The rise of person inflection
with special reference to the Munda languages

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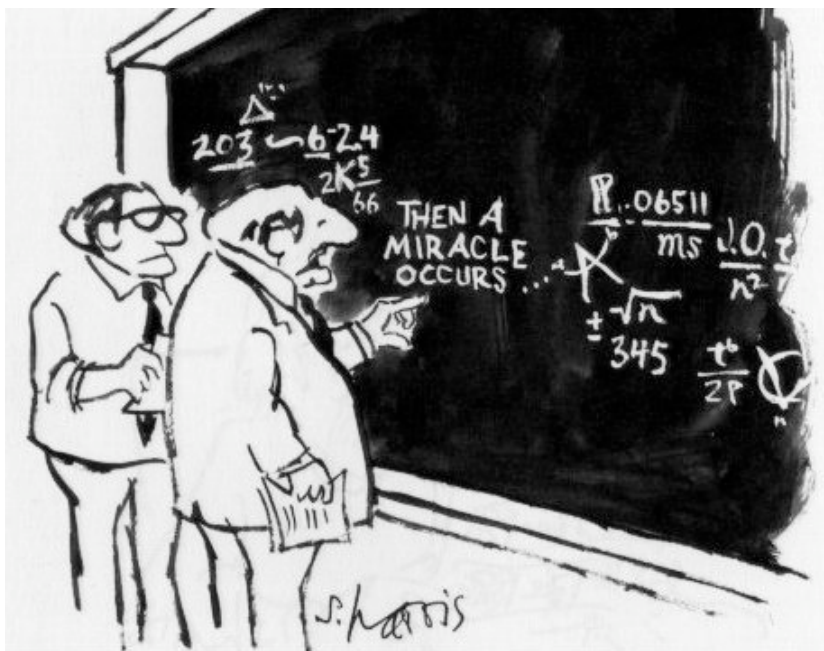
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1   Introduction

Research questions:
–   Why do some languages use bound (verbal) morphology for person cross-references and other not? Is this purely by accident, or are there typological reasons?
–   How does person marking end up bound onto the verb?

Givon on the origin of person inflection:

> 'Agreement arises via *topic-shifting* constructions in which the topicalised NP is coreferential to one argument of the verb. … When a language reanalysed the topic constituent as the normal subject or object of the *neutral*, non-topicalised sentence pattern, it per-force also has reanalyzed subject-topic agreement as subject agreement and object-topic agreement as object agreement.' (Givón 1976: 151)

(1)   The man, he   came.   →   The man   he-came.

     TOPIC   PRO VERB   SUBJ   AGR-VERB

"I think you should be more explicit here in step two."

from *What's so Funny about Science?* by Sidney Harris (1977)

In fact, there are three different questions (Givón 2001: 420-1):

(2) a. Why do contrastive stressed independent pronouns become unstressed – and eventual cliticized – anaphoric pronouns?
   b. Why do anaphoric pronouns cliticize on the verb – rather than on any other word type in the clause?
   c. Why do anaphoric pronouns become obligatorily grammatical agreement in the presence of the full NP?

Givón's (2001: 421-6) answers:

(3) a. Because of communicative over-use.
   b. Because the verb is the most likely word to appear in a clause.
       (But how does it get there?)
   c. Through topicalizing constructions: left/rigth-dislocation.
       (But how does this dislocation gets incorporated in the sentence?)

I will here only deal with the second question by investigating the cross-linguistic diversity of clitic person marking systems. I use a rather simple definition of the concept 'clitic': I look at all person marking systems that do not have a fixed position in the sentence. In the following section, a survey of languages is presented that have variable position of person marking. It turns out to be highly regular in which contexts the clitic is not found on the verb.

2   A cross-linguistic survey of variable person affigation

2.1   Indo-European

In European Portuguese, the unmarked position of the object person marking is after the main verb. However, preverbal position occurs in the following circumstances:

(4) European Portuguese (Madeira 1992; Barbosa 1996; Rouveret 1999; cf. Old Romance Ramsden 1963; Wanner 1987)

   – with sentential negation *não*
   – after initial WH-words *quem* 'who', *onde* 'where', *que* 'which', *o que* 'what'
   – after NPs with focus particles *só [X]* 'only X', *até [X]*, 'even X'
   – after focussed initial constituents
   – after complementizer *que* 'that'
   – after indefinite subjects *ninguém* 'no one', *alguém* 'someone
   – after quantified subject *todos [X]* 'all X', *poucos [X]* 'few X'
   – after preverbal adverbials *já* 'already', *nunca* 'never'

