AN INITIAL RECONSTRUCTION OF PROTO-BORO-GARO

by

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A THESIS

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This study attempts to reconstruct Proto-Boro-Garo (PBG), the ancient language from which the modern Boro-Garo (BG) family evolved. BG is a largely underdocumented sub-branch of Tibeto-Burman that is spoken primarily in the Brahmaputra valley of northeastern India. While other comparative studies have focused on PBG phonology, this study concentrates on grammatical elements and syntactic structures. An initial reconstruction is attained by examining data from the limited number of descriptive grammars available on BG languages and using the comparative method to determine the oldest forms of grammatical elements. Where elements correspond across languages, they can be reconstructed for the common ancestor. When they do not, we have evidence for independent innovation. This is accounted for, when possible, by language-internal reconstruction.

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CHAPTER I

INTRODUCTION

1.1 Language Family Background

The Brahmaputra valley of northeastern India is one of the most linguistically diverse regions on earth. The area has been the locus of intense language contact for millenia, with successive layers of Indo-Aryan, Austro-Asiatic, Tibeto-Burman and most recently Tai languages (Grierson 1903; Jacquesson 2005, 2006). All of the languages in the region evidence significant influence from the others. This is conspicuously true of the Boro-Garo family.

Boro-Garo belongs to the greater Boro-Konyak-Jinghpaw sub-branch of Tibeto-Burman and consists of at least eleven languages: Bodo, Garo, Deuri, Rabha, Tiwa, Dimasa, Kokborok, Atong, Wanang, Moran, Koch. These languages can be further divided into various dialect communities which are found in the northeastern Indian states of Assam, Meghalaya and Nagaland, highlighted in Figure 1, as well as across the national border in Nepal and Bangladesh. The distribution of these languages across northeast India is illustrated in Figure 2.



Figure 2: Boro-Garo Language Map



The classification of Tibeto-Burman sub-groups has been a point of debate for many years, with many distinct analyses proposed (see Hale 1982 for a comparative summarization of different proposed TB taxonomies). This is due in part to the similarity of typological features among many languages in Southeast Asia, the confusion created by the use of different names for the same language, as well as the prolonged cultural contact between distinct linguistic communities which has lead to massive amounts of cross-linguistic influence with respect to phonology, morphology, syntax and semantics (Haudricourt 1966; Matisoff 1976; Hale 1982). Boro-Garo is a close-knit branch whose genetic unity is indisputable, but its place in the larger family is less clear. Numerous attempts have been made to classify the primary branches of Tibeto-Burman, and consequentially, where to place Boro-Garo within the family. Those who have focused on BG have also attempted to classify these languages in terms of their relation to one another since as early as the late 1800's.

In one of the earliest publications on any BG languages, Dalton (1872) acknowledges the relationship between Rabha, Kachari and Garo, but does not suggest internal branches to the BG family or place the sub-group in a specific branch of TB. Konow (1903) places BG under its own branch of TB and divides the family into two sub-groups: Bārā and Garo. He places Bodo, Mech, Dimasa, Kachari, Hojai, Tipura, Lalung and Moran under the Bārā branch, while the Garo node is further divided into four distinct sub-branches; these consist of a) Garo, Abeng, Dacca and Kamrup, b) Atong, Rabha, Ruga, Tintekiya, Cooch Behar and Koch, c) Wanang and d) Chutiya. This contrasts only slightly with Shafer's (1953, 1955, 1966) sub-grouping of the family, who suggests a Baric branch of TB that consists of the Barish (BG) and Naga sub-families.

Within the BG group, rather than dividing BG into two primary sub-branches as Konow (1903) did, Shafer (1955, 1966) divides the BG languages among five primary sub-branches: a) Western, b) North Central, c) South Central, d) Jalpaiguri and e) Eastern. These divisions, however, seem to be based more-so on geographic location of the communities. Shafer's (1955, 1966) groups consist of a) Bodo, Mech, Dimasa, Hojai, Tipura, Lalung and Moran, a b) North CentralGaro, Abeng, Dacca and Kamrup, c) Atong, Rabha, Ruga, Tintekiya, Cooch Behar, Kontsand Koch, d) Wanang and e) Chutiya, respectively. The close genetic ties between the BG languages and neighboring Naga languages, as suggested by Shafer (1953), are recognized by Burling (1959) and reiterated by Voegelin & Voegelin (V&V) (1977). While Burling (1959) focused on the internal distribution of languages within BG, resulting in three distinct branches (Boro, Garo and Koch), V&V's analysis attributes the similarities between BG and languages like Jinghpaw and Rawang as evidence of a common linguistic heritage and propose a Boro-Naga-Kachin subbranch of Tibeto-Burman. The Boro (BG) branch of this family is divided into three distinct groups: a) Bodo, consisting of Mech, Dimasa and Kachari, b) Garo and c) Koch, consisting of Koch, Atong and Wanang. Benedict (1972) divides the BG family into four branches: a) Bodo, consisting of Bodo and Dimasa, b) Garo, which is further divided into two distinct sub-branches, Garo A (Atong, Rabha and Ruga) and Garo B (Garo, Abeng and Awe), c) Deori and d) Konyak languages Moshang, Namsang, Banpara, Tableng, Tamlu and Chang.

While Egerod (1974) applies Shafer's (1955) *Baric* term to the same family, he divides it into three groups: a) Bodo, consisting of Bodo and Dimasa, b) Garo, consisting of Atong, Rabha, Ruga and Koch, and c) languages related to the Baric languages, such as Moshang, Namsang and Banpara. The languages categorized under this third branch reflect the claims of genetic relation made by Shafer (1955, 1966) and Benedict (1972), who place them under a separate Nagish or Konyak node, respectively.

Burling (1983) continues with the classification of BG, drawing from previous comparative analyses which demonstrate the genetic relationship between Garo and Jinghpaw (Burling 1971). Based on lexical similarities resulting from shared innovation,

he proposes the Sal sub-group, the name of which is based on the reconstructible form of the cognate lexical item used for 'sun' which is unique to these languages. Though his analysis does not alter the internal classification of the BG family, Burling (1983) provides greater evidence for the common linguistic ancestry among the BG languages and other Konyak languages such as Nocte, Konyak and Tangsa. The tripartite division of BG espoused by Burling (1959) was reiterated in Jacquesson (2005, 2006), but after conducting a more thorough comparative analysis of BG phonology (Joseph & Burling 2006), a different subgrouping of BG was proposed. While the connection of BG to Konyak and Kachin languages remains undeniable, Joseph & Burling (2006: 1-2) divide the family into four sub-branches: a) Garo, consisting of the various mutually intelligible Garo dialects, b) Koch, consisting of Koch, Rabha, Wanang, Atong and Ruga, c) Boro, consisting of Boro, Kokborok and Tiwa and d) Deuri. This division is maintained by Joseph (2007), who also claims some level of shared innovation between Bodo and Garo. For the purposes of this project, I will adopt the division of modern BG into these four sub-groups as proposed by Joseph & Burling (2006). Figure 3 illustrates the internal division of the family.





1.2 Typology of the Modern Boro-Garo Languages

In Boro-Garo, as in Sino-Tibetan languages in general, the syllable plays a major role in the phonological system which tends to have a more numerous inventory of initial consonants than syllable-final consonants (Burling 1992; Joseph & Burling 2006). While there is some dispute concerning the number of tones (Burton-Page 1955; Burling 1959; Bhattacharya 1977; Joseph & Burling 2006), we find a fairly consistent two-way contrast between high and low tones in BG languages; Garo is the only exception to this phenomenon. Instead, Garo syllables contrasts between those with a final glottal stop and those without. The lack of phonological tone contrasts in Garo has been attributed to the historical development of the glottal stop from the BG high tone (Burling 1959, 1981, 1992; Joseph & Burling 2001, 2006).

The modern BG languages are verb-final. Arguments are freely omitted, especially when argument reference is easily retrieved from the discourse context. When included in propositions, however, there is a strong tendency for A arguments to precede O arguments, though this is by no means strict. Argument order may vary according to pragmatic factors of the speech environment. The semantic roles of the arguments are nevertheless maintained by post-NP case-marking clitics, which follow a Nominative-Accusative system. The languages of the BG family also employ a system of postpositions and relator nouns which describe the location of a referent with respect to some grounding element. We also find the consistent use of numeral classifiers which prefix onto the numeral word class when modifying a noun referent. While some of the categories denoted may vary across the family, these classifiers organize referents into semantic categories according to salient physical characteristics.

It is difficult to support the notion of a coherent OV verb phrase in the traditional sense due to the non-restrictive nature of argument order. However, grammatical behavior of the verbal complex is consistent across all branches of the family, with TAM inflections suffixed onto the main clausal verb. There are very few verbal prefixes, which are more commonly derivational in function. These languages also demonstrate a tendency towards clause-chaining and verb serialization, which has created the necessary conditions for grammaticalization and reanalysis in many instances.

1.3 Data Sources

As the majority of the BG languages lack descriptive documentation, data sources for this language family are limited. However, there are descriptive grammars available for at least one language from each of the four branches of modern BG (Bodo, Garo, Rabha and Deuri), which are the basis for this comparative work. All examples and data used in this thesis have been taken from these grammars, and when available, examples from lesser discussed BG languages have been taken to supplement the reconstruction.

1.4 Aim and Scope

This thesis attempts an initial reconstruction Proto-Boro-Garo syntax, paying special attention to the form and function of grammatical elements. All phonological reconstructions are based on Joseph & Burling's (2006) reconstruction of Proto-Boro-Garo phonology. Where the functions of grammatical elements vary between languages, I attempt to provide a logical diachronic pathway for the evolution of these items. In Chapter II, I reconstruct the PBG noun phrase, with special focus placed on inconsistent forms and functions of NP grammatical items. In Chapter III, I provide an in-depth analysis of the classifier systems across BG in an attempt to identify the basic semantic categories present in PBG grammar. I also account for variation of classifier forms between languages, and discuss class-terms. Chapter IV discusses PBG verbal morphology and offers a reconstruction of most of the finite verb affixes in PBG.

CHAPTER II

THE PROTO-BORO-GARO NOUN PHRASE

2.0 Introduction

Noun phrases behave as arguments to the main clausal verb. In modern Bodo-Garo, just as in many Tibeto-Burman languages, NPs may be left out of a proposition if the referent is clear from the discourse context. When included, they can range in the complexity of their internal constituents. A noun phrase may be as simple as a single pronoun, or may contain a more complex array of elements that form a syntactically and conceptually bound unit. This chapter attempts to reconstruct internal NP constituent order, as well as many of the grammatical elements typically found in NPs across the modern BG languages.

2.1 Syntactic Description and Reconstruction of PBG NP Word Order

In this section I will reconstruct the order of elements in the Proto-Bodo-Garo NP. The reconstruction will be based on a purely formal approach, paying attention only to the word order of clausal elements in very specific construction types. Once the reconstructed form of a construction type is established, I will then move on to another construction, all the time keeping in mind the previously reconstructed forms to see if the data continue to support, or end up contradicting, my hypothesis. With each subsequent reconstruction of a particular construction, I will add these to the PBG forms in their respective syntactic position, making an ever more complex noun phrase structure for PBG. Since the languages that comprise this branch of Tibeto-Burman are said to have developed at a more recent time-depth, we can assume that propositional forms will be very similar and lend themselves to a rather easy reconstruction of PBG syntax.

2.1.1 Demonstratives and the Nouns they Qualify

Demonstratives may function as a pronoun and alone fill the NP slot. When modifying a noun, they consistently precede the noun qualified across the modern BG languages. This suggests a similar syntactic pattern in Proto-Boro-Garo: PBG **DEM N*.

(1) Garo:

a.	aŋ-a	u-ko	nik-a-miŋ
	I-NOM	that-ACC	see-NEUT-PST
	'I saw it/that'	(Burling 2004:	214)

b.	i-a	paŋ-ko	daraŋ-ba	den?-na-be	ia-de
	this-NOM	tree-ACC	anyone-IND	cut-NEG.IMP	this-but

aŋ-ni-sa 1s-GEN-only 'Don't anyone cut this tree. It is mine.' (Burling 2004: 217)

(2) Boro:

bé báthrá-khow bun this information-ACC speak 'Speak this information' (Bhattacharya 1977: 122)

(3) Deuri:

Hela iskul–a atay-o-ne that school-TH all-GEN-FOC 'That school is public.' (Jacquesson 2005: 257) (4) Kokborok:

i	manury-rok	tub-əy	thaŋ-di
this	thing-many	take-prog	go-IMP
'Go	taking these thin	igs.' (Annama	lai 1976: 32)

- (5) Dimasa: *ebo ãncha hãmbi*that child good
 'That child is good' (Dundas 1908: 5)
- (6) Rabha:

e-kai	pan-be	nem-a
this-REL	tree-DEF	good-NEUT
'This tree is	s good.' (Josepl	n 2007: 314)

2.1.2 Possession

Across the modern languages, the genitive-inflected possessor consistently

precedes the possessed. From this we can assume that the same was true for PBG.

- (7) Garo:
 chiŋ-ni achak-pi?-saba
 1P-GEN dog-DIM-also
 'our puppy also' (Burling 2004: 167)
- (8) Boro:

án-ní	bízáb-khow	how
1s-gen	book-ACC	send
'Send my bool	x' (Bhattachary	a 1977: 149)

(9) Deuri:

ã	ã-yõ	поw-о	dũ-ĩ
1s	1s-gen	boat-LOC	EX.COP-NEUT
'I am in my boat' (Jacquesson 2005: 231)			

(10) Kokborok:

Ram-ni	uskul	hakcal-o
Ram-GEN	school	far-LOC
'Ram's schoo	l is far away'	(Annamalai 1976: 58)

(11) Dimasa:

na—ni	no	baraha
2s-gen	house	where.is
Where is you	r house'	?' (Dundas 1908: 20)

(12) Rabha:
 bak-ŋi tátheŋ bí-nata
 pig-GEN leg break-PST
 'The pig's leg is broken.' (Joseph 2007: 361)

Though there are no examples in any of the grammars where a NP has both a demonstrative and a possessor, it is a robust cross-linguistic pattern for pre-N demonstratives to be the first element in a NP. Thus, we may also assume that demonstratives preceded both the possessor and noun: **PBG: DEM POSS N*

2.1.3 Plural Marking

Plural inflection is suffixed directly onto the noun it modifies in the modern languages, and precedes any case-marking that may be relevant to the noun's grammatical role in the sentence. This order reconstructs to **PBG: DEM POSS N-PL*.

(13) Garo:

mande-daŋ-ni	ha?-ba-soŋ-ba	baŋ?-a-miŋ
person-PL-GEN	fields-also-village-also	much-NEUT-PST
'The Mandis' property	(fields and villages) we	ere plentiful'
(Burling 2004: 180)		

(14) Boro:

má-phər-khownan-gowwhat-PL-ACCneed-PST'What are needed?' (Bhattacharya 1977: 123)

(15) Deuri:

jimosaya	mira-mirasi-laju-wa	cagu-ho	kirobo-ho
Deuri	boy-young-PL-TH	route-LOC	go-LOC

jeŋ-laju-nagusa-iobstacle-PL-ACCremove-NEUT'The young Deuris remove the obstacles when they go on the road' (Jacquesson2005: 280)

- (16) Kokborok:
 bui-ruiy-chikla-rog-no rohor-di
 3s-girl-young-many-ACC send-IMP
 'Send the young girls' (Annamalai 1976: 54)
- (17) Dimasa:

subúŋ-nishi-ni man-PL-GEN 'of the men/men's' (Dundas 1908: 3)

(18) Rabha:

bukhi-kai	kai-taŋ-a	mai	rákhu-Ø
hungry-REL	person-PL-DAT	rice	give-IMP
Give rice to th	nose who are hungry.'	(Joseph	2007: 359)

2.1.4 Adjectives

Adjectives vary across the languages with respect to their word order. They may occur either before or after the noun they qualify. This may be a pragmatic function of the adjectives, giving contrastive focus on whichever element comes first. Since there is evidence in most of the languages that adjectives can move more freely with respect to the qualified noun in the NP, we might assume that this was also a phenomenon in PBG: **PBG: DEM POSS {ADJ} N-PL {ADJ}*

- (19) Garo:
 - a. *dal?-gipa achak* big-REL dog 'big dog'
 - b. achak dal?-gipa dog big-REL 'big dog' (Burling 2004: 133)
- (20) Deuri:

dẽ popo tall tree 'a tall tree' (Jacquesson 2005: 111)

(21) Kokborok:

wag-jəla-kəsəm-nə pig-male-black-DAT 'to the black male pig' (Annamalai 1976: 92)

(22) Dimasa:

ãcha hãmba child good 'good child' (Dundas 1908: 5)

2.1.5 Classifiers and Numerals

Since it is a grammatical restriction in some BG languages that the classifiernumeral morphemes follow the qualified noun, we might assume that this was their syntactic patterning in PBG. The freer word order we find in a few of the modern languages could simply evidence that reanalysis has taken place such that these constituents are now less constrained in the NP, somewhat mimicking the word order patterns of adjectives: **PBG: DEM POSS {ADJ} N-PL {ADJ} CL-NUM* (23) Garo:

a.	me?chik	ak-bri
	woman	CL-4
	'4 women' ((Burling 2004: 250)

b.	kan-sa	kodam-ko-in	aŋ-na	ra?ba-bo
	CL-1	pillow-ACC-FRG	1s-dat	bring-IMP
	'Bring	me a pillow.' (Burling	2004: 185)	

(24) Boro: *məsow-ha athin thən-brəy don* cow-LOC leg CL-4 EX.COP 'A cow has 4 legs' (Bhattacharya 1977: 142)

(25) Deuri:

- a. *ã-yõ gu-ja gumo dũ-i* 1S-DAT CL-1 hat EX.COP-NEUT 'I have one hat' (Jacquesson 2005: 262)
- b. *motosaikl gu-ja ko-ri* motorcycle CL-1 come-PRF 'A motorcycle came' (Jacquesson 2005: 262)

(26) Kokborok:

than-sa	cempay	bə-thay-gəna	n nan-go	kaŋ-cha	japa
CL-1	basket	fruit-poss	need-NEUT	CL-1	basket

naŋ-gɔ need-NEUT 'A basket full of fruits and a *japa* (basket) are needed' (Annamalai 1976: 130)

(27) Dimasa:

botol thai gini bottle CL 2 '2 bottles' (Dundas 1908: 7)

2.1.6 Case Inflections and Post-positions

Case inflection is consistently the final element in the NP, preceded by a postposition – if part of the proposition. This behavior suggests that this too was the syntactic restriction for these elements in PBG.

*PBG: DEM POSS {ADJ} N-PL {ADJ} CL-NUM PP=CASE

2.1.7 Conclusion

Word order within the BG is consistent across the family. This indicates that no divergence has taken place in the modern languages since the split from the protolanguage. The rest of this chapter will focus on reconstructing PBG NP grammatical forms.

2.2. PBG Grammatical Forms

Many grammatical NP elements throughout BG are cognate and can be attributed to PBG inheritance. There are, however, a number of divergent forms which evidence independent innovation. Both comparative and language-internal reconstruction are used to determine which grammatical morphemes reconstruct to the PBG level, as well as the diachronic sources for deviant forms.

2.2.1 Personal Pronouns and Demonstratives

One might expect to find a clear correlation between pronominal forms across BG due to the family's relatively shallow time depth. However, as Thurgood (1985)

demonstrates, it is not uncommon for TB languages to innovate new pronominals, even within a short period of time. We find some evidence of this in the modern BG languages, as not all the person distinctions made are consistently found across the family, nor are all the forms cognate. Table 1 demonstrates the closeness in form for the 1S, 2S and 1Pl pronouns, which easily reconstruct to the original PBG pronominal forms. They also reflect the Proto-Tibeto-Burman system (Matisoff 2003; Jacquesson 2005). Following the sound correspondences proposed by Joseph & Burling (2006), they can be reconstructed as **aŋ*, **naŋ* and **ciŋ*, respectively.

	Garo	Boro	Deuri	Dimasa	Kokborok	Rabha	PBG	PTB
1s	aŋ(a)	an	ã	aŋ	aŋ	aŋ	*aŋ	*aŋ
2s	na?(a)	nən	nõ	nuŋ	ոաղ	naŋ	*naŋ	*naŋ
2s		nớnthan						
FORM								
3s	bi(a)	bí	ba	bo	bo	u		
	u(a)					o		
1р	na?chiŋ	jung	jou	jiŋ	cun	ciŋ	*ciŋ	*ciŋ
	an?chiŋ							
1р	chiŋ(a)							
EXCL								
2Р	na?soŋ	nánsər	lou	nishi	nərək	nároŋ		
3р	bisoŋ	bísər	bau	bõnishi		iroŋ		
	uamaŋ	bíphər				uroŋ		

Table 1: Pronouns across Boro-Garo

The third person pronouns slightly diverge within the family. There is a strong correspondence across the family with respect to the /b/-initial forms, which suggests pre-PBG origin. This PBG pronoun reconstructs as **bi* (Joseph & Burling 2006). We are thus left with the task of determining whether the divergent *u* forms in Garo and Rabha also date back to PBG, or if they were more recently innovated. Demonstratives are typically a reliable etymological source for third person pronominals cross-linguistically. The BG demonstrative system, shown in Table 2, does not provide strong evidence for either claim.

