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Pronouns and Pronominal Morphology in Tibeto-Burman

By

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B.S. (Michigan State University) 1964
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DISSERTATION

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Committee in Charge

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.....

To my parents

Robert and Julia Bauman

who awaited this accomplishment with
patience, understanding, and love.

PREFACE

My thanks and appreciation go out to the members of my committee, Jim Matisoff, Shirley Silver, and Karl Zimmer, for the painful task of reading previous drafts of this work, often lacking in depth, organization, and style, much of which they kindly supplied.

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TABLE OF CONTENTS

	<u>Page</u>
Preface	iii
Table of Contents	vi
List of Figures	xii
Introduction	xv
Orthographic Standardization	xvii
Abbreviations and Conventions	xix
Chapter 1: Theoretical and Methodological Perspectives	1
1.0. Introduction	1
1.1. Morpho-Syntactic Stereotype of TB	3
1.1.1. Divergence from the Stereotype: The Pronominalized Languages	6
1.1.2. Accounting for Pronominalization: Outside Sources vs. Internal Development	9
1.2. Linguistic Areas	13
1.3. Linguistic Substrata	15
1.3.1. The Case of Rumanian	18
1.3.2. The Case of Armenian	20
1.4. Morphological Borrowing	21
Chapter 2: A History and Typology of Tibeto-Burman Pronominal Verb Morphology	29
2.0. Introduction	29
2.1. History of Thought Regarding Pronominalization	29
2.1.1. Brian H. Hodgson	30
2.1.1.1. Classification of Tibeto-Burman	31

	<u>Page</u>
2.1.12. The Turanian Hypothesis	35
2.1.121. General Turanian Characteristics	36
2.1.122. Pronominal Characteristics of Turanian	40
2.1.2. The Linguistic Survey of India	42
2.1.21. Konow's Assessment of TB	43
2.1.22. The Formulation of the Munda Hypothesis	47
2.1.3. Morphological Borrowing from Indo-European	48
2.1.4. Hypothesis of Native Origin	50
2.2. An Evaluation of the Munda Substratum Hypothesis	52
2.2.1. The Munda Pronominal System	53
2.2.2. Comparison of Bahing and Santali	54
2.2.21. Independent Pronouns	55
2.2.22. Intransitive Verb Affixes	59
2.2.23. Transitive Verb Affixes	62
2.2.3. Munda and the Proto-Austroasiatic Pronominal System	66
2.3. Typological Evidence for the Nativeness Hypothesis	69
2.3.1. Geographic Distribution of Pronominalization	69
2.3.2. Aims of the Comparison	75
2.3.3. Typology of Pronominal Verb Affixes	78
2.3.31. Transitive Verb Affixes	79
2.3.32. The Reflexive Affix Category	82
2.3.33. Affixation Patterns	82

	<u>Page</u>
2.3.34. Tense/Aspect/Mood Concord	83
2.3.35. Negative Concord	84
2.3.4. Distribution and Assessment of Affix Types	85
2.3.41. Occurrence of Tense/Aspect Concord	85
2.3.42. Co-occurrence of Transitive with Intransitive Paradigms	87
2.3.421. Parallels Between Lushei and Kachin	88
2.3.422. Parallels Between Tiddim and Kachin	90
2.3.423. Morphological Links Between Kachin and Kuki-Chin	91
2.3.424. Morphological Links Between Kachin and Other Pronominal- ized Languages	91
2.3.43. Occurrence of Reflexive Affixes	94
2.3.44. Prefixation versus Suffixation	95
2.3.5. Pronominal Categories	99
2.3.51. Correlations Between Categories	99
2.3.52. Proto-Categories	102
Chapter 3: Independent Pronouns: Categories and Roots	105
3.0. Introduction	105
3.0.1. Paradigmatic Change	106
3.0.2. Pronominal Diversity in TB Subgroups	109
3.1. Overview of TB Independent Pronouns	112
3.1.1. Reconstructible Forms: * <u>na</u> and * <u>nan</u>	112
3.1.2. Alternation in Pronominal Forms	114

	<u>Page</u>
3.1.21. Case Related Alternation	115
3.1.22. Number Related Alternation	117
3.1.23. Affix Related Alternation	120
3.2. Pronominal Roots in the Himalayan Languages	123
3.2.1. Eastern Himalayish	123
3.2.21. Singular Forms: # <u>gana</u> and # <u>kana</u>	125
3.2.22. Non-Singular 1st Person Forms: The Inclusive/Exclusive Distinction	129
3.2.221. Nasal Initial Roots	130
3.2.222. Inclusive # <u>i</u> and Exclusive # <u>u</u>	131
3.2.223. The Exclusive Roots # <u>ka</u> , # <u>ku</u> , and # <u>u</u> and the Question of PTB Pronominal Categories	133
3.2.23. 2nd Person Morphemes	137
3.2.231. # <u>i</u> as a 2nd Person Marker	137
3.2.232. Plural Marker # <u>i</u>	140
3.2.2. Tibetan	142
3.2.3. Other Himalayish Languages: # <u>gyana</u> and # <u>kyana</u>	146
3.3. Pronominal Roots in the Languages of the Assam Hills	151
3.3.1. Overview	154
3.3.2. 2nd Person Forms	156
3.3.21. Forms in <u>no</u> or <u>nu</u>	156
3.3.22. Suppletive Plurals and Forms in <u>ni</u>	157
3.3.3. 1st Person Forms	160
3.3.31. 3rd Person Influences	162

	<u>Page</u>
3.3.32. Non-Singular Forms	165
3.4. Appraisal of the Disyllabic Pronoun Hypothesis	167
3.4.1. Summary of the Argument	167
3.4.2. Etymology of the Stop Initial Pronominal Elements	171
3.4.21. Historical Priority of the Nasal Initial Roots	172
3.4.22. The Genitive Marker # <u>kya</u>	174
3.4.23. Reanalysis of a PTB Genitive Construction	176
3.4.24. Stop Initial Plural Stems	180
3.5. Summary	182
3.5.1. System of PTB Pronominal Roots	182
3.5.2. Predictive Capacity of the System: Other TB Subgroups	184
Chapter 4: Affixal Pronominal Roots and Patterns of Affixation	189
4.0. Introduction	189
4.1. Intransitive Verb Affixes	191
4.1.1. The Prototype of the Intransitive Verb Paradigms	191
4.1.2. 1st Person Singular Forms	196
4.1.3. Dual Markers	197
4.1.4. Plural Markers	199
4.1.5. The Inclusive/Exclusive Distinction	200
4.1.6. The Morpheme # <u>te</u>	203
4.1.7. 2nd Person Forms	206
4.1.8. Homophony Avoidance: Systemic Stability	208

	<u>Page</u>
4.2. Transitive Verb Affixes	211
4.2.1. Affixation Patterns	211
4.2.11. Transitivity Type	212
4.2.111. Split-Ergatives	214
4.2.112. The Expression of Transitivity Type	216
4.2.12. Split-Ergative and Mixed Pronominalized Languages	221
4.2.13. Change of Transitivity Type	226
4.2.2. Roots of the Transitive Paradigm	226
4.2.21. Person Marking	227
4.2.22. Morphology of # <u>te</u>	229
4.2.23. Number Marking	232
4.2.24. Person Marking for the Transitive Subject	238
4.2.25. Non-singular Transitive Objects	240
4.3. The Split-Ergative Prototype of the Pronominalized Languages	243
4.3.1. Split-Ergative Agreement and Mixed Case Systems	248
4.3.2. Subject-Object Agreement and Mixed Case Systems	251
4.3.3. Subject Agreement and Split- Ergative Case Systems	252
4.3.4. Change of Transitivity Type	253
4.4. The Speech Participant Category	256
Appendix: The Pronominalized Languages-- Pronouns and Pronominal Morphology	265
Primary Sources	305
Bibliography	308

LIST OF FIGURES

	<u>Page</u>
Figure 1: INDEPENDENT PRONOUNS OF SANTALI AND BAHING	56
Figure 2: INTRANSITIVE VERB AFFIXES OF SANTALI AND BAHING	60
Figure 3: BAHING TRANSITIVE VERB AFFIXES	64
Figure 4: MAP OF TB AREA SHOWING DISTRIBUTION OF PRONOMINALIZATION	72
Figure 5: TYPOLOGY OF PRONOMINAL VERB AFFIXES	80
Figure 6: LUSHEI AND KACHIN OBJECT AFFIXES	89
Figure 7: 1st PERSON VERB AFFIXES OF KACHIN, TIDDIM, AND LUSHEI	92
Figure 8: INTRANSITIVE VERB AFFIXES OF CHEPANG, RAWANG, JYARUNG, AND LIMBU	97
Figure 9: EXEMPLIFICATION OF THE INCLUSIVE AND DUAL CATEGORIES IN PRONOMINALIZED LANGUAGES	100
Figure 10: EXAMPLES OF POSSESSIVE ALTERNATION	116
Figure 11: EXAMPLES OF NUMBER ALTERNATION	118
Figure 12: HOMOPHONY OF POSSESSIVE AND NON-SINGULAR FORMS OF THE PRONOUNS	118
Figure 13: EXAMPLES OF AFFIXAL ALTERNATION	121
Figure 14: LANGUAGE RELATIONS IN CENTRAL AND EASTERN NEPAL ACCORDING TO SHAFER (1974)	124
Figure 15: 1st PERSON PRONOUNS IN EASTERN HIMALAYISH	126
Figure 16: 2nd PERSON PRONOUNS IN EASTERN HIMALAYISH	127

	<u>Page</u>
Figure 17: NON-SINGULAR 1st PERSON FORMS PRESERVING INCLUSIVE AND EXCLUSIVE ROOTS	132
Figure 18: 2nd PERSON FORMS EXHIBITING <u>ye</u> - <u>i</u> ROOT	138
Figure 19: PERSONAL PRONOUNS IN VARIOUS TIBETAN DIALECTS	143
Figure 20: 1st PERSON PRONOUNS IN VARIOUS HIMALAYAN SUBGROUPS	147
Figure 21: 2nd PERSON PRONOUNS IN VARIOUS HIMALAYAN SUBGROUPS	148
Figure 22: PRONOUNS OF THE ASSAM HILLS LANGUAGES	152
Figure 23: PRONOMINAL AFFIXES OF INTRANSITIVE VERBS	170
Figure 24: 1st PERSON PRONOUNS IN MISCELLANEOUS TB SUBGROUPS	185
Figure 25: 2nd PERSON PRONOUNS IN MISCELLANEOUS TB SUBGROUPS	186
Figure 26: 1st PERSON INTRANSITIVE VERB AFFIXES	192
Figure 27: 2nd PERSON INTRANSITIVE VERB AFFIXES	193
Figure 28: PROTOTYPE INTRANSITIVE VERB AGREEMENT SYSTEM	195
Figure 29: TYPES OF TRANSITIVE VERB AGREEMENT	220
Figure 30: TRANSITIVE VERB AFFIXES: SINGULAR SUBJECT AND OBJECT	228
Figure 31: TRANSITIVE VERB AFFIXES: NON- SINGULAR SUBJECT WITH 3rd SINGULAR OBJECT	233
Figure 32: TRANSITIVE VERB AFFIXES: NON- SINGULAR SUBJECT WITH 1st AND 2nd SINGULAR OBJECTS	234
Figure 33: PROTOTYPE OF NUMBER SPECIFICATION FOR TRANSITIVE VERBS WITH SINGULAR OBJECTS	237

	<u>Page</u>
Figure 34: OBJECT AGREEMENT IN TRANSITIVE RELATIONS WITH 1st OR 2nd PERSON OBJECTS	245
Figure 35: PROTOTYPE TRANSITIVE VERB AGREEMENT SYSTEM: SINGULAR SUBJECT AND OBJECT	247
Figure 36: MATCHING OF TRANSITIVITY TYPES FOR CASE AND AGREEMENT SYSTEMS IN THE PRONOMINALIZED LANGUAGES	254
Figure 37: SEMANTIC FEATURES RELATING THE SPEECH PARTICIPANT AND DEMONSTRATIVE CATEGORIES	260

INTRODUCTION

For upwards of a century opinion has been split on how to account for the appearance of complex morphological structures in the verbs of several Tibeto-Burman languages. The majority opinion sees it as due to outside influence while the minority attributes it to the continuation of the phenomenon from the time of the proto-language. Neither of these hypotheses, however, has ever been verified by a systematic comparison of the relevant languages.

I have attempted to remedy this situation by bringing together sufficient data to insure a representative sampling of such verb structures for genetic, geographic, and typological comparisons. On the basis of such studies, I believe that it is now possible to settle the controversy on the side of the nativeness hypothesis.

However, while I believe in the correctness of the conclusions reached after comparing this data, I do not believe that I have said the last word. For many of the languages considered, the data is incomplete and perhaps inaccurate, and for these it was not possible to do more than merely suggest the true sequence of development. Hopefully, forthcoming data, especially from Nepal, will clarify many of the issues.

This work was also attempted on a conceptual framework of Tibeto-Burman still inadequately understood. Opinions regarding subgrouping, phonological history, and syntax have often had to be conjectural. Since the reliability of a morphological comparison and reconstruction hinges on having satisfying answers to many of these questions, the study reported here might be construed as premature. However, the poor prognosis for acquiring additional data on many of these languages justifies the attempt at this time.

On the positive side, to the extent that the data is reliable, the morphological comparisons achieved here can lend either credibility or doubt to proposals established independently using other language criteria. They can, in short, be of decided value in testing and directing further lines of research.

ORTHOGRAPHIC STANDARDIZATION

A standardized set of orthographic symbols was used to record the data in order to facilitate comparison of the forms. For the consonants these are as follows:

		Dental/ Bilabial	Alveolar	Palatal	Velar	Glottal
Stops	voiceless	p	t		k	ʔ
	voiced	b	d		g	
Fricatives	voiceless	f	s	š	x	h
	voiced	v	z	ž		
Affricates	voiceless			c		
	voiced			j		
Nasals		m	n	ɲ	ŋ	
Glides		w		y		

Aspirated stops and affricates are indicated by a following, h .

In no case was a change made without first ascertaining that there was phonetic identity. For the consonants this was usually possible although glottalic phenomena were sometimes troublesome. Very commonly only an apostrophe, ' , is used in a source to repre-

sent some only vaguely described glottal event. This convention has been maintained for the relevant languages.

The phonetic description of vowels is very often much less assuredly given than that of consonants. The approximate values in the vowel space and the symbols used are as follows:

	front		central	back
	round	unround		
high	ʉ	i	ɨ	u
		e		
mid	ø	ɛ	ə	o
		ɛ	ʌ	ɔ
low		æ	a	

Vowel length is indicated by a colon, :, following the vowel symbol.

Tone marks are unchanged from the source.

ABBREVIATIONS AND CONVENTIONS

acc.	accusative
colloq.	colloquial
descr.	descriptive
dl.	dual
emph.	emphatic
erg.	ergative
excl. } ex. }	exclusive
fut.	future
gen.	genitive
imper.	imperative
incl. } in. }	inclusive
intr.	intransitive
LSI	Linguistic Survey of India
neg.	negative
nom.	nominative
obj.	object
pl.	plural
poss.	possessive
pres.	present
PTB	Proto-Tibeto-Burman
sen. part.	sentence particle
sg.	singular
subj.	subject

subord.	subordinate
TB	Tibeto-Burman
tran.	transitive
vb	verb
1st	first person pronoun
2nd	second person pronoun
3rd	third person pronoun
→	When connecting two pronominal forms, as X-Y, this symbol indicates a transitive relation such that X is acting on Y.
#	precedes a tentative reconstruction
*	precedes a phonologically sound reconstructed form

CHAPTER 1. THEORETICAL AND METHODOLOGICAL PERSPECTIVES

1.0. INTRODUCTION

The Tibeto-Burman (TB) family which includes several hundred languages extending from northern Tibet and western China south through Burma, and from northwest India east to Laos and Thailand, became established primarily on the basis of lexical and syntactic evidence assembled by various workers. Perhaps the earliest recognition of the unity of the family is contained in a letter written by the missionary Nathan Brown to Brian Hodgson (Hodgson 1850:12).¹ Commenting on which language would constitute the best standard for comparison within Indo-Chinese, he "assumes the Burmese, which is at least half-brother to the Tibetan. This would bring the Tibetan, the Lhopa or Bhutanese, the Burmese, the Singpho, the Naga, etc. into a kind of family

¹ The dates for Hodgson's work will be given according to their original publication in the Journal of the Asiatic Society of Bengal. The page references, however, will be given from the reprinted versions of these works in either the Miscellaneous Essays (1880) or Essays on the Languages, etc. of Nepal and Tibet (1874), wherever this is applicable.

union."² With the addition of more and more materials as research expanded, the field took on fuller form until with the appearance of the Linguistic Survey of India (LSI), the present membership of Tibeto-Burman was solidified and the first serious attempts were made to subgroup the field. Later comparative work, especially by Shafer, mainly reshuffled one or another language into different subgroups; the field was essentially composed, and very productive and successful work was begun on the phonological reconstruction of Proto-Tibeto-Burman (PTB), especially by Benedict (1972).³

² Very significant is the exclusion of the Tai languages, especially Shan which is within the geographical confines of Tibeto-Burman. "It has little or no affinity with the neighboring dialects, and may represent another whole class of languages not yet ascertained. It is probably allied to the Chinese." The exclusion of Chinese from the proposed family is also significant since it was almost certainly decided on the basis of its different syntactic structures. Both Chinese and Tai show dominant subject-verb-object (SVO) word order in opposition to Tibeto-Burman invariable SOV. Later proposals to set up Karen as a branch parallel with Tibeto-Burman out of a common Tibeto-Karen are similarly motivated, since Karen also shows the verb in medial position.

³ Benedict's Sino-Tibetan: A Conspectus, though only recently published, was written in the early 40's during his directorship of the Sino-Tibetan Philology Project at the University of California, Berkeley. The results of this project, compiled into the still unpublished typescript Sino-Tibetan Linguistics, were also utilized by Shafer in his comparative work, the culmination of which is his Introduction to Sino-Tibetan (1974).

1.1. MORPHO-SYNTACTIC STEREOTYPE OF TB

The essential unity of the Tibeto-Burman languages makes itself apparent in many aspects of the grammar, but especially in the common retention of many lexical items and in many shared morpho-syntactic structures. Comparative-historical work has multiplied considerably the number of apparent lexical cognates by documenting the nature and course of sound changes within individual languages or within subgroups (Benedict 1972; Burling 1959, 1967; Matisoff 1970, 1972a; Okrand 1974; Shafer 1974; Thurgood 1974, 1975).

Lesser attention has been paid to the morphological and syntactic reconstruction of the family, although it is possible to list what are generally considered the diagnostic traits. These include: (1) the sentence-final position of the verb which, according to Greenberg (1966), will universally imply the presence of other syntactic features, such as postpositions, preposed modifiers, or, according to Steele (1975), modal elements following the verb; (2) the monosyllabicity of lexical roots; (3) the absence or sparseness of derivational processes with the corollary that word compounding processes will be necessarily exploited; (4) the similar scarcity of inflectional processes; (5) the general absence of

morphophonemic alternation, though the still unexplained verb stem alternation of Tibetan, associated with tense/aspect distinctions, is a very conspicuous exception; (6) the morphologically unmarked status of tense, separable from aspectual notions; (7) following somewhat as a corollary of the minimal use of affixal processes, the typical absence of noun or verb classification such as appear in the different declensions or conjugations of Indo-European languages, extending even to the absence of gender categories in the noun and pronoun; and (8) the expected lack of concord and agreement relations between noun and verbs or adjectives, perhaps as a consequence of the prevailing absence of inflections.

Broadly summarizing this list, we can stereotype Tibeto-Burman as consisting of monosyllabic roots strung together into higher syntactic organizations in an analytic manner, there being relatively little derivational or inflectional morphology. It is also characterized as semantically terse, expressing few redundancies within its structure. Whether or not this description is synchronically accurate⁴ the

⁴ It should be stressed that many of these assessments, especially those which characterize TB as lacking in morphological processes, are inapplicable to individual languages. Henderson's (1965) description of Tiddim Chin, for example, provides many interesting counter-examples to these assertions. In addition, historically oriented research, especially by

proponents of this view have used it as a springboard from which questions of wide relationship and diachronic development have been launched. It constitutes a concise heuristic principle and in early comparative linguistic work proved useful in circumscribing the family, separating it off from neighboring families such as Mon-Khmer (Austroasiatic) with its disyllabic roots and evident derivational morphology; Indo-Aryan with its complex system of noun and verb classification seen in its various declensions and conjugations, the syncretic nature of its inflections and its complicated system of agreement and concord relations; and Altaic with, again, di- and polysyllabic roots, a multitude of agglutinative affixes on both nouns and verbs some of which show agreement relations, and verbal stem alternation associated with tense distinctions.

The picture of PTB which is drawn by what can be adjudged an essentially negative list of characteristics--telling us what Tibeto-Burman is not--cannot be entirely satisfactory. The reason for such a portrayal can be understood partly from the Indo-European bias that 19th century researchers brought

Wolfenden (1929) and Benedict (1972), established very convincingly the need to attribute morphological distinctions to PTB.

to their studies. Tibeto-Burman seen in such a light will appear impoverished. Consequently, in much of the early literature great stress is put on these and other lacks, such as the absence of a definite article or of 3rd person pronouns.⁵ Also, the pioneering work, which primarily concerns us here, had the task of first separating and sorting out an unusually large number of contiguous languages, members of as many as seven major language families, as we see it today. In accord with the prevailing 19th century practice of considering morphological typologies to be pre-eminent in establishing relationship, it would be expected that such a set of negative criteria would prove just as useful as a positive set. For the early comparativist, then, no serious breach of methodological precision is at stake in making use of such a list.

1.1.1. DIVERGENCE FROM THE STEREOTYPE:
THE PRONOMINALIZED LANGUAGES

The potential danger of such a set of norms arises after the families have been set up and membership assigned. At this point it can happen that

⁵ This in no way necessarily invalidates the worth of these early studies. Very often greater care and attention was given to just those distinctions 'exotic' to Indo-European, generally in the rhetoric of demonstrating the 'genius' of the language.

these statistical generalizations for the comparativist become accepted as essential criteria of the proto-language for the historical linguist. Then any divergence from the norm by a particular language must be explained away by reference to some factor other than historical continuity. These might include innovation, borrowing, and areal convergence. Since divergence from a Tibeto-Burman norm implies the accrual of a feature and since a plausible hypothesis of linguistic change would hold that it is easier to lose distinctions than to gain them, explanations accounting for these added features must necessarily be more elaborate and, it seems, more convincing than an argument implying their loss in languages lacking them.

Returning now to the list of Tibeto-Burman characteristics it is possible to discover for each, one or more languages which exhibit the distinction or behavior specifically proscribed. All of these languages then would necessitate some explanation to account for their deflection from the main stream, in the event that this set of norms is to be also understood as applicable to the proto-language. It will be a major task of this work to critically examine one of these instances of conflict between the generally accepted morphological typology of TB and the actually observed facts of some member languages.

In two groups of geographically separated languages, one mainly in eastern Nepal and the other in northwest India near the Kashmir border, the verb is complicated out of all proportion to the Tibeto-Burman norm which states that there is no agreement between the noun and verb. Specifically, what these languages show is person and number agreement for the subject of the sentence and in some languages also for the object. The details differ from language to language, but within this framework, most will show agreement for singular, dual, and plural numbers in three persons, as well as for inclusive and exclusive 1st person in the dual and plural. For the most part the affixes involved are suffixed either directly to the verb stem or to some type of tense/aspect auxiliary. In some languages prefixes are also used. The syntax of the verb phrase with respect to these affixes varies widely, some languages prefixing some markers, suffixing others; some splitting subject from object affixes across a tense or aspect marker; some prefixing for certain semantic relations, suffixing for others; some allowing agreement only for certain tenses; and, similarly, some showing separate sets of pronominal affixes correlated with different tenses; etc. This phenomenon has, after Hodgson (1856), been referred to as verb pronominalization or simply as pronominalization.⁶

1.1.2. ACCOUNTING FOR PRONOMINALIZATION: OUTSIDE SOURCES vs. INTERNAL DEVELOPMENT

Bearing in mind the preceding discussion of the overall morphological simplicity in which Tibeto-Burman was conceived, most of the early explanations of pronominalization attempted to find some outside source which influenced these languages to take on the feature. Various sources and various explanations of how the transfer occurred have been proposed. The sources will be examined in Chapter 2, but for now I would like to explore the basis for supposing one or another explanation to be a legitimate vehicle for the transmittal of the complex morphological characteristics sketched above. Three such explanations will be evaluated: substratal influences, morphological borrowing, and areal conformity.

Anticipating somewhat, I would like to point out now that these three alternatives are not really co-equal in explanatory potential. The notion of a substratum, for instance, is not so much a mechanism of change as it is a post-facto rationale for why a daughter language no longer looks like its parent. The

⁶ I will continue to use this term since it is entrenched in over one hundred years of literature. It should not be confused with 'pronominalization' as understood in generative-transformational theory, which refers to a transformational process deriving the independent pronouns from underlying sources, based on the co-referentiality of nouns or noun phrases.

same may be said for the 'linguistic area' also. What distinguishes these two descriptive models is that in the case of a substratal influence the influencing language has presumably disappeared, at least from the area where the influenced language is spoken, while in a linguistic area the influenced and influencing languages, to the extent that they may be discriminated, are still in existence and in contact. Only the explanation entailing morphological borrowing between languages is truly process oriented and, hence, capable of empirical validation.

In other words, the notions of linguistic area and the linguistic substratum are merely labels for similarity between languages that is not attributable to genetic continuity, while morphological borrowing, in common with such other mechanisms as convergence, diffusion, and innovation, is an explanatory hypothesis of how change comes about. I shall confine myself here to examining the plausibility of maintaining one or another of these descriptive labels and to providing some basis for objectively evaluating the question of morphological borrowing.

The preceding discussion leads us to what seem to be divergent conclusions: that linguistic similarity between languages may be ascribed either to genetic relationship or areal relationship. In the unusual situation where the history of one or more

languages being considered can be tracked back to a certain source, and the linguistic structure of that source is attested (as, for example, in Indo-Aryan) then it is possible to profitably speculate on which features may be attributable to outside influence and predict the direction of influence. Emeneau's (1956, 1965) important work relating Indo-Aryan, Dravidian, and Munda into a linguistic area benefitted enormously from our knowledge of Sanskrit. In other situations where we can trace the languages only back so far or even not at all, the similarities observed are more problematic. In the Northwest California linguistic area, as described in Haas (1969), the sharings between many languages are extensive enough that it is actually difficult to even propose a set of typological features which unambiguously characterize the families established on the basis of lexical correspondances. And since the lexical correspondances themselves are numerically small and not yet relatable by sound correspondences, we find ourselves in some doubt even as to the validity of the families.

Areal pressures can thus lead to a situation where the genetic relationship of a language is obscured. Such an observation has been made from time to time with the idea of stressing the multiple parentage of languages which have undergone periods of intimate association with unrelated groups. This

doctrine, for instance, became a primary tenet of the Italian Neolinguistic theory (Bonfante 1947) and is maintained as a unifying concept of the excellent anthology Linguistic Comparison in Southeast Asia and the Pacific (Shorto 1963).

During the 19th century when knowledge of the linguistic diversity of Southeast Asia was first becoming apparent, typological classifications proved useful in determining group membership. The extent to which comparativists had to depend on these criteria can be seen in the confused status of the Tai and Miao-Yao groups of languages in regard to their wider affiliation. The traditional viewpoint, based on the typological similarity prevailing between the morphology and syntax of Tai (and Miao-Yao) and Chinese, and shored up with large numbers of lexical correspondences, has been to include these groups as main branches of a common ancestor language—Proto-Sino-Tibetan. It has only been lately that a growing minority of opinion, based on different assumptions and a different methodology, has attempted to see these languages as early branches from a common Austronesian stem (Benedict 1966, 1975). The intriguing theoretical implication of this and other controversies of linguistic affiliation is that obvious similarities may count for little in the long run. Instead, it may be the obscure similarities,

apparent only after deep investigation, that give the truest picture of genetic relationship.

1.2. LINGUISTIC AREAS

A linguistic area is here defined as the situation, arising for whatever reasons, of a group of geographically contiguous languages showing substantial structural similarity in their phonology, morphology, syntax, and semantics.⁷ As an additional qualification the languages should be either unrelated genetically or so distantly related that each has undergone some measure of development independent of the other languages of the area. Closely related languages which have had continuous parallel development would in themselves be specifically excluded as constituting a linguistic area, since most similarities are directly attributable to shared continuations of characteristics of the parent language or simple diffusion of innovations through a dialect continuum. Converging structures, on the other hand, can be understood as emerging from the necessity for facilitating mutual

⁷ Lexical borrowing between languages is not necessarily diagnostic of a linguistic area, especially in the absence of grammatical commonalities. The use of a borrowed term can become very widespread with only minimal bilingualism; perhaps a single individual can effect it. Still, since this argument hinges on a quantitative rather than qualitative distinction, lexical evidence can be and often is useful in delineating areal boundaries.

understanding where it does not already exist. Such communication is in every case mediated through the creation, maintenance, and expansion of a substantial bilingual population, especially at zones of interference (Weinreich 1968). The elaboration of the linguistic area then proceeds slowly according to principles of convergence which accomodate divergent structures to one another.⁸

As our conception of the make-up of linguistic areas is still very rudimentary it is not possible to flatly state what sorts of linguistic categories and structures are prone to being influenced, to what degree, and to what effect. For the issue of the pronominalized languages we must bear in mind the question of whether it is even possible for a complex verb morphology to be generated under areal influence. This issue will be considered in conjunction with the discussion of morphological borrowing in section 1.4. In the event that we can respond affirmatively to this question and a probable source for the influence can be suggested, it is still incumbent on us to counter the argument for genetic retention of the feature from earlier stages of the language. This is made

⁸ A recent case study of long-standing bilingualism in an Indo-Aryan/Dravidian border village in India by Gumperz and Wilson (1971) has made a substantial start toward determining what these principles are and how they operate.

necessary because, as we have seen, the same data can be used to advance either position.

1.3. LINGUISTIC SUBSTRATA

Since conceptual awareness of the linguistic area presupposes a great deal of specific information on all the languages in a particular region as well as a knowledge of their classification, a less rigorously defined hypothesis, the linguistic substrate, was called upon during the 19th century to account for non-genetic similarities between languages. The concept of the linguistic substrate was almost self-evident to early 19th century investigators, especially in Indo-European studies. It is consequently difficult to pinpoint any one person as the originator (Izzo 1972) or to trace a coherent pattern of development up its inclusion within the confines of a larger theoretical model, as by the Italian Neolinguistic school (Bonfante 1947).

By mid 19th century, as language data began to rapidly accumulate, comparative and historical explanations were prone to be influenced by the young science of genetics and especially by Darwin's mechanistic outlook on evolution. August Schleicher's (1863) too ready propensity for analogizing from the biological to the linguistic realm overburdened the

field with so-called scientific explanations for linguistic relation and linguistic change, which often glossed over the real problems involved in the development of a social, but not a biological, reality. As this emphasis concerns us here, there arose a body of literature dealing with mixed languages and mechanisms of mixture, based on the observation that languages under outside influence could have their structures modified to more closely approximate a model language. The phenomenon is of course not in doubt. The proposed mechanisms for achieving this mixture, however, tended to adapt themselves to the prevailing evolutionary mood.

In a genetic model⁹ a language might easily be viewed as the reproductive product of the blending of two parent languages. As with any progeny a greater resemblance to one of the parents might be apparent, that being the direction in which to look for the historical continuity of the language within the family tree model, which presupposes only a single

⁹ Perhaps the admitted aesthetic stance of the Neolinguists should properly be included here also, since even while recognizing and emphasizing the social nature of language, it appreciates the biological metaphor of language as maintaining a certain vitality of its own. This group stresses that languages will not simply die out but that they will continue within the speech of surrounding peoples, it also rejects the Neogrammarian position of viewing language as a static or objective fact, in favor of Humboldt's more romantic view of language as energeia. (Bonfante 1947)

parent. The two models were not considered anti-
 thetical. The postulated reproductive process always
 involved the fusion of two divergent languages over
 the same geographical area, as for example in the
 situation described by an invading or migrating
 people. Operating within the concept of the family
 tree or Stammbaum, it would be the culturally pre-
 dominant group who would be recognized as continuing
 its language, should over a period of time only a
 single language emerge for the entire population—
 indigenous and invading. The other parent, in this
 case, would be considered as contributing a sub-
 stratal influence on the progeny's structure.¹⁰

Two of the earliest examples of substratal
 explanations come predictably out of Indo-European
 and Romance studies, in the former case involving
 Armenian and in the latter Rumanian. The earliest
 attempts at accounting for the recognized non-native
 elements in their grammars and lexicons stressed the
 contribution of underlying substrates; for Armenian a
 Caucasian related language (Dirr 1909-1910) and for

¹⁰ Substrate explanations almost always involved this
 order of historical events. In cases where both
 languages remained viable in the same area with a
 bilingual population, mention was never made of a
 substrate, only of diffusional influences. This
 makes the concept somewhat suspect in my mind,
 since it seemed to be invoked to explain only
unattested influences.

Rumanian an Illyrian language which purportedly continued with heavy outside influences into modern Albanian (Miklosich 1862). Since neither of these two languages was actually attested from the areas of modern Rumanian and Armenian, it was hoped that bilateral comparisons with Georgian and Albanian respectively would suffice to show up the original substrate. And at first glance very striking correspondences can be uncovered.

1.3.1. THE CASE OF RUMANIAN

For Rumanian and Albanian Miklosich records the following points of structural similarity, none of which can be attributed to Latin or Proto-Romance: the formation of a periphrastic future construction using an independent verb form meaning 'to wish'; the absence of an infinitive form of the verb; the merger of the genitive and dative; postposed articles; and many phonological correspondences. These commonalities are certainly impressive and by themselves would require some explanation, the existence of an Albanian type substrate in Rumanian being one. However, two facts argue that the problem might actually be more complex than Miklosich recognized. First of all, Rumanian and Albanian both share many syntactic features with Bulgarian and modern Greek

and secondly old Rumanian texts point to the comparatively recent development of many of the parallels with Albanian.

Operating within an historically deeper and geographically more encompassing framework, Sandfeld (1930) amassed a great deal of convincing evidence which ultimately pointed to a diffusional source from Greek to explain the correspondences between the four mentioned languages. For instance, Greek uses an infinitive only in a substantive function, while Bulgarian to the northeast retains the Slavic prepositional infinitive only for a few verbs and in the future construction; northern Albanian uses it freely in subordinate clauses while southern Albanian, which is closer to Greece, has only frozen instances of it; and different dialects of Rumanian (as well as Serbo-Croatian) vary its productive use, from a substantive only, to full Romance function in the northernmost dialects.

Sandfeld views the commonalities as clearly spreading from the south under the impetus of a very powerful Greek cultural influence during past centuries. His more thorough evaluation of the data as a set of complex interactions, leading to the establishment of a Balkan linguistic area, effectively pulls the pins out of the substrate argument. He invokes instead a mechanism of cultural and linguistic

convergence based on the pattern provided by some vital member of the association.

1.3.2. THE CASE OF ARMENIAN

Much the same argumentative evolution has occurred with respect to Armenian. The substrate proponents (Dirr 1909-1910) offered a bilateral comparison of Armenian and Georgian which turned up a common absence of gender distinctions; leveling of the case system; a plural marker distinct from the case markers; the word order, modifier plus head noun; a set of postpositions; and the absence of number concord with adjectives. None of these characteristics are generally understood to have been original to Indo-European, with its highly complex noun, consisting of many syncretic affixes, prepositions, concord, etc.

Again, however, viewed historically and geographically both Armenian and modern Georgian have clearly innovated. Vogt (1945), for example, has compared the written records of both Georgian and Armenian with the modern languages and shown that some of the above commonalities occurred earlier in Armenian than Georgian. He has also taken as a point of comparison a reconstructed ancestor language to Georgian—Proto-Khartvelian—and, for all the features above, shown this language as morphologically

probably more complicated than modern Georgian. Further, putting the data into other perspective, he demonstrates the presence of many of these same features in neighboring Ossetic, a Persian language, and in Turkish, which typologically might best be labelled the original source of an eastward diffusion, eventually resulting in a Caucasian linguistic area.

Although the idea of a linguistic substrate has been rendered somewhat dubious by the above counter arguments to two presumed examples of it, the notion of the linguistic area has benefitted tremendously at its expense. But, how does the convergence of languages into a recognizable linguistic area itself take place? The arguments are complex and in some cases speculative, hinging on the debated claims that morphological borrowing between languages can or cannot occur. This issue will be considered next.

1.4. MORPHOLOGICAL BORROWING

The methodological principles which gave rise to the 19th century concern for matters of language mixing and substrata changed in the last quarter of that century for a majority of linguists due to the Neogrammarian revolution, which perfected a methodology of comparative and historical analysis based on lexical comparisons for phonological correspondences.

In most matters, as Koerner (1972) has emphasized, the theoretical perspective did not change; there was still the same belief in the Schleicherian family tree (Stammbaum) model of relationship as the guiding principle in conducting research. Nevertheless, the shift in method brought about by the Neogrammarians eventually led to a split in opinion with regard to what one language could transpose onto another. The demonstration of genetic continuity came to rest on the belief that the morphological structure of a language resisted change and influence, because all too often there was an easily demonstrable lack of continuity in the sound systems of the languages. To maintain the integrity of the family tree model some point of the grammar had to remain constant; there would otherwise be no basis in the claim that a language such as English remained Germanic in spite of its accrual of a tremendous number of Romance features. If all levels of the grammar have changed drastically, then the comparativist has no way of gauging whether certain structures in a language continue an archaic structure of a certain family or were borrowed from some member of that family at a later state of development.¹¹

¹¹ The seemingly conservative claim that morphological structure remains essentially unaltered through time is the string by which almost all modern claims

The rejection of the family tree model by the Italian Neolinguists (Bonfante 1947) and the only modified support given to it by the Prague school (Jakobson 1938) and by others¹² results in a more open attitude to the possibility of morphological influences. There has emerged from the literature, therefore, a long debate concerning the issue of morphological borrowing¹³ with what must be considered the main stream of opinion somewhat opposed to the concept. Since the arguments offered to support this view will be of interest in evaluating a possible Indo-European influence on Tibeto-Burman, the next few pages will be spent summarizing some of them.

At the outset it should be made clear that there are undoubted examples of morphological influence of one language on another, some of which

of distant relationship are tied. The danger here is that what might be nothing other than typological similarity is interpreted instead as evidence of genetic affiliation. There are hundreds of examples of such speculation in the literature, notably Hodgson's Turanian construct (cf. section 2.1.122).

- 12 Compare especially the perspective of many British investigators contained in the previously mentioned anthology of comparative historical papers edited by Shorto (1963), which is in essential accord with the Prague school outlook.
- 13 Witness especially the many arguments pro and con solicited by the 6th International Congress of Linguists in 1948 (Proceedings 1949) in answer to the question, "Dans quelles conditions et dans quelles limites peut s'exercer sur le système morphologique d'une langue l'action du système morphologique d'une autre langue?"

we have seen in the preceding section. It is not so much the phenomenon itself that is in contention as it is the mechanism by which it is accomplished. Meillet (1918) in stressing the indefinable boundary between lexicon and morphology contends that it is possible for an originally borrowed word to eventually make its way into the morphology of the language. Therefore, "it does not necessarily follow that such a grammatical form is, properly speaking, borrowed" (Meillet 1918:14). Thus, by extension, though a language's morphology will show changes over time, sometimes to the extent that foreign intrusions have complicated its historical status, it would nevertheless reveal its original identity on close inspection. Meillet was being especially critical of Schuchardt whose powerful influence propagated the contrary view: "There is no fully unmixed language" (Schuchardt 1884:4).

Whitney (1882) had earlier put his trust in much the same mechanism of morphologization of a borrowed lexical item, what he called "secondary processes", adding the qualification "that the structural elements thus taken into our language from a foreign source are only such as are analogous with others already in use among us" (1882:18). However, he was certainly less assured than Meillet seems to have been that true grammatical borrowing could never take place. The

occasion for this article, in fact, was the criticism of an "axiom" of Müller's (1873) to the effect that the grammar of a language remained inviolable during contact. Whitney took issue with what amounted to Müller's laxness in the use of the word axiom; claiming rather that grammar was not immune to outside influence, but probably only more resistant than other facets of the language. On examination he finds that there is an increasing scale of resistance to borrowing with nouns and adjectives at one pole offering least resistance and inflectional morphology at the other pole offering greatest resistance. This scale constructs itself on some parameter of relative abstractness, "...whatever is more formal or structural in character remains in that degree free from the intrusion of foreign material" (1882:14). Haugen (1950) much later proposed a similar "scale of adoptability", according to which all linguistic elements are hierarchized, such that "the more habitual and sub-conscious a feature of language is, the harder it will be to change" (1950:224).

This belief in a concrete-abstract dimension along which all the morphemes of a language were distributed also formed the basis of Sapir's (1921) argument with Boas (1920) that the morphology of a language could faithfully be trusted to answer questions of deep relationship, since it would resist diffusional

pressure to level it out. In Swadesh's (1951) analysis of this debate and his subsequent siding with Sapir on the issue, he suggests that certain traits are so fused into a superordinate structure that they are not likely to be borrowed independently of the entire complex—which is itself highly unlikely. Sapir himself stresses the need to separate out a sort of superficial morphology from the "morphological kernel" (1921:219) of a language. It is the latter which alone determines family relationship, while the former may show outside modifications by way of either addition, deletion, or substitution.

The arguments so far presented have been largely empirically based; it seems ultimately possible to corroborate the notion of morphologization of borrowed morphemes and even the idea of structural resistance to borrowing. There have been other proposals, however, whose rationales are more impressionistically based and for which there has been no successful scientific documentation.¹⁴ One of these, especially fostered by Meillet (1918), stresses the factor of nationalism and language pride as a conservative force in linguistic change. Certain structural elements or categories are likely to be held

¹⁴ This does not necessarily invalidate these arguments. An idea which suggests broad lines of further research can be extremely valuable as a heuristic device.

by speakers as indicative of their independence from surrounding peoples and actual effort will be used to maintain them. That speakers would assign more weight to morphological elements than to grammatically less consequential lexical items seems to be implied.

Another argument which claims very widespread support reflects on the relative compatability of interfering languages. It is partially based on the observation that certain language families change rapidly and others rarely if at all, even when it appears that the rate of cultural change varies independently. Even Schuchardt who generally approved of the notion of morphological borrowing, unconstrained by any qualification, held to the view that "Frequently the influence of a foreign language works together with a prevailing tendency (herrschenden Tendenz) in another language" (Schuchardt 1884:11). Whitney (1882) states the principle unequivocally by denying the doctrine that a language can learn from another "a grammatical distinction, or a mode of expression, formerly unknown" (1882:19). In the same vein, Sandfeld (1938) speaks of "points of receptability" between a donor and a recipient language, and Jakobson (1938) of a "collective tendency" between languages, if a change in linguistic structure is to be copied from one to the other.