In Cypriot Greek, the unmarked position of reduced pronoun is postverbal, though preverbal/second position occurs in the following circumstance:

(5) Cypriot Greek (Terzi 1999)

   – after sentential negation *en*
   – after WH-pronouns *pjos* 'who', *ti* 'what'
   – after focused initial constituents
   – after factive complementizer *pu*
   – after subjunctive marker *na*

In Suleimaniye Kurdish, the person clitic is normally attached to the verb, but in transitive clauses the enclitic is found attached to the first word, though not all words can function as host to the clitic. Possible hosts are the following:

(6) Suleimaniye Kurdish (McCarus 1958: 104; Edmonds 1955: 497-499; MacKenzie 1961: 78; Bynon 1979: 216 ff.)

– negation
– WH-pronouns
– further: adjectives, pronouns, adverbs, preverbs can function as hosts, but not subject, prepositional phrases, interjections, conjunctions

2.2 Udi

The Lezgian (Caucasus) language Udi is exceptional among other Lezgian languages in having clitics. Udi adds clitics either on (or maybe better 'in') the verb or on the preverbal constituent. The default position is on the verb. But enclitics are attached on preverbal constituent after the following:

(7) Udi (Harris 2000: Ch. 3, 6)

– negative particle (in some conditions postverbal)
– questioned constituent
– focused constituents

2.3 Australia

The Ngumpin languages of north-central Australia have person marking enclitics, that are either found in second 'Wackernagel' position or on the verb (in various Ngumpin languages they are also found on an auxiliary-like element, which will be disregarded here). In the following Ngumpin languages, Wackernagel cliticization is attested in the following contexts:

(8) Ngarinyman (own analysis of fieldnotes kindly made available to me by E. Schulze-Berndt – in total there were only 76 utterances with clitics, so these are tentative conclusions)

– after negations
– after initial full pronouns
– after initial demonstratives
– after focussed NP (only rarely found)
– after modal adverb *ngaja* 'maybe'
– after *dumaji* 'too much' (a Kriol word)

(9) Djaru (Tsunoda 1981: 125, 256)

– after negation *wagura*
– after WH-pronouns
– after focused NP (only rarely found)
– after modal adverb *ŋara* 'possible'
– after conjunction *ɲaŋga*

(10) Gurindji (McConvell 1996: 308-309, 318-319)

– after sentential negation *kula*
– after initial WH-words
– after first constituent with contrastive focus
– after subordinator/complementizer *nyamu*
– in swearing

In various Pama-Nyungan languages in south-central australia person marking enclitics are found regularly on the verb, except in the following context, where they are found in Wackernagel position:

(11) South-central Australian languages Wackernagel clitics

    a. Southern Bagandji (Hercus 1982: 156-167)
       – after WH-pronoun
    b. Woiwurrung (Blake 1991: 73-77)
       – after negation
       – after WH-pronoun (only few cases)
    c. Arabana-Wangkangurru (Hercus 1994: 264-266)
       – after negation
       – after WH-pronoun
    d. Wathwurrung (Blake *et al.* 1998: 77-80)
       – after negation
       – after WH-pronoun
    e. Kuyani (Hercus 1994: 265-266)
       – after negation
       – after WH-pronoun
       – after various other words (not further explained in source)
    f. Yuwaalaraay (Williams 1980: 51-53)
       – after negation
       – after WH-pronoun
       – after place adverbs (only one instance)
    g. Wembawemba (Hercus 1986: 50, 56-59, 92, 135-137)
       – after negation
       – after WH-pronoun
       – after time and place adverbs

2.4 Sulawesi

The Sulawesi languages are a subgroup of the Austronesian languages, showing a wide variety in their person marking. In some Bungku-Tolaki languages (a subgroup of Sulawesi), the ergative person prefixes are attested as Wackernagel enclitic

(12) Padoe (Vuorinen 1995: 109)

– after negation *la* 'not', *aambo* 'not yet'
– after conditional *ba* 'if, when'
– after sequential *ka* 'so that'
– after subordinate *ako* 'because'

(13) Moronene (Andersen 1999: 80)

- after negation *na, sa*
- sequential *ka* 'then'
- conditional *ki* 'if', *ha* ('whenever'
- after subordinate *hi* (complementizer)
- after exclamative *taba* 'how!'

