

# Advances in proto-Munda reconstruction \*

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## 0. Introduction

It is the purpose of this brief report to demonstrate what morphological features a Proto-Munda-like language might have possessed. In terms of affix typology, such a language would probably have had both features marked by prefixes and a very small number of suffixes. These include a set of (resumptive) subject proclitics or prefixes, and suffixes for tense/transitivity and object. Noun incorporation probably also occurred to a limited degree within the verbal complex. These are features that must be considered when attempting to trace substrate lexical or structural features of Munda origin in South Asian languages.

Why such features are likely to be found in a Proto-Munda-type language constitutes the bulk of the presentation below. Based on a careful comparison of the attested Munda languages, it is now possible to have a general overview of what the verb in Proto-Munda must have looked like morphologically speaking. The verbs admitted a greater degree of morphological structure than did the nouns in this language, although both allowed some morphemic complexity. Inflection in the verb was probably common,<sup>1</sup> and some degree of inflectional morphology may have been used in nominal forms as well.<sup>2</sup>

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<sup>1</sup> Thus, despite the rather strong claims to the contrary in Donegan and Stampe (1983) Donegan (1993), i.e. that Mon-Khmer languages simply do not allow inflection, this can be easily demonstrated to be false in a number of Mon-Khmer subgroups, e.g. Bahnaric, Aslian, or even Palaung, in a phonologically non-bound form

<sup>2</sup> Cf. the seemingly cognate object case *prefix* in Proto-South Munda and the Mon-Khmer language Tao-ih (Sointseva 1996).

## 1. Causative marking in proto-Munda and proto-Austroasiatic

As is well known, the Austroasiatic languages often preserve vestigial traces of an earlier system of derivational voice marking. In Proto-Munda the causative could be realized as either a prefix or an infix, the prefix \*<sup>?</sup>**b-** appearing with monosyllabic stems [1-σ] and the infix \*<sup>?</sup>**-b-** appearing with stems longer than one syllable, so-called sesquisyllabic (one and a half syllables) and bisyllabic stems [here abbreviated 1+-σ]. Both the causative prefix and infix forms are preserved actively in such South Munda languages as Juang or Gta<sup>?</sup>, but only in a very restricted set of lexicalized forms in North Munda, which has generally lost productive prefixation processes inherited from Proto-Munda; thus, earlier prefixed formations are preserved only in lexicalized forms.

### (1) CAUS prefix and infix in proto-Munda [**\*\*ə**'**b-** w/ 1- σ. \*<sup>?</sup>**-b-** with 1+- σ]

Mundari	Bhumij	Korku
<i>ajal-</i> 'make s.o. lick'	<i>ajom-</i> 'feed' <i>nunu</i> 'drink' → <i>anu</i> 'cause to drink'	
<i>akiriŋ-</i> 'sell'	<i>anu?(u)-</i> 'give to drink'	<i>koŋ-a-neŋ'</i> 'caused to call s.o.'
(Osada 1992: 94)	(Ramaswami 1992: 86)	(Nagaraja 1998: 57, 59)

Kharia	Kharia	Kharia	Kharia
<i>ob-puŋ-na o-leŋ-na</i>	<i>ŋo-b-ko-na</i>	<i>ob-ŋo-b-ko-yo?</i>	
CAUS-jump-INF	CAUS-fly-INF sit-CAUS-sit-INF	CAUS-sit-CAUS-sit-PAST.II	
'to make jump'	'to cause to fly' 'make sit, seat'	'he made him make her sit'	
(Malhotra 1982: 165-6)			

Juray (w/stem-reduplication)	Remo (w/ stem-reduplication)
<i>ə-r-ə'b-ti-tiy-əm</i>	<i>ɔ-gi-ge'b</i>
NEG- CAUS-RDPL-give- 2	CAUS-RDPL-heat
'I can't give you (any)'	'cause to heat up, burn'
(A. Zide 1983: 120)	(Bhattacharya 1968: 12)

Gorum	Gorum	Gta <sup>?</sup>
<i>bu-p-toŋ-u</i>	<i>ab-geb-u</i>	<i>n-a?<sup>?</sup>-coŋ-ke</i>
fear-CAUS-fear-TR.INF	CAUS-burn- TR.INF	1-CAUS-eat-TENSE/ASP
'to frighten'	'to burn'	'I fed'
(A Zide, field notes)	(A Zide, field notes)	(Mahapatra et al. 1989: 29)

A distribution identical to that of Proto-Munda, with an original prefix used with monosyllabic stems and an infix used with sesquisyllabic and polysyllabic stems is found in Nicobarese, Khmu<sup>?</sup>ic, and Monic (2).

- (2) Nancowry                      Nancowry                      Nancowry  
*ha-kah-naŋ*                      *p-um-lóʔ*                      *h-um-kah*  
 ‘make understand’              ‘make lose’                      ‘make know’  
 (Radhakrishnan 1981: 87; 54-5)
- Kammu (Khmuʔ)              Kammu (Khmuʔ)              Kammu (Khmuʔ)  
*háan* → *p-háan*              *rəh* → *p-rəh*              *tluy* → *t-m-lùuy*  
 ‘die’ → ‘kill’                      ‘rise’ → ‘raise’                      ‘hang’ → ‘hang (tr)’  
 (Svantesson 1983: 104)
- Spoken Mon  
*hum d̥aik* →              *p-hum d̥aik*              *klàŋ* → *hə-làŋ*  
 ‘have a bath’                      ‘bathe’                      ‘be numerous’ > ‘increase’  
 (Bauer 1989 [1986]a: 90)
- Old Mon                              Kuy  
*kcət* → *kəcət*                      *kəcet* → *kəmcet*  
 ‘die’ → ‘kill’                      ‘die’ → ‘kill’  
 (Bauer 1990 [1987-88]: 149) (Bauer 1990 [1987-88]: 149)

Note that although not obviously cognate at first glance, the *p-* in ‘bathe’ and the *-ə-* in ‘increase’ (i.e. *CəC* < \**CmC*) in spoken Mon are allomorphs, historically speaking. Each represents the regular reflex of the inherited Proto-Austroasiatic causative prefix and infix, respectively: Mon-Khmer infixed \*-*m-* < Proto-Austroasiatic \*-‘*b-*’.<sup>3</sup> This is a clear demonstration of how the totality of data must be considered before snap judgments are to be made in comparative linguistics.

In other Eastern Austroasiatic languages, only the prefix has been preserved (3).