Table 2: Modern Boro-Garo demonstratives

	Garo	Boro	Deuri	Dimasa	Kokborok	Rabha
'this'	(h)i-(a)	be	la	óbo	i	i
'that'	(h)u-(a)	bí	ba	houbo	u	u

We find a similar divergence in form among demonstrative pronouns as in the third person pronominal system. Cognate demonstratives in other TB languages, such as Tibetan, further support the reconstruction of PBG **bi*.

- (28) a. *khyi-bo* dog-DEM 'that dog'
 - b. *myi-bo* man-DEM 'that man' (Franke 1929: 112)

However, there is evidence elsewhere in TB that supports the reconstruction of *u 3s and *i 'this' vs. *u 'that' into PBG as well. Benedict (1983) reconstructs *(h)i 'this' and *(h)aw 'that' in Western Bodic, which are clearly cognate to the u vs. i demonstratives found in the modern BG system. This is especially true for the Garo allomorphs, *hia* and *hua*, respectively. Other evidence supporting a *u 3s reconstruction can be found in the PTB transitive verbal paradigm, outlined in Table 3

Undergoer	1 st	2 nd	3 rd
Actor			
1 st		(-na/-ŋ)	-ŋ
2^{nd}	-ŋ		(-na)
3 rd	-ŋ	-na	[-u]

Table 3: The PTB Suffix Paradigm (from DeLancey 1988)

The $-\eta$ 1s and -na 2s suffixes developed from the PTB 1s and 2s pronouns, * ηa and * $na(\eta)$ (DeLancey 1988, 1989). Following this pattern, it is a logical step to assume that the 3>3 index has a diachronic connection to a 3s pronominal *u. Table 4 demonstrates how similar cognate forms are also found in the verbal paradigms other modern TB languages.

	Mhai Kham			Rawang			Limbu		
1>2	ŋa-	V	-n		V	-ŋ		V	-ne
1>3		V	-ŋ		V	-ŋ u		V	~u ŋ
2>3	nə-	V	-n	e-	V	-u	ke-	V	-u
3>2	(0)-	V	-n u	e-	V		kε-	V	-a
3>1	(0)-	V	-ŋ u	e-	V	-ŋ		V	-aŋ
2>1	nə-	V	-n	e-	V	-ŋa	ke-	V	-aŋ

Table 4: Transitive Paradigms for Mhai Kham, Rawang and Limbu (DeLancey 1988)

The numerous examples of cognate u forms across TB indicate that the divergent third person u in Garo and Rabha is not an independent innovation, but was rather inherited into PBG from an earlier ancestor, possibly even dating back to PTB.

It is not clear from the data what grammatical functions PBG **bi* served compared to **u*. Only one language demonstrates the continued use of both forms; Garo. Burling (1961: 39) writes that speakers alternate between *ua* and *bia* for the distal demonstrative, commonly relying on the *ua* form for written language, whereas *bia* is used orally. He also mentions that *bia* is used in reference to humans in the spoken language, while *ua* is used in reference to non-human animate and inanimate entities. This difference could reflect a split in PBG 3s and demonstrative pronominal system based on humanness and animacy. As the modern BG languages evolved, the system was simplified in the majority of the communities. In spite of the evidence supporting a reconstructible PBG **u*, it is worth noting that the surrounding Indo-Aryan languages have similar demonstrative forms, shown in Table 5.

Table 5: Indo-Aryan Demonstrative Pronouns

	<u>Bengali¹</u>	<u>Bhojpuri²</u>	<u>Assamese³</u>
'this'	ea~ehi~ini	i~hai	i~iye~eye
'that'	o~ui~uni	u~hau~(h)unhi	hi~hiye~heye

This cannot be interpreted as evidence that the BG u/i forms are borrowed, given the evidence for their TB provenience. However, it is certainly possible that the existence of similar forms in these neighboring languages has supported their preservation.

¹ See Bandyopadhyay (1998) for an introductory grammar to the Bengali language.

² See Pandey (2003) for a comparative analysis of Bengali and Bhojpuri.

³ See Grierson (1903) for a brief description of the Assamese language.
2.2.2 Adjectives: Verbal Derivation

In order to behave as noun modifiers within the NP, stative verbs take a derivational prefix. The modern languages vary as to how productive this process is, however. Adjectives in Bodo are formed somewhat productively by prefixing either gV-or mV- onto a stative verb. The verb roots these affixes occur with are constrained, mV-being more restricted than gV-. The vowel in these prefixes is generally copied from the vowel in the verb root. Below are a few examples of adjectives derived from stative verbs in Bodo, including the limited number of examples of the mV- prefix cited by Bhattacharya (1977).

(29) Bodo:

a.	báŋ →	gi-báŋ
	'to be more'	'more'

b.	$zam \rightarrow$	gi-zam
	'to be old'	'old, ancient' (Basumatary 2005: 63)

(30) Bodo: a. *gə-khəy* 'sour' (Bhattacharya 1977: 206)

b. gə-rən 'wise, one who knows' (Bhattacharya 1977: 207)

(31) Bodo:

mə-zaŋ	'good, nice (inherently)
mə-dəm	'good scented'
mə-led	'indistinct, weak'
mə-slid	'weak'
mə-seŋ	'dry'
mu-dəy	'small'
me-hukhub	'busy'
me-lem	'content' (Bhattacharya 1977: 208-9)

There are very few examples of the m-initial prefix in the other BG languages. In Rabha, we find *mo-lon* 'naked (adj.)' (Joseph 2007: 785) and *mi-jan* 'giddy, dizzy (adj, verb)'

(Joseph 2007: 787). Other instances of this prefix in the family are rare, but if we explore other languages in the greater Bodo-Jinghpaw-Konyak family, there is evidence of this form. The similarity in form and function suggests common ancestry, and indicates that the m- prefix does reconstruct to at least the PBG level.

(32)	Jingl	Jinghpaw:				
	a.	dawŋ	'to rebuke'			
		mə-dawŋ	'displeasure'			
	b.	gam	'to be lucky'			
		mə-gám	'power, authority' (Hanson 1954: 412)			
	c.	jù?	'to converge'			
		mə-jù?	'firmness, stability' (Hanson 1954: 416)			

In Garo, this prefix comes in the form of gi-, with allomorphs git- and gip-. Like Bodo gV-, this prefix also deverbalizes stative verbs. It has however diminished in frequency over time to such an extent that we find it only in a few fossilized lexical examples.

(33) Garo: gip-bok 'white' gi-sim 'black' git-chak 'red' git-ting 'raw, unripe' git-tang 'living, fresh' git-dal 'new' git-cham 'old' (Burling 2004: 273)

That these elements are deverbalized as a result of prefixation is evidenced by the fact that stative verbs with *gi*- cannot take verbal morphology, with a few exceptions (Burling 2004). There are some instances where reanalysis has taken place and the deverbalized

function of *gi*-inflected stative verbs is beginning to be lost, resulting in the interpretation of these elements as verbs. Burling (2004) discusses the possible variants of some of these verbs.

(34) Garo:
a. *ba?ra gipbok-jok-ma* cloth white-PRF-Q 'Did the cloth turn white?' (Burling 2004: 273)
b. *ba?ra bok-jok-ma* cloth white-PRF-Q 'Did the cloth turn white?' (Burling 2004: 273)

While it is not surprising that the verb stem bok 'to be white' takes verbal inflection, that gip-bok 'white' is also able demonstrates some degree of reanalysis of the prefixed form. As the deverbalizing function has been bleached, the productivity of the gi- prefix has diminished and once nominalized verbs are understood as verbs. Another method for creating adjectives is used in Garo that involves the nominalizing suffix, *-a*.

(35) mande nam-a man good-NMZ
'good man, the man is good' (Joseph 2007; 624)

While Burling (2004) and Joseph (2007) refer to -a as the present tense, the ambiguity in this example demonstrates the original derivational function of this verbal suffix. It is also demonstrated in other Garo examples.

- (36) *chon-a pi?sa-raŋ-na ron?-ba* small-NMZ child-PL-DAT give-IMP 'Give it to the small children.' (Burling 2004: 133)
- (37) *aŋa bi-ni sawi-a-ko chakchik-na man?-ja-jok* I 3S-GEN insult-NMZ-ACC endure-INF can-NEG-PRF 'I can't stand his insults any more.' (Burling 2004: 295)

Functional reanalysis in the type of construction depicted by (35) led to its use as a

tense/aspect marker. This will be further discussed in Chapter IV.

Kokborok also uses the "adjectivizing" morpheme found in Boro and Garo. As in Bodo, the vowel of this prefix assimilates to the vowel in the verb root.

(38) Kokborok: ga-ham 'good' (Jacquesson 2005: 113)

There are other instances where this prefix has been fossilized on stative verbs.

(39) Kokborok:
 wag-jəla-kəsəm-nə
 pig-male-black-DAT
 'to the black male pig' (Annamalai 1976: 92)

Evidence from Garo in (33) show that som is the lexical item denoting 'black', while this

k p- is simply an allomorph of the gV- prefix. This example also demonstrates how

"adjectives" really are deverbalized constituents within the noun phrase, as the case-

declension clitic does not come between the noun and "adjective".

Rabha has completely lost the gV- prefix found in the fossilized example from Bodo and Garo, though other forms are found.

(40) Rabha:
mai-cam 'old'
pí-dan 'new'
pí-thiŋ 'raw, unripe' (Joseph & Burling 2006; 135-7)

The *mai*- prefix on 'old' reflects the less productive mV- prefix found in some Bodo and Garo examples, though cognate forms of this word in the mentioned languages are gi-

jam, and *git-cak*, respectively. Other divergent patterns are demonstrated by the *pi*- prefix on 'new' and 'raw, unripe'. Though they do have the same place of articulation as the

mV- prefix, the cognate forms in Bodo and Garo both have the gV- prefix. Stative verbs in Rabha are only understood as deverbalized constituents of the NP when they take the suffix -kai, which nominalizes the verb and is used to form relative clauses.

(41)	Rabha		
	a.	<i>kai-be</i> person-DEF 'The man (per	<i>nem-a</i> good-NEUT rson) is good.' (Joseph 2007; 447)
	b.	<i>nem-kai</i> good-REL	<i>kai</i> person
		'good person'	(Joseph 2007; 448)

Since this suffix shares many of the same grammatical functions as the relativizing

suffixes found across the family, it will be discussed in the next section.

Deuri lost the PBG gV- prefix as well, though there is at least one fossilized

example of it.

(42) Deuri: gija 'thick, coarse' (Jacquesson 2005; 308)

When comparing this word to cognate forms across BG, seen in table 6, we find the

following:

Table 6: Cognate Forms of 'thick' across BG (Joseph & Burling 2006: 143)

Gloss	Tiwa	Boro	Garo	Rabha	Proto-Form
'thick'	ro-ca	rш-ja	rit-chat	cá	*rw-ca
			ru-cha		

While most of these cognate forms have a rV- syllable in initial position, the second

syllable is clearly the same element as Deuri -ja from the above example. Deuri relies on

a different system for creating adjectives which involves leaving stative verbs unmarked.

This contrasts with constructions in which stative verbs take finite verbal morphology.

(43)	Deuri:			
	a.	la	popô-wâ	dê-î
		that	tree-TH	tall-NEUT
		'That	tree is tall.'	
	b.	dê	popô	
		tall	tree	
		'a tall	tree' (Jacquess	son 2005: 111)

Dundas (1908) offers a few examples in his grammar of Dimasa in which this affix never occurs.

(44)	Dimasa:				
	a.	<i>ãcha hãmba</i> child good 'good child'			
	b.	<i>houbo ãncha hãmba-ne</i> that child good-DAT 'Give it to that good child.'	<i>rî</i> give (Dundas 1908: 5)		

Though Dundas (1908) glosses *hãmba* as a monomorphemic element, comparison of cognate forms across the family, seen in Table 7, evidences more complex inflection in these examples.

Table 7: Cognate Forms of 'good' in Modern BG (from Joseph & Burling 2006: 127)

Gloss	Tiwa	Boro	Garo	Rabha	PBG
'good'	nam-	mu-jaŋ	nam-	nem-	* <i>nam</i>

While there is one anomalous form (Bodo), the other languages examined are all closely cognate. This gives supports Jacquesson's (2008) claim that the -ba element in the above

example is really a deverbalizing affix used as another method for deriving adjectives from verbs. The interesting aspect of this particular construction in Dimasa is that it is grammatical to include the -ba suffix even when the adjectivizing gV- prefix is used.

(45)	Dima	Isa:
	a.	ri gi-sim-ba
		cloth gV -black-NMZ
		'a (definite) black cloth' (Jacquesson 2008: 36)
	b.	musu ge-dé-ba
		cow gV-big-NMZ
		'a big cow' (Jacquesson 2008: 36)

The construction demonstrated by Dimasa is found in other TB languages outside of BG,

a fact that suggests its provenience from a period prior to PBG.

(46) Tangkhul:

a.	kə-khop	'to sew / sewing	
	kə-khop-pə	'sewer (mas.)'	

b.	khə-ŋəsəm	'to run / running'
	khə-ŋəsəm-mə	'runner (mas.)' (Arokianathan 1987: 38)

(47) Dumi:

amn i	na:m	<i>no:.</i>	khə-ni-kpa	tsikh-a.
today	sun	be.good	AP-be.good-AP	be-23S

aŋ	ye	khə-nɨ-kpa	lo:-t-ə.
[too	AP-be.good-AP	be.good-NON.PST-1S

'The sun's good today. It's pleasant out. I too feel fine.' (van Driem 1993: 274)

While it is difficult to ascertain the relative level of productivity of the gV- prefix in Dimasa for deriving adjectives given the limited number of examples, we may assume that those forms with this prefix again represent fossilized instances of the gV- prefix in BG (Jacquesson 2008: lexicon). This -ba suffix behaves similarly to the relativizing suffixes in the other BG languages, and will be discussed in the next section.

With the scant number of examples available demonstrating the overall productivity of this prefix across BG, especially with the number of modern languages that have no instances of this prefix, it is difficult to determine the frequency of its use in adjectival derivation in PBG. Nonetheless, the grammatical behavior of the fossilized gVforms in some of the modern BG languages does suggest a similar syntactic form and grammatical function for this prefix in the proto language. More evidence supporting this reconstruction can be found in neighboring Tibeto-Burman languages as we find a cognate form serving the same function described in BG. For example:

(48) Karbi: pé ke-lòk cloth white 'white cloth' (Grüßner 1978; 124)

(49) Angami:
 kí kə-sa ú
 house new the
 'the new house' (Herring 1991: 57)

With the loss of this prefix in most of BG, the modern languages have adopted different methods for conveying adjectival modification of nominals. Therefore, though its exact role and restrictions in PBG nominal derivation remains unclear, we may reconstruct this prefix as *gV-, as demonstrated by Table 8.

Tiwa	Boro	Garo	Dimasa	Kokborok	Deuri	PBG
ko-	gV-	gV-	gV-	gV-	gi-	*gV-
		git-		kV-		
		gip-				

Table 8: Adjective Prefix across BG

2.2.3 Relative Clauses: Verbal Derivation vs. Relative Pronouns

The modern BG languages vary with respect to how they form relative clauses. Some continue to rely on a prototypically Tibeto-Burman method which involves the nominalization of a verb phrase to be used as a modifier of a noun referent (Matisoff 1972; DeLancey 1986b, 1999, 2005; Herring 1991; Genetti 1992). In Garo, this is accomplished by suffixing the derivational affix, *-gipa*, onto the verb and treating it as an embedded constituent within the NP.

	F - · · · · · · · · · · · · · · · · · · ·	cnik-gipa	аспак-ко	aŋ-a
Jasen-GEN	child-ACC	bite-REL	dog-ACC	I-NOM
dok-a-miŋ				
hit-NEUT-PST				

This suffix relates all the information contained within the relative clause to the modified noun such that they are understood as uniquely defining characteristics of the noun referent. Burling (2004) describes this suffix as serving more of a definitivizing function, in the sense that it creates restrictive relative clauses.

(51) Garo:

a.	aŋa	gi-sim-a	boi-ko	nik-jok
	Ι	black-NMZ	book-ACC	see-PRF
	ʻI sav	v (some) black	books.' (Burlin	ng 2004: 134)
b.	aŋa	gisim-gipa	boi-ko	nik-jok
	I	black-REL	book-ACC	see-PRF
	ʻI sav	v the particular	books that are	black.' (Burling 2004: 134)

This is not the only method Garo has for forming relative clauses. Though it does use the -gipa suffix, verbs may simply take the -a suffix discussed in the previous section. This is especially true of stative verbs, though there are instances of active verbs with a volitional agent that take this suffix to derive a relative clause.

(52)	Garo:	
	a.	chon-a pi?sa-raŋ-na ron?-bo
		Small-NMZ child-PL-DAT give-IMP
		'Give it to the small children' (Burling 2004: 133)
	b.	aŋa ma?su dal?-a-ko nik-a
		I cow big-REL-ACC see-NEUT
		'I see the big cow (the cow that is big).' (Burling 2004: 135)
	c.	aŋa ma?su kat-a-ko nik-a
		I cow run-REL-ACC see-NEUT
		'I see the running cow (the cow that runs)' (Burling 2004: 135)

It is not possible to determine whether the instances of -a in these examples are

phonologically reduced forms of -gipa or just the nominalizing -a.

Rabha has a similar structural and functional pattern to the Garo -gipa, though the

form used is slightly different.

(53)	Rabha:							
	mai	rim-kai	kai-o	prao-Ø				
	rice	cook-REL	person-ACC	call-IMP				
	'Call the one who cooks rice.' (Joseph 2007: 284)							

As demonstrated by this example, *-kai* may be used to denoted agentive attributes on the nominalized verbs. It can be used to create relative clauses that refer to a number of semantic roles.

(54)	Rabha	•		
	a.	nán	nu-kai	hádam-i
		2s	sit-REL	place-LOC
		'in the	place w	where you sat' (Joseph 2007: 289)
	b.	rákhu-k	kai	pakja
		give-RE	EL	thing
		'the thi	ng that	was given' (Joseph 2007: 285)

Dimasa forms relative clauses similarly to both Garo and Rabha, relying on a derivational

suffix, -jaba.

(55) Dimasa:

a.	aŋ	musu wai-j	iaba misi	i-ke	nu-du
	1s	cow bite-	REL tige	r-ACC	see-NEUT
	'I see	the tiger that l	killed the cow.	' (Jacque	esson 2008: 38)
b.	bo	pai-jaba	subuŋ-ke	níŋ	nu-du
	this	come-REL	man-ACC	2s	see-NEUT
	'Do y	ou see this ma	n who comes?	" (Jacque	esson 2008: 38)

This suffix in Dimasa may actually be decomposed into two separate morphemes,

according to Jacquesson's (2008) outline of the language. The -ja suffix, when occurring

as the only suffix on a verb, deverbalizes the verb and adds a notion of nominal

agentivity.

(56) Dimasa: žo 'speak' žo-ja 'speaker'

> *saiŋ* 'count' *saiŋ-ja* 'counter'

It is unlikely that this element has a shared etymology with the -gi we find in Garo -gipa or the Rabha -kai. The -ba morpheme in -jaba functions as a nominalizer as well.

(57)	Dima	a:
	a.	<i>an misi musu wai-ba-ke nu-ha-du</i> 1s tiger cow bite-NMZ-ACC see-DIS-NEUT 'I see that the tiger kills the cow.' (Jacquesson 2008: 37)
	b.	<i>ha-gaó-ba</i> land-break-NMZ

'land-slide' (Jacquesson 2008: 46)

In (a) of this example, we see how -ba has nominalized the entire clause 'the tiger kills the cow' since it takes nominal declension, in this case, the accusative -ke.

Nominalized relative clauses may either precede or follow the noun referent in most of the modern BG languages, forming externally- vs. internally-headed clauses, respectively. This ability to precede or follow the head noun makes it necessary to determine the constituency of the clause. Joseph (2007) offers an example in Rabha which demonstrates that they are indeed NPs.

- (58) Rabha: a. *ak-kai másu-bijan* black-REL cow-PL 'the black cattle/cows'
 - b. *másu ak-kai-bijan*cow black-REL-PL
 'the black cattle/cows' (Joseph 2007: 284)

Since the plural suffix cliticizes on to the end of the noun phrase (preceding any caseendings or post-positions), example (59a) does not necessarily provide any insight as to whether the relative clause and noun are treated as a syntactic unit. The alternate word order in (59b), however, demonstrates how the RC is indeed part of the overall NP since it takes inflectional noun morphology, *-bijan* 'PL', which maintains its semantic connection to the noun referent, *másu* 'cow'. Though the methods outlined above do constitute the prototypical approaches to forming relative clauses in BG, these languages have adopted the Indo-Aryan method which relies on relative pronouns and fully finite relative clauses. The relative pronouns are illustrated in Table 9.

Table 9: BG Relative Pronoun

Bodo	Garo	Rabha	Deuri
je~jai	je	je~ja	jiba

In Bodo, Garo and Rabha, these pronouns may take the case-marking of any verbal argument.

