound Verb Clauses

The lowest level of the complex predicate hierarchy is represented by clauses linked simply by adding one verb root to another to form a compound root. Clauses linked in this way are as much reduced as is possible. Their verbs carry no affixes at all, and therefore are not independently negatable, nor marked for tense, aspect, and pronominal cross-reference. They must share the Actor or Statant with the Primary clause to which they are linked. Examples of Compound verh forms are:

```
13a. nl-ci ran chyap-?al-na -п?-cə
        we-Dl fiezd clear-go -NPt-lE-D1
    'We two go to clear a field (or: We two go field-clearing).'
    b. ni-ci hme? tayk-?al-na -n?-cə
        we-Dl fire light-go -NPt-lE-Dl
        'We two go to light fires (or: We two go fire-lighting).'
    c. ?ow? wa? ?ap -kla?-na -ŋ?-c -u
        that bird shoot-drop-NPt-lE-Dl-Ag
        'We two bring down the bird.'
```

The two verbs are always combined as a phonological unit, with stress on the first element. The Object participant of the Tertiary clause may be phonologically and semantically incorporated in the verb (as in
examples $13 a ., 13 b$.$) , in which case the stress falls on the Object.$ Alternatively this participant may be separate from the verb (ex.l3c.).

The semantic relation between clauses linked through compound verb forms is usually that of action-purpose (ex.l3a., l3b.), but occasionally antecedence-consequence (ex.l3c.). Notice that the ordering of clauses (or the verbs representing them), relative to their respective times of occurrence, differs for the two types of semantic relation. For the purposive relation the order of expression is the opposite of the expected sequence of events, with the verb of the purposive clause preceding that of the action. However for the antecedent-consequence relation the order of the verbs coincides with the order of the events.

### 4.2.3.5. The Complex Predicate Hierarchy: A Summary

The four levels of the complex predicate hierarchy, including the Primary level, provide a ranking of clause reduction with the progression from highest to lowest representing:

1. A decreasing amount of explicit information carried by the verb.
ii. Decreasing independence of the clause.

1i1. Increasing tightness of semantic and formal linkage with an associated higher level clause, usually a Primary clause.

The differences between the four levels can be illustrated by the table given below (Table 4). Here a (+) signifies that a clause, at the level indicated, is independent of a following Primary clause with respect to the listed independent features, or else that it possesses a particular distinctive feature.

TABLE 4
CONTRAST BETWEEN LEVELS OF THE COMPLEX PREDICATE HIERARCHY

LEVEL:
Independent Feature Aspect Negation Interrogation Pronominal Affixation Participant set Setting
Absolute Tense
Semantic Relations
Distinctive Feature
Negated by -la
Emphatic or Information Flow marker affixed

PRIMARY SECONDARY TERTIARY COMPOUND

| $\mathbf{+}$ | + | + | + |
| :--- | :--- | :--- | :--- |
| $\mathbf{+}$ | $\mathbf{+}$ | $\mathbf{+}$ | - |
| $\mathbf{+}$ | $\mathbf{+}$ | - | - |
| $\mathbf{+}$ | $\mathbf{+}$ | - | - |
| $\mathbf{+}$ | $\mathbf{+}$ | - | - |
| $\mathbf{+}$ | - | - | - |
| $\mathbf{+}$ | - | - | - |
| + | - | - | - |
| + | $\mathbf{+}$ | - | - |

It must be emphasised that the situations expressed by Primary clauses are not necessarily semantically more significant than those referred to by Tertiary clauses. In fact the verbs of Primary clauses are often fairly general in denotation, referring to actions or states such as 'coming', 'going', 'moving' or 'remaining'. Moreover a Primary clause is just as tightly linked semantically to its associated Tertiary or Secondary clauses as they are to it. Together they form a complex clause representing a complex situation which is in some way a conceptual unit. It is the degree of formal completeness, and of independence from subsequent clauses that determines the level in the hierarchy.

### 4.2.4. NOUNINESS HIERARCHY

### 4.2.4.1. Structure and Function

The nouniness hierarchy is less developed in Chepang than is the complex predicate hierarchy, having only two levels besides the Primary level. These two levels are the Nominalised Clause level and the Compound Noun level.

The function of constructions in the Nouniness hierarchy is to represent situations that are to be treated as participants in some wider situation. In other words these constructions act as nouns, or NPs, hence the name of the hierarchy.

### 4.2.4.2. Nominalised Clauses

The verbs of Nominalised clauses are relatively simple in form, in that they lack Pronominal and Tense affixes. Instead of the threecategory system of Past, Non-Past, and Indefinite Future found in positive Primary verbs, the positive verb of a Nominalised clause has a binary system which may best be described as a 'realis-irrealis' opposition - in the sense of an opposition between situations that have actually taken place, and those which have not, at some point of temporal reference. The two affixes which indicate this opposition are -?o 'Realis', and -sa 'Irrealis'. Their presence also signals that the verb belongs to a Nominalised clause. The structure of the verb is:

Root (Der) (Aux) (Neg) Nom
where Nom $=$ Nominalisation marker (that is, - ?o, -sa or -lo, the last being a form used in conjunction with the Negative affix). As with all but Primary verbs the Negative affix is -ma?.

Realis-Irrealis Versus Past-Non-Past
Evidence showing that the distinction between -?o and -sa is realis versus irrealis, rather than past-non-past, proves to be meagre. This
is because contrary-to-fact past constructions (in particular, conditional expressions such as the Contary-to-fact Conditional 'If he had gone...' and the corresponding result 'He would have...'), which might be expected to assist in determining the basis of the opposition, do not in fact use Nominalised clauses (4.2.5.3.). The strongest evidence for the realis-irrealis distinction comes from the fact that the form -?o does not occur with the Negative affix, even if the past is being referred to. Instead a separate Nominalisation marker -lo is used. In contrast, the affix -sa can occur with the Negative. This is to be expected if - ?o indicates realis and - sa irrealis, since the Negative signifies that the situation was not realised and therefore -?o could not be used in conjunction with it. But, from a slightly different point of view, the Negative signifies the realisation of the nonoccurrence of a situation and this is probably why the third nominal affix -lo is used in most cases, rather than -sa. The use of -lo therefore, with the Negative, indicates that it was a fact that the situation did not occur (ex.14d. below), while the use of -sa with the Negative indicates that the situation is unrealised, but nevertheless potentially realisable (ex.l4c.).

Examples of Nominalised clauses (underlined) acting as nouns in a matrix clause are (with perspective cases given underneath):

```
14a. 年另ten dah -t। wan -?o pe -na?
                Statant
    'Your having come today is good.'
    b. dyahməy dah -sa syaw -na?
            Statant
        'Arriving tonight would be all right.'
    c. gopal dyahmey dah -ma?-sa pe -I 
        Gopal tonight arrive-RNg-IN good-Neg
            Statant
        'Gopal's non-arrival tonight would be bad.'
    d. nan yoh dah -ma?-10 syaw -1a
        nan yohterday dah -ma?-10 syaw -- m
        'Your non-arrival yesterday was not right.'
    e. nan-?i manta -kay je?-?o phe -?u
        you-Ag person-Gl eat-RN leave-Ag
            Object
        'Stop eating people:'
    f. \frac{?apa - -1 dhyun-sa-kay yam ra -c -u}{\mathrm{ father-Ag stand-IN-Gl }}\mathrm{ rice cut-Dl-Ag}
        'Let us two cut rice for father to set up (for a festival).'
```

Notice that, as in example l4a., a Nominalised clause may itself have a complex predicate, in this case a combination of a Tertiary and a Nominalised clause. In such an instance the semantic relationship between the two clauses is the same as between a Tertiary clause and a following Primary clause (see 4.2.3.3.).

## Nominalised Clauses as Referring Constructions

As noted above (4.2.4.1.), situations expressed by constructions in the nouniness hierarchy are those which are regarded by the speaker as equivalent to participants in some wider situation. As members referring to abstract entities - situations viewed as participants - and are treated as nouns. This means that they may take nominal affixes, such as those of case, though there are of course semantic constraints on the roles which can be ascribed to such abstract entities. For instance a situation cannot be regarded as having intent, and therefore it cannot be an Agent. Usually Nominalised clauses have the roles of Object, Statant, Goal, or Temporal Locative.

## Relative Clauses

Nominalised clauses may also be used to restrict the reference of the head noun in an NP, just as true nouns may (ex.l5a.). In such instances they function as relative clauses or as adjectives, there being no formal difference between these two categories (see exx. l5b., 15c., 15d., below):

15a. Noun Modifier: ?ow?-pay ghodung wa? -?a that-DIF valley bird-Em
'That was a valley bird (one which inhabited the valleys).'
b. Relative Clause: ?ow? ten jik-?o manta that today sick-RN person 'The person who was sick today.'
c. Adjectival

Equivalent: ?ow? jik -?o manta that sick-RN person 'The sick person.'
d. ?ow? suk-sa kodo that sow-IN millet
'The seed millet (or: millet which is for sowing.), 1

[^13]As noted earlier, accessibility to relativisation extends as far as Locatives (1.5.1.3.).

Since the head noun may be omitted, relative clause constructions merge with Nominalised clauses acting directly as nominals. This is particularly the case when the Nominalised clause defines as location:
16.

$$
\begin{aligned}
& \text { win? mu }- \text { ?o-han ?al-?l } \\
& \text { bat remain-RN-Loc go -Pl } \\
& \text { 'Let's go (to the place) where there are bats..' }
\end{aligned}
$$

There is, in fact, no general noun of location in Chepang which could be used as the head noun in such a construction (though a Nepali word thaw 'place' is sometimes used for this function). The Nominalised clause is therefore perhaps best regarded as acting as a strict nominal, rather than a relative clause, in these instances.

Nominalised Clauses as States
Actions expressed as Nominalised clauses tend to be viewed as states, since their activity is, as it were, frozen with respect to the wider situation in which they are participants. It is not surprising therefore that habitual actions, which by their continuity or frequency are more like states, are represented in Chepang by Nominalised clauses embedded in an Equative clause. Compare, for instance a Habitual construction (ex.l7a.) with the more normal Equative type clause (ex.l7b.) in which one nominal is equated with another:

```
17a. gopal ŋa-ko? kim -han wan -?o khe?-to
    Gopal I-Gen house-Loc come-RN be -2ry
    'Gopal used to come to my house.'
    b. gopal kim -ko? ?apa khe?-to
        Gopal house-Gen father be -2ry
    'Gopal was the head of the house.'
```

Here the use of the Secondary verb indicates that the situation held in the past, as explained previously (4.2.3.2:125). An Equative clause which is unmarked for tense does not require a verb but may simply Juxtapose two NPs (ex.l8a.). Similarly an Habitual construction which is unmarked for tense also often consists of just an NP (the Statant) plus the Nominalised clause (ex.l8b.):

```
18a. gopal kim -ko? ?apa -le?
    Gopal house-Gen father-REm
    'Gopal is the head of the house.'
    b. gopal Da-ko? kim -tan wan -?o-le?
    'Gopal comes/came to my house (habitually).'
```

$$
\begin{aligned}
& \text { c. gopal na-ko? kim -tan wan -ma?-lo-le? } \\
& \text { Gopal I -of house-Al come-RNg-NN-REm } \\
& \text { 'Gopal doesn't come to my house.' }
\end{aligned}
$$

Constructions of the type shown in examples l8b., 18c. often provide the general setting of events in narratives. They are also common in questions and answers.

The use of -?o for the Present Habitual provides further evidence that it indicates the category of realis, rather than simply a past tense, though it is true that, for a situation to be regarded as habitual at the present time, it must have occurred to some extent in the past (or if negative, as in l8c., it must not have occurred for some time previously).

## Characterisation Clauses

If the situation represented by a Nominalised clause is viewed, not as a habitual situation, but as a situation characteristically associated with a particular participant, then a construction is used which I have termed a 'Characterisation' clause. Its nearest equivalent in English is seen perhaps in the question and answer of the form: 'Where are you (come) from?', 'I am (come) from Kathmandu'. The Chepang equivalent of this is given in example 19c. below. The Pronominal forms found after the verb in a Characterisation clause are also found in the same clause-final position in certain Equative clauses (ex. 19d.). For this reason these forms are best analysed, not as verb affixes, but an enclitic to the whole construction. Examples of Characterisation clauses, contrasted with a Habitual clause (ex. 19a.), are:

```
19a. nin-ji lan -kus wah -?o-le?
    you-2Dl demon-Com move-RN-Rem
    'You two habitually go about with demons.'
    b. \(\frac{n i n-j i}{y o u-2 D 1}\) demon-Com move-RN-CIF-Em-2D1
    'You two are associates of demons (or: You two are ones
    who go about with demons).'
    c. Qn. ga? -səy wan -?o-te? An. na kathmandu-səy wan -?o-nə
where-Ab come-RN-CIF
        'Where are you from?' 'I am from Kathmandu.'
```

    d. \(\frac{\text { nin-ji }}{\text { you-2Dl that-Gen Yobro.-REm- } \overline{\mathrm{CIF}}-\mathrm{Em}-\mathrm{EDL}}\)
    'You two are his younger brothers.'
    The second translation in example l8b. above ('You two are ones who go about with demons.') suggests that Characterisation clauses might be regarded as a type of cleft construction, with the first NP/pronoun
(ninji 'you two') representing a Statant in a verbless Equative clause and the remainder (lan-kus) representing a Statant in a verbless Equative clause and the remainder (lan-kus wah-?o-te?-?a-jo) a Relative clause in construction with the Pronominal affixes as its head.

## Necessitative Clauses

Another construction in which Nominalised clauses occur is one which expresses necessity or obligation. These constructions are basically Equative clauses in which an unrealised Nominalised clause is used, usually in conjunction with the verb 'khe?- 'be, exist' in its Secondary form, or else with the Emphatic -?a. Various degrees of obligation however can be expressed, as discussed in chapter 3.2.1.5. Examples of the most common Necessitative constructions are:

```
20a. gopal na-ko? kim -han wan -sa-?a
        Gopal I -Gen house-Loc come-IN-Pt
    'Gopal should come to my house (or more literally:
    Gopal is to come to my house.)'
20b. gopal ga-ko? kim -han wan -sa khe?-to
    Gopal I -Gen house-Loc come-IN be -2ry
    'Gopal must come to my house (or, more literally:
    Gopal has to come to my house.)'
```

It should be noted that, although the translations in parentheses in the above example (ex.20.) correspond closely in form to the Chepang, semantically they are more narrow in their application, being restricted usually to repeated commands in English. The Chepang equivalents, however, are unspecified as to the source of the obligation.

## Verb Complements

As in English, certain verbs in Chepang regularly take Nominalised clauses as their complements, though the number that do so is much less than for English. These are verbs which refer to situations that commonly have another situation as a participant. The Chepang complementtaking verbs are generally those which refer to desires and feelings. Clauses that refer to speech or thought always express this directly, rather than indirectly. However, as mentioned earlier (1.5.1.3:44), the direct speech may be condensed to such an extent that it appears to be indirect in form, and it is possible that even the complements of verbs of feeling and desire should be analysed as condensed verbalisations of these emotions (see for instance the alternative translations in examples 2la., 2lb., 2lc.). If this is so, then the condensation probably represents a step towards eventual indirect complementation, because it can even now be re-analysed as this. The condensation
is certainly obligatory, since the nominalised clause cannot be expanded to take a clearly direct Statant pronoun (ex.2lc).

Whether or not this direct verbalisation analysis is accepted, the Nominalised clauses represent the states that are the object of the feeling or desire. Examples of this use of Nominalised clauses are:

```
2la. kathmandu-ha\eta yak -sa gopal chyup -na?
    'Gopal wants to live in Kathmandu (or: "(For me) to live
    in Kathmandu." (this thought) pleases Gopal.)'
    b. kathmandu-han yak -?o gopal chyup -na?
    Gopal likes living in Kathmandu (or: "(I) live in
    Kathmandu." (this thought) pleases Gopal.)'
    c. Xfa kathmandu-han yak -?o gopal chyup -na?
    I Kathmandu-Loc live-RN Gopal please-NPt
    '"I live in Kathmandu." (this thought) pleases Gopal.'
d. Tow?-kə? payh -sa gya -nə-1ə -tə sita hmər -?a
    '"I am not willing to return with him." thought Sita.'
```

Direct verbalisation of the whole emotive state, as in example 2ld., is in fact the most common way of expressing feelings in Chepang. This is in line with the general tendency in the language to verbalise mental and sensory experiences - reflecting perhaps the fact that usually we are not able to say much about another person's feelings unless he himself first verbalises them.

Abilitative constructions are also formed from Irrealis Nominalised clauses, in conjunction with the verb khay- 'overcome, complete' in an Intentive clause, as for example:

```
22. ni-ci-?i ?ow? sin? lonh -sa khay -na -n?-c -u
    we-Dl-Ag that tree elimb-IN complete-NPt-lE-Dl-Ag
    'We two can climb that tree.'
```


### 4.2.4.3. Nominal Compounds

Nominal Compounds are the nominal equivalents of the Compound verb forms found in the complex predicate hierarchy. They are formed by simply juxtaposing the verb root of the reduced clause with a noun root. This noun root is sometimes a free form, with the potential of occurring independently, but is often a bound form, existing only in these compounds. These bound forms include:

```
-ray? - the noise or sensation of an action as in
        hlak -ray? 'An account (of events)'
        recount-Nom
        gya\etah -ray? 'A startling noise'
        startle-Nom
        no? -ray? 'Words'
        speak-Nom
-jhyan - the work or effort of an action, as in
        japh-jhyan 'Work'
        make-Nom
-ryaw - the evil result of an action, as in,
        pran?-ryaw 'A curse'
        curse-Nom
-rame - the cause of an action
    \etal? -rame 'A joke'
    laugh-Nom
```

These constructions appear to be freely productive and participants of the compounded clause may be expressed by NPs with participant that would be an Actor in a Primary clause is marked with a Possessive affix, so that the resulting construction is like the possessed gerund used as a nominal in English (ex.23b.). The occurrence of this in Chepang may be the result of Nepali influence, though Nepali tends to use an abstract noun instead of the compound. Note that the compounded clause in Chepang may be a complex one (ex.23c.). Examples of the use of Nominal Compound clauses are:

23a. $\frac{\text { na-?i kim jaŋh-jhyan-ko? poysa boy?-ci }}{I-A g \text { house make-Nom Gen money give-2SI }}$
'Give me the money for making the house.'
b. mayhli-ko? me -jhyan-kay ?amh bəy?-?a-thəy Mayhli-Gen sing-Nom -Gl food give-Pt-Gl
'For Mayhli's singing performance they gave her food.'
c. ?ow? mom?co? Iyam-han wan? -ti gem-jhyan-ko? han boy?-sa
'For the effort of bringing the girl to the track beer should be given.'

As with the compound forms of the complex predicate hierarchy, verbs of Nominal compounds carry no affixes and cannot be separately negated.

### 4.2.4.4. The Nouniness Hierarchy: A Summary

The differences between levels in the nouniness hierarchy may be summarised as in Table 5

TABLE 5
CONTRAST BETWEEN LEVELS OF THE NOUNINESS HIERARCHY

| LEVEL: | PRIMARY | NOMINALISED CLAUSE | NOMINAL COMPOUND |
| :---: | :---: | :---: | :---: |
| Feature |  |  |  |
| Normal Case Affixes | + | + | $\pm$ |
| Negatable | + | + | - |
| Absolute Tense | + | $?$ | - |
| Pronominal Affixes | + | - | - |
| Emphatic and IF | + | - | - |
| markers non-enclitic |  |  |  |

### 4.2.5. SETTING HIERARCHY

### 4.2.5.1. Justification

This is the least developed of all the reduced clause hierarchies, with two partially separate levels below the Primary clause, those of Repetitive Setting and Conditional clauses. However there is some evidence to justify this hierarchy, at least for Chepang. In particular it is a characteristic of Chepang discourse that the Primary clause of a preceding sentence may be repeated in a reduced form, as part of the setting for the next sentence. And, significantly, the verb form of the repeated reduced clause is different from that which would occur if the clause was being treated as a regular spatial or temporal Locative (which has a Nominalised clause plus a Locative affix - see example 16. above). Moreover the reduced clauses of the Repetitive Setting type always occur sentence-initially, which is not the case for Nominalised clause Locatives.

### 4.2.5.2. Repetitive Setting Clauses

The two main verb endings used for Repetitive Setting clauses are:
-?ak(bat)tl(ko?) - Sequential Setting (SqS), which indicates that the situation referred to (possibly implicitly) in the previous sentence took place before the situation of the present sentence (ex.24a.).
-tokhan - Simultaneous Setting (SmS), which indicates that the situation of the previous sentence is simultaneous with the situation of the present sentence (ex.24b.).

The negative of the Simultaneous Setting clause is -ma?kha (ex.24c.) the Sequential Setting is evidently not negatable.

Examples of Repetitive Setting constructions are:

```
24a. Ione nyam thon-?a nyam thon-?aktiko? ram ?al-?a
    later sun rise-Pt sun rise-SqS Ram go -Pt
    'Later the sun rose. The sun having risen Ram went off.'
    b. Ione nyam thon-?a nyam thon-tokhan ram ?al-?a
        Zater sun rise-Pt sun rise-SmS Ram go -Pt
    'Later the sun rose. While the sun was up Ram went off.'
c. nyam thon-dhan-le nyam thon-dhan-ma?kha ram ?al-?a
    sun rise-NFu-Neg sun rise-NFu -NSmS Ram go -Pt
    'The sun had not yet risen. While the sun was still
        not up Ram went off.'
```

Notice that the Repetitive Setting forms are composites of several morphemes. The Sequential Setting form, for instance, consists of the Relative Past affix -?ak, together with (optionally) the Possessive affix -bot, plus the Tertiary affix -tl and the Genitive -ko?. It appears to have originated as a Tertiary form, but now the construction clearly acts as unit. The particular combination of affixes could not occur anywhere else. Similarly the Simultaneous Setting forms appear to have originated as Nominal Compound constructions which now have a specialised function.

The verb forms of the Repetitive Setting level do not have Pronominal affixes, nor Absolute Tense marking. Emphatic and Information Flow forms are enclitic.

Another uncommon reduced clause of the setting hierarchy involves a reduplication of the verb root plus the affix -bale, as in:

```
25. manta -ləm-?i yo -yo -bale kasya? jya -?a
    person-Pl -Ag look-look-PSms deer flee-Pt
    'As the people were watching the deer fled.'
```

It is not certain as to how this differs from the Simultaneous Setting form described above, though the repetition of the root appears to convey a durative aspect, indicating that the situation occurred over some time.

Instead of using a reduced clause as a setting, other non-clausal linking forms may be used. The most common of these is ?ohansay(ko?) 'Sequential Conjunction' - equivalent to 'After that...'. It has the components ?o 'that', han 'Locative', say 'Ablative' plus, optionally, ko? 'Genitive', but this combination also functions as a unit morpheme. A form equivalent to the Simultaneous Setting reduced clause would be ?otokhan 'Simultaneous Conjunction'.

### 4.2.5.3. Conditional Reduced Clauses

The protasis of Conditional constructions is usually a reduced clause of a type similar to that of the Repetitive Setting. It is possible,
therefore, to regard Conditional constructions as reduced clauses of the Setting hierarchy, with a degree of reduction close to that found in Repetitive Setting clauses, but with a different semantic relation to the following Primary clause - that of a condition for the occurrence of the Primary situation. Often, though not always, the condition is a hypothetical one.

There are three conditional affixes, -ya, -dik, and -məy, each of which (with the possible exception of -may) may occur in combination with the Negative affix -ma?. The first of these three, -ya, is the marker for Alternative constructions often used in Interrogatives (3.2.2.) and is evidently related to the Indo-Aryan disjunctive form -ya 'or'. It is often followed by the affix -kay, the latter having an extended function as described in 2.2.3:65). The other two forms, -dik and -may, are possibly the original Chepang affixes and are used without -kay. The first of these two, -dik, indicates a contrary-tofact condition, where the pre-requisite condition, though once possible, did not in fact take place. The second form, -moy, is similar to a Subjunctive and indicates a future unrealised situation. In the Western dialect of Chepang -may is the regular Irrealis Nominal marker (6.2.3.).

Examples of various Hypothetical Conditional constructions are:
26. 1. Past, Contrary-to-Fact Condition
a. mat na?-ya-kay li? -ca?-thoy khe?-to
'If it had had leaves it would have weighed him down.'
b. mat na?-ma?-ya ?al?-ca -w? khe?-to
leaf be -RNg-Alttake-IFu-Ag be -2ry
'If it had not had leaves he would have taken it.'
c. mes -kha je?-dik syaw -no-to
'If I had eaten it before $I$ would have been all right.'
d. naŋ way-ma?-dik na-?i ghan-ce?-nan khe?-to
'If you had not come I would have beaten you.'
11. NonPast, Possible Condition
e. ti? wa -ya-kay tun -sa do?-na?
rain fall-Alt-Gl drink-IN get-NPt
'If it rains he will get to drink.'
f. ti? wa -ma?-ya tup -sa do?-iə
rain fall-RNg-Alt drink-IN get-Neg
'If it does not rain he will not get to drink.'

```
g. Tow? thok ta -may way -ca?
    'If that thing is thrown it may be damaged.'
```

Non-Hypothetical conditions are expressed by Repetitive Setting forms:

```
27. (gopal syagh wan -na?) wan-?aktiko? ga ?al-na-n?
    '(Gopal will come tomorrow.) After he comes I will go.'
```

If the first sentence is understood then it may be omitted.
The reduced Hypothetical Conditional clauses do not have Pronominal affixes in the verb, nor do they have any Absolute Tense marking - the tense of the protasis is determined by the apodisis. Information Flow markers are enclitic and, because of the indefinite nature of these clauses, they do not have verbal or clausal Emphatic forms. Unlike the Repetitive Setting clauses the Hypothetical Conditional clauses have negative equivalents and therefore may be regarded as forming a level, or sub-level in the Setting Hierarchy that is slightly above that of Repetitive Setting forms.

### 4.2.5.4. Resultative

There is also a relatively rare reduced clause which marks a reasonresult relation between it and the following clause. The verb form in this type of clause consists of the verb root plus the affix -dharna, as in

```
28a. na-?l ?ete je?-dharna jan -na?-ta-\eta?
    I -Ag thus eat-Resl scold-NPt-Gl-1E
    'Because I ate in this way he will scold me.'
    b. ?ama say?-dharna-ha\eta ci? -?aka-n
        mother hear-Resl -Loc know-Pt -Ag
    'Because he heard his mother he knew it was her.'
```

The fact that this clause may be suffixed by a Locative, as in example 28b. above, makes it appear formally like a Nominalised clause. However in terms of the relationship it bears to the following clause it is more like a Conditional Setting form. If the second clause is negated then the construction indicates unexpected result, as in:
29. ti? tup? -ma?-dharna ŋа sl -ŋə-lə water drink-Neg-Resl I die-lE-Neg
'Though I did not drink I am not dying.'

### 4.2.5.5. Summary of Contrasts within the Setting Hierarchy

The contrasts within this hierarchy may be shown by the following table:

TABLE 6

## CONTRASTS WITHIN THE SETTING HIERARCHY

LEVEL:
Feature
Negatable
Pronominal Affixes
Absolute Tense
Non-enclitic IF markers

PRIMARY CONDITIONAL REPETITTVE SEITING

| + | + | - |
| :--- | :--- | :--- |
| + | - | - |
| + | - | - |
| + | - | - |

### 4.2.6. INTERCLAUSAL LINKING OF UNREDUCED CLAUSES

It is possible, in certain cases, to link unreduced (Primary) clauses together with the same degree of semantic tightness as is found with reduced clauses. This is achieved through the use of various non-bound conjoining particles. In particular these particles can express the same relations that would be conveyed by the use of Secondary and Conditional clauses. Examples of these constructions are:

30a. ŋa ?en? -?ala-ŋ?-tə jhyante sya?-?l yam mak -tak -?ala-ŋ? $I$ sleep-Pt -lE-Eq 80 cow - Ag rice devour-Cs -Pt -1E
'I slept and so let the cows eat up the rice.'
b. kəsya?-?l ti? tun -?o bela-hap con glyunh -?a deer -Ag water drink-RN time-Loc crab come out-Pt
'As the deer drank the crab came out.'
c. ?apa -kay go? -?aka-n ?apa buru tyan -la father-Gl call-Pt -Ag father but answer-Neg 'He called for his father but he did not reply.'
d. ti? wa -na?-tə khe?-ya tun -sa do?-na? rain fall-NPt-Eq be -Altdrink-IN get-NPt 'If it rains he will get to drink.'

The first three examples (30a., 30b., 30c.) may be compared with their equivalents formed using Secondary forms (exx.9a., 9b., 9c.) while the last sentence is the equivalent of example $26 e$.

The morphemes buru 'but' and bela 'time' are loans from Nepali. The conditional form khe?ya, while it is formed from a Chepang root and affix, nevertheless functions as a unit equivalent to the Nepali bhane
'if'. It is possible, therefore, that all these Chepang constructions using unreduced clauses are based on Nepali equivalents, and that the reduced clause constructions were the original Chepang method of expressing interclausal linkage.

## Co-ordinate Conjunction

Independent clauses may also be conjoined using the co-ordinate conjunction -ma. The basic function of this form is to link symmetrically (or co-ordinately) two or more referring expressions. However this linking of two expressions is often achieved in practice, not by simply conjoining the two expressions in the one clause (as is the case in example 3la., and as is usual in English), but by repeating the whole clause for each expression with the latter marked by -ma (exx. 3lb., 3lc.).

```
3la. nan-kay-ma na-kay-ma bo? -?u
    you-Gl -Co I -Gl -Co divide-Ag
    'Divide it up for you and me.'
    b. naŋ-kay-ma mu -na? ga-kay-ma mu -na?
        you-Gl - \(\overline{C o}\) remain-NPt \(I\)-Gl -Co remain-NPt
        'There is some for you and there is some for me.'
    c. yo -ma-na -n? tun -ma-na -n?
        see- \(\overline{\mathrm{Co}}-\mathrm{NPt-1E}\) drink-Co-NPt-1E
        'I will see and I will drink.'
    d. ?ow?-?i je?ga tunga bəy?-nə -w?
        that-Ag food drink give-NPt-Ag
        'He gives food and drink.'
```

The presence of -ma serves really to emphasise the conjoining of two expressions. Its use is not obligatory, even for the linking of coordinate NPs as in example 3la. - the two NPs may simply be used together without any overt conjunction (ex. 3ld.). And, as example 32. shows, clauses that are already linked by the use of reduced clauses may also be marked with -ma:

```
32. nak -nis-?l thep -tl -ma ?unten-ti -ma hlok-na?-c -u
    serpent-Dl -Ag flick-3ry-\overline{Co}}\mathrm{ lift -3ry-\о- send-NPt-Dl-Ag
    'The two serpents flicking and lifting sent it (flying).'
```


## Switch Reference

Chepang also has a free clause conjoining particle ti, the function of which is apparently to indicate a change of Actor participant, for the situations represented by the conjoined clauses. That is, it has a switch reference function. It can be used with both Primary and Secondary clauses. Examples of its use are:

33a. ja? -? 1 jurh -?u-to ti krut-han cu? pok -?a tiger-Ag seize-Ag-2ry SRf hand-Loc thorn enter-Pt 'When the tiger seized it, a thorn entered its paw.'
b. yo -t $i$ wan -? $\frac{t i}{} k w a$-khe je?-ti mu -na? Zook-3ry come-Pt $\overline{\text { SRf }}$ friend-Con eat-3ry remain-NPt 'He came to look and his friend was eating.'