- (3) Khasi                      Khasi                      Ksingmul  
*ph-rung*                      *ph-láit*                      *p-ca:*  
 ‘penetrate’                      ‘clear away’                      ‘feed’  
 (Henderson 1976: 487) (Henderson 1976: 487) (Pogibenko & Buy 1990: 35)
- Middle Khmer                      Bahnar                      Bahnar  
*tyiŋ* → *ph-tiŋ*                      *lôch* → *pə-lôch*              *ji* → *pə-ji*  
 ‘know’ → ‘inform’              ‘die’ → ‘kill’                      ‘be hurt’ → ‘hurt s.o.’  
 (Jacob 1976: 611) (Banker 1964: 105) (Banker 1964: 105)

<sup>3</sup>As is well known, there is often a correlation between glottalized elements and nasals, so-called ‘rhinoglottophilia’

Kentakbong <i>ɳilay</i> → <i>pi-lay</i> ‘bathe’ → ‘bathe s.o.’ (Haji Omar 1976: 955)	Kentakbong <i>ci?</i> → <i>pi-ci?</i> ‘eat’ → ‘feed’	Kentakbong <i>teɣ</i> → <i>pi-teɣ</i> ‘sleep’ → ‘cause to sleep’
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Katu <i>mut</i> → <i>pa-mut</i> ‘run’ → ‘make run’ (Costello 1965: 35)	Katu <i>ntôq</i> → <i>pa-ntôq</i> ‘fall’ → ‘make fall’ (Costello 1965: 35)	Katu <i>goot</i> → <i>pa-goot</i> ‘cut hair’ → ‘cause to cut hair’ (Costello 1965: 34)
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We thus reconstruct the causative as in (4) for Proto-AA

(4) CAUS in Austroasiatic (Anderson and Zide 2001)

Proto-Munda	*ə'b- (1-σ), *-b- (1+-σ)
Proto-Austroasiatic	*B- (1-σ), *-b- [~/> *-m-] (1+-σ)

## 2. The Bimoraic constraint and noun incorporation in proto-south Munda and proto-Austroasiatic

Another characteristic feature of a Proto-Munda-like language would have been noun incorporation using a monosyllabic combining or stem form of nouns (see 2.2 below). In addition, there appears to have been a bimoraic constraint on corresponding free forms of those same nouns, requiring the use of one of a number of different noun formative processes, including various prefixes, infixes, suffixes/compounding and reduplication. This system is preserved in both modern Gta? and Khasi, as well as various Nicobarese languages.

### 2.1 The Bimoraic constraint in proto-south Munda and proto-Austroasiatic

In Proto-Austroasiatic and preserved down to the Proto-South Munda and even the modern Gta? level was a ‘bimoraic’ constraint on the free forms of nouns (Anderson and Zide 2002). That is, a noun minimally consisted of two morae, or in other words, in some sense constituted a metrical foot.<sup>4</sup>

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<sup>4</sup>This is actually not specific to nouns per se in Proto-Austroasiatic, but the issue probably never arose in relation to the verb, which had various derivational or inflectional elements that would have filled a minimal word constraint like this; the only really plausible candidate for this would be an intransitive imperative used with monosyllabic verb stems; in Proto-Munda, at least, these appeared with a suffix, that may have been originally motivated phonologically, not morphologically, that is, to make this otherwise non-conforming form satisfy the bimoraic minimal word constraint. Note that as Osada notes (1992: 20; personal communication), phonological words also consist minimally of two morae in such North Munda languages as Mundari.

One of the outstanding problems in comparative Austroasiatic linguistics is the at times frustrating lack of direct correspondences of full forms of nouns both within individual Austroasiatic subgroups as well as across these groups. For example in Munda, it is often easy to isolate a monosyllabic root in nouns, but free forms are unrecoverable for the proto-language. Compare the following forms (5) and the resulting noun-formative correspondence sets (6) deducible from these in the modern Munda languages.

(5) Selected nouns in Munda languages (Anderson and Zide 2002)

Gutob	Remo	Gta?	Kharia	Juang	gloss
<i>titi</i>	<i>titi</i>	<i>titi</i>	<i>ti?</i>	<i>iti</i>	'hand'
<i>susuŋ</i>	<i>tiksuy</i>	<i>nco</i>	<i>gujuŋ</i>	<i>ijiñ/ŋ</i>	'foot'
--	<i>gisinyra?e</i>	<i>gcæŋ</i>	<i>jinyray</i>	<i>jinjae</i>	'porcupine'
<i>oŋger</i>	<i>ŋger</i>	<i>ŋgir</i>	<i>køŋg<sup>h</sup>er</i>	<i>køŋger</i>	'yng man'
<i>məd/?</i>	<i>məd</i>	<i>ŋmwə?</i>	<i>mođ</i>	<i>ɔmɔr/d</i>	'eye'
<i>gikil, kilɔ</i>	<i>kilɔ</i>	<i>ŋku</i>	<i>kiɾõg̃</i>	<i>ki ɔg</i>	'tiger'
<i>ɔ?ɔn</i>	<i>ɔ?ɔn</i>		<i>kɔnɔn</i>	<i>kɔnɔn</i>	'child'
<i>gusɔ?</i>	<i>gusɔd</i>	<i>gsu?</i>	<i>solo?</i>	<i>selog</i>	'dog'
<i>ɖa?</i>	<i>ɖa?</i>	<i>ndia?</i>	<i>ɖa?</i>	<i>ɖag</i>	'water'
<i>sulɔb</i>	<i>sulɔb</i>	<i>sla?</i>	<i>(uslo? 'earth')?</i>	--	'tree'
<i>sulɔj</i>	<i>sulɔi</i>	<i>slwə?</i>	<i>laej</i>	--	'stomach'
<i>sasay</i>	<i>saysay</i>	<i>ssia</i>	<i>saysay</i>	<i>sa(ɾa)hsay</i>	'turmeric'
<i>gidɛb</i>	<i>gidɛđ</i>	<i>gri?</i>	?	--	'frog'
<i>gisiny</i>	<i>gsæŋ</i>		<i>siŋkoe/i</i>	<i>seŋkoe</i>	'fowl'
<i>suram</i>	<i>siram</i>	<i>sra</i>	--	<i>seɾam</i>	'sambar deer'
<i>gikiŋ</i>	<i>ŋkuĩ</i>	<i>ŋkwĩ/ŋ</i>	--	<i>kuiŋkar</i>	'fi-l, w.e.b.'
<i>gubɔn</i>	<i>gibe</i>	<i>gbe</i>	<i>bane/, -ai</i>	<i>banae</i>	'bear'
<i>so?l</i>	<i>su?u</i>	<i>ncu</i>	<i>jol</i>	<i>ɔ?ɔn</i>	'oil'
<i>urɔi/urei</i>	<i>urai</i>	<i>ñɔrwe</i>	<i>kođroy</i>	--	'fly'
<i>piɾig</i>	<i>piɾi?</i>	<i>plæg</i>	<i>konthed</i>	<i>konted</i>	'small bird'