(59)	Kabha: <i>ja-ni</i> REL.PRO-GEN 'Whatever is	<i>badaŋ</i> which prayed	<i>-an ardi-a</i> -about pray for, that one ge	<i>a uo-n</i> that-it ets, so it	tself is said.	<i>mán-a-ge</i> get-it.is.said ' (Joseph 2007: 694)	
(60)	Garo:		т.,	10			
	Je	achak	Jasen-ni	p1?-sa	i-KO	chik-a-miŋ,	u-a
	REL.PRO	dog	Jason-GEN	child-	ACC	bite-NEUT-PST	that
	a?chak-ko	aŋ-a	dok-a	n-miŋ			
	dog-ACC	I-NOM	hit-NI	EUT-PST			
	'Whatever do	og bit Jas	son's child, tha	at dog I	struck.'	(Burling 2004: 336)	
(61)	Deuri:						
	jiba	mosi	ko-ri	ba	ã-nã	ito-ri	
	REL.PRO	man	come-NEUT	DEM	I-dat	see-NEUT	
	'The man wh	o is com	ning sees me.'	(Jacque	sson 200	05: 188)	

There are even lexicalized formations based on the relative pronouns, though the number of these in each language, as well as how they are formed, varies between linguistic communities (Joseph 2007: 570-1).

The relative pronoun used in BG was undeniably borrowed from the neighboring Indo-Aryan languages (Burling 2004; Jacquesson 2005; Joseph 2007). Aside from the fact that it is incredibly rare for a TB language to utilize this type of construction for forming relative clauses, the pronouns used are incredibly similar in form to the relative pronoun found in Assamese and Bengali. The relative clause construction also reflects the fully finite Indo-Aryan pattern, which is absent in other languages belonging to the Bodo-Konyak-Jingphaw or "Sal" branch, such as Jinghpaw (Hanson 1917; Qingxia and Diehl 2003). It is possible that the incorporation of the Indo-Aryan relative clause construction preceded the evolution of PBG into the modern language as we find it across all branches of modern BG, but it is difficult to prove such a claim.

2.2.4 Interrogative Pronouns

The interrogative pronouns in modern BG share a fair number of similarities in both form and function. Many of them also lend themselves to simple morphemic analysis. Joseph (2007) proposes that it is possible to categorize the interrogative pronouns into groups based on their initial consonant.

2.2.4.1 PBG who and whose

Like PTB *su 'who', this is the only interrogative pronoun in the class to begin with a fricative. This morpheme can easily take case inflection across BG, though it can only be used as a pronoun. In Table 10, we see the strong phonological similarity for this form across the family.

Table 10: who across BG

Bodo	Garo	Rabha	Deuri	Dimasa	Kokborok	Tiwa	PBG	PTB
sər	sawa	caŋ	sa	səré	sabo	shar	*shar	*su
sir	sa		sar	sré	səba			

(62) Garo:

sa	bi-ni	samba-o	asoŋ-na	ha?sik-a
who	3S-GEN	beside-LOC	sit-INF	want-NEUT
'Who	wants to	sit beside her	r?' (Burling	2004: 221)

(63) Deuri:

ba-wa sa DEM-TH who 'qui est celui-là (Who is that)?' (Jacquesson 2005: 251)

(64) Dimasa:

sré paí-ba who come-PRF 'Who has come?' (Jacquesson 2008: 52)

The only instances in modern BG when 'who' may be used as an interrogative

demonstrative is found when it takes genitive declension and modifies a noun referent as the possessor of said referent. This effectively turns 'what' into 'whose', and given the similarity in forms, as depicted by Table 11, we may assume was done in the exact same manner in PBG.

Table 11: whose across BG

Bodo	Garo	Rabha	Dimasa	PBG
sər-ni	sa-ni	caŋ-i	səré-ni	*shar-
				ni

(65) Garo:

bia sa-ni pi?sa DEM who-GEN child 'Whose child is that?' (Burling 2004: 221)

(66) Rabha:

caŋ-imásuwho-GENcow'whose cattle'(Joseph 2007: 327)

(67) Dimasa:
bó-la sere-ni nó
3S-TOP who-GEN house
'Whose house is this?' (Jacquesson 2008: 52)

2.2.4.2 PBG what

In Table 12, we find that there is a fair amount of variation across modern BG

with respect to the interrogative pronoun 'what'.

Table	12:	what	across	BG
-------	-----	------	--------	----

Bodo	Garo	Rabha	Deuri	Dimasa	Tiwa	PBG	PTB
ma	mai	at-	da(m)(di)	sumú	inda	*ma	*ba
	mo?			smú			*ma
	mu?						

- (68) Garo:
 na?a pi?sa-na ma?-ko agan-a
 2s child-DAT what-ACC say-NEUT
 'What did you say to the child?' (Burling 2004: 222)
- (69) Deuri: *la-wa dam* ceci-TH quoi 'qu'est ceci?' (Jacquesson 2005: 252)
- (70) Rabha: náŋ-i ata muŋ you-GEN what name 'What is your name?' (Joseph 2007: 326)

Joseph & Burling (2006: 147) reconstruct it as *ma, cognate to PTB *ma 'who'.

However, they offer no justification as to why they suppose this is the proto-form and not one of the other, non-nasal initial forms we find. The Bodo and Garo forms are clearly cognate, as is the second syllable of the Dimasa *sumú*; the initial *su* is the PTB **su* 'who'. The Deuri forms, *dam* and *damdi*, have only retained the /m/ from the PBG pronoun. While the source of the initial *da* is not synchronically transparent, it is likely cognate to Jinghpaw *dê* 'how much' (Hanson 1957: 304) and PTB **ta* 'when'.

2.2.4.3 PBG why

The pronoun meaning 'why' is formed in the exact same manner across BG. Each respective language uses the 'what' pronoun as a base and inflects it with the dative casemarker. Data from Bodo, Garo, Rabha and Deuri are listed in Table 13.

Table 13: why across BG

Bodo	Garo	Rabha	Deuri	*PBG
ma-ni-(na)	mai-na	ata-na	da-noy	*ma-na
		a-na		

(71) Garo:

mo?-na gan-da What-DAT cause 'Why?/For what reason?' (Burling 2004: 223)

(72) Deuri:

nõ	da-noy	ke-n
2s	what-DAT	go-NEUT
'Why	are you going?'	(Jacquesson 2005: 254)

2.2.4.4 PBG where

The BG forms for 'where' are all transparently cognate and listed in Table 14.

Table 14: where across BC

Bodo	Garo	Rabha	Dimasa	PBG
bou	ba-no	bo	brá	*ba-ao
			bárá	

(73) Garo: *bi-son ba-no don-ina* He-PL what-LOC EX.COP-CONT 'Where are they?' (Burling 2004: 224)

(74) Rabha:

bo ame nuk-ca where 1s see-NEG 'Where, I don't see?' (Joseph 2007: 329) These are clearly conflations of the general ba 'which' and the locative suffix. The final syllable in the unreduced Dimasa bárá seem divergent, but comparison of PTB forms suggests that this rá is cognate to PTB *ra 'place'.

2.2.4.5 PBG when

There is a fair amount of inconsistency across modern BG with respect to the word for 'when', as seen in Table 15.

Table 15: when across BG

Bodo	Garo	Rabha	Deuri	Dimasa
ma-bla	basako	bedo	dumo	bákálí
	basiko			

(75) Garo:

aduru-ko basoko sik-noa-miŋ horn-ACC when blow-FUT-PST 'When will the horn be blown?' (Burling 2004: 225)

(76) Deuri:

ã areke ko-mã-ĩ, dumõ niji-ya
1s encore venire-POT-P, quand savoir-NEG

'Je peux venire à nouveau, je ne sais quand.' (Jacquesson 2004: 252)

The Garo form, *ba-sak-o~ba-sik-o* is the composite form of *ba-sik~ba-sak* 'how many' inflected with the locative suffix. The etymology of Rabha *bedo* 'when' also requires explanation. The initial syllable *be* is the reduced form of Rabha *ben* 'where (place)', which is followed by -do, another reflection of PTB **ta* 'when' and possibly related to Jinghpaw *dê* 'how much'. Despite the fact that final /ŋ/ is rarely deleted in examples

where *bey* is followed by a suffix with a stop, the frequency of use of these two morphemes together to form the meaning 'when' would certainly motivate phonological reduction to the preferred CV syllable structure. The final /o/ in *bedo* is reminiscent of the PBG locative suffix *-ho*, but since Rabha has replaced this with the innovative *-si* form, the only way to account for this occurrence of the PBG locative would be to claim that the Rabha form represents the PBG form for 'when'.

The Deuri form, *dumo* can be decomposed into three separate morphemes. The initial syllable, *du*-, is another instance of the /d/-initial interrogative pronoun seen in the previous sections which is cognate to PTB **ta* 'when'. The /m/ is the reduced form of PBG **ma* 'what', while the final /o/, as in Rabha, is an instance of the locative suffix.

Dimasa *bákálí* does not have clear synchronic sources. The initial *ba*- is related to the /b/-initial forms we find in modern BG for 'which', 'how many' and 'how', and is cognate to PTB **ba* 'what'. The second syllable, *ka*, is identical to PTB **ka* 'which'. We do find instances of a cognate *ka* element in other BG languages. Rabha *bekai* 'which' provides some evidence that suggests this form was part of the PBG system, and not an independent innovation. The Bodo form *mabla* 'when' is a combination of PBG **ma* 'what' and *bla*, the latter of which is cognate to Dimasa *brá* 'where'.

2.2.5 Plural Suffixes

Plural inflection on nouns is not obligatory in the modern BG languages. Rather, it is the semantics of a proposition that may denote plurality of a referent, despite the fact that an overt marker may be absent in the clause. This is especially true when noun

referents occur in constructions with quantifiers or numerals.

(77)Garo:
han-chiŋha-dokdamsni-onichiriŋdamsni-onaWe-INCLareaseven-AUGriverseven-AUG

kat-su-sa-a-na run-compete-NEUT-QUOT "'We race from seven areas to seven streams,' it is said." (Burling 2004: 350)

- (78) Rabha:
 - a. *kai kamiŋ* person two 'two people' (Joseph 2007: 350)
 - b. con pilupilu pitak-a worm swarm wriggle-NEUT 'a swarm of worms wriggle or are in a wriggling motion' (Joseph 2007: 350)

(79) Deuri:

a-yo	dugu-ŋda	moysa	du-i
I-dat	CL-three	child	EX.COP-NEUT
'I have	3 children'	(Jacquesso	on 2005: 262)

There are instances however, when overt plural marking does occur in modern BG. Throughout Southeast Asia and Australasia, this is generally accomplished via "plural words". "Plural words" are described by Dryer (1989: 865) as elements that "...modify nouns but serve the same grammatical function as plural affixes in other languages". Cross-linguistic etymological sources for these elements may vary. They may be grammaticalized numerals, stative verbs, and as demonstrated by at least one BG language, nouns. Structurally, these tend to be separate words that represent a distinct grammatical category, and though the modern BG plurals are nominal suffixes, many have diachronically arisen from the sources as other plural words cross-linguistically. Some of these inflectional suffixes are similar in form across the modern BG languages, though at times their semantic functions do not appear to correlate. The various plural BG suffixes are listed in Table 16.

	Honorific	Primary use in personal pronouns (2 nd and 3 rd person)	Human pl	General pl
Bodo	-min	-sɨr		-p i r
Garo		-maŋ		-raŋ -draŋ
Rabha		-roŋ	-taŋ -roŋ -sari	-bijan
Dimasa		-si	-rao -sá	
Deuri			-kani	-laju

Table 16: BG I	Plurals (Jose	ph 2007:	575)
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2.2.5.1 Honorific Plural

The honorific plural marker *-min* occurs only in Boro, which is the sole modern BG language to distinguish between 2s informal and 2s formal. This morpheme does bear some resemblance to the plural marker used on personal pronouns in Garo, *-may*, which is cognate to Tibetan *may* 'many, much' (Jäschke 2007: 410). However, the difference in vowels and the place of articulation for the final nasal do not overtly adhere to the sound correspondences proposed by Joseph & Burling (2006). Rabha does display at least one instance of interchangeability between final velar and alveolar nasals in the imperfect verbal suffix (*-min/-miŋ*), however, which could account for the variation found in this particular suffix. Frequency of use of this morpheme would prime the element for phonological reduction and account for the vowel shift. We also find at least two possible cognate forms in Jinghpaw: *man* 'a pair (N)' and *màŋ* 'to be scattered (as dust)' (Hanson 1957: 391-2). Language internal reconstruction does not provide evidence as to the etymology of this form. However, the identical structure of Jinghpaw *màŋ*, with similar semantics, suggests that this form was indeed a part of the PBG system, and quite possibly even the Proto-Bodo-Jinghpaw-Konyak stage.

2.2.5.2 Personal Pronoun Plurals

Pluralizing morphemes associated with 2PL and 3PL pronouns vary across modern BG. While the function of cognate Bodo -sir and Dimasa -si are limited to use with 2^{nd} and 3^{rd} person pronouns, Garo -man and Rabha -ron may also be used to indicate plurality on human noun referents, providing a notion in terms of what Joseph (2007: 576) defines as "and related others or and those along with".

- (80) Garo:
 baba-man
 father-PL
 'dad and others (with him)
- (81) Rabha:
 baba-roŋ
 father-PL
 'dad and others (with him) (Joseph 2007: 576)

This function is essentially the same as its role in pluralizing 2nd and 3rd person pronouns, since when pluralizing 2s and 3s pronouns, the speaker is basically saying "you/him/her and the other people along with you/him/her". From the data, we can assume there was a

specific pluralizing morpheme associated with personal pronouns in PBG, but there is very little indication of which it might have been.

2.2.5.3 Human Plural

Both Bodo and Garo lack a specified plural marker that modifies human referents while in Rabha, Dimasa and Deuri we find *-taŋ*, *-rao* and *-kani*, respectively. Rabha may also use *-roŋ* when pluralizing human referents to denote a sense of plurality on nouns with a relational meaning

(82) Rabha: momo-roŋ young.sibiling-PL 'young siblings' (Joseph 2007: 576)

The only immediate correlation among these plural morphemes is found between Rabha $-ro\eta$ and Dimasa -rao. Jacquesson (2008) provides a compelling argument that the Dimasa -rao comes from the verb rao meaning 'to be in great quantity'. The semantic extension of this type of verb to be used as a pluralizing suffix is very common cross-linguistically, and is the most likely explanation.

There are other correlations among plural markers across modern BG, but they are not as obvious. If we examine the other elements across modern BG, we do find cognate forms. The honorific suffix $-ta\eta$ in the Bodo 2s honorific *niŋ-taŋ* is identical to Rabha $-ta\eta$, which is used only when pluralizing human referents (Joseph 2007).

(83) Rabha:

uni badaŋ	te-ba	dimdak	raba-taŋ	u-na
therefore	now-also	all	Rabha-PL	he-ACC

urgi-eta venerate-CONT

'Because of this, even now all the Rabhas venerate him' (Joseph 2007; 701)

The semantic connection between these cognate forms is clear; it is grammatical to use -tan in Rabha when modifying a human referent, while its only appearance in Boro is limited to the 2s honorific pronoun. This behavior suggests a strong connection between the -tan suffix and human referents in at least two of the modern BG languages, and most likely reflects the original semantics of the morpheme. It is possible that this morpheme was in fact part of the PBG system, used only when pluralizing at least 2s pronouns. From there, the use of *-tan* could have expanded in Rabha to be used in reference to all humans, while in Bodo, its sense of plurality was overridden by a reanalysis of its function as marking the 2s honorific. This reinterpretation of a 2^{nd} person plural to mean honorific is not uncommon cross-linguistically, as we find examples of such a phenomenon occurring in English and certain dialects of Spanish (Nevalainen 1996; Opper 2001). The *-tan* suffix is also found in Garo, though when directly following a noun referent, its meaning is that of "one's own". However, it also appears in the Garo reciprocal form *an?-tan* 'one's self'. The cognitive connection between these meanings and the notion of plurality in Rabha and Bodo is not obvious.

Another argument for the existence of *-taŋ* in PBG is found in the related Bodo-Jinghpaw-Konyak member Jingphaw. In a 1917 publication on the language, Hanson describes the use of *-hte* and *-hteŋ* to denote plurality of noun referents. This form is clearly cognate to the BG *-taŋ*, which supports the claim that it was part of the PBG system. Tibetan cognate *dag* 'pl' (Jäschke 2007: 246) demonstrates that this form could even date back as far as the Proto-Bodo-Jinghpaw-Konyak level.

The Rabha human plural-marker –*sari* comes from the lexical *sari*, which denotes a row or line of people/things (Joseph 2007: 819). Dimasa –*sá* is used only to refer to ethnic denominations, but is suspiciously close in form to Rabha –*sari*.

(84) Dimasa:

- a. *tipra-sá* 'the Tripuris'
- b. taŋgum-sá 'the Kukis'
- c. *di-ma-sá* river-big-PL
 'the people of the bigger river : the Dimasas' (Jacquesson 2008: 47)

Since there is a conflict between the tones and no explanation available as to what happened to the -ri syllable in Dimasa if they are indeed cognate forms, the most likely explanation is that Rabha -sari and Dimasa -sa were independent innovations unique to these respective language communities.

Deuri –*kani* does not have a transparently clear etymology. Deuri –*kani* could be related to Rabha *kan* 'body', but it is unclear. This is clearly an innovation unique to Deuri.

2.2.5.4 General Plural

The general plural suffixes are quite varied across BG, and there is some evidence for independent innovation in some of the languages. For example, Garo -drag could be related to Rabha –*droy*, a derivational affix that modifies words like *nok* 'house' or *soŋ* 'village' to indicate the number of members. The Bodo –*pir* is suggested by Joseph (2007: 577) as being a "well-nativised" borrowing from Assamese which is slowly replacing the other plural morphemes in Boro. Since this is the only language that it appears in, we cannot reconstruct it back to PBG. The second syllable in Rabha –*bijan* appears to have a cognate form in the archaic Garo counting system, whereby –*chaŋ* groups numbers by multiples of twenty.

(85)	Garo:	
	20	kol
	40	kol-chaŋ-gin-i
	80	kol-chaŋ-bri (Burling 2004: 246)
	80	kol-chan-bri (Burling 2004: 246

Jinghpaw has the form jan~chyán 'to lie scattered about' (Hanson 1957: 220), which is also appears cognate to the second syllable in Rabha –bijan. It is unclear from the data where the initial bi- came from, nor do we find a source for Deuri –laju.

2.2.6 The PBG Classifier System

The modern BG languages employ a numeral classifier system which was clearly part of the PBG grammar. Yet with so many varied forms across BG suggesting recent incorporation into the system, we are only able to reconstruct a few of the classifiers to PBG. Interestingly, the reconstructed Proto-Boro-Garo classifier system seems to reduce to the most basic categories outlined by such systems, as proposed by Adams & Conklin (1973) and Rosch (1978). Since these categories were already established in the protolanguage, as the modern languages evolved, they have demonstrated some level of expansion in their classifier systems; since the most basic levels of salient physical characteristics are already categorized grammatically, the newer systems are thus more inclined to refine which characteristics are treated as special by the grammar. Table 17 below offers a brief glimpse of the reconstructible PBG numeral classifiers, which will be covered in more depth in Chapter III.

	Garo	Boro	Deuri	Rabha	Kokborok	Dimasa	PBG
Humans	sak-	sá-	dug(u)-	sak-	khərək	sao	*sak
		khá-		ka-			
Animals	maŋ-	má-		maŋ-	ma	má	* <i>maŋ</i>
1D obj	diŋ-	thó-		tun	tuŋ-		*doŋ
2D obj	kiŋ-	gán-	ha-	khó-	kaŋ	garáŋ	*gaŋ
3D obj	roŋ-	tháy-	ti-		thay-	thai-	*tai
Residual	kan-		gu-	gó-	kay-		*gÝ
category	ge?-				ku-		
	gi?-				kə-		

Table 17: BG Classifiers and Reconstructed PBG Forms

2.2.7 Postpositions

Languages may draw from a series of relator nouns from within their own linguistic system to serve as the ground when describing the location of a figure with respect to a human referent (Starosta 1985; DeLancey 1997). Over time, these relator nouns may begin to grammaticalize, thus allowing for a wider range of application of grounding to other objects. This serves as the starting point for their recategorization as adpositions. However, even though two languages may be closely related, they may base physical grounding on different things; that is, they may rely upon different relator nouns to convey they same spatial configuration. This is demonstrated by a few distinctions between the relator nouns used to denote the spatial configuration of 'in front of' across

BG.

- (86) Rabha: *-ni* nukhan-i
 GEN face-LOC
 'in front of'
- (87) Garo: *mikkaŋ-o* face-LOC 'in front of'
- (88) Kokborok: səkaŋ 'in front of'
- (89) Bodo: *kháphal* forehead 'in front of'

Rabha and Garo both use grammaticalized forms of the word for 'face' to denote the location of a referent as being in front of the ground, while Bodo uses *kháphal* 'forehead'. In spite of this, the forms have cognate k(h)a elements, as does Kokborok *səkaŋ* 'in front of'. Though these forms are all fairly similar, which could suggest the same etymological source, but it could also just be a case of parallel grammaticalization.