The implication of this wide consensus of opinion has important bearing on the origin of pronominalization, since it would direct us to look first for such structures (or 'predisposition' to add such structures) in Tibeto-Burman itself, before venturing to match it with those of any other family which is a presumed model. Consequently, the approach I have adopted in this work is to compare the TB pronouns and pronominal morphology internally, with the express goal of proving or disproving the claim that they are retained from the stage of the proto-language. Only then will it be appropriate to consider possible extra-familial influences and the question of linguistic areas.

CHAPTER 2. A HISTORY AND TYPOLOGY OF TIBETO-BURMAN PRONOMINAL VERB MORPHOLOGY

2.0. INTRODUCTION

The present chapter has three main goals, all of which center around the issue of whether to account for pronominalized verbs in TB by appealing to family internal continuity or extra-familial influence. First, the history of thought regarding pronominalization will be sketched (section 2.1); second, the dominant hypothesis of a Munda substratal influence on TB will be tested in a comparison of Munda and TB pronominalization (section 2.2); and third, a typological appraisal of all the pronominalized TB languages will be presented (section 2.3).

2.1. HISTORY OF THOUGHT REGARDING PRONOMINALIZATION

The following sections set themselves the task of tracing the history of the pronominalization problem in the literature. Bearing in mind the preceding statement of the overall simplicity in which TB was and is conceived (section 1.1), most of the early explanations of pronominalization were allied to the position of finding some outside source on which these languages modeled their verb morphology. Brian H.

Hodgson, however, was exceptional in seeing the feature as native, although within a much wider network of relationship than can be sustained today.

2.1.1. BRIAN H. HODGSON¹⁵

Hodgson's¹⁶ post as British Resident at the Court of Nepal with the India Office for over 20 years (1821-1843) and his later unofficial residence at Darjeeling for about 10 years (1848-1857), provided him the opportunity of actively collecting materials dealing with the native languages and cultures. During this time, Hodgson collected many of the materials that, up until the last few years, constituted our only sources of information about several languages of the area. It was apparent then and remains true today that in most ways he was an accurate and thorough recorder of whatever he heard.¹⁷ His material

¹⁵ The dates for Hodgson's work will be given as for their original publication in the Journal of the Asiatic Society of Bengal. The page references, however, will be given from the reprinted and corrected versions of these works in either the Miscellaneous Essays (1880) or Essays on the Languages, etc. of Nepal and Tibet (1874), wherever this is applicable.

¹⁶ The biographical materials on Hodgson which are interspersed through this section can be found in a short preface to Mitra (1882) and in a full, book-length portrayal by Hunter (1896).

¹⁷ The editors of JASB in a short preface to Hodgson's (1849c) "A brief note on Indian ethnology", suggest strongly that other workers in the area should

consequently remains valuable. Hodgson's linguistic interests ranged very widely and consequently we have information on tribes extending from northern Tibet to Ceylon and southern Burma.

Some publications under his name, however, are materials submitted to him by other investigators of languages located in Burma and eastern Assam (Hodgson 1849a, 1850, 1853a) and in central and southern India (Hodgson 1848a, 1849b, 1856). All other materials were personally gathered from native speakers of the languages. For some of these languages, namely Bodo and Dhimal (1847) and Hayu and Bahing (1857-1858), he supplied full grammatical sketches and extensive lexical materials. For others only random grammatical notes and partial vocabularies are available.

2.1.11. CLASSIFICATION OF TIBETO-BURMAN

Hodgson's primary purpose in amassing such copious data was to substantiate his contention that all of the aboriginal population of British India including Nepal, Burma, Indo-China, and China proper was ultimately related, though the web of relationship

submit themselves to following a single model in order to maintain a certain unity in the field, "and, if we are to be guided in this matter by the experience and judgment of any one man in India, surely none are entitled to higher respect than those of Mr. Hodgson" (1849c:238).

was somewhat diffuse even in his own mind. He conceived of three major "stocks" (1847, 1849c) into which this population was subdivided: a Tibetan stock which included many of the languages of the sub-Himalayas and northern Assam; a Chinese stock to the east of this region, excepting the languages of the Assam valley; and a Tamulian stock comprising all the native languages of India including those in the Assam valley and those of the forested Indian border areas of Nepal, Sikkim, and Bhutan. These stocks merge families now felt to be separate, such as Dravidian and Munda within Tamulian, and also transect now recognized families, specifically TB and Austroasiatic. The TB languages seen as Tamulian include many of the Barish¹⁸ languages of Assam as well as the East Himalayish group of Nepal; the Tibetan members comprise Tibetan and its dialects as well as the Gurung branch of Central Nepal; and the Chinese stock includes Chinese and the many TB languages of Burma and Thailand.

Even though Hodgson does not state the reasons for assigning one language or another to different stocks, it would seem from the evidence available to him that he depended most heavily on the syllabic structure of the word. Tamulian, including the TB

¹⁸ This and other names for established subgroups follow Shafer's (1974) terminology.

languages considered as such, shows words susceptible of a polysyllabic analysis, while the root structure of Chinese type languages is decidedly monosyllabic.¹⁹ The Tibetan stock took in those languages which were predominantly monosyllabic in root structure, but which also evidenced more complicated morphological processes, such as verb stem alternation. Hodgson yields a clue to his reasoning in his opinion "that the Bodo and Dhimal languages belong pretty evidently to the aboriginal Indian tongues [i.e. Munda and Dravidian] and not to the Indo-Chinese or monosyllabic" (1847:157).²⁰

Several years later, however, Hodgson (1850) had corrected his original subgroupings. Now he finds "one type of language prevailing from the Kali to the Koladan, and from Ladakh to Malacca, so as to bring the Himalayans, Indo-Chinese, and Tibetans into the same family" (1850:28). And, suggesting how he has arrived at this re-evaluation, he points to "syntactic

¹⁹ It will be recalled that Hodgson was only possessed of secondary information on these languages, entirely consisting, as far as the published information indicates, of vocabulary lists. A true picture of the complexity of the Burmese verb would not then have been available to suggest a closer approximation to say the structure of the Bodo verb (initially classified by Hodgson as Tamulian) with which it does show many parallels.

²⁰ In a footnote to a later paper, Hodgson (1853b:31) restates his position with regard to Bodo and Dhimal by repositioning them within the Tibetan and Himalayan stock, rather than the Tamulian.

poverty and crudity and etymological refinement and abundance [as] the characteristics of this vast group of tongues" (1850:33). He also presumes that "grammatical peculiarities" will not prove especially useful as diagnostics of relationship since they are "apt to be excessively vague or else palpably borrowed" (1850:33). His methods of linguistic comparison had now channeled into a heavy reliance on lexical, as opposed to morpho-syntactic evidence, and neither he nor his successors have ever swerved too far from this course.²¹ "A common stock of primitive roots and serviles...indicates unmistakably a common lineage and origin among the several races to which such stock belongs." (Hodgson 1850:33). It should also be noted, in reinforcement of an earlier argument, that Hodgson had in effect negatively christened his neonate Tibeto-Burman as possessing no interesting syntax or morphology to whet a comparativist's appetite. This view also persisted under his powerful influence, until Conrady (1896) partially dispelled it by demonstrating the archaic nature of the prefixes of written Tibetan along with some of the morphological categories they probably represented.

²¹ Compare for example Hunter's (1868) Comparative Dictionary of the Languages of India and High Asia, which assembled Hodgson's lexical materials for about 200 roots from over 100 languages, and the vast Linguistic Survey of India which faithfully

2.1.12. THE TURANIAN HYPOTHESIS

In spite of this hierarchical redistribution of languages and the postulation of TB, Hodgson still firmly believed in a larger pattern which enclosed all of central and eastern Asia's languages, excepting those of Indo-European lineage. This hypothetical construct he called Turanian. "Tamulians, Tibetans, Indo-Chinese, Chinese, Tangus, Mongols, and Turks are so many branches of another single family, viz., the Turanian" (1849d:3). This quote demonstrates his early position; his consistency is maintained seven years later after he had rearranged his subgroups. "Turanian affinities are not to be circumscribed by the Deccan, nor by the Deccan and Central India, nor, I may here add, by the whole continent of India, but spread beyond it into Indo-China, Himalaya, and the northern regions beyond Himalaya" (1856:127). In an earlier paper Hodgson (1853b) also attempted the demonstration of a relation between the languages of the Caucasus and Mongolian (intending mostly Tibeto-Burman) and, even farther afield, Pelasgian (intending Malay and Tagalog); though properly speaking he excluded these other groups from Turanian.

maintained many of Hodgson's subclassifications. Shafer (1974) and Benedict (1972) have similarly maintained an emphasis on lexical comparison.

It was by this Turanian category that Hodgson chose to explain many of the apparent similarities between widely separated members of the family. In the last and most complete statement of his position, Hodgson (1856) lists a series of facts, one of these being verb pronominalization, which, from his point of view, seem to offer evidence of genetic relation between his Turanian languages, specifically those now thought to be separate and unrelated. From an explanatory standpoint, this wide stance allows him to explain characteristics at variance with the overall typological picture of the language subgroup as merely remnants of a more archaic stage of the language, showing up in fuller or even unaltered form at some other point within Turanian.

2.1.121. GENERAL TURANIAN CHARACTERISTICS

Taking the position of TB as central, rather than Nilgirian (Dravidian) as Hodgson does, the following points of resemblance with other language families within Turanian are made:

1. Proliferation of sibilants in TB and in Dravidian (1856:131);
2. Numeral classifiers in TB and also in Dravidian (131);

3. Nominalization of adjectives by suffixation in Tibetan, Himalayish, and Dravidian (135);
4. Proliferation of gerundial or participial verb forms in Tibetan and Himalayish, but especially in Mongolian and Manchurian (140);
5. A tendency toward double causative verbs in Himalayish and literary Dravidian²² (141);
6. General absence of a passive construction in TB, Altaic, Hill Dravidian²³, and Munda (141);
7. Low reliance on morphological tense distinctions with a correspondingly greater reliance put on temporal adverbs to distinguish relative time—a feature common to all Turanian languages²⁴ (141-2);

²² Hodgson intends by this term the phenomenon of an intransitive verb undergoing a transitive or causativizing process with the possibility of the resultant verb undergoing an additional causativization. His example, from Vayu: dun 'become', thun 'to cause to become', thun-ping-ko 'to cause to cause to become'. He does not note that this process of double causativization is quite common in Indo-Aryan (cf. Kellogg 1938:252 ff.) and that this family could have provided the model for what might be independent borrowing in Dravidian and Himalayish.

²³ Hodgson remarks that the passive construction of literary Dravidian "is clearly factitious and suggested by contact with Arianism" (1856:143).

²⁴ Hodgson does not approach the question of the

8. The presence of a transitive or intransitive sign following the verb root in Himalayish, Altaic, Finno-Ugric, and in remnant form in Dravidian²⁵ (137-8).

Besides these grammatical correspondences, and the others described below, which Hodgson submits as demonstrating his Turanian hypothesis, he also suggests that many lexical correspondences provide confirmation. Here, however, as is often the case when wide comparisons are attempted, the sound laws for individual languages had not been worked out for shallower time depths, which immediately makes any conclusions suspect. Even so, much of Hodgson's grammatical evidence remains intriguing, even that which submits to alternative explanation, such as (2) the numeral classifiers which probably diffused westward out of Sino-Tibetan and Tai (Emeneau 1956,

distinction between tense and aspect markers in languages such as Tibetan, still a tricky problem. Therefore, he makes claims that, in some languages, where two "tenses" are distinguished, the present and future will be conflated. It might be better to discuss such a system as aspectual rather than temporal, especially since in the same languages the 'past tense' marker often equates to the transitive marker. This occurs in Himalayish, Dravidian, Turkic, and Finno-Ugric.

- ²⁵ Hodgson professes to see in this transitive marker an association with 3rd person object markers, implied perhaps by the transitive imperative suffixes of strictly speaking, non-pronominalized TB languages such as Lepcha and Burmese. Many languages show a variety of forms for these affixes, a particular verb lexically requiring one of them, thus setting up a system of implicit verb classification.

1965); (6) the absence of a passive which may be implicationally related to characteristics of ergative type languages; (3) adjective nominalization, an expectation in verb final languages; (5) double causatives which possibly originate in Indo-Aryan (cf. note 22); and (7) the relative unimportance of tense distinctions which is possibly more typical of the world's languages (with the exception of Indo-European) than its opposite. I leave the significance of these interlinguistic parallels an open question, however, since other non-genetic explanations aside, the cumulation of all these factors certainly could inspire the view that there may have been historical connections between these families. We may be observing traces of an older, now deteriorating linguistic area, especially since most of Hodgson's resemblances between TB and other families occur in the western border languages (most notably Himalayish). Support for this view may perhaps be had from a study of the trading and cultural area of northern Tibet and western China which included Indo-European Tocharians and Khotanese, Mongolians, Turkic Uigurs, Manchurians, and Sino-Tibetans, all presumably influencing and being influenced by their neighbors.²⁶

²⁶ A wealth of literature exists dealing with these languages. One of general merit which, I believe, largely succeeds in unraveling the tremendous complexity of the TB languages of the area is Thomas (1948).

2.1.122. PRONOMINAL CHARACTERISTICS OF TURANIAN

The remainder of Hodgson's evidence describes parallels between the pronominal systems of his Turanian languages, which overall are typified as "greatly developed."²⁷ These are as follows:

9. Separate forms for personal (independent) and possessive forms of pronouns (1856:135);
10. Separate inclusive and exclusive forms for 1st person pronouns (135);
11. Different sets of possessive pronouns: one used disjunctively (i.e. as a free form) and the other conjunctively (i.e. as an affix) (135);
12. Distinction between dual and plural number categories (137);
13. Verb pronominalization²⁸ (128, 135, 139, 143);

²⁷ Hodgson reminds us that this pronominal complexity "when viewed in connection with the paucity of true conjugational forms [recalls] the fine remark that 'rude people think much more of the actors than of the action'" (1856:135).

²⁸ As far as I know this paper contains the only reference to the term 'pronominalization' in all of Hodgson's linguistic corpus. From his casual use of the term, however, I would doubt that it was his own innovation.

14. Prefixation of noun possessive forms and suffixation of verb pronominal affixes²⁹ (136);
15. A prevailing verb structure consisting of root + transitive/intransitive marker + pronominal suffix;³⁰
16. The morphological conflation of 2nd and 3rd persons in TB and Dravidian in opposition to 1st person forms (140).

Most of these characteristics are associated with pronominalized languages, but many other languages with simpler verbs also show the categories. With regard to pronominalization itself Hodgson notes that the Himalayish languages and Munda show the feature in fullest form while the other Turanian languages either lack it entirely or show much more impoverished forms of it. Specifically intending Dravidian he says, "Whether from non-development or from decomposition,

²⁹ There are exceptions to this generalization among the pronominalized languages which Hodgson dealt with, such as Limbu with verbal prefixes, though he does not discuss these. He does, however, mention that Altaic and Finno-Ugric have noun possessive suffixes.

³⁰ Hodgson's examples for this construction, taken from many different languages, all show the transitivizer with some type of dental stop. However, in his Dravidian examples this morpheme is some sort of past/perfective marker. He implies thereby a historical development in Dravidian of this transitivizer into a tense/aspect marker.

the pronominalization is very imperfect on the whole" (1856:137); with reference to Altaic, "The Mantchuric and Mongolic groups of tongues were long alleged to show no sign of pronominalization. It is now known that that was a mistake" (1856:139).

I have emphasized this section in part to counter a possible interpretation that Hodgson regarded pronominalization as perhaps due to the unidirectional influence of one language on another, especially since the Munda group of languages has often been proposed as a diffusional or substratal source of the pronominalization which appears in Tibeto-Burman. However, Hodgson's only mention of both groups, with reference to their jointly possessing the feature, is the following: "Kiranti, Vayu, etc., of Himalaya show a wonderful agreement with what Müller calls the Munda class of languages in Central India. In all these tongues alike not only the agents (singular, dual, and plural, and inclusive and exclusive of the two latter), but the objects are welded into the verb, thus showing the maximum of pronominalization" (1856: 135). Nowhere does he propose a directionality of influence from one to the other.

2.1.2. THE LINGUISTIC SURVEY OF INDIA (LSI)

The period stretching from the last of Hodgson's

linguistic writings in 1857-1858 to the beginning of the LSI in 1894³¹ paralleled the development of more rigorous approaches to comparison and reconstruction. The general tenor of the times stressed scientific accuracy, and, as a consequence, Hodgson's elaborate Turanian edifice became neglected. Hypotheses of wide relations lacked the necessary materials for an adequate scientific demonstration. Work in eastern Asia became more descriptive, and what comparative work there was, explored what would have been to Hodgson only subgroups.

2.1.21. KONOW'S ASSESSMENT OF TB

It was in this climate of opinion that Sten Konow, who had the task of editing all of the TB materials received by the Survey and assembling a coherent system of internal classification, inherited the problem of Hodgson's pronominalized languages. Also, due to the efforts of the Survey the number of pronominalized languages themselves increased with the recognition that Kanauri and other languages in

³¹ Information on the history and procedures of the Survey can be found in Grierson's preface to the completed work (LSI 1(1):17-24). The project was originally conceived in 1886, organized from 1894-1897 when requests for data were issued, and edited beginning in 1898. Volume 3 in three parts, dealing entirely with TB was completed and published in 1909. The introductory volume, 1(1), did not appear until 1927; it was the last to be issued.

Almora and farther northwest also showed the feature.³² This created two main groups in the Himalayas exhibiting this complex verb morphology and the associated complexity in pronominal categories. The newly discovered group became known as the Western Pronominalized branch and Hodgson's original group in eastern and central Nepal as the Eastern Pronominalized branch of Himalayan. The only other recognized TB language with similar morphology was Namsangia Naga (cf. note 50), a geographically far distant member of the Eastern Naga subgroup of southeastern Assam. A short sketch grammar appeared in 1849 by Robinson and was therefore known to Hodgson, who did not hesitate to include it as pronominalized (Hodgson 1856:128). The LSI however makes no mention of how this language would directly relate to the Himalayan group if at all, or how it might best be accounted for historically. The silence on this issue could partly stem from the inability of the Survey to collect any additional information from this area.

In any event Konow operating with a vastly increased corpus of TB materials became convinced of

³² Earlier published reports of Kanauri, some of which would have been accessible to Hodgson, apparently did not comment on its grammatical characteristics. Hodgson himself never seems to have discovered the fact, in spite of his probable earlier contact with speakers of the Almora languages, while he served as assistant to the Commissioner of Kumaon in 1819-1820.

how best the ancestor language might have looked morphologically and syntactically. Contrary to the procedure of simply abstracting from the synchronic language, however, he did take account (following Conrady) of the probable course of development in the historically attested languages, especially literary Tibetan. This led him to put less reliance on the traditional view that TB must have been monosyllabic since Written Tibetan, many of the Bodo-Garo languages, and Kachin showed evidence of an elaborate prefix system at an earlier stage of development. He also advocated the position that Chinese, Tibetan, and other tonal languages developed their tonal systems from loss of these prefixes.³³ He therefore viewed the proto-language as agglutinative rather than isolating and partly subgrouped on the basis of how the daughter languages respected or rejected these agglutinative affixes. His other important criteria for subgrouping were based on tones, classifiers, and the syntax of the negative marker.

Besides the many general TB characteristics listed earlier, Konow suggested several more such as a decimal numeral system, absence of a relative pronoun,

³³ The details of tonogenesis in TB are certainly more complex than this (cf. Matisoff 1973a), but the overall picture of initial consonants affecting tone is certainly correct.

and syntactic methods of adjective comparison, which were clearly justified from his data. However, several other suggestions were certainly contrived, forced out of the common 19th century prejudice that tribal languages were not very capable of forming abstractions.

"Most Tibeto-Burman languages further evince a difficulty in forming words for abstract ideas...It has been common to draw attention to the fact that languages such as Tibeto-Burman are unable to distinguish between form and substance, because they do not possess form words, i.e., words which do not denote any substance or any material conception but simply the different ways of forming and arranging them in the mind" (LSI 3(1):5).

In less biased sounding terminology, this simply indicates that TB lacked derivational morphology and relied instead on compounding type processes.

But taking an additional metatheoretical step from this platform, Konow emphasized that the class of nominal elements in TB took precedence over verbal categories; in other words, verbs and adjectives were only 'surface' syntactic phenomena; at some underlying stage they were to be regarded as nouns.³⁴ This point will be of some importance, since Konow used it to explain away the phenomenon of verbal agreement for

³⁴ "The Tibeto-Burman verb is properly a noun" (LSI 3(1):8). Konow acknowledges Max Müller for the original formulation of this idea.

person and number by prefixation, as seen especially in Kuki-Chin. By treating the verb prefix as a possessive pronoun modifying an underlying noun, he restricts the term 'pronominalization' to only suffixal occurrences of such markers, and in effect disassociates these languages from other pronominalized groups. In a later part of this paper (cf. section 2.3.44), this view of affixation type as a critical factor in comparison will be challenged.

2.1.22. THE FORMULATION OF THE MUNDA HYPOTHESIS

Returning now to the more central problem of accounting for the appearance in certain TB languages of pronominal verb morphology in the face of a parent language which did not exhibit it, Konow fell back on Hodgson's notice of the similarity between Munda verb morphology and TB pronominalization and forged a causative link between the two by appealing to the very popular late 19th century notion of the substratum (cf. section 1.3). To quote his own statement:

"In such characteristics [complexity of pronominal categories and pronominal related morphology] the dialects in question have struck out lines of their own, in entire disagreement with Tibeto-Burman, or even Tibeto-Chinese principles. They have accordingly become modified in their whole structure. It is difficult to help inferring that this state of

affairs must be due to the existence of an old heterogeneous substratum of the population, which has exercised an influence on the language. That old population must then have spoken dialects belonging to a different linguistic family, and the general modification of the inner structure of the actual forms of speech must be due to the fact that the leading principles of those old dialects have been engrafted on the languages of the tribes in question. Now it will be observed that all these features in which the Himalayan dialects differ from other Tibeto-Burman languages are in thorough agreement with the principles prevailing in the Munda forms of speech. It therefore seems probable that Mundas or tribes speaking a language connected with those now in use among the Mundas, have once lived in the Himalayas and have left their stamp on the dialects there spoken at the present day" (LSI 3(1):179 and 1(1):56).

This contention of a Munda substratum in TB to explain pronominalization, has been sustained by a majority of researchers. Consequently it is also the hypothesis which will be given most comment, first by making a detailed comparison of Munda and TB pronominal verb morphologies (cf. section 2.2.2) and second by reviewing current opinion within Austro-asiatic concerning the evolution of these structures in Munda (cf. section 2.2.3).

2.1.3. MORPHOLOGICAL BORROWING FROM INDO-EUROPEAN

Besides Hodgson's view of pronominalization as progressing without interruption back to a common

Turanian ancestral language and Konow's espousal of a substratal influence from Munda, two additional hypotheses have been advanced. The first of these professes the policy of Les Langues du Monde (Meillet and Cohen 1952), built on the detailed examination provided by Henri Maspero (1946). On the argument that the underlying syntax of the verb differs significantly between Munda and Himalayish, Maspero rejected the Munda hypothesis. But, presumably not feeling the evidence strong enough to warrant an internally motivated explanation, he instead proposed an influence out of Indo-Aryan based on the analogy of that family's conjugational system.

Cet emploi des pronoms affixés au verbe diffère de celui des langues munda en ce que les pronoms sont toujours employés pour leur valeur propre, et non pour rappeler des notions précédemment exprimées dans la phrase par des noms. Plutôt qu'à l'influence d'un problématique substrat munda, c'est probablement à celle des parlers aryens environnants et de leur conjugaison qu'il faut attribuer ces faits qui éloignent fort ces dialectes de la norme des langues tibéto-birmanes. (Maspero 1946:175-176; Meillet and Cohen 1952:560)

This position has also been affirmed by Egerod (1973a) who sees TB pronominal verb morphology as "very reminiscent of adjacent Indo-European," and suggests that "the probability of an original close relationship of the two families must be taken into account" (1973a:503).

The spirit of the preceding discussion regarding morphological borrowing (cf. section 1.4) suggests that this line of argument would be impossible to carry through without having first assembled the comparative data and attempted to push it back as far as possible. The question of Indo-European or any other outside direction on TB would thus best be postponed to a point following a decision that the morphology is not native.

In any event, I would safely assume even now that Indo-European has not been an important influence for the reason that its contact with TB has been of relatively recent date and that at the time of contact the family had probably already split off into branches which today still maintain pronominalization. A more compelling reason is that Indo-European has few structures strictly comparable in TB. In many points of comparison Indo-European is either less complex or organized according to different norms of complexity, as, for example, is its subject agreement affixes syncretic for person and number or in its use of gender distinctions.

2.1.4. HYPOTHESIS OF NATIVE ORIGIN

The fourth and final position to be elaborated was, to my knowledge, first suggested by Eugénie J. A.

Henderson (1957) in a short paper whose immediate purpose was the demonstration that the term pronominalization, in the sense of a packet of features typically found together in certain languages, was appropriate to the colloquial (though not literary) standard of Tiddim Chin. The actual data and points of agreement with the Himalayan languages will be discussed later (cf. section 2.3); for now, however, it is appropriate to stress only that the feature had by this time been acknowledged in four different groups of TB languages: Western Pronominalized Himalayish, Eastern Pronominalized Himalayish, Eastern Naga,³⁵ and Kuki-Chin. The implication of such widespread occurrences is suggested by Henderson.

"It appears not unlikely that improved knowledge of the Chin languages and of others equally remote geographically from the so-called pronominalized groups will bring further similarities to light. In this event linguists may be obliged to conclude that, contrary to what has often been supposed, pronominalization is after all a genuine Tibeto-Burman family trait" (1957:327).

With this tentatively offered proposal that Proto-Tibeto-Burman may have exhibited complex verbal and pronominal morphology not usually attributed to

³⁵ Neither Henderson or Maspero makes mention of Namsangia Naga as pronominalized. The information on this language, admittedly very poor for comparative purposes, seems to have been generally passed over.

it, all the bases are effectively covered. We have the competing ideas of nativeness within a network of very wide relationship, substratal influence, borrowing, and nativeness at the level of TB. The only other possibility might be that pronominalization was independently innovated in all those languages or groups which exhibit it.

2.2. AN EVALUATION OF THE MUNDA SUBSTRATUM HYPOTHESIS

In an attempt to establish a plausible connection between the Munda family and the TB Himalayan languages, Kuiper (1962) indicates that "even now the distance between the most northern point where Santali [Munda] is spoken and the area of Limbu (a Himalayan language) is not greater than about 130 miles" (1962:42). Following the Indo-Aryan occupation of the Ganges valley which separates these two languages today, groups of Munda speakers in the northern hills of the valley became separated from their more southerly main contingent. Subsequently, Munda continued to be spoken there until its speakers finally "gave up their own language and adopted Tibeto-Burman dialects" (1962:42). Kuiper offers a set of potential cognates between Munda and TB to substantiate his claim of earlier contact. However, since he employs a scatter approach to comparison,

taking his items from very widely flung TB languages, many of which are not Himalayish at all, no sound correspondences can be set up. His appeal to verb pronominalization as another indication only reiterates Konow's subjective impression, since he also provides no detailed comparison.

2.2.1. THE MUNDA PRONOMINAL SYSTEM

In fact it seems that the only attempt at a non-superficial comparison of the two pronominalized families, by Maspero (1946), led to the denial of any causative relation between them. Maspero's conclusion, quoted earlier (cf. section 2.1.3), hinged on his finding that the Munda and TB verb were syntactically dissimilar. In Munda, object pronouns are directly incorporated into the verb. In other words, object affixes are not agreement markers,³⁶ they are the only surface manifestation of the underlying semantics, while subject affixes are simply agreement markers with an optionally deletable independent subject pronoun. The situation in those TB languages with both subject and object affixes differs in that both are

³⁶ In transformational terms, agreement implies a simple copying process, one selecting various features of the noun or pronoun and duplicating them at a point in the verb (phrase) complex, and then having the duplicated features coded into an appropriate affix by a late lexical insertion process of trivial concern for semantic interpretation.

agreement markers; the independent pronouns, both subject and object, appearing (optionally) in pre-verbal position.

Perhaps to explain this difference, it might be relevant to mention the absence of a true morphological system of case marking in Munda (Bodding 1929) in contrast to its general presence in TB. In other words, since nominative and accusative forms of the independent pronouns are not distinguishable in Munda, there would be potential confusion if both occurred in independent noun phrases (assuming too that the relative order of the noun phrases is more or less free); disambiguation of role status has to be made in the verb. In TB, however, ambiguities (which indeed do arise in the verb) are resolvable by different case markings on the independent pronouns or noun phrases. The issue will be re-raised shortly in discussing the probability of word order changes in Munda (cf. section 2.2.3). The difference between the two systems, in any event, does seem to be significant, especially as it does involve other deep-seated facts about the languages.

2.2.2. COMPARISON OF BAHING AND SANTALI

Even on other grounds, however, there exist indications of important differences between the

pronominalized verbs of Munda and TB. In drawing the comparison I will restrict the discussion to one language from each family—Santali for Munda³⁷ and Bahing for TB.³⁸ Neither of these languages would necessarily best represent the system of their respective proto-languages. Nevertheless, I feel that since they exhibit to the maximum the number of distinctions possible, in their respective families, any truly Munda influenced structures would very likely show up in both.

2.2.21. INDEPENDENT PRONOUNS

In Figure 1, the independent pronouns of both languages are compared. One of the striking incongruities of these two systems, which the figure reveals, is the presence of an alternate stem for Bahing possessive pronouns,³⁹ which fits in with the

³⁷ Santali is the Munda language spoken closest to the TB area, specifically the region of eastern Nepal and Sikkim. It shows more pronominal complexity than other Munda languages and has been rather fully described by Bodding (1929).

³⁸ While Bahing is not the nearest language to Munda geographically, it seems to show the eastern Nepal type of pronominalized verb structure at its most elaborate. It has also been generally better described (by Hodgson 1857-1858) than its sister languages. Finally it seems to have fewer morpho-phonemic alternations than a language like Vayu. I would caution though that these characteristics of Bahing are not necessarily being attributed to the original system.

³⁹ An independent possessive pronoun equivalent to

Figure 1: INDEPENDENT PRONOUNS OF SANTALI AND BAHING

	Santali	Bahing	
		ROM.	POSS.
1st sg.	if	go	wa
1st dl. incl.	alaŋ	gosi	isi
1st dl. excl.	aliŋ	gosuku	wasi
1st pl. incl.	abo(n)	go-i	ike
1st pl. excl.	ale	goku	wake
2nd sg.	am	ga	i
2nd dl.	abca	gasi	isi
2nd pl.	apc	gani	ini
3rd sg. anim.	uni	harem	a
3rd sg. inam.	ona		
3rd dl. anim.	unkin	harem dausi	asi
3rd dl. inam.	onakin		
3rd pl. anim.	onko	harem dau	ani
3rd pl. inam.	onako		

typical presence in TB of a morphological system of case marking. (Hodgson very early pointed out separate possessive stems as a Turanian characteristic, partly on TB evidence. cf. section 2.1.122.) Munda, on the other hand, typically lacks case markings. Therefore, to form the possessives in Santali the independent pronoun simply precedes⁴⁰ the head noun. The fact of this alternation in Bahing would seem to argue, therefore, that the pronominal categories in TB would be of some age and not copied from a Munda template.⁴¹

Besides this one major difference, there are also other important differences: (1) the lack of correspondence between the presence of animate/inanimate gender of Santali and its absence in Bahing; (2) the obvious number of affixes for Bahing⁴² (cf. -si 'dual'; -ni 'plural') while only the 3rd person of

'mine', etc. is formed with the possessive root with the suffix -ke; cf. wake 'mine'.

40 There may be a gender suffix attached to the pronoun to concord with the animate or inanimate gender of the following noun.

41 William Foley (personal communication) has pointed out to me the possibility that one of the two alternating forms, most likely the possessive, may have arisen on an outside model. Presumably, Austro-nesian has examples of such borrowing. Fuller comparative evidence to be discussed later (cf. sections 3.1.31 and 3.4), however, renders this possibility unlikely, since the alternation can be pushed back to the earliest stages of the family.

42 I have adopted the convention of indicating affixal forms by means of a hyphen: -affix indicating a

Santali uses number affixes; and (3) the association of the inclusive and exclusive of Bahing with 2nd and 3rd person morphemes, respectively (cf. -i 'inclusive' and i '2nd person, poss. stem'; -ku as in 1st plural exclusive goku may derive from an element #kho which is a very common 3rd person pronoun in Eastern Himalayish and Tibetan) (cf. section 3.2.33). It is possible also that wa- the possessive exclusive stem is equivalent to the 3rd possessive root a. Its use then as the normal possessive of the 1st singular would represent the regularization of the paradigm, especially since closely related languages show a different root (cf. Vayu (Hodgson 1857-1858) ang '1st singular possessive' and wathi '3rd person'). The principles of constructing these forms are thus distinct, Santali being relatively unanalyzable while Bahing still shows the probable derivational path from some no longer productively used morphemes (cf. section 3.2.222). In addition, there are no obvious phonological correspondences between any of the forms.

suffix and affix-, a prefix. Languages with discontinuous affixes are indicated as: affix- -affix for an intervening verb, -affix- -affix for two suffixes around another, intervening suffix, or affix- -affix- for two prefixes around some intervening prefix (although this situation has never arisen). Independent pronouns do not use any special mark.

2.2.22. INTRANSITIVE VERB AFFIXES

Even more indicative of the historical independence of TB from Munda are the verb affix systems themselves. The intransitive verb paradigm (cf. Figure 2) will be presented first.

Syntactically, the Santali affixes are applied most commonly to the word immediately preceding the verb or to the final position in the verb following the "finite marker" (Bodding 1929:49). These affixes are mainly used with animate subjects in the active voice (however, Bodding also remarks that the subject marker can appear if there is an underlying animate subject not appearing on the surface, as in a passive sentence, for example). In Bahing a subject marker will appear in a fixed position for every sentence.

A comparison of this chart with the independent pronouns of both languages shows that the Santali affixes are all easily derived from the free forms, showing typically the loss of the initial vocalic element (or of the entire first syllable of 3rd person forms), while the Bahing forms are sometimes less obviously derived or even entirely separate forms (cf. 1st singular intransitive -na with 1st singular go; 2nd singular intransitive -ye with 2nd singular ga; the 3rd person affixes have no relation to 3rd person free pronouns, since these latter have probably only recently developed). In addition the Bahing forms

Figure 2: INTRANSITIVE VERB AFFIXES OF
SANTALI AND BAHING

	Santali	Bahing		
		Pres./Fut.		Preterite
		Intr.	Neuter ^a	
1st sg.	-in	-qa	-u	-ti
1st dl. incl.	-laq	-sa	-isa	-tasa
1st dl. excl.	-liñ	-suku	-isuku	-tasuku
1st pl. incl.	-bon	-ya	-iya	-ntayo
1st pl. excl.	-le	-ka	-ika	-ktayo
2nd sg.	-em	-ye	-i	-te
2nd dl.	-ben	-si	-isi	-tasi
2nd pl.	-pe	-ni	-ini	-ntani
3rd sg.	-e	-ø	-a	-ta
3rd dl.	-kin	-se	-ise	-tase
3rd pl.	-ko	-me	-ime	-mtame

^a Neuter affixes are used with a small set of intransitive verbs which from their structure seem to be derived from old causatives. The choice of either intransitive or neuter suffixes is thus lexically determined.

show a great deal of internal diversity. For example the neuter set calls to mind the possessive set of independent stems (cf. -u '1st singular neuter' with -wa '1st singular possessive'; -i '2nd singular neuter' with i '2nd singular possessive'; -a '3rd singular neuter' with a '3rd singular possessive') and also duplicates the subject affixes of transitive verbs used with 3rd person objects⁴³ (cf. section 2.2.23). Another complication is the presence of a preterite set of affixes sometimes not easily relatable to the present/future set, even allowing for the assuredly temporal value to be assigned to the t- or ta- of these forms (cf. 1st singular preterite -t-i (< ta + i) with -na or -u 1st singular affixes; 1st plural exclusive preterite -k-ta-yo with -ka '1st singular intransitive' where there is a discontinuity around the temporal element). It is quite probable then that there was some interaction, presumably phonological, between tense/aspect and pronouns which resulted in a morphological syncretism for these

⁴³ The neuter verbs, which seem to have been originally a subset of causative verbs (indicated by the suffix -t, an old causative morpheme present in their finite conjugation), became strictly intransitive syntactically at a later stage of Bahing development. They, nevertheless, still require the special markings indicated under the Neuter heading of Figure 2. The chain of relationship which makes this set of suffixes also appropriate for the transitive verbs (with 3rd person object) stems partly from Bahing's ergative character (transitive objects and

affixes. The morphological details will be explored at greater length in following discussions (cf. sections 2.3.34 and 2.3.41).

2.2.23. TRANSITIVE VERB AFFIXES

The final comparison relates to the data of transitive propositions. The Santali situation includes the placement of an object affix, either direct or indirect but not both, after the "verbal suffix" and before an optional possessive affix.⁴⁴ These forms are essentially identical to the subject affixes (however, the 2nd singular object affix is -me, cf. 2nd singular subject affix -em); it is their order with respect to the root which unambiguously defines them as objects. Subject affixes, it will be recalled, either precede the verb root or occur as the final element of the verb phrase. The possessive affix

intransitive subjects are marked identically for case) (cf. section 4.2.1) and partly from a tendency for 3rd person to be zero marked in affixes (cf. section 4.4). It would appear that the possessive stems of the independent pronouns derived from this set of transitive subject affixes, but for what reason and by what semantic route, is still not clear.

⁴⁴ The verbal suffix is a syncretic affix including the semantic notions of time, transitivity, and intentionality of the action. Bodding summarizes the componentry of the verb as follows:

Base word + verbal suffix + object affix +
(possessive infix) + finite marker a +
subject pronoun

The object affix must be animate and in the active voice. Bodding uses the term 'infix' to describe a suffix which is interposed between other suffixes.

functions as a possessive pronoun, though its use is optional. Again, the forms are phonologically identical to the affixal form of the pronoun but with the addition of a prefixed element ta- (for example, -taben '2nd dual possessive', cf. -ben '2nd dual affix'); morphophonemic changes are possible, however (cf. -tifi '1st singular possessive' < -ta + ifi).

The Bahing data is much more complex than this relatively simple situation. It is charted in Figure 3.

The most interesting aspects of the Bahing transitive conjugation are: (1) the identical forms for the 2nd and 3rd person subjects with 1st person objects (2nd → 1st, 3rd → 1st)⁴⁵ and the 2nd person subjects with 1st or 3rd person objects (2nd → 1st, 2nd → 3rd); (2) the appearance of forms without any correspondants in the set of intransitive affixes, such as -na in '1st → 2nd' or -ka '1st plural exclusive → 3rd'; (3) in the preterite forms, one of several consonants preceding the preterite marker -ta; and (4) the seemingly reversed syntax of some forms, with the order subject-object varying with object-subject in the affixes. It would appear that some affixes are capable of shuffling some of their semantic features

⁴⁵ By convention, an arrow linking two pronoun forms indicates a transitive relation of subject acting on or for object (subject → object).

Figure 3: BAHING TRANSITIVE YERD AFFIXES*

Obj. Subj.	1st					2nd			3rd			
	SC.	INCL.	EXCL.	INCL.	EXCL.	SC.	PL.	PL.	SC.	PL.	PL.	
1st	SC.					-na	-nani	-nani	-pa	-pasi	-pasi	
	INCL.					-nana	-nannai	-nannani	-top	-topsi	-topsi	
	EXCL.								-sa	-sasi	-sasi	
	INCL.								-tam	-tamai	-tamai	
	EXCL.					-yeni	-yeni	-yeni	-saku	-sakusi	-sakusi	
	INCL.					-teni	-tenai	-tenani	-taruku	-tarukusi	-tarukusi	
2nd	SC.								-ya	-yasi	-yasi	
	INCL.								-tayo	-tayosi	-tayosi	
	EXCL.					-yeni	-yeni	-yeni	-ka	-kasi	-kasi	
	INCL.					-teni	-tenai	-tenani	-kako	-kakusi	-kakusi	
	EXCL.											
	INCL.											
3rd	SC.	-yi	-siki		-ki				-(y)i	-(y)isi	-(y)isi	
	INCL.	-ti	-tasiki		-taki				-ptu	-ptasi	-ptasi	
	EXCL.	-yisi	-sikiisi		-kisi				-si	-sisi	-sisi	
	INCL.	-tisi	-tasikiisi		-takisi				-ptusi	-ptasiisi	-ptasiisi	
	EXCL.	-yimi	-sikiimi		-kimi				-ni	-nisi	-nisi	
	INCL.	-tini	-tasikiimi		-takimi				-ptuini	-ptasiimi	-ptasiimi	
3rd	SC.	-yi	-so	-siki	-so	-ki	-ye	-si	-ni	-wa	-sasi	-sasi
	INCL.	-ti	-tase	-tasiki	-tase	-taki	-te	-tasi	-tani	-pta	-ptasi	-ptasi
	EXCL.	-yisi	-soisi	-sikiisi	-soisi	-kisi	-yeni	-sisi	-nisi	-se	-sasi	-sasi
	INCL.	-tisi	-tasosi	-tasikiisi	-tasosi	-takisi	-tasi	-tasisi	-ntanasi	-tase	-tasasi	-tasasi
	EXCL.	-yimi	-soimi	-sikiimi	-soimi	-kimi	-yeni	-sisi	-nisi	-se	-sasi	-sasi
	INCL.	-tini	-tasosi	-tasikiimi	-tasosi	-takimi	-tasi	-tasimi	-ntanini	-tase	-tasasi	-tasasi

* The top half of each cell contains the Present/Future form, the bottom half the Preterite form.

in different occurrences; for example, the suffix -ni has the meaning 2nd person plural object or 2nd person plural subject, but it confusingly also appears in preterite 2nd → 3rd plural forms making for complicated homophony, such that 'we saw you (pl.)', 'you (pl.) saw them', and 'they saw you (pl.)' would share identical verb structure.⁴⁶ There are many other instances.

We can also see evidence for the suggestion that 1st and 2nd persons, whether subject or object, seem to take priority over 3rd person. In fact, the only points at which we see definite indications of a 3rd person signification are the affixes -mi '3rd plural' and -wa '3rd → 3rd' (cf. also sections 4.2 ff). The very complexity of the conjugation, however, sets it strongly apart from the relatively straightforward Santali conjugation.

In evaluating all of the above data, from independent pronouns to affixes of transitive verbs it is apparent that the burden of accounting for the evolution of the Bahing system falls on the back of the Tibeto-Burmanist. In all points Bahing seems either equally or more complex than Munda, not only in the total number of morphological distinctions, but

⁴⁶ The questions that such homophony raises concerning effective communication and systemic or paradigmatic stability are discussed in section 4.1.8.

also in its highly involved and elaborate syntax. But to round out the arguments, we can also consider the impressive work by Pinnow in reconstructing Munda verbal morphology (1966) and the Austroasiatic pronoun system (1965).

