

Chapter 6 Reconstruction of verbal morphology

6.1. Introduction

This chapter is concerned with reconstruction of changes in two key areas of the KRNB verbal morphology: tense-aspect formations, and personal endings. The reconstruction of verbal morphology would be made more complete by a thorough study of negation and participial morphology across KRNB, but these tasks are beyond the scope of the present study. The formations described and compared are finite, with some discussion of the perfective and infinitival endings because of their relevance to the finite verb constructions in some lects.

Finite verb constructions in KRNB lects may be simple or compound. Simple verb constructions consist of a verb stem suffixed with Tense/Aspect morphology and Subject Agreement (AGR) endings:

Verb–Tense/Aspect–AGR

The KRNB agreement endings are marked for the person and number of the grammatical subject.

Compound verb constructions consist of a (semantically) main verb (Verb1) with a participial ending, followed by a simple auxiliary verb (Verb2):

Verb1–Participle + Verb2–Tense/Aspect–AGR

The set of auxiliary verbs—in Indo-Aryan studies also called intensifiers, operators, explicators or vectors—is limited, and the auxiliary meaning is different to the independent verbal meaning of the lexeme. The function of auxiliary verbs is stated by Masica:

Partially emptied of their lexical content, these modify the meaning of the main verb in various ways not unrelated to that content, which might best be described as *manner-specification*. (1991:326, emphasis original)

Masica designates the usual role of these auxiliary verbs in compound formations as *Aktionsart*—“they belong more to the domain of derivation, that is, to lexicon, than to grammar” (*ibid.*: 268, 326ff.; cf. Goswami & Tamuli 2003: 429ff.). Given the NIA generality of this phenomenon, we can expect that auxiliary verbs are used for

derivational *Aktionsart* categories beyond the aspectual categories described in this Chapter. The compound verb construction has given rise in RP, BH and BN to a new and productive continuous construction, see 6.2.4.

Tense/Aspect morphology is described and reconstructed in 6.2. Following this, the agreement systems of the 8 KRNB lects are described in 6.3, and historical changes are reconstructed in 6.4. It is preferable to treat the verbal morphology in this order because an understanding of Tense/Aspect history informs the reconstruction of agreement history.

6.2. Tense-Aspect morphology: description and reconstruction

In a comparative study of under-described lects, such as this one, it is not possible to do full justice to describing the functional relations within the Tense/Aspect system of each lect. Of the lects examined here, only MH and BH have been subject to modern linguistic description and even for these two lects the descriptions are not exhaustive (Toulmin 2002, Toulmin *et. al.* In prep.). We may expect that further, and more thorough, grammatical descriptions of KRNB lects will be available in the near future, which may be used to test the diachronic arguments outlined here. In the meantime, comparison is made of formations with broadly similar (if not identical) functions. Though detailed reconstruction of changes in verbal functions and semantics awaits more thorough descriptions, it remains possible nonetheless to reconstruct formal changes in the systems, as well as some broad functional changes.

The verbal formations that are reconstructed below for proto-Kamta are given in advance in Table 6-1 to aid the reader in following the arguments that follow. The use of ‘proto-Kamta’ to denote this stage is justified on historical grounds in 7.3.1.

	Indefinite aspect	Perfective aspect	Continuous aspect
Past tense	*VERB-il-AGR.IIA	*VERB-i tʃ ^h il-AGR.IIC	
Present tense	*VERB-AGR.I	*VERB-i-tʃ ^h -AGR.I	*VERB-ε-tʃ ^h -AGR.I
Future tense	*VERB-i[b,m] ¹ -AGR.IIB		

Table 6-1. Verbal formations reconstructed for p-Kamta

With the exception of the ‘present perfective’ data, the Tense/Aspect formations were tested using model texts collected at all 8 sites. The data for ‘present perfective’ were collected through more controlled and leading elicitation, and therefore may not be as reliable an indication of language use as the data for the other categories. There seems to be an overlap in function between the formation labelled ‘present perfective’ in 6.2.4, and those labelled ‘simple past’ and ‘past perfective’ in section 6.2.5. They are partially interchangeable in certain discourse contexts—though the contexts which permit interchange are not defined in this study. In the absence of complete descriptions, the labels applied to functional categories should be considered approximations. However, in defence of the reconstruction, the functional categories applied to the more historically divergent KRNB verbal systems (RP, BH and BN) are supported by (a) similarity with Asamiya (a well-described lect) in the case of BN, and (b) by analysis of some texts in the case of BH (Toulmin *et al.* In prep.). The RP and BH systems are in turn so closely related that the BH observations may be expected to apply equally in the case of RP.

Before beginning the description and reconstruction of finite verbal formations, a few pieces of derivational morphology that figure frequently in that discussion require closer analysis.

6.2.1. Perfective morphemes

In KRNB there are three kinds of perfective morphemes. These morphemes are structurally and formally distinct in at least some KRNB lects. The forms are shown in Table 6-2, with column headings explained below.

¹ The allomorphy is explained historically in section 6.2.6.

	PFV in adverbial clauses	PFV in compound verbs	PFV in simple verb formations
p-Kamta	*-ia	*-ia	*-i
KS	²	-(j)ε	-i
RL	-[j]ε = k ^h una	-(j)ε	-i
MH	-[j]ε = nε	-(j)ε	-i
TH	-hene	-e →	-[i,e]
SH	-ia, -iε	-i ←	-i
RP	-iaε	-i ←	-∅
BH	-ia, -iε	-i ←	-∅
BN	-ia	-ia	-i

Table 6-2. Perfective morphemes across KRNB and reconstructed for p-Kamta

The most grammaticalised of these three perfective categories is in the rightmost column. This morpheme occurs in present perfect and past perfect verbal formations directly after the verb stem and followed by the tense morphology (cf. 6.2.4 and 6.2.5 respectively). For example (from MH), /dɛk^h-i-tʃ-u/ ‘see-PFV-PRS-1.SG’=‘I have seen’. This morpheme is /-i/ across KRNB, except in TH, and it has been lost in RP and BH. The corresponding TH morpheme is /-e/, with the allomorph /-i/ resulting from regressive vowel raising when a high vowel occurs in the following syllable. This difference in form between TH and the rest of KRNB is not explained by phonological changes, but is the effect of morphological changes that remodel TH’s verbal morphology based on the SCB norms (see further 6.2.4). Based on the broad distribution of /-i/ across KRNB, *-i is reconstructed as the proto-Kamta form with ‘Perfective’ function in this structural position. This reconstructed morpheme can be seen in Table 6-1 as part of the perfective formations.

The second category of perfective markers attaches to *main verbs in compound verb formations* (see description above for the structure of these formations). For example, in Bhatibari: /mui dɛk^h-i p^hɛla-s-uŋ/ ‘I have seen (it)’. In this example, the main verb is /dɛk^h-/ ‘see’, suffixed with the perfective marker /-i/, and the auxiliary verb is /p^hɛla-/ ‘throw’. There is greater variation across KRNB of perfective marking in this position (cf. the middle column of Table 6-2). This variation is not explained by the

² Comparable data from KS not collected for this function.

phonological correspondences constructed in Chapter 4. Two hypotheses are possible. Firstly, western KARNB and eastern KARNB forms (which are also cognate with the adverbial perfective markers) could be irregular reflexes of *i in this position that result from a morphologically-specific sound change. However, this leaves unexplained why such a change did not apply in the case of the perfective in simple verbs (rightmost column of Table 6-2). Furthermore, the lowering of *i to /(j)ɛ/ in the western lects is not well motivated phonologically.

A better option for the etymology of /(j)ɛ/ in compound verbs is suggested by comparing it with the adverbial perfective forms in the leftmost column. The eastern and western KARNB lects use the same perfective marker in both compound verbs and adverbial clauses. The central KARNB lects on the other hand use the inherited perfective *-i from the simple verbs in compound formations and /-ia, -iɛ, -iæ/ < *-ia in adverbial clauses. The most economical diachronic explanation of this divergence is that the inherited perfective marker in *compound verbs* was *-ia (the same as in adverbial clauses), and that this morpheme was replaced in the central KARNB lects by the simple verb perfective *-i. In RP and BH the inherited *-i was then lost in simple verbs.

[MI 1.] *-i ‘PFV’ in simple verbs > /-i/ ‘PFV’ in both simple and compound verb constructions {BH, RP, SH}. (before [MI 56.]). Diagnostic.

This change bears partial similarity with Asamiya, which has regularised /i/ as perfective in all three of the distinct structural positions outlined for KARNB in Table 6-2 (simple verbs, compound verbs and adverbial clauses). The Asamiya change is a different change to [MI 47.] which is more tightly constrained and excludes perfective marking of adverbial clauses. On the basis that the morphological conditioning of [MI 47.] is complex, it is diagnostic of a propagation event.

The third structural position of perfective morphemes is attached to *non-finite verbs in adverbial clauses*. This position is common across Indo-Aryan languages and the morpheme is termed the ‘perfective conjunctive’ or ‘conjunctive participle’. The reconstructed perfective marker in this position is *-ia. Note that the corresponding morphemes are not all regular reflexes of *-ia. Nevertheless there is enough similarity across the attested forms to make the cognacy fairly sure, and to justify the hypothesis

of a morphologically-specific sound change. Raising of the final vowel of the suffix *-ia occurs in the central KRNB lects > /iæ, iɛ/ ‘PFV’. This conforms with phonologically regular changes (cf. 4.4.2). However, the western reflexes of /(j)ɛ/ cannot be similarly explained, because progressive vowel raising is not a general feature of the western lects. Instead the raising in these lects seems to be connected to the re-phonemicisation of the *i element of *-ia as a glide: *-ia > *(-ja, jɛ) > /-(j)ɛ/. The brackets in the final form indicate that the glide element is variable. The change of *a > /ɛ/ in this environment is not attested by multiple correspondences, but nonetheless it is a plausible sound change. It is more plausibly motivated than the alternative etymology of *i > /(j)ɛ/ which was rejected above. The following change is reconstructed for the western lects as a morphologically-specific change:

[MI 2.] *-ia ‘PFV’ > *(-ja, jɛ) > /-(j)ɛ/ ‘PFV’ {KS, RL, MH, TH}. Diagnostic value unclear.

A similar change has affected the Bangla inherited perfective: *-ia > /-e/ ‘PFV’. Bangla influence in this respect is sociohistorically plausible in the case of TH which is within the modern Bengal socio-political zone and has undergone other changes in common with Bangla (e.g. prosodic vowel raising, reconstructed to be a post-1800 AD change in section 7.5). However, the lects KS, RL and MH are outside the Bengal zone and tend to be influenced by diglossia with Hindi, not Bangla. Therefore at least for KS, RL and MH this change seems to be unrelated to the structurally similar change in Bangla. The case of TH is ambiguous because the change could have been a common propagation with KS, RL and MH during their common period of development (1550-1787 AD, cf. 7.4.2), or alternatively could have been a more recent innovation (post-1800 AD) due to diglossia in Bangla. This ambiguity cannot be resolved on linguistic criteria, and the diagnostic value of [MI 48.] is listed as unclear.

All three positions of perfective marking are illustrated by the following example from MH: /mui dek^h-**ɛnɛ** g^hur-**je** as-i-tʃ-u/ ‘Having seen (it), I came back’. Firstly, the perfective is suffixed to the simple verb /as-/ ‘come’ (which is here also the auxiliary of a compound construction). The perfective in MH is marked by /-i/ in this position. Secondly, the perfective is attached to the main verb /g^hur-/ ‘turn’ of the compound

construction. The perfective is marked by /-(j)ε/ in this position in MH. Thirdly, a perfective marker /-(j)εnε/ is also attached to the verb root /ḍεk^h-/ ‘see’. The adverbial clause /ḍεk^h-εnε/ ‘having seen’ is a subordinate clause to the main clause ‘I came back’. The semantic relation between the adverbial clause and main clause is of ‘a *succession of actions or events* done by or with reference to the *same* subject’ (Chatterji 1926: 1003). This relation between clauses differs from that of a compound verbal construction which describes a single event.

These perfective markers are inherited, and cognates are found in other Magadhan languages (and perhaps further afield in NIA also):

The conjunctive *-i* is derived from M.I.A. *-ia* < O.I.A. *-ya*. In [Bangla] it appears in the strengthened form *-iyā*. In [Early Asamiya] both the forms in *-i*, *-iyā* are found. (Kakati 1962: 365)³

The phonological reflex of MIA *-ia* is proto-Kamta **-iɔ*, which becomes /-i/ by loss of final **ɔ*. This MIA suffix *-ia* was extended by **-a* to give early Asamiya and high literary Bangla *-iā*, with SCB /-e/ a reflex of that extended suffix. The extension of *-ia* > **-iɔ* + **-a* > **-ia* parallels the extension of many proto-Kamta nouns that end in **ɔ* with the nominal suffix **-a* (cf. 4.4.11). That nominal suffixing process is of unclear diagnostic value because it is so well distributed across NIA. Any hypothesis regarding the diagnostic value of extending the perfective marker with **-a* should be based on a consideration of the diagnostic value of suffixing nouns ending in **ɔ* with **-a*. Consequently the following change is currently listed as ‘diagnostic value unclear’. This change also occurs in early Maithili (Jha 1985 [1958]).

[MI 3.] **-iɔ* ‘PFV’+ *-a* ‘nominal suffix’> **-ia* ‘PFV’ {Middle Bangla, Early Asamiya, early Maithili, KRNB}. Diagnostic value unclear.

This affix is historically connected to the contemporary Bangla morpho-phonemic process which dictates ‘high’ and ‘low’ variants of verb stems in different morphological environments. For example /aʃ-/ ‘come’ is the low alternate, and /eʃ-/ ‘come’ the high alternate. The high alternate occurs when suffixed by the perfective participle /-e/ < **-ia*. This distribution led Chatterji to propose a transposed **i* from

³ Note that the ‘*a*’ in the M.I.A form *-ia* is a short ‘*a*’, thus corresponding with KRNB /ɔ/ not long ‘*ā*’ which corresponds with KRNB /a/.