The same particle is sometimes used in questions and answers, where it may occur in final position in both the question and the reply, as in:
34. Qn. nay-te? ga? -tan-te? ?al-na? tI you-CIF where-Al -CIF go -NPt $\overline{\mathrm{SR}} \mathrm{f}$
'Where are you going?'
An. hayk-ban-tan-? $\quad$ ?al-na -n? tl gu trap-rock-Al-Em go -NPt-lE $\overline{\mathrm{SR}} \mathrm{f}$ friend
'I am going to the trap-rock friend.'
Here the use of $t i$ seems to indicate a change of Actor referent, not in the content clause, but in the implicit performative - 'I ask you... YOU tell me...'.

The use of this particle was reportedly more common in the past certainly it is not used a great deal in present speech, especially with its question-answer function.

## CHAPTER FIVE

## THE DEVELOPMENT OF PRONOMINAL AFFIXATION

### 5.1. THEORIES OF DEVELOPMENT

### 5.1.1. THE PROBLEM IN RELATION TO TIBETO-BURMAN

A notable characteristic of the Tibeto-Burman languages is their wide variation with respect to pronominal affixation in the verb (see Charts ll-35, Appendix l). Some Tibeto-Burman languages, such as Chepang, Hayu and Kham, possess verbal pronominal systems of considerable complexity. Other languages, including Rawang and Khaling, have minimal systems, while yet others do not possess pronominal affixation at all (as, for instance, Gurung and Newari). Moreover the distribution of this feature amongst the languages is not easily related to geographic position -Gyarong, geographically remote from Chepang, has pronominal affixation, while the two Tibeto-Burman languages closest to Chepang, Newari and Magar (the eastern dialects of the latter) do not possess such affixation. Even within a single language there is variation with respect to this feature. The western dialects of Magar do have some pronominal affixes in the verb, and within Chepang the type of pronominal system varies considerably across dialects (sect. 6.2.).

The extent of variation therefore suggests that either:

1. The proto-language already had pronominal affixation, with the original system undergoing considerable attrition, or total loss in many languages.
2. That languages possessing this feature have acquired it individually and more recently, through innovation or areal influence.

The available evidence tends to support the second possibility, but with the added proviso that the proto-language had characteristics which
favoured development of the system in languages of widely different geographic areas.

Bauman (1974, 1975) concluded from the scattered distribution of pronominal affixation, and the evident antiquity of the pronominal categories and forms, that innovation rather than outside influence is responsible for this feature in Tibeto-Burman. He appears also to attribute the possession of pronominal affixation systems in the verb to a very early stage in the development of the languages of this family, mainly because the pronominal categories, and the forms that represent them, can be reconstructed to such an early stage. This affix system he views as suffixing and speaks of a "shift from suffixing to prefixing" occurring in some languages (Bauman, l975:98). Evidence for the more recent innovation of the pronominal affixation systems, as opposed to the morphemic elements contained in them, includes the following:

1. The variety of systems that occur. As well as the variation already noted, some languages, such as Kham and Limbu, have both prefixing and suffixing pronominal forms while others, including Chepang, have purely suffixing systems.
2. The highly agglutinating nature of the affixes, in languages such as Kham and Chepang, suggests a relatively recent development, at least in these cases. Indeed for Chepang there is evidence to show that the pronominal system in the verb is still, to some extent, not yet truly affixing (see l.5.4.). Furthermore, languages like Akha and Kachin have categorical systems similar to those of the affixing languages, yet the elements which represent these categories are apparently free particles.

The above facts would seem to indicate, therefore, that while the pronominal categories and their forms may be of considerable age, the incorporation of these into the verbal unit as affixes may be much more recent. In the following section various mechanisms are described which could account for the relatively rapid development of pronominal affixation in the verb. The proposals adopted in this present chapter are supported almost entirely by internal evidence from Chepang. However the acceptability of these proposals, and of the internally reconstructed pronominal system that results, is discussed in the light of the wider Tibeto-Burman situation in the final chapter (Chapter 6).

### 5.1.2. TOPIC SHIFT AND AFTERTHOUGHT HシPOTHESES

Givón (1976) has proposed two processes which could lead to former free pronouns becoming attached to the verb as enclitics and eventually as affixes. These processes are based on two constructions:

1. The Afterthought construction, described in section l.5.1.1., in which reference to some participant is first omitted, but then supplied after the clause to which it belongs. Because only participants which are given are likely to be omitted at first, the afterthought constituent has pragmatic features similar to those of a topic, as defined by Li and Thompson (see 4.1.3.).
2. A Topic-Sentential comment construction resulting from what Givón calls a 'Topic-shift' (Givón, l976:154ff.). In this construction an NP referring to a topic participant is first stated, then this is followed by a clause in which this participant is referred to by a topic-anaphoric pronoun. In the TG terminology used by Givón the topic $N P$ is shifted outside the clause, leaving behind an anaphoric pronoun. English equivalents of the Topic-Comment and Afterthought constructions are:
la. 'The wizard, he iived in Africa.' Topic Comment
b. 'The wizard lost it - the broom.' Statement Afterthought

Givon notes that Topic-shift (TS) and Afterthought (AT) constructions are commonly found in child language, and in pidgins and creoles - that is in speech forms which arise in situations of heavy communication stress. If then the $T S$ and $A T$ constructions are extensively used in more normal situations, they may become re-analysed as single non-complex clauses, with the former topic or afterthought NP again within the clause. The anaphoric pronoun may then become enclitic or affixed to a constituent, usually the verb, as in:

2a. 'The wizard he-Zived in Africa.'
b. 'The wizard lost-it the broom.'

The significance of such hypotheses is that they can explain why the $N P$ cross-referenced in the verb has, in many languages, topic-like properties (Givon, l976), since according to this view the NPs originate from topics, or the closely related afterthought constituents. At the same time this NP is also subject-like in that it is cross-referenced by the verbal affix system.

The hypotheses also explain the commonly occurring formal similarity between the free and bound pronominal elements.

### 5.2. THE GENERAL DEVELOPMENT OF PRONOMINAL AFFIXATION IN CHEPANG

### 5.2.1. PROBLEMS WITH THE TS AND AT HYPOTHESES

Because the NP in cross-reference in Chepang is topic-like in many respects the $T S$ hypothesis appears, at first sight, to provide a very
acceptable explanation for the origin of the pronominal affixation in Chepang. However there is a serious problem which arises in seeking to apply this hypothesis to Chepang and other pronominalised TibetoBurman languages. This is the fact that the TS process, as it stands, would provide pronominal prefixes, not suffixes, in a verb-final language such as Chepang. And there is no evidence at all within Chepang (which is a perfectly well behaved verb-final language - section l.5.l.l.), and little in other Tibeto-Burman languages, to suggest that it might formerly have had some other ordering of clause constituents. ${ }^{l}$

The Afterthought (AT) proposal could provide an explanation for pronominal suffixes, since in a language such as Chepang, where zero anaphoric reference is possible, even pronouns could be found in the afterthought position, to be later re-analysed as suffixes. But there are problems with this proposal in its simple form also. Firstly the Afterthought NP is outside the main clause and often phonologically separate from it (1.5.1.1.). To become suffixes the pronouns would have to undergo two stages of re-analysis, first to place them within the main clause again, then to unite them with the verb. And secondly, the AT hypothesis does not easily account for the reduplicated affixes found with the plural in certain verb forms (2.l.3.). These reduplicated affixes probably originated with emphatic deictic reduplication, whereas an Afterthought NP or pronoun is, by its very nature unemphatic - it is, as its name implies, simply an afterthought.

However although the TS and AT hypotheses, as originally described, have problems when they are applied to Chepang and similar languages, it is possible to outline a process of development, incorporating elements of these hypotheses, which can account for the pronominal suffixes. And at the same time this proposed development can explain some of the otherwise odd features of the verbal system, such as the irregular occurrence of true 2nd Person elements in the paradigm, the origin of the -lə form of the Negative and the presence of the reduplicated affixes. The process to be suggested, which I will call the Modified Topic Shift (MTS) process, is discussed in detail in the next section.

### 5.2.2. THE MODIFIED TOPIC SHIFT PROPOSAL

The difficulty encountered with the TS proposal, namely that it would result in prefixes for a verb-final language, would be avoided if the

[^14]Topic-anaphoric pronouns did not occupy the same position in the clause as the NPs that they replace, but instead were placed after the verb. Conditions that could lead to this post-verbal position would be:

1. The presence of various clausal particles after the verb, especially those with pronoun-like functions, which would attract the anaphoric pronouns to this position.

1i. Normal anaphoric reference being by omission rather than by explicit pronouns. This would mean that there would be no strong precedent for the Topic-referent anaphoric pronoun to be placed before the verb. The fact that a pronoun is used for Topic reference, when the norm is to have zero anaphoric reference, may result from the fact that the $T S$ construction is most common in special contexts (those with heavy communication stress), where something more explicit than zero reference is required.

1i1. Following from condition (i1.), the occurrence of context that would for some reason highlight the Topic-referent pronouns.

Evidence to support the possibility that condition (i.) could have been met at an earlier stage in Chepang (and other related languages) comes from Tibeto-Burman languages such as Akha (Egerod, 1974), which has a number of post-verbal particles even though NPs are pre-verbal. Included among these particles are some which have an evidential (Information Flow) function. If the post-verbal position of the quasipronominal CIF marker (-te? in Chepang) pre-dated the pronominal affixation, this could explain why the Topic-anaphoric pronouns were attracted to this position. It would also explain why true 2nd Person pronominal affixes are less frequent, since their place may be taken by the CIF form. Evidential systems have a widespread geographic distribution in Tibeto-Burman - they occur in Gyarong and Rawang as well as in Akha and Chepang - and they therefore may well be an early feature of TibetoBurman. As well as the evidential forms it is possible that there were post-verbal Action Number particles, which indicated the number of times an action occurred, rather than the number category of the Actor participant. These would be similar enough to pronouns in their function that they might also have attracted the Topic-anaphoric pronouns. Bauman describes Action ('propositional') Number as occurring fairly generally in Tibeto-Burman (Bauman, 1975:240ff). This category is discussed further in the next subsection (p.152).

Evidence to support condition (ii.) comes from the fact that certain non-pronominalised Tibeto-Burman languages (such as Lisu, Givón, 1976:151 fn2) regularly use zero anaphoric reference. Even present-day Chepang follows this practice to a considerable extent. Moreover the development of reduced clause linkage is favoured by tie use of zero
reference, indicating that this was possibly common at an earlier age.
The contexts that would highlight the pronouns can best be found in the question and answer situation. Questions and answers occur commonly in situations of communication stress, such as when a child is learning a language, or in contacts with people from other language groups. Questions are also the standard method of greeting used by the Chepang and other Nepalese groups. They can readily result in TS, even for lst and 2nd Person pronouns, as in the colloquial English question and reply: "Are you going?" "Me - I'm going.".

The reason that questions and their answers highlight pronouns is that, especially for the Alternative Interrogative in Chepang (sect. 3.2.2.), the appropriate reply is a repetition of the question (or of half of it, if the full Alternative construction is used), but with the necessary change of pronouns or other referring expressions, as in:

$$
\begin{aligned}
& \text { 3. Qn. chltwan-say wan-?o-te? } \\
& \text { Chitwan-Ab come-RN-CIF } \quad \text { An. } \\
& \text { chitwan-say wan-?o-na } \\
& \text { Chitwan-Ab come-RN-1E you from Chitwan?' } \\
& \text { 'I am from Chitwan.' }
\end{aligned}
$$

Here the question is indicated by intonation, not by the use of the optional marker -ya. The underlining serves to bring out the partial copying of the question in the reply, with the reversal of the communicative roles in the latter emphasised by the use of no representing the speaker, instead of $-t e$ ? for the hearer. The effect may be likened to the reverse image of a photographic negative, with preservation of the overall shape but substitution of black for white.

The example given above uses, for simplicity, a Characterisation clause. Most questions and answers however would use Primary clauses, and here there is a slight complication because, while the CIF form precedes the Tense affix, the true pronominal affixes follow it, thus distorting somewhat the reverse image effect. This can be seen in the following question and answer:

$$
\begin{array}{lll}
\text { 4. Qn. chltwan-tan ?al-te?-na? An. Chltwan-tan ?al-na -n? } \\
& \text { Chitwan-Al go - CIF-NPt } \\
& \text { Chitwan-Al go -NPt--1E you going to Chitwan?' } & \text { 'I am going to Chitwan.' }
\end{array}
$$

For Non-Primary clauses there is no problem as they do not have tense affixes. Even with Primary verbs the difficulty can be overcome, if two assumptions are made concerning the earlier form of the language. The first assumption is that at an earlier stage, before pronominal affixation had developed, the Negative marker for Primary clauses was -ma? (or ${ }^{\text {m me? }}$ - see 5.4.1.), with a position close to that of the verb root. There is in fact strong evidence to support this assumption, both from within Chepang and from other Tibeto-Burman languages. All Non-Primary verb forms in Chepang still use -ma? as a negator, and its
position is close to the verb root, not at the end of the verb as is the case for the present Primary Negative -lo. (1.5.2.). Moreover the great majority of other Tibeto-Burman languages use -ma? or a cognate for negation, usually with this form in a pre-verbal position (Benedict, 1972:97 - see also section 6.2.). A mechanism by which -lə could have come to be substituted for -ma? is given in section 5.2.3.

The second assumption is that the full Alternative Interrogative construction was used freely at this earlier stage also. This construction is not uncommon in present speech, though perhaps more common are questions formed with just half the complete positive-negative alternative plus, often, the Alternative marker -ya. This last form is a borrowing from Indo-Aryan (Sanskrit -va, Hindi -ya 'or') so it is probably a recent addition.

If these assumptions are valid then there is no problem concerning Tense placement, since this does not occur in the second, negative half of the alternative. The question and answer would be as follows (using the assumed -ma? Negative form, but otherwise the present forms of the pronominal affixes):

$$
\begin{array}{llll}
\text { 5. Qn. chltwan-tan ?al-te?-na? } & \text { ?al-ma?-te? } & \text { An. } & \text { ?al-na -n? } \\
& \text { Chitwan-Al go-CIF-NPt } & \text { go -Neg-CIF } & \text { go -NPt-lE } \\
\text { 'Are you going to Chitwan or not?' } & \text { I am going.' }
\end{array}
$$

Here the reverse image effect is preserved, with the replacement of the Negative -ma? in the second half of the question by the positive NonPast form in the answer, and the substitution of the lst Person -n? for -te? (here acting as the equivalent of a 2 nd Person marker). It is possible that even the position of the Tense forms themselves, which only occur with positive forms, comes from their placement in opposition to the Negative of the question. This is illustrated by underlining in the above example.

A series of possible stages in the development of the pronominal affixation is given below (ex.6.). The first two stages (involving Afterthought and Re-analysis) need not necessarily have occurred, the Topic-anaphoric pronouns may have been placed post-verbally simply as the appropriate pronominal substitutes in the copy of the question. It would seem that a TS stage is necessary, however, in order to re-introduce the free pronouns into the clause. The proposed earlier forms of the Pronominal Group affixes are used here (see 5.4.1.).
6. First stage. Afterthought placement:

Qn. ?al tay? nə? ?al mə? tay? An. ?al nə? no 'Are you going or not?' $\quad$ So NPt I Aftement Afterght
'I am going.'

Second stage. Re-analysis - integrating the Afterthought with the clause again.


Third stage. Topic-shift - using the pronoun position provided by stage two, or else by direct substitution for the CIF form toy?:


Fourth stage. Combination of post-verbal element with the root, followed by phonological changes (see 5.4.1. for details) to give the present form:

$$
\begin{aligned}
& \text { na ?al-na - } \quad \text { ? } \\
& I \\
& \text { go -NPt-lE }
\end{aligned}
$$

Note that stage two, the re-integration of the Afterthought pronoun with the clause, would be greatly assisted by analogy with the question, which has the quasi-pronominal CIF marker as an integral component. This would help to overcome the integration problem mentioned in association with the AT process (5.2.l.). The second problem mentioned in connection with the AT process, that of accounting for reduplication, is also avoided because a Topic-shift takes place following the Afterthought stage (this is discussed further in 5.2.4.3.).

Action Number and the MTS Proposal
Because Chepang has the CIF marker there is no need to postulate post-verbal Action Number particles to account for the non-basic position of pronominal forms. Nevertheless there is considerable evidence to suggest that such particles did occur and, this being the case, it is necessary to discuss here their possible involvement in the MTS process.

The basis of Action Number marking is that there is an element somewhere in the clause (probably close to the verb, as this is the constituent which refers to the action) which indicates the number of individual actions that are involved. The similarity between indicating the number of actions and indicating the Number category of participants lies in the fact that, if a Dual or Plural participant is an Actor in situations of, for instance, walking or hitting, then it could be argued that there are two or more actions of walking or hitting involved in each case. This notion can be extended, a little less obviously, to states.

The contrast between the two types of Number marking is best seen in Intentive situations, because Action Number systems cannot distinguish between plurality of Agent and plurality of Goal. In other words a Dual action may involve either a Dual Agent acting on a Singular Goal or a Singular Agent acting on a Dual Goal. This ambiguity is indeed just what is found in some sections of the Chepang verb paradigm, especially where the Agent is lst Person (see 2.3.3:77, also charts ll-13, Appx.l). In contrast, Participant Number marking can distinguish between the two situations, provided the case of the participant is also given. For states only the Number category of the Statant is relevant, and the two types of Number marking are equivalent.

If the Number elements in the verb have come from Action Number particles that follow the verb root, then they could have played a part in attracting the pronominal Person elements to this position during Topic-shifting. This is because both Number and Person morphemes have the common feature of referentially categorising participants, and therefore naturally could be placed together. However an initial Afterthought stage, if it operated, would place the Person elements after the clause and hence after the Number forms instead of in front of them, which is the present position. The Afterthought stage therefore could not have operated for Non-Singular situations if Action Number particles existed. But it could have operated for Singular situations, in which the Number element is a zero, and this could then serve as a precedent for the placement of the Topic-anaphoric pronouns in the Non-Singular situations.

Assuming the existence of Action Number particles, the development of pronominal affixation that included these elements would be as follows, beginning at the Topic-shift stage:
7. First (Topic-shift) stage:

Qn. mu təy? nə? cə mu mə? tay? cə stay CIF NPt Dl stay $\overline{\mathrm{Neg}} \mathrm{CIF}$ Dl
'Are you two staying or not?'
An. jo mu nə? дə cə we (Top) stay $\overline{\mathrm{NPt}} \overline{\mathrm{I}} \mathrm{Dl}$
'Us - we two are staying.'
Present form (After re-analysis combination of elements and phonological changes):

$$
\begin{aligned}
& \text { mu -na-n?-co } \\
& \text { stay-NPt-lE-Dl }
\end{aligned}
$$

The presence of Action Number marking, if accepted, has the somehwat unexpected result that it would suggest that the Number elements of
the free pronouns came from the verbal（Action）Number forms，and not the reverse．Indeed there is some evidence to support this reverse influence，in that the free pronoun Dual and Plural markers are cv／jv and i respectively．These are identical to the verbal Dual and Plural forms，but very different from the NP（and Demonstrative）Number affixes， which are simply the numeral nis＇two＇for Dual，and－ləm or－moy？as Inclusive or Collective Plurals．Number marking on NPs is optional and，in fact，is only used to emphasise non－singularity．It seems， therefore，that firstly the free pronouns acquired the Number forms from the verbal equivalents，then later the NPs developed a type of Number marking to parallel that of the free pronouns．

The alternative to Action Number being the original system is，of course，that the free pronouns were always marked for（Participant） Number and that they consequently brought this marking to the verb． If this were the case then the development would be as follows（giving only the negative half of the Interrogative for simplicity）．

7a．First stage（Topic－shift）：
Qn．nə刀－cə ？al mə？tay？ you－Dl go $\overline{\mathrm{Neg}} \overline{\mathrm{CIF}}$
＇Aren＇t you two going？＇
Present Form．

$$
\begin{aligned}
& \text { An. nə-cə ?al nə? De-cə } \\
& \text { 'Us two - we are going.' } \\
& \text { 力i-ci ?al-na -п?-cə } \\
& \text { we-Dl go -NPt-lE-Dl }
\end{aligned}
$$

Notice that，under the present assumption of no Action Number，the verb in the question would have no Number marking．Number is however brought to the verb（strictly，the post－verbal position）by the Topic－ anaphoric pronominal form nəcə．
＇i＇he fact that there is effectively Action Number marking in some sections of the present verbal paradigm is not conclusive evidence that this existed as the earlier system．It is possible that the present system has arisen simply from a levelling of a paradigm that formerly did distinguish Participant Number．Nevertheless the evidence from the present paradigm，coupled with the apparent recentness of the NP Number affixes and the occurrence of Action Number in other Tibeto－ Burman languages，would seem to tip the balance in favour of Action Number being the original systen．

## 5．2．3．THE EXPLANATORY POWER OF THE MTS HYPOTHESIS

The discussion so far has shown that a TS hypothesis，in particular the MTD form，can account for three important facts about the pronominal affixation in Chepang．These are：

1. That in a fully expanded clause one participant may be referred to twice.
2. That the second reference in the verb is usually by forms closely related to the free pronouns, especially for lst and 2nd Person.

1i1. The selection of the participant which is referenced twice (cross-referenced) is on the basis of factors associated with topics, such as givenness and position in the animacy hierarchy.

No matter what the details of the stages are, the MTS proposal (involving the development of prononimal affixation firstly in a limited context, triggered by the CIF form) has also, it turns out, the power to explain several apparent anomalies or distinctive features in the verbal paradigm of Chepang. One of these, the unusual Action Number system, was mentioned in the previous section and its relation to the pronominal affixation has already been discussed. Other special features are discussed below. These include the distribution of the 2nd Person pronominal element, the use of -10 as the Primary verb negator, and the presence of the Inclusive forms which closely resemble the CIF marker.

One of the most obvious oddities of the verbal paradigm is the irregular and relatively rare appearance of the 2nd Person element na (<*no). An examination of the complete paradigm (App.1., charts 11 and 13 , excluding chart 12 because of complications in the Past forms) indicates a distribution of -na and the CIF marker -te? as shown in chart 5 below. It should be noted that -te? is not necessarily found in the verb itself for the situations represented in chart 5, but it will almost invariably occur somewhere in the clause containing the verb.

## CHART 5

THE DISTRIBUTION OF -na AND -te?


Here $S=$ Singular, $N S=$ Non-Singular

Notice that, in the above chart, -na is in complementary distribution with -te?, (except for the section with the 2nd Person Non-Singular Agent and a lst Singular Goal). This is just what we would expect from the MTS hypothesis, which proposes that the appearance of the pronominal suffixes results from treating the CIF marker as a 2nd Person pronoun. If indeed it was regarded as a pronoun then, of course, there would be no need to include -na as well. However in the l-2 section of the paradigm, where -te? does not occur, -na is in fact used, to fill the gap in the paradigm. The appearance of -na as well as te? in the 2NSIS section is probably hy analogy with its converse, the lS-2NS section just referred to.

The Use of -lə as a Negative
The occurrence of the form -lo as a Negative affix with Primary verbs in Chepang, instead of the more usual ma? (as found in Non-Primary verbs and other Tibeto-Burman languages), can also be accounted for very simply by the MTS process. This process can, moreover, account for its position, right at the end of the verbal affixes. The explanation is based on the assumption that the -lə Negative was originally a Referential Emphatic particle (see 3.2.l.2.) and that all verbs were formerly negated by -ma?. The present Referential Emphatic is in fact -le? but in the western dialects it is $-l a$, which may well represent the older form of this particle. The eastern form is probably the result of a combination of ${ }^{*} \mid ə$ with a common Nepali Emphatic form əy (Chepang ? $\partial$ ) giving *lə + ?əy? > ləy? > le? - the intermediate form lay? is still found in old songs. Referential Emphatic particles are often found enclitic to pronouns in questions and answers, as in the following example:

$$
\begin{array}{lll}
\text { 8. Qn. ten ?al-te?-na? } \\
& \text { today go -CIF-NPt } & \text { An. } \\
& \text { 'Are you going today?' } & \\
& \text { go -lE-Neg I I - REm }
\end{array}
$$

Assuming therefore an original Referential Emphatic *lə and a Negative *ma? the development of the Primary Negative would be:
9. First stage (Afterthought construction):

Qn. ?al ma? tay? An. ?al mə? クə-lə
go Neg CIF
'Aren't you going?'
go Neg $\quad I$-REm
'I'm not going.'
Second stage (after re-analysis to give a single clause again):
?al ma? クə-la
go Neg lE-REm

If the Emphatic was used more of ten for negative than for positive answers (compare the English 'I go.' and 'I do not go.' where the 'do' has had an emphatic force) then this form could be interpreted, firstly as part of the Negative morpheme, then later as the total Primary Negative. This re-interpretation would be greatly assisted by the similarity between the Negative ma? and the Co-ordinate Conjunction ma (2.2.7.). The final stages would therefore be:
10. Third stage (Re-interpretation of $l ə$ as Negative and ma as a conjunction):

Present form

$$
\begin{aligned}
& \text { ?al-ma-nə-Iə } \\
& \text { go -Co-lE-Neg } \\
& \text { 'I also am not going.' } \\
& \text { ?al-nə-Iə } \\
& \text { go -lE-Neg } \\
& \text { 'I am not going.' }
\end{aligned}
$$

Because Secondary and Tertiary verb forms rarely occur in clause-final position they have not acquired the la Negative through the AT process, instead they have retained the older ma? form. However Nominalised clauses may sometimes be found alone in questions, with their function of indicating states and habitual or characteristic actions (4.2.4.2.). As a result they appear to be partway towards developing a new Negative form. The development of the Nominalised Negative would be as follows:

## 11. First stage:

Qn. gopal chitwan-tan ?al ?o An. ?al ma? le ?o Gopal Chitwan-Al go RN go Neg REm RN 'Has Gopal gone to Chitwan?' 'He has NOT gone.'

Present form (after phonological contraction, la + ?o > lo):

```
?al-ma?-lo
go - \(\mathrm{RNg}-\mathrm{NN}\)
    'He has not gone.'
```

This has resulted in a new Nominalised clause marker for the Negative (-lo), but has not yet given a new Negative since the older form still retains its function.

## Inclusive Forms

If the original form of the CIF marker was *təy? (as *m-lay>le 'tongue', *r-məy>me? 'tail' - see Benedict, 1972 for Proto-Tibeto-Burman forms) then its resemblance to the lst Person Inclusive form -təyh (2.1.2.) is obvious. The Inclusive form probably arose by merger of *təy? with some other suffixed element, since most roots in Chepang with a final /h/ seem to have come from an original root plus an affix
(*s-na>neh 'nose', *s-la>lah 'moon', *m-sin>sinh 'liver' - compare Benedict, 1972) though the position of the affix and rules of merger are not clear at this stage. Just what this suffixed element was is not certain but it may have been -nə, the lst Person form, (see 5.4.1.1.). This origin from a CIF form is supported by the fact that the Inclusive is not used with lst Person Imperatives, even though these always include the 2nd Person. The CIF marker also cannot be used with Imperatives, and therefore if the Inclusive is derived from it its absence in Imperatives is to be expected. The development would then be:
12. First stage:

Qn. ?amh bay? ma? $\begin{aligned} & \text { tay? } \\ & \text { good give } \frac{\text { Neg }}{\text { CIF }} \quad \text { An. bay? ?a tay? no ca } \\ & \text { give Pt CIF } \frac{\text { Dl }}{I}\end{aligned}$
'Wasn't food given to you?' 'It was given to both of us.'
Final stage: (with *tay? +ga>(tayp? ) tayh).

$$
\begin{aligned}
& \text { bay?-?a-tayn-ca } \\
& \text { give-Pt-IIn -Dl }
\end{aligned}
$$

5.2.4. General features of the paradigm, in relation to ts hypotheses

### 5.2.4.1. Introductory

As well as the special features explained by the more specific MTS process, there are several others that can be accounted for by any TS process that places Topic-anaphoric pronominal elements in a postverbal position, or else fit in well with such a process. These features include double cross-referencing, plural reduplication, verbal case marking, possessive cross-reference, the Past Tense forms, and the 2nd Person Dual form. They are discussed in the following sections.

### 5.2.4.2. Double Cross-reference

One unusual feature of the verbal paradigm that fits in well with a TS hypothesis is the double cross-referencing mentioned in section 2.1.4. The explanation of these forms is based on the possibility that there may be two given (topic-like) participants in a clause, as in the situation outlined in example l3. below. The result is that a double Topic-shift takes place, as in:

$$
\begin{aligned}
& \text { 13. Qn. nin-ji-kay how -lam-?l ghan-te?-na -je (-ya) } \\
& \text { you-2Dl-Gl child-Pl-Ag beat-CIF-NPt-2D1 Alt } \\
& \text { 'Did the children beat you two?' } \\
& \text { An. ni-ci-kay ?ow?-məy-?i ghan-na?-s -u -na?-ta-n?-ce } \\
& \text { we-Dl-Gl that-PI-Ag beat-NPt-Pl-Ag-NPt-Gl-1E-DI } \\
& \text { 'They beat us two.' }
\end{aligned}
$$

The fact that the Tense affix is repeated would seem to indicate that these double forms originated by a double Topic-shift after the pronominal elements became attached to the Tense form, with the result that there are two whole Pronominal Group units represented, one for the Agent, the other for the Goal. Double cross-referencing does not appear to be used very much in actual speech, no doubt because of the complex forms involved.

### 5.2.4.3. Plural Reduplication

The optional reduplication of the 2nd Person element in the $1-2$ section of the verbal paradigm is another feature that can well be accounted for by a TS process. This reduplication has been mentioned earlier (2.1.3.) and it was suggested then that this feature originated with emphatic deictic repetition, as in the English 'You, you and you. I'Ll speak with you later.' It is worth noting that Manchati, one of the Western Himalayish Tibeto-Burman languages, has the potential of reduplication in the free pronouns (chart 29, App.1), possibly for similar reasons. The type of situation in which reduplication might arise is (using ${ }^{*}$ na as a 2nd Person form, see below, 5.4.1.1.):
14. Stage one (Topic shift):
mayhla sayhla kancha han bay? ?i nə? na no no no sa Mayhla Sayhla Kancha beer give ? NPt you you you I Pl
'Mayhla, Sayhla, Kancha, I will give you all beer.'
Present form (verb only - after combination and phonological change:

$$
\begin{aligned}
& \text { bay?-ne?-na-na-na-n-sa } \\
& \text { give-NPt-2-2-2-1E-Pl }
\end{aligned}
$$

The change of the original *na? NonPast form to ne? in these verb forms is evidently the result of a merger between it and a particle *? 1 of uncertain function (possibly a deictic - see below). The fusion of these two morphemes would take place along the lines of: *? ${ }^{*}$ *na? > *nya? > ne? (see 1.4.4:39).