Very few postpositions, as described in the descriptive grammars, have cognate forms across the languages. This should not be taken as evidence against the existence of these categories in PBG. Rather, this varied behavior suggests that the postpositions used in modern BG are more recent developments particular to each language community. As DeLancey (1984: 59) writes, "... as new (case) postpositions develop they replace older ones, rather than carving out an entirely new morphosyntactic category for themselves."

2.2.8 Case-endings

The BG case-markers are listed in Table 18. Using the same methodology applied in reconstruction of the PBG classifiers, those case-forms that are consistent across the modern languages will be assumed to represent the case-endings in PBG. The discussion of case-endings will only involve those forms exhibiting variation across the family and thus requiring that we determine which have been more recently innovated. BG has more case-endings than will be discussed here, but with such varying forms and unclear etymologies, we must assume that although their functional categories very well may have existed in PBG, they do not necessarily represent the oldest forms.

	Garo	Boro	Deuri	Kokborok	Rabha	Dimasa	*PBG
NOM	-Ø	-Ø	-Ø	-Ø	-Ø	-Ø	*- <i>a</i>
	-a	-ã					
ACC	-ko	-khow	-na	-no	-0	-kho	*-kho
		-kou				-khe	
DAT	-na	-n(ɯ)	-na	-no	-(N)a	-ne	*- <i>na</i>
GEN	-ni	-ni	-0	-ni	-(N)i	-ni	*-ni
ABL	-ni	-níphray	-capi	-ni	-ni para	-niphəraŋ	*ao-
	-cini				-ini		ni
	-oni				-ini para		
	-ciniko						
	-oniko						
LOC	-0	-ao	-(h)o	-0	-i	-ha	*-ao
					-ti		
					-si		
INSTR	-cha	-jiŋ	-coŋ	-bay	peke	-jaŋ	*-caŋ
	bak-sa				pake		

Table 18: Case-endings across Boro-Garo

2.2.8.1 Nominative

Many of the modern BG languages do not overtly mark the nominative case. In Garo, for example, -a is used only with monosyllabic pronouns when they behave as the S argument of an intransitive clause or A of a transitive clause.

(90)	Garo:					
	a.	aŋa	naŋ-ko	agan-a		
		I-NOM	you-ACC	speak-NEUT		
		'I spea	k to you.' (Bu	ling 2004; 186)	
	b.	<i>kan-sa</i> CL-one 'bring	<i>kodam</i> pillow me a pillow' (l	e- <i>ko-in</i> -ACC-FRG Burling 2004; 1	<i>aŋ-na</i> I-DAT 185)	<i>ra-ba-bo</i> bring-IMP

As other pronominal elements are polysyllabic, they never take the -a suffix.

(91)	bisoŋ-de	chi	jro-na	rak-a
	they	water	swim-INF	strong-NEUT
	'They are str	ong at sv	vimming' (Bu	urling 2004; 197)

One exception to this behavior is demonstrated by the demonstratives ia 'this' and ua 'that'. These pronouns maintain the -a suffix even when the noun they are modifying is clearly not in the nominative case.

(92) Garo: *ua mandi-ko* that person-ACC 'that person' (Burling 2004: 185)

In this instance, *-a* seems to be behaving more as a marker of definiteness, which coincides with Bhattacharya's (1977) analysis of this suffix in Boro, despite its clear structural restriction as a nominative case-marker (Joseph 2007). The data, therefore, do suggest the existence of an overt nominative case suffix in PBG, despite the scarcity of this morpheme in most of the BG languages. In the case of Garo, a fossilized form of the

PBG nominative is found only on monosyllabic pronouns filling S and A grammatical roles. Boro, however, has maintained the grammatical function of PBG *–*a*. These two languages reflect the retention of the older system, while the modern languages have simply lost this particular case-ending.

2.2.8.2 Accusative

Modern BG demonstrates some variation in form for accusative case-marking across the family. Some of the modern languages, exemplified here by Deuri and Kokborok, rely upon a "primary object" pattern in which the same form is used for dative arguments and for animate or definite direct objects. Conversely, we find that Garo, Boro, Rabha and Dimasa have a cognate form for the accusative case, -k(h)V, which is quite distinct from the dative declension. A similar form is also found in the surrounding Indo-Aryan languages, which suggests that they could have been borrowed. However, since we do find the -k(h)V morpheme across distinct branches within BG, it seems more likely that this was indeed the PBG accusative marker. We can then safely assume that those languages using the same morpheme for both accusative and dative marking have merely simplified the PBG system. Following Joseph & Burling's (2006) correspondences since we find no inconsistent patterns in the data, the accusative must therefore be reconstructed as **kho*.

2.2.8.3 Dative

The dative case is very close in form across the modern languages and demonstrates consistent sound correspondences. Thus, very little needs to be said about it. We can reconstruct this declension as *-*na*. Yet, this does not explain why we find the same case-form in the Deuri and Kokborok accusative. Cross-linguistic typological patterns do however evidence a somewhat common tendency for arguments in the accusative and the dative case to be marked the same, i.e. English and Bulgarian pronouns. It should be noted that primary object-marking is quite a common phenomenon in Indo-Aryan languages, as well, which could have been a motivating factor for the development of a similar pattern in Deuri and Kokborok.

2.2.8.4 Genitive

As these case-endings are clearly cognate across BG, very little discussion is needed to reconstruct its form, which was likely **ni*. The Deuri genitive form does share striking resemblance to the locative. Yet, since possession constructions in Tibeto-Burman languages are typically existential-locative constructions, it should not be surprising that Deuri has replaced the PBG genitive case-form by expanding the use of the locative to incorporate the genitive roles.

2.2.8.5 Ablative

The modern BG ablative declension certainly appears to be based on some conflation of the genitive marker with another morpheme in the majority of the BG

languages. A few, however, have polysemous morphemes serving as both the ablative and the genitive. It is not uncommon for this to occur given the functional and semantic connection between the genitive and the ablative, as well as the cross-linguistic ubiquity for these particular cases to share the same form. Given the analysis of the accusative case-form, which assumed that the accusative case-markers that were distinct from the dative case markers represent the older system, we may assume that the more complex ablative forms in Dimasa, Rabha and Boro represents the older case based on some kind of relator-noun construction. Despite the fact that para is an Assamese borrowing, it could have been a part of the system prior to the split of PBG since it appears across the different branches of the family. This explanation seems unlikely. For one, Joseph (2007; 582) mentions how the Garo ablative is a conflation of locative and genitive case-markers and is completely unable to use the Assamese para construction. Boro and Rabha, two languages which do use the postpositional construction, are also able to combine the locative and genitive case-markers, like Garo. This suggests that the older ablative form must have been some sort of LOC-GEN combination, which has been simplified to just the GEN in some BG languages, while others have adopted the neighboring Indo-Aryan methodology of a more acoustically salient morpheme than the locative morpheme. Thus, we should reconstruct the PBG ablative as LOC-GEN. The combination of these particular case-markers to form an ablative meaning is logically sound, since when a noun is suffixed with these declensions, the locative semantics ground the genitive possessor as the location from which that possession can be attributed. This therefore treats that noun as the source of some other referent.

But this does not explain why the ablative and genitive would have the same form in Deuri. It could be a simple case of phonological erosion, but if we examine the semantic value of these particular case-roles, we do find there could be some cognitive salience between the two. The genitive could be seen as the originating source or ground for a noun referent. For example, if we talk about Jon's dog, the dog is being grounded in the real world with respect to Jon. If we decided to talk about that same dog running over to Sally from Jon, the dog continues to be grounded in the real world with respect to Jon. Also, for something to come from a specific location, especially if that location is a human referent, it can generally be understood that this thing was once in possession of that referent, if only briefly.

2.2.8.6 Instrumental

With the exception of Kokborok and Rabha, we find clear cognate forms across these languages which follow the proposed sound correspondences in comparative BG phonology. Thus, we can reconstruct *cay for the instrumental case in PBG.

It is interesting to note how Rabha and Kokborok have replaced this suffix with a free standing form that has clear etymological source in the verb root *pak* 'to stick to', a form which is also reflected in the optional Garo instrumental *bak-sa*.

2.2.8.7 Locative

Very little needs to be said about the morphemes in this category, since the crosslanguage morphemes are all so closely related in form; this case can be reconstructed as **ao*. The only exception to this consistency is Rabha $-i\sim-si\sim-ti$.

2.3. Conclusion

While the modern languages do not differ in their syntactic ordering of NP elements, we do find some degree of variation among grammatical forms. Some instances indicate the simplification of more complex systems in the proto-languages as the modern languages developed. For example, the PBG 3^{rd} person pronouns, *u* and *bi*, have been reduced to a single *bi* form across most of BG. Person distinctions, such as formal vs. informal, have also been lost in most cases. Case-particles show little variation, aside from the replacement of the accusative marker with the dative in a few languages, while the numeral classifiers demonstrate shared ancestry for many elements. Postpositions/relator noun demonstrate the highest amount of variation and independent innovation. In the next chapter, I discuss the PBG classifier system in further detail.
CHAPTER III

THE PROTO-BORO-GARO CLASSIFIER SYSTEM

3.0 Introduction

The most common categories to be differentiated by classifier systems can be divided into five separate groups based on the following perceptually salient aspects: animacy (humans and animals), inanimacy (concrete and abstract things), one-dimensionality (longness), two-dimensionality (flatness) and three-dimensionality (roundness) (Adams & Conklin 1973; Rosch 1978). Such systems may become more complicated when size (largeness vs. smallness) and consistency (rigidity vs. flexibility) are also treated as salient characteristics of object classification. Languages can also be more specific when classifying human objects, taking into consideration age, gender and social rank (Haas 1942).

The classifier systems across BG display robust typological patterns. The five perceptually salient categories outlined above are distinguished, with the exception of a few of the modern languages where they have been lost. Other BG languages make more discrete shape classifications, taking into consideration the consistency of the qualified noun. This chapter attempts to reconstruct the semantic categories distinguished by the PBG classifier system and the lexical forms used to do so. The dearth of descriptive data on the majority of BG languages allows for only a provisional reconstruction. Cognate forms and categories are taken to be indicative of common ancestry, while noncorresponding forms suggest independent innovation. Unattested forms may indicate the loss of a category in a modern language, though this could be the result of the field worker's inability to elicit specific classifiers due to their abstract semantics. The high degree of innovation with respect to quantity and measurement classifiers impedes their reconstruction, so they will not be discussed. This reconstruction will instead focus on the basic perceptual categories proposed by Adams & Conklin (1973), as they offer more insight into the PBG classifier system.

3.1 BG Classifiers: A Synchronic Definition

Numeral Classifiers (NCs), though similar in form and semantic function to many nominal elements in the modern BG languages, exhibit distinct grammatical restrictions. When a noun referent is modified by a numeral, there is a grammatical requirement for these modifiers to take a prefix which relates them to the NP head noun in terms of some semantic category.

(93) Garo: kan-sa kodam-ko-in aŋ-na ra?ba-bo CL-1 pillow-ACC-FRG I-DAT bring-IMP 'Bring me a pillow.' (Burling 2004: 185)

(94) Boro: *məsów-ha áthín thən-brəy don*cow-LOC leg CL-four EX.COP
'A cow has 4 legs.' (Bhattacharya 1977: 142)

(95) Deuri:

ã-yõ	matro	du-kuni	moysa	dũ-ĩ
I-DAT	only	CL-two	child	EX.COP-NEUT
'I only	have 2	children.'	(Jacquession	n 2005: 262)

(96) Kokborok:

than-sa	сетрау	bəthay-gənaŋ	naŋ-gɔ	kaŋ-cha
CL-one	basket	fruit-POSS	need-NEUT	CL-one

japa naŋ-gɔ japa need-NEUT 'A basket full of fruits and a *japa* are needed' (Annamalai 1976: 133)

(97) Kachari:

botol thai gini bottle CL two '2 bottles' (Dundas 1908: 7)

(98) Rabha: *aŋ-i másu maŋ-aniŋ to-a* I-GEN cattle CL-2 EX.COP-NEUT 'I have two cattle.' (Joseph 2007: 389)

Some classifiers function only in numeral constructions while others may bleed into different syntactic categories. One such category has been referred to as "categoriser" (Burling 2004; Joseph 2007), "les [noms] composés inseparables" (Jacquesson 2005) and "class terms" (Haas 1942; DeLancey 1986). This seemingly non-restricted grammatical behavior may create some difficulty in reconstructing the numeral classifier system for PBG. Cross-linguistic diachronic evidence demonstrates that these forms often serve as the etymological source for many numeral classifiers (Aikhenvald 2003). The distinct synchronic structural restrictions define class terms from numeral classifiers. In class-term (CT) constructions, the classifying element functions as the head of a noun compound to form a restricted semantic class. These class term elements are more

numerous than numeral classifiers, and categorize referents into more restricted categories. They are found throughout BG.

(99) Garo: na?na?-tok 'fish' 'fish' exa. na?-chenbit 'small, edible fish' na?-tik 'fresh-water shrimp' ta?-'tubers' ta?-holchu 'casava, manioc' exa. ta?-ma 'large, edible tuber' ta?-milaŋ 'sweet potato' (Burling 2004: 168-171) (100) Bodo: 'body parts' á-khay 'hand' áexa. á-khob 'lower portion of the knee' á-khánthi 'arm' phi-/bi- 'trees, fruit' phi-phan 'tree' exa. bí-bar 'flower' 'bark of a tree' bí-gur (Bhattacharya 1977: 114-115) (101) Kokborok: 'earth' ha-kor 'cave' haexa. ha-duli 'dust' ha-cutk 'mountain' (Annamalai 1976, 36-39)

In some of the modern languages, class-term elements may also behave as free-standing nouns.

(102)	Garo: bol-	'trees'	exa.	bol bol-chek-si bol-goŋ	'wood, tree' 'twig of a tree' 'fallen tree'	
	do	'bird'	exa.	do do-di do-ka	'domestic bird, fowl' 'peacock' 'crow' (Burling 2004: 168-171)	

(103)	Boro:				
	ná	'fish'	exa.	ná	'fish'
				ná-barli	'catfish'
	nó-	'house	exa.	nó	'house'
				nó-ma	'big house'
				nó-sa	'hut'
	dáw-	'bird'	exa.	dáw	'bird'
				dáw-kha	'crow'
				dáw-sa	'chicken'
					(Bhattacharya 1977: 114-115)
(104)	Deuri:				
	du	'bird'	exa.	du	'fowl'
				du-pa	'rooster'
				du-jã	'egg'
	me-	'animals,	exa.	mẽ	'goat'
		quadrupeds'		me-go	'lion'
				me-sa	'tiger'
					(Jacquesson 2005: 218-219)
(105)	Rabha	:			
(100)	cón	'insects'	exa.	con	'insect, worm'
	209			con-bon	'woodworm'
				con-khobak	'white lice'
	ná	'fish'	exa.	ná	'fish'
				ná-ner	'electric eel'
				ná-khem	'dried fish'
	tó	'bird'	exa.	tó	'bird, fowl'
				tó-kha	'crow'
				tó-pak	'butterfly'

There are also find instances of "repeater" classifiers, which are common in languages of Southeast Asia, Micronesian and South America (Aikhenvald 2003). In these constructions, a noun is used in the classifier slot to modify the same noun.

(106) Garo:

son son-gini village CL-two 'two villages' (Burling 2004: 252)

3.2 The Proto-Boro-Garo Classifiers: An Attempt at Reconstruction

Due to the variation of some of the BG classifier systems, there are a number of claims that can only draw support from assumptions based in robust typological patterns as well as salient semantic "universals" of categorization. My approach thus follows that taken by DeLancey (1986: 446) in reconstructing the Proto-Tai (PT) classifier system, which draws from the following two assumptions:

"...[A]n etymon which occurs as a classifier in PT in all three modern branches of the family was used as a classifier in PT, and that any such etyma for which no noun or class term use is attested in the modern languages had no such use in PT, and is thus a likely candidate for membership in the earliest reconstructible classifier set."

The reconstruction will begin with a formal comparison of the class terms used across modern BG as these may reveal possible etymological sources for the numeral classifiers. Once completed, the PBG numeral classifier system will be examined. When divergent forms are encountered, internal reconstruction will be used with special attention paid to CT forms.

3.2.1 Class Terms

Class terms are nominal elements that denote a specific semantic field. They are used to form noun compounds that are restricted to the group denoted by the CT. Corresponding class terms are consistently found across modern BG, which indicates common ancestry from PBG. However, we also find variation with respect to the class terms that may be used as free-standing nouns. This should not be understood as evidence against PBG reconstruction, but rather an indication that these language communities did not find it useful or necessary to refer to each CT group in a general sense. As the function of class terms is purely lexical in nature, only a formal reconstruction will be proposed.

3.2.1.1 Animal Class Terms

There are four distinct class terms used to categorize non-human animals which are consistently found across the different branches of modern BG. This suggests a similar categorization in PBG such that we may assume the proto-language primarily separated the animal kingdom into four separate groups, morphosyntactically speaking. The different categories and forms used are listed in Table 19.

		Rabha	Garo	Boro	Deuri	Dimasa	PBG	PTB
Birds	Free	tó	do?	dáo	dua	dáo	*taó	*daw~*dow
	Bound		do?-					
Fish	Free	ná		ná			*ná	*ŋа
	Bound		na?-					
quadrupeds	Free	_	mat	míi	mẽ	mí	*ma	*maŋ
	Bound	má-			mV-	mÝ-		
Insect	Free	cóng	jo?ng-				*yóŋ	*dyuŋ
	Bound		jo?ng-	ong-				

Table 19: Animal Class Terms in Modern BG

<u>3.2.1.1.1 Birds</u>

The "bird" class term demonstrates consistent sound correspondences throughout the family, and can be reconstructed as **táo*. This form represents a common inheritance from PBG, and reflects PTB **daw~dow* 'bird'.

This class term particularly exemplifies how CT's are indeed a distinct category from numeral classifiers; not only is their syntactic distribution different, but they are more restricted in what nouns they can modify. This requires that there be more transparent of a semantic connection. This is evidenced by the fact that all five of these languages have a different classifier morpheme for animals which includes birds, while there is a distinct class term for avian creatures.

3.2.1.1.2 Fish

The "fish" class term also demonstrates consistent sound correspondences, and reconstructs as $*n\dot{a}$. This element is a reflex of PTB $*\eta a$ 'fish', and functions as a free-standing noun throughout BG, aside from Garo where it has the form *na?-tok*.

3.2.1.1.3 Quadrupeds

The class term for quadrupeds is used to classify most animals. Like the two previous class terms, this element is found throughout modern BG, and reconstructs to PBG as *ma. This form is related to the animal numeral classifier *may, and is cognate to PTB *mray 'horse'. Rabha is the only language demonstrating the inability of this form to function as an independent noun.

3.2.1.1.4 Insects

Following the sound correspondences in Joseph & Burling (2006), we can reconstruct the form for the "insect" class term as $*y \delta y$. This reflects PTB *dyuy 'insect, bug'. However, the "insect" class term is not found as consistently across the family as the previous class terms described.

3.2.1.2 Plant Class Terms

There are six distinct class terms used to categorize plants. These are listed in Table 20, and are consistently found across the different branches of modern BG. This suggests a similar pattern in PBG.

		Rabha	Garo	Boro	Deuri	Dimasa	PBG	РТВ
Tree	Free	pan	bol	bon			*pol	*bul~pul
	Bound							
Bamboo	Free	bá		oa~oua			*bwá	*pwa~wa
	Bound		wa?-					
Fruit	Free	thé					*thái	*sey
	Bound		te?-	tái-				
Yam,	Free	khan		tá	ta		*thá	*r(ya)
tuber								*kywəy
								'yam'
	Bound		ta?-					
Herbs,	Free	sam	sam	sam			*sam	*r-tswa-n
medicine,	Bound							
grass								
Rice,	Free	mai	mi	mai	mi	mai	*mai	*mey
paddy	Bound							

Table 20: Plant Class Terms in Modern BG

<u>3.2.1.2.1 Trees</u>

The "tree" class term demonstrates consistent sound correspondences and reconstructs as PBG **pol*, which is a reflex of PTB **bul~pul* 'tree'. This form functions as a free-standing noun in all of BG, though written descriptions on the family suggest that Rabha, Bodo and Garo are the only evidence of it functioning as a class term.

3.2.1.2.2 Bamboo

The "bamboo" class term follows the sound correspondences proposed by Joseph & Burling (2006: 108) and can be reconstructed as PBG **bwa*. This reflects PTB **pwa~wa* 'bamboo'. In Rabha and Bodo, this element may function as a noun, while it is restricted to noun-compounds in Garo.

3.2.1.2.3 Fruit

The PBG class term for "fruit" can be reconstructed as **thái* given the consistent sound correspondences. This does not reflect the PTB form, **sey* 'fruit', but the aspiration on the initial consonant and vowel diphthong do bear resemblance to PTB **ha:y* 'mango'.