*-ia (by [PI 30.]) to be the historical cause of ‘strong’ raising of the preceding vowel—‘strong’ because it affected all vowels including *a, which is not the case for the general regressive harmonic process (cf. 4.4.1). Diachronically, the ‘high’ alternate of the verb stem has been retained before the perfective participle, even though the phonological trigger has been lost by the change *-ia > /-e/. The synchronic result is a morpho-phonemic process which is absent from KRNB and Asamiya.

6.2.2. The Infinitive

Infinitive forms of verbs are found in KRNB as verbal complements (e.g. /mui **ɕa-ba** ʧahatʃu/ ‘I want **to go**’ {MH}) as well as in broader nominal uses suffixed by genitive case (e.g. /**ɕek^h-iba-r** patʃ^hɔʧ ɕam/ ‘after **seeing** (it) I will go’ {MH}). The forms for the infinitive across KRNB are shown in Table 6-3.

	Infinitive morpheme
p-Kamta	*-iba
KS	-na
RL	-ba
MH	-ba
TH	-ba
SH	-bar
RP	-bær
BH	-bær, -ir
BN	-ba

Table 6-3. Infinitive morphemes across KRNB and reconstructed for p-Kamta

The forms are partially cognate across KRNB, with the exception of KS which is cognate instead with the Hindi infinitive, and constitutes a loan. This change is diagnostic of KS’s relation to Hindi through diglossia.

[MI 4.] *-iba ‘INF’ replaced with /-na/ ‘INF’. Diagnostic of contact relations through diglossia with Hindi.

Otherwise, the infinitive participle is /-ba/ across the 8 KRNB lects, except in SH, RP and BH where it is /-ibar, -ir/. In these three lects a nominalised form in genitive case has been reanalysed as infinitive. This is a diagnostic change for these central KRNB lects.

[MI 5.] *-iba ‘INF’ + *-[ε]r ‘GEN’ > *-ibar ‘INF’ {SH, RP, BH}. Diagnostic.

The allomorph /-ir/ only occurs in BH and the surrounding areas of Cooch Behar and Dhubri. In this lect, /-ir/ attaches to verbs ending in a consonant, e.g. /dɛk^h-ir/ ‘to see’, and /-bar/ attaches to verbs ending in a vowel, e.g. /dʒa-bar/ ‘to go’. The creation of this allomorphy is distinct to BH (and the adjacent areas just mentioned), morphologically and phonologically specific, and a diagnostic change:

[MI 6.] *-ibar ‘INF’ > /-ir/ / C_ {BH}. Diagnostic.

The proto-Kamta infinitival suffix *-iba is cognate with /-iba/ in Oriya and /-ibɔ/ in Asamiya, and thus a pre-Proto-Kamta inheritance. The *i element is regularly or variably lost in all KRNB lects, probably in association with the changes described in section 4.4.6. The Bangla infinitival suffix /-[i]t̪e/ is not cognate, and constitutes an innovation.

6.2.3. Imperative and present indefinite formations

The imperative and present indefinite formations are treated together in this section by virtue of their grammatical similarities, namely (1) they are finite conjugations (i.e. they occur in finite clauses), but (2) they lack overt Tense and Aspect marking. In these formations the agreement suffixes attach directly to the verb stem, as in /kɔr-ɪʃ/, ‘do-2.SG’=‘you(SG) do’ (from BH).

The difference between imperative and present indefinite only pertains in the second and third persons, where it is signalled through use of distinct agreement suffixes.⁴ The agreement system used in the imperative formation is labelled as AGR.IMP, and the markers employed for present indefinite are labelled “Primary agreement”, or AGR.I, for reasons explained under 6.4 below. The difference between imperative and present indefinite conjugations is illustrated with data from BH:

- /t̪ui kɔr-ɪʃ/ is a present indefinite conjugation ‘you(SG) do’
- /t̪ui kɔr-ek/ and /t̪ui kɔr-Ø/ are imperative conjugations ‘you(SG) do’.

⁴ Masica 1991 prefers “General Unspecified” and “Present Habitual” to “Present Indefinite”, but as stated in the text above, exact description of synchronic functions is not the purpose of this study.

See further section 6.3 for the full system of imperative and primary endings for each of the 8 sample KRNB lects.

	Imperative	Present indefinite
p-Kamta	*-AGR.IMP	*-AGR.I
KS	-AGR.IMP	-AGR.I
RL	-AGR.IMP	-AGR.I
MH	-AGR.IMP	-AGR.I
TH	-AGR.IMP	-AGR.I
RP	-AGR.IMP	-AGR.I
SH	-AGR.IMP	-AGR.I
BH	-AGR.IMP	-AGR.IA
BN	-AGR.IMP	-AGR.I

Table 6-4. Imperative and present indefinite formations in KRNB and p-Kamta

The structure of imperative and present indefinite formations is uniform across KRNB, as well as Asamiya, Bangla and Oriya. The agreement endings used in these conjugations are also cognate beyond KRNB in other e.Mg lects (see section 6.4). With cognate suffixes in identical structural positions, both these formations are inherited from proto-Mg. through proto-Kamta. These imperative and present indefinite formations may be traced further back in history to the Imperative mood, and the present indefinite, of OIA (cf. Chatterji 1926: 864). The structural dissimilarity in BH, which has the present indefinite conjugated with a partially distinct ‘AGR.IA’ system (rather than AGR.I) is explained and reconstructed in section 6.4.

6.2.4. Present continuous and present perfective formations

There are two ‘present definite’ tense formations, which along with the ‘present indefinite’ dealt with above, complete the present tense conjugations for KRNB. The present perfective conjugation is used in KRNB for completed events where the completion is relevant to, or temporally proximate to, the (discourse-defined) present moment. The present continuous is used for action ongoing in the present. No greater functional exactitude is intended by the use of these labels.

Present definite formations—suffixed to Verb stems				
Present continuous			Present perfective	
P-Kamta	*-ε-tʃ ^h -AGR.I			*-i-tʃ ^h -AGR.I
KS	-ε-tʃ ^h -AGR.I			-i-tʃ ^h -AGR.I
RL	-ε-s-AGR.I			-i-s-AGR.I
MH	-(ε)-tʃ ^h -AGR.I			-i-tʃ ^h -AGR.I
TH	-tʃ ^h -AGR.I			-[i,e]-tʃ ^h -AGR.I
RP			-bær næk-s-AGR.I	-s-AGR.I
SH	-ε-s-AGR.IA			-i-ʃ-AGR.IB
BH			-ir ɖ ^h ɔr-s-AGR.IB	-s-AGR.IB
BN		-ia as-AGR.IA	-iba lag-i-s-AGR.IB	-i-s-AGR.IB

Table 6-5. Present continuous and present perfective formations in KRNB and p-Kamta

The two present ‘definite’ formations shown in Table 6-5 are erstwhile compounds involving the auxiliary /atʃ^h-/ ‘be present’. The auxiliary verb was grammaticalised as part of this construction and reduced to *-tʃ^h ‘present tense’, though it also remains in Magadhan lects as an independent and irregular verb. This grammaticalised piece of verbal morphology has been inherited into the Mg. lects with subsequent loss in Magahi and Bhojpuri (Chatterji 1926: 1035). Its occurrence in proto-Kamta is thus a retention.

The agreement system used in present ‘definite’ formations is AGR.I. This system of endings is found in contemporary KRNB lects attached (a) directly to verb stems in the present indefinite formation (see 6.2.3), and (b) attached to the present tense marker which is derived from the auxiliary verb *atʃ^h-. Diachronically, this distribution is explained by the inheritance of the AGR.I system from a stage prior to the grammaticalisation of *atʃ^h- > *-tʃ^h-. At that time, the AGR.I system attached to verb stems, which included *atʃ^h- ‘be present’. After the auxiliary verb *atʃ^h- was grammaticalised as *-tʃ^h ‘PRS’ the agreement endings were retained despite the change in morpho-syntactic environment. In recognition that the AGR.I system is an old and inherited system, it is termed the “primary” system of agreement in IA studies.

The primary system is distinguished from the “secondary” systems, which are (a) later developments (not inherited from earlier than proto-Magadhan), and (b) attach not to the verb stem, but to erstwhile participial morphology reanalysed as tense morphology. Participial suffixes became a source of Tense and Aspect morphology during late MIA. The reanalysis of various participial morphology as past and future tense markers is a proto-Magadhan change, and discussed in sections 6.2.5 and 6.2.6. After the division of proto-Magadhan, the secondary systems of agreement were innovated independently in proto-Bangla, proto-Asamiya and proto-Kamta (see under 6.4 below). For this reason, the secondary systems of e.Mg. lects are considerably more differentiated than the primary systems.

The data in Table 6-5 constitute evidence of phonological changes in the inherited present tense marker, as well as phonological and morphological changes in the perfective and continuous aspectual markers.

Phonologically regular reflexes of $*-tʰ$ ‘PRS’ occur in 7 of the 8 lects (cf. the intervocalic reflex of $*tʰ$ in Table 4-4). The one exception is SH /ʃ/ in the present-perfect conjugation, with SH /s/ (as in the present-continuous conjugation) the anticipated reflex. This post-alveolarisation in SH of the present tense morpheme from /s/ to /ʃ/ is restricted to the two perfective conjugations—the present-perfective, and the past perfective (see 6.2.5). The morphological and phonological complexity of the conditioning for this change makes it diagnostic of a propagation event. It is most plausible that the phoneme first underwent alveolarisation and fricativatisation $*tʰ > s$ (the regular reflex), followed by morphologically-conditioned re-phonemicisation $> /ʃ/$.

[MI 7.] $*-tʰ$ ‘PRS’ ($>*-s$) $> /-ʃ/$ ‘PRS’ in present and past perfective formations.
 {SH}. Diagnostic.

Turning to the perfective-marking vowel in the present perfective formation, we find that:

- /-i/ is found across RL, MH, SH and BN;
- /-e/ is found in TH, with allomorph [-i] due to regressive raising; and
- no vowel (i.e. a zero marker) is found in RP and BH.

Given the broader range of perfective /i/, the TH form /-e/ can be viewed in two complementary ways. Firstly, the form /-e/ in TH simple verbs is an analogical extension of the perfective /-e/ in compound verbs which < *-ia (see the arrow in Table 6-2). Secondly, SCB has undergone the same analogical extension, and the TH change represents a convergence towards the norms of SCB. The similarity between conjugations in TH and SCB extends also to the present-continuous formations shown in Table 6-5. The TH present-continuous is formed by suffixing the verb with the present tense marker—without aspectual marking—followed by the agreement endings. Other KRNB lects have some overt continuous aspectual marker in the corresponding formation, even if it is variable. These two changes in TH are diagnostic of contact relations between TH and SCB.

[MI 8.] *VERB-i-tʰ-AGR.I ‘present perfective’ replaced by VERB-e-tʰ-AGR.I ‘present perfective’ {TH}. Diagnostic of contact relations with SCB.

[MI 9.] *VERB-ε-tʰ-AGR.I ‘present continuous’ replaced by VERB-tʰ-AGR.I ‘present continuous’ {TH}. Diagnostic of contact relations with SCB.

Turning to the present-perfective conjugation in RP and BH, the absence here of perfective *-i is plausibly associated with the phonological changes reconstructed in 4.4.6 (transposition and loss). However, the formulation of changes there requires that one of the adjacent consonants to the vowel be a sonorant. This condition is not always met in the present-perfect conjugations, and yet the medial *i is still lost, for example in RP /dek^h-s-o~/ ‘I have seen’. The loss of medial *i is not predicted in this environment by the general phonological changes, and a morphologically-specific change must instead be proposed. What seems to have happened is that the medial *-i ‘PFV’ became zero in some verbal constructions by the phonological changes of transposition and loss of medial high vowels. The zero marker was then reanalysed as the regular marker of perfective in the present-perfect conjugation.

[MI 10.] *VERB-i-s-AGR.I ‘present perfect’ > VERB^H-s-AGR.I {RP} and VERB^H-s-AGR.IA {BH}. (After [MI 47.] and [PI 33.]). Diagnostic.⁵

⁵ VERB^H indicates a verb with the last vowel of its stem raised *ɔ > [o], *ε > [e]. The raising does not apply to *a, unlike in SCB.

There is a small difference between BH and RP in agreement endings in this construction, to be discussed in 6.4.1.1. Despite this difference, the reanalysis of zero as the perfective marking is common to both RP and BH. It is unique, and the range is sociohistorically plausible as a zone of integrated propagation, and therefore the change is diagnostic of a propagation event. The difference in agreement endings shows that the change [MI 56.] must have occurred subsequent to Progressive Vowel Raising ([PI 23.]). Furthermore, as this change is plausibly a reanalysis of the zero allomorph created by transposition and loss of medial vowels, therefore [MI 56.] must also have occurred after [PI 33.].

Based on this reconstruction of changes, the past perfective formation inherited from proto-Kamta was: *VERB-i-tʰ-AGR.I

The last of the present tense formations to be discussed is the present-continuous, with the reconstruction given in Table 6-5 as *VERB-ε-tʰ-AGR.I. The present-continuous constructions in KS, RL, MH and SH are all very similar (see Table 6-5) and may be straightforwardly reconstructed to a common formation. In contrast, the present-continuous formations in RP, BH and BN are non-cognate and periphrastic. These are very likely to be recent innovations through the reanalysis of certain compound verbs with continuous aspect (see further below). The TH form for present-continuous lacks any overt aspectual marking and has been reconstructed as an innovation in [MI 55.]. This leaves only the formation *VERB-ε-tʰ-AGR.I as a possible candidate for retention from the proto-Kamta stage. If this formation was found only in KS, RL and MH we might consider it a recent innovation, as these three lects form a historical subgroup and have undergone common changes after the division of proto-Kamta (cf. 7.5.2). However, the same construction is found in SH also. There is no diagnostic innovation whose range involves western KRNB lects and SH but excludes the other central KRNB lects RP and BH. The distribution of this formation in both western KRNB lects {KS, RL, MH} as well as in the central KRNB lect {SH} justifies the reconstruction of this formation as a proto-Kamta inheritance.