The plural form (?)), which appears in some sections of the paradigm, may similarly have come via plural reduplication from a deictic, - the Proximal Demonstrative 31 (2.1.2:55) just as in English the repetition of the deictic in 'Take this, this and this:' gives the equivalent of a plural object. By regular phonological rules (5.4.1:170) a repeated $2 i$ syllable in Chepang would rapidly contract to a single syllable, though now with a plural sense. This form of the Plural may have originally signified a specific plural in contrast to so as non-specific. (Compare this with the indefinite pronoun su). Bauman posits an *i
form for the Eastern Himalayish Inclusive, as well as for the 2nd Person and Plural morphemes (Bauman, l975:l3lff.). He also notes the common deictic use of this form, though he is not definite about the relations between these apparently homophonous elements. As far as evidence from Chepang is concerned the simplest view would be that *। was initially a proximal demonstrative that developed a plural sense through reduplication, as outlined above. It was also used to refer to the addressee in situations where this participant was involved along with the speaker - the latter being in an agentive role. This last usage could lead to the $C e ?$ forms of the Tense affixes as indicated in example 14. above. This in turn could lead to it becoming an Inclusive marker, as is the case for other Tibeto-Burman languages.

### 5.2.4.4. Verbal Case Marking

The present Agent case affix, $-(?) u$, was presumably originally a clausal particle which occurred after the Tense form, with the function of indicating that the Topic had an agentive role. This would mean that it was a type of transitivity marker, such as is found for instance, in the Khaling language (where $u$ has this function - see chart 3l, App. l). The development of this particle to become a full verbal affix would then be as follows, (assuming initially no NP case affixes) ${ }^{l}$ :
15. First stage (Topic shift):
(nə-cə) wan? nə? ?u nə cə $I$-Dl bring NPt TAg $I$ Dl
(Topic)
'We two bring it.'
Second stage (partial combination and vowel assumilation):
wan? no? ?u-ŋu-cu
bring NPt Ag-IE-DI

[^15]Final stage (after loss of $? u$, complete combination and re-analysis of final vowel as the Agent affix):

```
wan? -na -\eta?-c -u
bring-NPt-lE-Dl-Ag
```

The present Goal affix, $t(h) a$ would then have come from another clausal particle (*) ${ }^{*}$ ? , with the function of indicating that the Topic had a non-agentive role. For some reason this particle was not used when the addressee was the non-agentive participant, perhaps because of confusion with the formally similar CIF form *təy?. The development of the Goal affix would be:
16. First stage (Topic shift):
(クə-cə) wan? nə? tə? กə cə
$I$-Dl bring NPt NAg I Dl
'We two are brought.'
Second stage:
wan? -nə? tə-ŋ?-cə
bring-NPt Gl-lE-Dl
Final stage:
wan? -na?-ta-ŋ?-co
bring-NPt-Gl-IE-Dl
The alternative form of the Agent marker, $-n$, found in some parts of the $2-3$ and $3-3$ sections of the verbal paradigm (see charts ll-14, App. l), evidently comes from an earlier form *nl. Just what the original function of this form was, is not certain, though it probably was some type of plural ( $n$ l is an East Himalayan Plural - Bauman, 1975:140) ${ }^{1}$. In present speech the alternative form is used when the addressee is an Agent (whether as 2nd Person, or lst Inclusive), or when a third person is Agent. Its use is restricted moreover to Plural Agents, except in the Past tense - this exception representing an extension of its use. Possibly it represented a total pilural, as in 'you $A L L / t h e y A L L '$, in which case it would be related to the Imperative Emphatic no, which appears to have a similar sense (3.2.3.2.). If this is true then *ni could initially have been analysed $n(ə)$, a quantifier indicating totality, and (?)I, the (specific) Plural form. At the present stage of the language, however, $n$ clearly indicates an Agent.

A possible development of the alternative Agent form would be:

[^16]17. First stage (Topic shift):

```
(nig) wan? tay? no? ?u nl
    you bring CIF NPt Ag Pl
'You (aZZ) bring it.'
```

Second stage (partial combination, loss of $? u$, and re-analysis of nl ):

```
wan? tay? na? n - I
```

bring CIF NPt Ag-Pl

Final form:
wan? -te?-na -n - 1
bring-CIF-NPt-Ag-Pl
It should be noted that this alternative Agent marker is optional, and there are equivalent forms which use the regular $? u$ Agent form (see charts ll-14). These latter are, however, uncommon and may simply represent the beginning of paradigmatic levelling that would make ?u the sole Agent case affix. Alternatively they may indicate a non-specific Plural (5.2.4.3:159).

### 5.2.4.5. Possessive Cross-reference

An explanation of Possessive cross-reference in Chepang (see 2.2.6: 73) would assume an original clausal particle bot, with the function of indicating that the Topic stands in a possessive relationship with some entity. If the Topic is also an Actor in the clause, then this entity must be its possessor, and the Topic the possessed item, as the Genitive construction allows only the possessed item as a participant in the clausal situation. In this case bot is used, together with the appropriate Topic-referent pronominal elements (ex.l8a.). If the Topic is not an Actor, or not an explicit participant at all, then this is signified by the use of the Goal marker ta (<*tə?, NonAgent as Topic). The combination of bot $+t a$ indicates that the Topic, as a non-Actor is the possessor (ex.l8b.). If both the possessor and the possessed entity are topical then bat precedes the Tense form instead of following it, though ta is still used (ex.l8c.). The same rules of construction hold for states, where the Statant is the equivalent of the Actor. The different possibilities are therefore:

18a. Topic (the child) as Statant, hence is possessed.
First stage:
Qn. nan su -ko? co? -(toy?) you who-Gen child-(CIF)
'Whose child are you?'

```
An. na ram-ko? co? khe? bat no? 刀ə
    I Ram-Gen child be Pos NPt I
    'I am RAM'S chizd.'
```

Final stage (verb only):
khe?-bot-na-n?
b. Topic (Ram) not a participant
First stage:
Qn. ram-ko? co? su
Ram-Gen child who
'Which is Ram's child?'
An. ?ow? ram-ko? co? khe? no? bot to?
that Ram-Gen child be NPt Pos Gl
'THAT ONE is Ram's chizd.'
Final stage:
khe?-nə?-bat-thoy (thay<*ta?)

18c. Both Ram and the child topical.
First stage:
Qn. ram-ko? co? ?ow?
Ram-Gen child that
'Is that Ram's chizd?'
An. ?ow? ram-ko? co? khe? bət nə? tə?
that Ram-Gen child be Pos NPt Gl
'That is Ram's child.'
Final stage:
khe?-bat-na?-thoy

It should be remembered that the Topic, as defined for this work (4.1.3.), is not the matter being discussed, or the unknown entity in an Interrogative, but is the given participant or participants.

### 5.2.4.6. Second Person Dual

The Dual marker found with the 2nd Person forms is unusual, in that the initial consonant is voiced to give -jə, instead of -co which is used with lst and 3rd Person categories. The explanation of this difference is perhaps best sought in the Imperative forms of the verb. As has been noted previously (3.2.3.2.), there are two Emphatic morphemes used with the Imperative. These are ?ə, for a Singular addressee, and $n(ə)$, for a Plural addressee. With a Dual addressee only the regular 2nd Person Dual form is used, as can be seen in the following example:

| 19. Singular | Dual | Plural |
| :--- | :--- | :--- |
| wan-?ə | wan-jə | wan-nə |
| come-ImE | come-2D1 | come-ImP |
| 'You come!' | 'You two come!' | You (aZZ) come!' |

It may be that na had a sense of totality or inclusiveness ('you $A L L$ '). If it was frequently used with the Dual also it could have become fused with it, so that no + cə > jo. Because of the commonness of Imperatives the resultant voiced variant spread to all sections of the verb paradigm which included 2nd Person Dual forms.

### 5.2.4.7. Past Tense Forms

There is some evidence to suggest there were originally two separate forms that were associated with Past Tense. Their phonemic shapes were * (?ə)tə? and *(?ə)kə?, and they represented an aspectial contrast of some sort, such as a Perfect or Relational aspect versus a Non-Perfect aspect, or Perfective versus Imperfective (or even a Near versus a Distant Past opposition). Evidence for these two forms comes particularly from the western dialect of Chepang which still preserves the opposition in the Tense markers (6.2.3.). While the form with a velar consonant (the $k$-form) is the sole Past Tense marker in the eastern (Maiserang) dialect, traces of its opposite, the t-form, remain in aspectual markers, such as ?ata? (3.3.4.), as well as possibly the Secondary and Tertiary verb markers, (-to and -ti respectively). Moreover the Sunwar and Bahing languages (in Shafer's East Himalayish section) both use a tV form as a Past marker (see charts 20, 2l, App.1.). The reason for the near disappearance of the t-form in the eastern dialect of Chepang is its similarity with the NonAgent/Goal form -ta (<*to?). The possibility of confusion between the two has been resolved by the Goal marker becoming dominant in the eastern dialect, while exactly the opposite has happened in the western dialect - the t-form of the Past Tense has dominated and the Goal marker is rarely found. The formal similarity between the Goal marker and the t-form Past affix can be fllustrated as follows:

| 20. Western dialect compare with | Eastern dialect |
| :--- | :--- |
| ?al-(?a)ta-n? | ?al?-?a-ta-n? |
| go PfPt -lE | take-Pt-Gl-lE |
| 'I went.' | 'He took me.' |

It is possible that the t-form has itself become the Goal morpheme in the eastern dialect. However the Goal marker in this dialect is found right throughout the verbal paradigm, including the NonPast and Indefinite future sections, as well as with Secondary and Negative verb forms which do not have (Absolute) Tense affixes. More importantly perhaps there is some data to suggest that occasionally the western dialect uses a Goal affix in conjunction with the t-form of the Past (6.2.3:185), and therefore the two morphemes were separate, at some stage at least. It is more likely that the Goal and Tense morphemes have come from a common root, possibly that of ta?- < *te? 'cast, throw
a short distance' (see Matisoff, 1973, for the relation between directional action and benefactives). In this case the functions would have first diverged, then later the forms became confused. It is possible even that the ta? of the Cessative (3.2.3.2.) is related to the t-form in its perfective aspectial sense, since the Cessative is a command to cease, or complete an action. The present Cessative would therefore be a combination of the aspect marker, plus a form that was originally emphatic, but later analysed as Negative (see 5.2.3:156).

The k-form of the Past Tense has undergone considerable phonological change. Initially it was probably *kə? (and the t-form *ta?), with later addition of the $? V$ as either an Emphatic, or else a development of a former transition vowel which occurred after combination with the stem. In both the eastern and western dialects, the velar consonant has dissimilated to 1 before $\eta$ in the lst Person sections of the paradigm (giving *?VkV? > ?VIV?/_n). In the western dialect this l-form has spread to other areas of the paradigm. Also the kV? syllable is itself lost under certain circumstances, especially when it is the last of a string of combined elements (see 5.4.1.3:170).

### 5.2.5. SUMMARY OF TOPIC SHIFT HYPOTHESES

Although in one or two cases they may be somewhat speculative, the explanations of paradigm anomalies given in the above two sections (5.2.3., 5.2.4.), when taken together, give strong support to the TS hypothesis, including its more specific form, the MTS process. Especially these explanations demonstrate the viability of the notion that free. pronominal elements (particularly those of the Person category) may become verbal suffixes when associated with topicality.

However the acceptance of this notion does not exclude the possibility of reverse influence, with some purely affixal elements - specifically the Dual forms - later becoming associated with the free pronouns. Such reverse influence is required if the view is taken that the basic Number elements, cə 'Dual' and sə 'Plural' were initially post-verbal clausal particles, indicating Action rather than Participant Number.

### 5.3. ALTERNATIVE PROCESSES OF DEVELOPMENT

### 5.3.1. GENERAL

Of the proposed processes which could have lead to the development of pronominal affixation within Chepang (as distinct from theories of external origins, involving diffusion or substratum influence - see 6.3.3.), there are two which are significant enough to be considered here. These are development via the Characterisation construction, and development by analogy with Possessives.

### 5.3.2. CHARACTERISATION CLAUSE PROCESS

Characterisation constructions, described in section 4.2.4.2., are similar to cleft constructions in English. That is, they are Equatives, with an NP representing the Statant participant, plus an NP with a relative clause describing the Statant. However in English the head of the Relative construction is a general term (such as 'one', as in 'I am the one who left. '), whereas in Chepang the head is normally an enclitic pronominal form. Moreover the head constituent always follows the relative clause in Chepang. An example of a Characterisation construction, similar to that given in chapter 4, is:

```
21. gi-cl lan -kus wah -?o-?a-ŋə-cə we-Dl demon-Com move-RN-Em-lE-Dl Statant Relative Clause Head
```

'We two are ones who go about with demons.'
If, therefore, Characterisation clauses included Relative constructions formed, as normally, with the head following the relative clause, then the pronominal elements which constitute the head would naturally follow the verb. The Characterisation construction could then form the pattern for pronominal affixation in general. Such a proposal has in fact been made by Watters for the Kham language, on the basis of constructions similar to the Characterisation type (Watters, 1975).

The main objection to this proposal is the rarity of these constructions, at least in Chepang. Only one clause out of several thousand in text is a Characterisation clause, and, while they are perhaps more frequent in conversation, I have not noted them to be very common. Their occurrence would, however, strengthen the choice of post-verbal position for pronominal elements.

It is possible that the Characterisation clauses have themselves arisen from a TS process that has applied to Habitual clauses. This would account for the fact that pronominal elements, rather than general nouns, are used as the head of the relative as in the English cleft construction, (thought it is true that general nouns tend to be avoided in Chepang). The development would be:
22. First stage:

```
gi-cl lan -kus wah -?o Habitual Clause
we-Dl demon-Com move-RN
'We two habitually go about with demons.'
Second stage:
```

```
\etal-cl lan -kus wah -?o no cə Topic Shift
```

we-Dl demon-Com move-RN $I$ Dl
Topic Main Clause

```
Final stage:
ni-ci lan -kus wah -?o-nə-cə Re-analysis
we-Dl demon-Com move-RN-lE-Dl
'We two are ones who go about with demons.'
```


### 5.3.3. POSSESSIVE ANALOGY

An older hypothesis concerning the origin of pronominal systems is given by Konow. Following Friedrich Müller, Konow suggests that the Tibeto-Burman languages do not now have real verbs, but rather possess indefinite bases which may be used as either nouns or verbs (Konow, in Grierson, 1909, vol.3/1:6). Thus pronouns are adjoined to (more clearly nominal) bases to form possessive constructions.

It is certainly true that almost any noun root in Chepang can be combined with a Tense affix, usually the NonPast form, to give a verblike constituent:

```
23a. prem-ko? ran ban -na?
    Prem-Gen field stone-NPt
    'Prem's field is stony.'
    b. gopal pu? -na?
    Gopal OBro.-NPt
    'Gopal is the older brother.'
```

The blurring of the noun-verb distinction for roots also occurs in Munda languages (Pinnow, 1966:183). However there is no sign in Chepang of the use of juxtaposed pronoun elements to indicate possession, though such constructions do occur fairly freely in other Tibeto-Burman languages, such as Kham and Limbu. In these languages the pronominal element always precedes the possessed noun and so it is unlikely that such a construction could account for pronominal suffixation, nor indeed for the complexities of the verbal system.

There are some languages, including Kusunda, for which the Possessive analogy is a plausible explanation for pronominal affixation however. This can be seen from a Kusunda example:

```
24. \(\frac{g i t-y \wedge}{h e}\)-Gen \(\frac{g-e c i}{3-c h i z d ~} \frac{g-a m-n \wedge n}{3-e a t-N P t}\)
    'His child eats.'
```

Here it can be seen that the Possessive 3rd Person prefix exactly parallels the verbal 3rd Person prefix. The Kusunda pronominal system is, however, very simple, being little more than a marking of the Actor Person category by prefixation.

### 5.4. DEVELOPMENT OF THE CHEPANG PRONOMINAL SYSTEM IN DETAIL

### 5.4.1. PRONOMINAL ELEMENTS AND ruLES OF Change

In the previous section it was suggested that the present complex pronominal forms in Chepang have arisen from free pronouns, and other particles, by a modified Topic Shift process. If this hypothesis is correct it should be possible to show that both the present free pronouns, and the pronominal affixes, have come from this earlier set of elements via a series of plausible changes. Such a demonstration is indeed possible, using a small set of initial Pronominal Group elements, together with a few simple rules of phonological and morphological change.

### 5.4.1.1. Proposed Pronominal Group Elements



| Tense |  | Other |  |
| :--- | :--- | :--- | :--- |
| Past 1. | ka? | Negative | ma? |
| il. | ta? | CIF | tay? |
| Non-Past | na? | Emphatic | la |
| Ind. Future | ca? | Reflexive | sa |
|  |  | Secondary | to |

It is possible that the original 2nd Person element was originally simply *nə, and that the present morpheme was formerly the lst Person Inclusive pronoun. This Inclusive form would have been constructed by juxtaposing the 2nd and lst Person elements, with later loss of the final vowel: *nə + *nə > *nəəə > *nə刀. In Kusunda the Inclusive free pronoun is formed in just this way, with nu '2nd Person', and cl 'lst Person', being combined in this order to give nucl 'lst Person Inclusive'. In Kanauri also the Inclusive free pronoun appears to be composed of combined 2nd and lst Person elements (see chart 29, App.l., also Maspero, 1947:175). The shift of function from lst Inclusive to 2nd Person would be strongly assisted by the fact that the same lst and 2nd Person elements, *nə and *nə, come together in the l-2 section verbal forms (see 5.4.2.3:175), to give, for instance:

```
25. wan? -ne?-na-n -jo
    bring-NPt-2 -1E-2Dl
    'I bring you two.'
```

The two combined affixes, na-ŋ, could easily be re-interpreted as the single element naf, by contrast with the true Inclusive form, tayh, which developed at about the same time (5.4.2.3:174) to give:

```
26. wan? -na?-tayh-ca
    bring-NPt-lIn -DI
```

Analogy with this nan affix, now viewed as a simple 2nd Person element, could lead to the free Inclusive pronoun (also nan) losing its reference to the speaker to become a purely 2nd Person pronoun. ${ }^{1}$

### 5.4.1.2. Proposed Order of Elements

The order in which these elements were placed after the verb following a Topic Shift was:

Primary: (CIF) Tense (CIF) (Case) Person Number (Reflexive)
Other: (CIF) (Case) Person Number $\left\{\begin{array}{l}\text { Negative } \\ \text { Secondary }\end{array}\right.$

### 5.4.1.3. Proposed Rules of Change

Given below are the main rules of phonological change which apply to the Pronominal Group elements. It is important to note that they are viewed as applying only when the elements combined as enclitics or affixes. This restriction means that the time of combination of various elements (in relation to the application of the rules) is impor_ tant, since it will affect the final form of the affixation. Moreover certain rules apply only to stressed syllables, which are the first of a string of combined elements. This also means that the relative time of combination is important.
l. Assimilation. The central vowel assimilated to the position of a preceding or following high vowel under certain conditions given by the rule:

$$
\partial \rightarrow v_{h} /\left\{\begin{array}{l}
-(c) ? v_{h} \\
v_{h} c^{-}
\end{array} \quad c=\text { Consonant, } v_{h}=\right.\text { High Vowel }
$$

[^17]This rule operates at any time Pronominal Group elements are combined, so that it applies at more than one stage.
2. Loss of Glottal Syllable. Glottal initial syllables (?V morphemes) are lost when they are part of a string of combined syllables, but not when they are alone. The rule applies only at one stage, before further combination. The function of this lost form is taken over by a new form produced by reanalysis of the remaining syllables. The rule is:
$\boldsymbol{V} \boldsymbol{V} \rightarrow \varnothing$ (except / \#__ ) (\# = Word Boundary)
3. Resyllabification. Resyllabification may take place when two (monosyllabic) elements combine to form a single syllable. This results in a change in the form of the morphemes, but not in total loss, or fusion. The rules for this are:
a. $\quad \mathrm{C} \partial(?)+N V_{n f} \rightarrow \mathrm{CoN}(?)$
b. C ə? $+\mathrm{NV}_{f} \rightarrow \mathrm{CoNV}_{f}$
c. $C \partial\}+\left\{\begin{array}{l}? i \\ ? u\end{array} \rightarrow C \partial\left\{\begin{array}{l}y ? \\ w ?\end{array}\right.\right.$
d. Cey? + ŋV $\boldsymbol{C}$ Cəyh
4. Vowel Split. At some fairly late stage (at least after Resyllabification) the central vowel split to give a mid-central e and a low-central a - the latter being conditioned by stress. The rule is:

$$
\begin{aligned}
\prime ə \rightarrow a\left(\text { except / } C_{\left.n v I \_S V\right)} \quad S v\right. & =\text { Semi-vowel, } C_{n v i}=\text { Non-Velar, } \\
& =\text { Stress }
\end{aligned}
$$

The Non-Velar limitation to the exception is included to account for forms, such as -?aka-y? 'Past Plural', where the second vowel has lowered even though it precedes a semivowel. The explanation may in fact lie in the disyllabic nature of the Past form. The exception as a whole does not apply to the western dialect, where aw and ay are found (6.2.3.).
5. Past Tense Changes. As has been mentioned earlier (1.5.3.) the Past Tense has several forms depending on the different phonological environments in which it is found. The changes include the addition of a $? V$ prefix to the basic $k V ?$ form. This prefix may have begun as a transition vowel that was used once the Tense form combined with the verb stem, at a late stage, or it may have been an Emphatic. It is often absent in the western dialect forms of the Past Tense. A second stage is the dissimilation of $k$ to $l$ before velar nasal 0 . The third
change is from (?V)kV? to ?V, when the Tense form is not combined with any following element. This change must have taken place before the Tense particle combined with the Non-Agent marker *to? or the Inclusive marker təyh, as the Past form is ?a before both of these. These rules may be summarised as follows:

```
a. kV? }->\mathrm{ ?V /___#
b. kV ? ? P ? VikVi?
c. kV -> |V /__D
```

The ordering of these changes with respect to each other is not clear, since it makes no difference to the final form. As a whole, however, they presumably followed Resyllabification.
6. Glide Reduction. A glide from a mid-central to a high front position, $\partial y$, is reduced to a single segment, e, under stress, provided the syllable in which it occurs is not last in a string of combined elements:
'əy $\rightarrow$ 'e (except /__\#)
As well as these major rules there are one or two minor changes which must be accounted for. These will be dealt with where relevant.

### 5.4.1.4. Ordering of Combinations and Changes

As has been pointed out above, because several of the rules of change are restricted to combined elements and to certain positions within a string of combined elements, the ordering of combinations and changes is important. This ordering is given below. One item of significance is that the Agent Topic form $? u$ combined with the Person-Number forms at an earlier stage than did the Non-Agent Topic element *to?. This may have been because of the greater frequency of Agent Topics, or else because $a$ ?V form tends to be a weak syllable, liable to combination and eventual loss. The ordering then is:

1. Combination of Agent, Person and Number elements (to give an (A)PN unit).

1i. Application of Rule 1 (Assimilation).
iii. Application of Rule 2 (Loss of Glottal Syllable).
iv. Combination of (A)PN unit with preceding element (Tense or Non-Agent topic, or the CIF markers), to give a Pronominal Group (PnG) unit.
v. Combination of Negaiive or Reflexive with PnG unit, with reapplication of Rule $l$, Assimilation.
vi. Application of Rule 3. (Resyllabification).
vii. Application of Rule 4. (Vowel Split).
vii1．Application of Rule 5．（Past Tense Changes）．
ix．Combination of all postverbal elements．
x．Application of Rule 6．（Glide Reduction）．
xi．Combination of elements and verb stem．

## 5．4．2．EXAMPLES OF DEVELOPMENT

## 5．4．2．1．Method

In this section it is proposed to follow through，in detail，the development of the free pronouns and of some of the affixal forms． Because of the large number of the latter（well over a hundred），it is not possible to deal with each individually，and only eight examples will be given here．These will be chosen on their ability to exemplify the rules of change，and also to present special problems．One gener－ alisation that will be made is to use $\theta$ o？to represent all three Tense forms where possible，separating out the Past forms only when necessary． The stages of change will be numbered as given in the section above （5．4．l．4．），where the ordering of rules and combinations is described． Irrelevant stages are omitted and stress is marked only where it is needed for a rule．

## 5．4．2．2．Free Pronouns

Note that these include only the lst and 2nd Person forms as the 3rd Person forms are in fact Demonstratives（2．1．2：55）．The original Non－ Singular marker is assumed to be the（Deictic）？l，possibly reduplicated in the Plural．At some stage（here taken to be before stage 11．）the verbal Action－Number Dual forms were added to the free forms．The 2nd Person form here is taken as＊nən，but see 5．4．1．1．


| 1. | Original | ๑ə | クə－？ 1 | กอ－？1－？ | n ${ }^{\text {n }}$ | nəワ－？ 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1a． | Add Action No． |  | ๑ə－cə－？1 |  |  | nəロ－jə－？ |  |
| 11. | Assim． | ทə | D $1-c \mid<? 1$ | の1－？1－？ | nə刀 | nlo－jl－？ | nin－21－？ |
| 111. | Loss ？V | ワə | n $1-\mathrm{c} 1$ | 01 |  | $n i n-j i$ | n10 |
| iv． | V Split | ＇па | 01 | 01 | ＇nan | $n i n-j i$ | n10 |
| $x 1$. | Final | па | Dl－cl | 01 | nan | $n i n-j i$ | nin |

## 5．4．2．3．Development of Verbal Affixes

Non－Intentive Forms
a．lst Person Dual，as in：


Topic shift：
クə พəท $\theta$ ə？クə cə
Development of verb from separate elements．

```
    1. PN Comb. wə\eta 0ә? \etaә-cə
    iv. PnG Comb. wə! 0ә?-\etaə-cə
    vi. R3a,Resyll. wən 0ə-п?-cə
    vi1. R4,V Split 'wan '0a-\eta?-ca
    vii1. R5b,Tense wan 0a-\eta?-cə Pt. wa\eta ?aka-\eta?-cə
        R5c,Dissim. wan ?ala-n?-ca
xi. Final NPt. wan-na-n?-ca way-?ala-n?-ca
            IFu. way-ca-п?-cə
```

b. 2nd Person Plural, as in: níwai-te?-na?-jo
you come-CIF-NPt-2DI
'You two come.'
Note the use of the ?l Plural form here.
1. PN Comb. waŋ tay? өə? ? 1
iv. PnG Comb. wən tay? $\theta$ ə?-?
vi. R3c, Resyll. wan tay? $\theta$ a-y?
vii. R4,V Split 'waŋ 'təy? 'өə-y? Pt. 'wan 'təy?'ka-y?
vii1. R5b,Tense wan təy? ?aka-y?
ix. PVb Comb. wan tay?-өə-y? wan təy?-?aka-y?
$x$. R6,Glide Red. wan te?-өə-y? wan 'te?-?aka-y?
xi. Final NPt. way-te?-nə-y? way-te?-?aka-y?
IFu. war-te?-ca-y?
c. lst Person Plural Negative, as in: gl wan - ! - 1 - 11
we come-lE-Pl-Neg
'We do not come.'

Note the loss of the original Negative form mo？，and the take－over of its function by the former Emphatic la，as explained in 5．2．3：156．

| 1. | PN Comb． | wan mo？ | ワə－？1 1ə |  |
| :---: | :---: | :---: | :---: | :---: |
| 11. | Rl，Assim． | wə刀 | りl－？ 1 la | la becomes Negative |
| 111. | R2，？V Loss | wəท | 7）-110 |  |
| v ． | Neg．Comb． |  | n $-1-11$ |  |
|  | Rl，Assim． | way | n－ $1-11$ |  |
| xi． | Final | wan－n－1－1 | －11 |  |

The development of the Secondary forms is identical to that of the Negative, except that the vowel of the Secondary marker to does not assimilate, instead it causes a a vowel of the lst Person Singular and Dual to assimilate to its position, as with:

```
ni-ci wan -no-co-to
we-Dl come-1E-Dl-2ry
'We two have come...'
```


## Intentive Forms

a. lst Singular Agent with 3rd Plural Goal or lst Plural Agent with 3rd Singular Goal, as in:
wan? -na -n?-s -u bring-NPt-1E-Pl-Ag 'I/We bring them/him.'

1. APN Comb wəŋ? $\theta$ ə? ?u-ŋə-sə
2. Rl, Assim. wəŋ? $\theta$ ə? ?u-ŋu-su

1i1. R2, ?V Loss wən? 日ə? nu-s-u
iv. PnG Comb. wan? өə?-ŋu-s-u
v. R3a, Resyll. wan? $\theta$ a -n?-s-u
vii. R4, V Split 'wan?'өa -n?-s-u
vi1i. R5b, Tense wan? $\theta a-\eta ?-s-u$ Pt. wan? ?aka-ŋ?-s-u R5c
xi. Final NPt. wan?-na-ŋ?-s-u wan?-?ala-n?-s-u

IFu. wan?-ca-ŋ?-s-u
b. lst Inclusive Plural Agent, 3rd Person Goal as in:

```
wan? -na?-tayh-n -i
```

bring-NPt-IIn -Ag-Pl
'We two bring it.'
Note that this form, which includes the addressee, uses the ${ }^{*} \mathrm{n}$ l Plural form, mentioned earlier (5.2.4.4.). It is not clear whether this also indicated Agent case, or whether it was originally accompanied by an Agent Topic form $? u$ which has since been lost, with its function now taken over by the $n$ of the $n l$.