3.2.1.2.4 Tubers

The "yam/tuber" class term follows consistent sound correspondences as well, and reconstructs as PBG **thá*. Rabha is the only language with a divergent form, *khan*, which does not have a clear etymology. The class terms in the other BG languages do not reflect the PTB forms *grwa 'potato', *r(ya)/*kywəy/*nway 'yam', either.

3.2.1.2.5 Grass

The "grass" class term is identical across BG. It can be reconstructed as PBG **sam*, which reflects PTB **r-tswa-n*.

3.2.1.2.6 Rice, Paddy

The class term for "rice, rice paddy" is found throughout the family, and demonstrates consistent sound correspondences. The PBG form reconstructs to **mai*, a reflex of PTB **mey* 'rice, rice paddy'.

3.2.1.3 Natural World Class Terms

Only three modern BG languages (Rabha, Garo and Bodo) are described as having a class terms which categorize noun referents belonging to the natural world. This is illustrated by Table 21.

		Rabha	Garo	Boro	PBG	РТВ
land,	Free	há		Há	*há	*ha~ka
soil	Bound		a?-			
Fire	Free	bár	wa?al	Ot~ort~ór	*bwár	*bwar~pwar
	Bound					
Stones	Free		ro?ŋ		*róŋ	*luŋ
	Bound	róŋ-	ro-o?oŋ			

Table 21: Natural World Class Terms in Modern BG

<u>3.2.1.3.1 Land, Soil</u>

The "land" class term evidences consistent sound correspondences and can be reconstructed as PBG *há. This reflects PTB *ha~ka 'earth'.

<u>3.2.1.3.2 Fire</u>

"Fire" class terms also demonstrate consistent sound correspondences across the family. The PBG reconstructed form **bwár* is a reflex of PTB **bwar~pwar* 'fire'.

3.2.1.3.3 Stones

The "stones" class term is evident in only Rabha and Garo, though the other BG languages have cognate lexical nouns. Following the consistent sound correspondences evidence by the data, this form reconstructs as PBG *rón, which reflects PTB *lun.

3.2.1.4 Objects of Human Manufacture Class Terms

There is only one class term found in the modern BG languages that categorizes man-made items. Since these elements are all free standing lexical items, it does not seem likely that this CT was part of PBG. Instead, it seems more logical that all of the compounds featuring this morpheme are more recent innovations specific to each language community. Additional evidence for this can be found in the fact that many of the modern BG languages have specific names for many different kinds of basket, none of which are compounds headed by this "class term". In spite of this, we are still able to formally reconstruct this element into PBG as **khok*, cognate to Tibetan *khug-ma* 'pouch, bag' and a reflex of PTB **kuk~kow* 'basket, pouch'. Cognate forms are listed in Table 22.

Table 22: Objects of Human Manufacture Class Terms in Modern BG

	Rabha	Garo	Boro	PBG	PTB
Free	khok	kok	kó	*khok	*kuk~kow
Bound					

3.2.1.5 Body Part Class Terms

There are five distinct class terms used to categorize body parts which are consistently found across the different branches of modern BG and are listed in Table 23. All of the attested forms throughout the family consistently demonstrate the sound correspondences proposed by Joseph & Burling (2006).

		Rabha	Garo	Boro	Deuri	Dimasa	PBG	РТВ
Face,	Free	nuk					*muuk	*mik
eyes	Bound		mik-	mi-				
Hand,	Free	cak	jak			já	*yak	*dyak
arm								*yak
	Bound			ag-				
Leg	Free		ja?-a				*yá	*kaŋ~keŋ
	Bound	cá-	ja?-	a(n)-	apa-			
Internal	Free						*khá	
organs	Bound	khá-	ka?-					
Mouth	Free						*khú	*ku(w)
	Bound	khú-	ku?-	ku-				

Table 23: Body Parts Class Terms in Modern BG

3.2.1.5.1 Face, Eyes

The class term for "face, eyes" reconstructs to PBG **muk*, and reflects PTB **mik* 'face, eye'. Joseph (2007: 607) accounts for the aberrant Rabha *nuk* by suggesting that the initial [m] became an [n] under the analogical influence of the verb *nuk* 'to see'. Rather, it would appear that Rabha *nuk* 'to see' has simply replaced PBG **muk* as the element denoting the face or eyes. Given how the semantics of this verb inherently relate to the facial region of a person, this would be a logical extension of the function of *nuk* 'to see'.

3.2.1.5.2 Hand, Arm

The "hand, arm" class term reconstructs as PBG *yak. This is a reflex of PTB *(d)yak.

3.2.1.5.3 Leg

The "leg" class term reconstructs as PBG *yá, which could reflect PTB *kaŋ~keŋ 'leg'. This element consistently functions as a bound class term across the family, and is found in only a few fossilized examples in Rabha (Joseph 2007).

3.2.1.5.4 Internal Organs

The class term for internal organs and parts of the upper body is found only in Rabha and Garo. While there does not appear to be any corresponding PTB form, we are able to reconstruct this CT as PBG **khá*.

3.2.1.5.5 Mouth

The "mouth" class term reconstructs to PBG $*kh\dot{u}$, which reflects PTB *ku(w)"mouth". This morpheme consistently behaves as a bound element across the family.

3.2.2 Numeral Classifiers

The similarity among the different class terms in the modern languages might lead to the expectation that numeral classifiers would behave the same. However, it is not uncommon for languages to replace the existing forms used for categorization with innovated forms (Aikhenvald 2003); we find evidence for such a phenomenon in modern BG. Given the nature of the available data on numeral classifiers in modern BG, this reconstruction of the NC system is provisional. There are many instances where no attested NC form has been provided in the descriptive grammars of some of the modern languages. Though this is normally taken as evidence for the loss of a given category, field-work practices could contribute to the variation we find among the semantic categories denoted by classifiers. Certain categories, especially the "abstract concept" category, would be difficult to elicit which could lead to an incomplete documentation of classifier forms.

3.2.2.1 NCs Consistently Found across BG

The categories of classifiers provided in Table 24 are found throughout modern BG. We must therefore assume that these categories were distinguished in PBG grammar.

	Garo	Boro	Deuri	Kokborok	Rabha	Tiwa	Dimasa	PBG
Humans	(s)ak-	sá-	dug(u)-	khərək	sak-		sao	*sak
		khá-						
Animals	maŋ-	má-		ma	maŋ-	(ki-)	má	*maŋ
Flat objects	ko?-	gaŋ-	ha-	kaŋ	kho-	phé-	gráŋ	*khó
	kiŋ-					teŋ		*kaŋ
Round	roŋ-	tháy-	ti-	thay-			thai-	*thái
objects								
Long,	diŋ-	duŋ-		tuŋ-	tunj-	tâl		*tung
flexible								
objects								
Long, hard		gon-	ku-	kəŋ-			goŋ-	*koŋ
objects								
Residual	ge?-	(mun-)	gu-	ku-	gó-			*gÝ-
category	gi?-			kə-				
Abstract	miŋ-	m i n-						* <i>miŋ</i>
concepts/								
inanimate								
objects								

Table 24: Numeral Classifiers in Boro-Garo

3.2.2.1.1 Humans

The human classifiers in Garo, Bodo, Rabha and Dimasa are cognate to one another and demonstrate consistent sound correspondences. We may thus reconstruct the PTB form as **sak*. Dialects of Bodo spoken in North Kamrup and West Darrang have an alternate form for the human classifier, *khá*, which has similar phonological structure to the initial syllable in Kokborok *khorok* (Bhattacharya 1977). This initial velar could be connected to the final /k/ in Garo and Rabha *sak*-. Deuri *dugu*- does not have a clear etymology, though the second syllable, gu, is identical to the residual category classifier in this language. This divergence is indicative of independent innovation.

3.2.2.1.2 Animals

The PBG animal classifier can be reconstructed as *may, given the consistent sound correspondences evidenced by the modern languages. This form is cognate to PTB *mray 'horse'. Deuri is the only modern language lacking this category in the classifier system. However, there is compelling evidence that the use of the residual classifier guspread to incorporate the qualification of purely inanimate objects to include non-human animals as well; The same pattern is demonstrated by Tiwa ki-. While the loss of basic distinction between animate and inanimate objects may seem odd, it could be indicative of the influence that non-BG languages have had on the system. There is evidence that Austroasiatic classifier systems have influenced the classifier systems in other southeast Asian languages, and they are known for their lack of animal classifiers (Adams 1991).

3.2.2.1.3 Flat Objects

Joseph & Burling (2006: 120) reconstruct the PBG flat-object classifier as **khó* based on the sound correspondences shared between Rabha *khó* and Garo *ko*?. This particular form in Garo does not correspond to the form provided in Burling (2004: 251), *kiŋ*, which is cognate to the flat-object classifier in Bodo (*gaŋ-*), Deuri (*ha-*), Kokborok (*kaŋ-*) and Dimasa (*grán*). The prevalence of these forms throughout the family cannot be attributed to independent innovation, and their consistent sound correspondences indicate

that the reconstructed PBG form is *kan*, which could be a reflex of PTB *grwa* 'feather'. Synchronic data show that the source of this morph came from the word for 'feather', as it is still used as a lexical item in at least BG language.

(107) Boro:

- a. *gan* 'feather'
- b. *bilái gaŋ-se* tree CL-one 'leaf of a tree'
- c. *bizáb gaŋ-se* book CL-one 'a book' (Basumatary 2005: 55)

The question remains as to how to account for the divergent forms in Rabha and Garo. Synchronic evidence also proves useful in this case as we find the Rabha verb *kho* 'to stitch, weave (hem of clothes, edge of woven articles)' (Joseph 2007: 767). Despite the difference in tone on the vowel, the connection between a verb that refers to an action specifically done to flat items made of cloth and a classifier referring only to flat things is clear. Yet, that both Garo and Rabha developed these divergent forms independently of one another is suspect. Descriptions of the Garo flat-object classifier *kiŋ*- state that this form cannot be used when modifying objects made of cloth (Burling 2004: 251). The restricted use of this form indicates the existence of narrower flat-object classification in Garo that is based on rigidity of the referent. This indicates a similar categorization of two-dimensional object in PBG. While Bodo, Deuri, Kokborok and Dimasa simplified the categorization of flat objects by using **kaŋ*- in all instances, Rabha instead uses **kho*.

Tiwa flat object classifier *phé-teŋ* is an instance of independent innovation. There are no cognate forms found in the other modern languages, though we do find Rabha *phé-*

dem 'to fold (paper, clothes, leaves)' (Joseph 2007: 803). Like the verbal source of Rabha *khó* and Garo *ko*?, the action denoted by this verb is inherently related to objects of a certain shape. This connection could lead to the eventual grammaticalization of this verb to function as a classifier.

3.2.2.1.4 Round Objects

Bodo, Deuri, Kokborok and Dimasa share cognate forms for the round object classifier. Given the consistent sound correspondences, the PBG form reconstructs as **thái*, which is also the reconstructed form for the lexical noun meaning 'fruit'. The divergent Garo *roŋ*- is an independent innovation derived from the nominal *roŋ* 'stone' and "stones" class term *roŋ*-. Since both fruit and stones are saliently three-dimensional objects, there is no reason why Garo speakers couldn't have replaced the PBG classifier form with another word referring to a different three-dimensional object. In the case of Rabha, the category has either been lost, or is unattested.

3.2.2.1.5 Long Objects

There is evidence found across modern BG that the proto-language had a distinct category for long object classification that was sub-divided according to the relative flexibility of the noun referent. While most of the languages have simplified this system to incorporate all long objects under one category, cognate systems in Bodo and Kokborok reflect the classification of long object in PBG.

3.2.2.1.5.1 Long, Flexible Objects

Following the consistent sound correspondences, we can reconstruct the "long, flexible object" classifier as PBG **tunp*-. This form is clearly related to the second syllable in PBG *khul-tun* 'thread', which is a reflex of PTB **dun~tu:n* 'long, length'. Deuri and Dimasa are missing this category, while Tiwa *tâl* is a borrowing from Assamese (*tâl* 'tree').

3.2.2.1.5.2 Long, Rigid Objects

Garo and Rabha are both missing the classifier for long, rigid objects, while Bodo, Deuri, Kokborok and Dimasa all have cognate forms. Given the consistent sound correspondences, we can reconstruct the PBG form as *goy. This classifier is derived from the nominal goy 'horn', and reflects PTB *gruy 'horn'.

3.2.2.1.6 Residual Category

While the consonants and tone distinctions in the "residual category" classifier correspond across the family, the variation in vowels impedes our ability to accurately reconstruct the proto-vowel. In spite of this, Joseph & Burling (2006: 120) propose a reconstructable $*g \acute{V}$ - in PBG.

3.2.2.1.7 Abstract Concepts and Inanimate Objects

Only two languages in modern BG, Bodo and Garo, evidence the morphosyntactic categorization of abstract concepts and inanimate object. However, these languages represent distinct sub-branches within the family, which suggests common inheritance from the proto-language. This form can be reconstructed as PBG **min*.

3.3 The Simplification of the Boro-Garo Classifier System

Once the basic categories of a classifier system are established, i.e. animates vs. inanimates, humans vs. non-humans, and the three-way shape distinction, languages may fine-tune how they refer to the concepts that are most culturally salient. For example, if a language already has a well-established one-dimensional classifier category, once a new "long object" classifier starts edging its way into the system, the existing category may shift some, thus becoming more specific. This allows space for the new category, as DeLancey (1986: 449) writes:

"As soon as a new classifier is available, the existing category is subdivided in order to provide a category for it, and in both cases the division incorporates the consistency feature."

This phenomenon is not evidenced by the reconstruction of the PBG classifier system. Instead, data from the modern languages indicate that some degree of simplification has taken place. PBG distinctions between one-dimensional rigid objects and onedimensional flexible objects has been lost in Garo, Deuri, Rabha, Tiwa and Dimasa, which classify all long objects under one category. In the case of Garo and Rabha, the function of the PBG "long, flexible object" classifier was generalized to categorize all one-dimensional objects, and the "long, rigid object" classifier was lost. Deuri and Dimasa evidence the opposite pattern, with the function of the "long, rigid object" classifier spreading to incorporate all one-dimensional objects.

Flat object classification has also been simplified in the majority of the attested modern classifier systems in BG. The proto-system, reflected currently by the Garo "flat object" classifiers, distinguished between flat, flexible objects and flat, rigid objects. In Bodo, Deuri, Kokborok and Dimasa, these distinctions have been lost as the function of the PBG "flat rigid object" has generalized to be used in reference to all flat objects. Conversely, the Rabha system has incorporated the classification of all flat objects under the function of the PBG "flat flexible object" classifier.

Deuri has also lost the animal classifier found in the rest of BG. The "residual category" classifier has replaced this function as it now occurs with cows and birds (Jacquesson 2005). This suggests that the human/non-human animate distinction has been completely lost in this language.

<u>3.4 Conclusion</u>

This reconstruction is provisional due to the lack of descriptive data on the majority of the BG languages. In order to gain a more complete understanding of the PBG numeral classifier system, data from the undocumented BG languages is necessary. Examples from the classifier systems of neighboring languages from different TB sub-branches would also be helpful, as would examples from unrelated languages in the area.

Such examples could illuminate possible influences that the non-BG systems have had on PBG classifier categories.

Despite the difficulties confronting this reconstruction, the data indicate clear etymological sources for many of the numeral classifiers in modern BG. Typical of classifiers systems, many of these sources are lexical nouns and verbs. The reconstructed Proto-Boro-Garo classifiers also distinguish the most basic categories outlined by such systems (animacy and shape), with consistency also categorized for flat and long objects. The evolution of the classifier systems across the family demonstrates some degree of category simplification. Many languages have collapsed one- and two-dimensional object classification into one category. While these categories continue to be distinguished by reflexes of the PBG classifiers, rigidity of the referent is no longer taken into consideration.

CHAPTER IV

PBG VERBAL MORPHOLOGY

4.0 Introduction

Like other TB languages, BG languages are predominantly suffixing, with only a few prefixes. These affixes function as either finite or non-finite verbal inflection, and though several seem to be reconstructable for the proto-language, there is also evidence of independent innovation. This chapter is an attempt to reconstruct PBG finite verb morphology, as well as the proto-auxiliaries and valence-altering morphemes.

4.1 Neutral Tense

Various BG linguists differ as to how the neutral tense suffix is described. Bhattacharya (1977) glosses it as a present habitual in Bodo, while both Burling (2004) and Jacquesson (2005) define it as the "neutral" tense in Garo and Deuri, respectively. Joseph (2007), on the other hand, defines this suffix for Rabha, Garo and Bodo as the present tense. Given its unmarked semantics in the modern languages, it will be referred to as the neutral tense in this reconstruction. Table 25 illustrates the closeness in phonological structure of the suffix, which reconstructs as PBG *-*a*.

Table 25: PBG neutral tense

Garo	Bodo	Rabha	Deuri	PBG
-a	-w~-a~-i	-a	-i	*-a

(108) Garo: sok-a arrive-NEUT '(she) arrives' (Burling 2004: 93)

(109) Boro:

mansi-atho-yiman-NOMdie-NEUT'the man dies'(Bhattacharya 1077: 193)

(110) Rabha:

kai-be si-a person-DEF die-NEUT 'men/people die' (Joseph 2007: 636)

(111) Deuri:

hela ji-ya iga-i this water-TH good-NEUT 'This water is good.' (Jacquesson 2005: 170)

(112) Dimasa: *a-ni* bupa lim-du
I-GEN father ill-NEUT
'My father is ill.' (Jacquesson 2008: 28)

There is evidence that a functional reanalysis has taken place with this suffix. When left out of constructions with a stative predicate, there is no ambiguity in the meaning. The stative verb is understood as a modifier of the noun referent, and is not treated as a verbal predicate.

- (113) Garo: *le-ka gi-sim*paper black
 'the black paper' (Burling 2004: 273)
- (114) Deuri: $as\hat{a}$ $y\hat{a}$ distant house 'distant house' (Jacquesson : 171)

When -a is used on stative verbs in Garo, Rabha and Deuri, which Joseph (2007: 636) refers to as "verb roots having adjectival semantic content", ambiguity may be introduced to the proposition. This indicates the original nominalizing function of -a, which is a reflex of PTB *-*pa* 'NMZ'. In many instances, the suffix is taken to be finite verb inflection, while the noun referent behaves as the only clausal argument. The ambiguity in Garo example (115b) below illustrates how this is not always the case. Without the -asuffix, *gisim* 'black' can only be treated as a modifier of the noun referent and a constituent of the noun phrase. When -a is used, however, *gisim-a* may be treated as either a finite verb or as a deverbalized modifier of the noun referent and NP constituent.

(115) Garo:

a.	u-ni	sal-o-de	sal-ba	nam-en
	that-GEN	day-LOC-but	sun-also	very

diŋ-bi-a-na hot-very-NEUT-QUOT 'The sun was terribly hot that day, it is said.' (Burling 2004: 356)

b. *keka gisim-a* paper black-NEUT 'the paper is black'/'the black paper' (Burling 2004: 273)

(116) Deuri:

la yâ-wâ asâ-i this house-TH distant-NEUT 'this house is distant/far-off' (Jacquesson 2005: 171) (117) Rabha:
 kai-be nem-a
 person-DEF good-NEUT
 'the man is good' (Joseph 2007: 636)

Since it does not contribute tense or aspectual value to the verbal complex, in addition to the propensity for this suffix to follow other finite verb inflection, Joseph (2007) suggests that -a functions as a general finite marker. As will be demonstrated later in this chapter, many of the verbal aspect suffixes evolved from serialized verbs. In these constructions, the -a suffix was the final element in the clause, thereby nominalizing the verbal complex. As the serialized verbs began to grammaticalize and reduce phonologically, -a was taken to be a part of the innovated tense/aspect suffixes. Given this behavior and the ability to nominalize verbs, the original PBG function of -a can be more fully described. In simple declarative sentences, the verb took the -a suffix and the construction was no different from equational propositions with a nominal predicate and the copula omitted. With no explicit indication of tense in these verbal predicates, -a was reanalyzed as a finite marker on the verb. This would be a natural shift given that equational propositions are generally taken to apply at the time of the utterance, and are stated as a general fact.

The motivation for claiming -a is a relic of *PTB -pa comes from the allomorphs mentioned by Bhattacharya (1977): -yi and -wi. The variation in vowels is consistent with the sound changes in Bodo since the split from PBG and the syllable-initial glides suggest the remnants of an old consonant. Due to the bilabial place of articulation for [w], we may assume this reflects the place feature of the original consonant, [p]. We also find instances where the relativizing -gipa has been lost in the modern BG languages, only to be denoted by this -a suffix. Either -gipa reduced phonologically to the point that only -a *a* remained, or the nominalizing function of -a was utilized to create a nominalized relative clause.

The final piece of evidence to support this claim can be found throughout TB. It is a well-documented phenomenon that many languages in this family developed finite verb marking from nominalized constructions (Konow 1908, 1911; Matisoff 1972; DeLancey 1991, 2005; Bickel 1999). In Sunwar, for example, main verbs take a nominalizing suffix and are followed by copulas.