A plausible cognate for the proto-Kamta aspectual marker *-ε is the Maithili continuous morpheme /-Λi/. If the sequence *ɔi (where *ɔ corresponds to Maithili /Λ/) had been inherited into KRNB as a morpheme with continuous function, then the phonological reflex could very plausibly have been *-ε. The diachronic phonological plausibility comes from considering that the proto-Kamta third person agreement endings /-ε/ are the reflex of Magadhan *-ai* > *ɔi. Another etymological possibility concerns the verbal nominaliser /-a/ (possibly passive participle, see Chatterji 1926: 660) suffixed with the old Locative *-ε, followed by vowel coalescence: *-aε > *-ε. Further reconstruction at a broader Magadhan level is required before the etymology can be finalised.

Turning to the periphrastic present continuous constructions in Table 6-5, they are:

- RP: -bær næk-s-AGR.I
- BH: -ir ḍ^hɔr-s-AGR.I
- BN: -iba lag-i-s-AGR.I

The two elements that make up these formations are (1) the infinitive (cf. 6.2.2) and (2) an auxiliary verb (either reflexes of p-Kamta *lag- ‘attach’ or *ḍ^hɔr- ‘catch’) grammaticalised with continuous aspect. Three diachronic interpretations are possible regarding the differences in these formations. Firstly, a common change may have been propagated across all three lects whereby a compound construction *[VERB-INF lag-PFV-PRS-AGR] was reanalysed with continuous aspect. This would then have been followed by the substitution of the verb *lag ‘attach’ with *ḍ^hɔr- ‘catch’ in BH only, but still with continuous aspect. This is a plausible enough interpretation, and gives weight to the close phylogenetic relations between RP and BH lects—or to use more general labels, the lects of Rangpur and Cooch Behar. The second possible interpretation of the three periphrastic continuous formations is that RP and BN constitute a common change (based on the cognacy of the grammaticalised auxiliary verb < *lag- ‘attach’). The BH formation would then be considered an independent change. This interpretation gives weight to the cognacy of the contemporary forms in BN and RP. It is less sociohistorically plausible than the first interpretation because it does not recognise the much closer phylogenetic relationship between RP and BH than between RP and BN. Furthermore, the

similarity of a periphrastic continuous formation in both RP and BH is left unexplained by this second interpretation. The third interpretation is that all three lects independently innovated periphrastic continuous aspect formations. These three interpretations all account for the divergences in the data. I hold that the first explanation is the more plausible (because of the closer phylogenetic relations between BH and RP), and therefore reconstruct the following common change for RP, BH and BN:

[MI 11.] VERB-INF + present-perfective of *lag- ‘attach’ > ‘present continuous’ {RP, BH, BN}. Non-diagnostic.

This change involves the propagation of a reanalysed meaning for a construction already present in the lects. The precise forms that made up the construction, while cognate, need not have been identical at the time of propagation. That is, it is not necessary that [MI 57.] occurred before (a) the change of initial *l > n in RP and BH or (b) the reanalysis of the infinitive in those lects by [MI 51.]. The change [MI 57.] is somewhat complex in its conditioning, but because the change is generalised for RP, BH and BN based on sociohistorical plausibility (see above), the change cannot in turn be used to diagnose sociohistorical relations.

Finally, BN has a second present-continuous formation: VERB-ia as-AGR.IA. As a periphrastic construction, this is also likely to be a recent innovation. The morphemes involved are the perfective /-ia/ and /as-/ ‘be present’ from which we get the grammaticalised present tense marker *-tʰ. (Recall that the verb *atʰ- persists across KRNB as an independent lexeme alongside the grammaticalised morpheme *-tʰ.)

6.2.5. Past tense constructions

The constructions examined in this section are labelled ‘past tense’; this differs from Masica’s classification of NIA tense-aspect categories. In particular, Masica holds that the -l- form is an *unspecified perfective* across New Indo-Aryan, including in KRNB’s near relatives SCB and SCA. Whether or not this is true of SCA and SCB, it does not seem to be a good analysis of the KRNB situation. In KRNB if any formation is to be considered a candidate for an *unspecified* perfective, it should be

the VERB-i-tʃ^h-AGR.I construction labelled above as ‘present perfective’. Unlike the formation VERB-il-AGR.IIA which only occurs for past tense in KRNB, the /-i-tʃ^h-/ formation, while generally ‘present perfective’, can be used as ‘past perfective’ given the right discourse context. The label ‘past tense’ for the /-l-/ suffix is thus more suitable than Masica’s terminology in the case of KRNB.

In all cases in Table 6-6, [l,n] alternation is conditioned by the phonology of the agreement proto-suffixes—the /-n-/ allomorph occurring before first person endings (extended to some second person endings in RP); the /-l-/ allomorph elsewhere (see further 6.4.1.3). For example (from MH):

- /mui baɟʒar ɡei-n-u/ < *mui baɟʒar ɡei-l-ũ ‘I bazaar go-PST-1.SG’ = ‘I went to the bazaar’,
- /tʃui baɟʒar ɡei-l-o/ < *tʃui baɟʒar ɡei-l-o ‘you bazaar go-PST-2.SG’ = ‘you went to the bazaar’.

	Past indefinite (unspecified aspect)	Past definite		
		Past continuous		Past perfective
p-Kamta	*-il-AGR.IIA			*-i tʃ ^h il-AGR.IIC
KS				
RL	-[l,n]-AGR.IIA			-isi[l,n]-AGR.IIA
MH	-[l,n]-AGR.IIA			-is[l,n]-AGR.IIA
TH	-i[l,n]-AGR.IIA		-tʃ ^h i[l,n]-AGR.IIC	-iʃ[l,n]-AGR.IIC
RP	-(i)[l,n]-AGR.IIA	-bær næk-si[l,n]-AGR.IIC		-si[l,n]-AGR.IIC
SH	-i[l,n]-AGR.IIA			-iʃ[l,n]-AGR.IIC
BH	-(i)l-AGR.IIA	-ir d ^h ɔr-sil-AGR.IIC	-ia ts ^h il-AGR.IIA	-i sil-AGR.IIC
BN	-il-AGR.IIA		-ia asil-AGR.IIA	-i sil-AGR.IIA

Table 6-6. Past tense formations in KRNB and p-Kamta

As in the present tense, the past tense formations are quite uniform in the perfective aspect. The past indefinite formations (with unspecified aspect) are also very uniform across the eight lects. It is once again the continuous aspectual formations which lack uniformity across the lects.

The p-Kamta simple past is straightforwardly reconstructed with the elements /-i-/ (lost in some lects) and the /-l-/ allomorph. The /-n/ element is a more recent

innovation diachronically conditioned by the nasalised vowels in the first person AGR endings (see 6.4.1). The reconstructed morpheme *-il- ‘past tense’ is cognate with Oriya, Bangla and Asamiya (i.e. eastern Magadhan lects), and partially cognate also with the western and central Magadhan lects which have (-ɳl,-əl). This morpheme is not inherited from OIA participial or tense morphology, and its etymology beyond MIA is somewhat tricky (cf. Chatterji 1926: 940ff.). Chatterji notes that the MIA phonological changes had eroded the inherited OIA passive participle *-(ta, ita) > -(a, ia)* to the point of it being non-distinctive. Based on the presence of the /-l/ element in Magadhan languages he surmises that during the common Mg. stage (the Magadhi Apabhramsa) the inherited and eroded passive participle was extended by *-ll > -(ila, ala)*. Changes in verbal syntax between MIA and NIA—attested in written records—account for the altered function of the passive participle, as described in the following quote:

[T]he passive participle construction, the verb being an adjective qualifying the nominative when it was intransitive and the object when transitive, became the common idiomatic way of expressing the past in MIA. By the time when the Apabhramśa Stage came in, the old inflected past forms, which still lingered in Second MIA., were clean swept away, and only this participial past remained in IA.; and the NIA. past tense was formed out of this. (*ibid.*: 939-40)

This hypothesis accounts for the presence of *-l-* based past (or perfective) morphemes in the Magadhan languages, and the transition from passive construction to active, with the accompanying creation of secondary systems of agreement.

Turning our attention back to the past formations of Table 6-6, the various sibilants and affricates in past definite formations are traced to a grammaticalised form of the verb **atʃʰ-* ‘be present’ (as was the case in the present tense cf. 6.2.4). In these data, TH has deaffricated the morpheme **-tʃʰ > -ʃ-*, but the conditioning is different to that found in the SH present tense formations. In this TH formation, the proto-phoneme **-tʃʰ* has moved next to another consonant by the loss of the intervening vowel. The phonological sequence that results is phonotactically disfavoured, with no examples of /tʃʰC/ in the TH data. Accordingly, the affricate has been deaffricated to give the more phonotactically favourable sequence /ʃC/. The divergence in the past-

continuous formation in TH is therefore a phonological, rather than a morphological change. It is of little complexity and has no value for diagnosing propagation events.

The most variety in the past tense formations, as in the present tense, comes in continuous constructions. With no specifically past continuous formation found in the lects RL, MH and SH, and innovative periphrastic constructions in RP and BH, there is insufficient evidence to reconstruct a p-Kamta past continuous formation, distinct from a past perfective formation. This slot is accordingly left blank in the bottom row of Table 6-6 as well as in Table 6-1 earlier in the chapter. Forms to distinguish past continuous from past perfective function are post-*proto-Kamta* innovations, and accordingly have quite localised ranges.

The past-continuous formation in RP and BH is the past tense analogue of the construction innovated in the present tense formations by [MI 57.]. The periphrastic continuous based on the auxiliary **lag-* is not part of the data collected at BN, though this probably reflects an inadequacy in the data rather than the absence of the construction in the lect. The TH construction VERB- $t^h i[1,n]$ -AGR.IIC is once again identical with Bangla, and is reconstructed as a morphological replacement, diagnostic of contact relations.

[MI 12.] > VERB- $t^h i[1,n]$ -AGR.IIC ‘present-continuous’ {TH}. Diagnostic of contact relations with SCB.

The other past continuous formation—found in both BH and BN—is a compound verb construction, but in this case the vector verb is **at^h*- ‘be present’, and the main verb is suffixed with the perfective participle *-*ia*. A similar construction was seen in the present-continuous conjugation in BN. The structure of this construction is the same as used in Asamiya for a disambiguated past continuous function. There is a slight difference in form because the perfective participle in the BH and BN constructions is /-*ia*/ and in the Asamiya construction it is /-*i*/. Nonetheless, contact with Asamiya is a likely conditioning factor for the range of propagation of this construction—BN being within Assam, and BH located very near the border with Assam. On the other hand, there is some evidence elsewhere to support a propagation event connecting BH and BN (see the initial devoicing change in Chapter 4). Lacking

clear reason to decide between these two possible explanations—contact with Asamiya, vs. propagation between BN and BH—the change [MI 58.] is stated as having an ambiguous diagnostic value.

[MI 13.] > VERB-PFV *at^h-il-AGR.IIA ‘past-continuous’ {BN, BH}. Diagnostic value ambiguous between contact relations with Asamiya or a PE within BH and BN.

This concludes the discussion and reconstruction of past tense formations for proto-Kamta.

6.2.6. Future tense constructions

Only one future tense construction was collected as part of this study, though, as for the other tenses, it is possible that further *Aktionsart* categories are possible by compounding with auxiliary verbs. Analogously to the [l,n] alteration in the past tense morphology, [b,m] alternation in Table 6-7 is conditioned by the historical phonology of the agreement suffixes. The /-im/ allomorph occurs before first person agreement endings and is subsequently extended in RP to the 2.PL ending; the /-ib-/ allomorph is found before other endings (see further 6.4.1.3).

	Simple future
p-Kamta	*-i[b,m] -AGR.IIB
KS	-[b, im] -AGR.IIB
RL	-[b, im] -AGR.IIB
MH	-[b, im] -AGR.IIB
TH	-[ib,im] -AGR.IIB
RP	-[(i)b,im]-AGR.IIB
SH	-[ib,im] -AGR.IIB
BH	-[ib,im] -AGR.IIB
BN	-[ib,im] -AGR.IIB

Table 6-7. Future tense formations in KRNB and p-Kamta

The history of this formation is straightforwardly reconstructed. The element /-i-/ is lost in some lects, but maintained throughout KRNB in the fused future-and-first-person-singular-ending /-im/; it thus constitutes part of the inherited material. The [-m] allomorph is the historical result of transferring the nasalisation from a suffixed vowel onto the tense marker (cf. [MI 65.]). This morphologically conditioned

nasalisation of *-ib 'FUT' occurred prior to p-Kamta and thus the reconstructed p-Kamta system includes both allomorphs *-[ib, im].

The future tense employs a partially distinct set of agreement suffixes (AGR.IIB) to the past formations; these are described and reconstructed in sections 6.3-6.4.

Similarly to the past tense marker, the future tense marker *-ib is a reflex of older participial morphology:

it comes from the OIA. future passive participle gerundive in «-tavya-» or «itavya», in Second MIA. «-(i)avva-, -(i)abba-, -ěbba » (Chatterji 1926: 965).

As in the case of the past tense morpheme *-il, the use of the morpheme *-ib for *active* future tense is a late MIA or early NIA innovation. Only after this morpheme started to be used in active constructions were secondary endings added to the future tense formation. The AGR.IIA (past) and AGR.IIB (future) systems thus constitute early NIA innovations, and are relevant to subgrouping within e.Mg. (see further 6.4).

6.3. Agreement endings: synchronic description

This section moves from Tense/Aspect morphology to describe in outline form the Subject Agreement system of suffixes for each of the 8 KRNB test sites. Peculiar synchronic features of each system are noted in passing. The p-Kamta system of agreement marking is reconstructed in section 6.4.

Agreement marking on the Verb is a common feature of NIA. In most NIA lects, the agreement is with the Subject of the clause; in some languages there is additional marking for the Object (e.g. Maithili). The notion of Subject is defined differently across grammatical traditions. Here the intended referent is the S or A of a finite clause (Comrie 1978). This constituent receives no overt nominal marking in KRNB (see 5.3.3), but the Person and Number of the Subject control a morphological position on the verb. Agreement is only characteristic of KRNB finite verbal formations, and is absent in non-finite formations.

In KRNB lects there are multiple sets of agreement suffixes. Their use is grammatically conditioned, as is the general pattern in NIA (cf. Masica 1991: 259ff.). Agreement suffixes are traditionally classed in IA studies as Primary vs. Secondary.