2.2.3. MUNDA AND THE PROTO-AUSTROASIATIC PRONOMINAL SYSTEM

It would seem that the contention of a Munda influence on TB verb morphology would itself revert back to earlier stages of the language, most likely being itself a feature of the ancestral Proto-Austroasiatic. This presupposition is necessary because the time depth of the postulated contact with TB must be fairly early, predating the Aryan invasion and the split of early TB dialects. However, on gross comparative evidence alone, it might be expected that the nearer we approach Proto-Austroasiatic the more we will have to accommodate Munda to the simpler morphological structures of the majority of the family. On the whole, Austroasiatic exhibits much the same overall pattern as TB; a definite minority of its members show the complex pronominalization at issue, the majority are decidedly analytic in structure. Pinnow suggests the following explanation to account for this discrepancy in Austroasiatic between Munda on the one hand and Khmer-Nicobarese on the other.

This difference between the two branches... has its origin mainly in the fact that the two Austroasian groups belong to distinct linguistic leagues (Sprachbunda): The synthetic structure of Munda was strengthened by the proximity of Dravidian and Indo-Aryan languages, while the analytic structure of the Khmer-Nicobar languages was favored by the contiguity of the Thai, Kadai, Indonesian and also Burmese languages (1966:183).

Pinnow then proceeds along regular lines of comparison to point out the probable archaic status of the three person categories, three number categories, and the inclusive/exclusive distinction for the independent series of pronouns—even successfully demonstrating the cognation of many of the phonological forms, thereby arriving at a set of probable reconstructions.

However, he feels the affixal forms along with the attendant morphological system, to be a secondary development within Munda. "In proto-Munda...the pronouns properly were independent, isolatable free forms. The affix character of the pronouns, which were incorporated into the verb complex as subject or object respectively, is of more recent date" (1966:183). He also attempts a rationale for the syntax of the incorporated pronoun object of the verb, supposing an original SVO word order which is still mimicked by the order of affixes, the subjective pronoun immediately preceding the verb and the object pronoun following.

At the stage of development where the word order changed to the present SOV pattern, the pronouns had already assumed affixal status and consequently did not participate in the general object phrase reorientation. Pinnow has found independent support for this hypothesis in a dialect of Kharia which maintains SVO word order in some circumstances. Going even further, he expresses confidence in the assumption that the affixal realization of indirect objects and possessives as in Santali, which is very restricted over the entire Munda area, is not traceable even to Proto-Munda.

In one last previously unmentioned particular, Pinnow records no instance of a special reflexive pronoun. In this respect again Bahing shows both a means of forming an independent set of reflexive pronouns (wa-dwabo 'I myself') as well as a verbal affix to express self-inflicted action (-si-ŋa 'I verb myself'). This verb suffix then is in addition to the regular pronominal terminations described earlier.

From this summary of Pinnow's analysis of Austroasiatic pronouns and verb morphology, Munda again seems to offer no promise of unraveling the problem of the TB pronominalized verb. All of the arguments taken collectively, from the detailed comparison of one language from each of the two families to the internal evidence for morphological innovation within Munda

itself, seem to inescapably force some other explanation.

2.3. TYPOLOGICAL EVIDENCE FOR THE NATIVENESS HYPOTHESIS

2.3.1. GEOGRAPHIC DISTRIBUTION OF PRONOMINALIZATION

Since the writings of Hodgson and Konow when the problem of pronominal verb morphology in TB was first described and an attempt was made to draw a plausible picture of its origin, some additional languages have been recognized as exhibiting similar complexity. In a few cases the investigator attempted to place the new data within the framework of the earlier hypotheses. In some small subset of these languages the fit was facilitated by the geographic proximity of the language to others already recognized as pronominalized. For example, Chepang's nearness to one center of pronominalization farther east in Nepal created no special problems for subgrouping it together with these languages. Parallel arguments could then easily be provided for the genesis of the complex verb structure in terms of a Munda substratum (Caughley 1971)⁴⁷ without necessitating complex explanations for

⁴⁷ Caughley draws a comparison between Chepang and Mundari concluding that the two show many parallels in their "pronominalising systems". It appears

migration or diffusion of the structure. For languages in greater or lesser isolation from the two recognized nuclei of pronominalization (in Eastern Nepal [Eastern Pronominalized] and in Northwest India [Western Pronominalized]), two different courses were taken: (1) The verb morphology is simply described with no mention of its being "pronominalized", as with Kachin (Hanson 1896, Hertz 1935, Wolfenden 1929), Jyarung (Chin 1949, 1957-1958),⁴⁸ Rawang (Barnard 1934),⁴⁹ Nocte (Das Gupta 1971),⁵⁰ and Lushai (Shaha 1884, Lorrain and Savidge 1898); or (2) The language is recognized as pronominalized but explanations of

though that the comparison was not sufficiently detailed to uncover the fundamental differences in the syntactic structures of the verb between the two languages. Chepang's morphology, moreover, shows extremely close structural and lexical parallels to TB languages very remote from it (cf. Figure 8).

- 48 I would sincerely like to register my thanks and gratitude to Liao Chiu-Chung who provided me with a working translation of Chin (1957-1958). I am also grateful to Prof. Chang Kun for originally pointing out to me the importance of Jyarung and directing me to Chin's material.
- 49 Morse (1965) describes Rawang as pronominalized although this specific article does not provide detailed information.
- 50 Nocte is an Eastern Naga language (Benedict's Konyak Naga; Voegelin and Voegelin's Tangsa) which, if not identical to, is at least dialectally extremely similar to Namsangia Naga, originally described by Robinson (1849). Das Gupta gives no reference to this earlier work, however, and makes no attempt to subclassify Nocte within TB. The actual name 'Nocte' appears nowhere else in the literature.

outside influence are rejected, as for Kham⁵¹ (Watters 1973) and Tiddim Chin (henceforth Tiddim) (Henderson 1957, 1965) (cf. section 2.1.4).

In this section these languages will be systematically compared with several languages of the two nuclear pronominalizing groups; from the Western branch: Kanauri (Bailey 1909), Bunan (Francke 1909), and Manchatl (Francke 1909), and from the Eastern branch: Bahing (Hodgson 1857-1858), Vayu (Hodgson 1857-1858, Michailovsky 1974), and Limbu (LSI 1909). This list, of course, does not exhaust the possibilities (see Shafer 1950 and 1974 for fuller lists); but, very importantly it effectively covers most of the TB linguistic area (see the map of Figure 4), includes most of the major recognized subgroups of TB, and focuses on the best described pronominalized languages.

Using Shafer's (1974) classification these languages are grouped as follows: (1) in the Bodic division: Bunan (North-northwest branch of West Himalayish section), Manchatl and Kanauri (Northwest

⁵¹ The early literature, including the LSI, makes no mention of this language of west-central Nepal. David Watters (personal communication) has suggested that the Kham tribes were formerly ethnically identified with the Magars and that their language, which differs considerably, was simply hypothesized to be Magari (non-pronominalized of Shafer's West Central Himalayish section). Watters, as yet, has not to his own satisfaction been able to subclassify Kham within TB, partly because he is not convinced by the Munda substratum hypothesis.

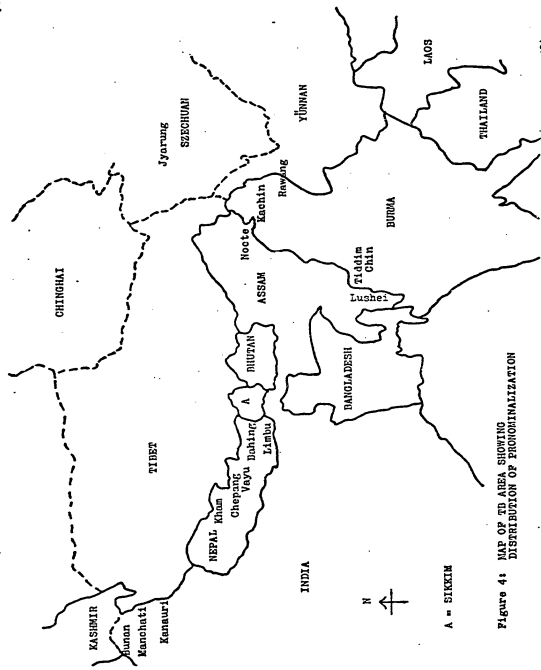


Figure 4: MAP OF TD AREA SHOWING DISTRIBUTION OF PROGAMMATIZATION

branch of West Himalayish section), Vayu and Chepang (West Central Himalayish section), Bahing (Western branch of East Himalayish section), Limbu (Eastern branch of East Himalayish section), Jyarung (Rgyarung section) and Kham (unclassified, see note 51); (2) in the Burmic division: Rawang (Nungish section), Kachin (Kachinish section), Lushei (Central branch of Kukish section) and Tiddim (Northern branch of Kukish section); (3) in the Baric division: Nocte (Nagish section).⁵² Benedict's (1972) main divisions sometimes crosscut with Shafer's. For instance Shafer's Bodic division is separated into two groups: Tibeto-Kanauri and Bahing-Vayu. This would have the effect of splitting off the Western Pronominalized group from the Eastern, suggesting, if true, (1) that an outside influence would have to have been independently exerted in both groups or (2) that any commonalities in the verb structure between these two groups must revert to a common stage predating their separation from PTB, in which case non-pronominalized languages such as Tibetan and Gurung (Tibeto-Kanauri)

⁵² I highly doubt the correctness of this grouping of Nocte, and the other northeastern Naga or Konyak languages, with Barish (Bodo-Garo). On the basis of a recent lexical comparison of languages in the Assam hills (Bauman 1975), based partly on more extensive Konyak materials than were available to Shafer, there appears to be sufficient evidence to bring together all the Naga languages, including the Konyak group, into a single family.

would also have been pronominalized at earlier stages or (3) that both groups have innovated independently of one another. Voegelin and Voegelin (1973), in a still different view, group together all of Shafer's pronominalized subgroups into a category called Gyarung-Mishmi which also takes in non-pronominalized languages (including the Abor-Miri-Dafla group), but excludes Tibetan entirely.⁵³

It is important to emphasize that, even though the pronominalized languages fall into different subclasses according to each of the three descriptions, no one scheme puts all these languages into a single category. This strongly suggests, therefore, that either the pronominal morphology is an archaic TB trait, in which case cognacy of morphemes and structures should be demonstrable or that the structures were independently produced during periods of Munda or other language contact, postdating the split from PTB. Under the second interpretation no cognacy would be necessarily expected.

⁵³ Voegelin are in error in remarking that Jyarung is non-pronominalized and that it is spoken around the Darjeeling area of India (near Sikkim). They no doubt based these conclusions on Hodgson's (1848b) Jyarung data which were collected in Darjeeling from a traveler. (Hodgson seemingly did not collect sufficient data to recognize it as pronominalized.) Another error is the assertion that Monpa is equivalent to Limbu. The two are entirely distinct, Monpa, for example, being non-pronominalized (cf. Das Gupta 1968).

2.3.2. AIMS OF THE COMPARISON

In the sections to follow the pronominal systems from the languages mentioned above will be compared point by point with a view to demonstrating the integrity of the hypothesis that pronominalization was a trait native to TB. I have adopted the policy of viewing parts of a total pronominal system in abstraction from the narrower confines of a particular paradigm within that system. A pronominal system is here understood to encompass the entire person and spatial deictic apparatus of a language—formally apparent in the subsystems of independent personal pronouns; person/number verb affixes; demonstratives; relative, interrogative, and indefinite pronouns; numerals; and kinship and status terms. Even within one of these subsystems it may be possible to further characterize various component patterns or structures. For example, the independent pronouns may be looked at from the standpoint of the case functions they carry out; very often the genitive or possessive pronoun is formally distinct from the nominative pronoun, not just in the case marker, but also in the stem itself. Compare for Kanauri: 1st singular ergative gũ and 1st singular possessive añ.

This sort of complexity within subsystems naturally provides more information for comparative

purposes, if the methodology that I have advocated is subscribed to. For Kanauri, therefore, I would factor out the person information from both of these 1st singular forms, ignoring for the time their different semantic/syntactic usages, and compare one or both with 1st singular forms in other TB languages, in any subsystem that they may occur. Again, I hope by such procedures to demonstrate not that there is less than the usually conceived of diversity in the number of pronominal roots, but that the diversity is patternable and ultimately explicable within the framework of an original complex morphological system.

Since my ultimate goal is a morphological rather than a lexical reconstruction, some shortcuts in the phonological demonstration of the pronominal roots will be taken. Rather than provide exact phonological reconstructions of different roots (which necessarily presupposes that the historical phonologies of all the compared languages are sufficiently well understood, which they are not) I will, instead only require that a form realized by comparison approximate the original proto-form.⁵⁴ Such forms are preceded by the number sign #.

⁵⁴ In most, but not all, cases it will be the vocalic element of the proto-root which is in doubt. Consonants generally seem more conservative, though even here, very common phonological processes such as palatalization can operate to confuse the issue.

The task of reconstructing a morphological system for PTB, which can account for the complexity we have seen in Bahing, can only proceed slowly, with very careful sifting of a multitude of data. This task thus necessarily lies beyond the foundation laid in this chapter. Essentially what I am attempting to demonstrate here is only the plausibility of the nativeness hypothesis and the justification for a more detailed investigation (cf. Chapter 4).

In the immediately following sections, some of the factors that must eventually be considered are listed so as to constitute a typological assessment of the problem. What I intend by this survey of some dozen or so languages is to show how different pronominal complexities cross-cut lexically established subgroup boundaries, to show that the solution must circumscribe all of TB and not isolated minorities within the family.

In a few cases the actual verbal syntax of various languages will be described and compared, even though our poor knowledge of the developmental histories of the individual languages complicates the

I would stress that data from any language used to establish the root can be disallowed by showing that its phonological history would make the segments on which the comparison was based inappropriate to earlier stages of its development. Hopefully the relatively large number of languages compared will level out some of this uncertainty.

problem. In applying such comparisons it would seem dangerous to simply take the most elaborate synchronic morphology to serve as the model for the proto-language. Recall Pinnow's contention that the complexity of the Munda verb will not reconstruct to Proto-Austroasiatic (cf. section 2.2.3). Pinnow proposes instead that it developed as an areal influence from surrounding Dravidian and Indo-Aryan languages. In the case of TB many individual languages may have accrued complexities due to similar areal pressures. The transitive verb affix system is especially troublesome since it is manifested in more than one typological format (cf. section 2.3.31), one of which is perhaps secondarily derivable from the components of the simpler intransitive affix system. The special problems to be met with in this area will, therefore, simply be acknowledged here. Full discussion will be postponed to sections 4.2 ff. It will be primarily the intransitive verb paradigm which will be examined for direct evidence of a historically retrievable morphological structure.

2.3.3. TYPOLOGY OF PRONOMINAL VERB AFFIXES

It is the presence or absence of a verbal affix system for person-number agreement which is criterial for designating a language as pronominalized or not.

However, within this broad assessment it is possible and desirable to particularize various parameters of this morphology, and rank individual languages as to their behavior. This procedure can be very useful in delineating language subgroups and these subgroups, in turn, can be valuable aids for tracking the chronology of development from earlier stages of the language.

2.3.31. TRANSITIVE VERB AFFIXES

The primary distinction of pronominal affixation which suggests itself from the briefest look at the data is that between intransitive and transitive affixes.⁵⁵ Some languages have mechanisms for only subject agreement (intransitive) while others require agreement for both subject and object (transitive). Within the transitive category two subtypes can be recognized. One of these has a set of object agreement affixes phonologically and morphologically distinct from the subject agreement set (the Discrete sub-heading of Figure 5), while the other has a set of affixes which simultaneously indicate the subject and

⁵⁵ These terms are not as closed to controversy as might be hoped. In some languages such as Bahing a division is made within the so-called intransitive category between "true" intransitives and a set of verbs without objects which nevertheless require affixes more appropriate to "true" transitive verbs (cf. note 43). The inclusion of a verb in one category or the other seems to be lexically determined.

Figure 5: TYPOLOGY OF PRONOMINAL VERB AFFIXES

		Affixation Type			
		Intransitive	Transitive		Reflexive
			Discrete	Syncretic	
Affixation Pattern	Prefixing	Kham Limbu Jyarung Rawang(2 only) Lushei Tiddim	Kham Lushei (1 only)	Limbu Jyarung Rawang	Jyarung Lushei
	Suffixing	Bunan Manchati Kanauri Chepang Bahing Vayu Nocte Kachin	Bunan(1 only) Kachin	Chepang Bahing Vayu Nocte	Kanauri Kham Bahing Vayu Rawang
Concord	Tense/ Aspect	Bunan (pres, fut, imperf, perf) Kanauri (pres/fut, past) Bahing (pres/fut, past) Vayu (pres/fut, past) Limbu (pres, past) Jyarung (only vestiges) Nocte (pres/fut, past/subord) Rawang (pres, imperf, fut/imperf, potential) Kachin (pres/fut, past, optative) Lushei (independent, subord) Tiddim (pres, fut, conditional)			
	Negative	Chepang (morphophonemic) Nocte (separate stems) Tiddim (morphophonemic)			

object roles in a "single" phonological form (the Syncretic subheading of Figure 5).⁵⁶ The latter is typified by the Bahing system presented earlier (cf. section 2.2.23). Within the languages with separable object and subject affixes it is further possible to specify different syntactic arrangements of the affixes with respect to one another and to the verb. Compare, for example, the situation in Kham:

1st sg.	→	2nd sg.	nga	<u>verb</u>	ni
3rd sg.	→	1st sg.	<u>verb</u>	na-	-o
1st sg.	→	3rd dl.	nga-ni	<u>verb</u>	

where prefixation and suffixation are differentially used to express the various possible role interrelationships. There are additionally several other characteristics of the transitive verb which will not be charted. These typically involve verb stem alternations and/or the insertion of epenthetic consonants at particular points of the paradigm. I have only been able to speculate about the possible functions these processes serve.

⁵⁶ The true situation is again oversimplified. For numbers other than singular it is sometimes possible to set off the subject from the object in syncretic languages. Michailovsky (1974) presents a detailed account of the semantic and morphological complexities involved in Hayu (Vayu) transitive verb agreement which puts the issue in sharper focus (cf. also sections 4.2.23 and 4.2.25).

2.3.32. THE REFLEXIVE AFFIX CATEGORY

A distinct type of verb affix expressing a reflexive meaning occurs in some languages. This usage is absent in other languages, which use instead pronoun based reflexive constructions. Compare:

Kham:	nga- <u>verb</u> -si	'I <u>verb</u> myself'
Kachin:	ngai-hkum	'I myself'

It is possible, though, for a language with a reflexive verb affix to also make use of a pronominal reflexive; for example, Kham can reduplicate the pronominal root to form a reflexive (although this cannot occur with singular roots).

Kham:	gin gin	'we 2 ourselves'
-------	---------	------------------

Languages exhibiting a verbal reflexive affix are indicated in Figure 5, subdivided according to affixation pattern.

2.3.33. AFFIXATION PATTERNS

As indicated above the affixation patterns of the language to be treated can be fairly complex. To simplify the chart somewhat, advantage will be taken of the fact that any prefixing language also exhibits suffixing mechanisms. Therefore, such a language will be indicated only once--in the prefixation row.

2.3.34. TENSE/ASPECT/MOOD CONCORD

Figure 5 also includes information relative to whether a particular language engages in one or both of two types of "concord" relations.

The more important of the two concerns the phenomenon of pronominal affixes, transitive and intransitive, having different forms agreeing with the tense/aspect marker of the verb. In what seems to be a related phenomenon, a separate set of affixes is used for what are variously called "potential", "subjunctive", "conditional", or "subordinate" clauses. These contrast with the set(s) used in independent clauses. Both the tense/aspect and this modal concord are treated together under the former label. For instance, Hanson (1896) describes the following suffixes in Kachin:⁵⁷

-nŋ(ai)	'I am <u>verbing</u> '
-riŋ ŋ(ai)	'I will <u>verb</u> '
-ni	'I have <u>verbed</u> '
-li	'may I <u>verb</u> '
-se	'I <u>verbed</u> '
-re:	'I will have <u>verbed</u> '

⁵⁷ It seems to be mainly the southern dialect of Kachin that Hanson is describing, although it is difficult to be certain of this. In any event the dialect described by Hertz (1935), which seems comparable to Hanson's Cowrie dialect on a comparison of certain pronominal affixes, does not appear to exhibit these distinctions.

The comparative analysis of this type of system will form an important aspect of a later study, though for now only the number and general nature of the distinctions which each language makes will be considered.⁵⁸

2.3.35. NEGATIVE CONCORD

A second type of pronominal concord occurs for the negative marker in a few languages. The details differ from language to language. In a simple case, for example Chepang, the negative set of affixes seems to be morphophonemically related to the positive set.

Chepang:	1st sg. positive	-ŋ
	1st sg. negative	-ŋa

However, in other languages, such as Nocte, the root itself can change.

Nocte:	1st sg. positive	-aŋ
	1st sg. negative	-mak [-m is the negative marker] ⁵⁹

⁵⁸ Not considering the total system of this morphological type can perhaps lead to difficulties when examining pronominal roots across languages. Some seemingly arbitrary decision will have to be made to select one of the tense/aspect concord forms in languages which exhibit this peculiarity, to compare with the roots in a language lacking the distinction. The solution adopted has been to

A further peculiarity of Nocte is that the separate negative forms occur only in "present" type tense/aspects. Unfortunately this phenomenon cannot be systematically examined at present since relevant data is missing in most languages. Figure 5 will simply indicate the presence of some form of this negative concord for languages where it has been described. In languages with transitive affixes, the same concord distinctions are made as for intransitive affixes, so there is no need to separately indicate this in Figure 5.

2.3.4. DISTRIBUTION AND ASSESSMENT OF AFFIX TYPES

2.3.4.1. OCCURRENCE OF TENSE/ASPECT CONCORD

Figure 5 yields a few significant generalizations, probably the most striking of which is the statistically high occurrence of tense/aspect concord in the languages sampled (11 out of 14). It has only not been reported in Kham, Chepang, and Manchari, although Manchari exhibits a system of verb stem alternation for tense/aspect which may be historically

compare only the present (/future) set of roots, which in most situations seems to represent the "unmarked" category.

59 Marc Okrand has pointed out to me the possibility that the isolable -ak element of Nocte -mak may be a regular morphophonemic alternant of -an. However, in view of the lexical variation which exists between na- and ka- forms in 1st person (cf. section 3.1.2), this may or may not be tenable. I am not aware if Nocte has a regular phonological rule alternating velar stops and nasals.

related. There is further support in view of its most closely related sister languages—Kanauri and Bunan—exhibiting the concord; although Kanauri itself seems to have partially leveled out the complexity also. Chepang has as yet not been fully described and final judgment on its actual behavior in respect to tense/aspect concord should be withheld.

Kham seems to be a true exception at this point. An interesting feature of its verb morphology, however, is the inclusion of a tense marker following the verb which can interpose itself between the subject and object affixes. This marker, in line with all affixes generally, seems to maintain its phonological and semantic discreteness. Kham thus seems to approach more than any other language considered a true agglutinative structure. One of two positions regarding Kham's exceptional behavior can be taken, relative to whether the tense/aspect concord phenomenon was common to PTB or whether it arose independently in later times as a result of processes which fused originally separate tense/aspect and pronominal markers. Under the first assumption Kham would be considered as innovative and under the second as archaic, in that it resisted the pressure to fuse these affixes. The first hypothesis may eventually carry more weight in view of a great many other peculiarities in Kham's structure. It more than any

other language seems to overstep the norms.

2.3.42. CO-OCCURRENCE OF TRANSITIVE WITH INTRANSITIVE PARADIGMS

Another significant finding is the high positive correlation between the presence of transitive with intransitive affixes. Again only three languages do not exhibit the correlation. Two of these, Kanauri and Manchatl, are closely related in the Western Pronominalized group. Bunan, the third representative of this group, can almost be included as lacking transitive affixes, since only a single object suffix, -ku 'me, for me', is used, and this only in imperatives and in the imperfect with 3rd subject. These three languages would together constitute a particular subgroup which presumably lost object agreement at an earlier stage of development.

The other language without object agreement is Tiddim, which, however, on the evidence of closely related Lushei, may be supposed to have originally possessed a set of discrete object affixes. Lorrain and Savidge (1898) report that the object affixes of Lushei are not used obligatorily so we may suppose that forces are at work to eliminate the distinction entirely. Lushei would then pattern with Tiddim.

2.3.421. PARALLELS BETWEEN LUSHEI AND KACHIN

If Bunan is eliminated from consideration of possessing object agreement for the reasons above and if Kham is eliminated by reason of its exceptional agglutinative approach to affixation, then only Lushei and Kachin are left as representatives of the discrete type of object affix. An attempt to account for this coincidence, by comparing the object affixes in these two languages (which are usually not considered as especially close geographically or genetically) revealed an interesting association, with possible implications for subgrouping (cf. Figure 6).

It is, of course, fairly apparent that the 1st person forms in #mi are cognate (in spite of their being prefixed in Lushei). The 2nd singular forms are almost as easily related, the o- of Lushei simply being the palatalized variant of the dental stop of Kachin.⁶⁰

What makes this even more obvious is the occurrence of the same vocalic alternation, -e - -i, in both languages. The 2nd plural forms keep the 2nd person root but make use of different plural markers: ma in Kachin

⁶⁰ There is only limited evidence of root initial dental stops followed by a high front vowel in PTB. Benedict (1972:52) sets up *tyan 'dark' with a Kachin reflex tšyan [cyən] 'black' and *tyak 'right, correct' with a Lushei reflex tək. There is some indication, therefore, that KACHIN does palatalize dental stops before a front vowel while Lushei does not.

Figure 6: LUSHEI AND KACHIN OBJECT AFFIXES

	1st SG.	1st PL.	2nd SG.	2nd PL.
Lushei	min - mi' (prefix)	min - mi' (prefix)	ce - ci-a (suffix)	ce-u - a-ce-u (suffix)
Kachin ^a	mi	mi	de - di	ma-de-ga - ma-de

^a Kachin has two 3rd person object forms which have no correspondents in Lushei.

(cf. -we-ai '3rd singular object'; -ma-we '3rd plural object (dial.)') and u in Lushei (cf. verb-imperative-u 'imperative plural'; cf. also Tiddim -u?_tə? '2nd plural').

2.3.422. PARALLELS BETWEEN TIDDIM AND KACHIN

The object affixes of Kachin taken together with their corresponding subject agreement members form a particular pattern within the total pronominal affixation system of the language. Hanson (1896) described this set as the "descriptive present", although he states that it may be used to convey any temporal notion. It simply does not vary with the tense/aspect markers of the sentence as does the other major set of affixes. What the determining variables are which select one set or the other is not made entirely clear, but it seems possible that it may be similar to a stylistic affixal variation found in Tiddim. Tiddim has a set of prefixed forms used only in the literary language and a contrasting set of forms used in colloquial speech. This second set shows variation for tense/aspect concord, while the literary set is invariable. It seems, therefore, that the "descriptive" set of Kachin would functionally pattern with the literary set of Tiddim.

2.3.423. MORPHOLOGICAL LINKS BETWEEN KACHIN AND KUKI-CHIN

If now the Kachin, Tiddim and Lushei systems are viewed concurrently, the striking parallels in the paradigms would seem to suggest some previous stage of common development.

Even though Lushei bears no colloquial/literary distinction, it seems fair to surmise that it did possess it earlier because its affixes clearly distribute themselves with members of both sets of Kachin and Tiddim. It does not, however, have an equivalent of the colloquial present, occurring in the other two languages.

The major characteristic distinguishing the two Kuki-Chin languages from Kachin is their innovation of the subject agreement prefix ka-, which along with the respective 2nd and 3rd person forms constitute a diagnostic feature of the Kuki-Chin languages.

2.3.424. MORPHOLOGICAL LINKS BETWEEN KACHIN AND OTHER PRONOMINALIZED LANGUAGES

An additional idiosyncrasy of Kachin provides a possible bridge to the languages with syncretic transitive affixes. Should this structure bear the weight of a phonological comparison, then the continuity of all the languages could be traced in regard to their handling of transitive affixes—all of them

Figure 7: 1st PERSON VERB AFFIXES OF KACHIN, TIDDIM,
AND LUSHEI

	Pronominal Agreement Affixes			
	Colloquial		Literary	
	Present "Subordinate" ^c		Subject	Object
Kachin ^a	-nq	-li	-we	-mi
Tiddim	-\iq	-\lɛq	kɛ-	
Lushei ^b		-ila	ka-	min-

^a The Kachin 'literary' affixes are what Hanson refers to as 'descriptive present' affixes.

^b Lushei has only a single set of affixes. It apparently makes no distinction between 'literary' and 'colloquial' styles.

^c In Lushei and Tiddim this affix lends a conditional meaning to the clause; in Kachin the meaning is "optative" 'may I...'

presumably initiating in a syncretic system.

The relevant data are found in certain of the descriptive subject agreement affixes. For instance, the 1st plural subject affix has two forms: -ga used with singular objects and -gaw used with plural objects. The 3rd plural object marker likewise has two forms: -nme used with 1st singular subject and -mu used with 2nd or 3rd singular subjects. In other words Kachin shows remnants of syncretic affixes within this particular subsystem.⁶¹

The morphological complexity of the paradigm itself may lend further support. In the preceding discussion of the Bahing transitive paradigm (cf. section 2.2.23), the phenomenon of homophonous affixes expressing different role relationships (for example, 2nd → 1st = 3rd → 1st) may be recalled. The same homophony is found in Kachin in what is ostensibly a discrete affix marking system. (Cf., for example, 3rd singular descriptive subject -wu = 2nd singular descriptive subject -wu and 1st singular descriptive subject -we = 3rd singular descriptive object -we.)

⁶¹ It is very difficult to establish unequivocal cognates in the transitive paradigm without having first performed the basic spadework on identifying the pronominal roots in simpler systems. However, a case can possibly be constructed for considering Vayu 3rd plural → 1st singular -no-me and 3rd plural → 3rd singular -me as resembling the two respective Kachin 3rd plural forms.

This role homophony is certainly less understandable as deriving from a basically discrete system of marking. For instance, no purely intransitive paradigm in any of these languages exhibits any similar homophony. Why there should be any syncretic affix homophony of this sort at all is still an unexplored area (but cf. section 4.1.8), however, given its occurrence in a language, such as Kachin, with discrete agreement markings, it would seem that referent ambiguity would be a persistent problem. In view of this, the system might prove unstable, and eventually be eliminated or leveled, as perhaps occurred in Tiddim and Lushei.

2.3.43. OCCURRENCE OF REFLEXIVE AFFIXES

The languages which have a suffixed reflexive marker (cf. Figure 5) provide an additional isolated bit of evidence toward the verification of the nativeness hypothesis of pronominalization. These five all show forms which are undoubtedly cognate as seen in their verb internal syntax (verb-reflexive-subject affix) as well as their phonological form:

Bahing:	-si
Vayu:	-ci
Kanauri:	-ši
Kham:	-si
Rawang:	-ši

An underlying form #ši will be assumed.

Since our information regarding other languages is incomplete it might be expected that this reflexive affix is even more widespread than here indicated.

The two languages with prefixed reflexive markers also show correspondences in their internal syntax and phonological shape:

Jyarung: pronoun-i + ne + (prefix)-verb

Lushei: subject prefix-in-verb

Both reflexive markers seem to be periphrastically derived. For instance, Lushei -in is also identifiable as an ergative case marker while the Jyung -i suffix may be equivalent to a genitive marker. The net effect in both, however, is a structure with a pronominal marker followed by a sequence in, which in turn is followed by the verb.

Again, the behavior of the other prefixing languages is not known.

2.3.44. PREFIXATION VERSUS SUFFIXATION

The final point to be made from the configurations of Figure 5 concerns the methodological value of maintaining the separateness of prefixing and suffixing languages for comparative purposes. I have reserved this discussion for last since I would appeal to the preceding arguments to further argue that the dichotomy should be ignored for investigating deep

levels of relationship. In the first place, no prefixing language is exclusively prefixing. Of the languages listed, Lushei and Tiddim have already been discussed with a view to demonstrating their innovative behavior in regard to prefixing. Of the others, Limbu, Rawang, and Jyarung show certain commonalities with Chepang, a strictly suffixing language, which certainly suggest that they have rearranged their own internal verb syntax (cf. Figure 8).

Although a detailed analysis of the roots is beyond the task at hand, it can be seen that the morphological patterns of affixations share much in common. Note the palatal element in the dual-- especially in 2nd dual, which is always separated from some overt marker of 2nd person status by some additional form--usually the verb, but in Chepang, the tense marker. The -i - -ni marker of 2nd plural shows a similar pattern.

It is difficult to decide on which of these languages, if any, preserves the original affixation pattern. In later discussion (cf. sections 4.1.6 and 4.2.22) the #te element of the 2nd person forms (Rawang e-, Jyarung te- and Chepang -te) is shown to originally have had a meaning distinct from any 2nd person signification. The affixation pattern of the 2nd person forms, therefore, must be understood in terms of the original, non-pronominal meaning of the

Figure 8: INTRANSITIVE VERB AFFIXES OF CHEPANG, RAWANG, JYARUNG, AND LIMBU

	Chepang	Rawang	Jyarung	Limbu
1st sg.	-ŋ	-ŋ	-ŋ	-a
1st dl.	-tayh-ca [incl.]	-ŋi	-t	a-verb-ci [incl.]
1st pl.	-tayh-i [incl.]	-i	-i	a-verb [incl.]
2nd sg.	-te	e-	to-verb-n	k'-
2nd dl.	-te-ja	e-verb-ŋi	to-verb-ntŋ	k'-verb-ci
2nd pl.	-te-y	e-verb-niq	ta-verb-ŋ	k'-verb-i

#te morpheme and whether it was originally prefixed or suffixed, a question about which I have no sure information.

The one remaining prefixing language of Figure 5 then is Kham which has in all probability innovated in this particular feature (cf. section 4.3).

The affixation patterns of a language are certainly not to be dismissed. There are undoubtedly historical reasons for why a language will undergo a shift from suffixing to prefixing behavior. To a certain extent we can say that each type of behavior is associated with or implied by other syntactic facts of the language (Greenberg 1963). It is, however, beyond the goals of this paper to examine these reasons, even assuming them to be retrievable from our generally impoverished data. The critical point at issue here is that these syntactic changes do not constitute a primary division of the proto-language. The various languages which have undergone such syntactic changes, in whatever direction this may have been, have done so independently or as members of recognized subgroups (such as Kuki-Chin). The pronominal categories and roots can, therefore, be studied in abstraction from the particular syntactic network in which they are embedded.

2.3.5. PRONOMINAL CATEGORIES

In this section, the analysis continues by inspecting some variables which hopefully will bridge the gap between the pronominalized and non-pronominalized languages. We must be sure that the geographical spread of the pronominalized verb is still not the result of any complex process of diffusion from one TB language to another from some original source outside of the family. The groundwork necessary to demonstrating this continuity of development will be presented here, by completing the broad characterization of the pronominal systems of the pronominalized languages.

In Figure 9 a list of those languages which maintain an inclusive/exclusive distinction and/or a number distinction is presented. Rather than simply providing a checklist, these distinctions are made more apparent by providing the inclusive plural forms and the dual forms for both the free pronouns and intransitive verb agreement affixes. It can be taken for granted that all the languages distinguish three persons and have a plural form, although the details will not be presented here (cf. Chapter 3).

2.3.51. CORRELATIONS BETWEEN CATEGORIES

Certain overall conclusions may be drawn from

Figure 9: EXEMPLIFICATION OF THE INCLUSIVE AND DUAL CATEGORIES IN PRONOMINALIZED LANGUAGES

	Pronominal Categories			
	Inclusive		Dual	
	Pronoun	Affix	Pronoun	Affix
Bunan	raŋ+ji	---	+nyispi	---
Manchati	ŋena+re	---	+ku	-ŋi
Kanauri	kiŋŋa'	-e'	+ŋi	-ic
Kham	---	---	+n - +ni	+n - +ni
Chepeng	ŋi	-tayh-i	+ci	-ca
Vayu	go khata	-ke	+nakpu	-chik
Bahing	go-i	-ya	+si	-si - -sa
Limbu	a:ni:	a:-	+ci	-ci
Jyarung	yo	-i	+ndŋ	-tŋ
Rawang	---	---	+ni	-ŋi
Nocte	---	---	---	---
Kachin	---	---	+n	---
Lushei	---	---	---	---
Tiddim	/ei	f- (coll)	---	---

Figure 9. One of the most apparent of these is the high correlation between the presence of each distinction in both free pronoun and agreement affix forms, this in spite of the fact that the two forms are not necessarily closely related phonologically; e.g. Vayu duals -nakpu and -chik. The exceptions to this statement are Bunan and Manchatì which currently appear to be leveling out their entire affix system (for instance, all Bunan agreement markers in 1st person are -g, no distinction is made for number of inclusive/exclusive; Manchatì maintains no person distinction between 1st and 2nd dual and plural) and Kachin which is also undergoing similar processes (cf. note 57).

Another interesting association is the general presence of a dual distinction with the inclusive/exclusive. Two different interpretations might be given to this fact. In the first, the parallel might involve a semantic reinforcement between the two concepts, in that an inclusive notion in most cases will apply to the speaker and one hearer, i.e. two persons. The inclusive/exclusive distinction might then 'pre-dispose' a language to also maintain a dual. There is some indication in the data presented that the inclusive form is probably of longer standing in TB than the dual form simply in the greater range of phonological shapes which it exhibits; in spite of the fact that it appears in fewer languages. The only language

which goes contrary to the expectation that a dual will be present if there is an inclusive/exclusive opposition is Tiddim, but this seems to be linked to its loss of the dual in conformity with the other languages of the area. The Tiddim inclusive forms seem to be related to those in the other languages (cf. Tiddim ɿ-, Jyarung -i, Chepang -tayh-i, Kanauri -e') (cf. also sections 3.2.23 ff., 4.1.5).

An alternate explanation for the dual-inclusive/exclusive parallel might contend that the majority of the languages which lack one or both of these distinctions are located in the southern end of the pronominalized verb range, i.e. in the general area of northern Burma (cf. Figure 4). As such, the drive to level out the distinctions might be part of a larger areal configuration, which includes Lolo-Burmese and Barish with their fewer oppositions and simpler verb morphology. The major exception to this interpretation is Kham in west-central Nepal. Its loss of the inclusive/exclusive would entail an independent innovation.

2.3.52. PROTO-CATEGORIES

In judging the relative antiquity of both the dual and the inclusive/exclusive categories, notice can be taken of the degree of phonological resemblance between the forms. The dual marker can fairly easily

be traced back to some sibilant plus high front vowel (#ʃi). Such an element is present in all of the affix forms (allowing for phonological alternations) and some of the free pronoun forms. The pronouns which use some dual indicator other than #ʃi generally have a form in n or ni (perhaps related to the numeral 'two' *g-nis). Kham has extended this form to the affix also.

An inclusive marker can, with slightly more effort, be recognized, again, in all the affix forms, but in only some of the pronouns. This root very likely will reconstruct to a simple high front vowel (#i).⁶² The free pronouns which do not use this root, however, show no obvious similarity in their respective forms (cf. Bunan eran, Manchati ɲena, Kanauri kiʃʃɔŋa', Vayu khata).

A possible reason for the apparent instability of the free pronouns might lie in their syntactic optionality. In the grammars which mention such details, it appears that the verb or the context itself is sufficient to carry the brunt of referent identification. This is also the case with non-pronominalized languages.

⁶² The atomistic shape of this root indicates a distinction on an equal par with the other person distinctions and not subordination to a 1st person category, as the inclusive/exclusive is usually conceived. In other words the original situation may have had a person category consisting of 1st, 2nd, 3rd, inclusive and exclusive, with number distinctions not being relevant in 1st person (cf. however, the continuation of this argument in sections 3.2.23 ff.).

Any agreement marker, however, appears to be obligatory, which perhaps accounts for the integrity of the roots in pronominalized languages through what must be very long spans of independent development. In Chapter 3 it is made clear that this instability of the pronouns, in conjunction with the collapse of the inclusive/exclusive and dual categories has led to certain roots changing categories, for example from inclusive to 2nd person significance (as one particular instance, cf. Lushei i- '2nd singular'; Bahing -i (- -ye) '2nd singular').

CHAPTER 3. INDEPENDENT PRONOUNS: CATEGORIES AND ROOTS

3.0. INTRODUCTION

The present chapter is intended to act as a bridge between the preceding and following chapters. Chapter 2 established the need for viewing PTB as morphologically complex, while Chapter 4 sharpens this appraisal by characterizing the morphological framework in its component details. Both these chapters are thus structural in concept. They are concerned more with the positions in the paradigm than with the lexical occupants of those positions. However, the fact that, over time, the frameworks of individual languages have undergone substantial change makes it difficult to pin down some elemental structure without appreciating what changes have occurred in the lexical component of the paradigm, especially as these involve categorial changes. In other words, the entire paradigm must be considered in order to travel past the points which represent the simple recognition of the problem and the first preliminary attempts to describe it. To render plausible the conception of PTB as morphologically complex, not only the structural elements of the morphology but the lexical elements as well must be carried back as far as possible. The conception would be weakened significantly if the pronominal roots were

demonstrated to result from sources outside of TB or, on the other hand, strengthened significantly if they exhibited an unbroken lineage from PTB.

The claim that pronominalization reverts to the level of PTB entails that the roots of any pronominalized language must be in conformity with the roots set up with the entire family in mind. For this reason, the independent pronouns, rather than just the affixal roots of the pronominalized languages, are considered. In this way all of TB is encompassed and the standard of proof is thus set at a higher peg than if only the pronominalized languages were included in the comparison.

The task at hand then is to sort out the primary roots—those retained with and without internal modification from PTB—from the secondarily derived roots—those due to internally or externally motivated substitution of the primary forms. Not doing so can only produce a confused picture of the ancestor language and a distorted view of the actual course of development in the daughter languages.

3.0.1. PARADIGMATIC CHANGE

In earlier pages (cf. section 2.3.5), in which the categories of person and number were discussed with reference to the pronominalized languages, the

independent pronouns of these languages were exemplified to be much more diverse than the affixal roots. It was hypothesized then that an obligatory morphological framework would stabilize the elements that comprise it, but at the same time destabilize optional systems carrying redundant semantic information--in this case the set of independent pronouns. Destabilization can manifest itself in several different types of change. In one case the elements of an original paradigm may be changed by outright substitution of a form from a source outside of the paradigm, but located elsewhere in the structure of the language--an extremely common example being replacement of a third person pronoun by a demonstrative element. As another possibility, a language may also replace paradigmatic elements by borrowing from a second language, for example, Lepcha may possibly have borrowed its 1st singular nominative pronoun go: from Himalayish, substituting it for an original form in *na or *no. The latter argument depends crucially for any plausibility it may have on an accurate appraisal of the subgrouping of the languages involved or on the attestation of earlier forms from historical records.