- (118) Sunwar: *kyarše saî-šo tshaa* goat kill-NMZ exist/3s/NON.PST 'He is killing a goat/goats.'
- (119) *kyarše saî-šo 'baâ-ta* goat kill-NMZ exist-3S.PST '[I saw] he was killing a goat/goats.' (DeLancey 2008: 5)

DeLancey(2008) also provides evidence that the recently innovate agreement markers in the language are actually possessive pronominals that cliticize onto the nominalized verb. Example (120) illustrates how ka is the 1s POSS, while the ability for this element to occur with the verb in (121) indicates the nominalizing function of the final particle $h\hat{i}$.

- (120) kà ká: nà: 1st cry.II NMZ 'my crying'
- (121) $k\dot{a} k\dot{a}p$ $h\hat{i}$: 1st cry.I FIN 'I cry' (DeLancey 2008: 6)

Lhasa Tibetan uses several different nominalizers, followed by copulas, to form finite clauses. The following examples are taken from DeLancey (2008)

(122)		STEN	M NOM	COPULA	
	nga	zas	-pa	yin	'I ate.'
	nga	za	-gi	yod	'I am eating.'
	nga	za	-gi	yin	'I will eat.'
	nga	za	-rgyu	yin	'I still have to eat.'
	nga	za	-mkhan	yin	'I am going to / intend to eat.'

These constructions are nominalized clauses finitized by a copula, and represent a basic source of clausal structure in TB languages (DeLancey 2008). Since the equational copula is optional in BG, the many instances where the copula was omitted led to a reanalysis of nominalizing -a such that it became a finite verb marker.

4.2 Negative Suffix:

The modern BG languages all have a negative suffix that follows the main verb. It is similar in phonological structure across the family, and can easily be reconstructed as *-ya. The different forms found across the family are listed in Table 26.

Table 26: PBG Negative Suffix

Garo	Bodo	Rabha	Deuri	Dimasa	*PBG
-ja	-a~-ya~	-ca	-ya	-ja	-*ya
	-wa				

(123) Garo:

mi doŋ-ja rice EX.COP-NEG 'There is no rice.' (Burling 2004: 115)

(124) Boro:

aŋ mao-a

I do-neg

'I do not do' (Joseph 2007: 645)

- (125) Deuri: ha-hî-ya eat-CAP-NEG
 'He cannot eat' (Jacquesson 2005: 165)
- (126) Rabha: *oroŋ reŋ-ca*they go-NEG
 'They do not go' (Joseph 2007: 260)

Negation clearly followed a similar pattern in PBG and can be attributed to a common etymological source for all of the negative morphemes seen here.

4.3 Auxiliaries and Copulas

The BG auxiliaries have, for the most part, maintained their syntactic and semantic functions across the modern languages. Both existential and equational copulas occur with very similar forms and functions.

4.3.1 Equational Copula

The equational copulas in modern BG, seen in Table 27, demonstrate consistent sound correspondences, and may be reconstructed as PBG $* \delta \eta$.

Table 27: PBG Equational Copula

Garo	Rabha	Deuri	PBG
oŋ	dóŋ	hõ	*óŋ

When two referents are compared to one another in a simple declarative proposition, the copula may be omitted.

(127) Garo:
a. aŋa mandi
I Mandi
'I am a Mandi.' (Burling 2004: 116)

(128) Rabha:

- a. *náme kai* you.DEF person 'you are a human being' (Joseph 2007: 243)
- b. *náme kai dó-a* you.DEF person EQ.COP-NEUT 'you are a human being' (Joseph 2007: 242)

(129) Deuri:

Hela-wa	jar-o	midigê
that-TH	us-GEN	cat
'That is out	r cat.' (Jacquess	on 2005: 107)

(130) Bodo:

áŋo mansi I man 'I am a man.' (Bhattacharya 1977: 246)

When more complex tense and aspectual distinctions are made in equational

constructions, the copula becomes necessary. This stem then serves as the anchor for the

tense and aspectual verb suffixes.

(131)	Garo:	
	nok-ma	oŋ-noa-ma
	rich-man	EQ.COP-FUT-Q
	'Will he be a	rich man?' (p. 116)

(132) Rabha:

i-be	kai	dóŋ-ca	i-be	bai-se
this-DEF	person	be-NEG	this-DEF	deity-EMPH
'This is not a l	human l	being, it is	s a deity.' (Josep)	h 2007: 242)

(133) Deuri:

<i>dugô-yô</i>	<i>Jimosaya</i>	<i>mosi</i>	<i>kani-ya</i>	<i>omcare</i>	<i>disi-kunö</i>
before-GEN	Deuri	man	COL-TH	very	ability-with
hô-nime					
EQ.COP-IMPF					
'Les Deuri d'	autrefois étaie	ent des ge	ens très habil	es.'	005: 276)
'The Deuris f	from before w	ere very a	able people.'	(Jacquesson 2	

In negative equational constructions, the copula is inflected with the negative suffix.

- (134) Garo: *bia mandi oŋ-ja*he Mandi EQ.COP-NEG
 'He is not a Mandi.' (Burling 2004: 116)
- (135) Rabha:

<i>uni badaŋ</i>	<i>nok-ini</i>	aro	<i>soŋ-ini</i>	<i>kai-taŋ</i>	<i>babi-e</i>
Therefore	house-gen	and	village-GEN	person-PL	think-NF
<i>rá-jo</i>	<i>je</i>	<i>i-be</i>	<i>jaba</i>	dóŋ-ca	a
take-PRF	REL.PRO	this-DI	EF anyon	e EQ.CO	P-NEG

noki-na mai bai-an ríba-nata house- DAT paddy deity-itself come-CONT 'Therefore people of the house and of the village thought to themselves that this is none but the paddy deity that came to the house.' (Joseph 2007: 700)

(136) Deuri:

la	saikl	ciba	hô-yâ
this	bicycle	new	EQ.COP-IMPF
'This b	oike is not new.	' (Jacqu	uesson 2005: 171)

The equational copula can be reconstructed back to PBG with similar restrictions; PBG

grammar allowed for the omission of the copula in equational constructions. In negative

constructions in PBG, the consistent trend to inflect the equational copula with the

negative suffix reflects a similar pattern in PBG.

4.3.2 Existential Copula

The existential copula, seen in Table 28, is also close in form across BG and reconstructs as PBG $*to\eta$.

Table 28: PBG Existential Copula

Garo	Bodo	Rabha	Deuri	PBG
doŋ	don	toŋ	dû	*toŋ

Its functions are also very similar, and exhibit robust typological patterns demonstrated cross-linguistically, especially within Tibeto-Burman. These elements are used in propositions to assert the existence/location of a referent, often in relation to the location of another referent.

- (137) Garo: *leka tebil-o doŋ-a*paper table-LOC EX.COP-NEUT
 'The paper is on the table/There is paper on the table/The table has paper on it.'
 (Burling 2004: 115)
 - (138) Rabha:

nok-ina bar-bapeke cika jora kican-i bebok pan bebok tree return-while water stream side-by house-ALL phan-sa cun-rana ton-ba CL-one big-very EX.COP-NEUT 'While returning home, by the side of a stream there was a very big bebok tree.' (Joseph 2007: 689-91)

(139) Deuri:

bo-ho	midige	gu-ja	dû-î
that-LOC	cat	CL-one	EX.COP-NEUT
'There is a cat	.' (Jacq	uesson 2005: 1	08)

(140) Boro: *lékháya bóha don* book where EX.COP 'Where is the book?' (Bhattacharya 1977: 253)

The existential copula is also used in constructions of possession. The grammatical

structure of the possessive construction is identical to the above examples in that the

possessor takes locative case and functions as the referential ground to the possessed

object (the figure).

(141) Garo: *wak* aŋ-o doŋ-a
pig I-LOC EX.COP-NEUT
'I have a pig/A pig is at me/There is a pig at me.' (Burling 2004: 115)

(142) Rabha:

a.	hácu	kára-i	risithan	to-a
	hill	above-LOC	risithan	EX.COP-NEUT
	'On the	e hill there is th	ne risithan.'	(Joseph 2007: 693-4)

b. an katan paisa to-a-min I LOC money EX.COP-NEUT-IMPF 'I had money.' (Joseph 2007: 484)

(143) Deuri:

ba-yo musu dû-î he-DATcow EX.COP-NEUT 'He has a cow (A cow is to him)' (Jacquesson 2005: 109)

Negative existential constructions follow the same syntactic pattern as negative

equational constructions; the copula is followed by the negative suffix.

(144) Garo: *mi doŋ-ja* rice EX.COP-NEG 'There is no rice.' (Burling 2004: 115)

(145) Rabha: a.

- an katan paisa ton-ca I LOC money EX.COP-NEG 'I have no money/I don't have money.' (Joseph 2007: 241)
- b. Ononba bandar-i okai nemsuka dorai toŋ-ca Even.then granary-LOC that beautiful lady EX.COP-NEG 'Even then (although everyone looked) there was no beautiful lady in the granary.' (Joseph 2007: 699-700)

(146) Deuri:

a.

ã-yõ musu ja I- DAT cow NEG.COP 'I don't have a cow.' (Jacquesson 2005: 109)

b.	jou-wa	micô-hô	ја
	We-TH	platform-LOC	NEG.COP
	'We are no	ot on the platform. ³	' (Jacquesson 2005: 172)

(147) Bodo:

nó-aw mánsi gəy-a house-LOC man NEG.COP-NEUT 'There is no man in the house.' (Bhattacharya 1977: 247)

The Deuri negative existential copula, *ja*, appears distinct from the other bi-morphemic constructions seen in the other BG languages, but there are a few possible explanations for that. This form could reflect the conflation of the Deuri negative suffix –*ya* with the existential copula *du*. A more likely explanation is found when we examine the divergent Bodo form, gaya.

Bodo utilizes a unique copula to indicate negative existence. This varies from the COP-NEG pattern seen in examples from the other BG languages above. No other BG language exhibits this behavior, but there is evidence suggesting the existence of such a form in PBG. Joseph (2007: 305) describes a verbal suffix in Rabha, -go(k), which "...contradicts a statement made by someone – mostly when something that is good and

correct is said in praise of another – and the one about whom it is said wants to contradict it in a light-hearted and modest manner and as a jest, but implicitly giving assent to the statement".

(147)	Rabha	:		
. ,	A:	<i>u-ni-be</i> 3s-GEN-DEF 'His/her voice	<i>khúraŋ</i> voice s is good.'	<i>nem-a</i> good-NEUT
	B:	<i>dóŋ-ca-gok</i> EX.COP-NEG-N	EGII	

'It is not true.' (actually admitting it) (Joseph 2007: 305)

The translation of (147b) would be better translated into English as "It's not not true", since the function of this suffix is to negate complementary statements in a modest way while still acknowledging the truth behind what was said. This behavior mirrors that of the cognate form in Bodo as it negates the truth-value of a proposition. This is not contradicted by (147b) since *-gok* negates the negative truth-value of the statement. It is likely that there was a similar form in PBG. Bodo grammar reveals that the function of the proto-form was negative assertion in a proposition. It is difficult to reconstruct the exact form of this copula as we find only two instances with slightly divergent structures, but it is clear that the initial consonant was *g. There is also evidence suggesting that the PBG negative suffix *-ya may be traced to the negative equational copula. This fact supports the claim that the second consonant was *y. The final -a in Bodo may be attributed to the PBG finite-marker -a, discussed earlier. This revelation concerns the Deuri negative existential copula, *ja*, in that this form is the resulting phonological conflation of the *PBG negative copula *gay. The collapse of the palatal glide and velar consonant would indeed lead to a palatal stop. Therefore, the Deuri *ja* can be accounted
for by evidence for a negative copula in the proto-language that phonologically reduced, while it was replaced in the other BG languages with the assertive existential and equational copulas inflected with the negative suffix.

The reconstruction of the PBG negative copula * $g_{\partial y}$ also accounts for the negative suffix. While Joseph & Burling (2006) reconstruct the PBG negative suffix as *- y_a , there is no discussion as to where this element came from. The lack of a negative verbal suffix in PTB (Matisoff 2003) suggests that we may attribute this suffix as far back as PBG only. The continued use of the negative copula in Bodo suggests that the negative suffix did not develop from the phonological conflation of the velar [g] and palatal [y] in * $g_{\partial y}(a)$. The most likely explanation is that when * $g_{\partial y}$ was used to form simple negative sentences in PBG, it would have taken the PBG finite marker –a. This would lead to a restructuring of the copula's CVC syllable structure to be CV-CV, which could in turn lead speakers to analyze the final syllable, /ya/, as the negating element in the copula. Such a reanalysis would result in the ability to use *-ya productively as a negative suffix.

That said, we are able to reconstruct the existential copula back to PBG, as well as the negative copula, and attribute the same syntactic and semantic functions as maintained across the modern languages in the family.

4.3.3 Other Auxiliaries and Modal Verbs

In addition to the equational and existential copulas seen in the above examples, there are other verbal elements across the modern BG languages which exhibit behavior typical of auxiliary verbs. Though they may serve as the clausal main verb, there are multiple instances where these verbal elements appear in clause-chained constructions, adding more semantic content to the main verb. Some of the basic semantic and syntactic functions of these auxiliaries are shared across the family, though there is some amount of variation in terms of the more recently innovated grammatical functions.

4.3.3.1 PBG *tak 'do, make' Auxiliary

Though phonological structure varies across the family, all of the modern BG languages investigated have an auxiliary with a similar function to English 'do/make'. Often, these may function alone as the clausal main verb.

- (148) Garo: *ma-ko dak-iŋa* what-ACC do-CONT 'What are (you) doing?' (Burling 2004: 116)
- (149) Rabha:
 hampa-ni para nenteŋ taŋ-e nen tak-a
 cotton-GEN from thread spin-NF cloth do-NEUT
 'Spinning yarn (thread) from cotton, cloth is woven.' (Joseph 2007: 703)
- (150) Bodo: *da-maw* NEG.IMP-do 'Do not do' (Basumatary 2005: 67)

(151) Deuri:
 ba-y hũ-na ba-wa dam-na nũ-mẽm
 ce-DAT cause-ACC 3S-TH quoi-DAT faire-PRF
 'En ce cas, qu'a-t-elle fait?' (Jacquesson 2005: 283)

Garo *dak* and Rabha *tak* are cognate and reconstruct to *tak. They are both also used to form light verb constructions (LVCs). The following examples illustrate this behavior, which is also found in other Tibeto-Burman languages.

 a. gwi b. gwi dak-a fog fog do-NEUT 'to be foggy' (153) a. gadila b. gadila dak-a clouds clouds do-NEUT 'It is cloudy.' (Burling 2004: 119) (154) Rabha: a. nen tak-a cloth do-NEUT 'weave cloth' (Joseph 2007: 827-8) b. khrá tak-a ringworm do-NEUT 'develop/form ringworm' (Joseph 2007: 827) (155) Kurteop: tashi nya thuy-shay PN arrow do-PRF 'Tashi shot arrows/did archery.' (Busch 2006) (156) Durni: lalikha ma-y-t-3 love do-1S-NoNPRET-1S 'I love him.' (Van Driem 1993: 138) Tak is special in Rabha because it has also been grammaticalized to adopt the function of direct causation. That is in serial verb constructions. (ak denotes that the cause of an	(152)	Garo:			
 fog fog do-NEUT 'to be foggy' (153) a. gadila b. gadila dak-a clouds do-NEUT 'It is cloudy.' (Burling 2004: 119) (154) Rabha: a. nen tak-a cloth do-NEUT 'weave cloth' (Joseph 2007: 827-8) b. khrá tak-a ringworm do-NEUT 'develop/form ringworm' (Joseph 2007: 827) (155) Kurteop: tashi nya thuy-shay PN arrow do-PRF 'Tashi shot arrows/did archery.' (Busch 2006) (156) Durni: lalikha ma-y-t-3 love do-1S-NoNPRET-1S 'I love him.' (Van Driem 1993: 138)		a.	guri	b.	guri dak-a
 (153) a. gadila b. gadila dak-a clouds clouds do-NEUT 'It is cloudy.' (Burling 2004: 119) (154) Rabha: a. nen tak-a cloth do-NEUT 'weave cloth' (Joseph 2007: 827-8) b. khrá tak-a ringworm do-NEUT 'develop/form ringworm' (Joseph 2007: 827) (155) Kurteop: tashi nya thuŋ-shaŋ PN arrow do-PRF 'Tashi shot arrows/did archery.' (Busch 2006) (156) Dumi: lalikha ma-ŋ-t-ə love do-1S-NONPRET-1S 'I love him.' (Van Driem 1993: 138) Tak is special in Rabha because it has also been grammaticalized to adopt the function of direct causation. That is in serial verb constructions tak denotes that the cause of an			fog		fog do-NEUT
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<i>Tak</i> is special in Rabha because it has also been grammaticalized to adopt the function of direct causation. That is, in serial verb constructions, <i>tak</i> denotes that the cause of an		'I love	him.'	(Van E	priem 1993: 138)
direct causation. That is, in serial verb constructions, tak denotes that the cause of an	<i>Tak</i> is	special	in Rabh	a becau	se it has also been grammaticalized to adopt the function of
λ () λ () λ () λ () () () () () () () () () (direct	causatio	on. That	is. in se	rial verb constructions. <i>tak</i> denotes that the cause of an

event comes directly from some agent, whether specified or not.

(157) Rabha:

jíbra-be	babra-o	oroŋ-i	sábra-o	kok-tak-ŋata
mother-DEF	father-ACC	they-GEN	child-ACC	beat-CAUS-PST
'The mother n	nade the father	beat their child	.' (Joseph 2007	': 193)

Rabha has another verb form, khár, which has similar semantics to 'do'. When used in

LVCs, *khár* denotes a sense of transitivity.

(158)	atoba	bebosta	khár-na	lagi-a
	some	arrangement	do-dat	must-NEUT
	'we	must adopt a p	lan.' (Joseph	2007: 671-2)

This verb may also occur as the main verb in propositions.

(159) nároŋ ata khár-a
2PL what do-NEUT
'What do you do?' (Joseph 2007: 670)

In more complex sentences, though the preceding verb must be marked with infinitival

marking. When it is used in these types of constructions, it gives the sense of 'about to'.

(160) *mai sá-na khár-eta* rice eat-INF do-CONT 'is about to have a meal/eat rice' (Joseph 2007: 247)

This form is clearly cognate to Garo ka?'work, do', which functionally overlaps some

with *dak* (Burling 2004). This element too is used in LVCs, especially in constructions where a verb has been borrowed from another language.

(161) Garo:

- a. *bia ka?a* 'to get married'
- b. *operet ka?a* 'to operate, perform surgery' (Burling 2004: 118)

Joseph & Burling (2006: 132) cite a cognate form, *dá*-, in Boro, despite there being no readily available examples of this element used in discourse. However, Bhattacharya (1977: 162) mentions *khalam* 'to do', which is clearly cognate to Garo *ka*? and Rabha *khár*. According to Joseph & Burling (2006), initial PBG [I] became [r] in Rabha. Once

this sound change had taken place, further phonological reduction would leave a monosyllabic form. This demonstrates that these two forms are indeed cognate. Like Rabha, Bodo *khalam* may be used in LVCs with a sense of transitivity.

(162) *haba khalam* marriage do 'to marry, perform a marriage' (Bhattacharya 1977: 162)

Of particular interest to this verb in Bodo is the grammatical function it has adopted. Bhattacharya (1997) discusses how *kha*, clearly the reduced form of *khalam*, may be suffixed onto the verbal complex to denote the completion of an action.

(163) bió bé bathrakhów bún-kha-bay
He this information speak-PRF-already
'He has already spoken out this information.' (Bhattacharya 1977: 189)

While there is no mention of auxiliaries in the available data on Dimasa, there is a perfect marker, *-ka*, which is cognate to the Bodo suffix *-kha*. Again, there is a connection between this aspectual suffix and the main verbs *khalam* and *khár* in Bodo and Rabha, respectively.

Deuri has three different verb forms with the meaning of 'to do'. *Haji*, a borrowing from Assamese denotes the fabrication of an object; $m\tilde{u}$, which bears some resemblance to Bodo *maw*, has the meaning of 'to make, prepare'; $N\tilde{o}$ patterns similarly to BG **tak*, though it does not have any transparent cognate forms in the other BG languages. Like both *tak* and *kar* in other BG languages, $n\tilde{o}$ may be used in conjunction with a nominal element, thus forming a LVC.

(164) Deuri a. *aka nõnĩ* hope do

hope do 'to hope' (Jacquesson 2005: 148) b. *biya nõnĩ* marriage do 'to marry/get married' (Jacquesson 2005: 148)

4.3.3.2 PBG *man 'to be able to, manage, finish' Auxiliary

The PBG modal auxiliary *man is found in many of the BG languages and

indicates physical ability. In Garo, this verb may behave as a main verb to the clause.

(165)	a.	u-ko	man-noa-ma
		that-ACC	able-FUT-Q
		'Will (you) be	able to do that?' (Burling 2004: 117)
	b.	man-jok	
		manage-PRF	
		'(I) managed/l	have done (it).' (Burling 2004: 117)

It may also follow the main verb, though the main verb must take infinitive suffix.