Some explanation for the use of these two terms has been given in 6.2.4, and we return to the historical differences between these two systems in 6.4. From a synchronic perspective, the “Primary” (AGR.I) endings occur in all present tense formations, and the “Secondary” (AGR.II) endings in past and future tense formations. Similarly to the Primary endings, the Imperative endings (AGR.IMP) attach directly to the verb stem. The function of the clause differs depending on which set of endings is used (see section 6.2.3).

Amongst the secondary endings, there are further divisions of labour—with one set of endings (AGR.IIA) used after the past tense /-(i)l-/ and a partially distinct set of endings used after the future tense /-(i)b-/ (AGR.IIB). Furthermore, in some KRNB lects there are different third person endings after the past tense marker depending on whether it is a ‘definite’ past formation or a simple past formation, yielding a third secondary set: AGR.IIC. (The historical explanation for AGR.IIC is in 6.4.2).

I have stated above that KRNB agreement endings mark both *Person and Number* categories for the Subject. This finding is notable because several IA studies state that Number marking is absent from the Bangla-Asamiya subgroup, for example:

Note the neutralization of number in the 1st person ... not only in the Eastern languages (except Oriya) as far west as Bhojpuri, but also in Punjabi ... The distinctions remaining in the 2nd and 3rd persons ... in the east have become distinctions of honorificity rather than of number.
(Masica 1991: 285, n.7)

The innovation of cognate forms in the secondary system distinguishing singular and plural number is a core diagnostic for the p-Kamta stage of development, distinct from the linguistic histories of Bangla and Asamiya (cf. 6.4.1). The detailed reconstruction of the history of Number marking in KRNB and e.Mg. is found in section 6.4.

6.3.1. Kishanganj (KS)

The agreement system used in and around Kishanganj (KS) of Bihar is outlined in Table 6-8.

	1	2	3
AGR.IMP	-i	-ʌ	⁶
AGR.I	-i	-is	-ε
AGR.IIA	-u	-o	-ε
AGR.IIB	-∅	<i>as AGR.IIA</i>	

Table 6-8. Subject agreement system around Kishanganj

This system differs structurally from the other KRNB systems described below (excepting BN) due to the absence of Number as a grammaticalised category of Agreement.

6.3.2. Rangeli (RL)

The agreement system for Rangeli (RL) of Nepal is given in Table 6-9. Unlike KS which has 3 persons but no number marking, in RL the agreement system distinguishes Singular and Plural across both first and second persons. The second person categories of inflection are slightly more complex than just SG vs. PL, as the PL form is also used for an Honorific Singular. This extension of Plural meaning to cover Singular Honorific is common in NIA. The two second person categories are nonetheless labelled as 2.SG and 2.PL as these are the principle categories of the system, not Honour. The 5 Person-Number combinations are listed in columns.

	1.SG	1.PL	2.SG	2.PL	3
AGR.IMP	-u(ŋgu)	-i	-[ε]k	-ʌ	-ok
AGR.I	-u(ŋgu)	-i	-i	-ʌn	-ε
AGR.IIA	-(g)u	-ʌ	-o	-ʌn	-ε
AGR.IIB	-(∅, gu)	<i>as AGR.IIA</i>			

Table 6-9. Subject agreement system around Rangeli

The optional pleonastic suffix /-[ŋ]gu/ to the first person singular endings is peculiar to the RL lect. Reconstruction of the history of this suffix is attempted in section 6.4.1. Together with MH, the RL system is unique in KRNB for employing a second person ending based on the vowel *ɔ > ʌ {MH, RL}, rather than *ε. This variation is examined in 6.4.2. This lect otherwise follows the broader pattern for KRNB.

⁶ Data not collected.

6.3.3. Mahayespur (MH)

The MH agreement endings outlined in Table 6-10 are highly similar to that of RL above.

	1.SG	1.PL	2.SG	2.PL	3
AGR.IMP	-u	-i	-ʌ, -ɛk	-[ʌ]n	-ok
AGR.I	-u	-i	-is, -i	-ʌn	-ɛ
AGR.IIA	-u	-ʌ	-o	-ʌn	-Ø, -ɛ
AGR.IIB	-Ø	<i>as AGR.IIA</i>			-ɛ

Table 6-10. Subject agreement system around Mahayespur

There are two forms categorised as ‘2.SG’ in both the primary and imperative systems. Speakers do not give a consistent explanation of the functional difference between these variants. Functional explication therefore awaits closer synchronic study, especially of texts. The variation in the primary form [-is, -i] ‘2.SG’ seems to be a case of phonological variation in word-final /s/. Variation in the third person past (AGR.IIA) endings between zero and /-ɛ/ is yet to be shown to reflect a functional distinction.

6.3.4. Thakurgaon (TH)

The agreement data for the TH test site are in Table 6-11:

	1.SG	1.PL	2.SG	2.PL	3
AGR.IMP	-u	-i	-ɛk	-[ɛ]n	-ok
AGR.I	-u	-i	-i	-ɛn	-ɛ
AGR.IIA	-u	-o	-o	-ɛn	-Ø, -ɛ
AGR.IIB	-Ø	<i>as AGR.IIA</i>			-ɛ
AGR.IIC	<i>as AGR.IIA</i>				-o

Table 6-11. Subject agreement system around Thakurgaon

The TH system has one structural difference to MH and RL above: the third person AGR.IIA (past tense) endings differ for past-indefinite and past-definite formations.

For example:

- /d̪exile, d̪exil/ ‘she saw’. Past indefinite.
- /d̪exiʃlo/ ‘she had seen’. Past perfect.
- /d̪ext^hilo/ ‘she was seeing’. Past continuous.

The past-indefinite formation takes the AGR.IIA ending, while the past-definite formations take the AGR.IIC ending. Any synchronic relevance of verbal transitivity for agreement marking in TH remains to be studied. The historical explanation for the origin of the AGR.IIC system is given in 6.4.2.3.

The TH system is akin to the other systems below, and distinguished from MH and RL above by having second person plural endings based on *ε > /e/ instead of *ɔ. Interestingly, both *-ε (> -e) and *-ɔ (> -o) are found as third person markers in TH—a crucial fact in the reconstruction of second person plural markers *-[εn,ɔn] (see 6.4.2).

6.3.5. Shalkumar (SH)

The agreement data for SH are given in Table 6-12:

	1.SG	1.PL	2.SG	2.PL	3
AGR.IMP	-o	-i	⁷	-[ε]n	-[u]k
AGR.IA	-o	-i	-iṭ	-εn	-ε
AGR.IB	-u	<i>as AGR.IA</i>			
AGR.IIA	-u	-i	-o	-εn	-εk
AGR.IIB	-∅	-ɔ	-o	-εn	-ε
AGR.IIC	<i>as AGR.IIA</i>		-iṭ	-εn	-o

Table 6-12. Subject agreement system around Shalkumar

The SH agreement system is structurally different to the systems above. As in TH there is a difference in conjugation between past definite and past indefinite formations in the third person endings. In SH this split in conjugation in the past formations is also extended to the second person endings, thus:

- /dɛxil-o/ 2.SG Past **indefinite** for the verb /dɛk^h-/ ‘see’
- /dɛxil-iṭ/ 2.SG Past **definite** for the verb /dɛk^h-/ ‘see’

Whether verbal transitivity has any synchronic relevance for agreement marking in SH has not yet been studied.

⁷ Datum not collected.

There is also a structural difference in the primary endings. The first person singular ending in the present *perfective* formation is different to that found in the present *indefinite* and *continuous* formations:

- /ḍex-i-s-u/ 1.SG Present **perfective** for the verb /ḍek^h-/ ‘see’
- /ḍex-ε-s-o/ 1.SG Present **continuous** for the verb /ḍek^h-/ ‘see’
- /ḍex-o/ 1.SG Present **indefinite** for the verb /ḍek^h-/ ‘see’

While progressive raising of *o > /u/ is not a regular feature of SH, it seems here to be a morphologically-specific raising process.

This description points to a further difference between SH and the preceding systems: in both AGR.IA and AGR.IMP the first person singular endings are a lower vowel /-o/, in contrast with the ending /-u/ found in the western KRNB systems described above. An historical explanation for this difference is given in 6.4.1.

Finally, the SH system extends the pleonastic /-k/ found in imperatives to the third person past ending (as does BH below).

6.3.6. Rangpur (RP)

The Rangpur system shares the same overall structure as TH.

	1.SG	1.PL	2.SG	2.PL	3
AGR.IMP	-õ	-i	-o, -εk	-[ε]n	-uk
AGR.I	-õ	-i	-iʃ	-εn	-ε
AGR.IIA	-u	-o	-u	-εn	-∅
AGR.IIB	-∅	<i>as AGR.IIA</i>			-ε
AGR.IIC	<i>as AGR.IIA</i>				-o

Table 6-13. Subject agreement system around Rangpur

The RP system has some phonological differences with the foregoing systems: firstly, RP maintains the inherited nasalisation on first person singular endings; secondly, the vowel in the second person singular ending of the secondary systems /-u/ is higher than for the lects described above. The raised vowel is the result of Progressive Vowel Harmony (see 4.4.2).

6.3.7. Bhatibari (BH)

The Bhatibari system shares the structure of RP and TH in distinguishing the AGR.IIC system. The endings are displayed in Table 6-14.

	1.SG	1.PL	2.SG	2.PL	3	
					Intrans	Trans
AGR.IMP	-[o]ŋ	-i	-Ø, -εk	-o	-uk	
AGR.IA	-[o]ŋ	-i	-iʃ	-εn	-ε	
AGR.IB	-[u]ŋ	<i>as AGR.IA</i>				
AGR.IIA	-uŋ	-oŋ	-u	-εn	-o	-εk
AGR.IIB	-Ø	-o	<i>as AGR.IIA</i>		-ε	
AGR.IIC	<i>as AGR.IIA</i>				-o	

Table 6-14. Subject agreement system around Bhatibari

There is one structural difference between this system and those above: the split of primary endings into two systems AGR.IA and AGR.IB. These two primary systems differ only with respect to first person singular: in the AGR.IB system the ending has been raised to /-uŋ/ from /-oŋ/. Some historical explanation for the raising of AGR.IB /-uŋ/ has already been given in section 6.2.4.

Similarly to RP, BH has progressive vowel harmony, and this process affects the height of vowels in Table 6-14, e.g. /-u/ ‘2.SG’.

6.3.8. Bongaigaon (BN)

The system of subject agreement in BN is quite different from the general pattern outlined above for the other KRNB lects. Similarly to KS, agreement in BN is not inflected for the number of the subject.

	1	2		3
		Low	High	
AGR.IMP	-o [~] c ⁻ , ŋ ^{v-}	-εn		-ɔk
AGR.I	-o [~] c ⁻ , ŋ ^{v-}	-is	-a	-ε
AGR.IIA	-o [~]	-i	-a	-Ø
AGR.IIB	-Ø	-i		-ɔ

Table 6-15. Subject agreement system around Bongaigaon

While number is unmarked in BN, High vs. Low Honour is distinguished in the second person endings. The ending /-a/ is not found elsewhere in KRNB, and is

shared instead with SCA.⁸ The first person ending is the lower variant /-o~/ found also in RP, SH and BH. The high variant /-u, -u~/ is not found in BN, nor in SCA. The relationship of the BN and SCA agreement systems is close, and the history is reconstructed in section 6.4.3.

6.4. Agreement endings: historical reconstruction

The synchronic specification of certain endings for certain tense formations is residue of the multiple layers of historical change—phonological and morphological—that swept over the verbal formations during the MIA and NIA periods. Of the various sets of agreement endings, the primary set alone constitutes an historical continuation in NIA of the OIA agreement morphology (Masica 1991: 260). As inherited features, cognacy of primary endings in NIA lects is generally not indicative of morphological change events. NIA primary endings are (mostly regular) reflexes of the Sanskrit present active endings (cf. Bubenik 2003: 227-8; also see footnote 9 under Table 6-16 regarding the regularity of the reflexes).

	1.SG	2.SG	3.SG	1.PL	2.PL	3.PL
Pāli (early MIA)	-āmi	-asi	-ati	-āma	-atha	-anti
Prakrit (middle MIA)	-āmi	-asi	-ai	-āmo	-aha	-anti
Apabhramsa (late MIA)	-aum̃	-ahi, -asi	-ai	-ahum̃	-ahu ^o	-ahim̃
various NIA languages (from Masica 1991: 263-4)	-õ, -ũ, -əũ, -əõ etc.	-əi, -əe, -es, -iʃ, -əs, etc.	-y (i.e. -j), -e, -əe, -əi etc.	-əũ, -aũ, -ũ, -õ etc.	-ə(n), -ɔ, -o, -əo	-oṅṭi, -ən, -in, -en, -ẽ etc.

Table 6-16. Derivation of primary endings in NIA from OIA and MIA forms

The outcome of this historical continuity is that *cognacy in primary endings is not unusual or unexpected in NIA languages*, and only in certain circumstances to be considered diagnostic of a propagation event.

⁸ But cf. section 7.3.1.3.

⁹ “There are various difficulties connected with explaining the origin of the plural suffixes in Apabhramśa. *u* in *-ahu* in the second person, as suggested by Bloch, comes probably from the suffixes of the third person imperative *-a(h)u* (< *-atu*) and *-antu*” Bubenik (2003: 228).

The situation is markedly different when we come to the secondary endings. The inherited perfective and future constructions of OIA were lost during MIA and early NIA. These were replaced in the Magadhan lects by constructions based on passive participles, reanalysed firstly as past and future tense markers with passive voice and subsequently with an active sense (cf. 6.2.5 and 6.2.6). It was only after this morphosyntactic reinterpretation that the secondary sets of agreement endings were created. As Chatterji puts it: “Affixation for the participial tenses is a NIA. development” (1926: 967). Because these secondary sets were created *de novo*, cognacy among the Magadhan lects in secondary endings is not to be regarded as retention from OIA (or MIA for that matter). Instead, cognacy is diagnostic of *either proto-Magadhan or post-Proto-Magadhan morphological innovations*.

In order to reconstruct the history of KRNB agreement marking and its origins in proto-Magadhan, the 8 KRNB systems are compared with each other as well as with corresponding forms for other Magadhan lects. Changes in the secondary systems are particularly significant for diagnosing propagation events given that these systems of endings are completely innovative.