IFu. wan?-ca?-toyh-n-1
c. 3rd Person Agent with lst Person Plural Goal, as in:

```
wan? -na?-ta-n -1
bring-NPt-Gl-lE-Pl
'They bring us.'
1. PN Comb won? 0ә? tə? пə-?।
11. Rl, Assim. wan? 0a? ta? ŋi-?।
1i1. R2, ?V Loss won? 0ә? to? n-i
iv. Case Comb. won? 0ә? tә?-п-I
vi. R3b, Resyll. wan? 0a? ta-n-i
vi1. R4, V Split 'wan?'0a?'ta-n-i
viii. R5a, Tense wan? 0a? ta-n-1
1x. PVb Comb. wan? na?-ta-n-i
xi. Final NPt. wan?-na?-ta-n-1
    IFu. wan?-ca?-ta-n-I
```

d. 3rd Person Agent and Goal, with Goal cross-reference, as in:

```
wan? -na?-tha-co
bring
'He brings those two.'
```

These forms require an Aspiration rule: tV? $>$ thV applying after Resyllabification (to prevent $t V-0 ? \rightarrow t h V-\eta ? ~-~ s e e ~ c . ~ a b o v e) . ~$

```
1. PN Comb. wən? 0ә? t ə? ca
iv. Case Comb. wən? 0ə? tə?-cə
vi1. R4, V Split 'wan?'0a?'ta?-cə
    (Aspn.) wan? 0a? tha-ca
vii1. R5a, Past wan? 0a? tha-ca Pt. wan? ?a tha-cə
1x. PVb Comb. wan? 0a?-tha-cə wan? ?a-tha-cə
xi. Final NPt. wan?-na?-tha-cə wan?-?a-tha-cə
```

    IFu. wan?-ca?-tha-co
    The form of the Aspiration rule is interesting, in that it gives some idea as to the conditions bringing about aspiration of initial consonants, which are regarded by Benedict as a later development in TibetoBurman (Benedict, 1972:20, but see also Mazaudon, l976:17). As noted above the change must have taken place after Resyllabification, to explain the unaspirated Goal forms in the $3-1$ section. It occurs in a stressed syllable.

With Singular Goal the Goal case marker may undergo a further change to thay, though this form is an idiolect variant in the eastern dialects.
e. lst Person Agent with Second Person Goal, as in:

```
wan? -ne?-(no)-na-n -sa
bring-NPt- 2 -2 -lE-Pl
'I bring you azZ.'
and wan? -ne?-(no)-?ala-n?-sa
bring-NPt- 2 -P+ -lE-Pl
    'I brought you aZZ.'
```

There are several points to be noted about the development of these forms. Firstly there is the fronting of the vowel in the Tense form, possibly because of combination with a preceding Deictic or Information Flow marker $? 1$ as described in 5.2.4.3, with this combination taking place before the Vowel Split. Secondly there is the possiblity of reduplicating the 2nd Person form up to two times, with the reduplicated element being $n$ n and stress on the closed syllable, nə-ŋ. Thirdly in the Non-Past, the 2nd Person element na is reanalysed as na 'Non-Past' and the Past forms are then constructed on this basis, to give:

```
wan? -na? -(na)-?ala-\eta?-sa
bring-(NPt)-(2) -Pt -1E-Pl
'I brought you all.'
```

As with all situations where the addressee is Goal there is no Goal case marker. The development therefore is as follows:


The reason for the unusual Past form probably lies in the fact that these situations, in which the speaker tells the addressee what he (the speaker) did to him in the past, tend to be uncommon. The Past tense therefore is formed simply on the basis of analogy with an alternative analysis of the Non-Past verb.

Verb forms for the reverse situation, with a 2nd Person as Agent and a lst Person Singular as Goal, are the same as the above, except where the 2nd Person 1s also Singular, when the suppletive cl is used for the Person elements. In other words the 2nd Person Agent dominates for cross-reference in $2 N S-1 S$ section of the paradigm. However when the lst Person Goal is Non-Singular it predominates and the verbal affixes are the same as for the $3-1$ section, the development of which is described in c. above.

## Reflexives

Reflexive forms are constructed on the model of Non-Intentive verbs and lack case marking - instead they use the Reflexive morpheme which
is basically so. The present Reflexive free pronoun is lay? which is not related to the bound form.

In 2nd Person Non-Singular Reflexives a 2nd Person element, $n$ In ( < * nər) may be included as well as the CIF form te?. As an example, the 2nd Person Plural Reflexive is:

```
wan? -te?-na -y?-sl or wan? -te?-na?-nin-s-l
bring-CIF-NPt-Pl-Rfl
'You bring (for) yourselves.' 'You bring (for) yourselves.'
(Initial stage): won? tәy? 0ә? ?l so
iv. PnG comb. wən? tәy? 0ә?-?i so
v. Refl Comb. wən? təy? 0ə?-?l-sl
vi. R2, Resyll. won? 0әy? 0ә-y?-sl
vi1. R4, V Split 'wan?'tay?'0ә-y?-sl
vi11. R5b, Tense wan? tәy? 0ә-y?-sl Pt. wan? toy? ?aka-y?-sl
1x. PVb Comb wan? tәy?-0ә-y?-si wan? toy?-?aka-y?-sl
x. R6,Glide Red. wan? 'te?-0ə-y?-sl wan? 'te?-?aka-y?-sl
xi. Final NPt. wan?-te?-ne-y?-sl wan?-te?-?aka-y?-sl
IFu. wan?-te?-ce-y?-sl
```

The Dual forms of the Reflexives are constructed according to an analysis of sl ( $<{ }^{*}$ sə) as the Plural marker, and hence regard y? (< *? $)$ as the Reflexive marker in the above Plural forms. Thus the lst Person Dual is: wan? -na -n - $-c \mid$ bring-NPt-lE-Refl-Dl
not $\mathrm{X}_{\text {wan? }}-n a-\eta ?-c ə-s ə$ as might be expected. Similarly the 2 nd Person
bring-NPt-lE-Dl-Rfl
forms incorporating the 2nd Person element are based on the same analysis to give:

```
wan? -te?-na?-nin-s -i
bring-CIF-NPt-2 -Pl-Refl
```

The confusion between the Reflexive and the Plural forms points to the possibility of the former originally coming from the Plural Action Number morpheme so. The Reflexive sense of the morpheme may have derived from the plural via the notion of reciprocality, which of necessity involves Non-Singular actions and participants. The semantic chain would therefore be: Plural > Reciprocal > Reflexive.

Suppletive Form cl
The form used to mark the $2 \mathrm{~S}-1 \mathrm{~S}$ section, -cl , is completely suppletive. It is similar to the Newari and Almora lst Person form, $j$, and identical to the Kusunda lst Person pronoun (6.4.4.).

### 5.5. CONCLUSIONS

The detailed description of the development of various verb forms, given in the last section, is important because it demonstrates that the MTS proposal is compatible with the facts of the present pronominal system. Indeed not only is it compatible with the present system, but it can also explain some of the more puzzling details of the paradigm. Moreover this explanation can be achieved with only a few general phonological rules of change, together with a small number of plausible assumptions concerning the nature of the language, and the set of pronominal elements, at an earlier stage.

There are other observations also that follow from the posited development. Firstly, evidence from the affixes suggests that the split of initial consonants into aspirated and unaspirated forms took place at a relatively late stage, supporting Benedict's view of Proto-TibetoBurman consonant contrasts.

Secondly there is no evidence at any stage that there was morphological fusion between the Tense and Pronominal elements. This places Chepang in a small set of Tibeto-Burman languages which are exceptions to the general rule of Tense concord in the Pronominal affixes (6.3.2.4.).

A third point that emerges from the proposed development is that the Inclusive morpheme tayh appears to derive from the CIF form te?, plus what was originally a general lst Person from, no. After the development of the Inclusive form, this general lst Person morpheme has become limited to an indicating Exclusive sense.

It is even possible to suggest the origins of the two Information Flow morphemes, to? and tan?. By the rules of change outlined earlier these could have come from the Non-Agent Topic marker, *t ${ }^{2}$, ${ }^{l}$ plus 31 and no respectively. If this is so then they represent contractions, not of the utterance itself, but of the underlying performatives, ' I say TO YOU', or 'I repeat what was told TO ME', where the emphasised portions could well be represented by *tə? + *? 1 and *tə? + *na. Note that here again (see 5.2.4.3.) we have an $? 1$ form representing a pronominal, or semipronominal element, in a situation that involves both the speaker and addressee. There is no evidence to suggest that 71 was the earlier 2nd Person form, rather than no( $n$ ), so it is possibly a deictic that was used to refer to the addressee under the circumstances specified, that is, when the speaker is also involved in the situation in an agentive or controlling role.

[^18]A further observation that can be made from the proposed development is that the split of the central vowel into mid and low phonemes is a relatively late event. This is in line with Benedict's five vowel Proto-Tibeto-Burman system, which has only one central vowel (Benedict, 1972:57). The stress conditioned vowel split rule also explains why the mid-central vowel is relatively rare in roots - because these are word-initial, and stressed, any central vowel they contain would be lowered. There are some roots with the higher vowel, these are either later additions to the lexicon or else were subject to rules which prevented application of the vowel lowering. An initial semivowel w for instance seems to have prevented lowering, so we get hwat - 'ask', wak- 'split' and so on, while the inhibiting effect of final semivowels on lowering has already been incorporated in the Vowel Split rule. All a vowels in affixes can be derived from a.

Evidence from the ordering of the various stages of development would seem to suggest that the lst Person element ${ }^{*} n \boldsymbol{n}$, and even the 2nd Person *no, were included in Dual and Plural forms of the verb at a fairly early stage in Chepang (see Bauman, 1975:198 for a contrary view). For instance the lst Person element presumably was included amongst the postverbal elements before the loss of the glottal syllable (Rule 2) and resyllabification (Rule 3). The MTS hypothesis, which places the lst Person element everywhere that the CIF morpheme te? occurs in the equivalent 2nd Person form, and places the 2nd Person element (*na) wherever the CIF form does not occur, explains the wide distribution of these elements in the verbal paradigm in Chepang.

More generally, the processes outlined here, and elsewhere in this work can account for features such as the formal identity, or homophony, of pronominal affixation in differing sections of the paradigm. The dominance of the lst Person participant in regard to choice for crossreference, especially when it is Non-Singular (2.3.3.) means, for instance, that when the lst Person is Goal, the Person of the Agent is irrelevant and the verbal forms are the same for both 2nd Person and 3rd Person Agents, a homophony unexplained in Bauman 1975:212. And the fact that Action Number, rather than Participant Number elements, are used in certain sections of the paradigm (especially the l-2 and l-3 sections), means that here the forms representing a Dual or Plural Agent with a Singular Goal, are the same as the forms representing a Singular Agent acting on a Dual or Plural Goal. Note, however the possibility of analogical levelling in a paradigm.

The acquisition of verbal case marking affixes would give stability to the pronominal affixation system as a whole, in that the latter now has a significant function, that of role identification (see 4.l.6.).

A discussion of the various features of the verbal paradigm in Chepang, in comparison with features of other Tibeto-Burman and non-Tibeto-Burman languages, will be given in Chapter 6.

## CHAPTER SIX

## COMPARATIVE MORPHOLOGY

### 6.1. INTRODUCTION

The previous chapter was given to a discussion of possible processes of development for the pronominal affixation in Chepang. These proposals were based on internal evidence taken mostly from a single dialect, that of Maiserang village in the south-eastern region. But a language such as Chepang does not, of course, develop in isolation. Some of its history is shared with related languages and, in particular, the various dialects must share a good deal of common development. Furthermore the language is potentially subject to diffusive influence, both from other Tibeto-Burman languages, and from non-Tibeto-Burman neighbours.

In this chapter, therefore, it is intended to compare the pronominal affixation of the Maiserang dialect with that of other dialects, and of other languages in the area, in order to see how well the proposed development fits in with the overall scene in this respect.

The next section (6.2.) describes the pronominal affixation in the other dialects of Chepang while the third (6.3.) gives a brief survey of the situation in the Tibeto-Burman languages in general. The fourth section looks at similar affixation systems in languages of other families. This last section (6.4.) has been included because the question of possible outside influence on the development of pronominal affixation in Tibeto-Burman has been the subject of considerable discussion (Hodgson, 1856; Maspero, 1946; Kuiper, 1962; Bauman, 1975 and others). The discussion is also in line with one of the goals of this work, mentioned in the Introduction (1.2:13) - that of using the findings of a detailed study of the verb in Chepang to throw some light on the general problem concerning the origins and interrelations of the pronominal affixation systems of languages in the area.

### 6.2. DIALECTS OF CHEPANG

### 6.2.1. GENERAL DISCUSSION

In the introductory chapter it was mentioned that Chepang can be divided into three dialects on the basis of differing verbal affixation for the Pronominal Group forms (l.l.12.). These are:

1. The eastern dialect, divided into northern and southern (Maiserang) subdialects.
2. The sguth western dialect.

1i1. The western dialect, divided into the mid-western and Bujheli subdialects.

The difference between the eastern and western dialects is such that, when coupled with the considerable lexical variation, mutual intelligibility is reduced to a fairly low level. The south-western dialect is somewhat of a hybrid, with features from each of the other two dialects. Differences across subdialects are minimal, and represent no serious barrier to communication.

The main features of the Pronominal Group systems for each dialect and subdialect are discussed below, in terms of their contrast with the speech already described in this work - the (south)eastern dialect as spoken in Maiserang village. Many of these differences can in fact be described in terms of the application, or non-application, of the diachronic rules of phonological change described in 5.4.1.3.

### 6.2.2. EASTERN DIALECT

### 6.2.2.1. Northern Subdialect of Eastern Chepang

## Tense

The most obvious difference between the northern subdialect and the Maiserang form is in the Past Tense affixes, which, as noted earlier, display considerable irregularity (5.2.4.7:165). In particular, in the northern area the initial ?a syllable of the usually disyllabic Past forms -?aka/?ala is often, though not always, omitted. The following example compares the forms in the two subdialects:

1. Northern
?al?-ka-n
take- $\mathrm{Pt}-\mathrm{Ag}$
'He takes.'

Southern (Maiserang)
?al?-?aka-n
take- $\overline{\mathrm{Pt}}-\mathrm{Ag}$
'He takes.'

This difference represents the lack of application, in the northern subdialect, of the Tense rule (5.4.1.3, No. 5b) which adds this initial syllable. The exact circumstances under which this syllable does appear
are not certain, though its function appears to be Emphatic rather than epenthetic.

Another difference, found only in the speech of the oldest man born in the northern area (he claimed to be 100 years old), and in a folk tale, is the use of -ka instead of -?ala for the Past Tense in the lst Person Exclusive forms, to give:

$$
\begin{aligned}
& \text { 2. ?al?-ka-n instead of: ?al?-?ala-n? }
\end{aligned}
$$

$$
\begin{aligned}
& \text { 'I take it.' 'I take it.' }
\end{aligned}
$$

This difference results from a lack of application of the Dissimilation rule for the Past Tense (rule 5c.).

If the old man's speech was truly representative of the language or four generations ago then the dissimilation of $k \rightarrow i$ is a fairly recent change. The Past Tense affix that he used is in fact the closest of any of the postulated original form *ka?. It is possible, of course, that this wider use of $k$ in Past affixes represents a levelling of former irregular forms, but it is significant that the -ka affix did occur in the older man's speech and not in that of younger persons.

Another, less noticeable difference in this subdialect is the use of unaspirated $t$ in all the Goal affixes, not just those which occurred with the lst Person as is the case in the Maiserang speech. This gives, for instance:
3. Northern
?al?-na?-tay ?al?-na?-thay
take-NPt-Gl
'He is taken.' 'He is taken.'
In this instance it is lack of application of the Aspiration rule (see 5.4.2.3:175) which has given the northern forms. This again results in a uniformity consistent with the proposed original Goal affix form *ta?.

There is also a difference in the Non-Past and Indefinite Future forms, in that vowel lowering has taken place even before a semivowel. In other words the exception to the Vowel Split rule (rule 4.) does not hold for the northern subdialect. The result is Non-Past forms such as the following:
4. Northern Subdialect
goapl-?l cyaw-na -w
Gopal-Ag see $-\overline{\mathrm{NPt}}-\mathrm{Ag}$
'Gopal sees it.'

Southern Subdialect
gopal-? 1 cyaw?-na -w?
Gopal-Ag see -NPt-Ag
'Gopal sees it.'

Note that the final glottal is evidently absent in the northern subdialect (and, in fact, in all other dialects). Even in Maiserang speech a glottal stop at the end of a verb is difficult to detect and perhaps often elided.

### 6.2.3. WESTERN DIALECT

### 6.2.3.1. General Features of Pronominal Affixation

Past Tense
The western dialect also shows significant differences in the Past tense - in this case there are in fact two sets of Past Tense affixes (see charts 15 and 16 in App.l.). The first set, the 'k-affix' set, is very similar in form to the eastern Past Tense affixes, both being derived from *ka? (5.2.4.7.). The second set, the 't-affix' set is formally similar to the eastern Non-Past, except that the initial $n$ of the Non-Past is replaced by a $t$. In other words the t-set is derived from the protoform by the same changes that have applied to the north eastern Non-Past - this includes the absence of vowel lowering before a semivowel. Both the t-affixes and the k-affixes are used for situations in the past, but the former include a Perfective aspect, that is, they denote situations that are viewed as complete (compare with the Maiserang form ?ata? - 3.3.4:108). In contrast the k-affixes are unmarked in this respect.

As with the north-eastern subdialect the initial $? V$ syllable is optional for the Past k-forms. Examples of the two Past Tense forms in the western dialect are:

```
5a. ?anamh wan -(?a)ka-ca k-form, Non-Perfective
before come- Pt -Dl
    'The two came some time ago (possibly more than once).'
    yoh wan -ta -ca t-form, Perfective
    yesterday come-PtPf-D1
    'The two came yesterday (as a single complete act).'
```

Non-Past Verb Forms
As with the north-eastern subdialect vowel lowering takes place
before a semivowel (see ex.4. above).

## Case Affixes

The Perfective (t-form) Past affixes of the western dialect are very similar in form, though not in meaning, to the Goal affixes found in the eastern dialect, as the following example shows:
6. Western Dialect

Perfective Past t-form

$$
\begin{aligned}
& \text { ni? -ta -co } \\
& \text { Zauah-PtPf-Di }
\end{aligned}
$$

laugh-PtPf-D1

$$
\begin{aligned}
& \text { (North)Eastern Dialect } \\
& \text { Past, with Goal affix } \\
& \text { ๆl? -?a-ta-cə } \\
& \text { Zaugh-Pt-Gl-Dl } \\
& \text { 'The two were Zaughed at.' }
\end{aligned}
$$

'The two Zaughed.'
In view of the similarity, and possible confusion between the two forms, it is not surprising to find that the western dialect has lost, or nearly lost, the Goal case marking affix. There is some evidence to show that the Goal may occasionally be marked, particularly when it cannot be confused with Tense, as in the following example (from the Bujheli subdialect):
7. ?ow?-kay bhalu-?i cum -lak-to-toy that-Gl bear-Ag seize-Int-Gl-PtPf
'The bear seized him.'
(where Int - Intentive - see 6.2.3.2.).
Although it is not absolutely certain that the to is a Goal marker in this example, this is exactly the situation in which we would expect to find one in the Maiserang dialect, because the Goal participant (a person) is both given, and higher placed in the animacy hierarchy than the bear, so it is highly favoured for cross-reference (2.3.4., 2.3.5.).

The fact that Goal marking has not entirely disappeared supports the suggestion that there were, at some stage, two separate morphemes, rather than the alternative view that the Goal morpheme was derived from a former Perfective through change of function (or the reverse, that the Perfective was derived from a Goal marker - see 5.2.4.7.).

There is similar homophony between the Past Tense and Goal (strictly, Benefactive) affixes in the closely related Hayu language (see 6.3.2.2.).

The fact that the Goal case affix is rarely used in the western dialect raises the question as to how effective the remaining verbal case marking might be. In connection with the eastern dialect it was pointed out that, although verbal case marking was not always present in Intentive verbs, the total paradigm is such that it is always possible to tell whether the NPCR is Agent or Goal (2.2.8.). However this is only true because the eastern dialect has Goal case affixes - if these were absent there would be confusion between, say, forms with the lst person as Agent, and those with a lst Person Goal. That is, a form such as ?al?-na-n? could mean either 'I take it' or 'He takes $m e .^{\prime}$, because a verb with a lst Person Singular Agent has no overt Agent marking in the eastern dialect. What has happened in the western dialects, however, is that the use of the Agent form -?u has spread to these particular forms, thus preventing the ambiguity that would other-
wise have occurred. The verb form of 'I take it' is ?al?-n-u-n with the -u indicating that the lst Person is Agent. This therefore contrasts with ?al-na-n, where the lst Person is Goal.

Historically, in terms of the development of affixation, this dialect difference can be accounted for by assuming that the combination of the Tense forms with the other Pronominal Group elements, including the case marker, took place (for the western dialect) before the loss of the - ?u Agent marker. This allowed regressive assimilation to take place in line with rule l. (5.4.1.3.), so that the *-a vowel of the Tense form becomes -u. The stages in the development would then be:
8. Development of wan? -n -u -bring-NPt-Ag-1E 'I take it.' (Western dialect)

1. Tense, PN comb. wan? nə?-?u-na
i1. Rl, Assim. wan? nu?-?u-gu
2. R2, ?V Loss wan? nu?-ŋu
vi. R3, Resyll. wan? n-u-n?
vi1. R4, V Split 'wan? $n-u-n$ ?
xi. Final form wan?-n-u-n (with loss of final glottal)

The Past forms are similarly wan?-t-u-n (Perfective) and wan?-(?a)l-u-n (Non-Perfective), with addition of - ?a, and $k \rightarrow 1$ in the latter, according to the Past Tense change (rule 5, 5.4.1.3.). In contrast, the development of the equivalent verb in the eastern dialect would be, (with Tense combination as a later stage):
9. Development of wan? -na -n? bring-NPt-1E 'I take it.' (Eastern dialect)

1. PN Comb. wan? nə? ?u-ŋə

1i. Rl, Assim. wan? na? ?u-ŋu
111. R2, ?V Loss wan? na-n-u
vi. R3, Resyll. wan? na-п?
vii. R4, V Split 'wan? 'na-n?
xi. Final form wan?-na-n?

Another significant difference between the eastern and western dialect is that the alternative Agent form -n of the eastern dialect has become -n in the west, fluctuating fairly freely with nasalisation of the preceding vowel, in the west. And, wherever this substitution has occurred in the paradigm, an accompanying Past $k$-form changes, in compliance with the Past Dissimilation rule (rule 5c), to an l-form. The contrast between the eastern and western dialects is shown in the following example:
10. Western Dialect
?amh bay?-?ala-n
food give-Pt -Ag
'He gave food.'

These changes lead to a superficial similarity in the western dialect between Intentive 3rd Person Agent forms, such as illustrated above, and lst Person Non-Intentive forms, as with:

## 11. Western Dialect

$$
\begin{aligned}
& \text { boy?-?ala-n } \\
& \text { give-Pt -Ag } \\
& \text { 'He gives (to me).' }
\end{aligned}
$$

$$
\begin{aligned}
& \text { wan }- \text { ?ala- } \\
& \text { come-Pt }-1 E \\
& \text { 'I came.' }
\end{aligned}
$$

The verb root type (as predominantly Intentive or Non-Intentive) usually enables these to be distinguished. It is not difficult to see how this change came about, if the overall paradigm of western Chepang is studied (chart 15, App.l.). Because this dialect has no (regular) Goal affix the result is that in the $3-1$ section of the paradigm, where the lst Person Goal dominates for cross-reference, the verb forms are similar to those for the lst Person Non-Intentive (ex.ll. above). The forms from the 3-1 section of the paradigm have generalised to spread to other areas where the 3rd Person is Agent, in particular the 3-3 section, to give, for example wan?-lak-?ala-n 'He brought him.' with - D now functioning as Agent marker, not lst Person Exclusive. Then, because in all dialects the $2-3$ section is the same as the $3-3$ section (though with the additional CIF form -te?), the $2-3$ forms in the western dialect also use -?ala-n, as in wan?-te?-?ala-n 'You brought him.'. The use of ?ala-n as an Agent-cross-reference verb ending for the Past, has therefore spread from the 3-1 to the 3-3 section, then from this to the 2-3 section of the Past (Non-Perfective) paradigm.

## Other Differences

There are two other differences between the western and eastern dialects that are worth noting. These are, firstly, the palatalisation of the initial consonant in certain affixes, to give -cya and -lyan as western forms where the eastern dialects have -ca(?) 'Indefinite Future', and -lan 'Purposive'. Also the western dialect uses -moy as an Irrealis Nominaliser instead of the eastern -sa, except for villages near the south-western (Khayar river) region, where -sa is used.

These differences, though relatively minor, are diagnostic of the different dialects.

Effects of Affixation Differences on Mutual Intelligibility
Although there are only two major differences between the eastern and western pronominal systems, and a large degree of overall similarity, the differences are such as to cause considerable difficulty in communicating across dialects. This is especially the case for a person from the eastern dialect who is seeking to understand a western speaker, because the easterner will encounter verb forms which are formally similar to those found in his own dialect, but which have very different functions. These include in particular the Perfective Past t-forms, which closely resemble the eastern Goal marked verbs, and those forms which have -?ala-n for Non-lst Person Agents - these being identical with the eastern lst Singular. It is not nearly so difficult for a western Chepang to understand an easterner, since he can correctly interpret the Past Tense k-forms used by the eastern speaker, though their aspectual sense may seem odd.

This asymmetry of communication difficulty became very obvious when I did some fieldwork amongst the Bujheli, accompanied by three Chepang speakers from the Maiserang (eastern) region. The Maiserang men had a great deal of difficulty in understanding the Bujheli, but the Bujheli had relatively little trouble in understanding the eastern visitors, presumably largely because of the reasons outlined above.

### 6.2.3.2. Bujheli Subdialect

The verb forms of Bujheli are very similar to those of the remainder of the western dialect. A cursory examination of texts makes the two subdialects appear to be considerably different, but this is simply because the Bujheli tend to use the Perfective Past (t-forms) in narrative while other western dialect speakers prefer the Non-Perfective (k-forms).

One difference that does occur is the spread of the use of the t-form as an indicator of the Non-Perfective. In all other subdialects and dialects (including eastern), the lateral is the result of dissimilation. In Bujheli, however, it appears as a Non-Perfective Past marker in those (originally $k$-form) affixes which have become reduced to - ?a elsewhere. This gives the following contrast:
12. Bujheli

$$
\begin{aligned}
& \text { ?al-?al } \\
& \text { go -Pt }
\end{aligned}
$$

'He went.' (Non-Perfective) 'He went.'

There are also two Negative forms for Primary verbs, apparently reflecting the same Perfective - Non-Perfective opposition. The formal
distinction is made by metathesising the more common IV Negative to give the Non-Perfective VI, as in:
13. Bujheli (Non-Perfective)
?al-? al
go -Neg
Other Dialects (and Bujhel1
?al-lo
go -Neg
'He did not go.'
'He did not go.'
The other western dialects do not appear to maintain this aspectual opposition in the Negative forms.

## Intentive Marker

The Bujheli sub-dialect is also distinctive in that it uses an affix lak/lat which indicates that the situation has a Goal, that is, it is fully Intentive, as for example:

```
14. kuy?-?i co? -kay joyk-lak-?ala-\eta
    dog -Ag child-Gl bite-Int-Pt -Ag
    'A dog bit the child.'
```

It appears to be used particularly for situations which do not regularly have a Goal, though it is not a Causative, since there is no participant regarded as an Agent. Its use is perhaps more like the Hayu Benefactive marker (6.3.2.2.). An example of 1ts use with a normally non-Intentive situation 1s:
15. ram gopal-kay mu -lak-?a

Ram Gopal-Gl remain-INt-Pt
'Ram waited for Gopal.'
Notice that this morpheme is not a regular Goal case marker - there are no Person and Number affixes, representing a Goal participant, to accompany it in the verb. Indeed it may occur in conjunction with an Agent marker, as in example 14 above. It does however, partly make up for the lack of Goal case marking, especially in the cases of potential ambiguity (noted in connection with example ll. above) where the verb root is not clearly Intentive or Non-Intentive, as in:

```
16a. gopal gi? -lak-?al
    Gopal laugh-lnt-Pt
    'Gopal laughed at (someone).'
    b. gopal gl? -?al
    Gopal laugh-Pt
    'Gopal laughed.'
```


### 6.2.4. SOUTH-WESTERN DIALECT

This dialect has characteristics from both the eastern and the western dialects, although in the most important respects it is eastern. That is, it has only the k-set of Past Tense affixes and uses Goal case marking freely in the verb. It also uses -sa as the Irrealis Nominaliser. However the south-western dialect does have some western characteristics. In particular it uses the -(?)u Agent affix form with lst Person Intentive verbs, as does the western dialect, and also has, as the alternative Agent form, the affix - $\quad$, with the accompanying l-forms of the Past Tense (6.2.3.1:187). In fact the use of the l-forms has spread to other areas of the paradigm, to give forms such as:

| 17. South-western Dialect | Eastern Dialect |
| :--- | :--- |
| co? -lam payh -?ala-y | co? -lam payh -?aka-y? |
| chizd-Pl return-Pt -Pl | child-Pl return-Pt -Pl |
| 'The children returned.' | 'The children returned.' |

Although this dialect does use the - $n$ form of the Agent affix the - $n$ form is also retained (often with a following vowel, to give -no), though it is not clear just what the difference in function is between the two:

```
18a. co? hlok-ka-na
    chizd send-Pt-Ag
    '(He) sent the chizd.'
    may? je?-Ia-n
    meat eat-Pt-Ag
    'He ate the meat.'
```

The two forms may perhaps preserve the Imperfective-Non-Perfective aspectual opposition, with the k-form being the Non-Perfective, as in the western dialect.

### 6.2.5. SUMMARY

The characteristics of the various dialects and subdialects that have been discussed in the previous sections of this chapter can be summarised as follows:

TABLE 7
DISTRIBUTION OF PRONOMINAL FEATURES


One feature which does not distribute according to the above grouping is the form of the Sequential Setting marker (4.2.5.2.). This is distributed as follows:

SUB-DIALECTS

| SE | NE | SW | W | Bujheli |
| :---: | :---: | :---: | :---: | :---: |
| \{-bət tiko? |  |  |  |  |
| - ?ak tiko? | bot $i$ |  | \{met | mitti |

This would appear to support the position that the SW dialect has borrowed certain forms from the western dialect, in particular the non-Bujheli section. These borrowings would give rise to characteristics v. - vii., in which the south-western speech principally differs from the eastern form. In terms of the major systemic differences (single set of Past affixes, use of Goal marking), the south-western dialect follows the eastern pattern, and is therefore grouped with it.

The south-western group is apparently a section of eastern Chepang that have come into close geographic proximity with the western Chepang, because of eastward migration of the latter. As a result of this contact they have borrowed some of the western features - those in fact which would be susceptible to borrowing. The use of the Agent case affix with the lst Person singular, for instance, is not necessary in a dialect with Goal affixes, but it represents a regularisation of the verbal paradigm and therefore could easily be brought into this dialect. The alternative Agent form, - $\quad$, also results in a levelling of the paradigm, though in this case it leads to homophony between the lS-3 and 3S-3 sections, as noted earlier (6.2.3.1:187).

### 6.3. OTHER TIBETO-BURMAN LANGUAGES

### 6.3.1. TYPES OF PRONOMINAL SYSTEMS

Those Tibeto-Burman languages which possess pronominal affixation in the verb (the so-called 'pronominalised' languages - Hodgson, 1857), can be categorised according to a variety of criteria. Bauman (1975: 80) used the following features to classify these pronominalised languages:

1. The presence of pronominal prefixes on the verb as well as suffixes. Languages which have prefixes are called 'prefixing', though all such languages have suffixes also. Languages which do not have prefixes are termed 'suffixing'.
2. The presence in the verb of object cross-referencing forms, giving what Bauman calls transitive agreement.