(166)	cha-na	man-noa-miŋ
	Eat-INF	can-FUT-PST
	'(it) could be	eaten.' (Burling 2004: 117)

(167)	gim-ik-in	jachok-cha	rama	re-na	man-a
	Everybody	leg-INSTR	road	go-INF	able-NEUT
	'Everybody	can walk with (his) legs	.' (Burlin	ng 2004: 117)

According to Burling (2004), there are a few lexicalized verb stems that this modal may

occur with, though man maintains the notion of capability.

- (168) a. *nik-man-a* see-POT-NEUT 'to notice, discover'
 - b. *sok-man-ja* arrive-POT-NEG 'fail to arrive'

There are two divergent forms in Rabha, *rin* 'know how to, be capable of' and *jan* 'be able' which appear to have been innovated after the split from PBG. Joseph (2007) describes a verb form *pháman* 'to know', which appears to have a relic of the older *man* that we find in Garo. However, the "potential" notion given by this form has been replaced in Rabha by the more recently innovated *jan*. Like Garo *man*, *jan* may follow the infinitival form of the main verb.

(169)	Rabha:		
	dimdakai-an	réŋ-a	jaŋ-o
	all-EMPH	go-INF	able-FUT
	'All can go' (Joseph 20	07: 220)

Joseph (2007) mentions a special construction with a very similar form, *mán*, following the infinitive-inflected main verb. The structure mirrors that seen in (169), and it shares the same semantics of potentiality as *man* in the other modern BG languages shown.

(170)	a.	<i>ame</i> I.DEF 'I have 2007:	<i>Taj Ma</i> Taj Ma e seen (6 267)	a <i>hal</i> ahal or have l	<i>nuk-ŋa</i> see-INF had the op	<i>mán-jo</i> POT-PST portunity to see)	the Taj Mahal.'	(Joseph
	b.	<i>а</i> ŋ I	<i>mása</i> tiger	<i>nuk-ŋa</i> see-INF	m PC	<i>án-khu-ca</i> DT-still-NEG		

'I have not had the opportunity to see a tiger.' (Joseph 2007: 268)

The indicator that this form is not likely cognate to Garo *man* is the lack of a glottal stop in the Garo form to correspond with the high tone in Rabha. Joseph (2007) suggests that Rabha *mán*, as seen in (170), demonstrates the grammaticalized function of the lexical verb *mán* 'get', which is the most probable account for this variation, In Deuri, this modal has not been maintained as a lexical verb. There is, however, a grammaticalized relic of it that suffixes onto the main verb of a clause to denote physical or mental capability.

(171)	Deuri	
	a.	gura abuga-ŋna ke-ma-y
		horse fast-CONT go-POT-NEUT
		'The horse can go quickly.' (Jacquesson 2005: 163)
	b.	ã ko-mã-î
		I come- POT-NEUT
		'I can come (il se peut que/il m'est possible) (Jacquesson 2005: 163)
	c.	cuju-mã-nî
		battre- POT-NEUT
		'(ils) peuvent se battre (cela peut bien arriver) (Jacquesson 2005: 165)

These forms, excluding Rabha *mán* 'get', are clearly related to PBG **[]a-man* 'to know, understand' (Joseph & Burling 2006: 130).

4.3.3.3 Desiderative

Though the modern BG languages have often similar methods for denoting desire or intention of performing an action, the forms are quite disparate. This is clearly the result of independent innovation, though synchronic evidence allows for a very simple language-internal reconstruction. The Garo form ha? 'wish' is transparently a fully lexical verb which constitutes the final verb in a periphrastic construction.

(172) Garo

aŋ-achu-naha?-sik-o-dechu-a-ri-noa-miŋIsleep-INFwish-ifsleep-just-FUT-PRF'If I (had) want(ed) to sleep I would have just slept.' (Burling 2004: 157)

Like Garo, Rabha uses a periphrastic construction with a lexical verb, mún 'desire'.

(173)	Rabha		
	dimdakai-an	réŋ-a	múŋ-o
	all-emph	go-INF	desire-FUT
	'all wish to go	o' (Joseph 20	07: 221)\

This form bears a slight resemblance to the Deuri verbal suffix $-mj\hat{i}$, but only in that both forms begin with the bilabial nasal /m/. Beyond this similarity, we are not able to propose a reconstruction for PBG.

(174) Deuri

 \tilde{a} ko-mjî-î I come-OPT-NEUT 'I want to come.' (Jacquesson 2005: 162)

4.4 Finite Verb Morphology

There is not much correlation between finite verb morphology across the modern BG languages. Instances can be found where languages share apparently cognate forms, but overall, there has been a large amount of language-specific innovation that has taken place since the split from PBG. This sections attempts to reconstruct those forms that suggest origin in PBG, and will try to account for the etymological sources for the more recent innovations, when possible.

<u>4.4.1 Future</u>

Joseph & Burling (2006) reconstruct the PBG future suffix as *-gVn despite the variation demonstrated by this inflection across the family. This impedes the reconstruction of this element into PBG. While there is some level of inconsistency

across the languages with respect to the morphological form used, we do find cognate forms, as demonstrated by Table 29.

Garo	Bodo	Rabha	Deuri	Dimasa
-gen	-gun	-no(a)	-ku	-naŋ
-no(a)			-n	-ma
			=na	

Table 29: Future Suffix in BG

The Rabha nasal-initial future suffix adopts the place of articulation of the preceding

consonant.

(175)	kaisábra	khap-mo
	child	cry-fUT
	'The child w	vill cry.' (Joseph 2007: 254)
(176)	an sam	phok-no
()	I grass	s pluck-FUT
	'I will pluck	grass.' (Joseph 2007: 254)

When used with stative verbs, this suffix denotes an inchoative sense.

(177) *i-be cuŋ-o* this-DEF big-FUT 'This will become big.' (Joseph 2007: 254)

The Garo future suffix bears striking resemblance to the Rabha marker, though it does

not assimilate to the place of articulation of the previous consonant.

(178) *aŋ-na i-ko naŋ-noa* I-DAT this-ACC need-FUT 'I will need this.' (Burling 2004: 122) Both the Rabha and Garo future suffixes may be followed by the neutral tense suffix, which is further evidence of this morpheme's original function as a nominalizer-cumfinite marker.

Jacquesson (2008) describes two future tense-markers in Dimasa, *-ma* and *-nay*. The first is used to denote the definite future, and though it appears cognate to Rabha and Garo *-noa*, it is doubtful that they have the same etymological source. Dimasa *-ma* is better analyzed as the future deverbalizer, *-ma*, which is used to create equational constructions with a nominal predicate.

(179) ebo jaokrailao-ma sé
this bridge long-FUTNOM one
'This bridge will be long (will be a long one).' (Jacquesson 2008: 30)

The appearance of the numeral modifier after the *-ma* suffixed verb demonstrates how *ma* nominalizes the verbal element. The latter suffix, *-nay*, is used in propositions where the future is less certain.

(180)	aŋ	ho zai	za-naŋ
	Ι	priest	become-FUT
	'I may	becom	e a priest.' (Jacquesson 2008: 30)

This suffix has a clear connection to the verb *nay* 'to want', cognate to Bodo and Garo *nay*, which is a common source for future-tense morphemes. Burling (2004) cites some examples where Garo -noa demonstrates implied desire or intent.

- (181) a. *riŋ-noa-ma* drink-FUT-Q
 'Do you want to drink?' (Burling 2004: 122)
 - b. *riŋ-ja-noa* drink-NEG-FUT
 '(No, I) do not want to drink.' (Burling 2004: 123)

This could be evidence supporting a common ancestor for this future morpheme, given the common function in restricted environments. However, there does not appear to be much connection between the Dimasa form and the other nasal-initial future suffixes beyond this slight semantic similarity given the inconsistent vowel change from [a] to [o]. Also, as seen in (178) above, *-noa* may still follow the fully lexical and phonologically complete verb-form *nay*, which has maintained the *PBG phonological structure. The change from *nay* to *-noa* would be completely unmotivated and unaccountable from the given data.

The Achik dialect of Garo has a different future form, *-gen*. It is used in exactly the same contexts as *-noa*, which is typical of the Mandi dialect. It denotes the same temporal distinction, and is taking over full use as the future marker in Garo (Burling 2004: 123).

(182)	aŋa	kinal-o	re ?aŋ-gen
	Ι	tomorrow	go-FUT
	ʻI will	go tomorrow.'	(Burling 2004: 123)

This form is cognate to the Bodo future tense-marker, *-gum*. Though they display the same syntactic restrictions and phonological form, the semantics of the Bodo suffix is slightly different from those of Garo *-gen*. Bhattacharya (1977: 196) describes *-gum* as indicating "...expected, possible action [that is] more or less definite."

(183) Bodo: *ana thaŋ-gtun*I go-FUT
'I intend to go (may be or may not be).' (Bhattacharya 1977: 196)

(184) ana un-aw za-gum
I afterwards eat-FUT
'I shall eat afterwards (definitely)' (Bhattacharya 1977: 196)

Neither of the Garo future suffixes indicates the speaker's view of the relative certainty for an action to take place, while the Bodo form does. This could relate to the different categories for the Dimasa future forms, despite their more recent innovation, in that PBG could have had two distinct futures which were based on the viewed certainty for a given event to take place. There are a few different forms described as future tense-markers in Deuri.

- (185) *ha-n* eat-FUT '(he) will eat' (Jacquesson 2005: 182)
- (186) *ã ũgadu-ku=na* I sleep-FUT=IM 'I am about to fall asleep.' (Jacquesson 2005: 180)

In Deuri, =na is considered to be the immediate future and quite commonly appears with -ku, which is considered to be the future marker. Both of these future forms in Deuri begin with similar consonants in terms of place and manner of articulation. They could be cognate, but it is difficult to tell.

Given the limited data and inconsistencies surrounding the different future tense suffixes across BG, it is not possible to make a claim as to which form represents *PBG inheritance and which has been innovated since the split (with the exception of the Dimasa forms, which have a clearly recent and independent innovation). However, these inconsistencies could also indicate a more highly specialized system in the protolanguage. While the majority of the BG languages do not do so, Dimasa, and sometimes Bodo, distinguish between certainty and uncertainty in the future via the future suffix used in a proposition. This could reflect a similar system in PBG whereby future events were referred to depending on likelihood of the event taking place, but since the forms do not correspond between languages, it is not possible to prove this claim

4.4.2 Past Tense in BG

There is discrepancy with respect to the form of past tense suffix in modern BG. Some of the languages, i.e. Garo, Bodo and Rabha, have two distinct past tense forms: the remote/narrative past and the recent/immediate past.

4.4.2.1 Remote/Narrative Past in BG

The remote/narrative past is used to refer to events from long ago or in narrative discourse. The forms in Garo, Bodo and Rabha do not correspond, as seen in Table 30.

Garo	Bodo	Rabha
-aha	-a	-(N)ata
		-nta
		-ta

Table 30: Remote/Narrative Past in BG

The Garo –*aha* suffix is referred to as the simple past by Burling (2003), who says it bears no relevance to the current situation.

(187) Garo: *bia kat-aŋ-aha*3s run-go-REM.PST
'He ran away.' (Burling 2004: 124)

The form in Rabha demonstrates place assimilation for the nasal onset. Following velar consonants, the remote past suffix will be $-\eta ata$, following a bilabial, *-mata*, and following an [m] or [n], the suffix will be -ata. There are also instances in which this suffix reduces to -nta or even -ta, though this generally happens on the most frequently used verbs (Joseph 2007: 255).

(188)	Rabha:			
	kai	sak-sa	ruŋ	jap-mata
	person	CL-one	boat	row-REM.PST
	'One p	erson rowed	the boat.'	(Joseph: 255)
	'One p	cL-one erson rowed	the boat.'	row-REM.PS (Joseph : 25:

(189) *té san-i raŋsaŋ túŋ-ata* today day-LOC sun hot-REM.PST 'Today the sun was hot.' (Joseph 2007: 255)

Deuri appears to have two distinct forms that are used depending on whether the main verb is transitive or intransitive. It is difficult to say if this is an actual tense distinction, or if it is some kind of perfective marker.

(189) Deuri: a. *ke-rom* go-INTRS.PST 'He left/has gone.'

> b. *ha-bem* eat-TRNS.PST 'He ate/has eaten.' (Jacquesson 2005: 177)

4.4.2.2 Recent/Immediate Past

The other past tense form in modern BG denotes recent/immediate past. While there is some inconsistency across the languages, we still find cognate forms, as demonstrated by Table 31.

Table 31: Recent/Immediate Past in BG

Garo	Bodo	Rabha	Deuri	Dimasa
-jok	-bai	-jo(k)	-bem	-ba
			-rom	

(191) Garo:

aŋa cha?-jok I eat-PRF 'I ate/have eaten.' (Burling 2004: 122)

(192) Rabha:

náme	kai	сиђ-јо
You-DEF	person	big-prf
'You have	grown big.	' (it is evident and visible) (Joseph 2007: 256)

While it is the general consensus among BG linguists that these elements indicate the past tense in propositions, they do describe certain semantic features inherent in these suffixes which evidence a sense of perfect aspect denotation. For example, in the Rabha example above, Joseph (2007) mentions how it would be inappropriate to use the other past tense marker, *-nata*, in this instance since the speaker is referring to a change in state that is physically salient and apparent. These distinctions are especially apparent in constructions where this suffix follows the negative verbal suffix.

(193) Garo:

aŋa cha?-ja-jok I eat-NEG-PRF 'I eat no more/will not eat (anymore).' (Burling 2004: 122)

(194) Rabha:

a.	aŋ	réŋ-ca-nata
	Ι	go- NEG-PST
	'I dio	l not go.'

b. *aŋ réŋ-ca-jo* I go-NEG-PRF 'I do not go/will not go (anymore).' (Joseph 2007: 256)

The Bodo form, *-bai*, is clearly unrelated to the Garo and Rabha *-jok*. However, the semantics of this verbal suffix, according to Bhattacharya (1977: 194), mimic the same aspectual distinctions made in these other languages.

(195) Bodo: *aŋə gami-attı thaŋ-bai*I village-LOC go-PRF
'I have gone (already) to the village.' (Bhattacharya 1977: 194)

Jacquesson (2008) describes a similar suffix, -ba, in Dimasa. Unlike the cognate Bodo

form, it does not have any aspectual semantic value. Instead, it is purely an indicator of

the past tense.

(196) Dimasa: *misi musu wai-ba*tiger cow kill-PST
'The tiger killed the cow.' (Jacquesson 2008: 31)

This suffix contrasts with the Dimasa suffix, -ka, which indicates perfect aspect.

(197) Dimasa: *misi musu wai-ka*tiger cow kill-PRF
'The tiger has killed the cow (it's over now).' (Jacquesson 2008: 31)

The Dimasa -ka suffix may also occur in negative constructions, similar to the Garo and Rabha examples (193) and (194).

(198) Diamsa:

an hozai za-ja-ka I priest become-NEG-PRF 'I am not a priest anymore.' (Jacquesson 2008: 32)

Deuri is not described as having a past tense. Rather, there are a series of morphologically complex verbal suffixes which denote aspectual distinctions. For those forms that could specifically relate to the other past tense/perfect aspect elements in BG we find *-bem* and *-rom*. The verbs that these suffixes may occur with are restricted to their transitivity, a phenomenon not found in the other modern languages. With intransitive verbs, we consistently find *-rom*, while *-bem* is restricted to transitive verbs

(199) Deuri:
 cemeci-ya ci-rom ant-TH die-INTR.PRF
 'The ant died.' (Jacquesson 2005: 177)

Jacquesson (2005) divides the perfect suffixes into two separate morphemes,

respectively. The final [m] on both suffixes represents the perfective marker -m, which is able to stand alone as a verbal suffix only when following the verb *ko* 'to come' and the negative suffix -ya.

(200) Deuri dey muku hadu-ya-m maintenant pluie tomber-NEG-PRF 'Maintenant, il ne pleut plus.' (Jacquesson 2005: 176)

By accounting for this piece of the perfect suffixes in Deuri, we are left with -ro and -be. The intransitive perfect suffix, -ro, does not appear to be cognate to any of the past tense or perfect aspect suffixes in the other BG languages. However, the transitive perfect -be could have a shared ancestor with Bodo -bai and Dimasa -ba, which could be a reflex of the perfective marker -pa in the Bodish branch of TB (DeLancey 2005). Based on the limited data and Joseph & Burling's (2006) BG sound correspondences, the reconstructed form would be *bai. The variation for the past tense suffixes/perfective aspect markers indicate that there was a complex system in PBG that distinguished between the immediate and more remote past, as well as the perfect aspect. Exactly which forms served each function remains unclear due to the lack of explicit data

4.4.3 Continuative

The continuative suffix in BG, shown in Table 32, is used to denote that an action is currently in progress. The different forms of this suffix across the modern languages evidence some similarity, though we do find inconsistencies which may make a reconstruction of the PBG morpheme difficult.

Table 32: Continuative Suffix in BG

Garo	Bodo	Rabha	Deuri	Dimasa
-eŋa	-diŋ	-eta~-ita	-ŋna-	-sai

The continuous suffix directly follows the verb in the verbal complex and may be used with stative, intransitive, and transitive verbs. With the exception of Deuri, which requires a periphrastic auxiliary construction when the main verb takes continuous inflection, this morpheme may be treated as a finite verb suffix.

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a.	ke-ŋna	dũ-ĩ
	go-CONT	stay-NEUT
	'(I) am going'	(currently in the process of) (Jacquesson 2005: 192)

b.	siri	hadu-ŋna	dũ-mde
	night	rain-CONT	stay-IMPF
	'It rain	ned last night.	' (Jacqueson : 192)

(202) Rabha:

a.	kai-taŋ	hat-ina	réŋ-eta
	person-PL	market-ALL	go-cont
	'People are go	ing to the mark	tet.' (Joseph 2007: 252)

b.	budakai-be	róŋ-eta
	old.man-DEF	strong-CONT
	'The old man	is (still) strong.' (Joseph 2007: 253)

(203) Garo:

a.	aŋ-ko	achak	maŋcha-iŋa
	I-ACC	dog	angry-CONT
	'The do	g is an	gry at me.' (Burling 2004: 141)

b.	ађа	cha?-iŋa	
	I	eat-CONT	
	'I am	eating (right now).' (Burling 2004: 141))

(204) Bodo:

aŋə gami-aw thaŋ-diŋ I village-LOC go-CONT 'I am going to the village.' (Bhattacharya 1977: 193)

(205) Dimasa:

bo	era-ha	pai-sai-du
3s	here-LOC	come-CONT-NEUT
'He	is coming here.	' (Jacquesson 2008: 24)

In Rabha, Bodo and Garo, this suffix is also able to be followed by other aspectual

inflections.

(206) Rabha:

u-ni-be mícik si-e bisir-sa-san cáŋ-ata-min 3S-GEN-DEF wife die-NF year-one-only become-CONT-IMPF 'It was only one year after his wife had died.' (Joseph 2007: 684)

(207) Bodo:

aŋə	gami-aw	thaŋ-diŋ-mɨn
Ι	village-LOC	go-CONT-IMPF
'I wen	t to the village	(sometime past).' (Bhattacharya 1977: 193)

(208) Garo:

sal-sa-o	marakka	maŋ-sa	kan-sa	chiriŋ-ona
day-one-LOC	barking.deer	CL-one	CL -one	river-AUG

hi?ba-e chi riŋ-iŋa-miŋ-na come-NF water drink-CONT-IMPF-QUOT 'One day a barking-deer came to a river to drink, it is said.' (Burling 2004: 349)

Joseph (2007: 638-9) proposes that the continuous suffix most likely represents the original present tense suffix in PBG. He bases this analysis on the fact that Rabha, Bodo and Garo all have one continuous suffix but no real morpheme denoting the present, and given typological patterns found cross-linguistically, one would not expect to find a language with future and past tense morphology without also having something to indicate the present. Though this makes perfect logical sense, the error in this hypothesis lies in the incorrect analysis of the "neutral tense" –*a*.

In section 4.1 above, it was demonstrated how -a originated as a nominalizing suffix that has been reanalyzed as a finite marker on the main verb. When it does not occur with other tense or aspect suffixes, -a indicates the present by default of the inherent temporal semantics of the nominalized predicate. This function of -a is further

supported by the fossilized form we find in the Garo continuative suffix, $-e\eta a$. That -a consistently follows $-e\eta$ does not contradict this analysis. Instead, it suggests that predicates with the $-e\eta a$ suffix were original serial verb constructions, and that $-e\eta$ represents an older verb-form that took the finite marker -a. Investigation into possible historical sources for this aspectual suffix provides strong evidence suggesting that this is the correct analysis. For instance, Joseph & Burling (2006: 141) reconstruct the verb form *diŋ 'stand' into PBG, seen in Table 33.

Table 33: PBG **diy* 'stand'

Garo	Bodo	Rabha	Tiwa	PBG
cha-d(e)ŋ	go-soŋ	diŋ-díŋ	tĩŋ	*diŋ

This verb is most likely the source for the continuous suffix in Bodo and Garo. For one, the reconstructed *PBG verb form is identical to the Bodo continuous suffix, and is nearly identical in phonological structure to the Garo suffix. Secondly, it is not uncommon for verbs meaning 'to stand' to adopt the grammatical function of aspectual continuity cross-linguistically (Heine & Kuteva 2002).