With the reconstruction involving multiple morphemes in multiple systems, the discussion below becomes quite intricate. To assist the reader in following the details of the reconstruction, the final product of reconstruction—the agreement system of p-Kamta—will be reproduced at several points throughout the chapter with shading to indicate which morpheme is currently being discussed.

In the KRNB data, endings with first person function are etymologically distinct from endings for the other persons. The same cannot be said for the second and third person endings. In their case, the etymologies are so intertwined that the reconstruction proceeds most perspicuously if second and third person endings are compared and reconstructed *en masse*. This perspicuity of analysis suggests that the endings for second and third person are reflexes of a pre-system which did not categorically distinguish these persons in agreement marking. As these person categories became grammaticised, they did so in variable and messy ways which signal their origin in a unitary pre-category: 2/3.General, see further 6.4.2.

6.4.1. First person agreement suffixes

Table 6-17 presents the first person agreement suffixes for the 8 KRNB sites. The data are divided into columns which indicate their functions within primary or secondary systems. Blank cells indicate the category is absent from that lect. Shaded cells are non-cognate.

	AGR.IMP, and (AGR.I or AGR.IA)		AGR.IB		AGR.IIA		AGR.IIB		AGR.IIC	
	SG	PL	SG	PL	SG	PL	SG	PL	SG	PL
p-Kamta	*-ɔw~	*-i	< AGR.I {BH} < AGR.IIA {SH}		*-u~	*-ɔ~	*-∅	*-ɔ~	< AGR.IIA	
KS	-i				-u		-∅			
RL	-u(ŋgu)	-i			-(g)u	-Λ	-(∅, gu)	-Λ		
MH	-u	-i			-u	-Λ	-∅	-Λ		
TH	-u	-i			-u	-o	-∅	-o	-u	-o
SH	-o	-i	-u	-i	-u	-i	-∅	-ɔ	-u	-i
RP	-o~	-i			-u	-o	-∅	-o	-u	-o
BH	-[o]ŋ	-i	-[u]ŋ	-i	-uŋ	-oŋ	-∅	-o	-uŋ	-oŋ
BN	-o~ ^c , ŋ ^v				-o~		-∅			

Table 6-17. First person agreement endings in KRNB and p-Kamta

The reconstructed first person endings, and the changes they entail, are discussed and argued for below, moving from left to right through the columns of Table 6-17.

6.4.1.1. Primary endings

KRNB primary endings for first person *singular* are divided between RL, MH and TH (which are /-u/) and SH, RP, BH and BN (which are /-o/). This divergence has been explained by phonological reconstruction of the proto-sequence *ɔw in 4.4.9. This proto-sequence goes to /u/ in the west and /o/ in the centre and east of KRNB. The non-cognate first person singular endings in Table 6-17 are KS /-i/ and the pleonastic (-gu) in RL. The KS morpheme comes from the first person plural, still in the primary system. A consistent feature of the KS system is the absence of Number as a category of agreement. It will be argued below that KS inherited the number distinction from proto-Kamta, but lost the distinction by reinterpreting the functions of inherited morphemes (see 6.4.3).

The RL agreement system has a pleonastic extension in both the primary and secondary first person singular endings. This is a morphological change, with no basis in the phonological changes affecting RL. The precise form of the added suffix differs across the tense formations, and thus it is not entirely clear whether the addition should be reconstructed as /-ŋgu/, /-uŋgu/, /-uŋg-/, /-g-/ etc. The RL lect has borrowed some of its nominal morphology and postpositions, as well as phonological and lexical features, from Hindi and/or Bihari as shown in previous chapters. It may not be coincidence that the Hindi future tense marker is /-ŋg-/. If the RL innovation is related to this Hindi form, then the innovation would be reconstructed at first for the 1.SG ending in the future tense (AGR.IIB), and from there by analogy to the other systems. However, this hypothesis cannot be satisfactorily verified at present, and the formulation of the innovation below is independent of etymology.

[MI 14.] AGR endings for 1.SG ~> ending + /-ŋgu/ {RL}. Diagnostic

The tilde here indicates that the change is variable in its application. The processes behind the slight alterations of /-ŋgu/ in the various tense formations are not transparent, but may be phonological. For the purposes here it is enough to establish that the extension is indeed an innovative addition rather than an inheritance from p-Kamta or earlier, and leave the precise phonological conditions of the change as a subject requiring further study. The change is diagnostic, but being restricted to RL the diagnostic value is of little significance for reconstructing historical relations.

The primary first person *plural* endings are remarkably stable, and the inherited form is reconstructed as *-i. The only exception to this is BN, which, similarly to KS (though geographically on opposite sides of the KRNB area) lacks number marking in its subject agreement morphology. As in the case of KS, the historical implications of the absence of number marking in BN are considered at the end of this reconstruction (section 6.4.3).

The first person plural ending *-i is not a reflex of the functionally corresponding MIA form *-āma* shown in Table 6-16. Plausibly cognate endings are also found with first person function in the primary agreement systems of SCB, Bhojpuri and Maithili. Tiwari (1960: 167) notes that Old Bhojpuri distinguished number in its

agreement morphology (Modern Bhojpuri does not), and that the primary first person endings were: $-o\tilde{}$ ‘1.SG’, $-i\tilde{}$ ‘1.PL’. He reconstructs the 1.SG ending in Old Bhojpuri $-o\tilde{}$ as a reflex of Sanskrit $-ami$ (> MIA $-aum$ from which KRNB $-ow\tilde{}$ is derived). The old Bhojpuri first person plural ending he proposes to be a reflex of OIA suffix $-yate$ > $-ia\tilde{i}$ > ie > $i\tilde{}$ (with the nasalisation a Bhojpuri innovative addition). Chatterji (1926: 864) lists this OIA suffix $-yate$ with passive function in the OIA indicative present conjugation. Whether Tiwari’s proposed etymology is left to stand or not, the distribution of $*-i$ in the first person primary endings of old Bhojpuri, as well as early Maithili (Jha 1985 [1958]: 480) shows that this morpheme was inherited as part of the primary system since at least proto-Magadhan—with reflexes in both w.Mg. (Bhojpuri), c.Mg. (Maithili) and e.Mg. (Bangla, KRNB). Therefore inheritance of both $*-ow\tilde{}$ and $*-i$ from p-Mg. into KRNB does not entail any post-Magadhan subgrouping relations for KRNB.

	AGR.I	AGR.IMP	AGR.IIA	AGR.IIB	AGR.IIC
1.SG	$*-ow\tilde{}$		$*-u\tilde{}$	$*-\emptyset < *-u\tilde{}$	$*-u\tilde{}$
1.PL	$*-i$		$*-o\tilde{}$		
2.SG	$*-i\int$	$*-\varepsilon k\omega$	$*-o$		
2.PL	$*-[o,\varepsilon]n(\ddot{t}i)$	$*-o$	$*-[o,\varepsilon]n(\ddot{t}i)$		
3	$*-\varepsilon$	$*-(o,u)k\omega$	$*[-\emptyset, -\varepsilon]$	$*-\varepsilon$	$*-o$

Reproduction of Table 6-24. Reconstructed p-Kamta system of AGR endings

Returning to the KRNB data, the first person singular endings in the AGR.IB (present-perfective) system of SH and BH are /u/ and /uŋ/ respectively. These morphemes are reflexes of the primary proto-morpheme $-o\tilde{}/ < *-ow\tilde{}$ with raising of the mid-vowel to /u/ triggered by the preceding high vowel of the perfective marker $*-i$. In RP and BH this perfective marker became null marked in the present-perfective construction by [MI 56.]. Despite this loss of the trigger for raising, the high vowel /-u/ remains in the BH present-perfective construction. In RP, the primary first person ending has been reinstated in the present-perfective construction following the deletion of the perfective marker $*-i$. As a result of this change, RP does not have two primary systems—AGR.IA and AGR.IB. This reinstatement in RP is not linguistically complex, in fact it reduces the complexity of the morphological system, and thus is not diagnostic of a PE.

[MI 15.] > /-õ/ ‘1.SG’ in the present perfective formation {RP} (after [MI 56.]).

Non-diagnostic.

The other lect with an AGR.IB (present-perfective) system is SH, which also has the higher variant /-u/. However, unlike RP and BH, SH does not have progressive raising of *o > /u/ as a phonologically general process (e.g. /d̪ek^hilo/ < *d̪ek^h-il-o ‘you saw’). The variation in the *first person* endings when preceded by the perfective *-i (see 6.3.5) is a morphologically-specific raising process.

[MI 16.] *-o ‘1.SG’ in AGR.I > /-u/ / iC_ {SH}. Diagnostic.

This morphologically-specific explanation could account for the higher vowel in BH also, but that option is dispreferred on the basis of simplicity of reconstruction. Progressive raising is phonologically regular in BH, and no further change is needed to account for the vowel height of BH /-uŋ/ ‘1.SG’ in AGR.IB. The arguments put forward above point to *distinct* historical processes of change as explanans for the higher vowel /-u/ in BH and SH AGR.IB systems.

6.4.1.2. Secondary endings

The secondary endings in KRNB are part of innovative past and future tense formations (see 6.2.5 and 6.2.6), and thus cannot be inherited in these verbal positions from earlier than the proto-Magadhan stage (when the new tense formations were innovated), and may be considerably later innovations. In the AGR.IIA (past tense) systems of Table 6-17, the first person singular and plural endings are reconstructed as reflexes of proto-Kamta forms *-ũ and *-õ, respectively. Reflexes of both these forms are found in 6 of the 8 KRNB lects—not in KS and BN—and a reflex of one of the two forms is found in KS. These two etyma are not found with these functions in AGR.IIA (past tense) systems elsewhere in Magadhan languages that I am aware of—SCB has /-am/, Oriya has /-i/, Maithili has /-hũ/ (possibly cognate but without Number marking), Bhojpuri has /-ĩ/, and SCA has /-õ/ (which seems to be an extension of the primary ending rather than cognate with these distinct p-Kamta secondary endings, cf. Kakati 1962: 353). In the AGR.IIB (future tense) system Bangla has /-o/ which Chatterji considers an extension to the AGR.IIB system of an older AGR.IIA (past tense) ending /-õ/ in Early Middle Bangla. This ending he identifies as

cognate with SCA /-o~/, which in turn he (1926: 975) and Kakati (as referenced above) derive from the primary system. This all suggests that Bangla /-o/ ‘1:AGR.IIB’ is not cognate with *-o~ of KRNB. In addition to the unlikelihood of formal cognacy, there is also the problem of functional disjunction, given that written records attest that Number was lost as a marked category of *primary endings* “from the earliest times in Bengali” (*ibid.*: 931), and the records give no indication that Number ever was a grammaticalised category in the Bengali *secondary systems*.

Given the innovative status of the secondary endings and the etymological uniqueness to KRNB of secondary endings *-u~ ‘1.SG’ and *-o~ ‘1.PL’, these innovative grammaticalised features are of considerable subgrouping value. The conditioning is complex (involving cognate phonological forms across KRNB, in stable paradigmatic relations). It is also distinctive, given that the neighbouring lects Bangla, Asamiya and Maithili do not distinguish Number in the agreement endings, nor have since “the earliest times” (*ibid.*). Furthermore, there are sociohistorical conditions which can account for the original propagation of these features in a proto-Kamta lect, consequently spread through migration across the KRNB area (cf. 7.3.1). These morphological innovations therefore diagnose a propagation event:

[MI 17.] > *-u~ ‘1.SG’, *-o~ ‘1.PL’ in AGR.IIA systems {KRNB, except BN}.

Diagnostic.

This linguistically complex innovation establishes these lects to be a subgroup, as further discussed in 7.3.1. While Number marking is absent in KS and BN, in the case of KS it is likely—for reasons discussed in 6.4.3—that this lect inherited number marking in agreement morphology, but has more recently generalised some of the inherited endings to include both singular and plural functions. The case of BN is less conclusive and is discussed in 6.4.3 as well as just below.

The BN ending in system AGR.IIA (past tense) is not a regular reflex of either of the reconstructed AGR.IIA forms *-u~ and *-o~. (Neither Prosodic Vowel Raising or Progressive Vowel raising of *o > /o/ are features of BN, therefore the anticipated reflexes of these reconstructed forms in BN are: **-u~, **-o~.¹⁰) The BN *secondary*

¹⁰ ** indicates expected but non-occurring forms.

ending /-õ/ ‘1.SG’ appears rather to be cognate with the BN *primary* ending /-õ/ ‘1.SG’ < *-ɔw̃. The same morpheme occurs in SCA, see further 6.4.3.

The other morpheme in the AGR.IIA (past tense) system which is non-cognate is /-i/ ‘1.PL’ in SH. This is cognate with the AGR.I (present tense) ending *-i (> /-i/ in SH). The occurrence of this etymon in the AGR.IIA (past tense) system is the result of an analogical extension:

[MI 18.] Analogical extension. *-i ‘1.PL’ in AGR.I > /-i/ ‘1.PL’ in AGR.IIA. {SH}.
Diagnostic.

Within KRNB this change is unique to a contiguous subsection in the central Jalpaiguri region near SH. Based on sociohistorical plausibility it is diagnostic of a propagation event.

The AGR.IIB (future tense) endings are all cognate across the KRNB lects, barring the extension of the zero morpheme in RL by /-gu/ (see [MI 60.] above), and the absence of number distinction in KS and BN (see 6.4.3). The changes in phonological form of *-ɔ are accounted for by regular phonological changes. Note that the nasalisation of *-ɔ̃ ‘1.PL’ is not lost in KRNB, but transferred to the tense marker on the immediate left: *bṼ > /mV/. This is morphologically conditioned, and not phonologically general. (Cf. the following examples: *bãʃ ‘bamboo’ > /bãʃ, bãs, baʃ/ not maʃ; *bãʃi ‘flute’ > /bãʃi, bãsi, baʃi/ not maʃi.¹¹) Changes involving the transfer of the nasal value are formulated in 6.4.1.3.