Sora	Gorum	Kherw	Korku	gloss
<i>s?i</i>	<i>si?i</i>	<i>ti ~ tii</i>	<i>ti</i>	'hand'
<i>j?eŋ</i>	<i>ji?iy</i>	<i>janŋa</i>	<i>nanŋà</i>	'foot'
<i>kənjij</i>	<i>uba?jiŋ</i>	<i>j<sup>h</sup>ik jiki(H)</i>	<i>jikɾa</i>	'porcupine'
<i>oŋgersij</i>	<i>iŋ-ger</i>	--	--	'yng man'
<i>m?ɔd, amad</i>	<i>mad</i>	<i>met/đ, (-e-, -e~)</i>	<i>med</i>	'eye'
<i>kina</i>	<i>kul(a)</i>	<i>kul, kula (M)</i>	<i>kula</i>	'tiger'
<i>o?on</i>	<i>aŋon</i>	<i>hɔn (o), hɔpɔn</i>	<i>kɔn</i>	'child'
<i>kənsod</i>	<i>kusɔd</i>	<i>seta</i>	<i>sita</i>	'dog'
<i>d(a)?a</i>	<i>da?a</i>	<i>dak/g/?/ø</i>	<i>ɖa?/?g</i>	'water'
<i>ən?eb</i>	--	--	--	'tree'
--	--	<i>lac, lai(?)</i>	<i>laj</i>	'stomach'
<i>saysay</i>	<i>saysay</i>	<i>sasay</i>	<i>sasay (c-)</i>	'turmeric'
<i>kindud</i>	--	--	<i>ded-dà?</i>	'frog'
<i>kənsim</i>	<i>(aŋ=oi)</i>	<i>sim</i>	<i>sim</i>	'fowl'
<i>kunsar</i>	<i>kisar</i>	<i>saram (H)</i>	--	'sambar deer'
<i>kun̄ar</i>	<i>kinar</i>	<i>hɔnhar</i>	<i>kun̄kar</i>	'fi-l, w.e.b.'
<i>kəmbud</i>	<i>kibud</i>	<i>bana</i>	<i>bana</i>	'bear'
<i>mij̄nol/=nol</i>	--	--	--	'oil'

<i>əroy</i>	<i>əroy</i>	<i>rɔ, roko</i>	<i>ruku</i>	'fly'
<i>ontid</i>	<i>porid</i>	<i>titid/r</i>	<i>tit'id</i>	'small bird'

H = Ho; M = Mundari

NB: Some minor or 'normal' semantic shifts in cognate elements are not included in the glosses here in order to save space. e.g. Kharia *kənən* 'small' not 'child' or 'son'; 'child' is attested in numerous forms, e.g. *kunruʔ, kunɖuʔ, kənɖu[ʔ]*, etc. Also *kənɖɔy* is 'fly' while the form cited above *kənɖroy* (~ *kənɖrɔy*) is sometimes glossed as 'small fly'.

(6) Select Munda correspondences X = CVC-root, Y = element used to form the free-standing compound

Gutob	Remo	Gtaʔ	Kharia	Juang	Sora	Gorum	Kherw	Korku
Rdpl	Rdpl	Rdpl	-ʔ	*N-	-ʔ-	-ʔ-	ø'	ø
Rdpl	X-Y	*N-	--	*N-	-ʔ	-ʔ	-a	-a
-	*kV-X-Y	k-X	X-Y	X-Y	kən-X	Y <sub>2</sub> X	ø/-i	X-Y
oŋ (<N-)	*N-	*N-	kən-	kən-	(<N-) oŋ-	*N-	--	--
ø	ø	N-	ø	N-	-ʔ, a-rN-	ø	ø	ø
*kV-, ɔ	-ɔ	*N-	-ɔg	-ɔg	-a	-aø	*-a	-a
-ʔ-rN-	-ʔ-rN-	*N-	-n-	-n-	-ʔ	Y-X, *N	ø, -p-	ø
*kV-	*kV-	*kV-	-l-	-l-	kən-	ku-rkən	-a	-a
ø	ø	*N-	ø	ø	-a	-a	ø	ø
sV=ø-	sV=ø-	sV=ø-	??sV-	--	*sV=-ʔ-	--	--	--
sV-	sV-	sV-	ø	--	--	--	ø	ø

Rdpl	Rdpl	Rdpl	Rdpl	Rdpl	Rdpl	Rdpl	Rdpl CV-	Rdpl CV-
*kV-	*kV-	*kV-	--	--	kin-	--	--	X-Y
*kV-	*kV-	*kV-	X-Y	X-Y	kən-	ø	ø	ø
X-Y	X-Y	X-Y	--	X-Y	*kən-	*kən-	X-Y	--
*kV-	*N-	*N-	--	X-Y	X-Y	X-Y	X-Y	X-Y
*kV-	*kV-	*kV-	X-Y	X-Y	*kən-	*kən-	-a	-a
-ʔ	-ʔ	*N-	ø	*N-	Y-X	--	--	--
*V-/N-	*V-/N-	*N-	kən-	ø	ə-rN-	a-rN-	ø, -X-PL	X-PL
*pV-	*pV-	*pV-	kən-	kən-	*(k)ən-	*pV-	Rdpl (-Y)	Rdpl

[Sources: Ramamurti 1931; N. Zide field notes; A. Zide n.d.; Malhotra 1982; Biligiri 1965; Kullu 1981; Bhattacharya 1968; Pinnow 1960-ms.; Osada 1992; Deeney 1975; Campbell/Macphail 1954, Matson 1964]

It is easy to see from the noun forms and the lists of correspondences, how difficult it can be to reconstruct actual proto-forms for Proto-Munda. In fact, such issues are not restricted to Munda languages. Similar variation is

attested in numerous other subgroups of Austroasiatic, for example, compare the Katuic forms in (7).

(7) Katuic noun correspondences (Peiros 1996)<sup>B</sup> =breathy <sup>T</sup> = tense

Bru	Kui	Pakoh	Katu	gloss
<i>nci:ʔ</i>	--	<i>kəci:k</i>	--	'comb'
<i>phərcɛ:l</i>	--	<i>ʔəcial</i>	<i>jəju:/il</i>	'heart'
<i>cɛ:m</i>	<i>cɛ:m</i>	--	<i>ʔəcim</i>	'bird'
<i>kəcah</i>	<i>kəcah-cah</i>	<i>kucah</i>	<i>kəcah</i>	'charcoal'
<i>ncəj</i>	<i>ncɛ:</i>	<i>ncɛ:<sup>T</sup></i>	<i>ncəj</i>	'body lice'
<i>ʔəca:</i>	<i>ca:ʔaca:</i>	<i>ʔəcɔ:</i>	<i>ʔəcɔ</i>	'dog'
<i>kəhial</i>	<i>khi:l</i>	<i>kijial</i>	--	'bee, hornet'
<i>kəhi:p</i>	<i>kəhɛ:p-hɛ:p</i>	<i>kəhɛ:p<sup>T</sup></i>	<i>kəhip</i>	'centipede'
<i>ʔəha:m</i>	<i>ɣha:m</i>	<i>ʔəha:m</i>	<i>ʔəha:m</i>	'blood'
<i>kla:ŋ</i>	<i>kla:ŋ-kla:ŋ</i>	<i>kla:ŋ</i>	<i>kla:ŋ</i>	'hawk, kite, eagle'
<i>nluaj<sup>B</sup></i>	--	<i>kluaj</i>	<i>cəluŋ</i>	'calf, leg'
--	<i>mɛ:ʔa:mɛ:ʔ</i>	--	<i>ʔəme:ʔ</i>	'mother'
<i>ka:n</i>	<i>ka:n</i>	<i>ʔkərnian<sup>T</sup></i>	<i>ʔəka:n-kien</i>	'child'
<i>ruaj<sup>B</sup></i>	<i>ruaj<sup>B</sup>-ʔa:ruaj<sup>B</sup></i>	<i>rirɔ:j</i>	<i>rərɔ:j</i> (AD)	'fly'
				Note also Bru <i>səruaj</i> 'horsefly'
<i>ʔətaj</i>	<i>te:ʔa:te:</i>	<i>ʔəti:</i>	<i>taj</i>	'hand'
--	<i>nta:ʔ</i>	<i>nta:ʔ</i>	<i>nta:k</i>	'tongue'
--	<i>kəta:m-ta:m</i>	<i>ʔəta:m</i>	<i>ʔəta:m</i>	'crab' (VN dam)
<i>ntre:l</i>	<i>nthre:l</i>	<i>t(i)rial<sup>T</sup></i>	<i>krial</i>	'egg'
<i>ɣha:ŋ</i>	<i>ɣha:ŋ</i>	<i>ɣha:ŋ</i>	<i>ɣha:ŋ</i>	'bone'
<i>ʔəjə:ŋ</i>	<i>dzi:ŋ</i>	<i>ʔji:ŋ</i>	<i>juŋ</i>	'foot, leg'
<i>ɣkim</i>	--	<i>nkim</i>	--	'thumb'
--	<i>təkəm-kəm</i>	--	<i>təkə:m</i>	'finger, toe'
<i>ko:ŋ</i>	--	<i>ko:ŋ</i>	<i>ʔəkəŋ</i>	'father' <sup>5</sup>
--	<i>wuaʔ-ʔa:wuaʔ</i>	--	<i>wɔ:k</i> (AD)	'monkey'
<i>təʔu:r</i>	<i>ɣʔo:r</i>	<i>ʔiŋo:r</i>	--	'hornet, bee'
<i>ɣŋo:r<sup>B</sup>-ŋo:r<sup>B</sup></i>	<i>ɣ(ə)ʔo:r</i>			