1i1. The possession of a 'discrete' as against a 'syncretic' affixation system. These are defined as follows:

> "A discrete system... is one in which subject and object are each specified affixally; a syncretic system one in which the subject and object roles appear to be fused into a single affix." (Bauman, l975:2ll).
iv. The occurrence of grammatically conditioned variants of the pronominal forms - in Bauman's terms, the feature of 'concord' (Bauman, 1975:83). The conditioning factor is often tense, aspect or mood. The variation typically includes fusion, hence it is a measure of the agglutinativity of the affixation.
v. The possession of reflexive affixes in the verb.

There is one problem that arises in connection with these features. This is in the definition of discrete and syncretic presented in relation to the third feature. It is not clear from this definition as to how zero representation of a pronominal category should be viewed. In the case of a form such as the Chepang wan? -?a-ta-n? '(He) brought me.', there are no overt affixes referring to the subject (Agent). Yet because of the overall paradigm pattern the verb form can only be used with a 3rd Person subject. Is this to be viewed as an instance in which the subject is specified, though covertly, or is it to be regarded as in some way a fusion of the 3rd Person subject with the object (Goal) affixes? The answer to this question would affect the classification of Chepang as discrete or syncretic. The language does possess one truly fusional form -cl, denoting a 2nd Person singular Agent acting on a lst Person singular Goal, but this could be regarded as atypical. If zero representation is treated as separate marking then Chepang can best be described as discrete.

Only a few languages have been described as having verbal Reflexive affixes, though this may be due to incomplete data in many cases. Other languages simply use a free pronoun to indicate reflexive situations.

The result of classifying the Tibeto-Burman pronominalsed languages according to the criteria given above (except for reflexivisation) is summarised in the following table, which is a rearrangement of that given by Bauman (1975:80), plus the addition of five other pronominalised languages - Magar (western dialect), Sunwar, Thulung, Kulung and Khaling.

TABLE 8
TYPOLOGICAL CLASSIFICATION OF TIBETO-BURMAN PRONOMINALISATION

|  | Non-prefixing |  | Prefixing |  |
| :--- | :--- | :--- | :--- | :--- |
|  | No Object <br> affixes <br> Mhaling <br> Manchati | Object <br> affixes | No Object <br> affixes | Object <br> affixes |
|  | Tiddim Chin <br> (colloquial) <br> Kanauri <br> Bunan | Hayu <br> Kulung <br> Thulung <br> Sunwar <br> Bahing <br> Kachin <br> Nocte | Tiddim Chin <br> (formal) | Kham |

### 6.3.2. COMPARISON OF PRONOMINAL SYSTEMS

### 6.3.2.1. Classification

In comparing the various pronominal affixation systems of TibetoBurman with that of Chepang, the basic taxonomic system used will be that of Shafer (1974), mainly because his classification is more complete in the areas of interest than that of Benedict (1972). Shafer divides the Tibeto-Burman languages into three divisions: Bodic, Burmic and Baric (he does not recognise a Tibeto-Burman grouping). Most of the pronominalising languages, including Chepang, are found in the Bodic division, a few are found in the Burmish division, while only one, Nocte, has been clearly identified in Baric.

The main sources for the various languages are giver in Appendix 1 , as well as diagrams of Shafer's and Benedict's classifications.

### 6.3.2.2. Bodic Division

## West Central Himalayish Section

The West Central Himalayish section of Bodic is represented by Chepang, Hayu and Magar. There is great diversity of affixation type across these three languages (charts ll-18, 30, App.1.). Hayu has a pronominal system that is perhaps the closest of any to Chepang, while western Magar has a minimal system, with no object crossrreference and eastern Magar has no pronominal affixation at all.

Hayu: Hayu differs from Chepang in that it does have a certain amount of tense concord, seen, for example, in the Non-lst Person Dual Reflexive affixes: -nachlk 'Non-Past', -nache 'Past' (see also exx. l9a, b.). It is similar to Chepang in that it has a type of Goal (Benefactive) marking in some sections of the verbal paradigm, especially where there is a 3rd Person Goal and a lst/3rd Person Agent. This system is not so developed as that of Chepang however, and the Benefactive affix often replaces the tense form. The Past-Non-Past distinction is therefore lost in these cases, except where there is a lst (Inclusive/ Exclusive) Plural Agent and a 3rd Person Goal. Here all four possible combinations are found:

| 19a. | NPt | $\begin{aligned} & \text { haa-ko-k } \\ & \text { give-Pl-lNPt } \end{aligned}$ | NPt Ben. | $\begin{aligned} & \text { haa -ti -ko-k } \\ & \text { give-Ben-Pl-lNPt } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 'We give him.' |  | 'We give TO him.' |
| b. | Pt | $\begin{aligned} & \text { haa -kiko-n } \\ & \text { give-Pl -lPt } \end{aligned}$ |  | $\begin{aligned} & \text { haa -t }-k o-n \\ & \text { give } \overline{B e n}-\mathrm{Pl}-1 \mathrm{Pt} \end{aligned}$ |
|  |  | 'We gave him.' |  | 'We gave TO him.' |

As it happens this lst Plural - 3 section does not have a Goal affix in Chepang, because the lst Person Agent dominates for cross-reference here.

Hayu, like Chepang, has a Dual Person category and makes an InclusiveExclusive opposition for lst Person Dual and Plural. No Possessive cross-reference has been recorded for Hayu.
Magar: Although the Magar pronominal system is relatively simple it does include prefixing, particularly for the Past tense. No Dual forms are given, but an Inclusive-Exclusive distinction is recorded for lst Person Plural with the Subjunctive: ažyain 'We (Inclusive) may eat.' and ažyanin 'We (Exclusive) may eat.' (chart 30, App.1.).

Pronominal Elements of West Central Himalayish Languages: The table below (Table 9.) presents the pronominal elements as found in (1.) the (free) pronouns, (ii.) the Intransitive verb, (ii1.) the Transitive verb (where relevant this is divided into Subject and Object

TABLE 9
PRONOMINAL ELEMENTS IN WEST-CENTRAL HIMALAYISH

|  |  |  | 1 |  |  | + 2 |  | 2 |  |  | 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | S | D | P | D | P | S | D | P | S | D | P | Neg | Refl |
| Chep. | Pn | na | nici | ni |  |  | nan | nioji | nin | ?ow? | ?ow?nis | Tow?may? | Vb-la <br> Vbma?- | -sa |
|  | $\operatorname{ITr}$ | -пə | -пəсə | $\begin{aligned} & \text {-nasə } \\ & -n i \end{aligned}$ | -tayhcə | -tayhi | -te? | -te?-jo | -te? | - | -cə | -? i |  |  |
|  | Ag | -nu | -пucu | -ヵusu | -t əyhcu | -t əyhni | -te?-?u | -te?-ju | -te?-ju | -u | -cu | -ni |  |  |
|  | Gl | $-\tan$ ? | -tan?ca | -tani | -t əyhcə | -tayhi | -te? | -te?-jo | -te?-? i | -tha | -t hace | -thasa |  |  |
| Hayu | Pn | gu | gu | gu |  |  | gon | gonche | gone | wathi | wathi | wathi | maVb- | -ci |
|  | Pos. | a! | apche | aki | uijche | unki | $u$ | unche | uni | wathim | wathim | wathim |  |  |
|  | ITr | $\begin{aligned} & -n 0 \\ & -40 \end{aligned}$ | -cho ${ }^{\mathrm{k}} \mathrm{n}$ | -kof ${ }_{\text {k }}$ | -chif $\begin{aligned} & \text { k } \\ & n\end{aligned}$ | $\begin{aligned} & \text {-ke } \\ & \text {-ikən } \end{aligned}$ | - | -chik <br> -Nche | $\begin{aligned} & \text {-ne } \\ & \text { - Nne } \end{aligned}$ | - | -chik <br> -Nche | $\begin{aligned} & \text {-me } \\ & \text {-Nme } \end{aligned}$ |  |  |
|  | $\operatorname{Tr}$ | $\begin{aligned} & -70 \\ & - \text { y } \end{aligned}$ | -chok <br> -chors | $\begin{aligned} & \text {-kok } \\ & \text {-kor) } \end{aligned}$ | $-\operatorname{chi}\left\{\begin{array}{l} k \\ n \end{array}\right.$ | $\begin{aligned} & \text {-ke } \\ & \text {-ikəŋ } \end{aligned}$ | - | -chik <br> -Nche | $\begin{aligned} & \text {-ne } \\ & \text {-Nne } \end{aligned}$ | - | -che | -me |  |  |
| Magar | Pn | na | kannis | kanko |  |  | nan | nakunis | naku | ase |  | ase | maVb- | -s |
|  | $\operatorname{Trr}$ | -an <br> na an |  | -in <br> ka as |  |  | $\begin{aligned} & \text {-da } \\ & \text { na_(a) } \end{aligned}$ |  | -danis na (a) | -a |  | -a |  |  |

forms), for the languages of this section. It should be noted that this, and following tables, sometimes present an abstraction of the actual paradigm forms, in order to simplify and highlight the similarities and differences between languages. The results should be compared with the paradigms given in Appendix l. Where major alternate forms occur these are shown - such as when possessive forms differ markedly from the free pronouns.

## West Himalayish Section

To the west of Nepal are the languages of Shafer's West Himalayish section. Several of these languages are pronominalising, including Bunan, Manchati, Kanauri and Chaudangsi (chart 29, App.1.). For the purposes of this study $I$ have included the Kham language (unclassified by Shafer) along with these, on the basis of similar pronominal elements - especially because of the unusual -rV Plural affix (chart 19, App 1.).

Kham: Kham does differ from the West Himalayish languages in that it has a complex prefixing affixation which includes object cross-reference while the others have a relatively simple suffixing affixation. But as we have already seen the complexity, or lack of it, in pronominal affixation apparently has no connection with genetic relationship. Kham is highly agglutinative, with discrete subject and object affixation lst and 2nd Person subject (Agent) and 3rd Person object (Goal) forms are prefixed, in the opposite roles they are suffixes.

Bunan, Manchati, Kanauri and Chaudangsi: These four languages in general do not cross-reference objects, though Bunan does cross-reference a lst Person Goal with a 3rd Person Agent in some cases (Grierson, 1909: v3.1.). Chaudangsi has a bare minimum of pronominal affixation.

Pronominal Elements: The pronominal elements of the above languages are presented in Table 10.

TABLE 10
PRONOMINAL ELEMENTS IN WEST HIMALAYISH

|  |  | 1 |  |  | $1+2$ |  | 2 |  |  | 3 |  |  | Neg | Refl |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | S | D | P | D | P | S | D | P | S | D | P |  |  |
| Kham | Pn | na | gin | ge: |  |  | nə(n) | jin | je | 'nolo | 'noni | ' nora | maVb | -si |
|  | ITr | na- | gin- | ge- |  |  | กə- | jin- | je- | - | -ni | -ra |  |  |
|  | $\operatorname{Tr}_{0}{ }_{0}$ | $\begin{aligned} & \text { na- } \\ & -n(a) \end{aligned}$ | $\begin{aligned} & \text { gin- } \\ & -\operatorname{si}(n) \end{aligned}$ | $\begin{aligned} & \text { ge- } \\ & -\mathrm{si} \end{aligned}$ |  |  | $\begin{aligned} & \text { nə- } \\ & -n i \end{aligned}$ | $\begin{aligned} & \text { jin- } \\ & -\mathrm{cin} \end{aligned}$ | $\begin{aligned} & \text { je- } \\ & -c i \end{aligned}$ | -o | $\begin{aligned} & -n i \\ & \text { yara- } \end{aligned}$ | $\begin{aligned} & \text {-rə } \\ & \text { yara- } \end{aligned}$ |  |  |
| Bunan | Pn | (in)gi | higran | higranji | eran | eranji | han | hannyispi | han 1 | tal | talnyispi | talji | maVb |  |
|  | $\operatorname{ITr}$ | -9 | -9 | -9 |  |  | -na | -gni | -gni | -re | -gre | -gre |  |  |
| Man. | Pn | gye | gyeku | nyere | nyekun | nyendu | kakyena | kyeku | kyere | du | doku | dore |  |  |
|  | Itr | -9 | -ši | -ni |  |  | -na | -ši | -ni | - | -ku | -re |  |  |
| Kan. | Pn | go/an- | niši | nigan | kāson | kisoja: ' | ka(n) | kist | kina: ( n ) | do | dokson | dogoa | maVb | -so |
|  | $\operatorname{Tr}$ | - $\mathrm{g}^{\prime}$ | -ic | -iñ | -ic | -se | -on | -ic | -iñ |  |  |  |  |  |
| Chaud. | Pn | ji |  | in |  |  | gan |  | gan i | u/vo |  | usi | maVb |  |
|  | $\operatorname{ITr}$ | -g |  |  |  |  | -n |  |  |  |  |  |  |  |

East Himalayish Section
The East Himalayish section includes the languages commonly known as Kiranti (Rai-Limbu). Although the area covered by these languages is not much greater than that occupied by the Chepang, there are at least seventeen different Kiranti languages (excluding Hayu, though it is sometime grouped with them). It is likely that most, if not all of these languages have pronominal affixation, though $I$ have reasonable data on only six of them. The six languages are: Bahing, Sunwar, Thulung and Khaling (Western branch of East Himalayish), as well as Kulung and Limbu (Eastern branch) (charts 20-25).

With this section also there is a great diversity of affixation types. Limbu has a complex affixation system that includes prefixing while Bahing has an equally complex system that is purely suffixing. At the other extreme is Khaling, which has simply a set of Intransitive and Transitive affixes, the latter not cross-referencing the object (except an occasional Plural object Number).

Limbu: As well as being the easternmost of the Kiranti languages Limbu is also the most distinctive. This is mainly because of its prefixes, which consist of a $k$ '- used when the 2nd Person is a participant (except when there is a lst Person Agent), plus a $\bar{a}$ - used for list Person inclusive and also me for a 3rd Person Plural. This gives the following distribution of the prefixes:

CHART 6

## LIMBU PREFIXES

| Actor$1$ | Intentive |  |  |  | Non-Intentive $\varnothing$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | $1+2$ | 2 | 3 |  |
|  |  |  |  |  |  |
| $1+2$ |  | a- |  | $\overline{\text { a }}$ | a- |
| 2 | àk' | āk' | $k^{\prime}$ - | k'- | $k^{\prime}$ - |
| 3 | me- | ame- | k'me- | me- | me- |

Compare this with the distribution of the Chepang CIF form -te? and the Inclusive -tayn:

## CHART 7

DISTRIBUTION OF CHEPANG -te? AND -təyh

|  | Intentive |  |  |  | Non-Intentive |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | $1+2$ | 2 | 3 | $\varnothing$ |
|  |  |  |  |  |  |
| $1+2$ |  | -t $\mathrm{O}^{\text {yh }}$ |  | -t $\mathrm{t}^{\text {yh }}$ |  |
| 2 | -te? |  | -te? | -te? | -te? |
| 3 |  | -t $\boldsymbol{r l}$ ¢ | -te? |  |  |

Note that the distribution of the k'- prefix is strikingly similar to that of the Chepang suffix, -te? (chart 7), the Gyarong prefix, ta/ka (chart 8, p.202). This suggests that originally the Limbu prefix had a form and function similar to the Chepang CIF marker -te? and that later the form was replaced by the $k '$ from the 2nd Person pronoun khene. Thus, in Limbu, as with Chepang, the quasi-pronominal function of the CIF marker has led to its being treated as a pronominal element (compare 5.2.2.).

The a- prefix in Limbu has a similar distribution to the Chepang -təyh, although the latter is not used when the speaker and addressee have different roles, as is the Limbu form. The Limbu me- Plural prefix has no direct equivalent in Chepang. It does, however, correspond to the Chepang NP Collective form -may?.

Other East Himalayish Languages: The other five East Himalayish languages are fairly similar to each other especially in regard to the pronominal elements found in the paradigms (Table ll). The variation is mainly in terms of complexity - Bahing, Sunwar and Thulung being approximately equal in this respect, while Kulung and Khaling have simple systems. It is possible however that the data for these last two languages may be incomplete, especially for Kulung.

Pronominal Elements: The pronominal elements in these six languages are given in the following table:

TABLE 11
PRONOMINAL ELEMENTS IN EAST HIMALAYISH


### 6.3.2.3. Burmic and Baric Divisions and Gyarong

The pronominalised languages to the east of Nepal belong to one of three divisions: Burmic (Rawang, Kachin, Lushei, Tiddim Chin charts 27, 32, App.1.), Baric (Nocte) and Bodish (Gyarong - chart 26, App.1.). Although Gyarong has been placed in the Bodish division by both Shafer and Benedict this may have been because diffusion has made it seem closer to the Tibetan languages than in fact it is (see Nagano, 1979). As far as the pronominal forms themselves are concerned Gyarong would appear to be closer to Burmic (compare, for instance, the 2nd Person pronouns: Gyarong no, Rawang na but Tibetan khyod, also the pronominal elements in Table l2 below). Gyarong, like Rawang and Tiddim Chin, has a to- prefix showing similarities with the Chepang CIF marker -te? and the Limbu k'- prefix (chart 8).

The pronominalised languages named above, Rawang, Kachin, Lushei, Tiddim Chin, Nocte and Gyarong all have relatively simple affixation systems, although Rawang, Lushei and Gyarong and formal Tiddim Chin have prefixes, while Rawang, Lushei, Nocte and Gyarong have some Object cross-reference. The main feature of interest in these languages, as far as comparison with Chepang is concerned, is the presence of an evidential or information flow type affix in Rawang, colloquial Tiddim Chin and Gyarong. The distribution of the affixes in each of these languages is shown in chart 8 below and should be compared with that given above for Chepang and Limbu (pp.199, 198).

CHART 8
DISTRIBUTION OF RAWANG è-, TIDDIM -te? AND GYARONG tə/kə-


Note that although there is a basic similarity of distribution as compared with the Chepang -te?, there has been some spread of the use of the morpheme to areas where the 2nd Person is not involved, and in the case of Gyarong, to where a lst Person is Agent (first row of chart 13.).

Another feature of interest in these languages is that of ten the Negative follows the verb root, and, in one case, Lushei, the form -lo is also similar to the Chepang -le Negative.

Pronominal Elements: The pronominal elements of these languages are shown in Table 12 below.

### 6.3.2.4. Distinctive Features of Chepang Pronominal Affixation

Chepang is distinctive amongst the Tibeto-Burman languages (as far as is known) in respect to the following features of its pronominal affixation system:

1. It has a clear system (in the eastern dialect) of verbal case marking affixes (as distinct from case positions or portmanteau forms), together with a choice between Agent and Goal participants for cross-reference in the 3-3 section of the paradigm. Hayu is perhaps closest to Chepang in this respect, with its 'Benefactive' marking but this is severely limited by factors such as verb root class, and Tense and Person categories. Khaling also has a Benefactive affix, but this appears to be restricted to truly benefactive situations, rather than acting as a general Goal marker of the type that has been described in this study. In languages such as Kham the role of participants may be indicated in the verb, though this is by position and not by case affixation.

1i. Chepang possesses a truly functioning evidential or information flow marking system, including a Contrary Information Flow form. Akha, though it is regarded as a non-pronominalised language does have an evidential system of considerable complexity (Egerod, 1974) while, as noted in the previous section, Gyarong, Tiddim Chin (colloquial) and Rawang have morphemic elements that may well have originated from something like a CIF marker. Also both western Magar (App.l, chart 30) and Kachin (chart 32) use a form -d(a) for 2nd Person Actor with possibly similar origins.
111. The possessive cross-referencing is another unusual feature of Chepang, although its occurrence follows naturally enough from the MTS process (5.2.4:178) and is found in a few non-Tibeto-Burman languages - Maithili (Indo-Aryan) and Santali (Munda).
iv. The optional reduplication of pronominal elements to indicate an Emphatic Plural is apparently unique to Chepang. Bahing does have some reduplication of elements in the $1 P-3$ and $3 P-3$ sections of the paradigm but these are not noted as being optional. Manchati, however, has some optional reduplication in the free pronouns for lst and $2 n d$ Person Non-Singular, possibly with a similar emphatic force.

TABLE 12
PRONOMINAL ELEMENTS IN BURMIC，BARIC AND BODISH

| Gya． |  | S | 1 |  | $1+2$ |  |  | 2 |  | 3 |  |  | Neg <br> ma Vb | Refl |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | D | P | D | P | S | D | P | S | D | P |  |  |
|  | Pn | na | nyo | กอก̃i¢ | nyo | yo | no | ทənソ＾ | ño | mə | manj＾s | meñie |  |  |
|  | Pos | Пə | กソə | yi | กソว | yi | nə | njă | ñi | wə | nj＾ | ñ |  |  |
|  | $\operatorname{ITr}$ | $\square$ | －čh | －i |  |  | tan | to nčh | to $\tilde{n}$ | kə－ | － | kə－ |  |  |
|  | $\operatorname{Tr}$ | －0 | －čh | －i |  |  | k／ta＿n |  | k／to＿n | －u | wu－ | wu－ |  |  |
| Raw． | Pn | na | nani | nanio |  |  | na | nani | nanio | an | anni | apnup | maVb | －ši |
|  | Itr | － | －ši | $-i / 5$ a |  |  | è（ 1 ） | è ${ }_{\text {c }} \mathrm{l}$ | è＿nig／ša | －1 |  | －i |  |  |
|  | Tr | － | saw | －i／క̌a |  |  | è－ | è＿saw | ènnio | －u／a |  | －u／a |  |  |
| Kach． | Pn | nal | an | ant he |  |  | nan | nan | nanthe | ši／khyl | Šan | Stanthe | nVb |  |
|  | $\operatorname{ITr}$ | －we |  | －ga |  |  | －wu |  | －mi | －wu |  | －mu |  |  |
|  | Tr | －ml |  | －mi |  |  | －da |  | made | －we |  | －nme |  |  |
| Lush． | Pn | keima |  | keimani |  |  | nagma |  | nammani | an i |  | anman 1 | Vblo |  |
|  | ITr | ka－ |  | kan－ |  |  | 1－ |  | in－ | a－ |  | an－ |  |  |
|  | Tr | $\mathrm{mi}(\mathrm{n})$－ |  | $\mathrm{mi}(\mathrm{n})-$ |  |  | －（a）ce |  | －（a）ceu |  |  |  |  |  |
| （Coll．） | Pn | kěmà？ |  | kôu（tě？） |  | el（tě？） | nǎnmă |  |  | āmà？ |  | àmà：$u\left(t{ }^{\text {e }}\right.$ ？$)$ |  |  |
|  | Pos | ka |  |  |  |  | na |  |  | a |  |  |  |  |
| $\begin{aligned} & \text { Tiddım } \\ & \text { Chin } \end{aligned}$ | ITr | ning |  | nû：${ }^{\text {n }}$ |  | ni／han | nitè？ |  | nú？tè？ | Tntè？ |  | untè？ | Vbkel |  |
| （Formal） | $\operatorname{ITr}$ | kă |  | kǎ＿ú？ |  | 1－ | na |  | na＿ú？ | $\overline{\mathrm{a}}_{-}$ |  | ā＿ú？ |  |  |
| Noc． | Pn | na |  | $n 1$ |  |  | nan |  | ne | ate |  | thanlo | Vbma |  |
|  | Pos | $T$ |  | $n 1$ |  |  | rian |  | ne | te |  | thanlo |  |  |
|  | ITr | －a．a／k |  | －e |  |  | －0 |  | －an | －a |  | －a |  |  |
|  | $\operatorname{Tr}_{0}$ | $\begin{aligned} & -a n / k \\ & -h a y \end{aligned}$ |  | $\begin{aligned} & -a / k / i \\ & -h i \end{aligned}$ |  |  | $\begin{aligned} & \text {-o } \\ & \text {-ho } \end{aligned}$ |  | －han |  |  |  |  |  |

The agglutinative nature of the affixation found in Chepang is also uncommon. However Kham, and Manchati lack Tense concord and this feature is very minimal in Gyarong and Khaling (it may be only morphophonemic alternation in this last case). A related feature that is almost unique to Chepang is its consistency of morphemic representation, especially for lst Person - the lst Person Exclusive form no (or a variant of this) is found in every section of the paradigm which involves the lst Person Exclusive. The same is true for the lst Person Inclusive form -tayh, while the 2nd Person has two basic representations, na(n) and te?. In contrast, in languages such as Kham, the lst Person affix changes from a nasal-initial form to a stop-initial form or, even more commonly, the lst Person participant is represented only by Number affixes (see Tables 9-12).

### 6.3.2.5. Comparison with Bauman's Reconstruction

In view of the fact that, in Chapter 5, an attempt was made to postulate the earlier forms of the Chepang pronominal elements using purely internal evidence, it is worth comparing the results with Bauman's morphological reconstruction for Tibeto-Burman as a whole. Though the two reconstructions need not necessarily represent the same period in historical development there should be no serious conflict between them, unless one or other is at fault (or both are). And indeed a comparison shows that there are no basic incompatibilities, especially given the fact that Bauman does not commit himself to the exact forms of the reconstruction (signified by \#, rather than * - Bauman, 1975:76). The major contrast is the presence of the Chepang CIF form -toy?.

The results of such a comparison are as follows:

TABLE 13
RECONSTRUCTED TIBETO-BURMAN AND CHEPANG PRONOMINAL ELEMENTS


The total Transitive paradigms would be as shown in charts 9 and 10 below．Note that for Chepang there is no claim that there was necess－ arily ever a single stage when the postverbal pronominal elements actually formed a paradigm as in chart lo，only that the form of these elements was such that they could have given this paradigm．In fact it is probable that different sections of the present total paradigm were formed at different times．

CHART 9
RECONSTRUCTED PARADIGM FOR TIBETO－BURMAN＊

|  | nt | 1 | 2 | 3 | $\emptyset$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | S |  | －na | －па | －па |
| 1 | D |  | －naši | － $\mathrm{y}_{1}$ | －š 1 |
|  | P |  | －nal | －1 | －1 |
|  | S | －па |  | －na | －na |
|  | D | －па ${ }^{\text {¢ }} 1$ |  | － $\boldsymbol{y}^{\boldsymbol{i}}$ | －sıl |
|  | P | －nanl |  | －ni | －i |
|  | S | －па | －na | －u | － |
|  | D | －naši | －naši | －St | $-5{ }^{\text {S }}$ |
|  | P | －nal | －nal | －ni | －i |

CHART 10
RECONSTRUCTED PARADIGM FOR CHEPANG

| Ag | 1 | $1+2$ | 2 | 3 | $\varnothing$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | －クəsə |  | －nəŋə | －？ulja | －ワə |
|  | －пəcəsə |  | －nəŋəəə | －？ujaca | －пəсə |
|  | －クa？ 15 |  | －nəjəəə | －？unasa | －re？ 1 |
| $1+2 \begin{array}{r}\text { D } \\ P\end{array}$ |  | －tay？${ }^{\text {a }}$ acasa |  | －tay？？uraca | －tay？ıjaca |
|  |  |  |  | －tay？${ }^{\text {anjuen }}$ | －tay？„ə？i |
| $2 \begin{array}{r}\text { S } \\ 2\end{array}$ | －t ay？t a？${ }^{\text {co }}$ |  | －tay？sa | －tay？？u | －tay？ |
|  |  |  | －t ay？cəsa | －tay？ | －t əy？cə |
|  | －t ay？ta？${ }^{\text {a }}$ ？ i |  | －t ay？？lsa | －t əy？？unl | －tay？？i |
| Refl ${ }^{\text {S }}$ |  |  |  |  | －so |
|  | －t əyŋə | －təy？${ }^{\text {a }}$ | －t əy？ | - －u／t ${ }^{\text {a }}$ | － |
|  | －ta？${ }^{\text {coca }}$ | －təy？„ə๐ə | －t ay？ca | －？u／t ə？ca | －cə |
|  |  | －tay？${ }^{\text {a }}$ ¢ i | －tay？？1 | －？u／ta？sa | －？i |

Note that for the Chepang paradigm the Number categories on the lefthand side give Action Number and represent either the Agent or the Goal, whichever has the highest Number category.

Although the Chepang paradigm is more complex, this is due mainly to the presence of the CIF marker *tay?, the Agent marker $2 u$ and the Goal marker to? and the fact that Person elements occur throughout the paradigm. The forms of the elements are similar in both reconstructions, as is the dominance hierarchy which gives preference to lst Person over 2nd, and 2nd over 3rd for cross-reference, except that for Chepang lst and 2 nd Persons are equally represented in the $1-2$ section of the paradigm. One formal difference between the two sets of reconstructed elements is that the reconstructed Dual for Tibeto-Burman is \#šl while for Chepang it is *ca. There is also no sign in Chepang of the free pronoun prefix \#ka- proposed by Bauman.

### 6.3.3. ORIGINS OF TIBETO-BURMAN PRONOMINAL AFFIXATION

The wide variation in pronominal affixation between, and even within, the various Tibeto-Burman languages points to the relatively recent origins of these systems. If this is the case, then what are the mechanisms which have given rise to these systems? In particular can Topic Shift, or the Modified Topic Shift proposal presented in chapter 5, be used to account for the appearance of pronominal affixation in Tibeto-Burman as a whole? A detailed answer to these questions is beyond the scope of this thesis, involving as it would a close study of Tibeto-Burman morphology. However a brief survey of the situation will be given in this section.

In general it does appear as though conditions that would favour an MTS process were present at a fairly early stage in Tibeto-Burman. Three of these conditions have already been mentioned (5.2.2.) - the widely scattered evidence of evidential or information flow systems, the use of Action Number and the indication of ordinary anaphoric reference by omission ('zero' anaphoric reference). Other evidence suggesting Topic Shift origins comes from the common occurrence of 'homophonous morphology', that is, the use of identical forms in different parts of the paradigm (Bauman, 1974:138). This homophony results, to a considerable extent, from the application of the person and animacy hierarchies to cross-reference, as explained for Chepang in section 2.3 . The fact that these hierarchies play a part in selection for pronominal affixation suggests that these affixation systems are, or have been, connected with topicality and hence may well have arisen by some sort of TS process.

## Evidential Systems

The MTS proposal given for Chepang in chapter 5 views the evidential (CIF) marker -te? as having a significant role in the development of pronominal affixation in this language. However there is little evidence to suggest that this was true for other languages, even for those which have evidential systems - though it is possible that former evidential markers have been simply replaced by pronominal forms, leaving no trace of the former. This certainly seems to have been the case for Limbu, where a prefix with a distribution like that of an evidential marker has apparently been replaced by the pronominal forms $k^{\prime-}$ '2nd Person' and a-'lst plus 2nd Person'. But this prefix replacement, while it supports the proposal that evidential forms play a part in affixation development, cannot account for the pronominal suffixes in Limbu. In colloquial Tiddim Chin the evidential markers are suffixed and a process like that of the Chepang modified Topic Shift is plausible here. But in Gyarong and Rawang the evidential morphemes are prefixed, while the true pronominal elements are suffixed, so some other mechanism is required to explain the affixation system.