(14) Tolaki (Mead 2002: 158)

- after conditional *ke* 'if'
- after sequential *a* 'and, so that'

The person prefixes are originally ergative-like, but in some languages these prefixes also cross-reference the intransitive subjects in some contexts:

(15) Tolaki (Bungku-Tolaki, Mead 2002: 156-8) nominative marking after:

- after negative
- after consessive *ke* 'if'
- after sequential *a* 'and, so that'
- after certain complement clauses
- after scene setting at the beginning of narrative

(16) Duri (South Sulawesi, Valkama 1995: 58-62) nominative marking after:

- after negative *teqda*
- after WH-words *umbo* 'where', *ciapari* 'why', *piran* 'when'
- after question clitic *-ka*
- after conditionals *ia-na* 'if', *sanggen-na* 'until', *ia ton-na* 'when'
- after consecutive proclitic *na-*, *dikua* 'so that', *ia-mo* 'therefore'
- after prohibitive *danggiq*

2.5 Typological summary

There is a wide variety of contexts throughout the world's languages, in which person marking is not found on the default verb-adjacent position. The recurrent elements that attract the person marking away from the verb are:

(17) Cross-linguistic common person marking attractors

- (sentential) negation
- WH-words or other interrogative constituents
- constituents in focus
- (time/place) adverbials
- complementizers/subordinators/conjunctions

This attraction is in most languages clearly a relict of an older treatment of person marking in the clause. In many languages, these elements are put in first position, which means that the person marking ends up in Wackernagel position.

3   The Munda languages

The Munda languages are a subgroup of the Austro-Asiatic stock. Geographically, they are the westernmost languages of this group, located in India and surrounded by Indo-Aryan languages. The most widely spoken and the most well-known among linguists are the Kherwari languages (e.g. Mundari, Santali, Bhumij). These languages are so strongly alike as far as their person marking is concerned, that I will mostly speak only of 'Kherwari', referring to the pattern common to all these languages.

I have used the following sources for this survey of the person affixes in the Munda languages (besides language-specific sources, some general and comparative information on the Munda languages and the person affixes in particular can be found in Pinnow 1966; Bhattacharya 1975; Anderson 2001; Anderson & Zide 2001; Osada 2001; Zide & Anderson 2001).

(18) Munda subgrouping

North Munda
  – Kherwari
      BHUMIJ (Ramaswami 1992)
      HO (Deeney 1975)
      MUNDARI (Hoffmann 1903; Sinha 1975; Osada 1992)
      SANTALI (Neukom 2001)
  – Korku
      KORKU (Kotian & Kotian 1990)

South Munda
  – Central Munda
      KHARIA (Biligiri 1965a; Mahapatra 1976; Banerjee 1982; Peterson in press)
      JUANG (Matson 1964; Mahapatra 1976)
  – Sora-Gorum
      SORA (Ramamurti 1931; Biligiri 1965b)
      PARENGI/GORUM (Bhattacharya 1954; Aze 1973; A.R.K. Zide 1997)
  – Gutob-Remo-Gta
      GATAʔ (Zide 1968)
      GUTOB (N.H. Zide 1997)
      REMO/BONDA (Fernandez 1983)

4   The Munda person affixes

In some recent papers, Zide and Anderson (Anderson 2001; Anderson & Zide 2001; Zide & Anderson 2001) argue for a change in morphological boundary of person affixes in some Munda languages to explain the presence of person suffixes on the immediately preverbal word. I do not think that this conclusion is warranted. I will give a short survey of my view of the diachrony of the Munda person affixes.

There is a strong similarity among the person suffixes, for now disregarding the functional differences of their usage in the various Munda languages. The person suffixes are summarised in Table 1. Among these suffixes, there are various dual forms that

were made from the numeral *bar* 'two' (cf. Pinnow 1966: 162-5). This is most clearly attested in Kharia and Juang, but possible also in Remo/Bonda.

(19) Suffixes derived from *bar* 'two'

-*jar* < **bar*   (Kharia first dual exclusive)
-*ñba* < *ñ+*bar* (Juang first dual)
-*bar* < **bar*   (Kharia second dual)
-*pa* < *pe+*bar* (Juang and Remo/Bonda second dual)

