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ABSTRACT

Three varieties of Kusunda, a critically endangered language isolate of Nepal, have been recorded in existing literature: in Hodgson (1857), in Reinhard & Toba (1970), and in several more recent publications analyzing material elicited from the language's last two fluent speakers, Gyani Maiya Sen and Kamala Khatri. Each of these varieties exhibits a set of unique phonological and morphological innovations from their most recent common ancestor, Proto-Kusunda (PK). This paper seeks to reconstruct the prefixing possessive-marking system of PK, using morphological evidence from the three attested varieties. Proto-Kusunda is reconstructed as exhibiting obligatory possessive marking on a set of inalienably possessed nouns. Possessed nouns were marked with 2 sets of preposed affixes: **t-*, **n-*, and **g-*, which indexed the person of the noun's possessor, and **-i- *-a- *-u- *-ja-*, a set of derivational prefixes which categorized possessed nominals into a number of semantic fields. The formal and functional characteristics of this system are strongly reminiscent of an analogous system of head-marking possession found in the Great Andamanese language family of India, prompting questions of possible areal influence or genetic inheritance in the remote past.

KEYWORDS

Kusunda, possessive prefixes, lexicalization, somatic affixes, Great Andamanese

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1 Introduction

The Kusunda (*Mihaq*) people are a small tribe of former hunter-gatherers living in the hills of Central and Mid-Western Nepal. Until the 19th and early 20th centuries, groups of Kusunda lived a nomadic existence in the forests of the area, moving frequently and subsisting off of what forest produce could be acquired from the jungle. Over the course of the 20th century, deforestation and other factors led to the fragmentation of traditional Kusunda territories, prompting many groups to assimilate into the sedentary, agricultural societies of neighboring ethnic groups. This led to a break in intergenerational transmission of the Kusunda language, and a subsequent rapid decrease in the total number of Kusunda speakers.

This paper seeks to reconstruct the possessive-marking morphology of Proto-Kusunda (PK), the common ancestor of all attested Kusunda varieties. In doing so, a typologically unusual system is revealed. Proto-Kusunda likely distinguished from its class of common nouns a set of inalienably possessed nouns, generally falling into the semantic categories of body parts and family members. These inalienably possessed nouns took on obligatory morphology indexing the person features of their possessor, but also another obligatory set of prefixes marking nouns for membership in a number of semantic categories, which I term *classificatory prefixes*. This system has broken down in the attested varieties of Kusunda due to several waves of lexicalization, analogy, and reanalysis, but remains reconstructible to PK.

1.1 Possession in Kusunda

Watters et al. (2006) report that Kusunda exhibits a series of head-marking possessive prefixes, which index the person (but not number) features of a noun's 1st or 2nd person possessor:

1st person	*tsi-*
2nd person	*ni-*

Table 1. Possessive prefixes in Kusunda

For 1st and 2nd person possessors, the possessive prefixes alternate freely with a dependent-marking genitive construction formed from free pronouns and the genitive suffix *-yi* or *-i*:

	SG	***PL***
1st person	*tsi-yi*	*tig-i*
2nd person	*ni-yi*	*ʔnig-i*
3rd person	*gina-yi*	

Table 2. Genitive pronouns in Kusunda

For 3rd person possessors, only the genitive construction is used. However, this may not have been the case in the past. Watters (2006: 46-47) proposes that some nominals in Kusunda show evidence of a 3rd person possessive prefix *gi-* (analogous to *tsi-* and *ni-*) that has lost productivity and become lexicalized:

gloss	***forms with lexicalized*** *gi-*
'stomach'	*gimət*
'breath'	*gyaqai* (< *qai* "wind")
'sap'	*gidaŋ* (< *taŋ* "water")
'body'	*gidzaŋ*
'name'	*gidzi*
'skin'	*gitət*
'word, language'	*gipən*
'fat'	*gisi*
'thorn'	*gitsi*

Table 3. Forms with a potentially lexicalized 3rd person possessive prefix *gi-*

Many of these words belong to the semantic domain of body parts. Others, such as *gidaŋ* 'sap' and *gitsi* 'thorn,' belong to the more general domain of things that are integral parts of a greater whole — in these two particular cases, a tree or plant. In an earlier stage of the language, these nouns — all of which belong to the semantic categories most associated with inalienability in possession — may have taken on obligatory possessive morphology. At some point in the transition to Modern Kusunda, which does not have obligatory possession, the 3rd person prefix **gi-* would have been reanalyzed as part of the nominal root. Lexicalization of head-marking possessive affixes like these is very plausible; for example, the lexicalization of the 3rd person possessive suffix *-nya* in Malay (Alieva 1980: 423).