## Action Number

The problems discussed above, in connection with an MTS hypothesis centred around an evidential marker, lead to the possibility that Action Number morphemes may be involved instead, for most of the pronominalised Tibeto-Burman languages. This possibility is supported by the fact that in these languages there is a tendency for the affixation to have Person elements only in the Singular, with Number elements for the Non-Singular parts of the paradigm. This results in a pattern like that of the complementary distribution of nan and -te? in Chepang (5.2.3:156). The suggestion is, therefore, that the Topic Shift anaphoric pronouns (representing the Person category only) were placed after the verb by analogy with the pattern of the already postverbal Action Number particles. This would apply particularly to situations which had a Singular Action Number, as this has a zero representation. For Non-Singular situations, where there is overt Action Number marking, anaphoric pronouns were simply not used, presumably because the Number Marking gave sufficient information for the Non-Singular verb. More recently there has been a spread of Person information to the Non-Singular. In Gyarong for instance the lst Person element, -n, is found only in the singular. The 2nd Person element, $-n$, is more widely distributed however, possibly because of the influence of the Imperative (see 5.2.4.6.). In all the, East Himalayish languages the lst Person Non-Singular verb has a $-k$ (v) element which may be a Plural Number affix rather than a variant of the lst Person form - (V). The 2nd Person is commonly not represented in the Non-Singular.

For languages with non-evidential prefixing (Kham, Magar, Tiddim Chin and Lushei) the process which leads to this affixation may well have been the Possessive analogy (5.3.3.). All of these languages, except perhaps Magar (the position here is uncertain), have Possessive pronoun forms which are usually similar or identical to the verbal prefixes.

### 6.4. NON-TIBETO-BURMAN LANGUAGES

### 6.4.1. Language Affiliation

Non-Tibeto-Burman languages of the North Indian area which do have pronominal affixation belong to one of three major classes according to their genetic relationships. These three classes are:

1. The Indo-Aryan languages, particularly the 'frontier' languages described by Emeneau (Emeneau, 1965), which include object agreement. These are found to the north and west of India.
2. The Munda languages, found to the north-east of central India, and including Sater and Mura in Nepal.

1i1. Languages of unknown affiliation, such as the Kusunda language of Nepal.

Representatives of each of these three language groups are found within Nepal itself and so have been in a position to interact with the Tibeto-Burman languages of that country. The two Munda languages, Sater and Mura, may be offshoots of Santali and Munda and it is not known how long they have been in their present location of south-east Nepal. As far as the Indo-Aryan frontier languages are concerned two are found in the southern valleys of the country, one immediately to the south-east of the Chepang area (Danuwar Rai), the other immediately to the west (Darai). These two were not discussed by Emeneau, probably because of lack of information, but they do possess some of the characteristics of the frontier languages. Another Indo-Aryan language which possesses verbal cross-referencing is Maithili. This is spoken in the southern Terai region of Nepal. The formerly nomadic Kusunda once ranged in a wide region to the north and west of the Chepang area and may then have had considerable interaction with the latter (1.1.4.).

### 6.4.2. INDO-ARYAN LANGUAGES

Six characteristics of Indo-Aryan pronominalised languages are listed by Emeneau (Emeneau, 1965:4lff). These are:

1. The possession of a set of verbal cross-referencing affixes for the Past tense which differ from the affixes for all other verb forms. This, of course, represents a type of tense concord.
2. The object may be cross-referenced in the verb, giving a construction which may be related to passives.

1i1. The pronominal affixes occur as possessive suffixes, or enclitics, which may be attached to NPs and other clausal constituents.
iv. These affixes may be attached to constitutents other than those with which they bear a direct semantic relation.
v. The affixes may be repeated within a clause, and give a second reference to a participant already expressed by a NP or free pronour.
vi. A constituent made up of an aspectual/modal element plus a pronominal affix may be prefixed to past stems of the verb.

It can be seen that some of these characteristics are true of Tibeto-Burman pronominalised languages also. Tense concord (characteristic 1.) and object cross-reference (characteristic i1.) have already been noted as occurring in Tibeto-Burman (6.3.1.), while many languages of this family have possessive affixes for NPs (characterstic ii1.), though for Tibeto-Burman these are prefixes. The Tibeto-Burman affixes are also cross-referencing, that is they may give a second reference in the clause (characteristic v.). They are not however freely attached to any constituent (compare characteristic iv.), though this is possible for the quasi-pronominal CIF form -te? in Chepang. The equivalents of -te? in Gyarong, Rawang, (and possibly once Limbu) may be prefixed to the verb stem (characteristic vi.).

One major difference between the Tibeto-Burman and Indo-Aryan pronominal systems is in regard to the categories represented. The TibetoBurman languages often possess a Dual category and make a distinction between Inclusive and Exclusive for lst Person. These distinctions are not features of Indo-Aryan. Another difference is in Reflexive constructions. A number of Tibeto-Burman languages indicate a reflexive situation by a verbal suffix (see Tables 9-12 above). Indo-Aryan languages however use independent pronouns for reflexive situations.

Possessor cross-referencing does, however, occur in at least one Indo-Aryan language. This is Maithili, which also has verbal affixation according to both subject and object. There is no Number category marked in the verb, instead distinctions are made with respect to Person and honorific status (chart 34, app.1.). An example of Possessor crossreferencing in Maithili is:
20. this tohar ghar ch-aw (non-honorific)
'This is your house.'
Some elements of the Maithili affixation system are common to those of Danuwar Rai. The honorific ending -hun, for instance, is probably
related to the Danuwar affix (also -hun) indicating Plural. It is possible therefore that the Maithili system was originally similar to that of the Indo-Aryan frontier languages but has turned the Number distinction into an honorific one.

Origin of the Indo-Aryan Pronominal Systems
The fact that, in the Indo-Aryan frontier languages, both NPs and verbs are suffixed by pronominal elements belonging to the same, or similar sets suggests, for these languages at least, that the verbal pronominal affixation may have originated by analogy with NP possessive marking, probably initiated by a TS process.

### 6.4.3. MUNDA LANGUAGES

Languages of the Munda family have long been known to possess complex verbs which include pronominal affixes. The similarity of the verbal affixation with that of the pronominalised Tibeto-Burman languages has been noted, in particular, by Hodgson who used this as one piece of evidence for placing Tibeto-Burman and Munda together in a wide reaching family called 'Turanian' (Hodgson, l856). And indeed there are several striking parallels in the pronominal systems of the two language families, as can be seen by comparing Table l4, given below, with those presented earlier for Tibeto-Burman languages (Tables 9-12).

TABLE 14
PRONOMINAL ELEMENTS OF SANTALI

|  | 1 |  |  | $1+2$ |  | 2 |  |  | 3 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | S | D | P | D | P | S | D | P | S | D | P |
| Pn | 1 n | alıñ | ale | alan | $\mathrm{abo}(\mathrm{n})$ | am | aben | ape | unl ona | unkIn onakin | onko onako |
| Vb | -iñ | -liñ | -10 | - lan | -bon | -am | -ben | -pe | -e | -kin | -ko |

The upper and lower entries for the 3 rd Person pronouns represent Animate and Inanimate categories respectively.

Note that Santali, like other Munda languages, has Dual and Inclusive Exclusive categories as do the Tibeto-Burman languages. The extra Animate-Inanimate distinction in Santali is not significant - it is marked only in the free pronouns and could easily develop in any language to which the animacy hierarchy applies (as it does for Chepang and other Tibeto-Burman languages), especially when a variety of deictics are used for 3rd Person reference.

As far as the verbal affixation systems are concerned, in a language such as Santali, the object or the indirect object is indicated by verbal affixes, as well as the subject. The object representation is not cross-referencing however - if the object is represented in the verb it cannot be represented in the clause also by an independent pronoun or NP. Although Maspero felt that this was a major difference between Tibeto-Burman and Munda languages (Maspero, l947) it is more likely a result of the low pragmatic status (or discourse significance) of object relative to subjects (Actors) and indirect objects (Goals). This can be seen in the fact that, for Chepang also objects can be represented only once, though in this case outside the verb, by means of NPs or free pronouns. If, however the presently free Object pronouns in Chepang became enclitic, or affixed to the verb for some reason, then a Mundatype situation would result.

Santali also has a system of Intransitive and Transitive marking. When the Intransitive markers are used only a subject can be represented in the verb. No object or indirect object can appear, even for situations normally regarded as transitive. With a Transitive marker an object or indirect object is represented in the verb while the subject pronominal element is either suffixed to the clausal constituent immediately preceding the verb, or (if no such constituent is present) is suffixed to the verb. This Transitive - Intransitive distinction is reminiscent of the Chepang Agent-Goal cross-referencing alternation. though Santali distinguishes object from indirect object affixes, instead of treating them as a single (Goal) case as Chepang does. It is not clear exactly on what basis the choice between Transitive and Intransitive is made, but the factors involved seem to be more semantic than pragmatic in some cases. The Intransitive is used, for instance, when the Agent and Goal participants cannot be distinguished, as in reflexive or reciprocal situations. It is also used for situations when no specific Object or Goal can be identified (as in 'Ram hunts.'). Chepang would use Agent cross-reference in this last type of situation.

Possessors may also be represented in the verb in Santali as the following example shows:

```
21. goj-en -t -lñ-a -e
    die-PtTr-Pos-1E-Cat-3S
    'Mine died.'
```

(where PtTr - Past Transitive, Cat = Categorical). The suffix shown as a 'Categorical' marker has been described as having the function of asserting the certainty of the situation described by the verb, and of forming verbs from noun roots (Grierson, l909; v.4:45). If this is the case then it is very similar in form and function to the referential
emphatic morpheme -?a in Chepang (3.2.1.2.), except that the Chepang form is more commonly used with NPs than with verbs.

As well as the general systemic parallels there are also some striking formal similarities between Santali and Chepang. The two basic forms of the Intransitive markers in Santali are ?o/u? and $n$, while the more or less equivalent Agent markers in Chepang are $? u$ and $n$. The similarity is most noticeable in the Santali Non-Past Perfect, a common form. Compare:

```
22. Santali Non-Past Perfect
    hormo-e dal -?aka -n -a
    man -3S strike-PtPf -ITr-CAT
    'A man has struck (it).'
```

```
(South-west) Chepang Past
manta -?l tho -?aka-na
person-Ag strike-Pt -Ag
    'A man struck (it).'
```

The Transitive (indirect) object marker is an (implosive) dental compare this with the Chepang Goal affix $t(h) a-$.

Against these resemblances must be put the evidence collected by Bauman to show that, in general at least, the morphological elements of the pronominal affixation in Tibeto-Burman go back to a very early stage in this family. The parallels between the affixation systems in the two language families must presumably be ascribed largely to the similar mechanisms for the development of such affixation which operated within each family. Pinnow suggests that pronominal affixation in Munda arose from independent pronouns which preceded (subject pronouns) or followed the verb (object pronouns), these gradually becoming united to either the verb or to a preverbal constituent (Pinnow, 1966:179ff). In order to explain the position of the object elements he proposed an earlier SVO order. However, as we have seen, both subject and object elements may follow the verb in Tibeto-Burman pronominal affixation, yet there is little or no evidence to indicate that this family originally had a verb-initial word order. It is possible, therefore that Munda also acquired its pronominal affixation by a TS or similar process which left the anaphoric pronouns in a non-basic position.

### 6.4.4. KUSUNDA

The analysis and data for Kusunda are somewhat incomplete but the results of my very brief fieldwork, backed by material from Reinhardt and Toba (1970), show the position as follows. The basic structure of the verb is:

Subject pronoun + Root + Number + Tense/Aspect
as in :

```
23. t-am -d -wan
    l-eat-Pl-Tn/Asp
    'We eat.'
```

The pronouns and pronominal affixes are:
Pronoun Affix
lst $\mathrm{Pn} \mathrm{ci} \mathrm{c} / \mathrm{t}-$
2nd nu n-

3rd git g- Probably animate only
The deictics are used for inanimate $3 r d$ Person and are:
ta 'this', It 'that'.
There is no Dual marking in the verb although animate NPs may be suffixed by -jhloa or a form of the numeral two to indicate Dual Number.

The Negative is $-(ə) w g$, as in:
24. oxoy-əwg-da
die -Neg-Tn/Asp
'He did not die.'
Some verbs have the pronominal elements following the main root, but this is probably because they are prefixed to an auxiliary root in these cases:

```
25. abi -c-ln -nan
    carry-1-Aux-Tn/Asp
    'I carry.'
```

I have no good text to indicate what the true word order might be elicited material usually followed the Nepali word order. The informant did, however, place NPs after the verb more freely than is the case for Nepali and Chepang, though this was not done regularly.

Possessive pronominal elements are prefixed to NPs; and are the same as the verbal prefixes.

```
26. ci-yə c-ec! oxoy-nan
    I -of l-chizd die -Tn/Asp
    'My child dies.'
```

The verbal system therefore could easily have arisen by analogy with the Possessive NPs, with Action Number being separate and postverbal.

### 6.5. CONCLUSIONS

A modified Topic shift hypothesis, if valid, describes a process which can account for widely differing pronominal affixation systems. In particular the presence of quasi-pronominal postverbal particles can provide an incentive for the Topic - anaphoric pronouns to be
placed in a position other than that of their equivalent NPs. The fact that there are two alternative positions - one, the basic NP position before the verb, the other, the non-basic position, after it - causes, in effect, a tension which may be resolved in different ways. The manner in which any particular language acts to resolve this tension may decide whether it has prefixing or completely suffixing affixation. If $T S$ reanalysis does not take place at all, then the result will be that the language remains without pronominal affixation. Furthermore, the possible occurrence after the verb of other particles, with tense, aspectual and similar functions, may through fusion, lead to pronominal affixes that are very different in phonological shape to the original elements. Such a variation, in otherwise closely related dialects, could cause rapid divergence and the evolution of separate languages, as in fact seems to have happened in the East Himalayish subgroup (6.3.2.2:219). Any theory of the development of pronominal affixation must be able to account for the wide differences that are found in the systems of closely related languages, and even between the dialects of one language.

This potential for great variation that is found in the Tibeto-Burman family means that certain features of affixation systems, such as prefixing or its absence, cannot be used to gauge genetic relationships between languages. Even a feature such as the object incorporation in the verb, noted by Maspero for Munda, may simply result from incomplete reanalysis after a Topic shift, and not from any deeprooted systemic difference.

A modified TS hypothesis therefore, shows that the observed differences between the Munda and Tibeto-Burman pronominal affixations systems may be of less significance than they first appear to be. It is ironic then, that the same hypothesis supports the independent development of this affixation within each language family of the area, being able to account for parallel development in otherwise separate languages. The one element that individual languages, and language families, needed to have in common was the initial stimulus - the communication problems brought about by contact with other very different language groups. This could lead to topicalisation and TS processes of different types, which could have then resulted in the present distribution of pronominal affixation. A development such as that proposed above, assisted perhaps by direct diffusion in some cases, allows both the great diversity found within a single family such as Tibeto-Burman, and, at the same time, the convergence of systems across families, because the same basic mechanisms apply in each family.

## APPENDIX 1

## PRONOMINAL CHARTS

```
    In this appendix the pronominal forms (free pronouns and affixes)
are given for languages that have been discussed in the main part of
this work. The following is a list of these languages, together with
sources, and any special comments. They are ordered according to their
subgrouping (that of Shafer, 1974 - see figure l below), where this
is possible. Free pronouns and Intransitive affixes are shown separately
from Transitive affixes.
Chart No.
Source
TIBETO-BURMAN
11 - 16 Chepang (eastern and western dialects)
Note that the CIF form te? is optional in the verb
and may be repeated up to two times if the 2nd Person
is Plural.
17 - 18 Hayu Michailovsky, 1974.
19 Kham
20 Bahing
21 Sunwar
22 Thulung
23 Khaling
24 Kulung(e)
25 Limbu
26 Gyarong (Jyarung)
27 Rawang (Nung)
28 Nocte
29 Bunan
    Kanauri
    Manchati
```

Michailovsky, 1974.
Watters, 1973.
Hodgson, 1857
Bieri, 1975.
Allen, 1975.
Toba, 1979.
Holzhausen, 1973.
Konow (in Grierson,1909. v3.1)
Chin, P'eng et al, 1958.
Barnard, 1934.
Das Gupta, 1971) (in Bauman,1975).
Francke, 1909 (in Bauman, 1975).
Bailey, 1909 (in Bauman, 1975).
Francke, 1909 (in Bauman, 1975).

## Chaudangs <br> Kham (Free pronouns and Intransitive affixes)

Konow (in Grierson, 1909. v3.1).

Magar
Subba, 1972
Hayu (Free pronouns and Intransitive affixes)

| Bahing (" | " | ") |
| :--- | :--- | :--- |
| Sunwar (" | " | ") |
| Thulung (" | " | ") |

Khaling (Free pronouns and Intransitive affixes)

| Kulung |  |  |  |
| :--- | :--- | :--- | :--- |
| Limbu | $("$ | $"$ | $")$ |
| Gyarong |  |  |  |
| Rawang | $("$ | $"$ | $")$ |
| (" | $"$ | $")$ |  |

Kachin (Jinghpaw)
Lushe 1
Tiddim Chin
Nocte (Free pronouns and Intransitive affixes)

Hertz, 1954. (in Bauman, 1975).
Lorrain and Savidge, 1898
(in Bauman, 1975).
Henderson, 1965.

NON-TIBETO-BURMAN
33 Danuwar (-Rai) - Indo-Aryan Kügler, 1975.
34 Maithili " " Williams, 1973.
35 Danuwar (Free pronouns and Intransitive affixes)
Maithili( " " " )
Santali - Munda Pinnow, 1966.
Munda (Mundari)- Munda Pinnow, 1966.

Note: In these charts tense, aspect, mood and negative forms are underlined where possible.

Figure 1 below gives the general genetic relationships for the TibetoBurman languages listed above, as well as representative languages from other families. The classifications are those of Shafer, 1974 and Benedict, 1972. Not all the mid-level groupings are shown. Languages listed above are italicised in this figure.


SINO-TIBETAN (Benedict, 1972) (Simplified)


Abbreviations: Bah Bahing Bur Burmese Gur Gurung Kan Kanauri Kul Kulung Mag Magar Mik Mikir Sik Sikkim Tib Tibetan Bhr Bhramu Chau Chaudansi Gya Gyarong Khal Khaling Lah Lahuli Man Manchati Noc Nocte Sun Sunwar Thul Thulur.g Bun Bunan Chep Chepang Kach Kachin Khm Khambu Lu Lushei Mei Meithei Raw Rawang Tam Tamang TC Tiddim Chin

$$
\text { FIGURE } 1
$$

General Relationships for Pronominalised and Other Representative Tibeto-Burman Languages

CHART 11
CHEPANG TENSE AND PRONOMINAL AFFIXES: POSITIVE NON-PAST PRIMARY INTENTIVE


CHART 12
CHEPANG TENSE AND PRONOMINAL AFFIXES: POSITIVE PAST PRIMARY


CHART 13
CHEPANG PRONOMINAL AFFIXES: NEGATIVE/SECONDARY


CHART 14
CHEPANG PRONOMINAL AFFIXES: POSITIVE JUSSIVE FORMS (INTENTIVE)


WESTERN CHEPANG (Partial) NON-PAST, PAST, PERFECTIVE PAST


CHART 16
PRONOMINAL FORMS: FREE PRONOUNS AND NON-INTENTIVE AFFIXES EASTERN CHEPANG $\qquad$
WESTERN CHEPANG

*Deictics

CHART 17
HAYU (VAYU) MICHAILOVSKY 1974; PAST INDICATIVE AND BENEFACTIVE (B = Benefactive) ( $\mathrm{N}=$ Nasal morphophoneme)


CHART 19
HAYU (VAYU); NON-PAST INDICATIVE (WITH BENEFACTIVE) MICHAILOVSKY, 1974


CHART 19
KHAM (TAKA DIALECT); WATTERS 1973 (Tn = Tense)


CHART 20
bahing non-past and past (hodgson 1857)


SUNWAR; NON-PAST AND PAST (BIERI 1975)


CHART 22
THULUNG; NON-PAST AND PAST (ALLEN 1975)


CHART 23
KHALING TRANSITIVE (S. TOBA 1979)


CHART 24
KULUNGE: NON-PAST BI-TRANSITIVE (HOLZHAUSEN 1973)


CHART 25
LIMBU; NON-PAST AND PAST (KONOW IN GRIERSON 1909)


CHART 26
GYarong/JYarong, CHIN P'ENG ET AL, 1958


CHART 27
RAWANG: NON-PAST AND PAST (BARNARD, J.T.O. 1934)


CHART 28
NOCTE; NON-PAST, PAST AND NEGATIVE (DAS GUPTA 1971)


PRONOUNS AND INTRANSITIVE AFFIXES


CHART 30
PRONOUNS AND INTRANSITIVE AFFIXES


CHART 31
PRONOUNS AND INTRANSITIVE AFFIXES


CHART 32
PRONOUNS AND INTRANSITIVE AFFIXES


CHART 33
DUNWAR RAI PAST AND NON-PAST FORMS (KÜGLER MSS.)


CHART 34
MAITHILI COMPLETIVE AND INTENTIONAL ASPECTS (WILLIAMS 1973)
(hon $=$ honorific)


CHART 35
PRONOUNS AND INTRANS ITIVE AFFIXES


## APPENDIX 2

SAMPLE TEXT

The text given below is a myth describing the origin of the shaman's drum, the most important instrument of his ritual. The story is one of three versions that were narrated by Bhabikan Chepang. I have the same myth in another version told by his nephew Manoram, and a further account of this story from Dumbhuria village to the east of Maiserang.

There are several points of interest in relation to the text narrative. Firstly it is a myth of the 'dismemberment' genre (Macdonald, 1975) in which the dismemberment of some object or creature gives rise to various natural objects, such as cane, grass, soil and so forth.

Secondly there is some doubt concerning the nature of the object that was dismembered. In this version it is fairly clearly a tree which was felled. This is reflected in the names of the tree as well as in the action of cutting it down. It is called the 'Ildhaysin?' (sentence 19) and the 'Ilmurunslo?' (sentence 24), where slo? is the normal Chepang term for a tree. But later on it is called a 'Ildhaysya?' where sya? is the regular suffix used for game animals. This is not just an isolated mistake since the same variation of name occurs in all three of Bhabikan's versions and, moreover, the creature is described as having various animal body parts, including liver and intestines. Even more significantly, in the version given by Manoram, the object is clearly an animal. It seems, therefore, that there were either two versions of the same story which have been combined, or there were two parts of the one account which have been collapsed. The latter possibility is perhaps the more likely in that the tree could have been the source of the drum wood while the animal would be the natural source of the drum skin.

Even more interesting is the name of the creature - IIdhay IImurun. The first syllable, il-, appears to be a prefix of some sort. If this
is the case then the remainder of the second word is -murun. This stem is very like the proto-Tibeto-Burman word for 'horse' *m-ran (Benedict, 1972, where *m-ran = Chep. *mərən). It is just possible therefore that the story has some connection with the horse sacrifices mentioned in the Indian Vedic literature (Basham, 1954).

It is noteworthy that this story, in any of its versions, accounts only for the creation of jungle produce and natural features. An entirely different myth, in which a girl is sacrificed, gives the origin of the cultivated crops, such as corn.

The names of the two demigods who attempt to cut the tree - ?atislri and batlslri - do not appear to be Chepang in origin. The first name could come from the Sanskrit atlsar 'exceed, lead' (Apte, 1979). The two successful candidates are ?athapa and bathapa (or sujl?a and kerml), these names also being apparently non-Chepang except for the final suffix -pa 'father, male'. The name of the underworld creator-goddess is dasəma. Her more truly Chepang name is hlawhlayma and she, along with the kruplaypa, a male god, form an earth-mother - sky-father pair. The (bombay)lan is an evil spirit or demon that is said to be visible, with a form rather like that of an abominable snowman, having a hairy body, claws and fangs. The names slo?gənl(dəsə)bandopal and mutranco? dyəw?anco? are ritual terms for, respectively, shamans and non-shamans, while sancəru?an nameru?an sancərətl is a collection of terms for a human spirit. The mandorwa? is a common small woodpecker but the other bird, the jawalwa? is of unknown identity - possibly it is a mythical species.

From a linguistic point of view the text is quite a good one. It is almost pure Chepang, with only a few Nepali loans, and contains a wide variety of typical Chepang constructions.

## CHEPANG TEXT: THE ORIGIN OF THE DRUM

1. ?atisi pu? -ca? batisi pu? -ca?-nls-tan? tha -?aka-cə. Atisi Bro.-KN Batisi Bro.-KN -Dl -IIF appear-Pt -Dl
The two brothers Atisi and Batisi appeared (it is said).
2. ?o? -nls-pay pona-dln-kay-hə-tan? syaw -?aka-cə. 3. ? that-Dl -DIF five-day-Gl -Lm-IIF become-Pt -Dl this
Those two came for only five days.
The two
jugan ? $\quad$ hlawhdəy-ban -kay? mu -sa-kay-pay ? 1 tha -?aka-cə completely this spread -stone-Gl stay-IN-Gl-DIF this appear-Pt -Dl Sujia spirit brothers came tostay on this earth for good.
dig -dhani suji?a pu? -ca?-tap?-?a. 4. ?o? -nis-?i-tan?
spirit-master Sujia Bro.-KN -IIF -RAS that-DI -Ag-IIF
Those two could

| khay-?aka-c -u doh kam khe?-ya -ma jagh-sa able-Pt -Dl-Ag what work be -Alt-Co make-IN | 5. hna renh-ti <br> first fast-3ry |
| :---: | :---: |
| perform | First, in order |
| way-sa-kay ?ane ?ow? ?atisi pu? -ca? batisi-le? <br> rid-IN-Co then that Atisi Bro.-KN Batisi-REm | pona-ra ?amh je?-?o five-tray food eat-RN |
| do the work quickly, those Atisi Batisi | $s$ ate five (winnow |
| pona-kokthun kyan? je?-?o nis pu? -ca?-le?. 6. five-pot curry eat-RN two Bro.-KN -REm | Ione -say ?o? -nis Zater-Ab that-Dl |
| rays of grain food and five pots of curry. | Later those two |

ja?wal -ko? than -ti mu -na?-cə.
jawal bird-Gen change-3ry stay-NPt-Dl
turned into Jawal birds.
7. ?ohansay nis-pu? -ca?-tan? tha -?aka-cə ?ow? nis-cak. 8. ?ohansəy
SCn two-Bro. -KN -IIF appear-Pt -Dl that two-Pn
Now those two brothers appeared.
manta-tan? ni?-jyo? car-gota-pay syaw -?aka-y?. 9. ?ohansəyko?
person-IIF two-Cl four-Cl -DIF become-Pt -Pl
there were two or three humans. Now a demon
?ow? ni?-jyo? manta -kay-pay lan -?i-tan?-?a wan -dhay je?-sa
that two-Cl person-Gl-DIF demon-Ag-IIF -Pt come-3Ct eat-IN
kept coming seeking to eat the two humans ---

```
bo\eta?-na?-tha-cə. 10. yat-jyo?-ta\eta? ?apa yat-jyo?-ta\eta? co?
seek-NPt-Gl-Dl one-Cl -IIF father one-Cl -IIF chizd
                                --- A father, a child the two were.
khe?-cə-to. ll. ?ohansəyko?-pay [?abə goyco?-ya mom?co?-ya ?abə
be -Dl-2ry SCn -DIF (now male -Altfemale -Alt now
```

    Now then (whether a boy or a girl I do not know -
    ci? -ŋə-lə co? ni?-jyo?-tə to -?o mu -na? dayh-ti hlak-?o].
know-IE-Ng child two-Cl -Eq say-RN stay-NPt say-3ry tell-RN)
it was said there were two, such is the account).
12. ?ohansəyko?-pay ?apa -taŋ? gayh -laŋ? gayh -laŋ?-taŋ? ?al-na? SCn -DIF father-IIF where-Idf where-Idf-IIF go -NPt Now (while) the father went here and there foraging, the demon
byah -lan co? -kay-pay wan -dhəy ?anə-tan?-?a lan -?l je?-sa forage-Pur child-Gl -DIF come-Ct much-IIF -Em demon-Ag eat-IN often came seeking to eat the child.
boŋ?-na?-thəy. 13. ?ohaŋsəyko?-pay "baba baba ?anə [ci?-lə doh seek-NPt-Gl $\quad \mathrm{SCn}$-DIF father father much (know-Ng what

So then, "Father, Father (I don't know what
?ow? Ian -ko? məyn-ma khe?-to hme? -?ala-ŋ? ? ?anə lan wan -na? ba. that demon-Gen name-Co be -2ry forget-Pt -IE much demon come-NPt Cer that demon's name was - I have forgotten) a demon comes often.
gəta hay-ti mu -?ak-sa." dayh-ti -tan? co? -khe-?l to -?a-thəy. how do -3rystay-RPt-IN say-3ry-IIF chizd-Con-Ag say-Pt-G. "How can we stay after this?" the child said to him.
14. "təbə doh hay?-sa gətə hay-tl tam -sa gətə hay-t। but what do -IN how do -3ry speak well-IN how do -3ry
"Indeed, but what should be done? How can we speak well
ta?jən?-sa gətə hay-ti thuk -sa ?l lan -kay?' dayh-ti -ta!? prevent-IN how do-3ry exorcise-IN this demon-Gl say -3ry-IIF (to defeat it)? How can we stop it and get rid of it?" said the
?apa dayh-?a. 15. ?ow?-tok bela-han ?atisiri pu? -ca? batisiri-tan? father say -Pt that-Tem time-Loc Atisiri Bro.-KN Batisiri-IIF
father. At that time the Atisiri Batisiri brothers
say?-?aka-c -u. 16. "?əhəy ?ow?-tə dayh-na?-cə batl ?ane. hear-Pt -Dl-Ag Oh that-Eq say -NPt-Dl Cer then heard him. "Oh, so that is what they are saying then.
17. ?o? -nis-kay?-pay mak -tan?-?a-khe?-?a-tha-cə lan -?l-tan?-?a that-two-Gl -DIF devour-IIF -Em-Im -Pt-Gl -Dl demon-Ag-IIF -Pt The demon is about to devour the two.
18. Iəw doh hay?-c -u?" dayh-ti -tan? pheri iəy?-nis pu? -ca? Excl what do -Dl-Ag say-3ry-IIF again own -Dl Bro.-KN