Individual changes of the types above are difficult enough to prove, but an even more problematic situation involves the invocation of analogy or paradigmatic leveling--the process whereby one form is

replaced by another which occupies a different position in the same paradigm. In the absence of written records documenting the changes, no empirical validation is possible; the postulated changes are motivated by considerations internal to the structure of the language and, typically, these motivations can only be conjectured.

However, to the extent that a convincing reconstruction of the system of the proto-language can be achieved, then the analogical explanations, necessary to account for aberrant structures, are made more probable. The credibility of the argument can be increased in still another way by providing data exemplifying the pressures a paradigm was subjected to by attestable changes taking place elsewhere in the total structure of the language.

In this chapter, there are many explanations of change in the pronominal systems of one or another language. Several of these explanations are admittedly analogical and, among these, are some which further study may disconfirm. Nevertheless, they are offered in the belief that if we are to advance a realistic conception of the structure of PTB, some of the diversity seen in contemporary TB pronominal systems must be pared away by these or similarly adduced explanations.

3.0.2. PRONOMINAL DIVERSITY IN TB SUBGROUPS

Of critical importance in achieving a correct appreciation of the developmental history of a set of languages is the knowledge of how those languages are subgrouped with respect to one another. A correct subgrouping provides an invaluable clue to how the postulated changes are sequenced and how far back they may be carried. Lacking this knowledge, we run the risk of attributing a proposed change to a greater time depth than is warranted, since an incorrect subgrouping necessarily imbues its membership with more interlanguage diversity than is justified. At the same time it may even minimize the actual diversity between groups. In Tibeto-Burman we are fortunate in having a fairly sure grasp on the crucial middle branches of the family tree. The higher order subgroups, however, are only poorly known, although there is broad agreement that the northwestern and southwestern languages represent two poles of the family (Shafer's Bodic and Burmic Divisions, respectively). As might be expected the middle ground--in the area of Assam--presents problems as to the wider affiliations of its languages.

For the purposes of this chapter, the TB languages will be separately treated in two main groups, both of which are characterized by numerous and varied forms of their personal pronouns. These two groups

comprise the languages of the Himalayas (cf. section 3.2) and the languages of the Assam Hills (cf. section 3.3), respectively. In the case of the Himalayan languages the membership is essentially identical to that proposed in Shafer's Bodic Division. The Assam Hills languages, however, do not fall neatly together in any particular subgroup. The justification for gathering these languages—including the Naga languages, Lepcha, Mikir, North Assam languages, and Ch'iang—is based on striking similarities in their pronominal systems.⁶³ Whether this grouping represents a correct

⁶³ Four languages—Lepcha, Ao Naga, Mikir, and Chang—form the core of a lexical comparison reported in Bauman (1975). (Rong) is a language of Sikkim, in early systems of classification, considered related to the Himalayish languages, but put by Shafer in Northern Naga, from which it is separated by about 400 miles; Ao Naga (Chungli dialect) is a representative of the Northern Naga subgroup; Mikir, an isolated language within the Naga group of languages but supposed by many to be transitional to the Kuki-Chin group, although the earliest accounts considered it transitional to Bodo-Garo; and Chang, a representative of the Konyak or Northeastern Naga group, which is considered by Shafer and Benedict to be most closely related to the Bodo-Garo group, although the evidence, which is statistically based, is not overwhelming, only suggestive. Chang also reveals significant percentages of shared vocabulary with the Naga languages proper to the southwest and Kachin to the northeast. The comparison of these four languages unambiguously shows a close link between them, one closer than can be said to exist between any one of the four and either the Bodo-Garo or Kuki-Chin groups. The relations among the Naga languages proper were not completely worked out, although indications show a close internal connection of these four languages, possibly encompassing Shafer's Luhupa branch (Tangkhum, etc.) and Meithei. In a farther orbit of relationship lie the Eastern (Angami, Sema, etc.) and Western (Empeo, etc.) branches of Naga.

subdivision of TB, however, is still problematic. Lexical evidence alone seems to pull the Kuki-Chin and Naga groups into closest association, but Kuki-Chin is not characterized by any of the high degree of pronominal variation which characterizes Naga. Recall too the close morphological parallels between Kachin and Kuki-Chin described earlier (cf. sections 2.3.421 ff.). The partially conflicting evidence brings to mind the controversial question of whether lexical or morphological information is better able to describe subgroupings; a question which, unfortunately, it is beyond the immediate purposes of this paper to explore.

The member languages of other groups (cf. section 3.5) are for the most part predictable in their pronominal forms, at least for 1st and 2nd person, which may even serve as diagnostic criteria for inclusion in the group. For instance, Barish (Bodo-Garo) languages invariably have a 1st singular pronoun in an⁶⁴ and Kuki-Chin languages a typical 1st singular pronoun in ka or some variant of it.⁶⁵

Throughout this chapter data is evaluated relative to whether it supports or refutes the hypothesis

⁶⁴ This pronoun is not a sufficient condition for Bodo-Garo membership, however, as it also appears in some of the Himalayish languages.

⁶⁵ The LSI (3(3):295), based on Singh's data, records the two Old Kuki languages Anal and Hiroi-Langang with 1st singular pronouns in ni and nai respectively. Both, however, show the expected verbal prefix in ka-.

of a common origin of the pronominal system. On full consideration, the position is advanced that there does exist sufficient evidence to support the hypothesis; therefore, a major function of this chapter is to account for the great diversity in pronominal forms attested synchronically (cf. section 3.1). The Himalayish and Assam Hills data separately suggest two different hypotheses: (1) that the proto-language was characterized by disyllabic forms of the pronouns which split into two varying monosyllabic forms in most languages and (2) that the variation in pronominal forms is attributable to some sort of suppletive variation in the proto-language. The two hypotheses are reconciled (cf. section 3.4) by viewing the suppletive variation as resulting from a split of an original disyllabic form, thus giving the first hypothesis historical precedence. In the remainder of section 3.4 the presumed syntactic origin of the disyllabic pronouns is considered.

3.1. OVERVIEW OF TB INDEPENDENT PRONOUNS

3.1.1. RECONSTRUCTIBLE FORMS: *na AND *nan

TB languages when casually viewed exhibit a striking diversity in the number of forms used to convey pronominal information. On closer examination, however, the more typical forms--those in highest

percentage or most widespread—stand out sharply. On the basis of such an examination Benedict (1972:93) was able to reconstruct a 1st person pronoun *na evidenced in Tibetan, Eastern Himalayish, Nung, Lolo-Burmese, and Bodo-Garo⁶⁶ and, he notes, perhaps also in Dhimal and Kuki-Chin ka. He also reconstructs a 2nd person pronoun *nan on the evidence of Himalayish, Kachin, Lolo-Burmese, Bodo-Garo, and Kuki-Chin (as well as Dhimal and Nung with reduced forms in na).

While these forms unquestionably pertain to the proto-language, they, nevertheless, do not in themselves capture all of the generalizations capable of being extracted from the data. Of particular interest is the appearance in a large number of languages of a 1st person pronoun in some velar stop plus vowel (cf. Bahing and Vayu go, Yakha ka, Ch'iang ka, Mishmi ki), with which the previously mentioned Dhimal and Kuki-Chin ka might profitably be compared.⁶⁷ In conjunction with such forms the 2nd person pronouns of many of these same languages also exhibit an initial velar stop (with palatal or laryngeal variants), rather than

⁶⁶ Benedict (1972:65) also sets up a TB form *nay 'I, self' on the basis of Kachin nai 'I' and Lushai nei 'self', as well as Tibetan ne(d) 'I, we (elegant)'; but he also unhesitatingly relates this root to *na (1972:93).

⁶⁷ The Almora languages and Newari with ji are to be included here also, the palatal stop in all probability conditioned by the front vowel. A front vowel appears explicitly with a velar stop in Bunan gyi and Kanauri gɔ.

the expected initial dental nasal (cf. Kanauri ka',
 Bunan han, Vayu gon, Bahing ga, Yakha -khi, Newari
cha - chi, Almora (Byangsi) gan). At this point, with
 the information given so far, it is not possible to re-
 construct forms for these roots; however, for ease in
 future reference they will be indicated as #ga (1st
 person) and #ka (2nd person). Those languages which
 possess both the #ga and #ka roots in the independent
 pronouns will be referred to as stop initial languages
 and those with the nasal initials for 1st and 2nd per-
 son pronouns as nasal initial languages.⁶⁸

3.1.2. ALTERNATION IN PRONOMINAL FORMS

Another important phenomenon, ultimately related,
 which is glossed over in Benedict (1972) as being of
 "secondary origin" (93), involves the elaboration in
 many languages of a system of pronominal inflection.
 Benedict provides two examples, which indeed to all
 appearances are secondary; in the case of Burmese a
 change to the creaky tone marks the possessive form of
 a pronoun, while in Dhimal the same case is marked by
 the addition of a velar nasal, cf. ka 'I', kan 'my'.

⁶⁸ The Kuki-Chin group and Dhimal show a k-n pattern,
 the stop initial appearing only in 1st person. On
 the other hand Tibetan shows a typical n-k pattern
 with the stop initial in 2nd person only.

3.1.21. CASE RELATED ALTERNATION

My examination of grammatical materials, however, points up a number of other cases where it is not so obvious that an inflection was secondarily produced. Figure 10 provides some data from a mixed set of languages which exhibit such an alternation. This is by no means an exhaustive list (cf. Figure 22 for additional examples), but does faithfully represent the distribution of the alternation, showing it to be confined to the Himalayas and Assam Hills.⁶⁹ These two areas have been previously noted for their instability in the set of independent pronouns (cf. section 3.0.2). It is undoubtedly true that some of the languages listed in Figure 10 have innovated particular forms, however it is noteworthy that some which are stop initial languages have a possessive form which is at least reminiscent of the corresponding form from the nasal initial set (cf. Kanauri 1st nominative gũ, possessive an; Chaudangsi 2nd nominative gan, possessive na-; etc.). The converse also holds true with respect to some of the nasal initial languages (cf. Chang 1st nominative ŋo, possessive ka; Ch'iang 2nd nominative no, possessive kux; etc.). Notice also that some of the alternating forms are not identifiable as reflexes

⁶⁹ Chaudangsi is an Almora language, Pahari a dialect of Newari, and Sopvoma a Naga language. The other languages have been introduced previously.

Figure 10: EXAMPLES OF POSSESSIVE ALTERNATION

	1st SG.		2nd SG.	
	<u>Nom.</u>	<u>Poss.</u>	<u>Nom.</u>	<u>Poss.</u>
Kanauri	gɕ	aŋ	ka	ka
Chaudangsi	ji	ji	gan	na-
Vayu	go	aŋ	go:n	uŋ
Bahing	go	wa	ga:	i:
Fabri	ji	nu	ci	cã
Lepcha	go	kasu	ho:	ho:
Chang	ɔo	ka	no	ke'
Ch'iang	qa	qa	no	kuv
Sopvoma	yi	ai, yi	ni	ni

of either the stop or nasal initial pronouns (cf. Vayu 2nd possessive un, Bahing 1st possessive wa, 2nd possessive i:, Sopvoma 1st nominative and possessive yi); and that in Sopvoma an alternation within the 1st person possessive, yi and ai, indicates a potential for the operation of some leveling pressures.

3.1.22. NUMBER RELATED ALTERNATION

In addition to this alternation for case, there also exists, though in fewer languages, an alternation of pronominal forms for the number of the pronoun. Figure 11 details the situation in four languages which show an alternation in both 1st and 2nd persons. There are, in addition, many other languages with a spurious number alternation in 1st person, due to the separate forms taken by the inclusive and exclusive pronominal roots (cf. sections 2.3.52 and 3.2.23).

Of further interest is the fact that the non-singular alternant in the three languages of Figure 11 which exclude Kham is homophonous with the possessive form of the pronoun⁷⁰ (cf. Figure 12). The exceptions to this generalization include Ch'iang 1st nominative ga and Lepcha 2nd possessive ho: both of which are undoubtedly analogical forms based on the possessive/

⁷⁰ The Kham possessives do not differ from the nominative roots. Their position preceding a noun marks them as genitive.

Figure 11: EXAMPLES OF NUMBER ALTERNATION

	1st		2nd	
	SG.	DL./PL.	SG.	DL./PL.
Lepcha	go	ka-	ho:	a:-
Chang	no	sa-[incl.] ka-[excl.]	no	ka:-
Ch'iang ^a	qa, (ŋa)	qa-	no	kur-
Kham	ŋa:	gin(dl.) ge:(pl.)	nan	jin(dl.) je (pl.)

Figure 12: HOMOPHONY OF POSSESSIVE AND NON-SINGULAR FORMS OF THE PRONOUNS

	1st	1st	1st	2nd	2nd	2nd
	SG. NOM.	SG. POSS.	DL./PL.	SG. NOM.	SG. POSS.	DL./PL.
Lepcha	go	kasu	ka-	ho:	ho:	a:
Chang	no	ka	ka-[excl.]	no	ka:	ka:
Ch'iang ^a	qa, (ŋa)	qa	qa	no	kur	kur

^a The Ch'iang 1st singular nominative form ŋa given in parentheses appears dialectally (Wen 1941). The na form is standard for the Chiu Tzu Ying dialect (Wen 1950) recorded here.

(lacking in numbering only)

non-singular in Ch'iang and the nominative in Lepcha. Levelings of this sort are to be expected in languages which show paradigmatic alternation to the extent which characterizes the Assam Hills groups of which the languages of Figure 12 are all members (cf. section 3.3.2).

3.1.23. AFFIX RELATED ALTERNATION

It may be recalled at this point that the pronominalized languages discussed in Chapter 1 were typified as having affixal forms for 1st person in -na and 2nd person in -na. This includes all those languages, such as Bahing and Vayu which are stop initial in respect to their independent pronouns. We must therefore explicitly recognize still a third type of pronominal alternation, one which varies the independent and affixal forms of the pronouns (cf. Figure 13). Notice, however, that this alternation is more predictable than the possessive alternation (cf. Figure 10). Affixal forms are for the most part the nasal initial variants⁷¹ while the independent pronouns are

⁷¹ The Northwest Himalayish languages have an affixal form -g which may or may not be a reflex of 1st person #ga. In Bunan this form is appropriate for all 1st person referents irrespective of number, as well as some non-1st person referents, e.g. 2nd plural -g-ni, 3rd plural -g-re ~ -g. The Manchari -g may likewise be used for either 1st or 3rd person (though only in the singular). Only in Kanauri

Figure 13: EXAMPLES OF APPIXAL ALTERNATION

	1st SG.		2nd SG.	
	INDEP. PRONOUN	INTR. AFFIX	INDEP. PRONOUN	INTR. AFFIX
Bunan ^a	gyi	-g	han	-na
Manchati ^a	gye	-g -ga	ka	-no
Kanauri ^a	gɔ	-g'	ka'	-on
Bahing	go:	-ga	ga	-ye -i ^b -na 'tran' ^b
Vayu	go:	-ɔo	gon	-g -nu 'tran' ^b

^a The Northwest Himalayish languages exhibit a clear alternation only in 2nd person.

^b The forms entered as 'tran.' for Bahing and Vayu are appropriate for the transitive relation 1st singular-2nd singular.

invariably stop initial. We never encounter stop initial forms in the affixes, associated with nasal initial independent pronouns (cf. Figures 26 and 27).

The total impression left by a consideration of all these various types of alternation—for case, for number, and for affix—in languages very widely separated genetically and geographically strongly suggests that we look for an explanation based on the internal history of TB to at least a time approximating the proto-language. Such an explanation could take the form of either a suppletive relation between the roots or a phonological conditioning of the original *na and *nan roots to the stop initial forms. It may be thought at first, in recognition of the close phonetic similarity between the 1st person *na and #ga roots, that the alternation is phonologically conditioned. I feel, however, that this explanation suffers in light of the fact that a velar stop alternant of 2nd person *nan appears in just those languages exhibiting #ga forms in 1st person. This strongly suggests that the two stop forms developed simultaneously and very likely from a common source (cf. section 3.4). And, since a

is -g (as -g) exclusively used as a 1st singular marker. Bahing and Vayu have introduced new forms for 2nd person intransitive verb affixes but preserve the older nasal initial root in the transitive verb affix system.

phonological alternation in 2nd person between n- and k- is unlikely, it seems better to posit a suppletive relation instead. In the particular instance of the Kuki-Chin 1st person form in ka, the above argument would bolster the opinion that it too is a reflex of the #ga root rather than a phonological alternant of *na. In support of this position recall that Tiddim does exhibit a probable *na reflex, -\iŋ, in its set of colloquial affixes (cf. Figure 7).

3.2. PRONOMINAL ROOTS IN THE HIMALAYAN LANGUAGES

3.2.1. EASTERN HIMALAYISH

Of main concern here are the languages of the central region of the main Himalayan chain--those in Central and Eastern Nepal, constituting what Shafer has classified as the East Himalayish Section of the Bodic Division. Figure 14 details Shafer's hierarchical organization of this section both internally and externally as it is related to its closest neighbors. Although this organizational scheme, which was developed on the basis of lexical comparison, will probably prove inadequate when fuller materials are available,⁷² it

⁷² The only linguistic materials for the great majority of these languages were collected by Hodgson (1857-1858). Some of this material, including the independent pronouns, was later incorporated into the comparative dictionary compiled by Hunter (1868).

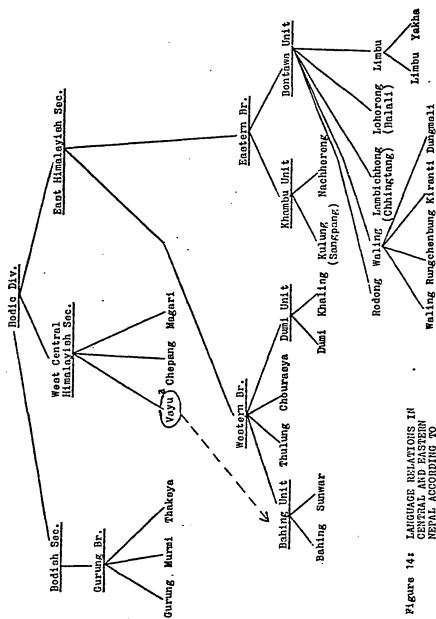


Figure 14: LANGUAGE RELATIONS IN
CENTRAL AND EASTERN
NEPAL ACCORDING TO
SHAFFER (1974)

^a Shaffer's conception of Vayu is here altered to place it instead in closer relation to Babing (see text for explanation). This is indicated by the dotted line.

will be used here as the framework for elaborating the directions of pronominal change in these languages. No large-scale changes were made in this arrangement, except to give Vayu coordinate status with Bahing in the Bahing Unit. This closer association is warranted on the basis of morphological criteria.⁷³

3.2.21. SINGULAR FORMS: #gana AND #kana

Figures 15 and 16 provide data exemplifying the considerable diversity in the independent pronouns of 15 of the Eastern Himalayish languages.⁷⁴ This includes, in the singular, monosyllabic forms with stop and nasal initials and disyllabic forms with various vocalic or stop initials. The non-singular forms are likewise elaborately represented with various specific number morphemes, periphrastic forms, and with inclusive and exclusive roots. In view of the recognized closeness of these languages to one another, it is important that the common Eastern Himalayish pronominal system be flexible enough to ultimately produce the synchronic diversity. The system which seems to

⁷³ Additional lexical materials collected by Boyd Michailovsky and Martine Mazaudon also substantiate this closer association (personal communication).

⁷⁴ Most of the data is taken directly from Hunter's (1868) dictionary in order to maintain a certain consistency in transcription. The Limbu data is taken from the LSI account, however, since the Limbu which Hunter records was incorrectly indicated to lack dual, inclusive and exclusive forms. For related reasons the Sunwar data is based on Bieri and Schulze (1971).

Figure 15: 1st PERSON PRONOUNS IN EASTERN HIMALAYISH

	<u>1st SG.</u>	<u>1st DL.</u>	<u>1st PL.</u>
Vayu	go	gonakpu	gokhata
Bahing	go	gosi[incl.] gosuku[excl.]	gosi[incl.] goku[excl.]
Sunwar	go	goni:k̄i	gopuki
Thulung	go		gosi[incl.] goku[excl.]
Chourasya	uŋ-gu		uŋgu-tica
Dumi	uŋ, aŋ-gu	ici[incl.] ocu[excl.]	iki[incl.] ogne[excl.]
Khaling	uŋ	inci[incl.] ancu[excl.]	ik[incl.] ok[excl.]
Kulung	koŋa		keka-a, koi, koni
Nachhereng	ka, ka-ŋa		kai[incl.] ka[excl.]
Rodong	ka, kaŋa, iŋ-ka		kai[incl.] ka[excl.]
Waling	iŋ-ka, aŋ-ka		ika, uka[incl.] koŋ-kai-ka[excl.]
Chhingtang	aka		kana-na, kaŋa-na
Lohorong	ka, ka-ŋa	kaci[incl.] kacika[excl.]	kani[incl.] kaniŋka[excl.]
Limbu	aŋa	anci[incl.] anciŋe[excl.]	ani[incl.] aniŋe[excl.]
Yakha	ka		kani[incl.] ka[excl.]

Figure 16: 2nd PERSON PRONOUNS IN EASTERN HIMALAYISH

	<u>2nd SG.</u>	<u>2nd DL.</u>	<u>2nd PL.</u>
Vayu	gon		gone khata
Bahing	ga	gasi	gani
Sunwar	ge	geni:kSi	ge puki
Thulung	gana		gani
Chourasya	nome, unu		unu, nome-tica
Dumi	in, anu	yeci	ani
Khaling	in	yeci, anci	yen
Kulung	ana		ana-i, ani
Nachhereng	ana		ana-i, anniac
Rodong	khana		khana-i, khain-i
Waling	hana, khana		hana-ni
Chhingtang	hana		hana-nina
Lohorong	ana, hana	hanaci	hanina
Limbu	khene	khenci	kheni
Yakha	injhi, 'nghi		inkhi-ni

best meet this condition is one which assumes that the original pronominal elements were disyllabic: a 1st person form in #gana and a 2nd person in #kana.

An additional assumption must also be made to allow the two elements of each disyllable a certain freedom of movement with respect to one another.⁷⁵ In the first place, the two elements seem to permute to produce forms such as Waling an-ka, Rodong in-ka, Chourasya un-gu < #gana.⁷⁶ The variability in the initial vowel of these forms suggests its innovative status. The Yakha 2nd singular forms 'nkhi - inkhi, if correctly transcribed, would show a comparable permutation.⁷⁷ A second indication of the independent status of each syllable is seen in the fact that one or the other syllable shows up as either the only form of the pronoun (cf. Bahing 1st singular go, 2nd singular ga; Khaling 1st singular un) or as an alternant of the full form (cf. Rodong 1st singular ka beside ka-na; Dumi 1st singular un beside un-ru). Other forms found

⁷⁵ Whether this implies a morphemic distinctness to each syllable is a question taken up later (cf. section 3.4).

⁷⁶ Notice that a form *naga is never found. This suggests the possibility that the 'permutation' of syllables in the proposed form #gana was actually realized as an assimilatory shift of the initial g- to follow the nasal, motivated by their common velar articulation. This might explain why a similar permutation of syllables in 2nd person #kana only rarely, if ever, occurs.

⁷⁷ Some doubt is cast on the reliability of this entry

in the table can be regarded as reduced variants of the full disyllabic forms, such as Limbu 1st singular ana < #anga and Chhingtang 2nd singular hana < #kana, Vayu 2nd singular gon < #kana.

Consideration of the individual vowel and consonant changes which have taken place, such as the -o of the 1st singular forms in Vayu, Bahing, Sunwar, and Thulung must include reference to the systematic phonological changes which characterize the individual languages (an investigation which lies beyond the goals of this study), as well as possible analogical changes in the morphology that maintain phonetic distinctiveness between the pronouns. We can see the operation of some analogical pressures in the Dumi forms where the 1st singular variants un and an-nu are paralleled by 2nd singular in and anu.

3.2.22. NON-SINGULAR 1st PERSON FORMS: THE INCLUSIVE/EXCLUSIVE DISTINCTION

The dual and plural forms present a considerably greater problem, due to idiosyncratic levelings occurring to an extent that muddies the perception of the original situation. The following remarks, then, should be construed as tentative in so far as they relate to proposed common forms.

by considering that the Yakha 3rd person pronoun is listed as khena/, with which compare the Limbu 2nd singular khene.

3.2.221. NASAL INITIAL ROOTS

The 1st person dual and plural forms are noteworthy, first of all, for not showing overt indication of an n, with the exception of the Chourasya 1st plural uŋ-nu. In the other languages which do show a 1st singular form in vowel + n the form of the dual and plural is vowel + n (Khaling 1st dual inclusive in(chi), Limbu an(chi)). Rather than assume the existence of a separate root, however, one might posit a change n > ŋ, explainable as an assimilation to a following front (palatal) consonant, thus maintaining the parallels to all other languages which obviously retain the same stem between singular and dual/plural. If this rule is valid, however, it would create a situation of potential ambiguity in the 2nd person; cf. the Khaling 2nd dual anchi < #anchi and the homophonous Limbu 1st dual inclusive anchi < #aŋchi, where the equivalent form in Khaling is inchi. It appears, therefore, that the vowel of the vowel + n sequence is secondarily determined in Khaling, recalling the problem of specifying it exactly for the singular forms. In corroboration, note that the Khaling 1st dual exclusive anchu does have the expected a, and not the i of the inclusive, there being no possible confusion with the 2nd dual anchi because of the u in the dual suffix.

3.2.222. INCLUSIVE #i AND EXCLUSIVE #u

Contrasting with those languages with a nasal segment in non-singular forms (presumably from *na) are other languages, such as Dumi, with 1st person non-singulars suppletive with regard to the singular form. Especially indicative is the use of a vocalic distinction to mark inclusive versus exclusive forms—in Dumi, i- for the inclusive and o- for the exclusive, which the vowel of the dual suffix (inclusive -ci, exclusive -cu) mimicks through a harmonic process.

Note that these same vowels also appear in other languages in appropriate semantic contexts (cf. Figure 17), either in independent pronouns, in verb affixes (Vayu), or in both (Bahing, Tiddim). In Kanauri, however, the forms are the reverse of expected, with i in the exclusive and u in the inclusive. This may represent a principled variation from the proposed pattern or, in view of the very obvious innovations that have occurred in Northwest Himalayan pronominal systems, it may itself be an innovation (cf. also section 4.4). The Jyarung data are only suggestive, not conclusive, due to the peculiar innovations which characterize that language. Note, however, that the dual suffix for 2nd and 3rd person—ndžA—does make use of a different vowel from the 1st dual (ndžo), even though it is not i. In the other languages with the dual category, the 2nd and 3rd persons always use

Figure 17: NON-SINGULAR 1st PERSON FORMS PRESERVING INCLUSIVE AND EXCLUSIVE ROOTS

	1st DL.		1st PL.	
	INCL.	EXCL.	INCL.	EXCL.
Dumi	ici	ocu	iki	ogne
Khaling	inci	ancu	ik	ok
Thulung			goi	goku
Bahing ^a	gosi -sa	gosuku -suku	goi -ya	goku -ka
Vayu ^b	-chik	-chok	-ke	-kok
Tiddim ^c			/ei i- -lhaq	lhou kē -u ^o -luq
Kanauri	ka:ʒəq	niʒi	kiʒəqə:	niqə:
Jyarung ^d	ndʒə		yo	qəʒit

^a The first form entered for Bahing is the independent pronoun, the second the intransitive verb affix.

^b Vayu forms are for the intransitive verb affixes. The language has no inclusive/exclusive distinction in the independent pronouns.

^c The Tiddim forms are cited as follows: first the independent pronoun, second the descriptive or literary intransitive verb affixes, third the colloquial intransitive verb affixes.

^d Jyarung does not maintain the inclusive/exclusive distinction in the dual.

the i form of the suffix.

As discussed in Chapter 2 (cf. section 2.3.5) the inclusive/exclusive distinction has been minimally preserved across TB, and consequently very little evidence other than that in Figure 17 is available. Nevertheless, the striking agreement in the forms of the distinction, exhibited on the one hand by languages in Eastern Nepal and on the other hand by Tiddim (inclusive /ei, exclusive \kou) in Northwestern Burma, argues for its consideration as an archaic trait.⁷⁸ Consequently, the two roots #i 'inclusive' and #u 'exclusive' are set up.

3.2.223. THE EXCLUSIVE ROOTS #ka, #ku, #u AND THE QUESTION OF PTB PRONOMINAL CATEGORIES

There is still a third possible contrast, however, in 1st person non-singular forms, which involves the use of a specific marker #ka to indicate the exclusive

⁷⁸ Himalayish and Kuki-Chin have never been closely subgrouped. Shafer, for example, separates them at the first step down from PTB--Himalayish considered in the Bodic Division and Kuki-Chin in the Burmic. This hypothesis, then, necessitates the conclusion advanced above, since the geographic separation of the groups would preclude any borrowing. Morphological parallels between Himalayish and Naga, to be described later, can also be propounded as evidence of long-standing categories and roots. It is possible, of course, to adopt a contrary stance and argue that Himalayish, Kuki-Chin, and Naga are more closely related than generally assumed; and there even seems to be supportive lexical evidence. However, in view of the undeniable connections between Himalayish and Tibetan and Kuki-Chin-Naga and other groups of

(cf. Lohorong exclusive dual kacika with the inclusive dual kaci or Limbu exclusive dual ancige with inclusive dual anci). In certain languages, however, we encounter a situation in which the #ka morpheme contrasts with the inclusive #i (cf. Bahing and Thulung inclusive plural goi, exclusive plural goku and Tiddim inclusive /ei, exclusive \kou). In still other languages a -k segment appears in both inclusive and exclusive forms (cf. Dumi inclusive iki, exclusive ogne and Khaling inclusive ik, exclusive ok). In the latter two types of languages, the #ka element always appears with a high back vowel which immediately calls to mind the #u root established above. The data thus entails a problem as to which of the two exclusive roots, #ka and #u, should be given historical priority or even whether a single root, presumably #ku, should be set up.

The resolution of this problem may ultimately depend on the observation that the shapes of the two proposed exclusive morphemes are nearly identical to roots which can be independently established from investigation of the fuller pronominal system. #ka, for example, is homophonous with the 1st person singular in some languages (cf. Yakha and Nachhereng 1st singular and exclusive plural ka). It is unlikely, however, that these two forms are cognate since the

languages in and around Assam, we are still pushed back to a time approximating the origins of the family.

1st singular ka is derived from a non-pronominal source (cf. section 3.4) and the inclusive/exclusive distinction antedates its development.

#u, on the other hand, does seem to have an important connection to a common demonstrative element in many TB languages (cf. distal demonstrative 'that' in Chepang u, Vayu wa(thi), Lepcha o(re), Bodo o(be), Chimal u(thoi), Garo o(mara), Tengsa Naga ocika, Sho o(ni)). What strengthens this connection is a paralleling relationship between the inclusive root #i and a common proximal demonstrative root (cf. 'this' in Vayu i, Bodo im(be), Dhimal i(thoi), Garo i(mara), Tengsa Naga igaka, Sho i(ni)). We might then set up a proportion:

inclusive : 'this' :: exclusive : 'that'.

In spite of this apparent high degree of relativity, caution must be urged in unequivocally attributing demonstrative influence on the elaboration of the inclusive/exclusive distinction, first, because the demonstratives have not as yet been successfully compared or reconstructed; second, because many languages, including most importantly some members of the Eastern Himalayish group, have i or u demonstratives of opposite meaning to those indicated above (cf. 'this' Chhingtang oko, Nachhereng unu, Thulung wo); and, third, because the demonstrative system may have been

itself influenced by non-TB languages.⁷⁹

Other similarities can be shown between #i and a plural root #i (cf. sections 3.2.25 and 4.1.4 ff.) and between #ku and a common 3rd person element in Himalayish (cf. Rodong khu, Waling moko, Kulung nako, Limbu khune; cf. also section 3.2.3). Taken together, these two correspondences could be interpreted as evidence for assuming an original situation of simple number marking with a suffix #i, which predated the rise of the inclusive/exclusive distinction. With the addition of a specific morphological marking for the exclusive—perhaps as 1st singular + #ku (3rd person) 'I + him' (cf. however note 83)—the old plural construction—1st singular + #i—was reinterpreted as indicating only 'I + you', i.e. #i took on the status of an inclusive marker. Since this proposal depends on an adequate comparison of TB 3rd person forms, it will not be possible here to decide on its relative merits vis-à-vis the proposal of demonstrative origin.

⁷⁹ Especially interesting is the possibility of Indo-Aryan influence. Bengali (Ray, et. al. 1966:46), for example, has a proximal demonstrative e and a distal demonstrative o, as members of its Fuller system. Assamese (Kakati 1941:297) has a proximal demonstrative i, but lacks a cognate to the Bengali distal demonstrative. Both of these languages are in direct contact with TB and could, therefore, have acted as a source of the TB demonstratives or could, conversely, been influenced by TB. The influence, in whichever direction, need not have been an outright borrowing of the forms, but only a model on which native roots were shaped. In this connection, Kakati mentions that Assamese i has developed from a fuller form eta-.

3.2.23. 2nd PERSON MORPHEMES

3.2.231. #i AS A 2nd PERSON MARKER

The data on 2nd person in Eastern Himalayish (cf. Figure 16) presents some interesting parallels to the 1st person developments discussed above. Again, the Dumi and Khaling data are especially important because they exhibit a 2nd person root which is related neither to *naŋ nor #kana. This root takes the shape ye- in the dual (and plural of Khaling) and i- in the singular. The antiquity of this root can be inferred from certain affixal forms in Himalayish and from isolated examples in other groups (cf. Figure 18). In some of these languages, the root may appear somewhat sporadically, for example, Bahing manifests it in the singular of the intransitive verb affixes but in the non-singular of the transitive verb affixes. In Kanauri it appears only in non-singulars while in Dumi it is absent only in the plural.

The considerable variation in the use of this root suggests that it should be regarded as innovative, in spite of its widespread appearance. Its antiquity, then, is probably due to a carryover of features from some semantically related root. In this connection, notice first the similarity between ye - i as a 2nd person root and #i as a proposed inclusive root (cf. section 3.2.22), not just in shape but also in the

Figure 18: 2nd PERSON FORMS EXHIBITING ye - i ROOT^a

	<u>2nd SG.</u>	<u>2nd DL.</u>	<u>2nd PL.</u>
Dumi	[anu], in	ye(ci)	[ani]
Khaling	in	ye(ci)	yen
Bahing ^c	-ye, -i [-na]	[-si] -ye	[-ni] -ye
Vayu ^{b,c}	-β [-nu]	[-chik] -β	[-ne] -β
Lushei ^d	i-		in-
Nocte ^e	-e		—
Kanauri ^d	[-on]	-ic	-in

^a Inappropriate forms are bracketed.

^b Vayu is included on the basis that its zero forms, though not obviously reflexes of this root, occur in positions exactly analogous to Bahing -ye.

^c The first form entered for both Bahing and Vayu gives the intransitive verb affix, the second the transitive verb affixes appropriate for a 2nd singular object with, reading across, 1st singular, dual, and plural subjects (see Appendix).

^d The Lushei and Kanauri forms are intransitive verb affixes.

^e The Nocte form is used to mark the 1st-2nd transitive relation. The plural form is not given in the source.

shared semantic feature of hearer inclusion. Notice secondly that most of the languages of Figure 18 are also included in Figure 17 as exhibiting the inclusive/exclusive distinction. Lushei and Nocte are exceptional, but both of their families have representatives bearing the distinction (cf. Tiddim in Figure 17 and Mikir in Figure 22). It seems highly likely, therefore, that the inclusive #i was the source of ye - i in its occurrence as a 2nd person pronoun.

One remaining question concerns whether the various languages of Figure 18 underwent this extension of the inclusive to 2nd person independently or as a shared event at an earlier period of union. Unfortunately, complete information required for an unambiguous answer is not available. For instance, neither Lushei nor Nocte retain the inclusive/exclusive distinction, so the supposed shift is conjectural for these languages, although evidence from other members of their respective subgroups makes it very probable. Arguing for independent origins, however, there is the fact of variability in the functional use of ye - i, as well as an indication that the change is still in progress, for example, in the Dumi alternation of 2nd singular anu and in.

3.2.232. PLURAL MARKER #i

The last point extractable from Figure 16 concerns the plural marker in 2nd person. Excluding those languages which have obviously introduced some periphrastic marker, such as Vayu khata, Sunwar puki, etc., the general plural marker manifests itself in two varying forms, -i and -ni. Since the 2nd singular root was earlier postulated as #kana and we have the specific information that the Rodong plural form is khana-i, it might be surmised that i represents the original of the two plural markers. The ni variant could easily be produced then from the not unexpected deletion of the intervening root-final a preceding the suffix; that is khana + i > *khani.⁸⁰ From this point it appears that in some languages the n was reanalyzed as pertaining to the suffix, for example, in the Bahing 2nd person pronouns ga, gasi, gani a synchronic analysis forces the conclusion that the plural suffix is -ni.

⁸⁰ The sequence -ni may be thought to result from the numeral two, PTE *g-nis. However, I am not inclined to trust this hypothesis for the reasons that -ni appears as a plural marker usually specific to 2nd person. If it derived from the numeral I would expect it to appear as a dual marker (especially since many of these languages maintain the distinction) and in all persons. Recall that in section 2.3.52, in discussion concerning the dual marker per se, some languages (notably Kham and Rawang) were described with a dual in -ni in all pronominal forms. A numeral origin in these circumstances is thus much more probable.

In certain cases, the -ni has generalized to the 1st plural also (cf. Dumi ogne, Kulung koni). Other languages, such as Yakha and Lohorong, with -ni in the inclusive plural may or may not have generalized it from the 2nd person. An alternative explanation, as outlined above, could involve phonological change of 1st person n > n̄ before -i. This final sequence became reinterpreted as a general plural marker, based on its identity with the 2nd person termination -ni which itself arose by reanalysis. In some of these same languages the 3rd plural also uses the -ni suffix.

Assuming the reliability of this analysis, the question arises of what might be the connection between the Himalayish 2nd plural in #-i and the inclusive also in #i. The identity of these forms suggests the possibility that one of the two notions was primary, the other occurring only later in association with the discrimination of a new category. Unfortunately, there is probably not enough information in the Eastern Himalayish independent pronouns to decide this issue with full certainty (cf. however section 4.1.4 ff.). However, for the purposes at hand—and appraisal of the pronominal categories and morphology of PTB—the decision need not be made, since the comparative evidence undeniably placed both roots far back in the history of the family. A presumed point at which a transfer or expansion of meaning occurred, probably in

conjunction with the accrual of additional categories, would thus predate the level of our interest. I would stress, however, that since the evidence does indeed suggest that TB underwent an elaboration of its pronominal semantics and morphological apparatus from some common base, nothing final may be assumed when PTB is compared in its wider relations, for example to Chinese.⁸¹

3.2.2. TIBETAN

The morphological analysis proposed in the preceding section to account for the variety of pronominal forms in Eastern Himalayish will also prove of use in describing the peculiarities of the Tibetan pronominal system (cf. Figure 19). It was earlier pointed out that Tibetan and its dialects pattern as nasal (1st person)-stop (2nd person) languages, a somewhat anomalous situation in view of the fact that the majority of TB languages tend to maintain either the stop initials

⁸¹ Questions of the Archaic Chinese pronominal system (Graham 1969-1970) are themselves still being debated, so that a comparison, with the reconstruction of Proto-Sino-Tibetan (PST) as goal, is still premature. I would tentatively suggest, however, that the pronominal system of PST would reconstruct as simpler than that which is being elaborated here for PTB, implying thereby some internal development and elaboration in the branch which ultimately leads to the TB family. The motivations guiding this explanation in structure are, of course, even more problematic than the opinion that they occurred at all and will not be speculated on at this time.

Figure 19: PERSONAL PRONOUNS IN VARIOUS TIBETAN DIALECTS

	1st		2nd	
	SG.	PL.	SG.	PL.
Written Tibetan	ŋa	ŋacag	khyod	khyedcag
Dé-jong Ké	ŋa	ŋaca:	chö	chöca:
Purik	ŋa:	ŋatEn[incl.] ŋaca[excl.]	khöröp yeraŋ[resp.]	khintāp yētāp[resp.]
Balti	ŋa	ŋadap[incl.] ŋaya[excl.]	khyap yaŋ[resp.]	khidap yidaŋ[resp.]
Lahul	ŋa	ŋaca	khied	khioča
Amdo	ŋa	ŋazo:	chyo	khA:zo:

or the nasal initials for both 1st and 2nd person pronouns. However, the Himalayish languages in several instances demonstrated that the 1st person underwent a presumed change from #gana > #anga, even though a parallel development is much rarer for 2nd person. In fact, the permutation of elements of the 2nd person form #kana seems to have occurred only in Yakha, 'nkhi - iŋkhi. This suggests that the 2nd person elements may have been more stabilized than the corresponding elements in 1st person, and hence less susceptible to rearrangement (cf. also section 3.3.1).

The Tibetan 1st person pronouns in most cases show no traces of the original presence of the #ga element. On this basis alone, then, its presumed presence in pre-Tibetan can only be speculative. Consideration of the 2nd person forms, however, increases the plausibility that Tibetan originally possessed both elements of the 1st person pronoun also. The most important data for positing the existence of an original disyllabic 2nd person root comes from the Purik plural root khin-,⁸² the final consonant of which is lost not only in all other Tibetan dialects, but also in the

⁸² It might be possible to segment this form after the vowel, the root then being khi-. This analysis, however, would give the plural suffix the shape ntaŋ which would violate a stricture against this type of initial cluster. No advantage accrues by considering the n as epenthetic before the dental stop, since it does not appear before the same suffix marking 1st plural.

singular of Purik itself. We can conjecture, along the lines sketched above, that the original 2nd person form was early lexicalized in its disyllabic shape in Tibetan and that the #ka initial morphemic element became reanalyzed as the root initial instead. The same process, however, did not occur in 1st person, where presumably the #ga element was dropped entirely.

Other instances of a close association between Tibetan and Himalayish with respect to their pronominal roots increase the likelihood that they shared, to a large degree, similar morphological features also. One of the most important of these commonalities is the shared presence of the ye root which is a common marker of 2nd person in Himalayish (cf. Figure 18) and of the respectful 2nd person in Tibetan (Purik yeran, Balti yan). The probable origin of this root from the inclusive pronoun #i and the shared innovation which the switch to 2nd person function entails for both Tibetan and Himalayish establishes their closeness.