While Peiros (1996) assigns Proto-Katuic forms for each etymon, the choice in certain instances seems *ad hoc*. Rather it is likely that in various cases, the Proto-Katuic form is simply not recoverable based on the particular set of correspondences. Rather, it appears often to be the case that while individual root forms for the nouns can be recoverable for Proto-Katuic, like for Proto-Munda, the different individual Katuic languages have resolved the incompatibility of the mono-moraic root with the bimoraic word constraint in various, non-cognate ways, by selecting one of a group of morphological

<sup>5</sup>Note Bru *ko:ŋ* ('of animal')

processes (various prefixes, infixes, etc.) to derive the free-form of the noun from its corresponding root. This corresponds exactly in principle to the situation described above for Munda.

Other Austroasiatic subgroups likewise exhibit a confusing array of non-cognate free forms of nouns, while sharing obviously cognate monosyllabic roots. For example, Bahnaric (8), Palaung-Wa (9), Nicobarese (10), Aslian (11), Pearic (12), Monic (13), Khmeric (14), Viet-Muong (15) and Khasic (16).

(8) Bahnaric correspondences

Bahnar	JöLöng	gloss
<i>anah</i>	<i>tōnah</i>	‘wood, tree’
<i>kōyaa</i>	<i>rōyaa</i>	‘ginger’
<i>rōngaa</i>	<i>rōngaa</i>	‘sesame’
<i>tōmoo</i>	<i>tōmoo</i>	‘stone’

(Léger 1974: 124-5)

Bahnar	Cua	Chrau	Stieng	gloss
<i>patuol</i>	–	<i>ntūl</i>	<i>ttul</i>	‘anthill’
<i>ʔdōk</i>	<i>talōk</i>	–	–	‘monkey’
<i>muh</i>	<i>muh</i>	<i>mǔh</i>	<i>tromǔh</i>	‘nose’

(Gregerson, Smith, Thomas 1976: 393-7)

(9) Palaung-Wa correspondences (Paulsen 1992)

Kontoi	Shinman	Samtao	gloss
<i>amh̄aɕ¹</i>	<i>kaʔ¹</i>	<i>muik¹ m̄xɕ¹</i>	‘ant’
<i>ak¹rak¹</i>	<i>qhak¹</i>	<i>krak¹</i>	‘buffalo’
<i>am̄ɔy²</i>	<i>kaʔ¹ moi²</i>	<i>moi²</i>	‘cow’
<i>kətam¹</i>	<i>kaʔ¹</i>	<i>tam¹ tam¹</i>	‘crab’
<i>kənel¹</i>	<i>ɛh¹</i>	<i>kənia²</i>	‘chicken’
<i>atep¹</i>	<i>tiap¹</i>	<i>tip¹</i>	‘flea’
<i>faʔ¹</i>	–	<i>kənfəʔ¹</i>	‘gibbon’
<i>apeʔ²</i>	<i>peʔ¹</i>	<i>peʔ¹</i>	‘goat’
<i>aʔuŋ¹</i>	<i>ɔŋ¹</i>	<i>ɔŋ¹</i>	‘hornet’
<i>apləŋ¹</i>	<i>kliŋ¹</i>	<i>piŋ¹</i>	‘land leech’
<i>kənl̄ik¹</i>	<i>lik²</i>	<i>kənl̄eɕ²</i>	‘pig’
<i>kənkəŋ²</i>	<i>kəŋ</i>	<i>kənkəŋ²</i>	‘rat’
<i>kənvay²</i>	<i>kaʔ¹ vai</i>	<i>avaɪ²</i>	‘tiger’
<i>naʔuk¹</i>	–	<i>naʔɛk¹</i>	‘chest’
<i>rəʔuh¹</i>	<i>laʔ¹ uɕ¹</i>	<i>aluah¹</i>	‘fat’



<i>kət̪it̪ol'</i>	<i>kaʔ<sup>a</sup> t̪i²</i>	<i>tr̪ʔatɛŋ</i>	'navel'
<i>kəvay²</i>	<i>kaʔ<sup>a</sup> vay¹</i>	<i>avay²</i>	'thigh'
<i>ntak'</i>	<i>kaʔ<sup>a</sup> tak'</i>	<i>ŋtak'</i>	'tongue'
<i>avɔy¹</i>	<i>oi¹</i>	<i>o¹</i>	'fem. in-law'
<i>akəŋ¹</i>	<i>kuiŋ¹</i>	<i>kɔŋ¹</i>	'father'
<i>ataʔ¹</i>	<i>taʔ¹</i>	<i>ataʔ¹</i>	'g.f.'
<i>kəmiʔ²</i>	<i>kaʔ<sup>a</sup> meʔ²</i>	<i>ameʔ¹</i>	'husband'
<i>ṃmiʔ²</i>	<i>kaʔ<sup>a</sup> meʔ²</i>	<i>konmeʔ¹</i>	'man'
<i>amaʔ²</i>	<i>maʔ²</i>	<i>maʔ²</i>	'mother'
<i>kək<sup>h</sup>rɛh¹</i>	--	<i>pəkrih¹</i>	'single female'
<i>məŋ²</i>	<i>kaʔ<sup>a</sup> muiŋ</i>	<i>amɔŋ²</i>	'wife'
<i>ṃpɔw¹</i>	<i>kaʔ<sup>a</sup> pɔw¹</i>	<i>kənpun</i>	'woman'
<i>ṃpək¹</i>	<i>kaʔ<sup>a</sup> puk²</i>	<i>apɔk¹</i>	'bridge'

a = subscript +

Palaung-Wa formatives to fulfill the Bimoraic Constraint (Note: Shinman has generalized kaʔ=)