	AGR.I	AGR.IMP	AGR.IIA	AGR.IIB	AGR.IIC
1.SG	*-ɔw̃		*-ũ	*-Ø < *-ũ	*-ũ
1.PL	*-i		*-ɔ̃		
2.SG	*-iʃ	*-εkɔ	*-o		
2.PL	*-[ɔ,ε]n(t̪i)	*-ɔ	*-[ɔ,ε]n(t̪i)		
3	*-ε	*-(o,u)kɔ	*[-Ø, -ε]	*-ε	*-ɔ

Reproduction of Table 6-24. Reconstructed p-Kamta system of AGR endings

¹¹ There is an example of the exact reverse process as an irregular variation in NIA: the nasal and stop elements in Sanskrit mahiṣá ‘buffalo’ are separated into oral stop and nasal vowel bã... in several of the KRNB lects, as well as in much of NIA more generally. cf. Turner (1966-71: p573, #9964)

The first person endings in the AGR.IIC (past-definite) system are identical with those of the AGR.IIA (past-indefinite) system. The AGR.IIC system is inherited from p-Kamta, but at the p-Kamta stage it differed from the AGR.IIA system only for the third person marking (see 6.4.2).

6.4.1.3. Transferral of nasal value from AGR ending to Tense marker

The change by which the nasalisation of a vowel is transferred onto the future tense marker is summarised as follows:

[MI 19.] *-ib ‘FUT’ + *-Ṽ > /-im-V/

The NIA lects with instances of such nasalisation are:

- all 8 of the sampled KRNB lects;
- all Asamiya varieties including SCA (Purkait 1989);
- Central, western and northern [Old] Purnia (perhaps only sporadically), loosely categorised by Grierson as transitional between Northern Maithili and Bangla (Grierson 1980 [1887]: 26, 34, 36, 41);
- Varieties around Rajshahi of Bangladesh (S. Islam 1992, Khondakar 1998);
- Kharia Thar (but not Mal Paharia), spoken in the Rajmahal hills on the border of West Bengal and Jharkhand (Dasgupta 1978);
- South Dinajpur Bangla varieties (Purkait 1989);
- Varieties of North-West Midnapore (Purkait 1989);
- Some eastern Bangla varieties, namely around the Bakhar area of ‘central’ East Bengali, and in ‘central-north’ East Bengali (Haldar 1986);
- the local variety of Ramnagar police station (Purkait 1989), south from Midnapore;
- Early Oriya found in the 15th and 16th century inscriptions (Chatterji 1926: 531-2);
- Modern Oriya (Chatterji 1926: 532), according to Dash (1982: 82) this is a “social dialect of Cuttack”;

- Magahi (Chatterji 1926: 532);
- unspecified Middle Bangla dialects (Chatterji 1926: 967).

These lects are spoken over quite a vast area, shown approximately by the shaded area in Figure 6-1. Note that there are other Indo-Aryan lects within the shaded area which do not share this feature.

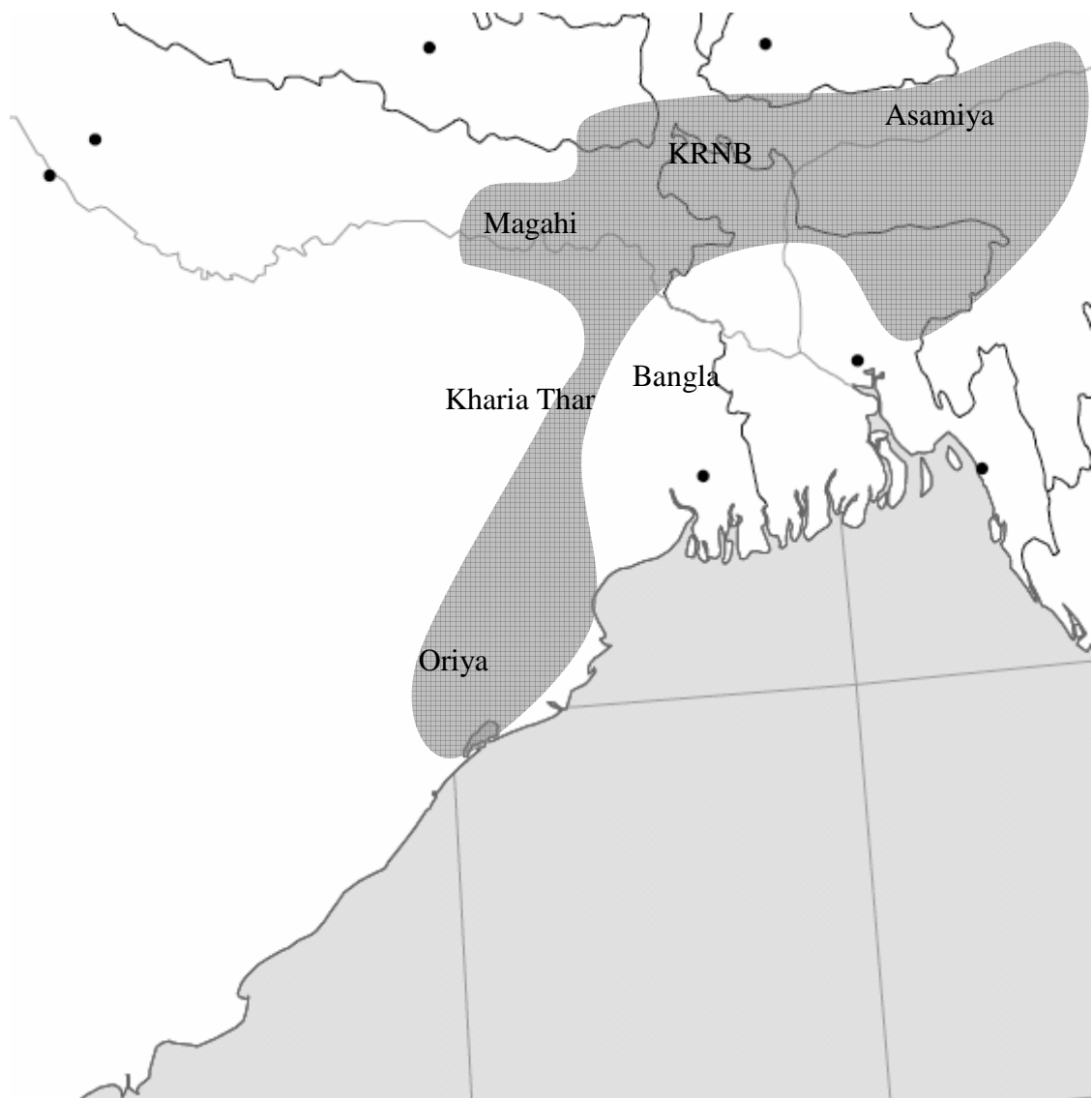


Figure 6-1. Approximate range of a nasalised future tense marker /m/

The diagnostics for propagation events are: linguistic complexity, ecological distinctiveness, and sociohistorical plausibility of propagation. The transferral of the nasal value is not linguistically complex, and furthermore is areally consistent with the eastern Magadhan tendency towards lenition of medial labial stops (cf. 4.3.5). The range is also not conducive to a sociohistorical explanation involving interconnected

propagation. Therefore this change is not diagnostic of a propagation event (cf. 3.4.1). In support of this non-diagnostic judgement, it is not entirely clear from Chatterji's examples for Magahi and Oriya whether a nasalised vowel is indeed always part of the conditioning environment for nasalisation of the *-b* future in those two lects. This does not take away from, but rather strengthens the point that the nasalisation of **-b > -m* could have been replicated multiple times, with separate propagations. Variable nasalisation of the future tense marker **-ib* may in fact have been inherited from the common Magadhan stage with independent regularisation in separate areas.

[MI 20.] **-ib* 'FUT' > /-im/ 'FUT' {several Magadhan lects, see Figure 6-1} Non-diagnostic.

Related to this nasalisation of **-ib* 'Future', is the fusion of secondary ending **-ũ* '1.SG' with the future tense marker to give **-im*:

[MI 21.] **-ib* 'FUT' + **-ũ* '1.SG' (> **-iβ̃u*, **-iw̃u* > **-iw̃*) > **-im* 'FUT:1.SG' {KRNB, south Dinajpur, Asamiya} Diagnostic.

The fusion of tense and agreement markings plausibly went through intermediate stages: **-ibũ* > **-iβ̃u*, **-iw̃u* > **-iw̃* > [-im]. This reconstructed change process is linguistically plausible, involving coalescence of a labial vowel with a preceding labial (and lenited) stop. The conditioning of the change is morphologically complex as it is restricted to first person singular—more complex than was the case for [MI 65.] above. Based on the data in Purkait (1989), the fusional change [MI 67.] is also considerably more limited in range than [MI 65.], and found only in the KRNB varieties, the neighbouring South Dinajpur varieties, and the Asamiya lects. The fusional change is not found in Rajshahi varieties according to S. Islam (1992: 143), nor in south-west Bangla varieties according to Purkait (1989). In both these cases the reported corresponding forms are *-mu* or *-mi*. In contrast to the general nasalisation change [MI 65.], the fusion of future tense and first person singular marking in [MI 67.] is more linguistically complex and found only in geographically contiguous lects. Such total fusion of tense and agreement marking is not found elsewhere in Magadhan lects that I have found. For these reasons the change [MI 67.] is diagnostic of a propagation event, while [MI 65.] is not.

A nasalisation change also occurs in the past tense morphology in a way highly similar to the nasalisation of the future tense marker by [MI 65.] (though without the fusion of tense and agreement marking). The nasal value is transferred from the old AGR ending onto the preceding past tense marker *-il > /-in/. The range of this change is not as widespread in KRNB as the *-ib > /-im/ change.

[MI 22.] *-il ‘PST’ + *-Ṽ > /-in-V/ {KS, RL, MH, TH, SH, Rajshahi, south Dinajpur, Midnapore, early Maithili, Marathi}. Non-diagnostic.

This innovative feature is also found in Rajshahi varieties (S. Islam 1992, Khondakar 1998), Kharia Thar (Dasgupta 1978), south Dinajpur, and north west Midnapore (South-west Bangla, Purkait 1989), optionally in early and modern Maithili (Jha 1985 [1958]: 467), and Marathi (Masica 1991: 312). The same issues of non-contiguity and non-complexity apply as in the case of [MI 65.]. Furthermore, there is the added possibility that, given the prior nasalisation of the future tense marker, this nasalisation could have been analogically extended to the past tense marking. The multiple linguistic motivations for nasalisation of *-il make it difficult to consider it diagnostic of an interconnected propagation event. Thus the range of [MI 68.] is labelled as non-diagnostic.

6.4.1.4. Summary of reconstructed first person agreement endings

The first person endings and their positions in the morphological systems of agreement are reconstructed for proto-Kamta as follows:

Category	AGR.IMP	AGR.I	AGR.IIA	AGR.IIB	AGR.IIC
1.SG	* $\text{-}\mathfrak{w}\tilde{\text{}}$		* $\text{-}\mathfrak{u}\tilde{\text{}}$	* $\text{-}\emptyset < *\text{-}\mathfrak{u}\tilde{\text{}}$	* $\text{-}\mathfrak{u}\tilde{\text{}}$
1.PL	* $\text{-}\mathfrak{i}$		* $\text{-}\mathfrak{v}\tilde{\text{}}$		

Table 6-18. Reconstructed first person agreement endings for p-Kamta

As indicated in Table 6-18 (and implied in [MI 67.]), the AGR.IIB (future) ending * $\text{-}\emptyset$ is a morphologically conditioned reflex of the same etymon which gives the AGR.IIA (and AGR.IIC) ending * $\text{-}\mathfrak{u}\tilde{\text{}}$ ‘1.SG’ (see [MI 67.]).

6.4.2. Second and third person agreement suffixes

In this section, second and third person endings are considered side by side. The argument below is that the variation within the data of Table 6-19 is best explained by intertwined etymologies among these categories.

	2nd person						3rd person									
	AGR.IMP		AGR.I		AGR.II		AGR.IMP	AGR.I	AGR.IIA	AGR.IIB	AGR.IIC					
	SG	PL	SG	PL	SG	PL										
P-Kamta	*-ɔ	*-εkɔ	*-[εn, ɔn] ¹²	*-iʃ	*-[εn, ɔn] ¹²	*-o	*-[εn, ɔn] ¹²	*-(o,u)kɔ	*-ε	*-∅ *-ε	*-ε	*-ɔ				
KS	-Λ		-is		-o			-ε	-ε	-ε						
RL	-εk		-Λ	-i		-Λn	-o		-Λn	-ok	-ε	-ε	-ε			
MH	-Λ	-εk		-[Λ]n	-is, -i		-Λn	-o		-Λn	-ok	-ε	-∅, -ε	-ε		
TH	-εk		-[ε]n		-i	-εn		-o	-εn		-ok	-ε	-∅, -ε	-ε	o	
SH		-iʃ	-[ε]n		-iʃ	-εn		-iʃ ¹³	-o ¹⁴	-εn		-uk	-ε	-εk	-ε	o
RP	-o,	-εk	-[ε]n		-iʃ	-εn		-u	-εn		-uk	-ε	-∅	-ε		o
BH		-∅, -εk		-o	-iʃ	-εn		-u	-εn		-uk	-ε	-εk	-ε		o
BN			-[εn]		-is ^{TR} , -a ^{INTR}		-i ¹⁵ , -a ¹⁶			-ok	-ε	-∅		-ɔ		

Table 6-19. Comparative reconstruction of KRNB second and third person agreement endings

¹² At the time of the proto-Kamta stage this form may have been *-[ɔ,ε]nti, depending on the chronology of [MI 71.]. See the discussion below.

¹³ Subsystem AGR.IIC.

¹⁴ Subsystem AGR.IIB.

¹⁵ Second person, low honour, cf. section 6.3.8.

¹⁶ Second person, high honour, cf. section 6.3.8.