This interpretation is supported by the fact that, in at least 1 Kusunda noun, *gimət* 'stomach,' the segment *gi-* is replaced with *tsi-* in 1st person possession:

gloss	***Kusunda***
'stomach'	*gimət*
'your stomach'	*ni-gimət*
'my stomach'	*tsi-mət*

Table 4. Possessed forms of *gimət* 'stomach' (Watters et al. 2006: 46)

In Section 2, I provide further support for this hypothesis by drawing on evidence from now-extinct Kusunda varieties documented in Reinhard & Toba (1970) and Hodgson (1857) — both of which appear to retain, to one degree or another, the obligatory possession hypothesized to be present in earlier stages of the language.

1.2 Sources

In this paper, I refer to the Kusunda variety spoken by the last 2 fluent speakers, Gyani Maiya Sen and Kamala Khatri, as "Modern Kusunda" (MK). This is not just a term of convenience, but a valid phylogenetic grouping; these two speakers' respective idiolects share a number of unique innovations from Proto-Kusunda not seen in other varieties, including the reflection of PK **-iŋ* rhymes as /-əŋ/, **ja* as /je/ before consonants and /e/ word-finally, and the elision of the uncertain PK vowel **a*^{3} (Spendley 2023). All data from Modern Kusunda cited in this paper is taken from the Kusunda vocabulary in Watters et al. (2006) and the Kusunda comparative wordlist in Aaley & Bodt (2019).

Prior to the publication of these sources, the most complete lexical dataset on Kusunda could be found in Reinhard & Toba (1970). This paper contains a relatively large wordlist (~339 entries) elicited from speakers of a variety of Kusunda that is noticeably distinct, in its phonology and morphology, from Modern Kusunda. This variety retains Proto-Kusunda features lost in Modern Kusunda and the Hodgson (1857) variety, reflecting, for example, PK intervocalic **k* as a glottal stop [ʔ]. In this paper, in lieu of any solid geographic or ethnographic terminology that could be used to refer to it, this variety of Kusunda will be referred to as the Reinhard & Toba (RT) variety.

Hodgson (1857), the earliest attestation of Kusunda, records a Kusunda variety closer to Modern Kusunda than to the RT variety. Following the same convention used for the RT variety, this variety will be referred to by the name of the author who first described it; I refer to it in this paper as the Hodgson (HG) variety.

Data from the RT and MK varieties has been transcribed in IPA for the sake of clarity. As the HG variety lacks a systematic phonemic transcription, entries from Hodgson (1857) are cited as is. To reflect this, these entries will be marked with < > when cited in-text or printed in tables.

All Proto-Kusunda reconstructions are taken from Spendley (2023), a comparative reconstruction of PK segmental phonology. Most attested Kusunda forms are similar to the reconstructed phonological form of their respective PK antecedents. Where PK forms have been reconstructed through non-trivial application of the comparative method, commentary on the sound correspondences involved is included in Appendix A. PK phonemes are also transcribed according to their phonological, rather than their likely phonetic, features. For example, PK **t* was most likely articulated as [ts] preceding **i* and **j,* as it is in all attested varieties, and **k* was almost certainly a glottal stop [ʔ] in intervocalic position; however, this will not be reflected in this paper's transcription.

2 Proto-Kusunda possessive marking

The head-marking possessive prefixes of Modern Kusunda, described in 1.1 above, are paralleled by similar constructions in the RT and HG varieties. The HG variety exhibits possessive prefixes with the form /C-/, while the RT variety exhibits possessive prefixes with the form /Ca-/, both appearing cognate with the Modern Kusunda possessive prefixes, which have the form /Ci-/.

Differences in the presence and quality of the vocalic element found in these prefixes are not attributable to regular sound correspondences between varieties. On the basis of this, Proto-Kusunda is reconstructed marking inalienably possessed nouns with 2 sets of prefixes: **t-* **n-*, and **g-*, which indexed 1st, 2nd, and 3rd person possessors respectively, and **i-*, **a-*, **u-*, and **ja-*, which appear to be fully lexicalized in all attested Kusunda varieties.

2.1 Sources

In the variety recorded in Hodgson (1857), a number of terms exhibit a word-initial <t-> or <ch-> which does not occur in Modern Kusunda:

gloss	*MK*	*HG*
'child'	*getse*	<chyáchi>
'tooth'	*uhu*	<toho>
'arm'	*awəi*	<táübi>
'ear'	*jəw*	<chyáü>
'eye'	*inəŋ*	<chining>
'foot'	*jen*	<chán>
'head'	*ipi*	<chipi>

Table 5. Word-initial <t-> and <ch-> in Hodgson (1857)

Within the limitations of the available data on the HG variety, <ch-> and <t-> can be confidently characterized as allophones of a single prefix /t-/, which surfaced as the sound transcribed in the wordlist as च <ch> (most likely alveolar [t͡s], as it is in Nepali, but possibly postalveolar [t͡ɕ], as in Hindi) when preceding /i/ or /j/. This is the result of a regular sound change occurring in all attested Kusunda varieties; Proto-Kusunda **t* always undergoes palatalization when preceding **i* or **j* (Spendley 2023).