Kontoi	Shinman	Samtao	Kontoi	Shinman	Samtao
a-	kaʔ=	∅	a-	∅	∅/-
kə-	kaʔ=	∅	kən-	∅	kən-
∅	--	kən-	a(ʔ)-	∅	∅
a-	k-	∅	-ʔ-	--	-ʔ-
kən-	kaʔ=	a-	kə...tol	kaʔ=	tr̪-ʔ-a-
-ʔ-	laʔ=	a-	a-	∅	a-
ŋ-	kaʔ=	ŋ-	ṃ-	kaʔ=	kən
kə-	kaʔ=	a-	ṃ-	kaʔ=	a-
kən-	--	pə-			

(10) Nicobarese correspondences

Central Car	Shom Pen	Teresa gloss
<i>kane-tai</i>	<i>el-ti:</i>	<i>mòh-ti:</i> 'hand', etc.
	<i>noai-ti:</i>	

(Man 1975 [1888-9])

## (11) Aslian correspondences

Sn, Saii	LJ, LY	TM	SM.I/II	MM, SB, Sl, Tq	gloss
<i>ko:n</i>	<i>kəwən</i>	<i>kəwət</i>	<i>kənɔ:n</i>	<i>kənən</i>	'child'

Ks, KB, Je, BN, CW	Mr	JH	gloss
<i>wəŋ</i>	<i>kəwəl</i>	<i>ʔewaʔ</i>	'child'

Sn	Sa	LY	Tm	Sm.i	Sm.ii	JH	MM SB,Sl	Tq	gloss
<i>ʔaceh</i>	<i>co:ʔ</i>	<i>ʔaceʔ</i>	<i>cəwɔʔ</i>	<i>cɔ:ʔ</i>	<i>coʔ</i>	<i>cuwo:ʔ</i>	<i>caw</i>	<i>cɔ:h cəw</i>	'dog'

Sn	Sa	JH	gloss
<i>ʔəŋkoŋ</i>	<i>ʔəŋkoŋ</i>	<i>kərakəŋ</i>	'male'

CW	Sn, Tm, Sm.i, Sm.ii	Sa, LY, JH	MM	SB, Sl	Tq	gloss
<i>beʔ</i>	<i>ba:ʔ</i>	<i>baʔ</i>	<i>beʔ</i>	<i>baba:h</i>	<i>babah</i>	'rice'

(Benjamin 1976a)

## List of Aslian language abbreviations

KS	Kensiu	KB	Kentaqpong	Je	Jehai
Mt	Mintil	BN	Bateq Nong	CW	Che' Wong
BD	Bateg Deq	Sa	Sabum	LJ	Lanoh Jengjeng
Tm	Temiar	Sm.i/ii	Semai I, II	JH	Jah Hut
SB	Semaq Beri	Sl	Semelai	Tq	Temoq
Mr	Mendriq	Sn	Semnam	LY	Lanoh Yir
MM	Mah Meri				

## (12) Pearic correspondences

Səmray	Səmree	Chong həəp	Chong ləə	gloss
<i>mpih</i>	<i>kəpih</i>	<i>kəpi:h</i>	<i>kəpi:t</i>	'shrimp'

(Headley 1978: 86)

Chong	Song	gloss
<i>kəlaʔ</i>	<i>khla'a</i>	'leaf'
<i>kəlaʔ</i>	<i>səla:</i>	'thorn'
<i>kəpha:</i>	<i>ləpha:</i>	'tortoise'

(Diffloth 1989: 149)

Note that Chong appears to be generalizing or have generalized *kə-*.

(13) Monic (Huffman 1990: 58-83; Diffloth 1984: 69-97)

Mon (Ro)	Mon (Rao)	Mon (Thai)	gloss
<i>həcɛm</i>	<i>həcɛm</i>	<i>həcɛɛm</i>	'bird'
<i>ʔəneiaŋ</i>	<i>k/ʔəneəŋ</i>	<i>ʔ/kəniəŋ, hənɛiaŋ</i>	'kite'
<i>ʔəyaoʔ</i>	<i>k/ʔəyaoʔ</i>	<i>k/ʔəyaoʔ</i>	'worm, maggot'
<i>ʔəchao</i>	<i>k/ʔəchao</i>	<i>(ʔə)chao</i>	'red ant'
--	<i>hələŋ</i>	<i>hələŋŋ</i>	'eel'

NyahKur(N)	NK(C)	NyK(S)	gloss
<i>nciam</i>	<i>nciam</i>	<i>kənciam</i>	'bird'
<i>(ʔo)ŋliəŋ</i>	<i>ləŋliəŋ</i>	<i>liŋliəŋ</i>	'kite'
<i>nc(h)ɸuʔ</i>	<i>ncɦu.uʔ</i>	<i>kənsɸuʔ ~ kəŋchɸuʔ</i>	'worm, maggot'
<i>chaw</i>	<i>chaw</i>	<i>saw ~ chaw</i>	'red ant'
<i>ntɔoŋ</i>	<i>thɸŋthooŋ</i>	<i>kənthɔoŋ</i>	'eel'

(14) Khmeric correspondences (Pou & Martin 1981: 16, 18, 28)

Old Khmer	Modern Khmer	gloss
<i>cincaañ</i>	<i>añcaañ</i>	' <i>gmelina asiatica</i> '
<i>daŋdraəŋ ~ di-</i>	<i>kand(r)aamn<sup>(o)</sup> [hae]</i>	' <i>polygonum barbatum</i> '
<i>kañchet</i>	<i>kañchaet</i>	' <i>neptunia oleracea</i> '

(15) Viet-Muong correspondences (Hayes 1992: 222; Ferlus 1974: 73)

Muong	Rục	Thavung	gloss
<i>thăc'</i>	<i>ũsúk'</i>	<i>sək'</i>	'hair'
<i>trōc'</i>	<i>kũluòk'</i>	<i>ʔɔɔk'</i>	'head'
<i>thay'</i>	<i>kàsăŋ'</i>	<i>ksay'</i>	'tooth'
<i>ruôi'</i>	<i>mũrɔy'</i>	<i>mɔyh<sup>2</sup></i>	'fly'

Thavung	Kha bô	A-rem	gloss
<i>akəl</i>	<i>klɔ</i>	<i>t'lo</i>	'star'

(16) Khasic correspondences (Fournier 1974: 86-92)

Khasi	Lyngngam	Synteng	Amwi	gloss
<i>ksew</i>	<i>ksu:/su:</i>	<i>ksaw ~ kswa</i>	<i>ksiá</i>	'dog'
<i>sim</i>	<i>sim</i>	<i>sim</i>	--	'bird'
<i>khmat</i>	<i>kh'mat</i>	<i>khmat</i>	<i>ma:t</i>	'eye'
<i>khmut</i>	<i>leo-'mut</i>	<i>khmut</i>	<i>mur-koy</i>	'nose'

Lakadong	Mynnar	War	gloss
<i>ksaw</i>	<i>ksow</i>	<i>ksià</i>	‘dog’
–	<i>ksem</i>	<i>ksem</i>	‘bird’
<i>ma:t</i>	–	<i>ma:t</i>	‘eye’
<i>mur-koŋ</i>	–	<i>myrkoŋ</i>	‘nose’

Thus, in each sub-group of Austroasiatic, the same types of phenomena occur: when examining nominal forms from a comparative perspective, it is often quite straightforward to identify a mono-moraic root element, while the corresponding free forms of the noun appear frustratingly non-cognate. This is easy to explain if one assumes that there were mono-moraic roots, a bi-moraic word constraint operating on free forms of nouns, plus a restricted but nevertheless fairly large set of morphological processes (prefixation, infixation, reduplication, compounding, etc.) available to produce free forms corresponding to the roots. Given this, the seeming lack of cognacy of free forms found both within individual Austroasiatic subgroups and across the family as a whole is hardly surprising. Note that individual languages or subgroups may favor one or another of these processes when deriving individual or sets of free forms of nouns, e.g. within Palaung-Wa, Shinman appears to have generalized *ka?*, or within Pearic, Chong appears to have generalized *kə*. The details of this await further research.