Another highly significant indication of this proximity in structures is the presence of a common 3rd person pronoun in #ku. Compare, for example, the following 3rd singular nominative forms in the following languages: Written Tibetan kho, Purik kho:, Balti kho, Amdo k'o, Lahul kho, Dé-jong Ké kho, Bahing -go, Kulung -ko, Rodong khu, Limbu khune, etc. 3rd person correspondences are uncommon enough in TB that they

must be regarded as significant. But, moreover, since this particular root itself is not widespread, the shared presence takes on even greater weight.⁸³

3.2.3. OTHER HIMALAYISH LANGUAGES: #gyana AND #kyana

The pronominal data of the other language groups in the Himalayas presents no serious problems for the roots set up with Eastern Himalayish in mind (cf. Figures 20 and 21). The relevant languages have been ordered geographically from southeast to northwest, and grouped according to Shafer's classification, except for the so-called Central Himalayish languages which Shafer divides into West Central Himalayish and the Gurung branch of Bodish. The indeterminate classificatory status of Kham has already been discussed (cf. note 51).

An interesting progression occurs in 1st person forms as Figure 20 is read down. Notice that all of the Central Himalayish languages employ the *na root in the singular and that all others, except Kham, use the velar stop form. Of particular interest is the

⁸³ It may be recalled that the Himalayish exclusive pronoun was set up as #ku and its identity to the 3rd person #ku was noted (cf. section 3.2.22). It was suggested then that the exclusive meaning derived from the 3rd person signification. Notice, however, that a change in the opposite direction is also conceivable, since it would parallel the development of the inclusive pronoun into a 2nd person form, seen in both Tibetan and Himalayish. The 3rd person pronoun may thus be innovated on the exclusive root.

Figure 20: 1st PERSON PRONOUNS IN VARIOUS HIMALAYAN SUBGROUPS

	1st SG.	1st DL.	1st PL.
Cent. Himalayiah			
Gurung	ŋa:		ŋimo
Tamang	ŋa		in[incl.], yaŋ[excl.]
Magar	ŋa:		kan-ku-rik
Thakya	ŋa	ŋisi	ŋica
Chepang	ŋa:	ŋici, nici	ŋi
Bhramu	ŋat		ni
Kham	ŋa:	gin	ge:
Newarish			
Newari	ji		jhi:[incl.], jipin[excl.]
Pahri	nuŋ, ja:		ja:di
Almorish			
Chaudangsi	ji:		in
Rangkas	ji:		nuŋ
N.W. Himalayiah			
Kanauri	gɔ	ka:ʒɔ[incl.] niʒi[excl.]	kiʒɔa:[incl.] niɔa:[excl.]
Manchati	gye	ɔyɛŋu[incl.] ɔyɛku[excl.]	ɔyɛnare[incl.] ɔyɛre[excl.]
Bunan	ɛyi	eraŋ[incl.] hiɔ[excl.]	eraŋji[incl.] hiɔji[excl.]

Figure 21: 2nd PERSON PRONOUNS IN VARIOUS HIMALAYAN SUBGROUPS

	2nd SG.	2nd DL.	2nd PL.
Cent. Himalayish	-		
Gurung	ke:n		kenmo
Tamang	ai		aini
Magar	na:tɔ		na:tɔkʉ:rik
Thaksya	gɣya:tɔ	gɣya:si	gɣya:tɔa
Chepang	na:tɔ-te	niq-ji-te	niq-te
Bhramu	na:tɔ		naq
Kham	nan	jin	je:
Newarish			
Newari	cha		chipin
Pahari	chuq, chi		cha:di
Almorish			
Chaudangsi	gan		gani:
Rangkas	ga		gani:
N.W. Himalayish			
Kansuri	ka'	ki'i:	kina:'
Manchati	ka	kyeku	kyere
Suman	han	hannyispi	hanji

presence of some high front vocalic element following the velar stop, which in the Almora group and Newari appears to have conditioned a palatalization of the stop. The same conclusion can be reached with respect to 2nd person forms in Figure 21. It may be recalled that the 1st singular and 2nd singular forms set up for Eastern Himalayish, #gaṇa and #kana, did not include a front vowel. With the information at hand it is difficult to decide if such a vowel should be reconstructed, but, to keep its presence in these languages in mind, it will tentatively be set up in the 1st person form #gyaṇa and the 2nd person form #kyana (cf. also section 3.5).

The Kham 1st person forms are of great interest in that they appear to bridge the gap between the other two groups. Note that the Kham 1st singular employs *ṇa, while the dual and plural make use of the #gya-root instead. Among the Central Himalayish group, Magar also shows a 1st plural kan-, formed from the #gyaṇa root.⁸⁴

Important substantiating evidence for assuming the existence of an original disyllabic form of the

⁸⁴ Recall that this stem alternation for pronominal number was earlier observed to occur in the Assam Hills groups (cf. Figure 11) and to constitute a portion of the argument that originally these two stems were suppletive forms of a single root. This argument will be more fully explored in conjunction with the discussion of the pronouns of those languages (cf. section 3.3.2).

1st person pronoun can be found in the Kanauri dual inclusive ka:šöŋ which can be conveniently regarded as #g(y)ana with an infix dual marker šö < #ši to yield #g(y)a-šö-ŋa.

Many 2nd person forms likewise retain traces of their original bisyllabic nature, including the Kanauri plural kina:' and Gurung plural ken(mo) < #kyana. Other 2nd person forms in Figure 21 are fairly straightforward. Again, Kham with its explicit number alternation interposes itself between those languages with the *nan stem and those with #kya-.

The inclusive or plural root #i shows up only sporadically as, for example, in Tamang 2nd person ai, Chaudangsi 1st person plural in, and perhaps in Bunan inclusive e(ran) if the segmentation is warranted. It is possible however that it may also covertly occur in the Kanauri 2nd person plural kina:'. This form may represent an original sequence #kya + i + na:' where the two stem elements of the disyllabic #kyana were split by what would here be interpreted as a number marker. Note that this analysis parallels that for the infix dual marker in 1st person and could also account for the absence of a high front vowel in the 2nd person singular gö. If the i of the plural resulted from the stem element y in #kya- there would be no reason to suppose its loss in the singular, but if it results from plural #i, its absence in the singular is

understandable. A possible morpho-syntactic justification for this presumed infixation will be discussed in section 3.4.3.

There remain two forms still unaccounted for, one the Chepang morpheme -te appended to 2nd person forms and also appearing among the verb affixes, the other the form nun variously appearing as the Rangkas 1st plural, an alternant of the Pahri 1st singular, and as the Bhramu 2nd plural. The latter is probably related to 2nd person *nan though the semantic change to 1st person is difficult to explain.⁸⁵ Chepang -te which, in its verbal behavior, paradigmatically patterns with a similar morph in Rawang and Jyarung (cf. Figure 8) has been discussed by Caughley (1971). Its appearance in three distantly related subgroups would seemingly argue for its archaic nature, but a decision on this issue must await further discussion of the morpheme (cf. sections 4.1.6 and 4.2.22).

3.3. PRONOMINAL ROOTS IN THE LANGUAGES OF THE ASSAM HILLS

In Figure 22 information on the independent pronouns in both nominative and genitive cases is provided

⁸⁵ The vocalic alternation a - o or u is quite common in TB for vowel final roots (Benedict 1972:58) but also occurs before a final consonant, as in PTB *m-nam 'smell' which appears as Tibetan snam-pa - snom-pa, Lepcha nom, and Karen *num, or, in the other direction, PTB *rus 'bone' is in Lepcha hrät (cf. Benedict 1972:75).

Figure 22: PRONOUNS OF THE ASSAM HILLS LANGUAGES^a

	1st		2nd	
	<u>SL.</u>	<u>PL.</u>	<u>SL.</u>	<u>PL.</u>
No. Naga-Konyak Mikir	nei (nei)	i: tum, i: li [incl.] (i, li) [incl.] nei, (i: i) tum [excl.] (nei) [excl.]	naq (naq)	naq (i: i) tum (naq)
Ao	ni (ke, ke, ni-)	o: c (nok), onok, asen (o-, et. al.)	na (ne, na-)	ne: nok (-)
Lhota	aiyo, aikha (ai)	o: eto (o, on, etum)	(i: i) nas, noi, yi: si (no), ni: s, yi (ni: i)	(i: i) nas, noi, yi: si (no), ni: s, yi (ni: i, ni: s)
Lepcha	go (kasusa)	koyui (koyurua)	hoi (hoima)	aiyus (aiyuses)
Chang (IST)	uoi go (qabai, ka-)	kancuq (kancuq)	ru (kaibi, kai-)	ka: tr, ka: tr na: ng (ka: rabi, ka: rai)
Chang (Hutton)	po (qebu, kabu)	man [incl.] (manbu [incl.]) kuan [excl.] (kanebu [excl.])	no (kasbu)	ka: rai (ka: rinebu)
Numungin	pas (i: i, i: raq)	nimas (i: i, i: raq)	naq (mai, ma: raq)	ma: ai (mai, ma: raq)
Nocte	pa (qa, i: i)	ni (naq, ni)	naq (ma, naq)	no (no)
Hoehang	pas (qai, i: i)	ni: gi: i (-)	pa: naq (-)	pa: in (-)
Banjara	ku (kuku)	ken (kembu)	naq (naphi)	ha: ra: om (ha: ra: raku)
Tumlu	pai (qale, ha: sai)	hambung (qale, hampbungai)	na: yu: q, na: yu: q (na: yu: q)	na: yu: q (na: yu: q)
Tablang	taso (to, ti)	tumai (tumai)	na: yu: q (na: yu: q)	na: yu: q (na: yu: q)

^a Possessive forms when available are given in parentheses.

(Figure 22 cont'd.)

Meithei	ni (nigi, i)	nikhoi (alkhoigt)	naqna (naqti, na)	naqkhoi (naqhoigt)
Luhupa Tangthul	i (iwt, i)	ithum (-)	na (naui, na)	nathum (-)
Maring	kai (kaiyeiklaur, kai)	kaiyei (kaiyeiklaur)	nag (nakiaur, nai)	naiyo (nakiaur)
E. Naga Angwai	ai (at)	hok[incl.] uko[excl.] (hok[incl.] uko[excl.])	no (un)	neko (neko)
Sema (ISI)	pi (i)	pike, qiguko (qiguko ?)	nai (un)	naike, naquko (nagu ?)
Sema (Hutton)	pi (-)	ni, niup (-)	no (-)	neko (-)
W. Naga Emepo	arpu:ti (arpu)	arpu:ti (arpu:ti)	nai (nais)	nai:pu:ti (nais:pu:ti)
Arung	i: (agur)	anul (anul)	nag (nagus)	nagul (nagus)
Ch'iang	q: (qer)	q:thxua (-)	no (kurer)	ku:thxua (-)
No. Asonam Digaru	hat, hti (hat, hti)	hiqlaq, iqmas (hiqlaq, iqmas)	nyo (nyo)	nyolq (nyolq)
Mi Ju	ki: (-)	ki:thai (-)	no, nyo (-)	no:thai, no:ni:thai (-)
Miri	no (naka)	no:lut (nolutka)	no (naka)	no:lut (nolutka)
Gallong	po (pokket)	qolu (qunuket)	no (nokket)	no:lu (nunukket)

for the different major groups (excluding the Barish languages) occupying the hill areas north and south of the Assam valley. These include the Konyak and Northern Naga languages, other Naga subgroups, the Abor-Miri-Dafla or North Assam group, and Ch'iang (cf. note 63). With the exception of the Konyak group, all the other languages are non-pronominalized, that is, there are no pronominal affixes associated with the verb on any productive basis. Traditionally, this fact was utilized in separating off Konyak from other Naga groups; although it now appears that the lexical connections between Konyak and Northern Naga must draw them together in spite of this difference in their morphologies. We have, too, an indication in Chang that pronominalization is retreating in this group, since that language has apparently undergone a loss of its verb morphology during recent times. The LSI account provided by Williamson, although internally not highly consistent, nevertheless exemplifies constructions with verbal marking of pronominal categories. Consider the following examples (LSI 3(2):368):

ɲa:i ɲa:m-la:bo	I beat
nu ɲa:m-a:si	you beat
ha:oi ɲa:m-bai	he beats

in which the verb root ɲa:m is variously followed by different suffixes which apparently agree with the pronominal subject. Hutton's (1929) account of Chang,

however, makes no mention of any such phenomena. Whether it was lost or simply not recorded is problematic but it does suggest that not too great a weight should be given to the presence or absence of this characteristic for purposes of postulating relationships.⁸⁶

3.3.1. OVERVIEW

Within the substantial diversity of the forms in Figure 22 one notices first of all that the 1st person is apparently much more unstable than the 2nd. While the 2nd person singular invariably uses a form derivable from *na, the 1st person is variously expressed not only by *na reflexes but by forms ultimately from #ga or gya, #i, or other still unidentified roots. The explanation for this conservative retention of 2nd person in face of a proliferation of 1st person forms may ultimately be explicable in some functional or sociolinguistic terms. It does not appear that an explanation based on principles of regular phonological or morphemic alternation, such as unifies the Himalayish data, will be possible. Still, the very existence of the phenomenon may be of use in correlating the facts

⁸⁶ Shafer (1950, 1953) also recognized this methodological principle in regard to the Himalayish languages, now associating, now separating out languages which the LSI had grouped only on the basis of pronominalization.

of other languages with developments in this group; for example, Kuki-Chin shows a similar proliferation of 1st person forms in contrast to a typical retention of 2nd person *naŋ.

An additional point of interest is the significant probability that a possessive form of a pronoun will express itself in a stem form other than that of the nominative, if not invariable then at least as an alternant. Some of this data was presented earlier in Figure 10 in the context of introducing the problem of pronominal stem alternation. The data currently under consideration expand this evidence with several additional languages. What applies to the possessive alternant applies equally to the alternation between singular and plural forms of the pronouns. In certain cases entirely different stems are used (cf. Banpara 2nd singular naŋ, 2nd plural hanzam), in others there appears to be a regular vocalic alternation (cf. Nocte 1st singular na, 2nd singular naŋ with -a- and 1st plural ni, 2nd plural ne both with a front vowel). Furthermore, it can be pointed out that in some of the languages the possessive and the plural alternates are homophonous (cf. Figure 12). Each of the points above is focused on in greater depth in the following sections and a suggestion is made concerning how all this disparate data may be accounted for coherently.

3.3.2. 2nd PERSON FORMS

As stated above, the 2nd singular forms of all the languages tabled in Figure 22 ultimately revert to PTB *nan. The only possible exception is Lepcha ho: which may derive directly from a shape *no or may instead be a borrowing from some Himalayish form, such as Waling ha-na < #kana.⁸⁷ The likelihood of the latter explanation representing the true source increases significantly when Lepcha 1st singular go is considered, since this pronoun, which is completely aberrant for Northern Naga, is attested in many Himalayish languages (cf. Figure 15).

3.3.21. FORMS IN no OR nu

One of the major reflexes of *nan is a form in no or nu attested in many languages, which is probably best regarded as a phonological variant of nan. The particular change involved *-an > -o may have an explanation based on the acoustic imprint a final consonant leaves on a preceding vowel (Thurgood and Javkin 1975). Notice, in this connection that a similar change of *-a > -o does not necessarily occur in 1st person (*na lacking the final consonant) even in those

⁸⁷ The change of *a > o is a regular sound correspondence in Lepcha; cf. for example, no 'bamboo' < *na, thok 'weave' < *tak, zo 'eat' < *dza, mo:n 'dream' < *man, etc.

languages with back vowels in 2nd person (cf. Ch'iang 1st person ga (na dial.) with 2nd person no).⁸⁸ Further, notice that 2nd person forms in *noŋ or *nun do not occur,⁸⁹ indicating that the loss of the final consonant is a necessary requirement for the occurrence of the vocalic change.

3.3.22. SUPPLETIVE PLURALS AND FORMS IN ni

In 2nd person plural, a majority of the Assam Hills languages have a stem form either in suppletive relation to the singular stem *nan (cf. Lepcha singular ho:, plural a:yu: ; Banpara singular nan, plural hanzam; Tamlu singular nayun, plural æmphun; etc.), or else in what appears to be a conditioned variant of *nan, with a front vowel substituting for the low central or back vowel (cf. Angami singular no, plural neko; Ao singular na, plural nenok; Nocte singular nan, plural ne; etc.) no, 2nd plural ne(ko). The exceptions to this generalization are the languages of the Manipur

⁸⁸ There are, however, languages such as Gallong and Chang which maintain -o- in both 1st and 2nd person. In Chang at least, the change of syllable final *-a > -o appears to be a regular sound correspondence (cf. pu 'tree' < *pa, sau 'eat' < *dza, nau 'five' < *b-na, etc.) and so independent of a change *-an > -o.

⁸⁹ There is one instance of this otherwise unobserved variation in Arung 2nd possessive nun-, although it is likely that the vowel is simply harmonic with that of the following possessive affix -ku.

area (Western Naga, Mikir, Luhupa, and Meithei) and some of the North Assam languages, which are felt to have leveled an original stem opposition in favor of the singular form. Some support for this interpretation is provided by considering that, for some of these languages, the 1st person still exhibits a stem alternation for number (e.g. Arung 1st singular i:, plural anui) or maintains a single form other than *na (e.g. Tangkhul 1st person i, Maring kai, Empeo a:nusi:), indicating that morphological leveling or substitution has undoubtedly occurred.

The 2nd plural forms in ni or ne can be evaluated against several different proposals. They may first of all be conservative reflexes of original 2nd plural roots with these same front vowels. In this case we have the problem of accomodating those languages—in some cases intimately related—which make use of the suppletive mechanism for indicating plurality. On the other hand, they may be considered products of some no longer productive grammatical or derivational mechanism which conjoined the singular na and some overt indicator of plurality, such as a morphemic element #i. What especially recommends this treatment is that it simultaneously accounts for 1st person plurals in ni < *ni < *na + i in the same set of languages showing the 2nd plural in ne or ni < *na + i. It also conveniently links these languages with the Himalayish group, the

description of which is also enhanced by positing a plural element #i (cf. section 3.2.223).

The other languages with suppletive plurals exhibit a wide range of variation in the actual forms used. However, it appears probable that this variety is only secondarily produced and that all these forms originate in some shape approximating #kan. A developmental sequence, involving a progressive weakening and loss of the initial and final consonants of this form, is apparently suggested by the following data:

Chang	ka:nm	
Banpara	han(zam)	[k- > h-]
Tamlu	aem(phun)	[h- > Ø; -n > -m before a bilabial stop]
Lepcha	a:(yu)	[-n > Ø]

However, although I would still maintain the correctness of the assumption that the forms of these languages are cognate, a sequence of such degenerative changes might not be warranted, especially for a language like Lepcha which is otherwise highly conservative phonologically. Instead, what may have occurred was that each language segmented an original disyllabic 2nd person form #kana in different ways. This explanation, of course, would reiterate and reaffirm the contention that such a form existed (and still does) in Himalayish (cf. section 3.2.21). It also has the benefit of tying this data together with that of the plurals exhibiting the vocalic variant in i.

To facilitate comparability, consider this original 2nd plural form to be #kana + i. Now, in the probable event that the two syllables of the pronominal stem retained separate morphemic status to varying extents in different languages, a cut, motivated for whatever reason, could have taken place on either side of the medial -n-: if to the right, then Chang (ka:nn) is accounted for; if to the left Lepcha (a:yu).⁹⁰ In addition, a cut to the left with retention of the right half of the form would successfully account for those languages with 2nd plural forms in ni or ne. Simultaneously, we have paved the way for a plausible explanation of why the languages retaining the #ka(n) element do not make use of the #i plural morpheme. If they do have an overt indicator of plurality it is always some other morpheme (e.g. Banpara -zam, Tamlu phun, Lepcha yu:, Chang cun) of more recent origin. Since #i was tied closely to the right half of the original form, it was necessarily lost when the option was taken to retain only the left half.

3.3.3. FIRST PERSON FORMS

The 1st person forms of Figure 22, as mentioned

⁹⁰ There seems also to have been a decided tendency to weaken or segment off the initial k- perhaps to avoid problems of homophony with 1st plural forms, such as Lepcha ka. Notice that the Chang 1st and 2nd plural stems (kann and kannn) are nearly

above, show more diversity than do the 2nd person forms of this same group. In the singular, there is the expectable na, ne, or some related variant, including probably Mikir ne:, since that language entirely lacks initial n-. The vowel change implied by the Mikir form, however, may be an analogical formation based on the plural stem. The development can be traced through languages like Moshang and Nocte representing the presumed earlier situation where only the plural has the high front vowel. Another possibility, however, is that these forms reflex the 1st person *ney reconstructed by Benedict (1972:65, 93) (cf. note 66). Notice, particularly, that a similar 1st person form appears commonly in this group (cf. Ao ni, Tamu nai, Sema (LSI) ni, Sema (Hutton) ni). However, the fact that a high front vocalic segment also appears in 1st singular forms unrelated to *na (cf. Miju ki:, Meithei ai, Maring kai, Lhota aiyo, Tangkhul i, Arung i:) suggests strongly that the i reflexes a separate morpheme and that Benedict's *ney might either not apply here or else itself be segmentable into *na + #i.

Other 1st singular forms include the by now to be expected forms in an initial velar stop, such as Banpara ku, Maring kai, Ch'iang qa, Miju ki:, and possibly, via a phonological development, Digaru ha:,

homophonous, distinguished only by an unexplained difference in vowel length.

presumably from #ga(na). Again, these forms are best treated as levelings of a paradigmatic opposition between the possessive and nominative roots. We have as corroborating evidence Wen's (1941) list of pronouns in Ch'iang dialects many of which preserve a nominative singular in na others of which exhibit the stop initial form. Significant statistical evidence can be advanced also. For instance, all of the languages with stop-initial pronouns have homophonous possessive forms, while Chang, Ao, and Tamlu preserve the earlier situation of a nominative in *na and a possessive in #ga.

3.3.31. 3rd PERSON INFLUENCES

Besides these more or less regular developments, this group also exhibits some idiosyncratic developments that are in all likelihood associated with politeness or euphemistic conventions. The data comprises Tableng ta:o, Lhota, Angami, and Empeo a:, and Tangkhul, Meithei, and Arung i or ai, all of which are the normal 1st person forms. In all cases except Tableng the roots are recognizable as either the inclusive root #i or the 3rd person (or demonstrative) form *a,⁹¹ or

⁹¹ Separate evidence for the existence of this form, which has not previously been alluded to in this paper, is widespread—in the affixal pronouns of many pronominalized languages; in some specific 3rd person independent pronouns observed in Tangkhul, Tiddim, Dhimal, etc.; as a nominalizing or

possibly a combination of both into ai. It is difficult to posit normal chains of development to these forms since there are no apparent phonological or morphological conditioning factors. For instance, the Arung nominative singular is i: while the possessive is a-, in common with the plural. We see no evidence for a presumed earlier stage where i was a plural element on which the singular may have been modeled.

In other languages, the i appears as nominative singular, possessive, and plural stems (e.g. Tangkhul) or as just the possessive (e.g. Nocte) or as just the plural (e.g. Mikir). Lhota appears with still a third variant one in which the plural and singular share the same i etymon but the singular possessive is a instead. What is significant, however, is that no language with either i or a in 1st nominative singular retains any evidence of either the *na or #ga forms of the pronouns anywhere else in the 1st person paradigm. In sum then, it seems that a change occurred whereby an inclusive or 3rd person root was substituted for the original 1st person pronoun(s), while either maintaining or leveling existing oppositions between possessive and nominative singular or between nominative singular and plural.

demonstrative element in many languages; and as a remnant of the early prefixation system of PTB (cf. Wolfenden 1929).

The preceding argument, which supposes some transfer of meaning from 3rd to 1st person, would necessitate an additional change in the total picture of the pronominal paradigm in that a new 3rd person pronoun would have to be created. On the other hand, however, the marked instability characteristic of the 3rd person slot in the paradigm would apparently have been a prerequisite in order for the change to 1st person to proceed at all. We can see evidence of the probable course of events in the Konyak group.

Tamlu, Tableng, Mulung, and Tablung are all very closely related within Konyak, one or more perhaps even being dialectally related. In 1st person, Tableng invariably uses some variant of a root tau, while its 3rd person is mi, in common with Tamlu. Tamlu, however, retains the original *na root in 1st singular although its 1st plural exhibits a form ham which is probably itself related to a proximal demonstrative. Mulung shows a similar form helam in the 1st nominative singular and plural although its 1st possessive uses a stem ti- < tau. Its 3rd singular pronoun is tau, showing the overt connection between the two persons. Tablung, like Tableng, uses the tau form to serve all 1st person functions, although its 3rd singular taupa also retains the root, but with the addition of a second morpheme -pa which distinguishes it from 1st singular tau.⁹²

3.3.32. NON-SINGULAR FORMS

This data, as well as the earlier discussion concerning the probable direction of analogical changes, invariably reveals a movement into the singular position of the pronominal paradigm by a plural or possessive form. Innovations in the singular are thus ultimately ascribable to variations original to or arising in non-singular forms. The particular changes producing these forms include: (1) the incorporation of 3rd person or demonstrative elements into 1st person; (2) the morphophonemic collapse of the singular with the plural marker:

$$\begin{Bmatrix} *n\alpha \\ *n\alpha \end{Bmatrix} + \#i \longrightarrow \begin{Bmatrix} n\dot{i} \\ n\dot{i} \end{Bmatrix} \quad 93$$

(3) the lexicalization of one syllable of an original disyllabic form:

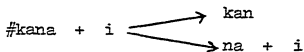
$$\begin{array}{l} \#g\alpha n\alpha \longrightarrow ga \quad 94 \\ \#k\alpha n\alpha \longrightarrow ka \end{array}$$

92 The two forms mi and pa are probably to be identified with the PTB roots *r-mi(y) 'man' and *pa 'father' respectively. There is no obvious etymology for #tau however.

93 This morphological process of forming the plural was retained until relatively recent times. It was operative in languages with plural and singular forms using roots other than *n\alpha, where the plural manifests a front vowel and the singular a central or back vowel (cf. Banpara 1st singular ku, 1st plural kem; Digaru 1st singular ka:, 1st plural hin).

94 It would perhaps be just as correct to cite these

and (4) the lexicalization of an original morpheme sequence at boundaries different from the original morpheme boundaries:



The 1st and 2nd person stem forms of Figure 22 are all explainable according to one of these alternatives.

Passing over those 1st plurals which have been specifically discussed already, we are left mainly with those exhibiting a stem form in an initial velar stop: Lepcha ka-, Chang kann (exclusive), Banpara kem, Tamlu ham(phur),⁹⁵ Ch'iang ga-, which are best explained as were the corresponding 2nd plural forms with k- initials (cf. section 3.3.21), as deriving from original bisyllabic forms.

The only other unexplained forms are Chang inclusive sann and Ao 1st plural alternants ozo- and asen. Chang sann probably derives from sa + ne (cf. inclusive possessive sanebu) where sa- may be regarded as a demonstrative or 3rd person element (not attestable

forms and those exemplifying point (4) with the -y- medial, i.e. #gyana and #kyana, as presumably obtains in the western Himalayish groups (cf. section 3.2.3). In the Assam Hills languages, 1st person forms such as Miju ki: and Ao ke would provide corroborating evidence.

⁹⁵ The stem final -m of Tamlu is conditioned by the following suffix initial ph-. Banpara -m may have a similar origin, though no specific plural suffix is cited.

in Chang, but cf. Lhota plural exclusive Ši:emni:, Ši: 'this, he'). Ao asen undoubtedly has a similar origin. The other Ao plural ozo- may be originally an inclusive form which was preserved as a plural when the distinction was lost (cf., for example, Sema dual inclusive a:kuzo and the discussion in section 3.5 of the Barish and Lolo-Burmese inclusives).

3.4. APPRAISAL OF THE DISYLLABIC PRONOUN HYPOTHESIS

3.4.1. SUMMARY OF THE ARGUMENT

At this point a summary of the arguments advanced as evidence for the original presence in PTB of disyllabic 1st and 2nd person roots as well as the separate morphemic status of each of the syllables is in order. Recapitulating their order of presentation in the text, they include:

- (1) The synchronic presence of bisyllabic 1st and 2nd person pronouns in Eastern Himalayish;
- (2) The permutability of the two elements of the pronoun, which lies at the source of explaining why closely related languages have one or the other of the two component morphemes and why a single language may exhibit both ordering combinations;

- (3) The reanalysis of the original bisyllabic form into a unitary syllable, for example 2nd person #k(y)ana becoming kan or some variant in many languages;
- (4) The morphosyntactic separability of the two component elements, as in Kanauri which interposes a dual or plural marker;
- (5) The characteristic use of only one of the two components of the independent forms in the verb affixes;
- (6) The finding that stop initial nominative pronouns do not co-occur with nasal initial possessive or plural forms;⁹⁶
- (7) The fact that languages with stop initial nominative pronouns have possessives or plurals in some innovative root i.e., neither n- or g- in 1st nor n- or k- in 2nd.

Each of these points was adequately covered in the text except point (5) which requires further

⁹⁶ Kanauri and Vayu, both stop initial languages, have 1st singular possessives in an. This appears to be a secondary development in each language, not immediately traceable to *na, cf. the Vayu 2nd singular possessive un which is clearly secondary and the Kanauri 2nd singular possessive ka where the stop initial is maintained. In general, 2nd person forms are more conservative than 1st in Northwest Himalayish.

elaboration. In section 3.1.23 verb affixes in the pronominalized languages were shown to be monosyllabic and either stop initial or nasal initial. This data is further expanded by simultaneously considering all the pronominalized languages together (cf. Figure 23). Figure 23 discloses the information that the stop initial roots only rarely appear in affixal form. In 1st person they are exhibited regularly and predictably in the Kuki-Chin languages (Lushei and Tiddim), although, as pointed out earlier (cf. section 2.3.422), Tiddim retains in the colloquial language the more prevalent reflex in ŋ. On this point, we can readily and reliably conclude that the Kuki-Chin ka 1st singular affix is secondarily developed.

The stop initial alternant of 1st person is maintained also as the common affix by the Northwest Himalayish group, though generally in varying form--only Manchari retaining the vowel. It is more difficult to determine if this represents an original situation or if, as in Kuki-Chin, it is a comparatively late innovation. If the 2nd person affixes are simultaneously taken into consideration, however, it appears that Northwest Himalayish is described by the second alternative, since its 2nd person affixes all utilize na or some variant root, while the independent 2nd person pronoun invariably appears with the innovative stop initial root. The different historical stabilities of

Figure 23: PRONOMINAL AFFIXES OF
INTRANSITIVE VERBS

	<u>1st SG.</u>	<u>2nd SG.</u>
Bunan	-g	-na
Manchati	-ga	-na
Kansuri	-g'	-än
Kham	ga-	na-
Chefang	-q	-te
Vayu	-qo	-ß
Behing	-qa	-ye
Limbu	-a:	k'__ß
Jyarung	-q	te__n
Rawang	-q	e__ß
Nocte	-aq	-o
Kachin	-nq(ai)	-nd(ai)
Lushei	ka-	i-
Tiddim	-\iŋ(coll.) kE-(descr.)	-_tɛʔ(coll.) nE-(descr.)

1st and 2nd persons, which this explanation presupposes, have also been previously exemplified in the languages of the Assam Hills (cf. section 3.3.1).

Besides the na root, another prevalent pattern exhibited in 2nd person affixes requires the use of some root which does not appear at all among the independent pronouns, most typically #te (cf. Figure 8). In Jyarung, where both #te and #nan are used we probably have a close approximation to the original morphological situation. Semantically, it would seem that the #te and #nan elements originally embodied different information in consideration of their appearance in different morphological position classes. Some discussion bearing on this difference may be found in sections 4.1.6 and 4.2.22.

Point (5) can therefore be restated more positively as:

- (5) The absence of any stop initial pronominal root in the affixal system of a pronominalized language, except as a secondary development.

3.4.2. ETYMOLOGY OF THE STOP INITIAL PRONOMINAL ELEMENTS

Although the morphological separateness of each of the syllables of the disyllabic pronouns is apparent, nothing has yet been said concerning the possibility

of lexically and semantically identifying these elements or even whether this is possible. The two syllables may be synonymous and the disyllabic form equivalent to a compound; they may be morphophonemically separable elements of a monomorphemic lexical item, or they may have separate lexical and semantic status, in which case the disyllabic form is equivalent to a syntactic or derivational structure.

3.4.21. HISTORICAL PRIORITY OF THE NASAL INITIAL ROOTS

As a first step in approaching this question we can make a considered guess from the facts of points (5-7) that the nasal initial forms are original and that they establish the basis for the operation of analogical processes. Given the direction in which this occurs, we can predict what the categorial and lexical consequences might be. For instance, supposing that a language eliminates its original nasal-initial nominative pronouns by substituting the proper stop-initial correspondent, the existing morphological distinction between nominative and possessive will be lost, unless compensated for by 'dragging' up some other form to fill the possessive space. We thus allow for the actually observed situations where the possessive and nominative forms appear similar and both are either stop initial or nasal initial, and where the nominative and possessive differ and the

possessive is either stop initial or some other substituted form.

Since it has been determined that the stop initial root (henceforth to be indicated by a neutralized form #kya)⁹⁷ probably appeared first in possessive and plural forms and then later generalized to singular pronouns in certain languages, the most logical guess as to its original meaning would involve one or both of these functions. For both functions there are many languages using particular morpheme indicators in construction with the pronoun root. The other possibilities of simply juxtaposing a pronoun to a noun to indicate possession or of allowing the context to disambiguate singular and plural meanings also occur in various languages, but specific morphemic indicators are very widespread.

⁹⁷ Throughout this Chapter the stop initial forms of the pronouns were shown to vary in idiosyncratic ways for different languages, the 2nd person expressed either with a different initial stop, a different vowel, or both from the 1st person (cf., for example, Ch'iang 1st ca, 2nd ku; Chang 1st ka, 2nd ka:; Kanauri 1st əb, 2nd ka'). Because of this variation it has been possible to only tentatively reconstruct shapes for the proto-roots. These have been indicated variously as 1st person #ga or #gya and 2nd person #ka or #kya. The different initial consonants were set up as place holders of the observed differences between 1st and 2nd person forms while the alternation of -y- medial with zero was motivated by a real difference occurring in different languages or groups. In view of the close phonological relation between these two stops and an assumption underlying the discussion to follow that these two pronominal elements ultimately derive from the same source, the difference will be neutralized and a single form #kya set up.

The plural markers of even very closely related languages often differ considerably. Many take on grammatical function from some independent status as nouns indicating a 'group' or 'collection' while others are derived from verb/adjectives such as 'many', 'several', etc. Besides this, the typical syntactic optionality of the plural markers probably makes them prone to rapid change. All in all therefore, they are a particularly troublesome set to compare or to reconstruct to any significant time depth.

3.4.22. THE GENITIVE MARKER #kya

Possessive markers, on the other hand, are less liable to interference from independent nominal or verbal notions (although it does occur) and are generally syntactically stable.⁹⁸ Inherently, this would suggest that an early genitive root might be retrievable. It is beyond the aims of this work to examine closely the case system of TB, it is simply necessary to point out that in a large percentage of the languages discussed in this chapter the possessive marker specifically appears as a syllable with an initial velar

⁹⁸ In many languages the genitive marker is optionally used, especially in certain constructions referring to a nominal possessor. In this way, there is a natural continuum from 'pure' genitive constructions to nominal compounds. The deletability of the genitive marker with a pronominal possessor, however, is either not possible at all or is at least highly constrained.

stop followed by a vowel or glide plus vowel (cf. Newari gu, Bahing ke, Dhimal ko, Chepang ku, Yakha ga, Arung gu:, Miri ka, Banpara ku, Meithei gi, Tibetan gyi, etc.).

The positive comparison between this possessive particle and the #kya pronominal root in both phonological shape and semantic usage implies that the genitive marker may have been a grammatical morpheme which fused with the pronominal roots to eventually create the stop-initial pronouns.

The original position of this genitive particle in relation to the pronoun, whether it preceded or followed, is difficult to determine, although a principled guess may be made that it followed, on the argument that it appears thus in all languages irrespective of subgroup which currently maintain it, that this is the expected position of a genitive marker for verb final languages (Greenberg 1966), and that Archaic Chinese is also reconstructed with a genitive in *-k following the pronoun (Graham 1969-1970).⁹⁹ If this is true then Miri in the North Assam group would best

⁹⁹ The Chinese final -k of pronominal forms has been a bone of contention since its original reconstruction by Karlgren (1920) who used it to advance the position that Archaic Chinese was an inflected language. Graham, after closer inspection, believes it to represent an originally independent genitive morpheme which later fused with the preceding pronominal root lending the appearance, though not the fact, to the inflection hypothesis.

exemplify both the phonological forms and syntax of the proto-language in its possessives naka 'my' and noka 'your'.

3.4.23. REANALYSIS OF A PTB GENITIVE CONSTRUCTION

If this statement regarding the original position of the genitive marker is correct, the alternate word order with a preceding genitive—#ky-ŋa and #kya-nan—must be accounted for. In the earlier treatment of the Himalayish languages the permutation of these two elements was well documented, although it appeared then that the genitive marker had already lost its possessive meaning and was better to be interpreted as a pronominal element, although with separate morphological status from the *ŋa and *nan roots. The permutability, therefore, functionally entails nothing more than a switch in position of two synonymous or near synonymous morphemes. In other words, even at the level of Proto-Eastern Himalayish, we do not have to account for the inversion of a syntactic construction. The factor responsible for the still earlier change of elements in the genitive construction has not been determined. I would like to propose now one possible explanation which, as will be seen, has the virtue of predicting the observed fact that the inversion of elements in the genitive construction is applicable only to pronominal elements.

In certain TB languages the genitive function is systematically subdivided into two syntactic constructions indicating respectively alienable and inalienable possession. In these languages, inalienable possession (marked for kin terms and body parts especially) is usually expressed by a short form of the pronoun prefixed to the substantive root; for example, Meithei i-pa 'my father', i- < ei 'I'. The 'short' set of pronouns may, however, be used to indicate simple possession of any noun, whether alienably or inalienably possessed, as an alternative to the normal genitive construction with the full pronoun plus genitive particle. So, for Meithei, both of the following phrases are possible:

naŋ-gi: khut	'your band'
na-khut	'your band'

For the set of inalienably possessed nouns, which must necessarily take the short form of the pronoun, the process has likewise generalized, so that the full form of the genitive may be preposed, resulting in constructions such as: ei-gi: i-pa: 'my father', with a double indication of the 1st person possessive. If a similar sequence of events had produced a comparable structure with the *na root, as in #na-kya na-Noun, a reanalysis to #kya-na Noun could very likely have occurred.

This explanation has the advantage of not pre-

supposing any necessary change in the relative order of the genitive particle in respect to nouns, it arises as a consequence of the reinterpretation of the #kya element as a dissociable part of the pronoun itself. As such, we would not expect to find phrase orders of the type:

possessed noun + genitive + pronominal possessor

in synchronic languages, and to my knowledge we do not.

We can also naturally formulate an account of the Kanauri 'infixed' number markers discussed earlier (cf. section 3.2.3). Recall that the 1st dual pronoun ka:ššŋ was interpreted as resulting from ka: + šš + ŋa where šš is clearly the dual indicator. The insertion of this element is syntactically justified on the evidence that numerals in Kanauri precede their head noun (even though number markers are invariably suffixed). In a possessive construction, therefore, the resultant order of elements will be:

possessor + genitive + numeral + possessed noun

i:mi:	u:	niš	caŋ
one man	genitive	two	son
'a man's two sons'			

Assuming that Kanauri earlier exhibited a pronominal prefix to the noun with genitive meaning, similar to that indicating inalienable possession in Meithei, then

a numeral would logically interpose itself between the genitive and the prefix:

pronoun + /genitive + numeral + pronoun / + head
noun

This construction could later have been reanalyzed as a single form, comprising the section spanning the two diagonals. This explanation is offered only with caution because of its highly speculative nature. We just do not have sufficient information to unequivocally state that Kanauri actually historically possessed the categories attributed to it. The reason it is proposed at all is that it falls into line with the facts and indications of other TB languages. Though we cannot use this cross-linguistic evidence to confirm the facts of Kanauri's development, we may at least utilize it to suggest a possibility.

It was originally assumed in approaching this problem that if a language reinterpreted its genitive marker as a pronominal element, that genitive marker would no longer be accessible to the language to carry out its original function. The expectation would be that a language with stop initial pronouns should therefore exhibit a genitive marker with some shape other than #kya. Certain stop initial languages do confirm this prediction; for example, Lepcha possessive marker -sa, Chang -bu, Ch'iang -sr, Kanauri -u. Others,

however, retain what appears to be the original genitive; for example, Banpara -ku, Sho -gu, Bahing -ke, Newari -gu. With the explanation advanced above, however, it is not necessary to assume that #kya will lose its status as a genitive. There is no necessary connection between the events which operate on the pronouns and those operating on the genitive marker, since what has been proposed is not so much a reinterpretation of a genitive morpheme as a reanalysis of a genitive construction. At the time of the reanalysis there is no similar pressure for reanalysis acting on the genitive marker in its use with nominal, as opposed to pronominal, possessors. We might expect, therefore, that it could easily maintain its status in the language, as it actually has in many cases. Pressures to substitute another genitive marker must result from other causes.

3.4.24. STOP INITIAL PLURAL STEMS

Recall now the data collected in Figure 12, which suggests an intimate association between the possessive and plural functions, necessary to account for the homophony of the pronominal stems used to express them in distinction to the nominative singular form. The postulated connection of these functions is just possibly fortuitous, since the possessive stem, arising by reanalysis of the genitive construction, may have

analogized to the plural. Arguing against this view, however, is the position that a leveling in this direction is no more motivated than one which would level the stem distinction between the possessive singular and the nominative singular forms of the pronouns. Languages with this particular alignment and with a plural form with the nasal-initial stem do not occur however.

Appealing again to the structure which was set up to underlie the reanalysis:

pronoun + genitive + pronoun + head noun

and recalling that the plural markers of many languages derive from independent nouns, it is possible that the head noun of the formula can be identified as the nominal predecessor of the plural marker.¹⁰⁰ In this event the reanalysis to the stop-initial pronouns would simultaneously yield the plural forms also. This explanation poses certain questions concerning the etymologies of plural indicators in TB languages, particularly those with stop initial pronouns. Presumably these questions are verifiable, but it was not possible to follow up these leads here.

¹⁰⁰ I would like to thank John Crothers for bringing this possibility to my attention.

3.5. SUMMARY

To conclude this chapter it will be expedient to summarize the data by presenting a brief description of each of the hypothesized roots and then test these roots against pronominal data from the subfamilies so far unmentioned.

3.5.1. SYSTEM OF PTB PRONOMINAL ROOTS

*ŋa and *nan : These two roots, 1st person *ŋa and 2nd person *nan are established as the 'primary' pronominal roots of TB on the basis of their ubiquitous presence in all subgroups of the family and their demonstrable historical priority over other pronominal roots. Further evidence of their antiquity can be found in the fact that both pertain to Sino-Tibetan, the earliest reconstructible level of the family. The 1st person form *ŋay reconstructed by Benedict is treated as very likely morphemically separable into *ŋa + #i (see below).