6.4.2.1. Primary endings

Reconstruction begins with the primary endings, which (as argued in the introduction to section 6.4) are retentions (unlike the secondary endings). The morpheme *-iḥ ‘2.SG’ is a reflex of OIA *-asi* involving post-MIA metathesis of the /s/ and /i/ elements. The MIA form *-asi* is not the phonologically regular reflex of OIA *-asi*, which according to Bubenik would be ***-ahi*. He terms the MIA form a “Prākritism” (2003: 228, with Tagare 1948: 288). Reflexes of the Prakritic (or semi-Tatsama) form *-asi* are found in Chattisgarhi and Marathi /-əs/, and Nepali /-es/. Chatterji also lists *-is* and *-asa* for Bhojpuri (1926: 936), Tiwari has *-asi* and *-asa* (1960: 168-9). As an inherited morpheme, its *position* in the primary system of agreement is a retention, but there has been an innovative metathesis. According to Chatterji (just above), this innovation is common with Bhojpuri and thus seems to have been a variable inheritance from proto-Magadhan. A reconstruction of the historical propagation of this metathesis requires broader Magadhan reconstruction than is within the scope of this study.

The morpheme *-ε occurs in the primary system for third person. This is the regular reflex of Sanskrit present active *-ati* ‘3.SG’ (> *-ai* > *ε). Cognates are found in Asamiya and Bangla /-e/, and in Maithili *-ae*, as well as in many more NIA lects. (The monophthongisation absent from Maithili is, nonetheless, widely distributed in NIA.) These are inherited morphemes in inherited morphological positions, and therefore not diagnostic of propagation events.

The last primary endings in Table 6-19 which are reconstructed for proto-Kamta are *-εn(ṭi) and *-ɔn(ṭi), both as ‘2.PL’. Of these, *-ɔn(ṭi) seems to be an etymological continuation of Sanskrit *-anti* ‘3.PL’, though note the change in function:

[MI 23.] *-anti* ‘3.PL’ > ... > *-[ɔ,ε]n(ṭi)¹⁷ ‘2.PL’ {KRNB}. Supportive, not diagnostic

The use of /-n/ for plural marking in *third person* agreement occurs across a large portion of NIA, but it is much less common in second person plural agreement (cf.

¹⁷ The *-εn(ṭi) variant is included in this change because of the cognacy of the *n element (see discussion that follows), and because [MI 69.] is the formulation of a change in function from third person plural to second person plural. It is this functional change which is common and distinctive to KRNB.

Masica 1991: 263-4). The only occurrences of second person agreement involving /-n/ in Masica's data are the 2/3.PL ending in Chattisgarhi, and the 3.PL ending in Bangla—with a note that the same morpheme is extended to High second person. The use of /-n/ in KRNB is principally to mark *second person plural*, and it is not used in *third person marking*. The change in function of this inherited morpheme by [MI 69.] from third to second person plural thus seems to be distinctive of KRNB within the NIA lects. However, this shift in function of third person plural, through second person high honour, to second person plural, is not linguistically complex. Therefore [MI 69.] is listed as supportive, but not itself diagnostic of a proto-Kamta propagation event.

The situation regarding second person plural marking is further complicated because while the function for the /-n/ element is uniform across KRNB, *the vowel that precedes it is not*. In TH, SH, RP and BH, the second person singular ending is /-ɛn/, but in RL and MH it is /-ʌn/. Note that the ending in {TH, SH, RP, BH} is formally similar to, though functionally distinct from, the Bangla 2/3 honorific ending /-ɛn/. It is not out of the question that the Bangla ending has played a role in these four lects acquiring *-ɛn for second person plural. The influence of Bangla in this regard is sociohistorically plausible given that it is these same lects which reflect the influence of Bangla in other changes (cf. 7.5.3.2). However, in the case of /-ɛn/ there is an alternative explanation for its presence in the four KRNB lects, as well as Bangla, which is based on inheritance of variation, as follows.

Recall that the morphemes *-ɛn and *-ɔn are not reflexes of inherited second person endings, but have instead shifted in function from an earlier third person agreement ending *-anti*. The Apabhramsa third person singular ending is *-ai* > *-ɛ. A highly plausible etymological explanation for *-ɛn, therefore, is mixing of the Apabhramsa third person endings: *-ai* '3.SG' and *-anti* '3.PL' > *-ainti* '3.PL' > *-ɛn '3.PL'. Variability between *-anti* and *-ēnti* is in fact attested in 14th century Bangla writings (Chatterji 1926: 933). Therefore we can conclude that (a) mixing of inherited primary 3.SG and 3.PL endings is old, and (b) this mixed reflex occurred in variation with the standard reflex of OIA *-anti*, probably for quite some time. In summary: the evidence from early middle Bangla documents supports a reconstruction of the proto-Kamta

second person plural endings as *-[ɛn,ɔn]. The variation was part of the proto-Kamta inheritance, and can be reconstructed as inherited from yet earlier proto-stages based on the cognates in early Middle Bangla /-anti,-ēnti/. Note also the Chattisgarhi endings /-an,-en/ given by Masica (1991: 264). The inheritance of variation, with subsequent regularisation, is not diagnostic of a propagation event (cf. 3.4.1.4) because of the possibility of separate, non-integrated regularisation. However, this change may support the grouping of Bangla, Asamiya and KRNB.

[MI 24.] -ai ‘3.SG’ and -anti ‘3.PL’ > -ainti ‘3.PL’ > *ɛn ‘3.PL’ {variably during a pre-proto-Kamta and pre-proto-Bangla (and plausibly pre-proto-Asamiya) stage} Supportive, not diagnostic.

The inclusion of pre-proto-Asamiya in this change is discussed at the end of this section.

Regarding the change in *form* of this morpheme from early NIA -anti, -ēnti > KRNB *-[ɔn, ɛn], Chatterji remarks on the chronology of this change from Bangla records:

The plural affix for the verb, «-anti», is found as «-anta, -enta» in the 15th century, and finally, by the 17th, it yields to the form «-en» (1926: 133).

[MI 25.] -nti ‘PL’ in agreement endings > /-n/ ‘PL’ {many NIA lects}. (chronology uncertain). Diagnostic value uncertain.

The diagnostic value of this change is uncertain given that reduction of -nt > -n in agreement endings is common across New Indo-Aryan, cf. Masica:

The retention of 3pl. (6) -anti in Oriya and of its /-n-/ element in several other languages (Punjabi, “Lahnda”, Sindhi, Kumauni, Nepali, Bengali, Kashmiri) is worth noting; in Marathi-Konkani-Sinhalese it was the -t- element that was retained (1991: 266).

It is possible that the nasal+stop cluster was still part of the plural ending during the proto-Kamta stage. That hypothesis requires that the reconstructed forms be represented as *-[ɔ,ɛ]n(t̪i). No conclusion has been reached on the chronology of [MI 71.], and thus no conclusion can be given on the precise form of the ending during the proto-Kamta stage. Accordingly, the curved brackets enclose material whose presence in p-Kamta is ambiguous.

Finally, some comment must be made regarding the Asamiya form /-a/ ‘2.H’ also found in the BN system. The etymology of this morpheme is open to some doubt, given that Kakati must depart verbal morphology and turn to nominal morphology to find a possible etymological ancestor (Kakati 1962: 351). Nonetheless, this morpheme is present in Asamiya linguistic history at least since early Asamiya.¹⁸ The BN form /-a/ is diagnostic of contact relations with Asamiya, but the chronology of these contact relations—whether a recent or old borrowing—is once again ambiguous, as was seen for the genitive case in 5.3.5.

[MI 26.] > /-a/ ‘2.H’ {BN}. (Chronology uncertain). Diagnostic of contact relations with Asamiya.

It is possible, (and perhaps likely, given the genetic relations between Bangla, Asamiya and KRNB) that Asamiya also inherited the ‘3PL’ ending *-ɔŋti from a pre-proto-Asamiya stage, and that this inherited plural marker was lost during the proto-Asamiya stage at the same time as this /-a/ ‘2.High’ ending was introduced. This possibility is relevant to the range of [MI 70.].

6.4.2.2. Imperative endings

Among the imperative endings given for KRNB in Table 6-19, there are two innovative features that are diagnostic of propagation events. Firstly, there is the third person ending reconstructed for p-Kamta with variation as *-(o,u)kɔ. Functionally equivalent forms in other modern Magadhan lects are given in Table 6-20 alongside forms attested in the earlier literatures:

	Bangla	Asamiya	Oriya	Maithili	Bhojpuri
Source	Chatterji 1926	Kakati 1962	Ray 2003, Misra 1975	R. Yadav 2003 Jha 1985 [1958]	Tiwari 1960, Verma 2003
modern form	-uk, un	-ɔk	-u, -ɔŋtu	-ɔ̃, -o, əuɪ ^h	-Ø, -as, -an, -i(n)
earlier form	-u, <i>āu(k)</i>	-o, -oka	-ahu	-aü, -a <u>tu</u> , -ao, - <u>tu</u> , -a, etc.	

Table 6-20. Third person imperative endings in Magadhan lects

¹⁸ The presence of /-a/ ‘2nd person’ in Maharaja Nara Narayana’s letter of 1555 AD (cf. 7.3.1.3.) suggests this morpheme may be a p-Kamrupa inheritance which was subsequently lost during p-Kamta or post-p-Kamta.

The /-k/ element of this third person imperative suffix is pleonastic, innovative, and unique to KRNB, Bangla and Asamiya out of the Mg. lects:

[MI 27.] third person imperative ending suffixed by + *-kɔ > *-Vkɔ ‘3: IMP’
 {Bangla, Asamiya, KRNB}. Diagnostic.

The precise qualities of the vowel to be reconstructed are obscure, with /-u-/ found in SCB and some KRNB lects, /-ɒ-/ in SCA, /-ɔ-/ in BN, and /-o-/ elsewhere in KRNB. This variation is probably not the reflex of a unique third person imperative ending. Nevertheless the addition of the pleonatic *-kɔ is firmly attested for all these lects. Note that the suffix is reconstructed with a final *-ɔ, which accords with the written records, and whose loss is expected by general NIA phonological changes to final vowels (cf. 4.4.11). The innovation [MI 73.] introduces a new segment to the inherited morpheme, which entails a certain linguistic complexity of conditioning and is diagnostic of a propagation event involving Bangla, Asamiya and KRNB.

The imperative ending *-εkɔ ‘2.SG’ is innovative and unique to KRNB along with Hajong (according to Chatterji 1926: 990). It is not reported elsewhere in e.Mg. varieties that I have been able to find, including not in the neighbouring Rajshahi lect according to S. Islam (1992). The equivalent morphemes in other Magadhan lects are as follows:

	Bangla	Asamiya	Oriya	Maithili	Bhojpuri
Modern	-Ø, -o, -un (hon)	-Ø, -a (hon)	-Ø, -ɔ	-əh, -ə, -u, -o, -Ø	-e, -ə, -u
Earlier	-a, -aha, -ā (hon)	-a, -sa, -ā, āhā (hon)	-a, -aha	-aha, -eha, -a, -hu, -ai, etc.	

Table 6-21. Second person singular imperative endings in Magadhan lects

Based on the ecological distinctiveness of this use of the pleonastic /-k/ < *-kɔ in second person imperatives, as well as linguistic complexity, the following innovation is diagnostic of a propagation event.

[MI 28.] In AGR.IMP, *-ε ‘2.SG’ + *-kɔ > *-εkɔ ‘2.SG’ {KRNB, some Hajong lects}.
 Diagnostic.

The other second person imperative ending is *-ɔ ‘2.PL’, which seems to be etymologically related to an ending in the secondary system *-o ‘2.SG’. The argument for this etymology is somewhat complicated, and revolves around similarities between KRNB and Oriya. The imperative ending *-ɔ ‘2.PL’ is cognate with Bangla imperative /-o/ ‘2.NT’ (with Prosodic Vowel Raising in Bangla, cf. 4.4.4), Oriya /-ɔ/ ‘2.PL’ (cf. Misra 1975: 151-2), Maithili and Bhojpuri /-ə/ ‘2.NT’. Chatterji derives these forms from OIA Indicative *-atha* through Apabhramsa *-aha* (which varies in MIA with the *-ahu* form given in Table 6-16, cf. Chatterji 1926: 905-6). KRNB *-ɔ ‘2.SG’ (along with its Mg. cognates) has entered the imperative system by extension from the primary system. The presence of this analogical extension (primary > imperative) across Mg languages and throughout their recorded histories proves this extension to be a Magadhan or pre-Magadhan change and thus not relevant to post-Magadhan subgrouping.

The etymological complexity emerges because the same etymon from the OIA primary system, *-atha*, (proposed above to give Oriya imperative /-ɔ/ ‘2.PL’) is also proposed as the source of Oriya /-u/ ‘2.SG’ in the secondary system. This problem is partially resolved in section 6.4.2.3.

Finally for the imperative endings, the use of *-(ɛ,ɔ)n in imperative function seems to be an innovative extension of the primary endings to the imperative system.

[MI 29.] *-(ɛ,ɔ)n ‘2PL’ in AGR.I > *-(ɛ,ɔ)n ‘2PL’ in AGR.IMP. {KRNB, ...}. Non-diagnostic.

This analogical extension is linguistically natural and non-complex, and not diagnostic of a propagation event.

6.4.2.3. Secondary endings

The secondary system of third person endings includes relics of an erstwhile Transitivity distinction:

differentiation between transitive and intransitive verbs, 3 person only ... can be called a common Magadhan trait, having its germ in the Māgadhi Apabhramśa (Chatterji 1926: 93).

The transitivity distinction in agreement marking is generally not retained in KRNB. However, there is a relic of this old distinction in the differentiation of third person marking between the AGR.IIA (simple past) system and the AGR.IIC (past definite) system. The latter is based on an old compound formation with auxiliary verb *atʃ^h- ‘be present’ and takes the erstwhile intransitive third person suffix *-ɔ.

Moving on to the plural ending, the analogical extension of the reflexes of Apabhramsa *-anti* from the primary endings to the secondary systems is not unique to KRNB, but also occurs in Oriya /-ɔnti/, Maithili and Magahi /-nh-/, Bhojpuri /-ən/ and Bangla /-en/.

[MI 30.] *-anti* ‘3PL’ in AGR.I > ‘3PL’ in AGR.IIA and AGR.IIB {KRNB, Bangla, Oriya, Maithili, Magahi, Bhojpuri, ...}. (Before change in function by [MI 69.]). Non-diagnostic.

It is not clear what change events should be reconstructed to make sense of this distribution which is scattered across Magadhan lects. Chatterji holds that during the early stage of “the neo-Magadhan speeches”, secondary affixation “was not indispensable” (*ibid.* 971), that is, it was variable. The most plausible explanation seems to be that the extension of *-anti* ‘3.PL’ to the secondary systems had begun as a variable change early in the post-Magadhan period. This variation was inherited into the Magadhan languages during the period when secondary systems were variable and “not indispensable”, and then independently regularised.