## 2.2 Noun incorporation in proto-(south) Munda and proto-Austroasiatic

Noun incorporation, that is the formal union of a nominal and verbal element into an inflectable verb, was apparently characteristic of at least western Proto-Austroasiatic dialects, including Munda, Nicobarese, and possibly Khasi as well. The monosyllabic combining form is the form used in these incorporated constructions in these Austroasiatic groups. This pattern is thus found in all the South Munda languages, and securely reconstructable to the ancient Proto-South Munda level. A cognate pattern is also seen in such languages as Khasi and Nicobarese, suggesting this must have been a feature of the archaic dialect groups that gave rise to these modern Austroasiatic subgroups. Often, cognate combining form elements are involved, further reinforcing their likely presence at some Proto-Austroasiatic level, as this is the only level at which Khasi, Nicobarese and Munda are united.<sup>6</sup> Compare, for example, the various forms meaning ‘hand’ incorporated in Munda (17), Khasi (18), and Nicobarese (19).

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<sup>6</sup>Of course, it is also possible that this represents three parallel innovations of a highly marked feature for the South Asian macro-area. If one’s historical bent prefers multiple parallel innovations of marked features rather than shared archaic retentions, then such a researcher can feel free to interpret these data in that light. Ultimately it is a question of faith, not science, and is therefore not empirically resolvable.

(17) Noun incorporation in PSM: The combining form *\*-ti* ‘hand’

Remo	Gta?	Sora	Kharia	Juang
<i>guiti</i>	<i>gwe?-ti-ke</i>	<i>le-m-si-t-am</i>	<i>gucte</i>	<i>gucti</i>
wash-hand	wash-hand-T/A	bow-hand-NPAST-	2 wash-hand	wash-hand
‘wash hand’	‘washed hand’	‘I bow to your hands’	‘wash hands’	‘wash hands’

As discussed by Mithun in a series of papers (1984, 1985, 1986), noun incorporation manifests itself in a variety of ways across the languages of the world. In some it is fairly weakly developed and primarily lexicalized. In others, it is a robust feature that is in large part dependent on syntactic or discourse factors, etc. Indeed, various South Munda languages adhere to this typology. The process is fairly restricted in such languages as Kharia or Remo, but robust in Gta? And widespread in Sora. For details, see Anderson (2004-ms).

(18) The combining forms *\*=ti* and *\*=mat* in Khasi

Khasi

- i. *k̄ti* ‘hand’ but *tiipdeŋ* ‘middle finger’ (Rabel 1961: 44)
- ii. *khmat* but *matli?* ‘white of eye’  
also *?iimat* ‘eye’ < see-eye/face (Rabel 1961: 149)

Noun incorporation in Khasi verbs

Khasi

- i. *ʃa?ʃko.r*  
remain-ear  
‘listen’  
(Nagaraja 1985: 66)
- ii. *ot-ʃer*  
cut-foreskin/penis  
‘circumcise’  
(Nagaraja 1985: 66)

(19) Nicobarese noun incorporation

- i. *-tay* ‘hand’

*təŋ* ‘reach; up to’ *təŋtatay* ‘reach for’ (cf. *təŋmta* ‘reach at’)  
(Radhakrishnan 1981: 106)

- ii. *-mat* ‘eye’

*halepimatri* ‘examine smthg.’  
(Radhakrishnan 1981: 145)

Note the following free forms for ‘hand’ in the South Munda languages:

## (20) Free forms for 'hand' in modern South Munda languages (&lt; PSM \*X-ti)

Language	'hand'	< *Form
Sora	<i>siʔi</i>	< *= <i>ti</i> + *. <i>ʔ</i> -
Gorum	<i>siʔi</i>	< *= <i>ti</i> + *. <i>ʔ</i> -
Juang	<i>iti</i>	< *N= <i>ti</i>
Kharia	<i>tiʔ</i>	< *= <i>ti</i> + *. <i>ʔ</i> -
Gutob	<i>titi</i>	< *= <i>Redpl</i> - <i>ti</i>
Remo	<i>titi</i>	< *= <i>Redpl</i> - <i>ti</i>
Gtaʔ	<i>titi</i>	< *= <i>Redpl</i> - <i>ti</i>

While the incorporated monosyllabic combining forms from South Munda are all clearly cognate across the board, the corresponding full forms of the nouns are not. Sora-Gorum and Kharia opted for glottal infixation, Juang selected the original syllabic nasal prefix and Gutob-Remo and Gtaʔ opted for reduplication as the means of deriving the full form to fill the bimoraic constraint.

Further, the combining forms found in both Khasi and Nicobarese are cognate with the combining forms in Munda; the free forms, as mentioned above, are clearly not. Thus, it appears that these three Austroasiatic sub-groups either retained an archaic morpholexical and/or morphosyntactic process<sup>7</sup> of noun incorporation inherited from the proto-language stage, combining original mono-moraic root forms of nouns with verb stems to form verbs, or each sub-family individually innovated this highly marked feature (for the pan-South Asian area) in a pseudo-cognate fashion.

### 3. Subject and object marking in proto-Munda

Turning from more derivational or morpholexical morphological features of Proto-Munda, I will now briefly have a look at some putative inflectional morphology.

The Proto-Munda verb is likely to have been inflected for both subject and object. Subject markers were prefixed or perhaps more likely proclitic, while the object markers formed a more tightly bound unit with the verb as suffixes following the tense markers (that also were likely to be present even at the Proto-Munda level). In Proto-South Munda the subject markers had

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<sup>7</sup>As is well known, there is no one consensus about the nature of the complex process conventionally referred to as noun incorporation, even among linguists specializing in this debate (e.g. Baker (1988), Mithun, or Sadock (1980, 1986)). There are those that believe the process to be morpholexical with (morpho)syntactic consequences and those that view it as basically a (morpho)syntactic process with (morpho)lexical consequences. Resolving these highly complicated and contentious issues lies beyond the scope of this preliminary study.

become bound prefixes, though they were probably resumptive subject clitics in Proto-Munda. This weaker degree of fusion gave rise to the boundary reanalysis that must have occurred in Proto-North Munda yielding the typologically unusual systems of the modern Kherwarian languages, where subject marking appears enclitic to the word immediately preceding the verb (Anderson and Zide 2001).

A table of subject marking in South Munda languages can be found in (21).