#gya- and #kya- : These two forms, #gya- (or #ga-) 1st person and #kya- (or #ka-) 2nd person, are felt to ultimately derive from a single morphemic element #kya representing an original genitive particle. This form, from its original position in a genitive construction, fused with the primary pronouns to create disyllabic pronominal forms, #gyana (#gana) 1st person

and #kyana (#kana) 2nd person. Various language specific processes could then operate to modify the phonological shape of these disyllables, two of the most typical being the deletion of the final vowel or syllable and the permutation of the elements. In languages exhibiting these so-called stop initial pronouns, there is always some characteristic distinguishing 1st from 2nd person. It appears, however, that different languages or language groups have changed according to different parameters, sometimes not involving a differentiation of the initial stop, so that not much phonological credence can be given to the difference between initial #g- and initial #k- as set up here. They should be regarded as simply marking the opposition in stop initial 1st and 2nd person forms, no matter how this is actually manifested.

#i, #u, and #ku : #i variously appears as a 1st person singular, or plural, an inclusive pronoun in languages possessing such a distinction, a 2nd person pronoun (where it appears as ye - i), or as a plural marker irrespective of person. Of these uses only the plural marker and the inclusive can lay any claims to being original, the others are secondarily developed. In deciding between these two alternatives, it was noted that #i appears widely as a proximal demonstrative, contrasting with a distal demonstrative in #u. These two considered simultaneously could account for

the inclusive/exclusive distinction since #i also appears as an exclusive marker paralleling the use of #i as an inclusive marker. On the other hand, a stronger case may perhaps be made for considering #i as a plural which generalized to the inclusive when a separate indicator, in the form of a morpheme #ka or #ku (< #ku 3rd person ?), was called into play to create the exclusive distinction. Exclusive forms in #i may then be regarded as phonological modifications of #ku.

3.5.2. PREDICTIVE CAPACITY OF THE SYSTEM: OTHER TB SUBGROUPS

Figures 24 and 25 present data on the independent pronominal forms of the major TB subgroups not considered previously. For the most part none of the data raises any serious problems for the analysis discussed above, in most cases the roots of these groups can be easily accommodated.

Certain peculiarities of these tables deserve mention. First of all, the Bodo-Garo 1st person plurals with an initial palatal affricate can be derived regularly from #i, or more precisely #yi, since it is characteristic of this group to affricate initial *y- (cf., for example, the following forms taken from Benedict (1972:32): PTB *ya:p 'winnow, paddle, etc.' is Garo co 'row, paddle, dig' and Dimasa jau 'paddle,

Figure 24: 1st PERSON PRONOUNS IN MISCELLANEOUS TB SUBGROUPS^a

	1st SG.	1st DL.	1st PL.
Jyarung	ŋa (ŋə)	ndʒo (ndʒə)	yo (yɪ)[incl.] ŋəhiə (yɪ)[excl.]
Nungish			
Rawang	ŋa	ŋani	ŋaniŋ
Trung	ŋa ⁴		iŋ ¹
Kachinish			
Kachin (Hanson)	ŋai (nye:)	an	anhte:
Kachin (Hertz)	ŋai (nye)	yan, an	i - ihte, anhte
Lolo-Burmese			
Maru	ŋaw (ŋa)	ŋanak	natnawŋ
Burmese	ŋa (ŋa.)		ŋadou., ŋa.dou
Lisu	ŋwa ⁴		raw ² , a ⁴ nu ² [incl.] ŋwa ² nu ² , a ⁴ nu ² [excl.]
Lahu	ŋá	ná-hí-má	ŋá-hí
Akha	ŋa ² (ŋa-eu.)		ŋa-ba-ma.
Sani	ŋa ³³		a ¹¹ sz ⁵⁵ [incl.] ŋa ¹¹ ŋa ⁴⁴ [excl.]
Bodo-Garo			
Chutiya	ã (ayyo)		jaru (jariyo, jar)
Bodo	a:ŋ		joŋ
Garo	aŋ		a ² n-eiŋ, na ² eiŋ[incl.] eiŋ[excl.]
Dimasa	aŋ(ani)		jiŋ, juŋ (jini)
Kuki-Chin			
Dhimál ^b	ka: (ka:ŋko)		kye:l (kiŋko)
Lushei	kei (keia, ka)		keini (keini, kan)
Tiddim	/kei (kã)		/ei (i)[incl.] \kou (kã ___ -u ²)[excl.]
Sho	ce: (ka)	ce:hni ² pa-hni ²	ce:me ² , ame ²

^a -possessive forms are included only when they differ from the nominative form. They are cited in parentheses.

^b Dhimál is included with Kuki-Chin simply on the basis of their morphological similarity. Its true affiliation is problematic.

Figure 25: 2nd PERSON PRONOUNS IN MISCELLANEOUS TB SUBGROUPS^a

	2nd SG.	2nd DL.	2nd PL.
Jyarung	no (nə)	ŋəndɛA (ndɛə)	no (ni)
Kungish			
Rawang	na	nani	naniŋ
Trung	na ⁴		nie ¹ ŋiŋ ⁴
Kachinisch			
Kachin (Hanson)	naŋ (na)	nan	nanhte:
Kachin (Hertz)	naŋ	nan	nihte, nanhte
Lolo-Burmese			
Maru	naw (ni)	nanak	nannwŋ
Burmese	nin (nin.)		nindou., nin.dou.
Lisu	nu ⁴		nu ⁴ wa ⁵ , nu ⁵
Lahu	nɔ̃	nɔ̃-hí-má	nɔ̃-hí
Akha	naw [~] (naw-eu.)		naw-ha ma.
Sani	n ³³		na ¹¹
Bodo-Garo			
Chútiya	nɔ̃ (niyo)		noru (noriyo, nor)
Bodo	naŋ		naŋ cur
Garo	na' (na'ŋ)		na'simaŋ, na'soŋ
Dimasa	nuŋ (nini)		niši, auši
Kuki-Chin			
Dhimal ^b	na: (na:ŋko)		nye:l (niŋko)
Lushei	naŋ (naŋa, i)		naŋni (naŋni, in)
Tiddim	/naŋ (nã)		— (nã ___ ~uʔ)
Sho	naup (na)	nauphni "pahni"	nauŋme"

^a Possessive forms are included only when they differ from the nominative form. They are cited in parentheses.

^b Dhimal is included with Kuki-Chin simply on the basis of their morphological similarity. Its true affiliation is problematic.

dig or root up, winnow'; PTB *yu(w) 'liquor, wine, beer' is Garo cu, Dimasa ju). The Bodo-Garo plural form, therefore, reverts to #yiŋ or #yaŋ (< #(y)i + na ?). Note the comparison to the 1st singular #aŋ (< #a + na ?). If the presumed etymologies are correct we might have another instance of the use of contrasting demonstratives in 1st person forms, similar to their appearance in Naga and Himalayish languages (cf. Lhota 1st singular a:kha, 1st plural e; Angami 1st singular a:, 1st plural inclusive heko (< #ha + i + ko ?); Digaru 1st singular ha:, 1st plural hinlon; Khaling 1st singular uŋ, 1st plural inclusive ik; Waling 1st singular anka, (also inka), 1st plural inclusive ika). The alternation of these two roots also characterizes Kuki-Chin, Kachin, and Lisu.¹⁰¹ Widespread evidence of this sort strengthens the hypothesis that demonstrative and 3rd person influences on 1st person functions is of long standing duration in TB.

One other point worth mentioning concerns the tonal alternation in the Lolo-Burmese pronouns,¹⁰² especially for Burmese, Akha, and Sani. Note particularly that the two former languages utilize the same

¹⁰¹ Graham Thurgood has informed me that the Lisu 1st plural inclusive raw³ can be regularly derived from a form *yaŋ² or *zaŋ², which recalls exactly the Bodo-Garo forms.

¹⁰² I appreciate very much having the fact of this alternation pointed out to me by Graham Thurgood who, moreover, directly supplied me with the data on Sani, Lisu and Akha.

tone for both the possessive and plural stems, which recalls the identity of these two forms in many other languages previously considered (cf. Figure 22). Graham Thurgood (personal communication) has work in progress which demonstrates that the tonal alternation can be attributed to an earlier, separate morphemic element in *ye or *ke which, if verifiable, would reaffirm the conclusion reached earlier concerning the shape of the genitive and its influence in determining the stem shape of the pronouns.

Hopefully during the course of this chapter the point has been convincingly made that the pronominal system of TB, though extremely pliable categorially, is internally consistent and explainable by regular, if not clearly understood, interactions between the separate domains of demonstratives and the system marking participants in the speech act. In the next chapter the reliability of the comparison setting up the pronominal roots described above is assumed and employed to examine the affixal roots of the pronominalized languages, hopefully to show something of the historical development of individual affixal patterns.

CHAPTER 4. AFFIXAL PRONOMINAL ROOTS AND PATTERNS OF AFFIXATION

4.0. INTRODUCTION

This chapter presents detailed discussion of the affixal morphology of the pronominalized languages, with the goal of uncovering evidence for the pathways different languages have taken in arriving at their current states of grammatical evolution. In the preceding chapter the opinion was expressed that the pronominal roots ultimately established for TB could be systematically related to certain demonstrative elements and an earlier genitive construction. In this context, any appearance of these derived roots in the affixal morphology would chronologically place that morphology at a time postdating its appearance in the independent pronominal system. Although such evidence does not conclusively prove one way or the other whether the morphological framework existed at the time that the derived root was inserted, it does presume a period of accretion of morphological apparatus which may be helpful in tracing the system to earlier periods.

In Chapter 2 the morphological apparatus of the pronominalized languages was shown to be typologically distinct from Indo-European and, on the whole, of great complexity in comparison to Munda. This matter is more fully examined in the following pages with an

attempt at further, more naturally typologizing the agreement relations which the affixes themselves convey. The intent of this approach is to demystify the complexity—to better understand it as a logical consequence of the categorial and syntactic facts of various TB languages.¹⁰³ The most important of these syntactic/semantic clues involves what will be called the transitivity type of the language, how agents and patients are marked.

I have made previous reference in Chapter 2 to the hypothesis that pronominal categories and morphology are traceable to very early stages of the family approximating if not identical to the stage of PTB. The changes in morphological structure which individual languages have undergone will not disconfirm this hypothesis; it still remains necessary to postulate some common morphological structure to the proto-language. In so far as possible, this structure is characterized and described and the developments from it to the

¹⁰³ The touchy question of whether synchronically all pronominal morphology should be construed as syntactically generated will be avoided. It is not at issue that in particular instances certain semantic distinctions are made in the affixal morphology which are neutralized in nouns and independent pronouns. Since it is probably true, however, that, diachronically, morphology derives from syntax, the morphology may retain evidence of a previous, more complex syntactic organization. The question of how such morphology should be treated vis-à-vis the contemporary syntax is the issue being skirted.

morphologies of the daughter languages are outlined. Finally, some concluding arguments are advanced (cf. section 4.4) for the purpose of demonstrating a certain unity to the categorial and morphological changes in pronominal systems occurring throughout TB.

4.1. INTRANSITIVE VERB AFFIXES

Figures 26 and 27 list the pronominal affixes of the intransitive verb of the fourteen pronominalized languages introduced in Chapter 2. For ease of comparison, the independent pronouns corresponding to each affix are also included in the second half of each cell. This pairing was felt to be especially useful in demonstrating the contention that the morphological systems of these languages are more conservative than the independent pronominal systems.

4.1.1. THE PROTOTYPE OF THE INTRANSITIVE VERB PARADIGMS

Note particularly that several of the stop initial languages, which we saw to be innovative in this characteristic (cf. section 3.4), retain nasal initial roots in the affixes (e.g. Bahing 1st singular go vs. affixal -na, Tiddim /kei vs. -\iŋ, Manchatı 2nd singular go vs. affixal -na). The pattern is pervasive enough for us to assume the originality of the *na and *nan roots for

Figure 26: 1st PERSON INTRANSITIVE VERB AFFIXES^a

	1st SG.	1st DL.IN.	1st DL.EX.	1st PL.IN.	1st PL.EX.
Bunan	-ki gyi- ingi	-ith eraŋ	hiŋ	-ith eraŋji	hiŋji
Manchati	-ga gye - ghyara	-xi nyengu	nyeku	-ni nyenare	nyere
Kanauri	-Sge gō (aŋ)	-ŋe' ka:ŋŋ	-ec niŋi	-ŋe' ki:ŋŋa:'	-ec niŋa:'
Kham	ŋa- ŋa:	gin- gin		ge- ge:	
Chepang	-ŋ ŋa:	-tayha ŋici	-ŋca ŋici	-tayhi ŋi	-ŋi ŋi
Vayu	-go go	-chik go nakpu	-chok go nakpu	-ke go khata	-kok go khata
Bahing	-ŋa go	-sa gosi	-suku gosuku	-ya goi	-ka goku
Limbu	-a: aŋa:	a: vb ci: a:ŋci:	-ciige: a:ŋci:re:	a: a:ni:	-iige: a:ni:ge:
Jyarung	-ŋ -ŋa	-tŋ -ndŋo	ndŋo	-i yo	ŋŋiŋe
Rawang	-ŋ ŋa	-xi ŋani		-i ŋaniŋ	
Nocte	-aŋ ŋa			-e - -ye ni	
Kachin	-ŋŋ(ai) ŋai	an		-ga anthe:	
Lushai	ka- kei			kan- keini	
Tiddim	-\iŋ kŋ- /kei			-\haŋ i- /ei	-\uŋ kŋ vb -u' \kou

^a The upper entry for each language is the intransitive verb affix, the lower entry the corresponding independent pronoun.

Figure 27: 2nd PERSON INTRANSITIVE VERB AFFIXES^a

	<u>2nd SG.</u>	<u>2nd DL.</u>	<u>2nd PL.</u>
Bunan	-na han, ini	-th- -ni han nyispi	-th- -ni hanji
Manchati	-na ka, kyena	-xi kyeku	-ni kyere
Kansauri	-ʒn ka'	-ec kiʒi:	-eʃ kina:ʔ
Kham	ne- nen.	jin- jin	je- je:
Chepang	-te naspte	-te- -ja niʒjite	-te- -y niʒte
Vayu	-ʒ gon	-chik gonche	-ne gone
Bahing	-ye - -i ga	-si gasi	-ni gani
Limbu	k'- khene:	k' vb ci: kheŋi:	k' vb i: kheŋi:
Jyarung	te vb n no	te vb ntʒ nendʒA	te vb n no
Rawang	e- na	e vb ʒi naŋi	e vb niʒ naŋiʒ
Nocte	-o naʒ		-an ne
Kachin	-nd(ai) naʒ	nan	-myitd(ai) nanthe:
Luchei	i- naʒ		in- naʒni
Tiddim	-_teʔ nʒ- /naʒ		-_uʔ_teʔ nʒ vb ~uʔ

^a The upper entry for each language is the intransitive verb affix, the lower entry the corresponding independent pronoun.

1st and 2nd person agreement respectively. Other roots serving 1st and 2nd person functions are either innovative (e.g. Bunan 1st singular -ki < #gya) or resolvable by considering other morphological factors (e.g. Chepang 2nd person -te, for a discussion of which see section 4.1.6). All of the roots used affixally have been described or introduced in Chapter 3 and need not be further elaborated on here.

One interesting difference between the independent pronouns and their affixal equivalents is that for dual and plural subjects agreement is generally for number only, and not person (cf. Jyarung 1st dual -tš (< #ši), Rawang 1st dual -ši, Bahing 2nd dual -si). In other languages, we typically do not find any evidence of either the 1st or 2nd person roots *na and *nan in the dual and plural affixes (cf. the Chepang 2nd plural affix -te- -y vs. the independent pronoun ninte; Kachin myitd(ai) vs. nanthe; Vayu -ne vs. gone; Bunan -th- -ni vs. hanji; or Rawang 1st plural -i vs. nanin, Kachin -ga vs. anthei, Chepang -tayhi vs. ni, etc.).

On this evidence I would propose that the system underlying the affixation pattern of these contemporary languages originally did not discriminate person information in the dual and plural. The picture of the proposed PTB intransitive verb affix system is sketched in Figure 28.

Figure 28:
PROTOTYPE INTRANSITIVE VERB AGREEMENT SYSTEM

	SG.	DL.	PL.
1st	-qa	-ši	-i
2nd	-na	-ši	-i

According to the model of Figure 28 it would be expected that some homophony of 1st and 2nd persons would occur in the non-singular numbers. Confirming this prediction, we actually do observe instances of such homophony, for example, in Vayu 1st dual inclusive and 2nd dual -chik, in Kanauri 1st dual exclusive (also plural) and 2nd dual -ec, and Manohati 1st dual and 2nd dual -ši and 1st plural and 2nd plural -ni. These, however, are the only examples.

The question of why homophony should not be more pervasive can best be answered in terms of various supplementary mechanisms developed to prevent possible confusion. There would, of course, be no confusion if the independent pronouns remained synchronically obligatory and historically stable. They did not, however. This suggests that greater reliance was placed on the affixal morphology to distinguish the case relations between nominal elements and the verb, necessitating some mechanisms to distinguish 1st and 2nd persons in the non-singular numbers. I will take up some of these issues in the immediately following sections.

4.1.2. 1st PERSON SINGULAR FORMS

The 1st singular affixes with the exception of the Northwest Himalayish group, Lushei, and Limbu all show *na derived roots. The exceptional languages have innovated their affixal forms on the model of derived

independent forms. In Northwest Himalayish we find #kya related forms: Bunan -ki, Manchatī -ga, and Kanauri -ŋg', based on the stop-initial forms of the independent pronoun. The same development pertains to Lushai ka- and Tiddim ka- formed on the basis of kei.¹⁰⁴ The Limbu 1st singular affix -a: is again based on a fuller form ana: which earlier was shown (cf. section 3.2.21) to be derived from #gana, possibly through a form #hana, the latter attested from other Eastern Himalayish languages (cf. Figure 15).

This evidence is taken to demonstrate the strong possibility of the original status of -na as the 1st singular agreement marker. It is set up as a suffix since it appears so in all languages except Kham, where it has been reanalyzed as a prefix on analogy with the innovated dual and plural markers (cf. section 4.1.4). Even the substituted #kya forms appear as suffixes, except in the Kuki-Chin languages where prefixation has become the predominant pattern—perhaps to maximize the difference from the suffixed colloquial affixes.

4.1.3. DUAL MARKERS

As mentioned above, the dual marker #ši is the only morpheme used to mark agreement for a 1st dual

¹⁰⁴ Tiddim also maintains an earlier *na reflex in the colloquial 1st person affix -in.

subject. The *na root is not used in the dual. The only exception to this assertion is Chepang in which -n marks the exclusive pronoun. There are two possible explanations, both of which require that it be secondarily introduced. First, affixal -n may simply mark agreement for the non-singular, independent pronoun in ni, which itself is an innovated form (cf. section 3.3.22). Or, second, it may represent an innovated exclusive root, since it paradigmatically contrasts with inclusive -tayh (cf. 1st dual inclusive -tayh-ca and 1st dual exclusive -n-ca) which is non-pronominal in origin (cf. section 4.2.22).

All the languages which exhibit an inclusive/exclusive opposition are by their nature counterexamples to the claim that person information is not incorporated into the dual and plural affixes. But even though this is the case, the mechanisms for marking the person differences do not involve the use of the 1st singular root; so for Bahing the 1st dual inclusive is -sa, exclusive -suku, singular -na. As we saw in Chapter 3, the elaboration of the inclusive/exclusive is tied instead to a parallel opposition between proximal and distal demonstratives or, to some 3rd person influence (cf. section 3.2.22).

4.1.4. PLURAL MARKERS

The plural marker of the prototype system was set up as #-i on the basis of the plural forms of Jyarung -i, Rawang -i, and Nocte -e. The Tiddim literary affix i- is also cognate although its morphological insertion probably took place at a later time, the colloquial affixes representing the original situation. We see additional evidence for #-i as the prototypical plural form by considering the -i of Chepang, which can be factored out of the inclusive -tayh-i and exclusive -n-i; and then comparing this marker with -ca, similarly factorable from the dual forms, as pointed out above. The same holds true with other languages maintaining this opposition (cf., for example, Limbu exclusive plural -i:ge, Bahing inclusive plural -ya, and Vayu inclusive plural -ke (< #ka + i)).

Other plural markers can be explained as follows. The Bunan 1st plural -ith is homophonous with the dual, which appears to represent the original meaning. The hypothesis that the plural was innovated on the dual model can be corroborated by noting that the independent dual eraj is the unmarked form, the plural erajji using an innovative suffix. The same explanation pertains to the Kanauri data also, the dual affixes -še and -ec appear also as the plurals and the independent pronominal plurals are formed by suffixing -a: to the

unmarked dual. Note further that the Manchari plural affix -ni based on the 2nd plural, is also innovative, suggesting that Northwest Himalayish as a whole lost the original marker of the 1st plural.

The Kham plural affix ge, like the dual gin, simply mimicks the independent form of the pronoun, which we earlier (cf. section 3.2.3) showed to be an innovation based on the stop-initial root #kya.

Lastly, the plurals of Kachin -ga, Lushei kan-, and Tiddim -\han (colloquial inclusive) -\un (colloquial exclusive) require some comment. First of all, it appears that the Kachin form in -ga derives from the root marking the exclusive (cf. section 3.2.223 and also the immediately following section). The Lushei kan- has undoubtedly the same origin, with the addition of -n, an indicator of the plural (cf. the 2nd person affixes: singular i-, plural in-). It might be possible to relate the Tiddim inclusive -\han with the Kachin -ga; though, again, this hypothesis must be weighed against the also likely possibility that the Tiddim form arose independently from a demonstrative source.

4.1.5. THE INCLUSIVE/EXCLUSIVE DISTINCTION

This distinction is not attributed to the morphological prototype (cf. Figure 28) for the reason that

no common mechanism can be assumed for all the languages which synchronically manifest it. Typically the inclusive and exclusive affixes are formed by combining some additional morpheme(s) to the original number markers for plural (and dual, where appropriate). The morphemes added are language or group specific, however, reflecting their disparate origins.

In the Eastern Himalayish group an element #ku (or #ka) is added to distinguish exclusivity, cf. Bahing dual -suku, Limbu -ci:ge:, and Vayu -chok, all from #-ši-ku, with vocalic changes the result of harmonic influences. The k-segment of the exclusive appears to have extended itself into the inclusive forms of Vayu (dual -chik, plural ke), so that only the vowel difference -i vs. -o distinguishes the inclusive from the exclusive in the dual (i.e. chik vs. chok).

It may be recalled that earlier the i/o variation was hypothesized to result from a parallel variation in demonstratives, marking the difference between proximal and distal notions. This was contrasted with a second hypothesis which viewed the inclusive pronoun as resulting from the reinterpretation of the plural marker #i, due to the categorial addition of the exclusive distinction, achieved by the addition of the morpheme #ku (#ka) to the 1st person paradigm. The evidence from the affixal systems clearly favors the

second hypothesis. Notice, however, that in many cases either pathway to the inclusive/exclusive would produce similar results, both opposing -i and -o. Even assuming the correctness of the second hypothesis it is quite possible that a pre-existing demonstrative opposition, structured along identical lines, partially motivated some of the phonological modifications seen in the Eastern Himalayish languages. As the old plural root was reinterpreted specifically as an inclusive root it would be easy to etymologize its origin as a proximal demonstrative, and this may have actuated the harmonic processes proposed above and perhaps influenced the origin of the independent inclusive and exclusive forms as well. In non-pronominalized languages bearing this distinction it is still possible for the demonstratives to have exerted their influence directly on the pronominal system.

Other languages have undergone still other processes in establishing the inclusive/exclusive opposition. Chepang was mentioned earlier as having elaborated two morphemes -tayh and -ŋ for the inclusive and exclusive respectively. Neither of these elements is demonstrative in origin and both precede the number markers (-tayh-i, ŋ-i) rather than follow, as the Eastern Himalayish #ku does.

The origins of both the Kanauri and Tiddim distinctions are opaque. Kanauri exclusive -ec appears

to be built on the dual root with some prefixed vocalic segment, although the morphemic identity of this vowel cannot be given with any assurance. It may in fact be epenthetic since the same form -ec is used for 2nd dual also. The Tiddim colloquial affixes, inclusive -\har, exclusive -\un, presumably representing an earlier period in the language than the literary affixes, may originate in the opposition of a 3rd person pronoun and a distal demonstrative respectively. Both languages require further comparative investigation.

4.1.6. THE MORPHEME #te

Crucial to an understanding of the 2nd person affixal forms is a correct appraisal of the #te element. This morpheme has been specifically alluded to in earlier sections (cf. sections 2.3.44 and 3.3.22) where its occurrence in different subgroups was noted to be a distinguishing characteristic of the pronominal morphology. We see overt evidence of its presence in Jyarung te vb n, Rawang e-, Chepang -te, Tiddim -tɛʔ. The list can be further expanded by including Kachin -nd(ai) where the vocalic element has been lost.¹⁰⁵

¹⁰⁵ The -ai of the Kachin form is a separable "nominalizer" (Matisoff 1972b) morpheme which according to James Matisoff (personal communication) may derive from a reconstructible form *way * *ray [the symbol * relates alternants of a single word family—see Matisoff 1975] (cf. Lahu ve, Akha e, Tibetan and Written Burmese yi). For the justification of including the Rawang form see section 4.2.22.

The Limbu 2nd singular k'- is problematic since the velar stop is obviously related to the 2nd person pronoun khene: (cf. a form of the 2nd pronominal adjective, also k'-). However, its morphological position preceding the verb stem is highly reminiscent of the morphological pattern of a language like Jyarung which maintains the #te root. Furthermore, the morphological pattern of 1st person forms in Limbu, though somewhat exceptional, does not use the singular root in prefixed position, as does the 2nd singular. All in all, therefore, it would seem that the position of Limbu k'- was previously occupied by some other element akin to the #te morpheme and that k'- simply replaced it. In sum, therefore, we can attribute #te morphology to all subgroups except Northwest Himalayish, Kham, and Konyak (Nocte) and, with a minimum of caveat, to the proto-language.

As mentioned earlier, #te is felt to embody a non-pronominal meaning, even though in specific instances it appears to have been reinterpreted as pronominal. The evidence for assuming this includes the fact that #te is not used as an independent 2nd person pronoun in any language, with the qualified exception of Chepang na:ŋte ;¹⁰⁶ that it characteristically

¹⁰⁶ Caughley and Caughley (1970) assume #te to be a 2nd person pronoun. However, this interpretation leaves unexplained its occurrence on non-2nd person forms

assumes a different morphological position from the 1st (or 3rd) person morphemes, occurring in the dual and plural, as well as the singular; and, lastly, that in Jyarung and Kachin it co-occurs with -n (< *-na) in the singular (cf. Jyarung te vb n , Kachin nd(ai)).

At this time it is appropriate to raise the possibility that #te should be interpreted as a type of evidential marker specifying the orientation of an action with respect to the speech participants, specifically that its presence marks the action as not initiated by the speaker. This idea will be more fully developed in conjunction with the discussion of the transitive verb affixes (cf. section 4.2.22). If, for now, this meaning of #te can be assumed it is easy to conceive of its reinterpretation as a 2nd person marker. Its negative definition--speaker exclusion--is simply inverted to the positive corollary--hearer inclusion--by changing the focused participant. In this situation, the *nan root could easily be conceived of as redundant and

such as: na:ko ?a:y:ri-?a:mh-te je?-ca-u 'my grain-te eat-will-3rd singular' glossed as 'you will eat my grain'. Notice, though that there is no agreement marker for 2nd person in the verb as would be expected. Consider also the clause ?ow-te na:n dasyh-ya: '3rd singular-te you say-question' 'if that is what you say' where -te is affixed to a 3rd person pronoun. Lastly, notice that its syntactic position in the object phrase nin-ji-kay-te 'you two' follows the case marker Kay. It is obviously felt to be dissociable from the pronoun per se.

eliminated, as presumably occurred in Chepang, Rawang, and Tiddim.

4.1.7. 2nd PERSON FORMS

Other 2nd person roots appearing among the intransitive affixes entail no great problems. The singular roots used instead of *nan include the reflexes of #te, as explained above; reflexes of #i in Bahing and Lushei; and -o in Nocte. #i as a 2nd person element was earlier traced to its probable origin as an inclusive pronoun, so that its extension to a 2nd person affix would not be unexpected. The -o of Nocte represents an extension to this paradigm of the singular imperative -o.

As decided for 1st person, the non-singular numeral roots should be set up as lacking any signification of the person of the subject. We may interpret the facts of Chepang dual -ja, plural -y, and Limbu dual -ci, plural -i as approximating this situation. Notice, however, that many of these languages, including some which might be expected to be conservative, as Jyarung, exhibit a 2nd plural form in ni or some variant; cf. Manchatī -ni, Kanauri -en, Vayu -ne, Bahing -ni, Jyarung -ñ, and Rawang nin. We may with some reservation also be justified in including Nocte -an, although, like the singular, it is the same as the

imperative. We can find, however, only minimal representation of *-na forms in the duals of these languages, only in Bunan -ni and Jyarung -ntš. This situation calls to mind the earlier finding for the 2nd person independent pronouns suggesting a probable change from na + i to ni (cf. section 3.3.22 and note 80). In various languages the ni was reinterpreted as the full form of the 2nd plural pronoun and in others as a 2nd plural affix and, by further extension, as a plural affix irrespective of person. The problem of homophony with 1st person forms in the circumstance of not marking person for dual and plural agreement markers may have occasioned the prevalent substitution of -ni. The question as to whether the languages with -ni made the substitution at a common level of relationship or independently of one another can probably be answered either way at the present. Perhaps, though, more substance can be provided the opinion of independent origin, first because change of na + i > ni is phonologically not unexpected and second because member languages of the Eastern Himalayish subgroup show both alternatives (cf. Limbu 2nd plural k' vb i: with Bahing -ni).

The Kuki-Chin languages and Kachin have each innovated particular 2nd plurals. Lushei uses the root i- plus an innovative plural marker -n.¹⁰⁷ The

immediate source of the i-, whether directly from #i plural/inclusive or via the singular form i-, is uncertain. Recall, however, that the 1st person affixes, both singular ka- and plural kan-, are based on an old exclusive root, perhaps making the plural origin of i slightly more probable. Tiddim has innovated a plural -u? and Kachin a form myit (< ma + i + te ?) where ma can likely be attributed to a plural marker #me, to be discussed in section 4.2.23. In all of these languages the original plural, #-i, has lost this semantic status, having been eliminated entirely (Tiddim) or reinterpreted (Lushei and Kachin).¹⁰⁸

4.1.8. HOMOPHONY AVOIDANCE: SYSTEMIC STABILITY

Much of the historical detail needed to exemplify the operation of a process of homophony avoidance is lacking or not yet extracted from the available data, so that it is difficult to assert this mechanism unequivocally. It would be valuable to know, for example,

¹⁰⁷ The source of the Lushei plural marker -n is in some doubt. It may be the product of a development similar to that outlined above which produced the -ni pluralizer. However, James Matisoff (personal communication) has also suggested the possibility of its connection to the PTB dental suffix *-n which Benedict (1972:99) assumes to have a "collective pluralizing" meaning.

¹⁰⁸ The close morphological parallels between Kachin and Kuki-Chin in this regard, as well as in other points of their verbal affixation (cf. sections 2.3.421 ff.), provide evidence for their relatively closer relation to each other than either exhibits to any other group.

what reliance was placed on the use of the independent pronouns in marking the case and person roles of the proposition. The fact that person information is lacking in the set of original affixes (except for the singular) leads one to suspect that at the time of PTB the independent pronouns were carrying the main burden of indicating these roles, in which case the verb affixes were probably being used simply for the purpose of indicating number.

If, now, the independent pronouns were destabilized, perhaps under the stimulus of an elaborating affixal morphology, the necessity of preserving the case relations would have initiated some compensating mechanism. Of course, more than one mechanism is conceivable; for example, a word order change to a rigid SVC pattern could preserve role information very adequately. Tibeto-Burman, however, seems to have undergone another kind of change, one consolidating this information in the verb affixes. In order to do this at all, it is of course necessary to admit person distinctions, which, with the framework proposed, would consist of disambiguating the dual and plural markers. In other words the early morphological framework was rendered ambiguous by the destabilization of the independent pronouns. The incorporation of person information into the affixal system remedied this situation.¹⁰⁹

Some of the mechanisms for introducing person categories into the verb were discussed above. These included the redefinition of #te as a 2nd person pronoun, the elaboration of the inclusive/exclusive distinction, and the phonological reanalysis leading to the interpretation of the sequence -ni as a 2nd plural marker. And, as will be shown in the following sections, case roles too are incorporated into the affix system of transitive verbs. Again, though the evolutionary pathway and the factors motivating these changes can only be assumed, the great diversity exhibited in the parameters discriminating 1st and 2nd person non-singular affixes in the contemporary languages indicates strongly that the discrimination process took place independently in different groups, although from a common morphological base in PTB or pre-PTB—that described in Figure 28.

109 With an intransitive verb, showing agreement for only a single nominal argument, the whole question of role interrelationships is obviated. Therefore, a presumed destabilization of the independent pronouns need only be visualized as a tendency to their optional use, thereby rendering the conveyance of person information problematic and actuating a compensating mechanism.

4.2. TRANSITIVE VERB AFFIXES

4.2.1. AFFIXATION PATTERNS

Before detailing the facts of the transitive verb affix system in those languages which maintain one, it will be necessary to first examine some of the semantic parameters which such morphological systems index. Of these parameters, the categories of person and number may be assumed from the typological assessment presented in Chapter 2 (cf. section 2.3.3). Person and number marking are not overly troublesome for the transitive affixes, the specific forms used are easily relatable in most cases to the roots which have been set up in Chapter 3, and in the immediately preceding discussion of intransitive affixes.

A problem does arise, however, when accounting for the assignment of person and number markers to noun phrases or underlying propositional arguments.¹¹⁰ This problem is directly reflected in the typological evaluation of affixation patterns into discrete and syncretic types, first presented in section 2.3.31. A discrete system, generally atypical of TB languages, is one in

¹¹⁰ I am sacrificing theoretical consistency here by considering that the morphology may either index overt syntactic noun phrases, which may then be transformationally deleted, or may directly code the semantic categories defining the affixes. This is not to minimize the importance of the distinction, however, but only to allow for leeway in approaching the issue.

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. The latter system leads to highly complex paradigms which are further complicated, for no obvious theoretical reason, by the presence of a great deal of what appears to be random homophony (cf. section 2.2.23). This homophony was assumed by Hodgson (1857-1858) to indicate evidence of the pending breakdown of the system. From a purely synchronic perspective, however, it raises the issue of how the meaning of a particular pronominal root, in its use as an independent pronoun or intransitive verb affix, matches with its use as a transitive verb affix, or, in other words, how coherently the transitive verb affixal system can be described.

4.2.11. TRANSITIVITY TYPE

These considerations prompted a re-examination of transitive verb morphology according to parameters other than the traditional notions of person and number. I became specifically interested in what case roles were coded by both noun phrases and their agreement affixes and how this was reflected in the transitivity type of the language.

By transitivity type I intend the morphological opposition accounted for by the terms 'ergative' and

'accusative'.¹¹¹ An ergative structure is one in which the transitive agent is specifically marked (typically by a case affix to the noun), and accusative one in which the transitive patient, goal, or beneficiary is specifically marked. For each type, the unmarked role, if any, is assumed to be in the 'nominative' case. In an accusative language, the nominative typically inserts itself into the subject position, and in an ergative language, into the object position.¹¹² In other words, an ergative subject will be morphologically marked,

¹¹¹ There is no standardized terminology in this area. The terms 'ergative' and 'accusative' are of course in general use, although the definitions vary (Lyons 1969:Chap. 8; Comrie 1973). However, there seems to be no cover term for the two which does not itself take account of the notions of subject and object. The intercalation of the two parameters, one morphological, one syntactic, is usually referred to as 'language type' or 'syntactic language type' (Dixon 1972). This is too inclusive for use here, however, since many TB languages can mix ergative and accusative structures. I have, therefore, coined the term 'transitivity type' to serve this need. Note that the use of this term will specifically exclude reference to intransitive verbs and to possible case related discriminations occurring on such verbs.

¹¹² This makes it appear that the subject-object distinction is inherently responsive to semantic information concerning role. Why, for example, does an accusatively marked noun, representing the patient or beneficiary, not occur in subject position, with a nominative agent in object position? The reasons are only conjectural at this point but they probably involve considerations of discourse structure, especially the issues of topic-comment and definiteness and their interaction with case roles.

while a nominative subject (in an accusative language) is unmarked morphologically.

Note that according to this terminology the semantic role of the subject will vary depending on the transitivity type. In any transitive sentence, a nominative subject is prone to be interpreted with any case role other than the patient, while an ergative subject, in keeping with its marked status, is semantically interpretable only as an agent.¹¹³

4.2.111. SPLIT-ERGATIVES

It is now necessary to introduce a complication into the relatively simple dichotomy in transitivity type sketched above. The facts of certain languages mandate that they be described with both ergative and accusative structures, the division being appropriate for certain tenses or aspects (reported in Indo-Aryan and Caucasian by Abadie 1974 and Comrie 1973), for independent versus dependent clauses (reported for the

¹¹³ I am ignoring passive type sentences. Although a transformational account of these sentence types would relate them to an underlying normal transitive pattern, there are opinions to the contrary which view these sentences as independently motivated, i.e. with their own proper deep structures. The crucial meaning difference may be discoverable in a difference in underlying context. In any event, the use of an intransitive sentence pattern to express the passive, whether or not it differs in fundamental meaning, would exclude it from consideration of transitive type agreement patterns.

Australian language Ngaḷuma-Yintjipanti by Silverstein 1975), or, as it concerns this work, for the category of person. Following Silverstein, these phenomena are collectively referred to as split-ergative systems, irrespective of the parameter on which the split is based.¹¹⁴ The following example, from Silverstein (1975) of a person split in Chinook is provided to clarify this transitivity type.

In Chinook, the incorporation of the 1st and 2nd persons singular into the verb complex is accomplished without any morphological mark to show whether it is functioning as a transitive subject or a transitive object (these functions are distinguished by syntactic position); in other words these pronouns behave non-ergatively. This behavior contrasts with the other pronouns which, when functioning as transitive subjects, require a special marking -k to distinguish their use for this function from that of the transitive object. Thus, they behave as in an ergative language.¹¹⁵

¹¹⁴ Besides simply labeling and exemplifying the phenomenon, Silverstein's paper has the greater purpose of demonstrating a hierarchy of pronominal and nominal features, which has the power of predicting how a language must change its alignment of case roles with transitivity type, if a change from ergative to accusative (or the opposite) is underway. The hierarchy is structured with hearer inclusion (2nd person) at the top, i.e. this feature is the least likely to maintain an ergative morphology. It is followed in order by: speaker inclusion (1st person), proper nouns, human nouns, and animate nouns. There is some question, however, whether the distinction between 1st and 2nd

Compare the following sentences:

i-n-l- <u>la</u>	
him-I-to-smell	'I smell him'
č-nš-l- <u>la</u>	
he-us-to-smell	'he smells us'

where the difference between 3rd person forms i- and š (< i + k) marks the difference between transitive object (unmarked) and transitive subject (marked by -k). Note too that the 1st person subject -n of the first sentence is not marked with -k, indicating its invariable status.

4.2.112. THE EXPRESSION OF TRANSITIVITY TYPE

Since transitivity type has been explicitly defined as a morphological classification of case frames, case

persons is motivated by differences in potential ergativity or by some other factor (cf. the following note).

115 Silverstein details two arguments for considering that the 1st person actually retains some ergative characteristics. These arguments, however, are appropriately syntactic, based, for one, on the unusual behavior of 1st person in sentences involving the transitive relation 1st→ 2nd in which the regular 1st person pronoun is substituted by a special form. Since this argument does not distort the morphological fact of 1st person being marked for transitive subject, we can still consider 1st person to be as accusative as 2nd person, and presume that some other parameter is at work influencing the syntax of 1st→2nd constructions.

here being understood as a set of semantic functions describing the relationships of nouns to verbs, its existence is intimately associated with the existence of a set of contrasting morphemes marking the case roles. In certain languages, such as Chinese, lacking overt morphological expression of case, the transitivity type cannot be adduced;¹¹⁶ in fact the question is inappropriate. The subject and object positions, set by the rigid word order requirements of the language (SVO) obviate the need for a case system. A less rigid order of nominal elements such as occurs in verb final languages sets up a greater need for the elaboration of a case system to maintain their functional separateness.¹¹⁷

The question now arises of how to describe the transitivity type of verbal agreement systems. Since an agreement system presumably copies information from a noun position—subject or object—onto the verb, it can reflect the transitivity type of the case system. In both strict ergative and accusative languages agreement typically occurs between the verb and the unmarked,

116 Arguments that Chinese is ergative in type (Frei 1956) depend crucially on the secondary argument that it possesses certain syntactic structures presumably characteristic of ergative languages. Since there is no certainty about syntactic correlates of transitivity type, including presence or absence of passives or medio-passives, the larger argument is doubtful.

117 Greenberg's (1966) universal 41 states that verb final languages almost always exhibit a morphological case system.

nominative noun, resulting in the contrasting situations of ergative agreement marking the patient (object) and accusative agreement the agent (subject). The information coded by the verb is thus the inverse of what is coded by the case marked noun.

I would like to standardize my terminology to refer to these confusing facts in an unambiguous way. First of all, the characterization of a language with a certain transitivity label simply provides the information as to how its case system operates. Ergative and accusative agreement types will refer to the situations described above where the unmarked noun of either an ergative or accusative language is indexed in the verb complex. The recognition of split-ergative languages suggests the possibility that an agreement system could be set up on similar lines. A realized instance of this possibility will be labeled a split-ergative agreement type. A third type of agreement, one which indexes both the subject and object, can neutralize the transitivity distinction with respect to the agreement system, since typically case markers are not directly marked in the verb. An instance of this type will be referred to as subject-object agreement. Subject agreement and object agreement refer to conceivable situations where a split-ergative case system is neutralized in the agreement system by invariably indexing only the subject or

object nominal positions. Two final, logical possibilities seem not to exist in fact: neither an ergative nor an accusative language may index its case marked noun to the exclusion of the unmarked noun. The different possibilities are summarized in Figure 29.

The split-ergative and subject-object agreement types raise an important issue as to what information may be indexed. Recall that in both ergative and accusative agreement the noun unmarked for case was indexed in the verb, suggesting a principle of complementarity of marking--the case system marking half of the transitivity relation the agreement system the other half. The fact that split-ergative and subject-object agreement relations mark both aspects of the transitivity relation, suggests that the case systems associated with such languages may be functionally superfluous.¹¹⁸ One of the implications of this redistribution of the marking functions is that the case marking system is destabilized and hence prone to processes of historical change. One of the tasks of this chapter is the description and matching of case agreement systems of the pronominalized languages, in

¹¹⁸ Languages such as Santali (cf. section 2.2.1) do not have the option of expressing a pronominal object independently, it must be incorporated into the verb. These languages, therefore, are not properly exemplars of subject-object agreement, and the generalization concerning the "sharing" of the marking function between the case and agreement systems does not apply.