This morpheme, clearly underlyingly /t-/, appears cognate with the 1st person possessive prefix *tsi-* in Modern Kusunda. It occurs in the Hodgson (1857) wordlist exclusively on body part terms and one family member term. These facts in combination strongly suggest that, unlike in Modern Kusunda, possessive prefixes in the HG variety were obligatory on inalienably possessed nouns. Hodgson's informant, when asked to provide terms belonging to this set, would have defaulted to 1st person possessed forms. Other possessive prefixes are not readily evident from the data in Hodgson (1857).

In the RT variety, a similar phenomenon of obligatory prefixation is evident from body part terms:

gloss	*RT*	*MK*
'stomach'	*tamat*	*gimət*
'head'	*taipij*	*ipi*
'eye'	*tainin*	*inəŋ*
'arm'	*taimok*	*omoq*

Table 6. Obligatory prefixation on body part terms in Reinhard & Toba (1970)

In this variety, the form of the 1st person possessive prefix is clearly *ta-*. Its near-ubiquitous presence on body part terms, again, suggests that obligatory possession was also the rule in the RT variety, with Reinhard's informants defaulting to 1st person possessed forms during elicitation. The presence of this apparently obligatory possessive morphology on this set of inalienably possessed nominals in both the RT and HG varieties, in combination with the evidence of lexicalized possessive markers on nominals belonging to the same semantic domain in Modern Kusunda, strongly suggests that Proto-Kusunda should be reconstructed with obligatory possession of inalienably possessed nouns.

The overall attestation of possessive prefixes in the various varieties of Kusunda is summarized in Table 7:

	Hodgson (1857)	***Reinhard & Toba (1970)***	***Modern Kusunda***
1P	/t-/	*ta-*	*tsi-* (< *ti-)
2P	?	?	*ni-*
3P	?	?	*gi-

Table 7. Possessive prefixes in attested Kusunda varieties

The 1st person possessive prefix can be confidently reconstructed as **t-*. On the basis of the evidence from Modern Kusunda, the 2nd and 3rd person possessive prefixes are reconstructed as **n-* and **g-*, respectively. However, this does not explain the presence of vocalic segments *-a-* and *-i-* in the RT and MK varieties, and their absence in the HG variety.

No regular Ø:a:i sound correspondence has been identified between the attested varieties of Kusunda (Spendley 2023). In the absence of a phonological explanation, we must instead consider a morphological one. The segments *-a-* and *-i-* in the RT and MK varieties probably originate from the fusion of the possessive prefixes with a set of morphemes ordered between them and the nominal root. This set of morphemes would have been fully productive in Proto-Kusunda, as possessive prefixes in the RT and MK varieties have both undergone fusion with a different member of the set, and analysis of the HG variety presents no evidence of such a process having occurred in it.

The 1st person possessive prefix /t-/ in the HG variety exhibits no vocalic segment similar to those present in its RT and MK counterparts. However, it is always followed by a vowel or glide <y>. This is because all body part and family member terms taking on obligatory possessive morphology in the HG variety exhibit a root that is vowel- or glide-initial:

gloss	***transcription***	***tentative underlying form***
'child'	<chyáchi>	/t-jati/
'tooth'	<toho>	/t-oho/
'arm'	<táübi>	/t-aubi/
'ear'	<chyáü>	/t-jau/
'eye'	<chining>	/t-iniŋ/
'foot'	<chán>	/t-jan/
'head'	<chipi>	/t-ipi/

Table 8. Tentative phonemic forms of inalienably possessed terms in the HG variety

These vowel- or glide-initial roots are cognate with vowel- or glide-initial roots in Modern Kusunda (see Table 5).

The root-initial vowels found in these terms provide a parsimonious explanation for the *-a-* and *-i-* seen on possessive prefixes in the RT and MK varieties. Both are fossilized remnants of a set of prefixes that occurred between the root and the possessive prefix.

The forms of these prefixes in Proto-Kusunda were **i-*, **a-*, **u-*, and **ja-*. In Section 2.2, I will argue that they were derivational in character and expressed a range of semantic features, primarily functioning to classify or categorize the inalienably possessed noun which they marked.