Table 1. Person suffixes in Munda

| | 1SG | 1DUAL | | 1PLUR | | 2SG | 2DUAL | 2PLUR | |
		INCL	EXCL	INCL	EXCL				
Korku	-(i)ñ	-lam	-liñ	-buñ	-le	-mi	-piñ	-pe	(Kotian & Kotian 1990: 125)
Kherwari	-(i)ñ/ŋ	-laŋ	-liñ/ŋ	-bu	-le	-m(e)	-ben	-pe	(various sources)
Kharia	-ñ/ŋ	-naŋ	-jar	-niŋ	-le	-em	-bar	-pe	(Peterson in press)
Juang	-(ni)ñ	-ñba		-neniñ		-(nɔ)m	-pa	-pe	(Mahapatra 1976: 810)
Remo	-(n)iŋ	-naŋ		-nay		-no	-pa	-pe	(Fernandez 1983: 25)
Gutob	-niŋ	-nei				-nom	-pen		(N.H. Zide 1997)
Parengi	-iŋ	-ileŋ				-om	-ibeŋ		(Aze 1973: 243)
Sora (I)	-iñ	–		-ay	-lɛn	-ɘm	-bɛn		(Biligiri 1965b: 238)
Sora (II)	-ay	–		-be	-ay		-ɛ		(Biligiri 1965b: 248)
Proto-Munda	*-(n)iN	*-laŋ		*-liN		*-le	*-(n)om	*-pe	

In the first person non-singular, there appears to be a correspondance between -*n*- in Kharia, Juang, Remo/Bonda and Gutob versus -*l*- in Korku, Kherwari, Parengi/Gorum and Sora. I will use *-*l*-* as reconstruction of the original segment (cf. Pinnow 1966: 167; Anderson & Zide 2001: 20). The reconstruction of *-*le* follows straigthforwardly (in Parengi/Gorum and Sora, a nasal is added and in Remo/Bonda and Gutob, the vowel has become a diphtongh). Also *-*liN* can be reconstructed on the basis of Korku, Kherwari, Kharia and Juang. Note that there is a functional discrepancy, as this suffix is sometimes dual exclusive and sometimes plural inclusive (cf. Pinnow 1966: 162). Although such a combination of meanings is rare, it is attested in various languages around the world (Cysouw forthcoming).

The suffix -*(i)ñ* in Korku, Juang and Sora appears to correspond to -*(i)ŋ* in Kharia, Remo/Bonda, Gutob and Parengi/Gorum, with the Kherwarian languages showing variable expressions. Following Zide (1968: 350, n. 4), I will use the indication *-*(i)N* to refer to the reconstructed form of this suffix for Proto-Munda.

The suffixes of Sora differ from the other languages. The set that is called Sora (II) in the table is probably a recent innovation – in fact being a combination of prefixes and suffixes. The set called Sora (I) closely resembles the suffixes from the other Munda languages, except for -*ay* inclusive. This suffix is also probably a recent innovation (Biligiri 1965b: 238).

This leaves only Korku and Kherwari first plural inclusive -*bu(ñ)* and second dual -*piñ/ben*. I would propose to take these as Northern Munda innovations. Note that Anderson and Zide (2001: 20) reconstruct second dual *-*pa* for proto-Munda.

Whatever are the precise details of the reconstruction, it is obvious that these suffixes are historically related in their form. However, their function and the place of attachment is not fixed throughout the Munda languages, as will be discussed shortly.

There are only a few Munda languages that show person prefixes. The most notable cases are Juang, Parengi/Gorum and Gataʔ. In Sora, there are only prefixes attested in the first and second person plural (together with the suffixes called set II in Table 1). They might be leftovers from an erstwhile more extensive paradigm (e.g. a merger of *le* and *pe*, Pinnow 1966: 166), though they could just as well have been developed independently as number markers. There appears to be a possibility to have person prefixes in some Kherwarian languages, but this has only been noted in passing by Bhattacharya (1975). I have not been able to check the validity of this claim.

(20) Person prefixes in some Kherwarian languages (Bhattacharya 1975: 145)

a. Birhor
am   am-jom
2SG   2SG-eat
'You will eat.'

b. Koraku
(ale do)   le-calao-im-a
(1PL.EXCL)   1PL.EXCL-go-FUT-IND
'We will go.'

c. Korowa
(ale)   le-sen-ta
(1PL.EXCL)   1PL.EXCL-go-FUT.IND
'We will go.'

The person prefixes as attested in the Munda languages are presented in Table 2. They do not show any indication that a reconstruction of the prefixes is possible. When the prefixes are compared to other person markers withing each individual language, the similarities become much more obvious (see Table 3). In Juang, the pronouns appear to be build by using the person suffixes, added to a root *a-* (except for the first person non-singular). The prefixes are the last segment of the suffixes (or of the pronouns). In Gataʔ, the pronouns and the prefixes are almost completely identical. In this language, the prefixes appear to be recently bounded forms of the pronouns. In Parengi/Gorum, the dative pronouns appear to be build by using the person suffixes, added to a root *en-* (the nominative pronouns show more irregularity). The prefixes show a strong similarity to both pronouns and suffixes, though it is not clear whether either of them is the direct origin of the prefixes.