AGREEMENT TYPE

Ergative:	X	→	Ⓢ	
Accusative:	Ⓢ	→	Y	
Split-ergative:	Ⓢ _a	→	Y	
	X _b	→	Ⓢ	
Subject:	Ⓢ	→	Y	} appropriate only for split-ergative languages
Object:	Z	→	Ⓢ	
Subject-Object:	Ⓢ	→	Ⓢ	

Figure 29: TYPES OF TRANSITIVE VERB AGREEMENT^a

^a A circle around a term of the transitive relation indicates that that term is marked as a verb affix.

hopes of being able to infer some of the morphological changes which have produced the various synchronically observed stages.

4.2.12. SPLIT-ERGATIVE AND MIXED PRONOMINALIZED LANGUAGES

In this section I will restrict myself to those pronominalized languages with transitive verb affixes: Kham, Chepang, Vayu, Bahing, Limbu, Jyarung, Rawang, and Nocte.¹¹⁹ The details of the pronominal morphology can be consulted in the Appendix; I will concentrate here only on aspects of the data relevant to the issue of transitivity types and patterns of affixation.

All of the pronominalized languages have ergative structures identifiable in their use of case suffixes or postpositions, though the details differ substantially from language to language.¹²⁰ Vayu, at one pole,

119 I will ignore for the time Lushei and Kachin whose morphological systems were compared in section 2.3.421. Their object affixes while relatable to one another fall outside the system of the other languages to be considered.

120 It was unfortunately not possible to adequately explore all of the details of the syntax as they might pertain to this issue, since we are severely limited in the amount of text or contextually bound materials necessary to a full exposition of the factors determining usage. Compounding this lack in materials we also suffer from a lack of explicit descriptions of the phenomenon, the major exceptions being Michailovsky's (1974) analysis of Vayu sentence types, Watter's (1973) detailed elaboration of Kham clause patterns, and Morse's (1965) description of the Rawang verb frames.

order. This word order change, however, does not seem to be an option for any other of the languages, though it occurs frequently in Chepang texts (Caughley and Caughley 1970).

Jyarung also has a peculiarity in its use of case markers which appears to be tied to the behavior of different verbs. Chin (1958), for example, records the subject of 'scold' with the ergative marker -ke but the subject of 'give' without it:

(4) Jyarung: no-ke ɲa kəu-nasɲo-ŋ
 you-erg. me 2nd-scold-1st
 sg. sg.

'You scold me'

(5) Jyarung: no ɲa kəu-wu-ŋ
 you me 2nd-give-1st
 sg. sg.

'You give me'

Without further explanation or exemplification the conditioning principle is impossible to identify (see also section 4.3.1).

A prevailing pattern at variance with the expected typological pattern of both strict ergative and strict accusative languages is the common absence of an unmarked (nominative) noun in a transitive sentence, in other words both an ergative subject and an accusative object are marked; compare the following sentences (the case markers are underlined):

- (6) Chepang: niŋ-ji-ka:y-te tuŋ-bren la:n-i
 you-dl.-acc.-te Tungbren lan-erg.
 jeʔ-ca:-ja
 eat-fut.-3rd-2nd dl.
 'The Tungbren lan will eat you two'
- (7) Kham: no-e ŋa-lay behtanji
 he-erg. me-acc. potato
 ya-n.-ke-o
 give-1st-past-3rd
 sg. sg.
 'He gave me a potato'
- (8) Nocte: ŋa-ma ate-nan ko-t-ak
 I-erg. he-acc. give-past-1st-3rd
 'I gave him'
- (9) Rawang: ŋa-mer na-kha kha thi me šin
 I-erg. you-acc. word one ? talk
 mayu-ŋ e
 want-1st-2nd sen. part.
 'I want to speak a word with you'

The presence of both ergative and accusative markers complicates the neat picture of these two types presented above. Since this pattern is not describable as a split according to some semantic feature I refer to it as a mixed system.¹²² In any event the

¹²² Note that a mixed transitivity type is the case system analogue of the subject-object agreement type discussed above.

4.2.13. CHANGE OF TRANSITIVITY TYPE

How to evaluate the differences in transitivity types--ergative, mixed, and split-ergative--comparatively and diachronically is very problematic at this time. It would appear, though, that many languages are currently undergoing a switch from ergative to accusative transitivity type and that the synchronically observed phenomena of mixed and split-ergative systems, word order change, and loss of case markings are construable as stages toward completion of the change. This speculation implies that the split-ergative system is inherently unstable and that it simply mediates a change in transitivity type. The implication, however, is overstated since it appears that as strong an argument may be made for the split-ergative system as a transitivity type in mutual opposition to both accusative and ergative, i.e. as a stable, semantically motivated morphological type (cf. section 4.4).

4.2.2. ROOTS OF THE TRANSITIVE PARADIGM

In the next section the morphological systems of the transitive verb affixes are analyzed, with the goals of demonstrating commonalities in their expression, the historically underlying system, and language specific secondary developments--all relative to the issue of transitivity type. The most useful tool in

shaping the conception of morphological patterns will be the previously adduced tentative reconstruction of the pronominal roots.

4.2.21. PERSON MARKING

The complexity of the transitive verb paradigms as evidenced in Figure 3 for Bahing, necessitates a piecemeal approach to the data. Consequently, to begin the discussion of person marking in these affixes only the singular subject-singular object relation will be specified (cf. Figure 30). The full paradigms for each language are presented in the Appendix.

We can with some certainty pick out and identify most of the affixes in Figure 30, since they have appeared in either the independent or intransitive verb affix systems. Besides 1st person -ŋa - -ŋ - -ŋu - -haŋ, etc. and 2nd person -na - -nu - -ne:, etc. both of which can be traced from PTB *ŋa and *naŋ respectively, we also encounter roots which were earlier identified as historically secondary. These include Limbu k'- the affixal (including possessive) form of the 2nd person pronoun khene:, and -a: the 1st person equivalent of aŋa:; Bahing -(y)i and -ye:; a regular 3rd person form in -o - -u - -w, etc. (from #u); and reflexes of #te. The use of such secondarily derived forms points up that these paradigms have undergone

Figure 30: TRANSITIVE VERB AFFIXES: SINGULAR SUBJECT AND OBJECT

	1st SUBJECT		2nd SUBJECT		3rd SUBJECT		
	1st + 2nd	1st + 3rd	2nd + 1st	2nd + 3rd	3rd + 1st	3rd + 2nd	3rd + 3rd
Kham ^b	qa <u>vb</u> ni	qa-	ne <u>vb</u> na	ne-	-na-T-o	-ni-T-o	-o
Chepang ^c	-ŋ -na:ŋ	-ŋ -ŋ	-te- -na:ŋ -ta:ŋ	-te- -w -thny--thn:	-w -ta:ŋ	-w -te	-w -thoy--tha:
Bahing	-na	-qa	-yi	-(y)i	-yi	-ye	-wa
Vayu	-nu	-ŋ	-ŋo	-β	-ŋo	-β	-β
Limbu	-ne:	-ŋ	k' <u>vb</u> a:	___ ^a	-n:	k'-	___ ^a
Jyarung	ta <u>vb</u> n	-ŋ	kəu <u>vb</u> ŋ	te-	wu <u>vb</u> ŋ	tau <u>vb</u> n	-u
Rawang	-ŋ	-ŋu	e <u>vb</u> ŋa	e <u>vb</u> u	e <u>vb</u> ŋ	e-	-u
Nocte	-o	-aŋ	-haŋ	-o	-haŋ	-ho	___ ^a

^a This form is not given in the source.

^b The symbol in some Kham forms marks the position of the tense marker.

^c The first set of forms is appropriate for "agent focus", the second for "object focus" (Caughley 1971).

language specific developments. It is to be determined if the paradigm itself is innovative or if the original lexical items in the paradigm have simply been replaced with new forms.

While the roots themselves are not particularly troublesome; what is considerably more worrisome is how these roots pattern morphologically. In Chepang, for example, it is quite clear that -ŋ marks a 1st person subject, -te 2nd person, and -w 3rd person in the agent focus set. 2nd person subjects, however, also have some explicit marking for the transitive object. The 3rd person -w is expectable but the 1st person -na:ŋ is unexplained except in regard to the final -ŋ, which in all probability identifies it as 1st person. Note that the Kham affix -na is also used for indexing a 1st person object, in contrast to a 2nd person form -ni. The Kham -na may thus pattern with the initial segments of Chepang -na:ŋ. Questions of affixation patterns will be discussed in greater depth shortly (cf. section 4.3).

4.2.22. MORPHOLOGY OF #te

It is difficult to predict the appearance of #te related morphemes within the transitive verb paradigms. The earlier discussion of this morpheme (cf. section 4.1.6) relative to intransitive verb affixes showed it to be reasonably straightforward morphologically,

although its semantics was clouded because it was used only in conjunction with 2nd person affixes and, in some languages, even replaced entirely the original *nan reflex.

In considering the transitive verb affixes, the behavior of #te is much harder to predict morphologically, but a clearer perspective on the semantics may be had as a compensation. Notice first of all that in those languages making use of #te forms—Chepang, Jyarung, and Rawang—the parallels in usage are not complete. Only the forms under the headings 2nd-3rd and 3rd-2nd of Figure 30 invariably make use of #te, although the 2nd-1st heading might legitimately be included also if the Jyarung keu- is taken as an analogue of #te appropriate for this category. Other appearances of #te are recorded in Rawang and Chepang 3rd-1st, Jyarung 1st-2nd, and Chepang 3rd-3rd.

The various situations are summarizable by noting that in Jyarung #te occurs in any transitive relation which includes a 2nd person irrespective of subject or object; in Rawang in all forms not involving a 1st person subject or the relation 3rd-3rd; and in Chepang for 2nd subject in agent focus or for all forms exclusive of 1st subject in object focus.

What appears to characterize the original meaning of #te is thus some notion of spatial orientation or movement not in the 1st person's control or experience.

With this perspective it is easy enough to imagine that #te could take on formal 2nd person status and consequently be extended to all forms utilizing this person, as occurred in Jyarung.

Rawang offers some independent evidence for this interpretation in two prefixal markers used in conjunction with the hortative. In one instance, la- is used to indicate motion away from the speaker or motion between two 3rd persons, i.e. 1st→2nd, 1st→3rd, and 3rd→3rd. Another marker le- is used for all other transitivity relations, i.e. 2nd→1st, 2nd→3rd, 3rd→1st, and 3rd→2nd. Note, first, that privileges of occurrence for le- exactly parallel those for e-, the morphological analogue of #te, and second, that the vowel is the same in both forms. This suggests that the distinction originally had to do with a speaker-hearer discrimination, possibly some type of evidential system.¹²⁴ It additionally suggests the possibility of analyzing #te as #t + #e, on the Rawang model of le (< *l + e ?) versus e-.

The details of how #te spread and from what position in the original transitive paradigm are difficult

¹²⁴ There is accumulating evidence that many TB languages manifest an evidential system. Egerod's (1971, 1973b, 1974) recent work in Akha and Chin's in Jyarung (1958) describe such systems explicitly. Of related interest might be the so-called benefactive markers observed in Lolo-Burmese, Kachin, and Nungish (see, for example, Matisoff 1973b:327-30).

to decide with the limited data on hand. It is even difficult to decide if it should be attributed to the proto-language at all (recall the arguments for and against the inclusion of #te in the prototypical intransitive verb paradigm in section 4.1.6), since its incidence is fairly restricted even within the pronominalized languages. A clue that it had wider distribution comes out of the Limbu data where k'- can possibly be understood as filling a position originally occupied by #te, even though it derives from the 2nd person pronoun. The more widespread use of #te in the intransitive verb paradigms (cf. Figure 27), including languages lacking transitive verb affixes, however, argues for its longstanding position in both paradigms.

4.2.23. NUMBER MARKING

Number marking in the transitive paradigms is rather complex and the details vary greatly from language to language. Rather than enter into a full discussion, much of which would be speculative, I would prefer to concentrate on selected aspects of number morphology, the target being a general morphological characterization.

Figures 31 and 32 table information on the affixes appropriate for either a dual or plural subject with singular objects (3rd object in Figure 31 and 1st and

Figure 31: TRANSITIVE VERB AFFIXES: NON-SINGULAR SUBJECT WITH 3rd SINGULAR OBJECT

SUBJECT		3rd SINGULAR OBJECT						
		Kham	Chopang	Vayu	Bahing	Limbu	Jyarung	Rawang
1st	INCL.		-tayheu	-chik	-ca	a: <u>vb</u> sui		
	DL.	gin-					-tsh	-saw
	EXCL.		-yeu	-chok	-ouku	-ouige:		
	PL.		-tayhui	-ke	-ya	a: <u>vb</u> uim		
	EXCL.	ge-	-yeu	-kok	-ka	-uimbe:	-i	-i
2nd	DL.	jin-	-te- -ju	-chik	-ci	-ou:	te <u>vb</u> ntsh	e <u>vb</u> saw
	PL.	je-	-te- -ni	-ne	-ni	---	te <u>vb</u> n.	e <u>vb</u> niq
3rd	DL.	-ni	-cu	-chik	-ne	-ou:	wu-	-u
	PL.	-re	-ni	-me	-me	me: <u>vb</u> us	wu-	-u

Figure 32: TRANSITIVE VERB AFFIXES: NON-SINGULAR SUBJECT WITH 1st AND 2nd SINGULAR OBJECTS

SUBJECT		1st SINGULAR OBJECT					
	Khom	Chepaang	Vayu	Dubbing	Lambu	Jyarung	Rawang
2nd DL.	jin vb na	-te-na:ja	-poche	-yini	rik' vb ni	keu vb 0	e vb 8a
PL.	je vb na	-te-na:qna	-qono	-yini	rik'-	keu vb 0	e vb 8a
3rd DL.	-na-T-ni	-cu	-poche	-yini	-ni:	wu vb 0	e vb 0
PL.	-na-T-ro	-ni	-qono	-yini	me: vb ai:	wu vb 0	e vb 0

SUBJECT		2nd SINGULAR OBJECT					
	Khom	Chepaang	Vayu	Dubbing	Lambu	Jyarung	Rawang
1st DL.	gin vb ni	-qou	-β	-yeoi	-no:ci:ge:	ta vb n	-8i
PL.	ge vb ni	-qou	-β	-yemi	-a:ni:ge:	ta vb n	-1
3rd DL.	-ni-T-ni	-ou	-β	-yeoi	k'me: vb ai:keu vb n	0-	0-
PL.	-ni-T-ro	-ni	-β	-yemi	k'me: vb ai:keu vb n	0-	0-

2nd objects in Figure 32). A comparison of these two figures reveals that they are in part organized according to different structural principles. On the one hand the 3rd person object affixes are formed on a basis which recalls the intransitive verb affixes for these languages—in fact the two agreement systems are in most cases identical or nearly so. Note that this means that no specific marking is accorded the 3rd object. On the other hand, while the 1st and 2nd person objects (cf. Figure 32) predictably incorporate information as to the number of the subject (with the exception of *Jyarung*), they also mark the person of the object as well. So for *Vayu* -no*che*, -no indicates a 1st person object and -che a dual subject, irrespective of whether it is 2nd or 3rd.

In spite of the difference in object marking, both of these tables suggest the same type of system which underlies the intransitive set of affixes (cf. section 4.1.1); i.e. one which marks only the number of a non-singular subject. Number marking which is not tied to a particular noun or pronoun in a particular case is not truly an agreement phenomenon. I will here and subsequently refer to it as 'propositional number' since it simply indicates the multiplicity of any argument or the multiplicity of the event itself, as for the expression of repetition or iteration. Person information specific to the subject is

consequently regarded as secondarily introduced in those languages where it also is marked (cf. section 4.1.8).

Departures from this characterization occur to such a great extent that it should be considered an idealization, rather than a firmly established hypothesis as to how the common system actually looked. Note, in one particularly telling instance, that the plural #-i appears only rarely in the data (Rawang 1st plural→3rd, 1st plural→2nd and Jyarung 1st plural→3rd). In no case is it used to indicate a 2nd or 3rd plural. 2nd person plurals are typically indicated by a form incorporating a dental nasal (Chepang -ni, Vayu -ne, Bahing -ni, Jyarung -fi, and Rawang -nin) which contrasts with a 3rd person plural marker with a bilabial nasal in some languages (Vayu -me, Bahing -me, Limbu me:-). In other languages the 3rd plural may be marked by another affix (Kham -re, Chepang -ni) or it is not indicated at all (Jyarung and Rawang).

Those languages lacking a 1st plural marker in #-i are those which have elaborated an inclusive/exclusive distinction and have incorporated the #-i into an inclusive pronoun (Bahing -ya, Vayu -ke, Chepang -tayh; cf. section 3.2.22). The overall impression one gets is that the plural markers were very early or perhaps even originally distinguished for the person of the subject. Figure 33 might, then, present a truer picture

Figure 33:

PROTOTYPE OF NUMBER SPECIFICATION FOR
TRANSITIVE VERBS WITH SINGULAR OBJECTS

SUBJECT		OBJECT		
		1st	2nd	3rd
1st	DL.		-naši	-ši
	PL.		-nai	-i
2nd	DL.	-qaši		-ši
	PL.	-qani		-ni
3rd	DL.	-qaši	-naši	-ši
	PL.	-qai	-nani	-ni

of the morphological prototype.

On the other hand, the difficulties we have in reducing the synchronic languages to an acceptable common system could conceivably be taken as evidence that number marking in the transitive verb developed independently in the languages or groups which exhibit it, though from a common framework described by the intransitive verb agreement affixes.

4.2.24. PERSON MARKING FOR THE TRANSITIVE SUBJECT

The difference between #ni and #mi as 2nd and 3rd plural markers respectively is limited to Eastern Himalayish. Earlier (cf. section 3.2.232) it was shown that ni could in all probability be derived from na + i; #na, of course, representing the 2nd person pronoun.¹²⁵ Note that #mi may be similarly derived from a paralleling sequence #ma + i, though #ma cannot be positively identified morphemically. Notice, however, that a similar element does show up in certain other languages with either a restricted 3rd plural reference (Chepang 3rd plural pronoun ʔo-man), a generalized pronominal marker (Tiddim -maʔ, Lushai

¹²⁵ Chepang offers additional support for this proposed derivation of #ni in the difference which exists between the 2nd plural intransitive verb affix -te -y and a corresponding transitive form -te-ni. This language, thus, maintains both forms, with #i being given historical priority because of its position in the intransitive verb.

-ma), or a plural marker (Kachin 3rd plural→1st singular descriptive present -nme, -māwe). Another possible etymology for #mi could be PTB *miy 'man, person'. Its use only in the plural could be explained from the observations that the singular position in the verb paradigm seems to be more resistant to replacement and that the 2nd plural -ni could provide an analogical model.

Other specific methods used to introduce person information referencing the transitive subject include the direct incorporation of the appropriate pronoun. Limbu, for example, in 2nd dual→1st singular has elaborated a form a:k' vb si: equivalent to '1st person object + 2nd person subject + verb + dual subject'. The same form in Kham is jin vb na '2nd dual subject + verb + 1st object'. Jyarung has adopted another procedure which varies the #te morpheme; for example, a 2nd person subject can be marked by kəu- or tə-, 1st person by ta-, and 3rd person by teu-, all while keeping intact the essential meaning of #te as an orientation marker.

In addition certain changes have progressed in the dual markers of some languages to make them uniquely specify a particular subject. So for Bahing, the dual marker -sa is appropriate only for an inclusive subject, -si for 2nd person, and -se for 3rd; and for Limbu, -su: for 2nd person and -cu: for 3rd (all of

these forms for a 3rd singular object). Rawang has modified its dual affix for the opposite purpose of marking a distinction for the person of the object, -ša for 1st person, -ši for 2nd, and -saw for 3rd (all of these forms for any dual, non-3rd person subject). It is important to realize that these modifications are internal to the history of a particular language and not traceable to a common source.

4.2.25. NON-SINGULAR TRANSITIVE OBJECTS

Problems of specifying a common pattern of number marking are multiply compounded when non-singular objects are considered. Many of the observed phenomena are quite clearly language specific and of no great use for reconstructing a prototype, lacking, as we do, a detailed knowledge of their histories. The complexity can be illustrated briefly from Rawang where the affix -niŋ is used to mark 1st-2nd plural, 3rd (except dual) ->2nd plural, 2nd plural->3rd. It is clear enough that -niŋ is being used to mark a 2nd plural irrespective of its subject or object status. In its etymology it is also quite clearly a 2nd person form. The difficulties of interpretation arise when the paradigm itself is to be justified. Figure 30, for instance, recorded the information that the relation 1st singular ->2nd singular was -ŋ, a 1st person form. When, then,

does the relation 1st singular-2nd plural utilize a 2nd person form? There is an expressed variation in the relation 1st plural-2nd plural--either -niq (2nd) or -i (1st)--which suggests that the decision to use either a 1st or 2nd person affix is variable. We have the substantiating evidence that the relation 2nd plural-1st singular or plural does not make use of -niq as might be expected, requiring instead the form -ša which is properly a dual marker. Why a dual should be used to mark a singular or a plural object is itself another facet of what seems to be an unattainable single solution to number marking.

I earlier proposed that number marking was propositionally related (cf. section 4.2.23) in accounting for why the prototype intransitive verb paradigm did not distinguish person markers for non-singular numbers. With an intransitive verb there would, of course, be no particular difficulty in specifying exactly how many referents were intended. With a transitive verb, however, such a specification is more problematic, since the actor participants and the patients-(objects) can both be non-singular. Working with a system which explicitly recognizes only singular persons, then, it is possible that a number marker may be interpreted as referring to either the subject or object, or, in some additive way, to both.¹²⁶

Different languages appear to have set themselves into one or another of the possible patterns. Kham, for instance, has a dual marker -ni and a plural (for 3rd person) -ra. With either a 1st or 2nd person subject, -ni is used only when the subject is singular and the object is dual (1st singular→3rd dual nani-, 2nd singular→3rd dual neni-). In all other cases of a non-singular 3rd person object -ra is used instead; including 1st dual→3rd dual ginra- and 2nd dual→3rd dual jinra-. In other words, when there are two referents included in the object the dual affix is used, unless the subject is likewise non-singular. In the latter case the number of subject referents is presumably added to the number of object referents to reach a number of total participants for which it is appropriate to use only the plural marker, not the dual.

It was for reasons of this kind that the concept of propositional number was advanced. It can be inferred from the divergent behavior expressed with the two foregoing examples that this concept is primarily useful as a cover term for principles of organization which can differ from language to language; the common denominator being that number marking is appropriate

126 James Matisoff has called my attention to a Lahu auxiliary verb mâ which, depending on the syntactic status of the verb it occurs with, can be interpreted as referencing either a plurality of subjects (cf. cay mâ 'many (people) go') or a plurality of objects (cf. šī mâ 'know much').

not just to a particular case role but to the event considered as a unity. The possibilities of uncovering the organization of number marking in all the languages with transitive verb affixes differ substantially with the source. The opportunity to realize these possibilities, however, was passed over as being only of marginal relevance to the goal of discovering a common morphological pattern.

4.3. THE SPLIT-ERGATIVE PROTOTYPE OF THE PRONOMINALIZED LANGUAGES

The two opposing values of affixation pattern, discrete and syncretic, outlined and exemplified in Chapter 2 can now be examined more precisely against the background of the set of PTB roots arrived at in Chapter 3 and the notions of transitivity type developed earlier in the present chapter. The discrete type is easy enough to specify as one which marks the subject and object, each by separate affixes located at different points in the verb complex, as in Kham. Allowance must be made for number marking as propositional rather than role oriented, however. The syncretic type represents the terms of a transitive relation, X-Y, as seemingly fused into a single affix, at least from the traditional perspective of subject/object agreement. Arguing from a different platform, however, the fused affix theory will yield to a more

convincing interpretation.

The data of Figure 30 which includes information pertaining to the relations of singular subjects to singular objects was set out under the headings of subject agreement. This schema predicts well enough the marker found when the object is 3rd person; i.e. we get only subject agreement. All the languages have some *na reflex for 1st-3rd. The 3rd-3rd relation would presumably also be interpreted as showing subject agreement, in the form #1.

However, in cases where the object is non-3rd we get instead agreement for the object rather than the subject in the great majority of cases. Part of the data of Figure 30 is retabled in Figure 34 to better show this pattern. Note first of all that with a 1st person object the two forms (2nd and 3rd subjects) are in several cases identical or nearly identical to one another (Chepang, Bahing, Vayu, Rawang, and Nocte), while in others some derived 2nd person and/or 3rd person marker disambiguates the two relations (Limbu, Kham, and Jyarung). In most cases the 1st person object is marked by a *na related form, though not invariably. Limbu, for example, uses -a:, presumably from underlying ana:; Kham a form -na (cf. 2nd person object -ni) which may be directly from na or some other source; and Bahing -yi which presumably derives from an extension of the inclusive pronoun.

Figure 34: OBJECT AGREEMENT IN TRANSITIVE RELATIONS
WITH 1st OR 2nd PERSON OBJECTS

	1st OBJECT		2nd OBJECT	
	2nd → 1st	3rd → 1st	1st → 2nd	3rd → 2nd
Kham	ne <u>vb</u> na	-na-T-o	na <u>vb</u> ni	-ni-T-o
Chepang	-ta:ŋ	-ta:ŋ	-na:ŋ	-te
Bahing	-yi	-yi	-na	-ye
Vayu	-ŋo	-ŋo	-nu	-ø
Limbu	k' <u>vb</u> a:	-a:	-ne:	k'-
Jyarung	kəu <u>vb</u> ŋ	wu <u>vb</u> ŋ	ta <u>vb</u> n	tau <u>vb</u> n
Rawang	e <u>vb</u> ŋa	e <u>vb</u> ŋ	-ŋ	e-
Nocte	-haŋ	-haŋ	-e	-ho

The 2nd person object affixes again show 2nd person agreement, but, interestingly, the 3rd+2nd relation is typically marked by some derived 2nd person affix, and thereby differs from the use of *na forms in the 1st+2nd relation. Why 2nd person objects should disambiguate 1st from 3rd subjects, while 1st person objects neutralize any indication of subject is not clear. It is important to realize though that the prototype 2nd person object system suggested by the data is similar to the 1st person object. We have specific indication of this in Kham -ni and Jyarung -n, which are used to mark 2nd person object, irrespective of the subject.¹²⁷ The prototype system of transitive agreement may, therefore, be sketched as in Figure 35.

Notice that the system described by Figure 35 is split in transitivity type. If the object is non-3rd, agreement occurs as in an ergative language, i.e. for the object; with a 3rd object, however, agreement occurs as in an accusative language, i.e. for the subject. It is this split-ergative system which underlies the conception of most of these languages as syncretic in affixation pattern. Syncretic, in terms of a split-ergative pattern, means that the affixes take account not so much of subject and object, but of

¹²⁷ The subject is identified by the use of an explicit subject marker in Kham and by a discrimination of the #te morpheme in Jyarung (teu- < te + u ?).

Figure 35:

PROTOTYPE TRANSITIVE VERB AGREEMENT SYSTEM:
SINGULAR SUBJECT AND OBJECT

SUBJECT	OBJECT		
	1st	2nd	3rd
1st		-na	-qa
2nd	-qa		-na
3rd	-qa	-na	-u

case roles, and whether a particular case role is filled by a 3rd or non-3rd pronoun. A discrete system marks only the syntactic categories of subject and object, irrespective of case roles.

Kham, which was the major exemplar of a discrete system, was earlier shown to exhibit a split-ergative pattern in its case markers (cf. section 4.2.12). Its affixation pattern, however, since it marks both subject and object irrespective of case, is discrete. The mismatch or lack of concord between the case marking system and the agreement system in respect to transitivity type also characterizes other languages. Vayu, for instance, was shown to be strictly ergative in case marking, but is demonstrably split-ergative in agreement marking.

Though we can be fairly sure of the transitivity typology of Kham and Vayu for both the case and agreement systems, other pronominalized languages exhibit enough variety in their morphology to make clear-cut typological decisions difficult.

4.3.1. SPLIT-ERGATIVE AGREEMENT AND MIXED CASE SYSTEMS

Several languages—Jyarung, Nocte, and Rawang—all demonstrate mixed case systems, i.e. they have both an ergative and accusative marker. The evidence for Rawang and Nocte was presented earlier in (8) and

(9), where single sentences manifested both markers. Jyarung is not as neat. Case marking is not specifically discussed by Chin et. al. (1957-1958) for the Suo-mo dialect, but Chin (1949:274-5) describes both an ergative marker -ka (cf. Tibetan -kyis) and an accusative marker -ko (cf. Burmese kou) for the Tsa-kou-nao dialect. Chin describes the function of both of these markers as emphasizing or focusing their respective nouns. The use of both an ergative and accusative marker suggests a mixed transitivity type, but, unlike Rawang and Nocte, no sentence is given which employs both markers simultaneously. This may simply be a gap in the data however.

Jyarung presents further difficulties to the characterization of its agreement system. On the one hand, it retains the markers for 1st and 2nd person patients characteristic of the split-ergative type---n (1st), -n (2nd). On the other hand, it has elaborated more than any other language the prefixal system, of which #te was the original member, to create forms which uniquely distinguish the agent of a transitive verb--2nd+1st keu-, 3rd+1st wu-, 1st+2nd ta-, 3rd+2nd tau-. The problem is how to construe these prefixes categorially. Do they actually represent person information or do they maintain their original directional or orientational information? Under the first interpretation we would expect that a 3rd agent would be

expressed by a single morpheme, irrespective of the patient, but we see in the forms above that this is not the case.¹²⁸ It seems, therefore, that the pre-fixes are for the most part still used with their original meaning and that the agreement type should be specified as split-ergative rather than as subject-object (discrete), although the language appears to be completing a change to the latter type.

Rawang in some respects also seems to be transitional in its agreement type. Notice from Figure 34 that, while its 1st person object forms are marked for 1st person, the affix marking the relation 1st→2nd, -n, is also a 1st person form, when, from the prototype (cf. Figure 35), 2nd person -n would be expected. The relation 3rd→2nd, e-, is equivocal. The e- may have extended to a 2nd person meaning, although the use of e- for the 3rd→1st relation indicates that it still retains its original #te related meaning. It thus seems probable that Rawang has a split-ergative system at variance with the 1st/2nd versus 3rd person dichotomy discussed earlier. Only transitive relations with a 1st person object are ergative while 2nd or 3rd objects are accusative in agreement, i.e. they show agreement for the subject rather than the object.

128 The -u element of teu- (3rd→2nd) may be related to wu- (3rd→1st), but notice that it also appears in kəu- (2nd→1st) where there is no 3rd person referent.

4.3.2. SUBJECT-OBJECT AGREEMENT AND MIXED CASE SYSTEMS

Chepang was earlier shown to be mixed in its case marking system (cf. sentence (6) above) and its affixation pattern was typologized as syncretic (cf. Figure 5). This classification holds true enough if just the affixes per se are considered. However, in functional perspective, Chepang was shown to have two sets of transitive affixes, one for agent focus the other for goal (patient) focus (cf. Figure 30) which when united constitute for the language as a whole an agreement system marking both subject and object. Caughley (1971) provides no discussion of the contexts appropriate for choosing one or the other agreement paradigms.

At this point of the classification, it seems correct to include both Lushei and Kachin. The transitive agreement systems of these languages were laid out in Figure 6 with the aim of showing them to be discretely marked. Strictly speaking, object agreement in Kachin pertains only to what Hanson (1896:51-2) calls the "descriptive present" tense, while the Lushei object affixes appear to be in general use irrespective of tense.

In respect to case marking Kachin has two optionally used postpositions: gaw which marks the agent of a verb and, phe (or phe gaw) which marks the

22

sentence object.¹²⁹ Hanson (1896:27) states that in general the object noun is discernable by its position in the sentence. Lushei is less obviously mixed, since it totally lacks an accusative case marker, although its 1st person pronoun distinguishes ergative from accusative forms—keima in (ergative), keima min (accusative). This hints that perhaps a change is underway from an ergative to mixed type, and for this reason Lushei is classified as mixed.

4.3.3. SUBJECT AGREEMENT AND SPLIT-ERGATIVE CASE SYSTEMS

One last type has been generalized from the data. This alignment pairs a split-ergative case system with simple subject agreement, and characterizes both Kanauri and Tiddim.

Bailey (1909:665) describes Kanauri with an agent (ergative) case marker -s which typically does not occur with 1st and 2nd person pronouns (though this "is not strictly adhered to") but which is used with

¹²⁹ According to James Matisoff (personal communication) gaw is a topicalizer rather than an ergative case marker. This explains why the form phe gaw is a legitimate alternative to the accusative postposition phe (actually phé?). It represents a topicalized object. This interpretation indicates another, still largely unexplored facet to the problem of specifying how case systems operate, especially in mixed languages with optional markers (cf. for example, Hope's (1973) treatment of 'subject' and 'object' in Lisu).

3rd person in past tenses. Henderson's description of Tiddim is not explicit on the pronominal occurrence of the ergative marker (Henderson's "subject phrase final particle" (43)) in although, since all of the examples given are with 3rd person or nominal forms, it may be concluded that it does not occur with 1st and 2nd persons. Both of these languages, therefore, appear to exhibit split-ergative case systems. Their agreement markers have been charted in Figures 26 and 27; neither of them productively marks objects.

4.3.4. CHANGE OF TRANSITIVITY TYPE

The preceding discussion with its typological assessment of the transitivity types of the pronominalized languages is summarized in Figure 36 which pairs each one's agreement and case systems.¹³⁰

The most interesting aspect of Figure 36 is the manner in which the co-occurrence possibilities lay themselves out to form a stepwise sequence from strict ergative to strict accusative case marking systems. It is possible to interpret this sequence as the path which a language must traverse in making the change from ergative to accusative type. Under this hypothesis, the agreement system might be construed as

¹³⁰ Certain of the pronominalized languages were not included because of incomplete data. These are Limbu, Bunan, Bahing, and Manchari.

mediating the changeover of the case marking system.

A need for caution arises from the fact that under this hypothesis the verb morphology is relegated to a subservient function, motivated and controlled by 'teleological' forces directed toward a goal of accusativity.¹³¹ It thus carries the corollary that so-called intermediate transitivity types lack an essential unity. In the next section this corollary will be challenged by demonstrating the plausibility of a categorial description proper and unique to the agreement systems observed in TB. This demonstration, of course, does not prove or disprove the idea of sequentiality toward an accusative goal, but it does effectively disprove the claim that the verb morphology serves no other than this purpose.¹³²

It is hoped that the following discussion will also clarify the important issue of why there are no examples of accusative or ergative agreement in Figure 36 and whether these gaps should be understood

131 "Teleological" may be too strong a term. The recognition given to the notion of linguistic drift (Sapir 1921) and recent attempts to systematize the notion (Lakoff 1972, Vennemann 1974) could provide another account of why changes of transitivity type are occurring in TB.

132 In most theories of general linguistics all elements of a language's structure should be understandable and systematically describable in terms of a set of parameters proper to it alone. The presence of ordered structure implies necessarily the presence of an organizing principle and this in turn implies a synchronic stability to the structure.

as accidental or systematic.

4.4. THE SPEECH PARTICIPANT CATEGORY

With the preceding section the descriptive analysis of TB pronouns and pronominal morphology is complete. Throughout the discussion various hypotheses have been advanced in order to integrate the data of all the pronominalized languages. A comparative approach led to the proposal of a rudimentary form of verb morphology at the level of PTB and a discussion of the morphemic elements composing that structure. Much discussion was given over to the idea that these basic elements underwent changes of their categorial status in different languages--the development of the inclusive/exclusive distinction from demonstratives being one example.

It was also expedient to propose some, strictly speaking, non-pronominal categories such as speaker-hearer orientation to the verbal proposition and propositional number to deal adequately with verb morphology. Lastly, the affixation patterns and the case morphologies of various languages necessitated an elaboration of the category of transitivity type beyond the traditionally recognized membership of the ergative and accusative types.

In the following pages I propose that many, if

not most, of these findings may be expectable developments in languages which utilize a natural distinction in the person category, one which separates 1st and 2nd persons as the participants of the speech act from 3rd persons, who lie outside of the speech event itself.¹³³ The claim is that all pronominalized TB languages operate with the participant distinction.

We have direct evidence of the participant distinction in the languages with either split-ergative case or affix systems (cf. Figure 36). Recall that these languages typically treat 1st and 2nd persons differently from 3rd. For instance, 3rd person is unmarked among the transitive verb affixes of Vayu, Bahing, Jyarung, and Nocte unless both terms of the transitive relation are 3rd persons. The same applies to Chepang in its object focus paradigm. Kham, though exhibiting subject-object agreement, nevertheless specifically marks 3rd person at a point different from 1st or 2nd (e.g. 1st singular+3rd dual ŋa-ni vb , 1st singular+2nd dual ŋa vb cin , 3rd singular+1st singular vb na- -o). And, in those languages with split-ergative case systems, 1st and 2nd persons are

133 This distinction is natural from the standpoint that the 1st and 2nd person are strictly deictic terms, the referent being appropriately determined by the demands of the speech act itself. The 3rd person, however, is anaphoric, referencing a particular entity whose identity will not switch simply because of the interchange of a speech act (Benéviste 1971).

marked differently from 3rd, in agent or subject position. Most, if not all, of the pronominalized languages, therefore, recognize the distinction overtly. Of course, the distinction is morphologically leveled in those languages which are straight ergative or accusative, though even here the strong tendency for displacements to occur in 3rd person—arguing for its differential instability with respect to 1st and 2nd persons—provides evidence of the covert action of the distinction.

Notice, now that every pronominalized language, irrespective of whether it possesses transitive or only intransitive agreement, at some point of its morphology specifically marks the participant distinction (cf. Figure 36). The gaps seen in Figure 36 (indicated by dotted lines) may thus be understood as systematic, not accidental; that is, accusative and ergative type agreement patterns are precluded by the fact that they would completely obscure the participant distinction, since all three traditional persons would be treated equally. Notice that object agreement is also excluded, possibly because a split-ergative case system always seems to split in the subject or agent position making it the unmarked position, in contrast to the accusatively marked object. The most likely type of agreement would therefore index the subject, rather than the object.

Under the proposed reinterpretation of the traditional person category, 1st and 2nd person are set in mutual opposition to one another in a paradigm definable with only these two terms. It might be expected, therefore, that certain other distinctions fundamentally based on or implying the separateness of just these two persons would arise. The #te morpheme may represent such a distinction, since its core meaning seems to specifically reference the progress or situation of the verbal event as unrelated to the speaker. Notice, however, that #te is still not appropriate to 2nd and 3rd persons but only to 2nd. It is difficult to fathom why this should be so in the circumstance of a paradigmatic opposition which included 1st, 2nd and 3rd persons, since two of the members of the opposition would be unmarked for orientation.

Another compelling argument hinges on the fact that in many languages 3rd person or demonstrative elements exert a strong influence on 1st or 2nd person, especially 1st. These influences suggest again that 1st and 2nd persons are conceived of as a unit exclusive of 3rd, but that a proportionality of features exists between these two units, as indicated in Figure 37. This Figure proposes a close conceptual association between the 1st person and the proximal demonstrative and, likewise between 2nd person and the distal demonstrative.

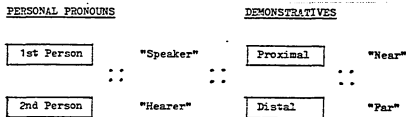


Figure 37: SEMANTIC FEATURES RELATING THE SPEECH PARTICIPANT AND DEMONSTRATIVE CATEGORIES

With this schema it is possible to account for the development of the inclusive/exclusive distinction on the demonstrative model. The proximal demonstrative nearly always shapes the inclusive and the distal demonstrative the exclusive pronouns (cf. section 3.2.22). This must occur on the basis of "near" defining a conjunction of 1st and 2nd persons and "far" a conjunction of 1st and 3rd persons, which is probable enough if the notion of speech participant is a real category.

It may be recalled, however, that a few languages exhibited instead of inclusive #i and exclusive #u, the opposite; for example, Kanauri inclusive dual ka:šōŋ, exclusive dual niši. We may account for this pattern not on the basis of the proportionate formation of the inclusive/exclusive on analogy with the demonstratives, but by the association of the distal demonstrative with the notion of "hearer". The inclusive notion in these languages, therefore, emphasizes the opposition in the speech participant category, "far" here being understood as involving the 2nd person. The exclusive pronoun is probably not based on the demonstrative notion at all, but simply reflexes the prototype number markers, dual -ši, plural -i.

Other interrelationships of 3rd person and speech participants are also indicative of the reality of the split in the person dimension. For one thing the high frequency of zero forms for the 3rd person and the

corresponding reliance put on demonstratives as well as the rich variety of 3rd person pronouns in those languages which maintain one, suggest the tenuousness of the category morphologically. The separateness of 3rd person can be looked at as facilitating the outright substitutions of 1st person by 3rd person forms which have taken place in several languages, especially in the Naga branch (cf. section 3.3.31). If 3rd person was conceived of as a co-equal member of the person category with 1st and 2nd person, such substitutions would be highly unlikely, since they would involve a synchronic, semantic overlap in the paradigm, producing communication difficulties. No confusion is necessarily entailed by a system which treats 3rd person as outside of the person dimension, but related to it via shared features of an overriding spatial deixis system (cf. Figure 37).

The construct of propositional number elaborated earlier (cf. section 4.2.23) also has its underlying rationale in the speech participant distinction. If it is true that only the speaker and the hearer(s) are important in this distinction, then non-singular numbers of 1st and 2nd person are going to be difficult to reference without mixing the information of the speaker-hearer with outside information of non-speaker-hearers. There can be only a single speaker; a 1st person dual or plural necessarily references

others besides this single speaker, but rather than indicating this conjunction of referents with a personal form, only a number marker seems to have been used in the proto-language (cf. Figures 28 and 33). The further elaboration of inclusive and exclusive forms specified which referent, 2nd or 3rd, was being associated with the speaker. In 2nd person, the non-singular forms are potentially ambiguous as including either more than one hearer or just a single hearer in conjunction with other 3rd persons. This distinction, however, is never morphologically marked in TB, though, since it admits the possibility of more than a single hearer, it could have acted to produce the very common -ni 2nd plural forms which properly include both person and number information.

A last, isolated instance of the speech participant distinction involves the use of the Lahu benefactive markers lâ and pi[^], the former appropriate for "action impinging on a non-third person" (Matisoff 1972:324) while the latter indicates only 3rd person beneficiaries.

The indications of the appropriateness of the proposed speech participant category to TB are therefore numerous, extending even to non-pronominalized languages. This clearly puts the hypothesis on a sound footing. It furthermore lends independent support to the claim that the verb morphology of the

pronominalized languages is deserving of an explanation based on the internal history of the family, since such morphology has been elaborated on this categorial framework.