2.2 The PK possessive-marking system

Inalienably possessed nominals in Proto-Kusunda took on two sets of prefixes: the possessor-indexing set **t-*, **n-*, and **g-*, previously explained in this paper, and a set containing the prefixes **a- *i- *u- *ja-*, the function of which is not immediately clear:

<table>
<tr><td colspan="2">-2</td><td colspan="2">-1</td><td>0</td></tr>
<tr><td colspan="2">possessor prefixes</td><td colspan="2">?</td><td>root</td></tr>
<tr><td>*t-</td><td>1P</td><td>*i-</td><td>?</td><td rowspan="4">Σ</td></tr>
<tr><td>*n-</td><td>2P</td><td>*a-</td><td>?</td></tr>
<tr><td rowspan="2">*g-</td><td rowspan="2">3P</td><td>*u-</td><td>?</td></tr>
<tr><td>*ja-</td><td>?</td></tr>
</table>

Table 9. Preliminary Proto-Kusunda pre-root nominal morphology

The -2 slot contains the consonantal possessive prefixes, which indexed the person of a noun's possessor. It is likely, given the evidence for obligatory possession in the attested varieties Kusunda reviewed in Section 2.1, that there was a set of inalienably possessed nouns in PK that always occurred with one of these prefixes. In some attested varieties, these prefixes underwent lexicalization, fusing with the root and losing their possessive semantics. This was a chaotic and disorderly process that clearly proceeded lexeme by lexeme, rather than across wide sections of the lexicon all at once. Proto-Kusunda **-ja-mti*, 'friend,' for example, is attested in MK as *gimtsi*, with lexicalized 3rd person g-, but in the RT variety as *tsəmtsi*, exhibiting a likely still-productive 1st person possessive prefix **t-*.

The -1 slot contains prefixes which fulfilled a less clear morphological function. In Proto-Kusunda, these prefixes occurred on all inalienably possessed nouns, ordered directly after the possessive prefixes. No PK root belonging to the inalienably possessed set, defined by the presence of 1st person possessive prefixes in wordlists from the RT and HG varieties, is reconstructed without **i-*, **a-*, **u-*, and **ja-*.

There are several possible explanations for this. The most obvious of these is that, in Proto-Kusunda, inalienably possessed nouns were inflected for noun class, taken here to mean the arbitrary division of the lexicon into a number of morphological categories which interact with inflectional and derivational morphology. Under this hypothesis, **i-*, **a-*, **u-*, and **ja-* represent class markers whose exponence is triggered by the presence of the possessive-marking prefixes **t-*, **n-*, and **g-*.

The class marker hypothesis may exhibit some merit. Which of the -1 slot prefixes a given Proto-Kusunda nominal root took appears to have been largely fixed, indicating that their occurrence was to some extent lexically determined, as is characteristic for noun classes. **i-*, **a-*, **u-*, and **ja-* appear consistently across varieties in the vast majority of inalienably possessed forms:

gloss	*HG*	*RT*	*MK*	*PK*
'knee'		*tu[p]utu*	*upto*	*-u-putu
'child'	<chyáchi>	*jətsi*	*getse*	*-ja-ti
'arm'	<táübi>	*tabi*	*awəi*	*-a-wai
'eye'	<chining>	*tainin*	*inəŋ*	*-i-niN

Table 10. Consistency of -1 slot marker affixation across varieties

However, a minority of PK roots exhibit multiple different -1 slot prefixes in their attested reflexes. Among these are PK **-mat* 'stomach' and **-ta* 'mouth;' the RT variety reflects **a-mat* and **u-ta* respectively, while MK reflects **i-mat* and **a-ta*. Additionally, terms descending from **-ma* 'below,' for example, include reflexes of the forms **u-ma* and **a-ma* distributed across the HG and MK varieties; I have not been able to reconstruct the exact semantics of the distinction between these two.

The co-occurrence in Modern Kusunda of multiple reflexes of a single root, exhibiting different fossilized morphology originating from the -1 prefix slot, is not characteristic of prefixes marking noun class. Nor is the phenomenon of **-mat* and **-ta* appearing with different class markers in the RT and MK varieties; in one or both of these varieties, these roots would both have had to switch inflectional classes at some point in the post-PK period. In light of this, the class marker hypothesis is untenable; these prefixes do not exhibit the characteristics of inflectional noun class markers.

Meanwhile, there are some reconstructed PK forms where the -1 slot prefixes appear to serve a derivational role. The inalienably possessed nominal **i-au* 'ear', attested in all Kusunda varieties, appears to be derived from the free nominal *au 'hole' via the prefixation of **i-* (Table 11). Two other PK roots, **u-dziŋ* 'tongue' and **g-i-dziŋ* 'body, horn (in conjunction with **i-piŋ*[2] 'head')' appear to derive from an unattested root ***-dziŋ*, referring to the general semantic field of objects or protuberances.

gloss	*PK*	*HG*	*RT*	*MK*
'hole'	*au		*au*	*əubaŋ*
'ear'	*i-au	<chyáü>	*iju*	*jəw*

Table 11. Derivation of **i-au* 'ear'

Another point in favor of the derivational hypothesis is the existence of apparent instances of cyclicity in word-formation processes involving the -1 slot prefixes. Reinhard & Toba (1970), for example, record *taihuwu* for 'tooth,' which possibly contains prefixes **i-* and **u-* in sequence.