	AGR.I	AGR.IMP	AGR.IIA	AGR.IIB	AGR.IIC
1.SG	*-ɔw̃			*-Ø < *-ũ	*-ũ
1.PL	*-i			*-ɔ̃	
2.SG	*-iʃ	*-εkɔ		*-o	
2.PL	*-[ɔ,ε]n(t̪i)	*-ɔ		*-[ɔ,ε]n(t̪i)	
3	*-ε	*-(o,u)kɔ	*[-Ø, -ε]	*-ε	*-ɔ

Reproduction of Table 6-24. Reconstructed p-Kamta system of AGR endings

The last secondary etymon to be examined is *-o ‘2.SG’. The etymology of this morpheme is somewhat more difficult as foreshadowed above in 6.4.2.2. Asamiya and Bangla have non-cognate forms for this secondary category: SCA /-i/, SCB /-iʃ/ and /-i/. Oriya has /-u/ across primary and secondary systems, with etymology reconstructed by Misra as follows:

2nd -u e.g. *khāu* < OIA *khādathaḥ* (OIA dual > plural in MIA which was transferred to singular in Oriya) > *khāaho* > *khāho* > *khāhu* > *khāu* (Misra 1975: 135)

The presence of /-u/ in Oriya secondary systems is then by analogical extension from the primary system (*ibid.*: 140, 143).

Comparing Misra's etymological hypotheses for the secondary Oriya ending /-u/ '2.SG' and the Oriya imperative ending /-o/ '2.PL', she has reconstructed a common etymology as reflexes of OIA *-atha* > *-aha* for these two distinct morphemes, see Table 6-22.

Prakrit	<i>aha</i> '2.PL'	<i>aha</i> '2.PL'
	the etymological source of the <i>imperative</i> ending by:	the etymological source of the <i>primary</i> and <i>secondary</i> endings by:
	regular phonological reflex <i>aha</i> > <i>a</i> > <i>o</i>	MIA morphological change <i>aha</i> > <i>ahu</i> '2PL'
<i>gives:</i>		
Oriya	/-o/ '2.PL:IMP'	/-u/ '2.SG:AGR.II'
<i>cognate with:</i>		
p-Kamta	*-o '2.SG:IMP'	*-o '2.SG:AGR.II'

Table 6-22. Etymology of second person singular endings in Oriya and KRNB

The imperative ending in Oriya (middle column in Table 6-22) is, according to Misra, the regular reflex of the Prakrit form. The secondary ending /-u/ (extended from the primary ending) is apparently the reflex of a morphologically conditioned change *aha* > *-ahu* that occurred during MIA (see Bubenik 2003: 227-8). This morphological change results in the Apabhraṃśa form *-ahu* '2PL' (see Table 6-16). It is plausible that the KRNB forms have the same etymologies as the Oriya forms, given that in KRNB there is also a difference in height between the second person singular imperative and secondary endings. The historical veracity and chronology of this hypothesis, which involves different reflexes of OIA *-atha* regularised in different morphological positions during MIA, should be tested against the MIA records. Such testing is left for further research.

What remains very much part of this study is to consider the implications of this hypothesis for KRNB-Oriya historical relations. In the primary endings, OIA

-atha > *-ahu* > Oriya /-u/ and proto-Kamta *-o. This occurrence in the primary endings would not be diagnostic of a change event, because these morphemes are hypothesised to be retentions in this position. However, given that the secondary systems are late and post-Magadhan innovations, the analogical extension of the primary ending to the secondary systems is a change event whose diagnostic value must be considered. The innovation also involves a change in the function of the inherited MIA ending.

[MI 31.] *-ahu* ‘2.PL’ in AGR.I {late MIA} analogically extended to the secondary system to give *-o ‘2.SG’ {proto-Kamta} and /-u/ ‘2.SG’ {Oriya} Non-diagnostic.

The threefold test for diagnosing propagation events is linguistic complexity, ecological distinctiveness, and geographical contiguity or other sociohistorical explanation for range of propagation. The most significant factor in this case is the geographical non-contiguity of Oriya and KRNB. There are no clear sociohistorical events which suggest significant interaction between these two historical kingdoms, geographically separated by modern Bengal and the earlier kingdom of Gaur. The innovation [MI 77.] would seem therefore either to be a case of independent innovation and propagation on the part of Oriya and KRNB, or alternatively, a proto-e.Mg. innovation retained in Oriya and KRNB, but lost in Asamiya and Bangla. However, retention from proto-eastern Magadhan is fairly implausible given the late origin of these secondary systems (cf. 6.4 above). In summary, the proto-Kamta morpheme *-o ‘2.SG’ in the secondary system is plausibly cognate with Oriya /-u/ ‘2.SG’ but the extension to the secondary system does not appear to be diagnostic of a common propagation event in the linguistic histories of Oriya and KRNB.

Note that this reconstruction of the development of KRNB *-o differs slightly from Chatterji’s hypothesis of a direct connection between “North Central” /-u/ and Oriya /-u/ (cf. e.g. 1926: 980). While supporting his hypothesis that the forms are cognate, this reconstruction argues that in the case of KRNB lects with /-u/ ‘2.SG’ (e.g. RP and BH), this form is diachronically more closely related to other KRNB lects which have /-o/ (e.g. MH and RL). Therefore the proto-Kamta morpheme is reconstructed as

*-o ‘2.SG’. The final form /-u/ in central KRNB is the result of progressive vowel raising (cf. 4.4.2).

6.4.2.4. Summary of reconstructed 2 and 3 endings

The second and third person agreement endings are reconstructed for proto-Kamta as shown in Table 6-23:

	AGR.I	AGR.IMP	AGR.IIA	AGR.IIB	AGR.IIC
2.SG	*-iʃ	*-εkɔ	*-o		
2.PL	*-[ɔ,ε]n(t̪i)	*-ɔ	*-[ɔ,ε]n(t̪i)		
3	*-ε	*-(o,u)kɔ	*[-Ø, -ε]	*-ε	*-ɔ

Table 6-23. Reconstructed second and third person agreement endings

6.4.3. Reconstructed p-Kamta agreement systems

Sections 6.4.1 - 6.4.2 present the argument that the agreement systems of the KRNB lects (with the possible exception of BN) are reflexes of a single historical agreement system (termed ‘proto-Kamta’ and dated in section 7.3.1). The proto-Kamta agreement system is summarised in Table 6-24.

	AGR.I	AGR.IMP	AGR.IIA	AGR.IIB	AGR.IIC
1.SG	*-ɔw̃		*-ũ	*-Ø < *-ũ	*-ũ
1.PL	*-i		*-ɔ̃		
2.SG	*-iʃ	*-εkɔ	*-o		
2.PL	*-[ɔ,ε]n(t̪i)	*-ɔ	*-[ɔ,ε]n(t̪i)		
3	*-ε	*-(o,u)kɔ	*[-Ø, -ε]	*-ε	*-ɔ

Table 6-24. Reconstructed p-Kamta system of AGR endings

This reconstructed p-Kamta system is now compared with the contemporary systems of KS and BN which are most divergent from it, and whose status as direct descendents is consequently in doubt.

KS lacks Number marking, and is thus a simpler system than the p-Kamta system. However, all of the affixes in the KS system (Table 6-8) are retentions from the reconstructed p-Kamta system. The forms retained in KS are a mix of p-Kamta singular and plural forms, and not just the singular forms, or just the plural forms. Most notably for subgrouping purposes, the KS system includes: (1) the fused future tense marker /-im/ ‘1.SG’ which proves its inclusion in the KRNB-Asamiya subgroup

established by [MI 67.]; and also (2) the secondary ending /-o/ ‘2.SG’ which is consistent with the independent KRNB and Oriya innovations formulated by [MI 77.]. Therefore, the KS agreement system is perspicuously reconstructed as a direct descendant of the p-Kamta agreement system. The following changes account for the divergence of KS:

[MI 32.] Loss of Number. AGR.I/AGR.IMP. *-i ‘1.PL’ > /-i/ ‘1’ .

[MI 33.] Loss of Number. AGR.IMP. *-ɔ ‘2.PL’ > /-ʌ/ ‘2’ .

[MI 34.] Loss of Number. AGR.I. *-iʃ ‘2.SG’ > /-is/ ‘2’ .

[MI 35.] Loss of Number. AGR.IIA. *-ũ ‘1.SG’ > /-u/ ‘1’ .

[MI 36.] Loss of Number. AGR.IIA/IIB. *-o ‘2.SG’ > /-o/ ‘2’ .

[MI 37.] Loss of Number. AGR.IIB. *-∅ ‘1.SG’ > /-∅/ ‘1’ .

This loss of number marking may be partially linked to language contact with the Bihari lects, as they lack number marking in first person agreement endings. However, this does not explain the change in second person marking.

BN is also considerably divergent from the proto-Kamta agreement system. In the case of BN though, the system contains affixes not present elsewhere in KRNB and thus not reconstructed as part of the proto-Kamta inheritance:

- /-a/ ‘2.H’ in primary and secondary systems, compared with proto-Kamta *-(ε,ɔ)n ‘2PL’;¹⁹
- /-i/ ‘2.L’ in secondary systems, compared with proto-Kamta *-o ‘2.SG’;
- /-ɔk/ ‘3’ in the imperative, which is identical with SCA, but slightly different to other KRNB lects which have /-ok/ or /-uk/.

The BN agreement system is, with the exception of the primary morpheme /-is/ ‘2.LOW’, identical to the SCA system. The presence of SCA endings in the secondary system cannot be proto-Mg. retention (given the innovative status of these formations). This leads to a confused phylogeny: BN shares some diagnostic proto-Kamta morphological changes (cf. [MI 31.]), but its verbal morphology is basically

¹⁹ But cf. section 7.3.1.3.

the same as for SCA. Phonological changes also showed a diagnostic phylogenetic relation between BN (the ‘Koch Rajbanshi’ lect of Bongaigaon) and other Asamiya lects. These results indicate a mixed linguistic history for BN, involving relations both with the proto-Kamta stage as well as various Asamiya stages. The special case of BN within the 8 sample KRNB lects will be returned to in the next chapter, in the context of reconstructing the sociohistorical conditioning of propagation events in linguistic history.

The innovations that have been reconstructed in this chapter as diagnosing PEs, or supporting the diagnosis of PEs, are as follows:

[MI 47.] *-i ‘PFV’ in simple verbs > /-i/ ‘PFV’ in both simple and compound verb constructions {BH, RP, SH}. (before [MI 56.]). Diagnostic

[MI 50.]*-iba ‘INF’ replaced with /-na/ ‘INF’ . Diagnostic of contact relations through diglossia with Hindi.

[MI 51.]*-iba ‘INF’ + *_r ‘GEN’ > *-ibar ‘INF’ {SH, RP, BH}. Diagnostic.

[MI 52.]*-ibar ‘INF’ > /-ir/ / C_ {BH}. Diagnostic.

[MI 53.]*-tʰ ‘PRS’ (> *-s) > /-ʃ/ in present and past perfective formations. {SH}. Diagnostic.

[MI 54.]*VERB-i-tʰ-AGR.I ‘present perfective’ replaced by VERB-e-tʰ-AGR.I{TH}. Diagnostic of contact relations with SCB.

[MI 55.]*VERB-ε-tʰ-AGR.I ‘present continuous’ replaced by VERB-tʰ-AGR.I {TH}. Diagnostic of contact relations with SCB.

[MI 56.]*VERB-i-s-AGR.I ‘present perfect’ > VERB^H-s-AGR.I {RP} and VERB^H-s-AGR.IA {BH}.(After [MI 47.] and [PI 33.]). Diagnostic.

[MI 57.]VERB-INF + present-perfective of *lag- ‘attach’ > ‘present continuous’ {RP, BH, BN}. Diagnostic.

[MI 58.]> VERB-tʰi[1,n]-AGR.IIC ‘present-continuous’ {TH}. Diagnostic of contact relations with SCB.

[MI 59.]> VERB-PFV *atʰ-il-AGR.IIA ‘past-continuous’ {BN, BH}. Diagnostic value ambiguous between contact relations with Asamiya or a PE within BH and BN.

[MI 60.]AGR endings for 1.SG ~> ending + /-ŋgu/ {RL}. Diagnostic

[MI 61.]> /-o~/ ‘1.SG’ in the present perfective formation {RP} (after [MI 56.]). Non-diagnostic.

[MI 62.]*-o ‘1.SG’ in AGR.I > /-u/ / iC_ {SH}. Diagnostic.

[MI 63.] > *-ũ ‘1.SG’, *-ɔ̃ ‘1.PL’ in agr.ia systems {KRNB, except BN}.

Diagnostic.

[MI 64.] Analogical extension. *-i ‘1.PL’ in AGR.IA > /-i/ ‘1.PL’ in AGR.IIA.

{SH}. Diagnostic.

[MI 67.] *-ib ‘FUT’ + *-ũ ‘1.SG (> *-iβ̃u, *-iw̃u > *-iw̃) > *-im {KRNB, south Dinajpur, Asamiya} Diagnostic.

[MI 69.] *-anti* ‘3.PL’ > ... > *-[ɔ,ε]n(t̪i) ‘2.PL’ {KRNB}. Supportive, not diagnostic

[MI 70.] *-ai* ‘3.SG’ and *-anti* ‘3.PL’ > *ainti* ‘3.PL’ > *εn ‘3.PL’ {variably in a pre-
proto-Kamta and pre-*proto-Bangla* (and plausibly pre-*proto-Asamiya*) stage}

Supportive, not diagnostic.

[MI 72.] > /-a/ ‘2.High’ {BN}. (Chronology uncertain). Diagnostic of contact relations with Asamiya.

[MI 73.] third person imperative ending suffixed by + *-kɔ > *-Vkɔ ‘3: IMP’

{Bangla, Asamiya, KRNB}. Diagnostic.

[MI 74.] In agr.imp, *-ε ‘2.SG’ + *-kɔ > *-εkɔ ‘2.SG’ {KRNB, some Hajong lects}. Diagnostic.