So what shall we two do?" the two Atisi Batisiri brothers said

```
no? -?aka-cə ?atisi pu? -ca? batisiri-taŋ?. 19. "iəw
```

speak-Pt -Dl Atisi Bro.-KN Batisiri-IIF Excl
amongst themselves.
?ow?-tə-khe?-ya -kay ləw mandorwa? toko-ma tororo-tə sin? dorh-ti that-Eq be -Alt-Gl Excl woodpecker tap -Co tap -Eq wood peck-3ry in that case the wood tap-tapping woodpecker, the woodpecking
wah -?o mandorwa? -kay dyah Ildhay-sl刀?-ko?-?a syaw -na?. move-RN woodpecker-Gl now Lidhay-tree-Gen-Pt become-NPt
woodpecker now is the right one for the Lidhay tree.

```
20. slngən? dəsə bandopal?-kay-pay ?ow?-məy?-kay-pay wəy?
    Singin Dasa Bangdopal-Gl -DIF that-CPL -Gl -DIF blood
    The woodpecker must be made to show the Singin Dasa
```

na?-?o slo? dorh-tak-tl wah -tl mandorwa? -?l-?a yo -tak-sa
be -RN wood peck-Cs -3ry move-3ry woodpecker-Ag-Em see-Cs -IN
Bangdopal (term for shaman) the tree blood (i.e. red sap of the
parə -na?." 2l. dayh-tl -tan? mandorwa? -tan? got -t 1
befall-NPt say-3ry-IIF woodpecker-IIF call-3ry
Lidhay tree)." Saying this, the two calling brought the
wan? -?aka-c -u slo?-ko? pun dorh-tl yo -sa thena du -to
bring-Pt -Dl-Ag tree-Gen skinpeck-3ry see-IN purpose red-2ry
woodpecker to peck the tree bark and see if red blood comes.
wan -na?. 22. "du -to wəy? wan -?
come-NPt red-2ry blood come-RN-Gen Mutrang-child
"With the coming of the blood the shaman can take
dyaw?an-co? -ko? sancaratl nameru?an toy -sa-kay ?ow?-?l-le?
Dyawang-child-Gen spirit spirit circle-IN-Gl that-Ag-REm
the Mutrang child Dyawang child's (i.e. human's)
singan? dasaban dopal?-? 1 ?ow?-?l-le? toy -tl nala -han?
Singan Dasabang Dopal-Ag that-Ag-REm circle-3ry underworld-Loc
spirit around the underworld ---
toy -tI -le? ?al?-ya -kay lldhay?-sln? IImurun -ko? ?ow?-le?
circle-3ry-REm take-Alt-Gl Lidhay -tree Limurung-Gen that-REm
--- for this the Lidhay tree Limurung tree will
nala -han than -lan dah -na?." dayh-ti-tan? ?u no? -?o
underworld-Loc change-Pur arrive-NPt say-3ry-IIF that speak-RN
arrive to change form in the underworld." saying this the Dasa Spirit,
pherl ?i dasə-dln dasə-ma kam? -say-le? lan?-?o. 23. ?ow?-pay
again this Dasa-spirit Dasa-Mo. below-Ab-REm lift-RN that-DIF
Dasa Mother $Z i f t e d$ from below.
First
hoa -le? hlok-?o kam? -səy 24. lon?-tl phun -ti ?i
first-REm send-RN below-Ab
lifi-3ry push up-3ry this
of all sending it from below. Lifting, pushing up through our
gi-ko? hlawhday-ban -han phun -tl lidhay?-sin? limurun -sin?
we-Gen spread -stone-Loc push up-3ry Lidhay -tree Limurung-tree
earth they set in place the Lidhay Limurung tree.
nyas -tak-?o. 25. "law ?i -lo khe?-?o sin? bon?-ti
put down-Cs -RN Excl this-Zike be -RN tree seek-3ry
"Right, if the Sujia spirit and the
suji?a-din kermi-din -?i krus-ya -kay ?ow?-?i ?ol-sa
Sujia-spirit Karmi-spirit-Ag meet-Alt-Gl that-Ag fell-IN

Karmi spirit look for this kind of tree and find it they can fell

```
khay-na?-c -u notra ?aru -?| khay-n -i -li.' dayh-tl -ta\eta?
able-NPt-Dl-Ag otherwise others-Ag able-Ag-Pl-Ng
it - others will not be able to." Saying this they
say 3ry-IIF
kam? -soy-le?-ta\eta? hna -le?-ta\eta? phak -ti hlok-?o.
below-Ab -REm-IIF first-REm-IIF separate-3ry send-RN
first of all sent the tree from below.
```

```
26. ?oha\etasəyko?-pay ?ow?-tə dayh-tok bela-ha\eta -pay
```

26. ?oha\etasəyko?-pay ?ow?-tə dayh-tok bela-ha\eta -pay
SCn -DIF that-Eq say -Tem time-Loc -DIF
SCn -DIF that-Eq say -Tem time-Loc -DIF
Now, when they said this, the two brothers ---
Now, when they said this, the two brothers ---
?o? -nis-pu? -ca?-pay. "donse law ?uya -pay khay-?a-na?-tәyh-c -u
that-two-Bro.-KN -DIF truly Excl therefore-DIF able-Em-NPt-IIn -Dl-Ag
"Right, truly therefore we can do it."
ni-ci-?i-ma." dayh-tl -ta\eta? ?ohaŋsəy pheri ləy?-nis no? -kay-ti -ta\eta?.
we-Dl-Ag-Co say-3ry-IIF SCn again own -Dl speak-Rcp-3ry-IIF
two two (Atisiri Batisiri) brothers said to each other.
```
27. ?ohaŋsəyko? ?al-taŋ?-?aka-cə ləw ?o? -nls ?apa-ca?-kay-taŋ?
    SCn go -IIF -Pt -Dl Excl that-Dl Fa. -KN -Gl -IIF
    Then they went and they met the father and child.
\(\begin{array}{llll}\text { krus-?a-tha-cə. 28. "low nin-ji-kay gotə khe?-?o? doh doh } \\ \text { meet-Pt-Gl-Dl } & \text { Excl you-Dl-Gl how be -RN } & \text { what what }\end{array}\)
pərə -na??' dayh-ti -tan? hwat-?a-tha-cə pu? -ca?-? 1 ?atIslri
befall-NPt say-3ry-IIF ask-Pt-Gl -Dl Bro.-KN-Ag Atisiri
for you two?" the two Atisiri Batisiri brothers asked them.
pu? -ca? batisI-?i. 29. ?ohansayko?-pay "lidhay?-sin?
Bro.-KN Batisi-Ag SCn -DIF Lidhay -tree
                            Then "The Lidhay Limurung tree, the right
limurun -sin?-ko? noy -doron -ko? raybun sita we? -doron-ko? bənər
Limurung-tree-Gen right-side -Gen Raybun Sita left-side -Gen Banar
side of which is Raybun Sita, the left side is Banar Sita amd from
sitə ?ow? du -to way? wan -?o ?ow?-ko? lidhay?-sin? lay?
Sita that red-2ry blood come-RN that-Gen Lidhay -tree own
which red blood comes - that Limurung tree is necessary for me.

mak -khe?-?a-ta-ŋ?-cə ba nl-ci-kay-ja.
devour-Im -Pt-Gl-lE-Dl Cer we-Dl-Gl -Em
about to devour us.
31. gata hay-tl
    how do
    How can we speak
tam -sa. 32. tam -sa do?-ŋə-cə-lə.
speak well-IN speak well-IN get-IE-Dl-Ng
the right word? We are not able to get the right word.
```

33. gam -sa-?a do?-\etaə-cə-lə ba." dayh-ti -ta\eta? to -kay-na?-cə.
do well-IN-Em get-lE-Dl-Ng Cer say-3ry-IIF say-Rcp-NPt-Dl
We are not able to perform it properly." they said to each other.
34. "?e law ?uya ?ow?-tə khe?-ya. law syaw -?a. 35. Iaw por
Ah Excl then that-Eq be -Alt Excl become-Pt Excl five
"Ah, if that is the case it will be alright! We will
ra ?amh ni-ci je?-na -п?-c -u. 36. pona kokrhun kyan? ni-cl
tray food we-Dl eat-NPt-lE-Dl-Ag five pot curry we-Dl
eat five trays of food.
We will eat five pots of
je?-na -п?-c -u. 37. ?uya limuru\ lldhay?-si\eta? ?uya ni-cl-?i ?uya
eat-NPt-lE-Dl-Ag then Limurung Lidhay-tree then we-Dl-Ag then
curry.
Then we will chop the Lidhay Limurung tree."
krah-na -\eta?-c -u." 38. dayh-ti -ta\eta? ?oha\etasəyko? ?al-ta\eta?-?aka-cə
chop-NPt-lE-Dl-Ag
say-3ry-IIF SCn go -IIF -Pt -Dl
Saying this then, the two (brothers) went
```
din churi lat-tl ban churi lat -ti -tar? ?al-ti ?ow? spirit axe take-3ry stone axe take-3ry-IIF go -3ry that off carrying the stone axes and arrived at the Lidhay Limurung tree.

Iidhay?-siŋ? I lmurui -siŋ?-han-tan? dah -tI Lidhay -tree Limurung-tree-Loc-IIF arrive-3ry
39. "low -dhar Excl-NFu
"Right now,
mandorwa? low -dhan sin?-dhan dorh-ti -dhaŋ yo -dhaŋ-?u. woodpecker Excl-NFu tree-NFu peck-3ry-NFu see-NFu -Ag woodpecker! Right now, look for it, pecking the trees.
40. siŋ? gənl dəsə ban dopal?-kay-?a baŋ -gəni din -gəni-?a Singgani Dasabang Dopal -Gl -Em stone-PLoc spirit-PLoc-Em
For Singgani Dasabang Dopal (shaman), we and you must make a
```

ja\etah-sa pərə -na?-təyh-l ba." dayh-ti. 4l. ?oha\etasəyko?

```
make-IN befaZZ-NPt-IIn -Pl Cer say -3ry
stone instrument, a spirit instrument." they said.
Then when
```

way -ti -ta\eta? tok-tororororo-ta\eta? dorh-?o-tok bela-ham-pay
come-3ry-IIF tap-tap -IIF peck-RN-Tem time-Loc-DIF
(the woodpecker) came and tap-tapping pecked (the trees) red
du -to wəy? -ta\eta?-?a glyuøh -ti wa\eta -?a ?ow? siŋ?-ko? pun -səy-pay.
red-2ry blood-IIF -Em come out-3ry come-Pt that wood-Gen skin-Ab -DIF
blood came out from the tree bark.

```
42. "low ?i -le? singən? bandopai?-kay lon -do -sarə -kay
    Excl this-REm Singgin Bangdopal-Gl after-side-thing-Gl
    "Now this will be alright for the Singgin Bangdopal (shaman),
? i -le? syaw -na? 43. nala toy -sa-ma ?i -le? laŋka
this-REm become-NPt underworld circle-IN-Co this-REm heaven
this rear side."
To go about in the underworld and enter
```

hwam -sa-ma ?i -le?.
enter-IN-Co this-REm
the heavens, this is the thing.
44. nyurls-ma cawrls-ma tom -to
Nyuris-Co Cawris-Co wander-2ry
Also in the Nyuris and Cawris
lan?-ti wah -sa-kay-ma ?i -le? syaw -na?."
Zift-REm move-IN-Gl -Co this-REm become-NPt
(parts of the heavens) this will be right to lift him and (enable) him
45. dayh-ti -ta\eta? chyan?-?a-tha-co 46. "law
say -3ry-IIF show -Pt-Gl -Dl
to wander about." (the woodpecker) told the two. "Right,
krah-j -u nin-ji khay-ya -kay ?i -kay hrih -ti ?ol -j -u.
chop-2Dl-Ag you-2Dl able-Alt-Gl this-Gl swing-3ry fezl-2Dl-Ag
if you two can chop it, then swinging (your axes) fell it."
"dayh-ti -tan? to -?a-tha-cə 47. law mandorwa? payh -je?-?a.
say-3ry-IIF tell-Pt-Gl -Dl Excl woodpecker return-Fin-Pt
(the woodpecker) told them.
Then it returned home.

```
48. ?ow?-ta chyan?-tl gam -?aktlko? ?ohansayko? ?atisi pu? -ca?
    that-Eq show -3ry keep-SqS SCn Aitsi Bro.-KN
    Having shown this then, the Atisi Batisi brothers swung their
batisi-ta力? \(\boldsymbol{f}\) a hrih -c -u -to ?o? -nis ko? din churi ban
Batisi-IIF -Em swing-Dl-Ag-2ry that-Dl -Gen spirit axe stone
spirit axes, stone axes, but they were not able to succeed---

axe -IIF -Em swing-Dl-Ag-2ry able-IIF -Dl-Ag-Neg that skin-Em-REm,
                                    --- only the bark
wan - ?a. 49. ?ohansayko?-pay, "law law syaw -na? yado
come-Pt SCn -DIF Excl Excl become-NPt UnCer
came off. Then, "Well, this will do perhaps.
?i -le?-?a ?al?-c -u cho?." dayh-ti ?ow? nis-pu? -ca?
this-REm-Em take-Dl-Ag enough say-3ry that two-Bro.-KN
    Lets take it. That's enough." So saying the two
?ow?-le?-tan? wan? -?aktiko? bəy?-?a-tha-cə ?ow?-nis-kay.
that-REm-IIF bring-SqS give-Pt-Gl -Gl that-Dl -Gl
brothers brought (the bark) and gave it to the two (father and son).
50. "low ?i -le?-?a nly-ji to -?o." 5l. "ma? ?i -pay ?i -le?
    Excl this-REm-Em you-2Dl say-RN yes this-DIF this-REm
    "So 'This is it.' you two say." "Yes, this is it."
khe?-to." hlun ghyun-tl-tap? tyan -?aka-ca." 52. "?l -pay
be -2ry heart bend-3ry-IIF answer-Pt -Dl this-DIF
they answered ashamedly. "This is not
khe?-?ak-lə. khe?-sa-pay ?i -le? khe?-?o buru dong syaw -?o khal
be -RPt-Neg be -IN-DIF this-REm be -RN but true become-RN kind
it. Well, it is in a way, but not the real thing."
khe?-lə ?l "tə hmar-ii -taŋ? 53. "?l -pay ?i -le? khe?-to
be -Neg this Eq think-3ry-IIF
--- such, he was thinking.
this-DIF this-REm be -2ry
"This is it.
tay -ma yo-ca -刀? " dayh-ti -tan? tyak-ti.
nevertheless-Co see-lFu-1E say -3ry-IIF take-3ry
Nevertheless, I will see." so saying, he took it.
54. ?ohaŋsayko?-tan? khin -?aka-c-u ?ohansayko? khin - ?o

SCn -IIF put skin on-Pt -Dl-Ag SCn put skin on-RN
Then they two put on a drum skin --
kura khe?-lə soh thangwal soh gwar?-le?-tan?. 55. ?ow? pona-din thing be -Neg bare cylinder bare circle-REm-IIF that five-day - no - it was a bare drum cylinder.

That (drum)
səmə -taŋ? jhya-?a ?ow? pande -pay. 56. pona-din-ma-taŋ? syaw -?a up to-IIF beat-Pt that shaman-DIF five-day-Co-IIF become-Pt
the pandey beat for five days.
After five days had passed
kryaguryum tə ryum-?a. 57. ?ow?-ko ?an -ko? ti? wəy? mu -cyuk-taŋ? brittle Eq dry -Pt that-Gen body-Gen water blood stay-Lim -IIF
it dried up.
While it had sap, blood, it was fine indeed.
pe -to mu -je?-?a. 58. wəy? -ma sip? -ti -ma dyok -?a
good-2ry stay-Fin-Pt
kryaguryum ta-tan? syaw -?a 59. ?u -han limurun
brittle Eq-IIF become-Pt that--Loc Limurung
brittle.

> There the Limurung Lidhay tree
\begin{tabular}{ll} 
lidhay?-sin?-rə & Iijhayn? -tə-le?-tan? syaw -ti mu -je?-na? \\
Lidhay -tree-nevertheZess & untouched-Eq-REm-IIF become-3ry stay-Fin-NPt \\
still remained untouched. &
\end{tabular}
60. ?oharsayko?-pay pheri ?atisiri pu? -ca? batisi-kay SCn -DIF again Atisiri Bro.-KN Batisi-Gl
Then the man said to the Atisiri Batisi brothers -
?ow? manta -?i. "? \(\quad\) krak -ma jhonongo təy力?-ma tiwitiwi ?atisiri that person-Ag Oh testicle-Co nuked penis-Co naked Atisiri
"Oh, you naked good-for-nothing Atisiri Batisi
pu? -ca? batisi-ja pona-din-ko? pona wa?rame janh-ti -te?-?a ga-kay-ja Bro.-KN Batisi-Emv five-day-Gen five morning make-3ry-CIF-Pt I -Gl -Emv brothers. By making one that lasted five days, five mornings, you have
\begin{tabular}{lll} 
way -khe?-?a-nan-ja ba. 6l. & nin-ji-?i-ja pona ra ?amh \\
waste-Im -Pt-2 -Dl Cer & you-2Dl-Ag-Emv five tray food \\
treated me badly indeed! & You ate five trays of food and
\end{tabular}
je?-ti pona kokhun kyan? je?-ti nin-ji-ja way -te?-?aka-j-u ba. eat-3ry five pot curry eat-3ry you-Dl-Emv waste-CIF-Pt -2D-Ag Cer five pots of curry all for nothing.
62. doh hay-ti -te? ?ete-te? n|n-j| -te? rew-te?-?a-tak-?a-nan-jo? what do -3ry-CIF such-CIF you-2D1-CIF bad-CIF-Em-Cs -Pt-2 -2D1 Why have you caused me such an evil?
63. nin-ji -ma-te? rew-na?-jə na-ma rəw-?a-na -n?" 64. ?i you-2Dl-Co-CIF bad-NPt-2Dl I -Co bad-Pt-NPt-1E this You two are bad so \(I\) also suffered.

This
din -dhenl -ko? kura ?ow? dayh-tl -tan? to -?aka-n ?ow? pande -?l. spirit-master-Gen word that say-3ry-IIF say-Pt -Ag that shaman-Ag
word the shaman spoke to the spirits.
65. "?əhhəy ni-ci-pay ?asər -pay ga? -le?-?a-tak-təyh-c -u -lu bati Oho we-Dl-DIF result-DIF reduce-REm-Em-Cs -IIn -Dl-Ag-Neg Cer
"Oh dear, we were not able to bring about any result.
66. dyah doh hay?-c -u?" dayh-tl -tan? ?o? -nis lih-?aka-c -u. now what do -Dl-Ag say-3ry-IIF that-Dl sad-Pt -Dl-Ag Now what shall we do?" the two said sadly.
67. ?ohansəyko? pona-dln tə to -?o-han ?al-tan?-?aka-cə. 68. "ləw Scn five-day Eq say-RN-Loc go -IIF -Pt -Dl Excl
So then on the fifth day, they went off.
"Right,
ten -pay khay-to -le?-?a yado janh-c -u." dayh-ti -tan? ?al-?aka-cə today-DIF able-2ry-REm-Em UnCer make-Dl-Ag say-3ry-IIF go-Pt -Dl today we may be able to do it." -- they said setting off
?o? -nis-ko? ?an -bira ka? -bira jəmbay lat -ti -tan? ?al-ti. that-Dl -Gen body-sword back-sword all take-3ry-IIF go -3ry
carrying all their body-swords.
69. ?al-ti -tan? hrih -c -u -to jugan -ma-tan? khay-c -u -lu go-3ry-IIF swing-Dl-Ag-2ry completely-Co-IIF able-Dl-Ag-Neg Having gone they laid to but were completely unsuccessful.
jugan. 70. pona-din to to -?o-han-pay ?o? -nls-pay jhən completely
five-day Eq say-RN-Loc-DIF that-Dl -DIF more
After five days those two became more and more worn
?an-nare \(\quad\) o? -nis-pay jhok-jhok-jhak-jhak-pay jhen hryok-ti body-strength that-Dl -DIF flop-flop-flop-flop-DIF more wear -3ry out, dropping with weariness.
hryam-ti hryam -?i gay?-ti -tan? syaw -?aka-cə. 7l. "ləw tire -3ry tiredness-IN get -3ry-IIF become-Pt -Dl Excl
"So we
khay-təyh-c-u-lu raysə nl-ci-pay. 72. cho? dyah-pay. nan-ma able-lIn -Dl-Ag-Neg indeed we-Dl-DIF enough now -DIF you-Co two are unable to do this.

That's enough now. You
ga? -?a na-ma ga? -?ala-n? dyah-pay.
73. dhah-pay ja?wal-ko? now -DIF Jawal -Gen
are beaten, \(I\) am beaten now.
Now let's turn into
than -ti ni-ci-pay munh -ran -wa? -ko? than -ti ni-ci-pay change-3ry we-Dl-DIF scrub-field-bird-Gen change-3ry we-Dl-DIF Jawal thicket birds and do away with ourselves."
```

way-?a-təyh-cə." 74. dayh-ti -tan? ?oha\etasəyko? ?o? -nis ?uya
rid-Pt-lIn -Dl say-3ry-IIF SCn that-Dl therefore
Saying this then the two being ashamed,
ras -ti ja?wal-lekha khoyh khoyh to huyk-la\eta pha\eta? -ti wa?
shame-3ry jawal -like khoyh khoyh call-Pur deteriorate-3ry bird
calling like Jawal birds, 'Khoyh khoyh.' and changing to a lower
syaw -ti mu -?aka-cə 75. "?əhhəy ?oha\etasəyko?-pay raysə
become-3ry stay-Pt -Dl Sho SCn -DIF indeed
form they became birds. "Oh, then indeed the two were unable

```
```

khay-c -u -lu. mutran -co? dyaw?an-co? -pay lan -?i-?a
able-Dl-Ag-Neg Mutrang-child Dyawang-child-DIF demon-Ag-Em
to do it! The Bombay demon will devour the humans.
bombay-lan -?l-?a mak -khe?-?a-tha-so syaw -lə ?al-?a-cə
Bombay-demon-Ag-Em devour-Im -Pt-Gl -Pl become-Neg go -Em-Dl
That's no good. Let
ni-ci-?a." 76. dayh-ti ?oha\etasəyko? ?uya suj?ia-din
we-Dl-Em say -3ry SCn therefore Suhia spirit
us two go. Saying this then the two Sujia spirit, Karmi
karmi-din pu? -ca?-tan? ?uya wan -?aka-ca ?u -nis-ko?-pay
Karmi-spirit Bro.-KN -IIF therefore come-Pt -Dl that-Dl -Gen-DIF
spirit brothers therefore came, carrying their powerful axes.
?abo blcu?əy churi lat -tl hengu?ay churl lat -ti ?o -han kocu?ay

```
churi lat -t 1 77. ?o? -nis-ko?-pay ?abo jəmbay pe -pe -?o-tan?
axe take-3ry that-Dl -Gen-DIF now all good-good-RN-IIF
    Theirs were very good ones given by the
kam? -ko? dəsə din -?l-le? bəy?-?o dəsə-ma -?i-le? bey?-?o.
below-Gen Dasa spirit-Ag-REm give-RN Dasa-Mo.-Ag-REm give-RN
Dasa spirit, the Dasa mother.
78. [ma? ?atha-pa pu? -ca? batha-pa -le?] ?ohansəyko? wan -?aktiko?
    (yes Atha -Fa. Bro.-KN Batha-Fa.-REm) SCn come-SqS
    (Yes their (Chepang) names were Atha Father, Batha Father) Having
?ohaŋsəyko?, "ləw ləw ?l -kay dyah ?atlsiri pu? -ca? batisl
SCn excl excl this-Gl now Atisiri Rro.-KN Batisi
come then, - "So now Atisiri Batisi Brothers were not able to
khay-c-u-lu law dyah ni-cl-dhan ?asam ni-ci-dhan hrih -tl
able-Dl-Ag-Neg excl now we-Dl-NFu perhaps we-Dl-NFu swing-3ry
do it. Right now, let us two try it next for these."
```

yo -c -u ?i -kay" dayh-ti. 79. "?oha\etasəyko? kam? dəsə-pa
see-Dl-Ag this-Gl say-3ry SCn beZow Dasa-Fa.
they said. Then below in the underworld

```
dəsə-ma -kə? -han-səy-ko? kam? jombə-han-səy-ko? ?abə yoh -nam din
Dasa-Mo.-MLoc-Loc-Ab -Gen beZow Jomba-Loc-Ab-Gen now yester-day day
of the Dasa Mother, Dasa Father from the Jomba place in the underworld
yoh -nam ?aghe -han mutran -co? dyəw?an-co? -kay toylən?-sa
yester-day underworld-Loc Mutrang-child Dyawang-child-Gl raise -IN
of former times the human's spirit can be raised and taken around."
toy?o-sa." 80. dayh-ti "sancəru?an nameru?an sancərəti nak -ti
circle-IN
    say-3ry spirit spirit spirit hold-3ry
    So saying, "Holding the spirit close it is to be

hlok-?o lidhay?-sya? limurun -sin? dyah ni-ci hrih-na -n?-c -u.
send-RN Lidhay -animal Limurung-tree now we-Dl swing-NPt-lE-Dl-Ag
Limurung tree that you ordered sent we will now lay to with our
dyah hrah-na -п?-c-u." dayh-ti ?o? -nis to -?ak -ti ?amapa-kay.
now chop-NPt-lE-Dl-Ag say-3ry that-Dl tell-Prec-3ry parent-Gl
axes. Now we two will chop it." saying the two spoke to the parents.
82. thuk -?aktiko?-ma-tan? how -khe?-?l we? -səy pu? -khe?-?
    appease-SqS -Co-IIF Yo.Bro.-Ad -Ag left-Ab O.Bro.-Ad -Ag
    Having appeased (the parents), with the younger brother taking
noy -səy nis-pu? -ca?-?l-ma-taŋ? brək -tə-ma-tan? hrih -na?-c -u
right-Ab two-Bro.-KN -Ag-Co-IIF together-Eq-Co-IIF swing-NPt-Dl-Ag
the left side and the older brother taking the right side the two
?ow? lidhay?-slo?-pay ?ol -taŋ?-?a. 83. "low
that Lidhay -tree-DIF fell-IIF -Pt
                                Excl
brothers swung their axes together. The tree began to lean, "So,
dyah ?ane nin-ji-ja ŋa-kay-ja ?ane hrlh -te?-?a-nan-jə -ba.
now then you-Dl-Emv I -Gl -Emv then swing-CIF-Pt-you-2Dl-Cer
now you have swung at me.
84. dyah-ga? -tan وa ?ol -ca -п??" dayh-tl -tan? pheri ?ow? slo?
    now -where-Al \(I\) fall-IFu-lE say-3ry-IIF again that tree
    Now where shalて I fall?" saying again the tree spoke.
no? -?a. 85. "law lay? ?ohlan lay? bohlan ?ol-?
speak-Pt Excl own benefit own benefit fall-ImE Cyuri-Em
    "Right, fall wherever is best for you. On the Cyuri
```

saydorl kumh-?a.
Saydori lie -ImE
range to the South lie down.

```
86. nan-ko? yonkli? -ko? thaw?krat you-Gen intestine-Gen (Sp)cane Your intestines become thaw cane!