This may also explain why the RT and MK varieties exhibit an additional vocalic segment in their respective possessive prefixes, which is not reconstructible to Proto-Kusunda. In Section 2.3, I will posit 2 separate lexicalization events which led to this situation: one in which derivational prefixes underwent fusion with their nominal roots, and another in which a "default" derivational

prefix, used to form possessed forms of free nominals, underwent fusion with the possessive prefixes **t-*, **n-*, and **g-*.

The use of the -1 slot prefixes to derive inalienably possessed body part terms from free nominals, the appearance of multiple PK roots with related meanings that differ only in the -1 slot prefix they take, and the evidence for cyclical affixation of -1 slot prefixes characteristic of derivational word-formation all provide compelling evidence that, morphologically, **i-*, **a-*, **u-*, and **ja-* represent derivational prefixes. But what semantic/morphological features did these prefixes express in Proto-Kusunda?

This is a somewhat easier question to answer than the previous one. In the reconstructed Proto-Kusunda lexicon, there is a striking correlation between the general semantic category of an inalienably possessed root and the -1 slot prefix it is reconstructed with in Proto-Kusunda. Broadly, **i-*, **a-*, **u-*, and **ja-* are found marking the semantic categories listed in Table 12:

prefix	***semantic category***	***examples***
*i-	external body parts; abstractions	*i-muq 'arm', *i-niN 'eye', *g-i-dzi 'name', *i-tat 'skin'
*a-	?	*a-wai 'arm', *a-ma 'below', *a-ta 'mouth', *a-mat 'stomach'
*u-	internal body parts	*u-ju 'blood', *g-u-hu 'bone' *u-dziŋ 'tongue'
*ja-	human beings	*ja-mti 'friend', *ja-hi 'father', *ja-ti 'child', *g-ja-ku[g/dz]i 'mother in law'

Table 12. Semantic categories associated with -1 slot prefixes

The full list of likely inalienably possessed terms reconstructed to PK, included in Appendix A, illustrates the consistency with which these general semantic fields are associated with their corresponding -1 slot prefixes. However, as has been argued in this section, these were not class markers. In this paper, I refer to **i-*, **a-*, **u-*, and **ja-* as *classificatory prefixes*, a term reflective of their semantic content and their derivational function in word formation.

The evidence reviewed in this section permits a refinement of the PK morphological template previously offered in Table 9. Table 13 offers an updated summary of the morphological and semantic characteristics of the classificatory prefixes reconstructed to PK:

-2		***-1***		***0***
possessor prefixes		*classificatory prefixes*		*root*
*t-	*1P*	*i-	*external body parts, abstractions*	Σ
*n-	*2P*	*a-	*?*	
*g-	*3P*	*u-	*internal body parts*	
		*ja-	*human beings*	

Table 13. Proto-Kusunda pre-root nominal morphology, updated

2.3 Changes from the PK system to the modern varieties

The PK possessive-marking system has undergone substantial changes in all attested varieties of Kusunda. This can generally be divided into 4 stages: 1) fusion of classificatory prefixes to the root; 2) analogical levelling of classificatory prefixes to a single default prefix; 3) fusion of the default classificatory prefix with the possessor-indexing prefixes; and 4) lexicalization of the 3rd person possessor prefix.

All attested varieties preserve evidence of an initial phase of lexicalization where the contents of the -1 slot, the classificatory prefixes, fused with the nominal root in certain nouns. In Modern Kusunda, which no longer exhibits obligatory possession, this is visible in the free forms of many formerly obligatorily possessed nouns:

gloss	*PK*	*MK*
'knee'	*u-putu	*upto*
'tooth'	*u-hu	*uhu*
'father'	*ja-hi	*jəi*
'arm'	*a-wai	*awəi*
'mouth'	*a-ta	*ata*
'eye'	*i-niN	*inəŋ*
'nose'	*i-nau	*inu*

Table 14. Lexicalized classificatory prefixes in Modern Kusunda

The RT variety appears to mostly preserve the PK system of obligatory possession, with the majority of obligatorily possessed terms appearing in the authors' wordlist with the 1st person possessive prefix *ta-*. However, it is still evident that in this variety some words have undergone a very similar lexicalization process to that which took place in Modern Kusunda. In many cases, a vocalic segment corresponding to the PK classificatory prefix of a given word occurs in obligatorily possessed nominals *after* the 1st person possessive prefix:

gloss	*PK*	*RT*
'mouth'	*u-ta	*tauta*
'tongue'	*u-dziŋ	*taudziŋ*
'arm'	*i-muq	*taimok*
'nose'	*i-nau	*tainao*