Further support for the claim that *diy 'stand' was the etymological source for the continuative suffix in Bodo and Garo can be found in the reconstructed PTB cognate lexeme *m/s-diy 'settled/fix/establish' (Matisoff 2003). The connection these items have to PBG *diy 'stand' is clear. Both items imply a state of stationary existence/posture over an unspecified period of time. While the frequency of PBG *diy 'stand' being used in

serialized verb constructions increased and the verbal semantics began to blur, all that would remain is the atelic temporal notion, thus leading to its grammaticalized function as a continuative suffix.

The divergent Deuri form, -nna- 'CONT', is not as easily explained. While the syllable initial [n] could be a remnant of PBG **din* 'stand', we are still left with the task of discerning where [na] came from. Jacquesson (2005) describes the grammatical restriction for verbs taking - ηna - 'cont' inflection to be followed by the auxiliary $d\tilde{u}$ -'rester', exemplified above in (201). In these periphrastic constructions, the auxiliary takes the finite verb inflection, which could lead to the assumption that [na] is a reflexof the reconstructed PBG infinitve suffix *-na (Joseph & Burling 2006). Thus, we might assume that the [na] in Deuri - ηna - 'cont' is actually a fossilized infinitive marker that followed the continuative so consistently in these periphrastic constructions that it was reanalyzed as part of the aspectual morpheme. Though it is nearly impossible to find supporting evidence for this claim, it is not difficult to imagine such a process occurring. If PBG *din 'stand' is the historical ancestor for BG 'cont', then the tendency in Deuri to have this type of serialized construction followed by a finite auxiliary could lead to the use of infinitival -na inflection on *din. This -na would only work to reinforce the timestability of **din* 'stand', and could easily be reanalyzed as part of **din* as the grammaticalization process began. Phonological reduction could thus leave us with -nna-.

Rabha also has a divergent form for the continuative verb suffix, *-eta/-ita* which we cannot attribute to the same etymological source for the continuative in Bodo and Garo. Therefore, it must be some recent innovation unique to this language.

The Dimasa continuative suffix, *-sai*, is the most divergent form the modern BG languages display for this morpheme. While we are not able to find a clear etymological source for this element, there are a few characteristics that are relevant to the current discussion and bear mentioning. Jacquesson (2008) describes the tendency for the continuative suffix *-sai* to be followed by the present tense maker, *du*. This type of construction is similar to the one seen in Deuri, in which the auxiliary *dũ* follows the continuative-inflected main verb. Since Dimasa *du* 'pres' is clearly the grammaticalized form of PBG **doy* 'existential copula' which occurs in all present-tense propositions, we are not fully justified in claiming that this continuative suffix is the result of grammaticalization in a serial verb construction. However, it does bear some syntactic resemblance to Deuri *-yna*, but with no evidence that *-sai* evolved from a verb, we are only able to say that the continuative suffix in Dimasa was independently innovated.

4.4.4 Imperfective

The imperfect suffix behaves very similarly across the four branches of modern BG. Phonological similarity, seen in Table 34, and the tendency to follow other tense and aspect suffixes in the verbal complex suggest a common ancestral form.

Tah	le	34	· 1	mnerf	fecti	ve	in	R	G
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Garo	Bodo	Rabha	Deuri
-cim	-m i n	-m i n	-rumde
		-miŋ	

(209) Rabha: *aŋ kani-eta-min*I say-CONT-IMPF
'I was saying.' (Joseph 2007: 642)

- (210) Garo: *aŋa agan-eŋa-cim* I say-CONT-IMPF 'I was saying.' (Joseph 2007: 642)
- (211) Bodo:
 aŋ buŋ-dɨŋ-mɨn
 I say-CONT-IMPF
 'I had said or I was saying.' (Joseph 2007: 642)

Though Joseph (2007: 642) claims the aberrant Garo form, -cim, is inexplicable,

investigation of possible etymological sources for this element proves otherwise. Burling (2004: 131) describes *-mitiŋ*, a subordinating verbal suffix in Garo he glosses as 'while', which most often occurs with the nominal locative inflection -o. Clauses with this element pattern very similarly to other relator noun constructions briefly discussed in Chapter II.

(212) Garo:

a.

biaaŋ-niki?saŋ-ochadeŋ-eŋa3sI-GENrear-LOCstand-CONT'He is standing in back of me.' (Burling 2004: 230)

b. *bi-ni chu-mitiŋ-o aŋa sok-ba-jok* 3S-GEN sleep-while-LOC I arrive-there-PRF 'I arrived while he was sleeping.' (Burling 2004: 131)

In both examples, the relator noun is inflected with the locative suffix while the possessor takes genitive declension. The only difference between these two examples is that *mitiŋ-o*

follows a verb while ki?saŋ-o is free-standing. The ability of Garo *mitiŋ-o* to modify verbs in such a manner could be attributed to the fact that when this suffix is not inflected with locative -o, it also follows a verb, lending an atelic connotation.

(213) Garo: *mi cha?-mitiŋ* rice eat-while '(I'm) in the midst of eating.' (Burling 2004: 131)

As was seen in the previous section concerning the continuative suffix, Matisoff (2003: 616) lists the PTB root **m/s-diy* 'settled/fix/establish'. The identical phonological structure this proto-form shares with Garo –*mitiy* indicates this as the etymological source for this element in the modern language. This similar temporal semantics would also predispose this element to aspectual grammaticalization. This would not contradict the previous claim that the continuative suffix diachronically arose from PBG **diy* 'stand', nor that this verb came from PTB **m/s-diy* 'settled/fix/establish'. Rather, at some point after PTB **m/s-diy* was already being used as the non-finite PBG **mitiy*, the initial syllable was lost, leaving **diy* as a lexical verb. It was this verb that gave rise to the continuative suffix, so while -*mitiy* and **diy* have the same etymological source, they were not in the same lexical categories when they were grammaticalized.

Evidence of the source construction for this aspectual inflection is found in the seemingly divergent Deuri –*rumde*. The final [mde] is a reduced form of PBG * *mitin* where the vowel in the initial syllable and final nasal have been lost. The initial –*ru* is a reflex of the Tibetan terminative suffix, -*ru* (Jäschke 1883), as is indicative of a clause-chaining construction in PBG whereby –*ru* functioned as a non-finite marker on the main

verb. As this construction grammaticalized, the -ru suffix was lost in all the modern languages except for Deuri, and PBG **mitin* also reduced as a result of increased frequency of use. In Bodo and Rabha, [ti] was lost and the vowels followed the phonological patterns of closed syllables, thus resulting in -min. Regarding Garo -cim, the initial syllable of *mitin* was lost and the high front [i] palatalized the alveolar [t].

4.4.5 Optative

The BG optative suffix is described as marking the "...the third person imperative, indirect permission as well as non-committal, indifferent and resigned acceptance of a situation." (Joseph 2007: 262). Table 35 provides the forms in three of the modern languages

Table 35: Optative Suffix in BG

Garo	Bodo	Rabha	*PBG
-kan	-tɨŋ	-khan	*-khan
-cina	5		

In most cases, this suffix can only be used when referring to the third person.

(214) Garo:

i-ko-de	bia	cha?-kan
this-ACC-but	he	eat-OPT
Let him eat it	t.' (Bı	urling 2004: 125)

(215) Rabha:

bajiŋ	toy-batay	pímuŋ-ina	dáŋ-khan
outside	stay-PL	inside-ILL	enter-OPT
'Let those wh	o are staying o	utside enter ins	ide.' (Joseph 2007: 263)

(216) Bodo:

biə thaŋ-tiŋ 3s go-OPT 'Let him go/He may be permitted to go.' (Bhattacharya 1977: 197)

There are some circumstances when using this suffix is appropriate when addressing the second person. In Garo, this is involves implying dissatisfaction or antipathy towards someone; for example, it is used in expletives.

(217) Garo: matca cik-kan tiger bite-OPT
'May (you) be bitten by a tiger.' (Joseph 2007: 646)

The cognate Rabha form, *-khan*, may also be used when referring to the second person. It does not, however, imply a negative connotation, as seen in Garo.

(218) Rabha: *siri sraŋan rasoŋ sraŋan cáŋ-khan*totally healthy become-OPT
'May (you) be totally healthy.' (Joseph 2007: 263)

Garo has another suffix, *-cina*, which may be used in constructions similar to example (214). It is viewed as being more polite than using *-kan*. While Rabha does not have a related form, Bodo has cognate *-tiŋ*. Not only is Bodo *-tiŋ* used in similar situations as

Garo -cina, but has effectively taken over the optative function in all instances.

(219)	Bodo:	n í ŋ-ni	raij i -a	p i i-tiŋ
	Rabha:	náŋ-i	sonhhásoŋ	cán-ba-khan
	Garo:	na?ŋ-ni	sonnok	o?ŋ-ba-cina
		You-gen	kingdom-NOM	be-OPT
		'May your kin	ngdom come' (Joseph 2	2007: 647)

(220) Bodo:

góthó-phra gáhám-əy tha-tiŋ child-PL good-LOC stay-OPT 'Let these children remain well.' (Bhattacharya 1977: 197)

4.5 Prefixal Verb Morphology

4.5.1 Negative Imperative

Table 36 illustrates the consistent sound correspondences demonstrated by the negative imperative prefix across modern BG. This form reconstructs as PBG **ta*-, and reflects the PTB negative imperative prefix **da*/**ta* (Matisoff 2003: 660).

Table 36: Negative Imperative Prefix across BG

Garo	Bodo	Rabha	Tiwa	Deuri	Dimasa	PBG	PTB
da-	da-	ta-	ta-	da-	dá-	*ta-	*da~*ta
-nabe							

Negative imperatives are formed by prefixing this element to the propositional main verb.

This pattern is found throughout BG.

(221) Deuri: da nî NEG.IMP drink 'Don't drink!' (Jacquesson 2005: 200)

(221) Rabha:

hoŋ-a-be ta-réŋ there-DAT-DEF NEG.IMP-go 'Don't go there.' (Joseph 2007: 249) (222) Garo:

da?-cha NEG.IMP-eat 'Don't eat!' (Burling 2004: 127)

(223) Dimasa:
glaglag dá-za
Glaglag NEG.IMP-become
'Don't be talkative!' (Jacquesson 2008: 33)

Garo also has a prohibitive suffix, -nabe, though this is more commonly found in the

Achik dialect and is hardly used in Mandi.

(224) Garo (Achik dialect): *ua* nok-o-na nap-nabe
that house-LOC-DAT go-NEG.IMP
'Don't go into that house.' (Burling 2004: 127)

Joseph (2007) correctly suggests that the Garo -nabe is most likely a grammaticalized

form of the construction V-na be?ng, where -na DAT is followed by the verb be?ng 'to

forbid, ban, prohibit'. With Garo being the only language in the BG family, we cannot

attribute this construction to PBG, and must therefore accept it as being a recent

innovation unique to Garo.

The modern BG languages have also developed a periphrastic construction with a

prohibitive denotation.

(225)	Bodo:	<i>V-inf naŋ-neg (naŋ</i> 'need, must')
	Garo:	<i>V-inf naŋ-neg (naŋ 'need, must')</i>
	Rabha:	<i>V-inf lagi-neg (lagi 'need, must')</i>

4.5.2 Causative Derivation

Causative derivation takes on many distinct forms in modern BG as demonstrated by Table 37. Some of the forms date back to the proto-language, while others have been more recently innovated. In spite of this, all of these affixes function to increase the valency of the main verb.

Garo	Bodo	Rabha	Deuri	Dimasa	PBG
-at	pi-	kh i -	-pa	p-	*p-
	-h i	+;	-ya		*k-
		1-	-wa		
		-tak			
		-tan			

Table 37: Causative Morphology in BG

The most synchronically transparent of the recently innovated forms are found in Bodo and Rabha. In Bodo, the causative suffix -hi is added to the main verb

(225) Bodo: *já-hi* eat-CAUS 'to feed' (Joseph 2007: 638)

This suffix comes from the verb hi 'give', which is a common source for causative

morphemes cross-linguistically (Heine & Kuteva 2002). Despite this purely grammatical

function of this verb, it is still able to function as a clausal main verb.

(226)	Bodo:					
	bi-zəŋ	phəysa	hi-za-gin			
	3s-instr	money	give-pass-fut			
	'Money wil	l be given by	him.' (Bhattacharya 1977: 198)			

This causative grammatical function of *hi* 'give' clearly evolved from a serial verb construction in which its lexical semantics were diminished, leaving behind the valence-increasing characteristics of a ditransitive verb.

The recently innovated Rabha causatives are *-tak* and *-tan*. The first suffix, *-tak*, comes from the verb *tak* 'make, do', and functions as a "directive causative" (Joseph 2007: 193). This particular suffix can only be used with active verbs that have an agentive subject. It is used in instances where the causative agent requests the action of the "agent subject." As a result, the agent-subject is demoted to the direct object syntactic role, and it takes acc inflection.

(228)	Rabha:			
	u-be	aŋ-o	hat-ina	réŋ-tak-ŋata
	he-DEF	I-ACC	market-ALL	go-CAUS-PST
	'He asked me	to go to	the market.'	(Joseph 2007: 193)

The second causative suffix, *-tan*, is the grammaticalized form of the verb *tan* 'put', and is referred to as the "manipulative causative" by Joseph (2007: 194). Like *-tak*, this suffix demotes the agent-subject to direct object status, as evidenced by the ACC declension on the argument. The use of this suffix is more pragmatic compared to *-tak*. It is not restricted to a specific class of agentive verbs. Instead, *-tan* is used to denote that causation was not *actively* enforced, but is rather more a reaction to someone/something else's action or indirect causation.

(229) Rabha: noksuri hásuri oroŋ-o jar-tan-nata neighbors 3PL-ACC run.away-CAUS-PST
'(The) neighbors cause them to flee or run away.' (Joseph 2007: 195) This suffix arose in the same manner as -tak. As a result of being included in a serialized constructions and the bleaching of its lexical semantics, *-tan* adopted the grammatical function of increasing the valency of the verbal complex. The sources for the Garo causative suffix *-at* and Deuri *-pa~-ya~-wa* are much more opaque and no reconstruction can be provided.

(230)	Deuri:			
	ã	ba-na	yua-na	yo-pa-ri
	I	he-dat	bamboo-ACC	cut-CAUS-PRF
	'I mad	le him cut the	e bamboo.' (Jacqu	lesson 2005: 152)

(231) Garo: *ra?n-at* be.dry-CAUS 'to cause to dry'

Both Bodo and Rabha display another, more complex system of causitivization that involves a series of monosyllabic prefixes. The consonant of this prefix is somewhat predictable based on the initial consonant of the following verb stem. Bodo causative prefixes begin with /p b s/, while in Rabha they may begin with /k kh g t th d/. The correlation between the form of the prefix and the initial consonant of the following verb root are illustrated in Table 38.

	Prefix	Corresponding verb-root
	consonants	initial consonants
Bodo	/p/	/btdksjnlrh/
	/b/	/b j/
	/s/	/b g m/
Rabha	/k/	/t c/
	/kh/	/th s/
	/g/	/d j/
	/t/	/p k m n r/
	/th/	/ph kh/
	/d/	/d g/

Table 38: BG Causative Prefixes and Corresponding Initial Consonants of the Verb Stem

There are a few different kinds of causatives in Rabha, with different etymologies and functions in the languages. The active causatives are the only that look like they might have cognates in the other BG languages, but this is very speculative. These are divided into two groups; one is used with transitive verbs, thus creating ditransitive verbs, while the other is used with intransitive verbs, thus forming a transitive.

(232) Rabha:

- sá-nata a. aŋ eat-PST Ι 'I ate'
- b. khi-sá-nata aŋ-a I-DAT CAUS-eat-PST 6 I was fed.' (Joseph 2007: 195)
- ki-nata c. aŋ Ι fall-PST 'I fell.'
- d. an-o ti-ki-nata I-ACC CAUS-fall-PST 'I was dropped/made to fall.' (Joseph 2007: 195)

The lack of clear etymological sources for these prefixes in the available data does not impede our ability to reconstruct them to the PBG level. Investigation of other Boro-Jinghpaw-Konyak languages provides evidence that these prefixes in Bodo and Rabha were not independent innovations, but rather reflect older causative morphology. The following examples from Jinghpaw illustrate similar forms and functions of the causative prefixes, which confirms their common ancestry in modern BG from PBG, and even to the Boro-Jinghpaw-Konyak level.

(233) Jinghpaw:

a.	gyl?	'to be curled'
	siŋ-gyi?	'to bend'
b.	ZÂ	'to be damaged'
	siŋ-zà	'to destroy'
C.	à	'to be blessed'
	shə-à	'to bless'
d.	àp	'to be opened'
	kə-àp	'to open'
e.	hawn	'a sprout'
•	kə-bawŋ	'to sprout'
	-	-
f.	bák	'to be filled'
	də-bák	'to press, force (as things into a jar)
		(u. 1 1)
g.	gap	to be covered
	də-gàp	'to cover'

The lack of descriptive data impedes our ability to determine the distribution of these prefixes in PBG. While these restrictions may have been based on phonological form, it is also possible that the semantic class of the main verb influenced the possible prefixes to be used. Much more descriptive work on BG causatives is required in order to propose a proper reconstruction of the proto-system. At this stage, we can only say that the causative prefixes found in some of the modern BG languages were evident in PBG.

4.6 Conclusion

Many verbal elements across modern BG may be attributed to common inheritance from PBG. However, there are also many instances of divergence and independent innovation which impedes this reconstruction. Verb serialization and clausechaining have led to the development of new aspectual suffixes, while the disparity between some of the tense morphemes may suggest the existence of richer inflectional verb morphology in PBG. Unfortunately, the lack of data makes it impossible to prove such claims. Other elements, such as the causative prefixes, are found in opaque systems that tell us very little of the restrictions that may have existed in the proto-language. That we find similar elements in closely-related non-BG languages proves that these forms were part of PBG, though much more data is required to obtain a more thorough reconstruction of PBG verbal morphology.
CHAPTER V

CONCLUSION

This study has attempted a provisional reconstruction of Proto-Boro-Garo. The first chapter presented review of the previous literature concerning the grouping of modern BG languages within the family and their relation to other Tibeto-Burman languages. It also provided a brief description of the typological features displayed by the family. In Chapter II, I provided a reconstruction of word order within the PBG NP, as well as grammatical elements commonly found in this phrasal category. Particular attention was paid to the pronominal systems (personal, demonstrative and the interrogative pronouns), adjectival and relative-clause derivation, plural suffixes and case-endings. Though many cognate forms indicate common inheritance from the protolanguage, there is also evidence of independent innovation. Chapter III provided an indepth account of PBG classifiers and class-terms. It was demonstrated how many of the modern languages have simplified the PBG classifier system with the resulting loss of distinctions made based on the consistency of one- and two-dimensional objects. In Chapter IV, I discussed PBG verbal morphology and attempted to reconstruct finite verb inflection, as well as causative derivation. Due to the high degree of formal divergence and independent innovation, only a provisional reconstruction was possible. Overall, this

reconstruction indicates a high degree of variance between the modern BG languages. This is especially true for the verbal complex. Such evidence comes in spite of the relatively shallow time-depth of modern Boro-Garo, which would lead one to expect a higher degree of correspondence.

While it is only an initial reconstruction of PBG grammar, this study has provided solid ground for further investigation. Many grammatical elements found in both the NP and verbal complex still require reconstruction. Descriptive documentation of the other BG languages and variation between dialects is required in order to attain a more thorough account of both PBG phonology and morphology. Data from languages within the greater Boro-Jinghpaw-Konyak family would also be helpful in determining which elements are unique to PBG and which date back even further.

APPENDIX

LIST OF ABBREVIATIONS

1	first person
2	second person
3	third person
ABL	ablative
ACC	accusative
ALL	allative
AUG	augmentative
CAP	capability
CAUS	causative
CL	classifier
COL	collective
CONT	continuative
COP	copula
DAT	dative
DEF	definite
DEM	demonstrative
DIM	diminutive
DIS	distal
EMPH	emphatic
EQ.COP	equational copula
ERG	ergative
EXCL	exclusive
EX.COP	existential copula
F	female
FIN	final
FOC	focus
FORM	formal
FUT	future
GEN	genitive
HAB	habitual
ILL	illative
IM	immediate (future)
IMP	imperative
IND	individual
INF	infinitive
INFML	informal

INTR.PRF	intransitive perfective
INSTR	instrumental
LOC	locative
Μ	male
Ν	noun
NEG	negative
NEG.COP	negative copula
NEG.IMP	negative imperative
NEUT	neutral tense
NF	non-final
NMZ	nominalizer
NOM	nominative
NON.PRET	non-preterit
NPST	non-past
OBJ	objective
OPT	optative
PASS	passive
PL	plural
POL	polite
POSS	possessor
РОТ	potential
PRF	perfective
PST	past
Q	question particle
QUOT	quotative
REL	relativizer
REL.PRO	relative pronoun
REM.PST	remote past
SG	singular
TH	theme

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