APPENDIX: THE PRONOMINALIZED LANGUAGES--PRONOUNS
AND PRONOMINAL MORPHOLOGY

	<u>Page</u>
Bahing	267
Bunan	271
Chepang	273
Jyarung	276
Kachin	278
Kanauri	280
Kham	282
Limbu	286
Lushei	290
Manchati	291
Nocte	292
Rawang	294
Tiddim Chin	299
Vayu	301

(lacking in numbering only)

BAHING

	INDEPENDENT PRONOUNS		INTRANSITIVE VERB AFFIXES			
	NOM.	POSS.	PRES./FUT.	PAST	IMPER.	
1st SG.	go	wa, wake	-ŋa	-u ^a	-ti	
DL. INCL.	go:si	i:si, i:sike	-sa	-isa	-tasa	
DL. EXCL.	go:suku:	wa:si, wasike	-suku	-isuku	-tasuku	
PL. INCL.	go:i	ike, ikke	-ya	-iya	-ntayo	
PL. EXCL.	go:ku	wake, wakke	-ka	-ika	-ktako	
2nd SG.	ga	i, ike	-ye	-i	-te	-wo
DL.	gasi	i:si, isike	-si	-isi	-tasi	-se
PL.	gani	i:ni, i:nike	-ni	-ini	-ntani	-ne
3rd SG.	hara	a:, a:ke, haremke	-ŋ	-a	-ta	
DL.	harendausi	s:i:si, asike, harendausike	-se	-ise	-tase	
PL.	harenda	ani, anike, harenda	-me	-ime	-ntame	

^a The forms in this column are used with so-called 'neuter' verbs in stem final -to.

BAHING

TRANSITIVE VERB AFFIXES: PRESENT/FUTURE

		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
1st SUBJECT	SG.	-na	-nasi	-nani	-ŋa	-ŋasi	-ŋani
	DL. INCL.	-yesi	-sici	-nisi	-sa	-sasi	-sani
	EXCL.	-yesi	-sici	-nisi	-suku	-sukusi	-sukumi
	PL. INCL.	-yemi	-simi	-nimi	-ya	-yasi	-yami
	EXCL.	-yemi	-simi	-nimi	-ka	-kasi	-kami

		1st OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
2nd SUBJECT	SG.	-yi	-siki	-ki	-(y)i	-(y)isi	-(y)imi
	DL.	-yisi	-sikisi	-kisi	-si	-sisi	-simi
	PL.	-yini	-sikini	-kini	-ni	-nisi	-nimi

		1st OBJECT				
		SG.	DL. INCL.	EXCL.	PL. INCL.	EXCL.
3rd SUBJECT	SG.	-yi	-so	-siki	-so	-ki
	DL.	-yisi	-sosi	-sikisi	-sosi	-kisi
	PL.	-yimi	-somi	-sikimi	-somi	-kimi

		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
3rd SUBJECT	SG.	-ye	-si	-ni	-wa	-wasi	-wami
	DL.	-yesi	-sisi	-nisi	-se	-sesi	-semi
	PL.	-yemi	-simi	-nimi	-me	-mesi	-mami

BAHING

TRANSITIVE VERB AFFIXES: PAST

		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
1st SUBJECT	SG.	-ntana	-ntanasi	-ntanani	-toq	-toqsi	-toqmi
	DL. INCL.	-tesi	-tasisi	-ntanisi	-tasa	-tasasi	-tasami
	DL. EXCL.	-tasi	-tasiki	-ntaniki	-tasuku	-tasukusi	-tasukumi
	PL. INCL.	-temi	-tasimi	-ntanimi	-ntayo	-ntayosi	-ntayomi
	PL. EXCL.				-ktake	-ktakosi	-ktakomi

		1st OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
2nd SUBJECT	SG.	-ti	-tasiki	-ktaki	-pteu	-tasi	-ntani
	DL.	-tasi	-tasikisi	-ktakisi	-pteusi	-tasisi	-ntanisi
	PL.	-tini	-tasikini	-ktakini	-pteumi	-tasimi	-ntanimi

		1st OBJECT				
		SG.	INCL. DL.	EXCL. DL.	INCL. PL.	EXCL. PL.
3rd SUBJECT	SG.	-ti	-taso	-tasiki	-taso	-ktaki
	DL.	-tisi	-tasosi	-tasikisi	-tasosi	-ktakisi
	PL.	-timi	-tasomi	-tasikimi	-tasomi	-ktakimi

		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
3rd SUBJECT	SG.	-te	-tasi	-ntani	-pta	-ptasi	-ptami
	DL.	-tesi	-tasisi	-ntanisi	-ntase	-taseisi	-taseami
	PL.	-temi	-tasimi	-ntanimi	-ntame	-ntamesi	-ntameami

BAHING

		REFLEXIVE AFFIXES		
		PRES./FUT.	PAST	IMPER.
1st	SG.	-siya	-sti	
	DL. INCL.	-sca	-stasa	
	DL. EXCL.	-scuku	-stasuku	
	PL. INCL.	-siya	-stayo	
	PL. EXCL.	-sika	-stako	
2nd	SG.	-se	-ste	-so
	DL.	-sci	-stasi	-sce
	PL.	-sini	-stani	-sine
3rd	SG.	-se	-sta	
	DL.	-sce	-stasa	
	PL.	-sini	-stame	

- TRANSITIVE IMPERATIVES						
1st OBJECT			3rd OBJECT			
	SG.	DL.	PL.	SG.	DL.	PL.
SG.	-yi	-siki	-ki	-wo	-wosi	-womi
DL.	-yisi	-sikisi	-kisi	-se	-sesi	-semi
PL.	-yini	-sikini	-kini	-ne	-nesi	-nemi

BUNAN

INDEPENDENT PRONOUNS

		NOMINATIVE	POSSESSIVE
1st	SG.	gyi, ingi	gyii
	DL. INCL.	eraq, eraqeraq	
	DL. EXCL.	hiq, hiqraq	hiqi
	PL. INCL.	eraqji, eraqeraqji	hiqji
	PL. EXCL.	hiqji, hiqraqji	
2nd	SG.	han, hanini ini[resp.], iniini[resp.]	hangyi
	DL.	hanyiispi, hanininyispi	
	PL.	hanji, haniniji	
3rd	SG.	tal, talinzi	talgyi, tai
	DL.	talnyispi, talinzinyispi	
	PL.	talji, talinzi	

BUNAN

VERB AFFIXES^a

		PRES.	FUTURE	IMPERFECT	PERFECT	IMPERATIVE
1st	SG.	-g	-kata	-kiza	-kita	
	DL./PL.	-g	-katæg	-ithsa	-ithaig	
2nd	SG.	-na	-katana	-zana	-tana	-a
	DL./PL.	-gni	-kathadni	-thsani	-thadni	-ni
3rd	SG.	-re	-kata	-za	-ta	
	DL./PL.	-re, -gre	-kathad	-thsa	-thad	

^a Bunan also has a verb suffix -ku which indicates a 1st person object.

CHEPANG

		INDEPENDENT PRONOUNS	INTRANSITIVE VERB AFFIXES	
			POSITIVE	NEGATIVE
1st	SG.	ne:	-ŋ	-ŋa
	DL. INCL.	ŋici, nici	-tayhca	-tayhca
	DL. EXCL.	ŋici, nici	-ŋca	-ŋca
	PL. INCL.	ŋi	-tayhi	-tayhi
	PL. EXCL.	ŋi	-ŋi	-ŋi
2nd	SG.	na:ŋte	-te	-te
	DL.	niŋjite	-te- -ja	-te- -ja
	PL.	niŋte	-te- -y	-te- -ʔi
3rd	SG.	ʔo	-β	-β
	DL.	ʔonis	-ca	-ca
	PL.	ʔolan, ʔoman	-i, -y	-ʔi

CHEPANG

TRANSITIVE VERB AFFIXES -- AGENT (SUBJECT) FOCUS

		2nd or 3rd OBJECT				1st, 2nd, or 3rd OBJECT	
1st SUBJECT	SG.		-ŋ	3rd SUBJECT	SG.		-w
	DL. INCL.		-tayhcu		DL.		-cu
	DL. EXCL.		-ŋcu		PL.		-ni
	PL. INCL.		-tayhmi				
	PL. EXCL.		-ŋsu				

		1st OBJECT	3rd OBJECT
2nd SUBJECT	SG.	-tena:ŋ	-te- -w
	DL.	-tena:ŋja	-te- -ju
	PL.	-tena:ŋsa	-teni

CHEPANG

TRANSITIVE VERB AFFIXES -- GOAL (OBJECT) FOCUS

		2nd or 3rd SUBJECT
1st OBJECT	SG.	-ta:ŋ
	DL. INCL.	-tayhca
	DL. EXCL.	-ta:ŋca
	PL. INCL.	-tayhi
	PL. EXCL.	-ta:ŋi

		1st SUBJECT	3rd SUBJECT
2nd OBJECT	SG.	-na:ŋ	-te
	DL.	-na:ŋja	-te- ja
	PL.	-na:ŋsa	-te- y

		1st SUBJECT					2nd or 3rd SUBJECT
		SG.	DL.	EXCL.	PL.	EXCL.	
3rd OBJECT	SG.	-ŋ	-tayhcu	-ŋcu	-tayhni	-ŋsu	-thay, tha:
	DL.	-ŋcu	-tayhcu	-ŋcu	-tayhni	-ŋsu	-tha:ca
	PL.	-ŋsu	-tayhcu	-ŋsu	-tayhni	-ŋsu	-tha:sa

JYARUNG

		INDEPENDENT PRONOUNS		INTRANSITIVE VERB AFFIXES ^c	CAUSATIVE VERB AFFIXES
		NOM.	POSS. ^a		
1st	SG.	ŋa	ŋə	-ŋ	
	DL. INCL.	nd̄ə	nd̄ə	-t̄š	
	DL. EXCL.	nd̄ə	nd̄ə		
	PL. INCL.	yo	yi	-i	
	PL. EXCL.	ŋəfiɛ	yi		
2nd	SG.	no	nə	to <u>vb</u> r ^b	to <u>vb</u> u ^b
	DL.	ŋand̄ə	nd̄ə	to <u>vb</u> nt̄š	
	PL.	fi	fi	to <u>vb</u> fi	
3rd	SG.	mə	wə	-ŋ	-u
	DL.	m̄and̄ə	nd̄ə	ke-	wu-
	PL.	m̄afiiɛ	fi	ke-	wu-

^a The possessive forms all have variants terminating in final -i, replacing the vowel listed.

^b These forms are also recorded as imperatives.

^c Strictly speaking the forms listed here are appropriate for only vowel final verb roots (excluding -i). After any root-final consonant the suffixes of the 2nd and 3rd singular are lost. Certain morphophonemic changes also occur after stop and nasal root-finals.

JYARUNG

TRANSITIVE VERB AFFIXES

		3rd OBJECT				3rd OBJECT				3rd OBJECT	
		SG.				SG.				SG.	
1st SUBJECT	SG.	-ɔ		2nd SUBJECT	SG.	te-		3rd SUBJECT	SG.	-u	
	DL.	-tɕh			DL.	te <u>vb</u> ntɕh			DL.	wu-	
	PL.	-i			PL.	te <u>vb</u> n			PL.	wu-	
		1st SUBJECT		2nd SUBJECT		3rd SUBJECT					
		SG.		SG.		SG.					
1st OBJECT	SG.			keu <u>vb</u> ɔ		wu <u>vb</u> ɔ					
	DL.			keu <u>vb</u> tɕh		wu <u>vb</u> tɕh					
	PL.			keu <u>vb</u> i		wu <u>vb</u> i					
2nd OBJECT	SG.	ta <u>vb</u> n				tau <u>vb</u> n					
	DL.	ta <u>vb</u> ntɕh				tau <u>vb</u> ntɕh					
	PL.	ta <u>vb</u> n				tau <u>vb</u> n					

KACHIN

		INDEPENDENT PRONOUNS		DESCRIPTIVE PRESENT AFFIXES	
		NOMINATIVE	POSSESSIVE	SUBJECT	OBJECT
1st	SG.	ṅai, ṅaw ^a	nye:, ṅaia	-we	-miai
	DL.	an	ana, anlākhawṅa		
	PL.	anthe: i, ithen ^b	anthe:a	-gaai ^d -ṅawai ^e	-mi, -miai
2nd	SG.	naṅ, niṅ ^c	na, naa	-wuai	-deai, -diai
	DL.	nan	nana, nanlākhawṅa		
	PL.	nanthe: ni, nitheṅ ^b	nanthe:a	-miai	-mādega, -mādeai
3rd	SG.	ṅi, khyi	ṅia	-wuai	-weai
	DL.	ṅan	ṅana, ṅanlākhawṅa		
	PL.	ṅanthe: khanthe:, ṅantheṅ, ṅanni ^b	ṅanthe:a		-nnea: ^f -māwe ^g -muai ^h

- ^a Used adversatively.
^b Cowrie or Northern dialect.
^c Used in direct discourse.
^d With singular subject.
^e With plural object.
^f With 1st sg. subject.
^g Dialectal.
^h With 2nd or 3rd sg. subject.

KACHIN

VERB AFFIXES

	PRES. INDEFINITE/ FUTURE		PRESENT PERFECT	PAST	FUTURE PERFECT
1st SG.	-nq	-riŋ ^a	-ni, -siŋ	-se	-re:
FL.	-ga	-rāga	-sāga	-sāga	-rāga
2nd SG.	-nd	-rind	-nitd, -sind	-nu	-wud
FL.	-myitd	-mārind	-mānitd	-mānu	-sud
3rd SG.	-ai, -re ^b	-ra, -ru	-s	-nu	-ru
FL.	-ma	-māra, -māru	-mās	-mānu	-māru

	OPTATIVE/ AFFIRMATIVE	SUBJUNCTIVE ^c	CAUSATIVE	IMPERATIVE ^d
1st SG.	-li			-s
FL.	-māli	-ga		-mi
2nd SG.	-lit	-n	-n	-u
FL.	-mālit	-myit	-myit	-mu
3rd SG.	-lu	-a	-u	-u, -wu
FL.	-mālu	-ma	-mu	-mu

^a The affixes of this set are used mainly with verbs of motion.

^b Used with future meaning.

^c Expresses a conditional meaning.

^d The forms in 1st and 3rd person are used when these persons are objects of a transitive imperative.

KANAURI

INDEPENDENT PRONOUNS

	NOXINATIVE	POSSESSIVE
1st SG.	g ⁵	aŋ
DL. INCL.	ka:ʒʒŋ	kaʒʒŋd̄
DL. EXCL.	niʃi	niʃu:
PL. INCL.	kiʒʒŋa:'	kiʒʒŋd̄nū
PL. EXCL.	niŋa:'	niŋand̄
2nd SG.	ka', ki' ^a	kaŋ, kin ^a
DL.	kiʃi:	kiʃu:
PL.	kina:'	kinand̄
3rd SG.	do, nu	do:, nu:
DL.	dokeʒʒŋ, nūksʒʒŋ	dokeʒʒŋt̄, nūksʒʒŋt̄
PL.	doŋoa, nuŋoa	doŋoand̄, nuŋoand̄

^a respect form

KANAURI

VERB AFFIXES^a

	FUTURE	PAST	IMPERATIVE ^c
1st SG.	-tʊg', -tiŋ ^b	-ʂg'	
DL. INCL.	-te'	-ʂe'	
DL. EXCL.	-tic	-ec	
PL. INCL.	-te'	-ʂe'	
PL. EXCL.	-tiŋ	-ec	
2nd SG.	-tʊn	-ʂn, -eŋ ^b	-ʂ, -ra:', -da:'
DL.	-tic	-ec	-ic, -ric, -dic
PL.	-tiŋ	-eŋ	-ic, -ric, -dic
3rd SG.	-to', toʂ ^b , tiʂ ^b	-:':, -eʂ ^b	
DL.			
PL.	-to'	-a:'	

^a Kanauri makes use of a suffix -c to indicate a 1st or 2nd person object irrespective of number.

^b respect form

^c The alternate forms of the imperative suffixes are lexically conditioned.

KHAM

		INDEPENDENT PRONOUNS	INTRANSITIVE AFFIXES	REFLEXIVE AFFIXES ^a	IMPER.
1st	SG.	qa:	qa-	qa <u>vb</u> si-T	
	DL.	gin	gin-	gin <u>vb</u> si-T	
	PL.	ge:	ge-	ge <u>vb</u> si-T	
2nd	SG.	nan.	na-	na <u>vb</u> si-T	-ni
	DL.	jin	jin-	jin <u>vb</u> si-T	-cin
	PL.	je:	je-	je <u>vb</u> si-T	-ci
3rd	SG.	noe ^b	-β	<u>vb</u> si	
	DL.	noni	-ni	<u>vb</u> si-T-ni	
	PL.	norae	-re	<u>vb</u> si-T-re	

^a The T of these forms represents the position of the tense marker.

^b The final -e of these 3rd person forms is identifiable as an ergative marker.

KHAM

TRANSITIVE VERB AFFIXES -- ACTIVE VOICE^a

1st SUBJECT	2nd OBJECT			3rd OBJECT		
	SG.	DL.	PL.	SG.	DL.	PL.
SG.	qa vb ni-T	qa vb cin-T	qa vb ci-T	qa-	qani-	qara-
DL.	gin vb ni-T	gin vb cin-T	gin vb ci-T	gin-	ginra-	ginra-
PL.	ge vb ni-T	ge vb ci-T	ge vb ci-T	ge-	gera-	gera-

2nd SUBJECT	1st OBJECT			3rd OBJECT		
	SG.	DL.	PL.	SG.	DL.	PL.
SG.	na vb na-T	na vb sin-T	na vb si-T	na-	noni-	nera-
DL.	jin vb na-T	jin vb si-T	je vb si-T	jin-	jinra-	jinra-
PL.	je vb na-T	je vb si-T	je vb si-T	je-	jera-	jera-

3rd SUBJECT	1st OBJECT			2nd OBJECT		
	SG.	DL.	PL.	SG.	DL.	PL.
SG.	-na-T-o	-sin-T-o	-si-T-o	-ni-T-o	-cin-T-o	-ci-T-o
DL.	-na-T-ni	-sin-T-re	-si-T-re	-ni-T-ni	-cin-T-re	-ci-T-re
PL.	-na-T-re	-sin-T-re	-si-T-re	-ni-T-re	-cin-T-re	-ci-T-re

3rd SUBJECT	3rd OBJECT		
	SG.	DL.	PL.
SG.	-T-o	ni vb -T-o	ya vb -T-o
DL.	-T-ni	yara vb -T-niyara vb -T-ni	
PL.	-T-re	yara vb -T-rayara vb -T-re	

^a The T of these forms represents the position of the tense marker.

KHAM

TRANSITIVE VERB AFFIXES -- PASSIVE VOICE^a

		1st OBJECT		
		SG.	DL.	PL.
3rd AGENT	SG.	o <u>vb</u> na	o <u>vb</u> sin	o <u>vb</u> si
	DL.	ni <u>vb</u> na	ya <u>vb</u> sin	ya <u>vb</u> si
	PL.	ya <u>vb</u> na	ya <u>vb</u> sin	ya <u>vb</u> si
		2nd OBJECT		
		SG.	DL.	PL.
3rd AGENT	SG.	o <u>vb</u> ni	o <u>vb</u> cin	o <u>vb</u> ci
	DL.	ni <u>vb</u> ni	ya <u>vb</u> cin	ya <u>vb</u> ci
	PL.	ya <u>vb</u> ni	ya <u>vb</u> cin	ya <u>vb</u> ci
		3rd OBJECT		
		SG.	DL.	PL.
3rd AGENT	SG.	o-	oni-	cra-
	DL.	ni-	nira-	nira-
	PL.	ya-	yara-	yara-

^a Passive forms with 1st or 2nd person agent are identical to the active forms except for the substitution of a passive marker for the tense morpheme.

KHAM

TRANSITIVE IMPERATIVE AFFIXES

		1st OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
IMPERATIVE SUBJECT	SG.	-na	-sin	-si	- \emptyset	ni vb \emptyset	ya vb \emptyset
	DL.	-nacin	-sisin	-sici	-cin	ya vb cin	ya vb cin
	PL.	-naci	-sici	-sici	-ci	ya vb ci	ya vb ci

REFLEXIVE IMPERATIVE		HORTATIVE -- 3rd OBJECT		
SG.	DL.	1st DL.	1st PL.	
-sin	-sicin	gin-	ge-	DL. PL.
		ginra-	gera-	ginra- gera-
				gera-

LIMBU

	INDEPENDENT PRONOUNS		INTRANSITIVE VERB AFFIXES	
	NOMINATIVE	POSSESSIVE ^b	PRESENT	PAST ^b
1st SG.	aqa:	a:-, aqai:n	-a:	-aʒ
DL. INCL.	a:nci:		a: <u>vb</u> ci:	a: <u>vb</u> si:
DL. EXCL.	a:nci:ge:		-ci:ge:	-si:ge:
PL. INCL.	a:ni:		a:-	
PL. EXCL.	a:ni:ge:		-ige:	
2nd SG.	khene:	k'-, khene:i:n	k'-	k'-
DL.	khenci:		k' <u>vb</u> ci:	
PL.	kheni:		k' <u>vb</u> i:	
3rd SG. ^a	1. khu:ne:, hu:ne:	kus:-, khu:ne:i:n, khellen	-ʒ	-ʒ
	2. na: 3. na:khen, hen			
DL.	khu:nci:		-ci:	
PL.	khu:nci:		me:-	

^a The three forms of the 3rd sg. form a system of evidentials, the first appropriate when the object is absent, the second when in sight but distant, and the third when near.

^b Vacant spaces in the chart reflect gaps in the data.

LIMBU

TRANSITIVE VERB AFFIXES: PRESENT^a

		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
1st SUBJECT	SG.	-ne:	-neci:ŋ	-neni:ŋ	-ŋ	---	---
	DL.	INCL. -neci:ge:	-neci:ge:	-neci:ge:	a: vb su:	---	---
	EXCL.	-su:ge:	---	---	-su:ge:	---	---
	INCL.	a: vb u:ŋ	---	---	a: vb u:ŋ	---	-u:ŋsi:ŋ
PL.	EXCL. -a:si:ge:	-a:si:ge:	-a:si:ge:	-u:ŋbe:	-u:ŋsi:ŋbe:	-u:ŋsi:ŋbe:	

		1st OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
2nd SUBJECT	SG.	k' vb a:	ark'-	ark'-	---	---	---
	DL.	ark' vb si:ark'-	ark'-	ark'-	k' vb su:	---	---
	PL.	ark'-	ark'-	ark'-	---	---	---

		1st OBJECT				
		SG.	INCL. DL.	EXCL.	INCL. PL.	EXCL.
3rd SUBJECT	SG.	-a:	a: vb si:	-i:ge:	a: vb si:	-i:ge:
	DL.	-si:	a:me: vb si:	-si:	a:me:-	me:-
	PL.	me: vb a:	a:me: vb si:	me: vb i:ge:	a:me:-	me: vb si:ge:

		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
3rd SUBJECT	SG.	k'-	k' vb i:	k' vb i:	---	---	---
	DL.	k'me: vb si:	k'me: vb i:	k'me: vb i:	-cu	---	---
	PL.	k'me: vb si:	k'me: vb i:	k'me: vb i:	me: vb u:	---	me: vb u:si:

^a Dashes indicate gaps in the data.

LIMBU

TRANSITIVE VERB AFFIXES: PAST^a

		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
1st SUBJECT	SG.	---	---	---	-u:ŋ	---	-u:ŋsi:ŋ
	DL. INCL.	-neci:ŋe	---	---	a: <u>vb</u> e:cu:	---	---
	DL. EXCL.	---	---	---	-e:cu:ŋe	---	---
	PL. INCL.	-a:si:ŋe	-a:si:ŋe	-a:si:ŋe	a: <u>vb</u> u:m	---	-u:msi:m
PL. EXCL.	-a:si:ŋe	-a:si:ŋe	-a:si:ŋe	-u:mbe:	-u:msi:mbe:	-u:msi:mbe:	

		1st OBJECT			2nd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
2nd SUBJECT	SG.	k' <u>vb</u> a:ŋ	---	---	---	---	k' <u>vb</u> u:si:
	DL.	a:k' <u>vb</u> e:ci:	---	---	---	---	---
	PL.	a:k' <u>vb</u> i:	---	---	---	---	k' <u>vb</u> u:msi:m

		1st OBJECT					
		SG.	INCL.	DL.	EXCL.	INCL.	PL. EXCL.
3rd SUBJECT	SG.	-a:ŋ	a: <u>vb</u> e:	---	---	---	-e:ci:ŋe:
	DL.	---	a:me: <u>vb</u> si:	---	---	---	---
	PL.	me: <u>vb</u> a:ŋ	a:me: <u>vb</u> si:	---	---	---	---

		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
3rd SUBJECT	SG.	k' <u>vb</u> e	k' <u>vb</u> e:ci:	---	-u:	---	---
	DL.	---	---	---	-su:	---	-su:si:
	PL.	---	k'me: <u>vb</u> e:ci:	---	---	---	---

^a Dashes indicate gaps in the data.

LIMBU

Imperatives

	1st OBJECT			3rd OBJECT		
	SG.	DL.	PL.	SG.	DL.	PL.
SG.	-aje:	a: <u>vb</u> e:	a: <u>vb</u> e:	-e:	-e:se:	-e:se:
DL.	a: <u>vb</u> e:ce:	a: <u>vb</u> e:ce:	a: <u>vb</u> e:ce:	-e:ce:	-e:ci:se:	-e:ci:se:
PL.	a: <u>vb</u> emme:	a: <u>vb</u> emme:	a: <u>vb</u> emme:	-emme:	-emsi:me:	-emsi:me:

IMPERATIVE REFLEXIVES	
SG.	-si:je:
DL.	-nece:
PL.	-a:sime:

LUSHEI

INDEPENDENT PRONOUNS		
	NOMINATIVE	POSSESSIVE
1st SG.	kei, keima	ka, kata, keia, Nom. + ta
PL.	keini, keimani	kan, kanta, Nom. + ta
2nd SG.	naq, naqma	i, naqa, ita, Nom. + ta
PL.	naqni, naqmani	in, inta, Nom. + ta
3rd SG.	ani, ama	a, Nom. + ta
PL.	anni, ammani	an, Nom. + ta

VERB AFFIXES				
	SUBJECT	OBJECT	SUBORDINATE	IMPERATIVE
1st SG.	ka-	min-, mi'-	-ila, -la, -lan	
PL.	kan-	min-, mi'-	-ila	a vb aq, i vb aq
2nd SG.	i-	-ce, -ace, -cia	-la	-š, -(aq)ce, -tace, -te
PL.	in-	-ceu, -aceu	-ula	-u, -(aq)ceu, -taceu, -teu
3rd SG.	a-	Ø	-šela	-se
PL.	an-	Ø	-šela	-se

MANCHATI

		INDEPENDENT PRONOUNS		VERB AFFIXES	IMPERATIVE
		NOM.	POSS.		
1st	SG.	eye, ghyana	gyiu	-g, -ga	
	DL. INCL.	nyengu, nyekuyeng	nyengutu	-ši	
	EXCL.	nyeku	nyekutu		
	INCL.	nyenare, nyenan,	nyendu	-ni	
PL. EXCL.	nyere, nyerenyena	nyetu			
2nd	SG.	ka, kyena[resp.], kakyena, kyenakyena[resp.]	kanu	-n, -na	-β, -u
	DL.	kyeku, kyekukyengu	kyekutu	-ši	-ši
	PL.	kyere, kyende	kyetu	-ni	-ni
3rd	SG.	du, ena	dou	-β, -g, -t	
	DL.	doku	dokutu	-ku	
	PL.	dore, dore-enare	dotu	-re	

NOCTE

		INDEPENDENT PRONOUNS		INTRANSITIVE VERB AFFIXES				
		NOM.	POSS.	FRES. ^b	PAST	FUT.	SUBORD.	IMPER.
1st	SG.	qa	i:, qa	-aŋ (-sak)	-tak	-raŋ	-lak	
	PL.	ni	ni, naŋ[reep] ^a	-e, -ye (-mi)	-ti	-ri	-li	
2nd	SG.	naŋ	na, naŋ ^a	-o (-mo)	-to	-ro	-lo	-o
	PL.	ne, nekhu	ne	-an (-mit)	-tat	-ren	-lat	-an
3rd	SG.	ate	a, ate	-a (-ma)	-ta	-ra	-la	
	PL.	thannin	thannin	-a (-ma)	-ta	-ra	-la	

^a The tone of 1st pl. naŋ differs from 2nd pl. naŋ.

^b The forms in parentheses are the present negative affixes.

NOCTE

TRANSITIVE VERB AFFIXES^a

		2nd OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.
1st SUBJECT	SG. 1 ^b	-e		-aq	-aq
	2	-mi	-ma	-mak	-mak
	3	-ti		-tak	
	PL. 1				
	2	-mi	-ma	-mi	-mi
	3				

		1st OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.
2nd SUBJECT	SG. 1	-haŋ	-hi	-o	-o
	2	-mahaŋ	-mahi	-mo	-mo
	3				
	PL. 1	-ha		-an	
	2		-mahi	-mat	-mat
	3	-thaŋ		-to	

		1st OBJECT		2nd OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.	SG.	PL.
3rd SUBJECT	SG. 1	-haŋ	-hi	-ho			
	2	-mahaŋ	-mahi	-maho		-ma	-ma
	3	-thaŋ			-mahan	-ta	-ta
	PL. 1	-haŋ					
	2	-mahaŋ	-mahi	-maho	-mahan	-ma	-ma
	3	-thaŋ	-tho			-ta	

^a There is no information in the grammar for the gaps in the paradigm.

^b Form (1) is singular/future, (2) is negative, (3) is past.

RAWANG

		INDEPENDENT PRONOUNS ^a	INTRANSITIVE VERB AFFIXES				
			PRESENT	PAST IMPERFEC ^b	FUTURE	POTENTIAL	HORTATIVE/ IMPERATIVE
1st	SG.	ŋa	-ŋ	-ŋ-T-ŋa	-ŋniŋ	-nu	la <u>vb</u> ŋ
	DL.	ŋani	-ŋi	—	-ŋidi	-ŋaw	la <u>vb</u> ŋi
	PL.	ŋaniŋ	-i	-T-s ^a	-idi	-i	la <u>vb</u> i
2nd	SG.	na	e-	e <u>vb</u> -T-i	e <u>vb</u> di	-e- -nu	e-
	DL.	nani	e <u>vb</u> ŋi	—	e <u>vb</u> ŋidi	-e- -ŋaw	e <u>vb</u> ŋi
	PL.	naniŋ	e <u>vb</u> niŋ	e <u>vb</u> -T-ŋa	e <u>vb</u> niŋdi	-e- -niŋ	e <u>vb</u> niŋ
3rd	SG.	aŋ	ŋ	-T-i	-di	-nu	la-
	DL.	aŋni	ŋ	—	-di	-nu	la-
	PL.	aŋniŋ	ŋ	-T-i	-di	-nu	la-

^a The possessive pronouns are identical to the nominative.

^b T indicates the place of the past tense marker.

RAWANG

TRANSITIVE VERB AFFIXES: PRESENT

		2nd OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.
1st SUBJECT	SG.	-ŋ	-niŋ	-ŋu	-ŋu
	DL.	-ŋi	-niŋ	-saw	-saw
	PL.	-i	-niŋ, -i	-i	-i

		1st OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.
2nd SUBJECT	SG.	e vb ŋa	e vb ŋa	e vb u	e vb u
	DL.	e vb ŋa	e vb ŋa	e vb saw	e vb saw
	PL.	e vb ŋa	e vb ŋa	e vb niŋ	e vb niŋ

		1st OBJECT		2nd OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.	SG.	PL.
3rd SUBJECT	SG.	e vb ŋ	e vb i	e-	e vb niŋ	-u	-u
	DL.	e vb ŋ	e vb i	e-	e-	-u	-u
	PL.	e vb ŋ	e vb i	e-	e vb niŋ	-u	-u

RAWANG

TRANSITIVE VERB AFFIXES: FUTURE

		2nd OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.
1st SUBJECT	SG.	-qniq	-niqdi	-quniq	-quniq
	DL.	-Eidi	-niqdi	-sawdi	-sawdi
	PL.	-idi	-idi, niqdi	-idi	-idi

		1st OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.
2nd SUBJECT	SG.	e vb qamiq	e vb Eadi	e vb udi	e vb udi
	DL.	e vb Eadi	e vb Eadi	e vb sawdi	e vb sawdi
	PL.	e vb Eadi	e vb Eadi	e vb niqdi	e vb niqdi

		1st OBJECT		2nd OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.	SG.	PL.
3rd SUBJECT	SG.	e vb qniq	e vb idi	e vb di	e vb niqdi	-udi	-udi
	DL.	e vb qniq	e vb idi	e vb di	e vb niqdi	-udi	-udi
	PL.	e vb qniq	e vb qniq	e vb di	e vb niqdi	-udi	-udi

RAWANG

TRANSITIVE VERB AFFIXES: PAST IMPERFECT^{a, b}

1st SUBJECT	2nd OBJECT		3rd OBJECT	
	SG.	PL.	SG.	PL.
SG.	-ŋ-T-ŋa	-T-ša	-ŋ-T-ŋa	-ŋ-T-ŋa
PL.	-T-ša	-T-ša	-T-ša	-T-ša

2nd SUBJECT	1st OBJECT		3rd OBJECT	
	SG.	PL.	SG.	PL.
SG.	e vb ŋ-T-ŋa	e vb T-ša	e vb T-a	e vb T-a
PL.	e vb T-ša	e vb T-ša	e vb T-ša	e vb T-ša

3rd SUBJECT	1st OBJECT		2nd OBJECT		3rd OBJECT	
	SG.	PL.	SG.	PL.	SG.	PL.
SG.	e vb ŋ-T-ŋa	e vb T-ša	e-	e vb T-ša	-T-a	-T-a
PL.	e vb ŋ-T-ŋa	e vb T-ša	e-	e vb T-ša	-T-a	-T-a

^a This tense neutralizes the dual and plural distinction.^b T indicates the position of the past tense marker.

RAWANG

TRANSITIVE VERB AFFIXES: POTENTIAL MOOD

		2nd OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.
1st SUBJECT	SG.	-n	-niŋ	-nu	-nu
	DL.	-ŋi	-niŋ	-saw	-saw
	PL.	-i	-niŋ	-i	-i

		1st OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.
2nd SUBJECT	SG.	-e -a	-e -ŋa	-e -nu	-e -nu
	DL.	-e -ŋa	-e -ŋa	-e -saw	-e -niŋ
	PL.	-e -ŋa	-e -ŋa	-e -niŋ	-e -niŋ

		1st OBJECT		2nd OBJECT		3rd OBJECT	
		SG.	PL.	SG.	PL.	SG.	PL.
3rd SUBJECT	SG.	-e -n	-e -i	-e -n	-e -niŋ	-nu	-nu
	DL.	-e -n	-e -i	-e -n	-e -niŋ	-nu	-nu
	PL.	-e -i	-e -i	-e	-e -niŋ	-nu	-nu

TIDDIM CHIN

INDEPENDENT PRONOUNS

	NOMINATIVE	POSSESSIVE	OBLIQUE
1st SG.	/kei, /kei_ma ^o	kã	\kei, /kei ^{ma}
PL. INCL.	/ei, /ei\te, /ei_ma ^o , /ei\ma:u	i	\ei, /ei\te, /ei ^{ma} , /ei ^{ma} :u
PL. EXCL.	\kou, \kou\te, \kou\ma:u	kã vb _u ^o	\kou, \kou\te, \kou ^{ma} :u
2nd SG.	/naŋ, /naŋ_ma ^o	nã	\naŋ, /naŋ ^{ma}
PL. ^a		nã vb _u ^o	
3rd SG.	ã_ma ^o	ã	ã ^{ma}
PL.	ã\ma:u, ã\ma:u\te	ã vb _u ^o	ã ^{ma} :u, ã\ma:u\te

^a The 2nd plural forms except for the genitive are not provided in the source.

TIDDIM CHIN

VERB AFFIXES

		COLLOQUIAL				FORMAL
		UNMARKED	FUTURE	CONDITIONAL	NEGATIVE	
1st	SG.	-\iŋ	-\niŋ	-\leŋ	-\/keŋ	kã-
	PL. INCL.	-\haŋ	-\ni	-\le:əŋ	-\\xaŋ	ĩ-
	PL. EXCL.	-\uŋ	-\nu:ŋ		-\/kei\uŋ	kã vb ~u?
2nd	SG.	-_te?	-ni_te?	-\le_te?, -\le_cin	-\/kei_te?	nã
	PL.	~u?_te?	nũ_te?	-\le_u?_cin, -\le_u?_te?		na vb ~u?
3rd	SG.	-š	~in_te?	~le?	~/kei	ã
	PL.	~u?	~un_te?	~(u?)_le?		ã vb ~u?

VAYU

	INDEPENDENT PRONOUNS		REFLEXIVE AFFIXES	
	NOM.	POSS.	PRES./FUT.	PRETERITE
1st SG.	go	aŋ	-nɛuŋ	-nɛhuŋ
DL. INCL. ^a	go nakpu, go nayuŋ	uŋci	-nachik	-nachiŋ
DL. EXCL.	go nakpu, go nayuŋ	aŋci	-nachok	-nachoŋ
PL. INCL.	go khata	uŋki	-ncike	-nchiken
PL. EXCL.	go khata	aŋki	-ncikok	-nchikok
2nd SG.	gon	uŋ	-nɛhe	-nɛhe
DL.	gonche	uŋchi	-nachik	-nache
PL.	gone, gone khata		-ncine	-ncine
3rd SG.	wathi	wathim	-nɛhe	-nɛhe
DL. ^a	wathi nakpu, wathi nayɪ, wathi nayuŋ	wathim nakpum, etc.	-nachik	-nache
PL.	wathi khata	wathim khatam	-ncime	-ncime

^a nakpu is a masculine suffix (and feminine in 1st dual),
nachi is feminine, and nayuŋ is neuter.

VAYU

	INTRANSITIVE VERB AFFIXES					
	REGULAR CONJUGATION			ACTIVE INTRANSITIVE CONJUGATION ^a		
	PRES./FUT.	PRETERITE	IMPER.	PRES./FUT.	PRETERITE	IMPER.
1st SG.	-ꞑo	-suꞑ		-chuꞑ	-chuꞑ	
DL. INCL.	-chik	-chiꞑ		-nachik	-nachꞑ	
DL. EXCL.	-chok	-choꞑ		-nachok	-nachoꞑ	
PL. INCL.	-ke	-kikeꞑ		-cike	-cikeꞑ	
PL. EXCL.	-kok	-kikoꞑ		-cikok	-cikoꞑ	
2nd SG.	-ꞑ	-ꞑ	-ꞑ	-ce	-ce	-ce
DL.	-chik	-che	-che	-nacik	-nache	-nache
PL.	-ne	-ne	-ne	-nacik	-nache	-cine
3rd SG.	-ꞑ	-ꞑ		-ce	-ce	
DL.	-chik	-che		-nacik	-nache	
PL.	-me	-me		-cime	-cime	

^a Hodgson refers to this conjugation as the reflex or active intransitive. The citation forms of verbs requiring this conjugation end in -ce which can be identified as the reflexive affix.

VAYU

TRANSITIVE VERB AFFIXES -- PRESENT/FUTURE

1st SUBJECT		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
SG.		-nu	-noche	-none	-ŋ	-ŋche	-ŋme
DL.	INCL.	-β	-chok	-ne	-chik	-chik	-chik
	EXCL.				-chok	-chok	-chok
PL.	INCL.	-β, -kok	-chik	-ne, kok	-ke	-ke	-ke
	EXCL.				-kikeŋ	-kikeŋ	-kikeŋ

2nd SUBJECT		1st OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
SG.		-ŋo	-chok	-kok	-β	-chik	-me
DL.		-ŋoche	-chok	-kok	-chik	-chik	-chik
PL.		-ŋome	-chok	-kok	-ne	-ne	-ne

3rd SUBJECT		1st OBJECT					
		SG.	DL.	INCL.	EXCL.	INCL.	EXCL.
SG.		-ŋo	-chik	-chok	-ke	-kok	
DL.		-ŋoche	-chik	-chok	-ke	-kok	
PL.		-ŋome	-chik	-chok	-ke	-kok	

3rd SUBJECT		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
SG.		-β	-chik	-ne	-β	-chik	-me
DL.		-β	-chik	-ne	-chik	-chik	-chik
PL.		-β	-chik	-ne, -me	-ne	-me	-me

VAYU

TRANSITIVE VERB APPIXES -- PRETERITE

1st SUBJECT		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
SG.		-nu	-noche	-none	-kuṅ	-kuṅche	-kuṅse
DL.	INCL.	-ḡ	-che	-ne, -choṅ	-chiṅ	-chiṅ	-chiṅ
	EXCL.				-choṅ	-choṅ	-choṅ
PL.	INCL.	-ḡ	-che,	-ne, kikoṅ	-kikeṅ	-kikeṅ	-kikeṅ
	EXCL.				-kikoṅ	-kikoṅ	-kikoṅ

2nd SUBJECT		1st OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
SG.		-suṅ	-chuṅ	-kikoṅ	-ko	-koche	-kome
DL.		-suṅche	-chuṅ	-kikoṅ	-che	-che	-che
PL.		-surme	-choṅ	-kikoṅ	-ne	-ne	-ne

3rd SUBJECT		1st OBJECT			
		SG.	INCL. ^{DL.}	EXCL.	INCL. ^{PL.} EXCL.
SG.		-suṅ	-chiṅ	-choṅ	-kikeṅ -kikoṅ
DL.		-suṅche	-chiṅ	-choṅ	-kikeṅ -kikoṅ
PL.		-surme	-chiṅ	-choṅ	-kikeṅ -kikoṅ

3rd SUBJECT		2nd OBJECT			3rd OBJECT		
		SG.	DL.	PL.	SG.	DL.	PL.
SG.		-ḡ	-che	-ne	-ku	-koche	-kome
DL.		-ḡ	-che	-ne	-koche	-koche	-koche
PL.		-ḡ	-che	-ne	-kome	-kome	-kome

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ABBREVIATIONS

AA	American Anthropologist
AL	Anthropological Linguistics
AM	Asia Major
AO	Acta Orientalia
BSLP	Société de Linguistique de Paris. Bulletin
BSOAS	Bulletin of the School of Oriental and African Studies
FL	Foundations of Language
GL	General Linguistics
IJAL	International Journal of American Linguistics
JA	Journal Asiatique
JAOS	Journal of the American Oriental Society
JASB	Journal of the Asiatic Society of Bengal
JBIRS	Journal of the Bihar Research Society
JCL	Journal of Chinese Linguistics
JP	Journal of Phonetics
JPASB	Journal and Proceedings of the Asiatic Society of Bengal
JRASBL	Journal of the Royal Asiatic Society of Bengal: Letters
JUHRI	Journal of Urusvati Himalayan Research Institute
Lg	Language

LTBA	Linguistics of the Tibeto-Burman Area
SS	Studia Serica
TAPA	Transactions of the American Philosophical Association
ZDMG	Zeitschrift deutsche morgenländische Gesellschaft

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