Table 15. Lexicalized classificatory prefixes on inalienably possessed nouns in the RT variety

This also occurs in the RT variety in the set of (formerly) obligatorily possessed terms which are not attested with *ta-*:

gloss	*PK*	*RT*
'blood'	*u-ju	*uju*
'father'	*ja-hi	*jei*

'ear'	*i-au	*iju*
'foot, leg'	*i-aN	*jəŋ*

Table 16. Lexicalized classificatory prefixes on common nouns in the RT variety

The RT and modern Kusunda varieties have clearly undergone a broadly similar lexicalization process, with classificatory prefixes completely fusing with the nominal root.

These varieties have also undergone significant analogical levelling in their respective possessive-marking systems. Both the RT and MK varieties preserve the head-marking possession of Proto-Kusunda; however, in the RT variety the main 1st person possessive prefix (which will be taken as representative of its paradigm, due to a lack of data on 2nd and 3rd person possessive indexing) is *ta-*, whereas in the MK varieties 1st person possessors are indexed with *tsi-*. These prefixes go back to Proto-Kusunda **t-a-* and **t-i-* respectively.

In the RT variety, the productive classificatory prefixes **-i-* **-u-* and **-ja-* have been levelled out in favor of **-a-*, which underwent fusion with the 1st person possessive prefix **t-* to form the RT variety's attested default 1st person possessive prefix *ta-*. The other class markers survive fossilized in a few recorded terms, like *tu[p]utu* '[my] knee' (< PK **t-u-putu*) and *tsəmtsi* '[my] friend' (< PK **t-ja-mti*).

In contrast, there is no evidence that the HG variety underwent this kind of levelling in its possessive-marking system. The HG variety appears to retain both the obligatory possession of Proto-Kusunda and the formal characteristics of PK classificatory prefixes. However, there is nothing in the data that allows us to conclusively demonstrate this.

Modern Kusunda underwent the same sort of levelling as the RT variety, only with *-i- becoming the default classificatory prefix instead of **-a-*. A few terms preserve lexicalized evidence of other classificatory prefixes, like *guhu* 'bone' (< **g-u-ɦu*) and *yəi* 'father' (< **-ja-ɦi*). The default classificatory prefix **-i-* then underwent fusion with the preceding possessor-indexing prefixes in the -2 slot, yielding modern Kusunda 1P *tsi-*, 2P *ni-*, and the now-fossilized 3P ***g-*.

The lexicalization of 3rd person ***g-* is the final step in the transition from the classifying, obligatorily-possessing PK system to the Modern Kusunda one, which retains neither of these features. This process likely began in the later Proto-Kusunda stage, as all attested varieties preserve some evidence of it. It appears to have been strongly lexically determined; for example, all Kusunda varieties, including the HG variety, attest PK **u-ɦu* 'bone' only in its 3rd person possessed form **g-u-ɦu*, while only the Kusunda varieties spoken by Gyani Maiya Sen and Kamala Khatri attest PK **ja-mti* 'friend' in its 3rd person possessed form **g-ja-mti*.

The classificatory prefixes are almost certainly no longer productive in Modern Kusunda, although the possessive prefixes are. In the other attested varieties, the situation is less clear. It is unlikely this question will be answered in the future, as the RT and HG varieties are now extinct.

3 Conclusions

Proto-Kusunda, taken here to mean the theoretical common ancestor of all attested Kusunda varieties, clearly exhibited obligatory possessive-marking morphology on inalienably possessed nominal roots. In this paper, I have argued that the somewhat fragmented attestations of this system represent significant deviations from the original Proto-Kusunda system. In Proto-Kusunda,

obligatorily possessed nominals exhibited two separate pre-root morpheme slots. The first of these included the prefixes **t-*, **n-*, and **g-*, which indexed the person of the noun's possessor. The second set **i-*, **a-*, **u-*, and **ja-*, which I refer to here as classificatory prefixes, marked information relating to the inherent semantics of the noun's referent. While classificatory prefixes are not productive in any attested Kusunda variety, they were certainly present in Proto-Kusunda.

3.1 Kusunda possessive-marking in areal context

Obligatory possessive-marking on nominals is not a typical feature of the South Asian linguistic area. However, within the more constrained language area of the Himalayan fringe Kusunda is significantly less exceptional. The formal and functional features of Proto-Kusunda possessive marking — obligatory possession, head-marking possessive prefixes, an alienable/inalienable distinction — are not uncommon among the Trans-Himalayan languages of the area.