(21) South Munda referent indexing: subject

	1	1Dli	1Dle	1Pli	1PLe	2
Kharia	-ñ/ŋ	-naŋ	-jar	-niŋ	-le	-m
Juang	-V <sub>r</sub>	ba-			nV <sub>(v)</sub>	mV <sub>(v)</sub>
Sora	-ay			-be	ə...ay	∅, m <sup>8</sup>
Gorum	ne-				le-	mo-
	1	1Dli	1Dle	1Pli	1PLe	2
Gutob	-niŋ				-nei	-nom
Remo	-(n)iŋ	-naŋ			-nay	-no
Gta?	ŋ-	ni-		næ/ne-	næ?/ne?-	na-
	2DL	2PL	3	3DL	3PL	
Kharia	-bar	-pe	-	-ki-yar	-ki	
Juang	ha-	V <sub>r</sub>	-	-ki-a	-ki	
Sora		ə...ε	-		-ji	
Gorum		bo-	-		-gi	
Gutob		-pen	-		-nen	
Remo	-pa	-pe	-			
Gta?	pa-	pe-	-		-har-	

Examples of South Munda subject marking include the following:

(22) Juang (Matson 1964, Pinnow 1960-ms.)

<i>mε-jɔ-ki-ñ</i>	<i>n-ɔn-ɖe</i>	<i>ba-sɔŋ-a</i>
2-‘see’-PRES.II-1	1PL-‘go’-PRES.I	1DL-‘buy’-FUT.II
‘you see me’	‘we go’	‘we 2 will buy’

<sup>8</sup>Only in a small subset of so-called ‘impersonal’ (Biligiri 1965) or ‘inverse’ (Anderson 1999-ms).

<i>ɟɔ:k-ɔm</i>	<i>te-me-le-niñ</i> <sup>9</sup>
‘see’-1-PRES.II-2	‘push’-3FUT-‘push’-1
‘I see you’	‘he will push me’

(23) Gorum (Aze 1973)

<i>mo-taʔy-iŋ</i>	<i>ne-aʔy-t-om</i>
2-‘give’-1	1-‘splash’-NPAST-2
‘you gave me (money)’	‘I will splash you’

(24) Remo (Fernandez 1968, 1983)

<i>way-t-iŋ</i>	<i>way-oʔ-niŋ</i>	<i>i-g-niŋ</i>	<i>sum-oʔ-no-ki</i>
‘call’-NPAST-1	‘call’-PAST.II-1	‘return’-PAST.I-1	‘eat’-PAST.II-2-Q
‘I call’	‘I called’	‘I returned’	‘did you eat?’

(25) Gutob (N. Zide 1997, field notes)

<i>suŋ-to-niŋ</i>	<i>suŋ-oʔ-nom</i>
‘throw’-CUST-1	‘throw’-PAST.II-2
‘I throw’	‘you threw’

(26) Gtaʔ (K. Mahapatra et al. 1989)

<i>ŋ-coŋ-ke</i>	<i>ŋ-coŋ-ge</i>
1-‘eat’-TENSE/ASP	1-‘eat’-PAST
‘I eat, ate’	‘I ate’

Given that cognate elements appear as prefixes in three disparate languages belonging to three separate subgroups, viz. Gtaʔ, Gorum, and Juang, there is a strong likelihood that Proto-South Munda had subject prefixes.<sup>10</sup> The loss of the subject prefixes and their replacement by subject suffixes in Kharia and in Proto-Gutob-Remo, may be the result of influence from Dravidian or Indo-Aryan languages, as this pattern is the common one in the South Asian linguistic area, while subject prefixes are highly marked features among the non-Tibeto-Burman languages of India, but are not infrequently attested in Tibeto-Burman languages of South Asia.

While subject marking is found in all South Munda languages, object marking is more restricted. However, the formal and functional

<sup>9</sup>Note the unusual infix third person subject marker in the future in Juang. This has no direct parallels in any other Munda language.

<sup>10</sup>As with noun incorporation, it is of course possible that parallel innovation of an areally marked feature (subject prefixes) had its hand in these developments. I favor an analysis suggesting that these are archaic retentions, not three separate parallel innovations.



correspondences suggest a relatively straightforward reconstruction for Proto-South Munda.

(27) South Munda referent indexing: object

	1	1DL	1PL	2	2DL
Juang	-(ni)ñ	-ñ-ba	-nen-iñ	-(n)(ɔ)m	-pa
Sora	-iñ	-ay	-lɛn/ŋ	-am/-əm	
Gorum	-iŋ	-ileŋ	-om		
	2PL	3	3DL	3PL	
Juang	-pe	--	(-ki-a)	(-ki)	
Sora	-ben	-e		-ji	
Gorum	-ibeŋ			(-gi)	

Some examples of South Munda object marking may be found in (28)-(30).

(28) Juang (Matson 1964, Pinnow 1960-ms.)

<i>mɛ:ɔ-kɪ-ñ</i>	<i>ɔ:k-ɔm</i>
2-‘see’-PRES.II-1	‘see’.1-PRES.II-2
‘you see me’	‘I see you’
<i>tele-ɔ-ñ</i>	<i>te-me-le-niñ</i>
‘push’-PAST.II-1	‘push’-3FUT-‘push’-1
‘he pushed me’	‘he will push me’

(29) Sora (Ramamurti 1931)

<i>uruŋ-l-iñ</i>
‘take’-PAST-1
‘(you) took me’
<i>an-uruŋ-l-am</i>
NEG-‘take’-PAST-2
‘(I) didn’t take you’

(30) Gorum (Aze 1973)

<i>mo-taŋy-iŋ</i>
2-‘give’-1
‘you gave me (money)’
<i>ne-aŋy-t-om</i>
1-‘splash’-NPAST-2
‘I will splash you’

As noted above, subject marking in Kherwarian is generally on the word immediately preceding the verb. Note that this may include even an overt subject pronoun itself. Object marking, as mentioned above, comes after tense/aspect suffixes (if any are present).

## (31) Referent indexing in north Munda

Mundari

*hola Ranchi-te-ŋ sen-ke-n-a*

Yesterday R-ALL-1 go-ASP-INTR-FIN

'yesterday I went to Ranchi'

(Cook 1965: 228) (Bodding 1929: 58)

Santali

*hē iŋ-iŋ cala'k-a*

yes I-1 go -FIN

'yes I will go'

Mundari

*ka-ko jom-ke-d-a*

NEG-PL eat-ASP-TR-FIN

'they didn't eat (it)'

(Osada 1992: 39)

Santali

*alo-m lāi-a-e-a*

PRHB-2 tell-BEN-3-FIN

'don't tell him'

(Bodding 1929: 81)

The correspondence between the subject prefixes of Proto-South Munda and the subject enclitics found on the word immediately preceding the verb in Proto-Kherwarian suggest that there was a boundary reanalysis during the course of the development of Proto-Kherwarian (and probably Proto-North Munda as well), reinterpreting the original prefixes or proclitics as enclitic to the immediately preceding word.

## (32) Developments of proto-Munda referent indexing markers (Anderson and Zide 2001a)

PM X  $\alpha$ -Y- $\beta$  > PSM X  $\alpha$ -Y- $\beta$ > PNM X- $\alpha$  Y- $\beta$ -FIN > Korku X Y- $\beta$ -FINPKher. X- $\alpha$  Y- $\beta$ -FINX = word preceding the verb, Y = verb stem,  $\alpha$  = SUBJ,  $\beta$  = OBJ

Resumptive pronouns are found in various eastern Austroasiatic languages as well, e.g. Katu or Palaung. Note that in Palaung, these may be non-identical phonologically to the corresponding free form of the pronoun, suggesting a further degree of grammaticalization on the way to becoming full fledged agreement prefixes. This is what has already happened in the Aslian language Temiar (35), where South Munda-like prefixes for subject are found.