```

88. doh doh jaykrat syaw -? ! !" dayh-tl krat-ko? khal-han ?ana what what (Sp)cane become-ImE say-3ry cane-Gen kind-Loc much Whatever become jay cane!" so saying he gave many commands
to -na-n-1 [pande-?l ci?-na-n-1 balə cl? -nə-lə.] tell-NPt-Ag-Dl (shaman-Ag know-NPt-Ag-Pl little know-lE-Neg.) concerning various canes. (The shamans know about it, I don't know
89. ?ohansayko? ?ow? koy krat syaw -ti mu -?a. 90. koy SCn that some cane become-3ry stay-Pt some
it all.) Then some became canes. The wirhyonkli? syaw -t mu -?a koy doh doh sinh -ko? doh doh small intesting become-3ry stay-Pt some what what liver-Gen what what small intestine became something, the liver became something.
syaw -t mu -?a. 91. ?ohansəyko? ?ow? ?ol-?a. 92. ?oi -?aktiko become-3ry stay-Pt SCn that fazz-Pt fazz-SqS Then that (tree) felz. Having falzen
?uya poy -say-ko?-khe ?uya plak-tl don wan? -t I therefore right-Ab -Gen-Ad therefore split-3ry true bring-3ry therefore, splitting the right half of the tree they brought the bəy?-?a-tha-cə slngen?-kay dəsə bandopal? tə to -?o ?ow?-tə to -?o give-Pt-Gl-Dl Singin-Gl Dasa Bangdopal Eq tell-RN that-Eq tell-RN real thing to the shaman (he is called the Dasa Bang Dopal), such is
kura. 93. ?uyhle don lanh -?o-han-səy dly -dhəni bay?-?o
word formerly true climb-RN-Loc-Ab spirit-master give-RN
said. Formerly when the shaman truly went up (from the underworld)
```

```

name-IIF this this Dasa Singin Bangdopal Eq tell-RB
the name was given - this Dasa Singin Bangdopal, such he was called.
94. ?ohansayko? ?uya "law ?l -le?-?a nan-kay." 95. "?ahhəy"

| SCn |
| :--- |
| therefore |

Then, "So this is for you."
?ohansəyko?-pay ?asə -?a. 96. "ma?-dəy ?l -le?-?a ba.
SCn -DIF happy-Pt yes-Excl this-REm-Em Cer
Then he was happy. "Yes, indeed this is it thanks.
97. ?atlsirl pu? -ca? batls!rl-?i-Ja pona kokthun kyan?-hə
Atisiri Bro.-KN Batisiri-Ag-Emv give pot curry-Res
The Atisiri Batisiri brothers devoured five pots of curry and

```
```

mak -?aka-c.-u ra ?amh-hə mak -?aka-c -u ?otə ?asər „a-kay
devour-Pt -Dl-Ag tray food-Res devour-Pt -Dl-Ag such effect I -Gl
five trays of food - that's all (they did), they were not able to
ga? -tak-sa-ja khay-tak-ma -io khe?-to ba. 98. nin-jl-?l
reduce-Cs -IN-Emv able-Cs -Neg-NN be -2ry Cer you-2D-Ag
achieve this much for me. You two -
?atha-pa pu? -ca? batha-pa -?l-te?-?a dak -?a-nay-jo ba.
Atha -Fa. Bro.-KN Batha-Fa.-Ag-CIF-Em deliver-Pt-you-2Dl Cer
Atha Father, Batha Father brothers - you two delivered it to me.

```
99. Iow he dyah-pay ?
    Excl well now-DIF this-REm become-Cer now this tree-Gen
    Well now this is alright.
Now that this
?oghe -way ban -ko? ?oghe -way dah-to ?i -?l-le? ga-?l
underworld-thing stone-Gen underworld-thing now-2ry this-In-REm I -Ag
underworld wood, this underworld stone thing has arrived, with this
dyah hryay -tl ?l -?l-le? dyah na-? tam -na -n?
now prepare-3ry this-In-REm now I -Ag speak well-NPt-1E
being prepared, now \(I\) can chant spells with this.

    spell-Co this-REm speak well-NPt-lE speZl-Co this-IN-RE
    I can chant spells with this, I can speak knowledgeably."

    So saying - now his alone was completely
?ow?-ko?-hə -tan? jugan ?uya tenchyan-kay dah -to -kay
that-Gen-Res-IIF complete therefore nowadays-Gl arrive-2ry-Gl
sufficient to last until today.
səmə syaw -?a-?a. 103. təbə jhyante tenchyan righ-ma na?-to
as much become-Em-Pt but therefore nowadays drum-Co be -2ry
    But nowadays as a result (of the knowledge
sal -kay-le? syaw -na?
year-Gl -REm become-NPt
gained as mentioned) drums last many years.

\section*{APPENDIX 3}

\section*{FOSSIL PREFIXES AND SUFFIXES}

It has been known for a long time (especially since Wolfenden, l929) that many Tibeto-Burman languages preserve remnants of a once productive affixation system. Chepang is no exception to the general rule in this respect, and a brief outline of the situation in this language will be given here because it does give some insight into verbal morphology at an earlier stage.

Traces of these 'fossil' affixes show up in the verb root in Chepang in one of two ways: i. the root has initial or final consonant clusters which retain the consonant of the affix, ii. the initial or final margins of the root syllable are devoiced or glottalised as a result of the presence of a former affix. Evidence for this second type of affix trace can be found fairly easily by comparing Chepang roots with those reconstructed for proto-Tibeto-Burman, as in Benedict (1972). This gives the following reflexes for the affixation:
PTB Chep compare: PTB Chep
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline *s-1iy & > & 1i?- & 'heavy' & & & & \\
\hline *s-min & > & mln?- & 'ripe, cooked' & & & & \\
\hline *s-man & > & hman? & 'dream' & *man & > & man- & 'swelて' \\
\hline *r-kuw & > & ku? - & 'steal' & * kuw & > & ku- & 'pigeon' \\
\hline *r-ley & > & 1e?- & 'buy' & & & & \\
\hline *m-nam & > & namh- & 'smezz' & & & & \\
\hline
\end{tabular}
where \(C\) - indicates an affix.
Note that the proto-prefixes are reflected in the syllable-final margin. This is discussed further below.

Other traces of former affixation show up in such sets as the following, which consist of essentially intransitive-transitive pairs:

Intransitive
\begin{tabular}{ll} 
?al- & 'go' \\
phen- & holzow' \\
Il- & 'Iaugh' \\
plaw- & turned up' \\
lam- & 'slide' \\
klyum- 'submerged'
\end{tabular}

Transitive
\[
\begin{array}{ll}
\text { ?al?- } & \text { 'take' } \\
\text { phon?- } & \text { 'make space' } \\
\text { nl?- } & \text { 'taugh at, mock' } \\
\text { plow- } & \text { 'turn, up' } \\
\text { lom?- } & \text { 'push' } \\
\text { klyum?- } & \text { 'submerge' }
\end{array}
\]

These pairs have been noted in other languages and are usually regarded as reflecting a former transitivising, or causative s- prefix (Wolfenden, 1929:46ff., Matisoff, 1973:33).

Benedict's reconstructed prefixes show few reflexes of type i. (above) in Chepang verb roots, though they do show up in other categories:
\[
\begin{aligned}
& \text { b-lly > play 'four' } \\
& \mathrm{b}-\text { ya > pona 'five' } \\
& \text { s-rlk > srayk '(head) Zouse' }
\end{aligned}
\]

However a considerable amount of fossil affixation can be found by looking within the language itself. There are in fact a large number of sets of verb roots, the members of which are similar not only semantically but also phonologically, often differing by only one phoneme. The pairs given above are examples of such sets but some will have more than six members. The following items are further examples of these sets:
1. hlyu- 'peel off', hlyuk- 'slip off (head of tool)', hiyut- 'peel off (clothes, snake skin)', hlyun- 'peel off (clothes, skin'), klyut- 'take off husk', klyus- 'burst (skin)'.
2. hlup- 'slip on (hat etc.)', glyup-, gllp-'slip on (clothes).
3. klek- 'ricochet', kleh- 'shoot off', gleh-, glenh, blenh-, 'miss (of arrow)', glayn-, blayo-, playn-, plen-, plan'glance off (axe blow)'.
4. ram- 'gather forest food', hram- 'graze (Intransitive)', hram?- 'herd animals, graze (Transitive)', hromh- 'pull off Zeaves', hramh-'chop off leaves for fodder', ra 'cut off'.
5. pan- 'encircle'; pan?- 'bind', panh-'tie around edge (as weights around net)', penh- 'halter, tie around neck'.
6. phan- phen- 'unbind, unloose', phas- phalh- phol-
7. pre?-, pra?-, pro?-, mri?-, mro?-, mra?-, bra?, sra?-, 刀rl?-,刀rya?-, \(\quad\) re?-, \(\quad\) ro?-, mrya?- 'mix together two or more kinds, supplement (food) by so doing, support, agree'.

Notice that sets 1 . and 2. are related in terms of being an action (removing of skin, clothes and so forth) and its reverse, (putting on of clothes). The same relationship holds between sets 5 (surrounding, tying) and 6 (untying, loosing).

The simplest explanation for these, and the many other sets that exist, is that the members of each set are combinations of a basic root common to all members, together with various prefixes and suffixes that give rise to the individual differences. The basic roots would appear to have been normally CV syllables. Thus sets 1 . and 2. have a basic root \(l(y) u\) meaning 'slide along, slide down', with a former -p suffix that indicates the reverse action. The former function of the other suffixes and prefixes is uncertain. Similarly set 3. has a basic root la(<*|ə) 'move past', set 4. has ra(<*ra) 'remove leaves', sets 5. and 6. have pa(<*рa) 'encircle, surround', while the basic root of 7. is ra/la(<*rə/lə) 'increase, mix'. The various vowel changes appear to result from the addition of (?)I/y or (?)u/w as either affixes or infixes, where these may indicate degrees of intensity or completeness (compare min?- 'cooked' and mənh- 'well cooked' also birhi?-'curl (small vine)', narho?- 'curl (large vine)').

The comparison of a root such as glyugh- 'come down, out' with other related ones (including those in sets l. and 2. above) indicates that it was originally morphologically g-|-yu-ワ-h (where <*sV 'Intransitive/ Middle'), with the basic root yu- 'move down' together with various prefixes and suffixes. This basic root compares with the proto-TibetoBurman *yu 'descend'. The picture which emerges is that the language originally had a number of lexical roots that were phonologically simple in shape (usually \(C V(C)\) syllables) and that these roots combined with each other, and with other functional elements to give complex units. These complex units have then become frozen to give the present lexical roots, which may be semantically and phonologically fairly complex (though still normally monosyllabic). It is possible too that, at the early stage, when combination was freely productive, the order of any two elements with respect to each other may have been related to their relative givenness. The influence of givenness, or topicality, on relative ordering has already been mentioned in connection with the position of the Tense and Possessive affixes in the verb (5.4.4.5:162). It is conceivable, therefore, that a causative or transitivising element may have either preceded or followed the verb root, depending on whether the causation or the action itself was the more topical. Such a variable position would explain why reconstructed proto-Tibeto-Burman prefixes, such as a causativising *sV-, affect the final margin of the root in Chepang - evidently in Chepang they became fossilised as suffixes rather than prefixes.

It is difficult, at this stage, to determine fust what the meanings or functions of the different affixes were, though a few fairly consistent patterns can be found. For instance the prefix b-is commonly associated with concommitance or equality, while -1 often has an
ablative, and \(-\eta\) an allative or illative sense. An s prefix or suffix seems to have indicated causativity or transitivity as mentioned above, and \(-r\) is often connected with circularity. It is possible, therefore, that a thorough study of the lexicon might establish these and other regularities.

SWADESH LISTS FOR EASTERN AND WESTERN CHEPANG
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & English & Eastern & Western & & English & Eastern & Western \\
\hline 1. & \(I\) & ワа & па & 36. & feather & men？ & myan \\
\hline 2. & thou & na！ & nan & 37. & hair & myan & myan \\
\hline 3. & we & \(\bigcirc 1\) & ！ & 38. & head & talay & talan／puh \\
\hline 4. & this & ？ 1 & \(x ? i\) & 39. & ear & no & no \\
\hline 5. & that & ？ow？ & \(\mathrm{x}^{\text {dyo }}\) & 40. & eye & mlk & mlk \\
\hline 6. & who？ & su & Su & 41. & nose & neh & neh \\
\hline 7. & what？ & doh & doh & 42. & mouth & hmoton？ & mon \\
\hline 8. & not & － 1 a & －I \({ }^{\text {a }}\) & 43. & tooth & sayk & soy？ \\
\hline 9. & al2 & juda & & 44. & tongue & 1 e & 1 e \\
\hline 10. & many & na？to & na？to？ & 45. & fingernail & san & son／son \\
\hline 11. & one & yat & yat & 46. & foot & dom & dom \\
\hline 12. & \(t w o\) & nis & nis & 47. & knee & noltum？ & numtol \\
\hline 13. & big & braw－ & braw－ & 48. & hand & krut & krut \\
\hline 14. & long & yas－ & chon－ & 49. & belly & luk & tuk／？yon \\
\hline 15. & smazl & mi－ & mi－ & 50. & neck & kəyk & kek \\
\hline 16. & woman & mom？co？ & mom？co？ & 51. & breasts & \[
x_{\text {dut }}
\] & \(\mathrm{x}_{\text {dut }}\) \\
\hline 17. & man & \(x\) goyco？ & \(x^{\text {goyco？}}\) & 52. & heart & hlun & lhup \\
\hline 18. & person & \(\mathrm{x}_{\text {manta }}\) & \(\mathrm{X}_{\text {manche }}\) & 53. & liver & sinh & sinh \\
\hline 19. & fish & na？ & 力a？ & 54. & drink & tur－ & tur－ \\
\hline 20. & bird & wa？ & wa？ & 55. & eat & je？－ & je？－ \\
\hline 21. & dog & kuy？ & kuy？ & 56. & bite & jəyk－ & jəyk－ \\
\hline 22. & louse & srayk & srayk & 57. & see & cyow？－ & caw？－ \\
\hline 23. & tree & si〕？ & slo？ & 58. & hear & say？－ & say？－ \\
\hline 24. & seed & say？ & say？ & 59. & know & ci？－ & cl？－ \\
\hline 25. & leaf & 10？ & 10？ & 60. & sleep & ？ en？\(^{\text {－}}\) & ？em？－ \\
\hline 26. & root & rut & rut & 61. & die & si－ & si－ \\
\hline 27. & bark & －pun & －pun & 62. & kiてl & sat－ & sat－ \\
\hline 28. & skin & pun & pun & 63. & swim & & \\
\hline 29. & flesh & may？ & may？／sya？ & 64. & \(f 2 y\) & syup？－ & \\
\hline 30. & blood & wəy？ & way？ & 65. & walk & wah－ & wah－ \\
\hline 31. & bone & hrus & rhus & 66. & come & waı－ & wa！－ \\
\hline 32. & grease & chaw？ & chaw？ & 67. & lie & ？ en ？－ & ？¢m？－ \\
\hline 33. & egg & －？um & －？um & 68. & sit & cyup？－ & nya－ \\
\hline 34. & horn & ron？ & ron？ & 69. & stand & clo－ & \[
c 10-
\] \\
\hline 35. & taiz & me ？ & me ？ & 70. & give & bəy？－ & boy？－ \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & English & Eastern & Western & & English & Eastern & Western \\
\hline 71. & say & to- & to-/rok- & 86. & mountain & syalun & \\
\hline 72. & sun & nyam & nyam & 87. & red & du- & du- \\
\hline 73. & moon & lah & Iahu/lahow & 88. & green & pli- & pll- \\
\hline 74. & star & kar & kar & 89. & yelzow & yar- & yar- \\
\hline 75. & water & ti? & t I? & 90. & white & bham- & pham- \\
\hline 76. & rain & \(t 1\) ? & \(t 1\) ? & 91. & black & gal- & gaw- \\
\hline 77. & stone & ban & ban & 92. & night & yah- & ya?- \\
\hline 78. & sand & & & 93. & hot & dhah- & dha- \\
\hline 79. & earth & sa? & sa? & 94. & cold & n 1 k - & nik- \\
\hline 80. & cloud & mus & mus & 95. & fuてz & blin- & \\
\hline 81. & smoke & -ku? & -ku? & 96. & new & raw & \(x_{\text {nəy }}\) \\
\hline 82. & fire & hme? & mhe? & 97. & good & pe- & pe- \\
\hline 83. & ash & -mut & & 98. & round & gore & \\
\hline 84. & burn & mut - & mut- & 99. & \(d r y\) & sot- & sot- \\
\hline 85. & path & I yam & I yam & 100. & name & mayo & min \\
\hline
\end{tabular}

\section*{BIBLIOGRAPHY}
```

ALLEN, N.J.
1975 Sketch of Thulung Grammar. Cornell University East Asia Papers 5.
New York: Cornell University.
ALLERTON, D.J.
1978 The notion of "giveness" and its relations to presupposition and
theme. Lingua 44:133-168.
APTE, V.S.
1979 The student's Sanskrit-English dictionary. Delhi: Motilal
Barnarsidass.
BANDHU, C.M., B.M. DAHAL and R.C. CAUGHLEY
1970 Chepang segmental phonemes. Journal of the Tribhuvan University
5/1:65-81.
BARNARD, J.T.O.
1934 A handbook of the Rawang dialect of the Nung language.
Rangoon: Government Printer.
BASHAM, A.L.
1954 The wonder that was India. London: Sidgwick and Jackson.
BAUMAN, J.
1974 Pronominal verb morphology in Tibeto-Burman. Linguistics of the
Tibeto-Burman area, vol. l. Berkeley: Department of Linguistics,
University of California.
1975 Pronouns and pronominal morphology in Tibeto-Burman. Ph.D.
dissertation, University of California, Berkeley.
BECKER, A.
1967 A generative description of the English subject tagmeme. Ph.D.
thesis, University of Michigan.
BENEDICT, P.K.
1972 Sino-Tibetan: a conspectus. Cambridge: Cambridge University Press.
BENEDICT, P.K. ed.
1976 A rhyming dictionary of Burmese. Linguistics of the Tibeto-Burman
area, vol.3/l. Berkeley: University of California.

```

BIERI, D.
1975 Is Sunwar a pronominalized language? SIL Nepal. Mimeo.
BISTA, D.B.
1967 People of Nepal. Kathmandu: Ratna Pustak Bhandar.
BRADLEY, D.
1979a Proto-Loloish. Scandinavian Institute of Asian Studies, Copenhagen. London: Curzon Press. SIAS Monograph Series.

1979b Lahu dialects. Canberra: Australian National University Press.
BRUCE, L.P.
1979 Alamblak grammar. Ph.D. thesis, Australian National University.
CAUGHLEY, R.C.
1969 Chepang phonemic summary. In Tibeto-Burman phonemic summaries l:l-36. Kathmandu: SIL.

1970a Chepang segmental synopsis. In Hale and Pike, eds 1970:279-299.
1970b Pitch, intensity and higher levels in Chepang. In Hale and Pike, eds 1970:143-157.
1970c Chepang texts. In Hale and Pike, eds 1970:(4)l-130.
197la Chepang as a pronominalised language. SIL mimeo.
1971b Some performative markers in Chepang. SIL mimeo.
1971c Some restrictions on focus in Chepang. SIL mimeo.
1978 Participant rank and verbal cross reference in Chepang. In J.E. Grimes, ed. Papers on discourse, 51, 163-178. Dallas, Texas: SIL.
CAUGHLEY, R.C., B.M. DAHAL and C.M. BANDHU
1971 Notes on Chepang culture. Journal of the Tribhuvan University 6/1: 77-89.
ChAFE, W.L.
1970 Meaning and Structure of Language. Chicago: University of Chicago Press.
1974 Language and consciousness. Language 50/1:111-133.
1976 Giveness, contrastiveness, definiteness, subjects, topics, and point of view. In Li, ed. 1976:25-55.
CHIN P'eng, T'AN K'e-jang, CH' \({ }^{\prime}\) Ai-t'ang, and LIN Hsiang-jung
1958 The phonology and morphology of the Jyarung language (Suo-mo dialect). Yügen Yenchiu 3:71-108. (In Chinese.)
CHOMSKY, N.
1976 Reflections on the nature of language. London: Temple Smith.
COLE, P. and J.M. SADOCK, eds
1977 Syntax and semantics, vol.8: Grammatical relations. New York: Academic Press.
COMRIE, B.
1976a Aspect. Cambridge: Cambridge University Press.
1976b The syntax of action nominals: a cross language study. Lingua 40:177-201.
1976c The syntax of causative constructions: cross language similarities and divergences. In Shibatani, ed. 1976:261-312.

DIXON, R.M.W.
1979 Ergativity. Language 55:1.
EGEROD, S .
1974 Further notes on Akha sentence particles. Paper presented at the 6th International Conference on Sino-Tibetan Languages and Linguistics.

EMENEAU, M.B.
1965 India and historical grammar. Annamalai University Publications in Linguistics 5. Annamalaingar.
FILLIMORE, C.J.
1968 The case for case. In E. Bach and R.T. Harms, eds Universals in linguistic theory, l-68. New York: Holt, Rinehart and Winston.

1977 The case for case reopened. In Cole and Sadock, eds 1977:59-81.
FOLEY, W.A. and R.D. VAN VALIN
forth- Role and reference grammar.
coming
FORBES, C.J.F.
1877 Affinities of the dialects of the Chepang and Kusunda tribes of Nepal with those of the hill tribes of Arracan. Journal of the Royal Asiatic Society and Great Britain and Ireland 9:421-424.

1878 On the Tibeto-Burman languages. Journal of the Royal Asiatic Society of Great Britain and Ireland 10:210-227.

1881 Comparative grammar of the languages of Further India: a fragment and other essays. London: W.H. Allen.

GIVÓN, T.
1975 Promotion, accessibility and casemarking: towards understanding grammar. Working Papers in Language Universals 19:55-125.
1976 Topic, pronoun and grammatical agreement. In Li, ed. 1976:149-188.
GLOVER, W.W.
1974 Sememic and grammatical structure in Gurung (Nepal). Normanton, Oklahoma: SIL, Publications in Linguistics and Related Fields 49.

GREENBERG, J.H.
1963 Some Universals of grammar with particular reference to the order of meaningful elements. In J.H. Greenberg, ed. Universals of Language Cambridge. Cambridge, Massachusetts: M.I.T. Press.

GRIERSON, G.A. ed.
1909 Linguistic survey of India. 12 vols. Calcutta: Superintendent of Government Printing. (Reprinted 1967, Delhi: Motilal Barnarsidass.)

GRIMES, J.E.
1975 The Thread of Discourse. The Hague: Mouton.
GRUBER, J.
1967 Topicalisation in child language. Foundations of Language 3:37-65.
HALE, E.A. ed.
1973 Clause, sentence and discourse patterns in selected languages of Nepal. Normanton, Oklahoma: SIL, Publications in Linguistics and Related Fields 40/I-IV.

HALE, E.A. and K.L. PIKE, eds
1970 Tone systems of Tibeto-Burman languages of Nepal: vol. 3 of F.K. Lehman, ed. Occasional papers of the Wolfenden Society on Tibeto-Burman linguistics. Urbana: Department of Linguistics, University of Illinois.

HALLIDAY, M.A.K.
1961 Categories of the theory of grammar. Word 17:22.
1970a Language structure and language function. In Lyons, ed. 1970:140-165.
1970b Functional diversity in language. Foundations of Language 6:322-361.
1973 Explorations in the function of language. New York: Elsevier.
HAWKINSON, A.K. and L.H. HYMAN
1974 Hierarchies of natural topic in Shona. Studies in African Linguistics 5/2:147-170.

HENDERSON, E.J.A.
1957 Colloquial Chin as a pronominalized language. Bulletin of the School of Oriental and African Studies 20:323-327.

1965 Tiddim Chin: a descriptive analysis of two texts. London Oriental Series, vol.15. London: Oxford University Press.

HODGSON, B.H.
1848 On the Chepang and Kusunda tribes of Nepal. Journal of the Bengal Asiatic Society 17/2:650-658. (Reprinted 1874, in Essays on the languages, literature and religion of Nepal and Tibet, part 2. London.)
1856 Aborigines of the Niligiris with remarks on their affinities. Journal of the Bengal Asiatic Society 25:498-522.

1857 Comparative vocabulary of the languages of the Broken Tribes of Nepal. Journal of the Bengal Asiatic Society 26/5: 317-349. (Reprinted 1880, in Essays relating to Indian subjects, vol.1 London.)

HOPE, E.R.
1974 The deep syntax of Lisu sentences. Pacific Linguistics, B-34. Canberra: Pacific Linguistics.

HOLZHAUSEN, A.
1973 Kulunge Rai clause types. Nepal Studies in Linguistics l:15-26.
HUNTER, W.W.
1868 A comparative dictionary of the languages of India and High Asia. London: Trübner.

JEST, C.
1966 Les Chepang: ethnie nepalaise de langue tibéto-birmane. Objet et Mondes 6:169-184.

JOHNSON, D.E.
1977 On relational constraints in grammar. In Cole and Sadock, eds 1977:151-178.

KEENAN, E.L.
1976 Towards a universal definition of "subject". In Li, ed. 1976:303-333. KÜGLER, K.P.

1975 Pronominalization in Danuwar Rai. MS
KUIPER, E.B.J.
1962 Nahali: a comparative study. Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afd. Letterkunde 25/5.

LEHMANN, W.P.
1973 A structural principle of language and its implications. Language 49/1:47-66.

LI, C.N. ed.
1976 Subject and Topic. New York: Academic Press.
LI, C.N. and S.A. THOMPSON
1976 Subject and topic: a new typology of language. In Li, ed. 1976:457-489.
LONGACRE, R.E.
1964 Grammar Discovery Procedures. The Hague: Mouton.
1976 An Anatomy of Speech Notions. Lisse: Peter de Ridder Press.
LYONS, J., ed.
1970 New horizons in linguistics. Harmondsworth: Penguin.
1977 Semantics, vol.2. Cambridge: Cambridge University Press.
MACDONALD, A. W.
1975 On Prājapati. In A.W. Macdonald, ed. Essays on the ethnology of Nepal and South Asia. Bibliotheca Himalayica Ser.III, vol.3. Kathmandu: Ratna Pustak Bhandar.

MASPERO, H.
1947 Notes sur la morphologie du tibétobirman et du Munda. Bulletin de la Société de Linguistique de Paris 44:155-185.

\section*{MATISOFF, J.A.}

1973 The grammar of Lahu. Berkeley: University of California Publications in Linguistics 75.
1974 Verb concatenation in Kachin. Linguistics of the Tibeto-Burman area l/l.

MATTHEWS, P.H.
1974 Morphology: an introduction to the theory of word-structure. Cambridge: Cambridge University Press.

MAZAUDON, M.
1976 Tibeto-Burman tonogenetics. Linguistics of the Tibeto-Burman area 3/2:1-123.

MICHAILOVSKY, B.
1974 Hayu typology and verb morphology. Linguistics of the Tibeto-Burman area l/l:l-26.

1975 Notes on the Kiranti verb (East Nepal). Linguistics of the TibetoBurman area 2/2:183-218.

NAGANO, Y.
1979 A historical study of Gyarong initials and prefixes. Linguistics of the Tibeto-Burman area 4/2:44-68.

NEBESKY WOJKOWWITZ, R. von
1959 Kusunda and Chepang: notes on two little-known tribes of Nepal. Bulletin of the International Cormittee for Urgent Anthropological and Ethnological Research 2:77-84.

OLSON, M.
1979 Barai clause juncture: towards a functional theory of interclausal relations. MS. Australian National University.

PIKE, K.L. and E.G. PIKE
1977 Grammatical Analysis. Arlington: SIL publications in Linguistics 53. PINNOW, H.J.

1966 A comparative study of the verb in the Munda language. In N. zide, ed. Studies in comparative Austroasiatic linguistics, 96-193. The Hague: Mouton.

REINHARD, J.
1976 The Ban Rajas, a vanishing Himalayan tribe. Contributions to Nepalese Studies vol.4:1-22.

REINHARD, J. and S. TOBA
1970 A preliminary analysis and vocabulary of the Kusunda language. SIL Nepal mimeo.
ROMMETVEIT, R.
1968 Words, meanings and messages. New York: Academic Press.
ROSS, J.R.
1973 Nouniness. In O. Fujimara, ed. Three dimensions of linguistic theory. Tokyo: TEC Company.

SCHACHTER, P.
1974 A non-transformational account of serial verbs. Studies in African Linguistics, Supp.5:253-270.

1977 Reference-related and role-related properties of subjects. In Cole and Sadock, eds 1977:279-306.

SHAFER, R.
1966-70 Introduction to Sino-Tibetan, Pt. l (1966), Pt. 2 (1967), Pt. 3 (1969), Pt. 4 (1970). Wiesbaden: Otto Harrassowitz.

Shibatani, M. ed.
1976 Syntax and semantics, vol.6: The grammar of causative constructions. New York: Academic Press.

SILVERSTEIN, M.
1976 Hierarchy of features and ergativity. In R.M.W. Dixon, ed. Grammatical categories in Australian languages, 112-171. Linguistic Series 22. Canberra: Australian Institute of Aboriginal Studies, and Humanities Press.

SUBBA, S .
1972 A descriptive analysis of Magar, a Tibeto-Burman language. Ph.D. thesis, University of Poona.

TOBA, S .
1979 Khaling. Asia and African Grammatical Manual, No.l3d. Tokyo: Bunpō Kyōdō Kenyū Project, Asia Africa Gengo Kenkyūzo. Tokyo Gaikokugo Daigagku.

VAN VALIN, R.D. and W.A. FOLEY
1979 Role and reference grammar. Paper delivered at the Conference on Current Approaches to Syntax, University of Wisconsis.

VOEGELIN, C.F. and F.M. VOEGELIN
1964-65 Languages of the world: Sino-Tibetan. Anthropological Linguistics 6/3, 7/3, 7/4, 7/5, 7/6.

WATTERS, D.E.
1973 Clause patterns in Kham. In Hale, ed. 1973:39-202.
1975 The evolution of a Tibeto-Burman pronominal verb morphology: a case study from Kham. Linguistics of the Tibeto-Burman area 2/1:45-79.

WILLIAMS, J.
1973 Clause patterns in Maithili. In R.L. Trail, ed. Patterns in clause, sentence, and discourse in selected languages of India and Nepal, 345-452. Normanton, Oklahoma: SIL Press, 4l/2.
WOLFENDEN, S.N.
1929 Outlines of Tibeto-Burman linguistic morphology. Prize Publication Fund vol.2. London: The Royal Asiatic Society.

YOUNG, R.A.
1971 The verb in Bena-Bena: its form and function. Canberra: Pacific Linguistics, Australian National University. B-18.```


[^0]:    $\overline{\mathrm{l}_{\text {As }} \text { used in, for example, Halliday, 1970, Dixon 1979:10, for any referent of an NP. }}$

[^1]:    ${ }^{1}$ Compare R.M.W. Dixon, 1977 'Where have all the adjectives gone?' Studies in Language 1. The only common non-verbal adjectives in Chepang are: ?ay 'old', raw 'new' and soh 'empty'. These cannot take verbal affixes or the phonaesthetic marker -tə.

[^2]:    ${ }^{1}$ See S. Kuno.1979:8. 'Functional Syntax' in Papers from the Conference on Current Approaches to Syntax, University of Wisconsin.

[^3]:    ${ }^{1}$ Note Bauman's 3rd Person Plural marker mi (Bauman, 1975:238) and the Lahu mâ Verbal Plural Action Number.

[^4]:    ${ }^{\text {cff. Dixon, }}$ 1979:103. Nearly all languages classify the verb 'see' in the same way as 'cut'. More surprisingly the perceiver of 'see' is always agentive.

[^5]:    $\mathrm{I}_{\text {Though he }}$ does link te? via Rawang è and le to a 'directional' function (Bauman 1975: 231, see also section 6.3.2.3:202).

[^6]:    ${ }^{1}$ Note that Sunwar (Pike and Pike, 1977:298ff) has the forms: $-m \quad$ 'Direct observation' ("The speaker is certain he has seen the event"). -t(a)'Indirect observation' ("The speaker is not certain he has seen the event").

[^7]:    ${ }^{1}$ It is not uncommon to find Declarative forms used, (with appropriate intonation) for interrogation and commanding, but Interrogative and Jussive forms are rarely used for making declarations.

[^8]:    ${ }^{1}$ And suggests previous counter-expectancy 'It is indeed.'

[^9]:    $1_{\text {The nearest }}$ equivalent to this is: puse-ko? doh -ma wan -lam cat-Gen what-Co come-HNg
    'Of all cats, all may not enter.'

[^10]:    ${ }^{1}$ A more accurate description would perhaps be a 'Limited Present', with the sense of 'just now', in which case the affix is formally and semantically very close to the free form denl 'just now'.

[^11]:    ${ }^{1}$ A further difference between the English Passive and the Chepang clause with the Goal as the NPCR is that the Passive is of ten used to omit reference to the Agent, whereas in Chepang it is the cross-referenced Goal NP that is most likely to be omitted, not the Agent.

[^12]:    $\overline{1_{\text {Compare Dixon }} \text { 1979:111. }}$

[^13]:    ${ }^{1}$ Non-verbal adjectives limited basically to $\mathrm{Pay}^{\prime}$ 'old', row 'new', soh 'empty/bare', plus a few less common forms.

[^14]:    laivón's (1976) suggestion for *I.E. SOV ordering with suffixation cannot apply here since Chepang pronominal elements are final to the verb in the Affirmatives (they do not occur before Tense, or verb 'to be').

[^15]:    $I_{\text {The NP Agent affix might originally have been a Topic or Possessor marker of the }}$ form *?l. If this were the case then the First stage would be:

    пə-cə-?। wan? nə? ?u пə cə (compare ex.15) $I$-Dl-Ton bring NPt TAg $I$ Dl

    The NP Goal case marker could then have come from *ka? 'Mobile Locative' + *? , with *ka? + *? $i \rightarrow \operatorname{kay}(?)$
    ne-cə-kə?-?
    $I$ wan? ne? to? no ce (compare ex.16)
    $I$-Dl-ML Top bring NPt NAg $I$ Dl $I$-Dl-ML Top bring NPt NAg $I$ Dl

[^16]:    

[^17]:    $\overline{1}_{\text {nan }}$ is a 2nd Person form in i) West Central Himalayish (Bodic Division);
    ii) Kukish and Kachin (Burmic Division); iii) Baric. This widespread occurrence in Tibeto-Burman is a counter-evidence for the above proposal.

[^18]:    $\overline{\mathrm{I}_{\text {This may }}}$ originally have been a directional element *to? 'towards' - compare the present form -tan 'Allative'.