Prefixing possessive markers are found in Kiranti (Ebert 2003: 507), Kham (Watters 2009: 56), and the Western Himalayan language isolate Burushaski (Munshi & Piar 2008: 49). They appear to have once been active in Magar, but in most dialects the system has undergone significant reduction (Grunow-Harsta 2008: 99). Obligatory possession is found to some extent in Kham (Watters 2009: 57-59) and in Burushaski (Munshi & Piar 2008: 49). Alienability distinctions in possession are found in Magar (Grunow-Harsta 2008: 97-101), in Burushaski (Munshi & Piar 2008: 49), and again to some extent in Kham (Watters 2009: 57-59). Interestingly, in Trans-Himalayan languages spoken outside of the Himalayan fringe, these features are rare or entirely absent. This may indicate influence from a Kusunda-like substratum in the area.

Regardless, in these respects the possessor indexes prefixes **t-*, **n-*, and **g-* are broadly typical of the Himalayan area. However, the classificatory prefixes **i-*, **a-*, **u-*, and **ja-* reconstructed in this paper to PK have no clear analogue in any nearby language. To find a reasonable parallel to this phenomenon, we must look significantly further afield. In Section 3.2, I will discuss the strikingly similar system of somatic prefixes found in the Great Andamanese languages of the Andaman Islands in India.

3.2 External comparison: Somatic prefixes in Great Andamanese

In previous sections, I have argued that the Proto-Kusunda classificatory prefixes marked inalienably possessed nouns for certain semantic features of their referents — including, in the case of the opposition between "internal" **u-* and "external" **i-*, the spatial relationship between the referent and certain body part regions. There is compelling evidence, reviewed in 2.2, that they served a derivational, rather than an inflectional, role in PK nominal morphology. And, perhaps most significantly for the purpose of external comparison, the classificatory prefixes were ordered between the root of the inalienably possessed nominal and the prefixing possessive markers **t-*, **n-*, and **g-*.

These formal and functional characteristics parallel, to a striking degree, the nominal morphology of the Great Andamanese languages of India. Tables 17 and 18 compare a simplified version of the pre-root morphology of possessed nominals in the Great Andamanese language Aka-

Bea (Zamponi & Comrie 2020) and that of inalienably possessed nominals in Proto-Kusunda, reconstructed in this paper:[1]

[1] Table 17 omits, for the sake of clarity and with the intention of focusing on the relative ordering of the possessor and somatic prefixes, Aka-Bea prefixes which serve to mark nominal plurality and reflexivity.

-2		*-1*		*0*
possessor prefixes		*somatic prefixes*		*root*
d-	*1PS*	ab-	*body*	Σ
		aka-	*mouth*	
m-	*1PP*	ar-	*torso/legs*	
		aya-	*ears*	
ŋ-	*2P*	ig- / idʒ-	*face/arms*	
		on- / ɔyo-	*extremities (hands/feet)*	
Ø-	*3P*	ot- / ɔt-	*head*	
		ɔkɔ- / ɔko-	*lips*	

Table 17. Simplified Aka-Bea pre-root nominal morphology

-2		*-1*		*0*
possessor prefixes		*classificatory prefixes*		*root*
*t-	*1P*	*i-	*external body parts, abstractions*	Σ
*n-	*2P*	*a-	*?*	
*g-	*3P*	*u-	*internal body parts*	
		*ja-	*people*	

Table 18. Proto-Kusunda pre-root nominal morphology

In Aka-Bea, and the Great Andamanese languages in general (Abbi 2011:745-746), nominal roots are preceded by possessor prefixes, which index the person and number features of the noun's possessor. Between the possessor prefixes and the root, however, possessed nominals also take on a set of affixes termed "somatic prefixes." These prefixes serve a role somewhere between that of noun-class prefixes and shape classifiers: they are obligatory on possessed nominals, and their exponence alters the semantics of the marked nominal, often in unpredictable ways (they are also frequently found on adjectives, verbs, and unpossessed nominals). Each somatic prefix is associated with a different area of the human body and its semantic extensions — similar to the classificatory prefixes **i-* and **u-* in Proto-Kusunda. The somatic prefix *aka-*, for example, participates in forming nouns related to the mouth, such as language names — *Aka-Bea* being one such example — and body parts, e.g. *-aka-baŋ* 'mouth'.