## (33) Resumptive pronouns in eastern Austroasiatic

Pacoh

*a-ám anhi acân ɣai pôc*

Fathers uncles FUT 3PL go

'fathers and uncles will go'

(Watson 1966: 93)

Katu

*dó dâh dó gamak*

he quickly he become.big

'he quickly became big'

(Wallace 1965: 27)

Katu

*yi 'boor pe jaal yi chô*

we 2 3 times we return

'we returned 2 or 3 times'

(Wallace 1965: 27)

(34) Palaung

*ge hnyam be: de: loh*

they not.yet able 3 go  
‘they are not able to come yet’  
(Milne 1921: 110)

*ɔ: ka s<sup>h</sup>i:n ɔ: loh*

I NEG wish 1 go  
‘I do not wish to go’  
(Milne 1921: 22)

*vs. ɔ: ka loh*

I NEG go  
‘I’m not going’  
(Milne 1921: 108)

Palaung

*pe: hnyam ba:p de: (~pe:) loh*  
you not.yet NEC 3/2PL go  
‘you must not go yet’

Palaung

*pa:r hnyam ba:p de: (~pa:r) loh*  
you.2 not.yet NEC 3/2DL go  
‘you two must not go yet’ (Milne 1921: 19)

Palaung

*ye: ka be: ye: re*  
we NEG able 1PL wait  
‘we could not wait’

Palaung

*bi: ra:t e:h ye: ki:n ye:*  
man steal curse we curse we  
‘the thieves cursed us’ (Milne 1921: 19, 21)

(35) Subject prefixes in Aslian

Temiar

*kaʔan kaʔa-sehluh*  
you.2 2DL-blow.pipe  
‘you 2 are blow-piping’  
(Benjamin 1976: 159)

Temiar

*ʔi-sehluh nam ʔim-rec*  
1-shoot animal 1.FUT-eat  
‘I shot an animal to eat’  
(Benjamin 1976: 166)

Temiar

*toʔ ha-reprek sec mejmej na*  
NEG 2-RDPL-eat meat excellent that  
‘you didn’t eat that good meat’  
(Benjamin 1976: 167)

Object suffixes appear to be an innovation during the splitting of Proto-Munda from the western Austroasiatic dialect continuum, but one that had clearly happened by the PM level. Note however the final Palaung form in (34) above with a doubled object pronoun. This may be analogous to the original construction that gave rise to the Proto-Munda object suffixes.

Note that in Nyaheun, double-marking of subject occurs with lexical doublets. This is akin to the ‘serialized’ or ‘doubled’ pattern of inflection in auxiliary verb construction (Heine 1993; Anderson 1999), a similar construction to this probably gave rise to the double inflection seen in most Gorum auxiliary verb constructions, although in the latter instance, influence from Dravidian cannot be ruled out, and in fact, is a likely source for the rise of double marking in Gorum auxiliary verb constructions (Anderson 2003).

(36) Nyaheun

*a nyeh a wun*

I am 1 am  
‘I am I am’  
(Davis 1973: 73)

*a drək a rek*

I go 1 go  
‘I went’  
(Davis 1973: 73)

(37) a. Gorum

i. miŋ

I

‘I ate vigorously’ (Aze 1973: 279)

*ne-gaʔ-ru*

1-eat-PAST

*ne-laʔ-ru*

1-AUX-PAST

- ii. miŋ                    *ne-adaʔ-ruʔ*      *ne-k-ruʔ*  
 I                         1-thirst-PAST    1-AUXPAST  
 ‘I was thirsty’ (Aze 1973: 296)
- iii. e-niŋ                bam-(m)-iʔŋ      duk-iʔŋ  
 1                        OBJ-1 hit-OBJ    AUX-1OBJ  
 ‘it (an arrow) has hit me’
- iv. putiputi-nom    ir-*om*                luʔr-*om*  
 heart-2                beat-2                AUX-2  
 ‘your heart is beating’  
 (Aze 1973: 298) (Aze 1973: 284)

#### 4. Summary

It is hoped that the reader has gained some insight into what a Proto-Munda type of Austroasiatic language might be like morphologically speaking. Such a language is likely to have at least the following (non-exhaustive list of) characteristics. In terms of verbal morphology, the template probably looked something like this:

- (38) Subject proclitic=[causative/reciprocal prefix]-Verb-  
 [Incorporated monosyllabic Noun]-Tense/Aspect/Transitivity Suffix-  
 Object Suffix/Enclitic.

Note that the causative or reciprocal prefix and the incorporated noun elements may have been mutually exclusive, although this is not recoverable at the current level of reconstruction. Unlike the relatively elaborate verbal morphology, nominal morphology is likely to have been much more restricted, with the possible templates consisting of at least the following sub-types

- (39) Derivational or class prefix/infix=monosyllabic stem form

As reconstruction of Proto-Munda and Proto-Austroasiatic continues, these findings may of course be revised, either contracted or expanded, and certainly refined. However, given the current state of affairs in the reconstruction of earlier stages of this important and challenging language family of South and Southeast (and possibly Inner) Asia, this is what can be offered at the present. It is hoped that at the very least this will head the discussion about earlier linguistic layers in this region of the world in the right direction.

## Abbreviations Used

1	1st Person
1/CLOC	Cislocative
2	2nd person
3	3rd Person
3T/A	Transitive/Active
4	4th person
ACC	Accusative
ACT	Active
AGT	Agentive
AOR	Aorist
APPL	Applicative
ASP	Aspect(ual)
AUG	Augmented
AUX	Auxiliary
BEN	Benefactive
CAUS	Causative
COMPL	Completive
COND	Conditional
CV	Converb
DECL	Declarative
DESID	Desiderative
DET	Determiner
DIR	Direct
DL	Dual
DT	Ditransitive
EMPH	Emphatic
EXCL	Exclusive
FEM	Feminine
FIN	Finitizer
FREQ	Frequentative
FUT	Future
HABIT	Habitual
I.I.	Independent Indicative
IMPER	Imperative
IMPRF	Imperfective
INCL	Inclusive
INDIC	Indicative

INDRCTV	Indirective
INF	Infinitive
INSTR	Instrumental
ITR	Intransitive
M	Masculine
NEG	Negative
NOM/ABS	Nominative/Absolutive
NPAST	Non-Past
OBJ	Object
OBV	Obviative
OPT	Optative
PERF	Perfect(ive)
PGRG	Proto-Gutob-Remo-Gta?
PL	Plural
PORT	Portative
POSS	Possessive/-or
PRES	Present
PROG	Progressive
PRTCPL	Participle
PUNC	Punctual
PV	Preverb
Q	Interrogative
REC.PST	Recent Past
RECIP	Reciprocal
REDPL	Reduplication
REL	Relative
RFLXV	Reflexive
SBVE	Self-Benefactive
SG	Singular
SM	South Munda
STAT	Stative
SUBJ	Subject
SUBORD	Subordinate
TERM	Terminative
TRANS	Transitive

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