Also like the classificatory prefixes, somatic prefixes in Great Andamanese play a derivational role in word formation, attaching to both nouns, verbs, and adjectives in order to modify meaning and create new roots:

(1)
a. *nalama* 'clean'
b. *ab-nalama* 'clean (of another's body)'
c. *a-d-nalama* 'clean (of the speaker's body)'
d. *aka-nalama* 'clean (of a cooking or eating utensil)'
e. *ig-nalama* 'clean (of the face)'
f. *on-nalama* 'clean (of a hand)'
g. *ot-nalama* 'clean (of a round object)'

(Zamponi & Comrie 2020: 69)

(2)	a.	*maya*	'sir, chief'
	b.	*ot-maya*	'ancestor'
	c.	*ab-maya*	'married man'

(Zamponi & Comrie 2020: 69)

(3)	a.	*ab-elma*	'space in front'
	b.	*aka-elma*	'space in front, surface of a liquid'
	c.	*ig-elma*	'palm of the hand'
	d.	*on-elma*	'palm of the hand, sole of the foot'
	e.	*ot-elma*	'surface of any solid'

(Zamponi & Comrie 2020: 70)

Often, the semantics of a derived term formed from a somatic prefix and a lexical root will be relatively transparent, as in the case of Example (1). In other cases, as in Examples (2) and (3), the meaning is more unpredictable.

Aside from the similar places they and the personal possessive prefixes occupy in their respective morphological templates, there is very little formal resemblance between the individual somatic prefixes of Aka-Bea and derivational prefixes of Proto-Kusunda. Despite this, a clear functional connection exists between their respective roles in word formation and possessive-marking. It is unlikely that this is coincidental. This connection clearly merits further investigation in the future, and may be indicative, in conjunction with other evidence, of a genetic relationship between these two language groups.

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APPENDIX A: INALIENABLY POSSESSED NOUNS IN PROTO-KUSUNDA

The following table lists examples of inalienably possessed nouns in Proto-Kusunda, and their reflexes in the attested varieties.

class	*semantic category*	*PK*	*HG*	*RT*	*MK*
*u-	abstractions	*u-ma 'below'	<tumái>		*numəi*
*u-	internal body parts	*u-ju 'blood'	<uyú>	*uju*	
*u-	internal body parts	*u-hu 'bone'	<gou>	*guwu*	*guhu*
*u-	internal body parts (?)	*u-putu 'knee'		*tu[p]utu*[2]	*upto*
*u-	internal body parts (?)	*u-ta 'mouth'		*tauta*	
*u-	internal body parts	*u-dziŋ 'tongue'		*taudziŋ*	
*u-	internal body parts	*u-hu tooth'	<toho>	*taihuwu*	*uhu*
*ja-	people	*ja-ti 'child'	<chyáchi>	*jətsi*	*getse*
*ja-	people	*ja-[h]i 'father'		*jei*	*yəi*
*ja-	people	*ja-mti 'friend'		*tsəmtsi*	*gimtsi*
*ja-	people	*ja-ku[g/dz]I'mother-in-law'		*giʔogi*	*gyaudzi*
*a-	external body parts	*a-wai 'arm'	<táübi>	*tabi*	*awəi*
*a-	abstractions	*a-ma 'below'			*aməgəi*
*a-	internal body parts (?)	*a-ta 'mouth'			*ata*
*a-	internal body parts (?)	*a-mat 'stomach'		*tamat*	
*i-	external body parts	*i-muq 'arm'		*taimok*	*omoq*[3]
*i-	external body parts	*i-au 'ear'	<chyáü>	*iju*	*jəw*
*i-	external body parts	*i-niN 'eye'	<chining>	*tainin*	*inəŋ*
*i-	external body parts	*i-pakan 'finger/flower'	<gipóan>	*geipəʔən*	*gepan*
*i-	external body parts	*i-aN 'foot/leg'	<chán>	*jəŋ*	*yen*
*i-	external body parts	*i-ai 'hair'	<gyai-i>		*gi*
*i-	external body parts	*i-piŋ[2] 'head'	<chipi> / <iping>	*taipij*	*ipi*
*i-	external body parts	*i-dziŋ 'horn/body'	<jing>	*giziŋ*	*gidzəŋ*
*i-	abstractions	*i-daŋ 'hunger'	<idáng>		*idaŋ*
*i-	abstractions	*i-dzi 'name'	<giji>		*gidzi*
*i-	external body parts	*i-nau 'nose'		*tainao*	*inu*
*i-	external body parts	*i-tat 'skin'	<gitán>[4]	*gitət*	*gitət*
*i-	internal body parts (?)	*i-mat 'stomach'			*gemət*

[2] This form is recorded in Reinhard & Toba (1970) as <tugutu> and in Reinhard (1976) as <tuputu>; considering the evidence from Modern Kusunda, the transcription with <g> is most likely a typographical error.

[3] PK **iCu* > MK /uCu/ is a regular change.

[4] Hodgson's Kusunda wordlist was transcribed into the Latin alphabet from an original Devanagari document. The form <gitán> recorded in the published document likely mistakes a final handwritten त <t> for न <n>.