Table 2. Person prefixes in Munda

| | 1SG | 1DUAL | | 1PLUR | | 2SG | 2DUAL | 2PLUR | |
		INCL	EXCL	INCL	EXCL				
Juang	*V-*		*ba-*		*nV-*	*mV*	*a-*	*V-*	(Mahapatra 1976: 810)
Gataʔ	*N-*	*niʔ-*	*ni-*	*næʔ-*	*næ-*	*na-*	*pa-*	*pe-*	(Zide 1968: 349)
Parengi	*ne-*		*le-*			*mo-*		*bo-*	(Aze 1973: 243)
Sora	*Ø-*		–		*Ø-*	*ə-*	*Ø-*		*ə-*	(Biligiri 1965b: 232)

Table 3. Munda person prefixes compared with other person markers

| | 1SG | 1DUAL | | 1PLUR | | 2SG | 2DUAL | 2PLUR | |
		INCL	EXCL	INCL	EXCL				
JUANG									(Mahapatra 1976: 810)
pronouns	*añ*	*niñba*		*niñ*		*am*	*apa*	*ape*	
suffixes	*-(ni)ñ*	*-ñba*		*-neniñ*		*-(nɔ)m*	*-pa*	*-pe*	
prefixes	*V-*	*ba-*		*nV-*		*mV*	*a-*	*V-*	
GATAʔ									(Zide 1968: 349)
pronouns	*nəeŋ*	*niã*		*nəeʔ*	*nəe*	*na*	*pa*	*pɛ*	
prefixes	*N-*	*niʔ-*	*ni-*	*nəeʔ-*	*nəe-*	*na-*	*pa-*	*pɛ-*	
PARENGI									(Aze 1973: 243)
dative pr.	*eniŋ*		*enleŋ*			*enom*		*enbeŋ*	
suffixes	*-iŋ*		*-ileŋ*			*-om*		*-ibeŋ*	
prefixes	*ne-*		*le-*			*mo-*		*bo-*	

Whatever is the exact diachronic origin of the prefixes in these three languages, it seems clear that the prefixes are developments within each of the languages seperately. The proposal that the prefixes are very old and should be reconstructed for Proto-Munda (as proposed recently by Anderson & Zide 2001: 17-21; Zide & Anderson 2001: 531-532) does not seem to be justified. The idea of the antiquity of the prefixes goes back a long way in the history of Munda scholarship:

> 'The development of prefix forms to denote pronominal subjects was favored by the originally comparatively free position of the pronominal affixes which have this function … Pronominal prefixes as subject designation are … found chiefly in the Southern group … This formation, then, goes back at least to the time of Proto-Kharia-Sora, if not to the Proto-Munda stage.' (Pinnow 1966: 165)

> 'I would claim here that on typological grounds – these, admittedly, being rough – it seems unlikely that South Munda acquired these [subject] prefixes, and far more likely that some of the South Munda languages and North Munda lost them. Whether one would r econstruct pronominal verb prefixes for PM [Proto-Munda] is a question about the Munda verb at a still further remove from certainty. My guess would be yes. … The subject prefixes look old to me, and I think that they must go back to PM.' (Zide 1968: 348)

> 'A set of both subject proclitics and object suffixes needs to be reconstructed for Proto-Munda for first and second person subjects. … For Proto-South Mounda, both subject prefixes and object suffixes may be relatively straghtforwardly recon-structed, based on correspondences between Juang and [Parengi/]Gorum.' (Anderson & Zide 2001: 17)

The syntactic function and position of these person affixes is not constant throughout the Munda family. The function and position of the person PREFIXES (see Table 2) is still rather clear: they are found prefixes to main predicates and they are used for subject

reference in those languages that have prefixes (Juang, Parengi/Gorum, Gataʔ and possibly Sora).

In contrast, the function and position of the person SUFFIXES differs strongly throughout the various Munda languages. Basically, there are two different functions and two different positions for the person suffixes. As for function, the suffixes either mark for subject or for object (or for both). As for the position, the suffixes either occur suffixes to the main predicate or to the immediately preverbal word.

Object suffixes are found in Korku, Kherwari, Juang, Sora and Parengi/Gorum. These object suffixes always attach directly onto the main predicate.

Subject suffixes are found in Kherwari, Kharia, Gutob, Remo/Bonda and in very restricted contexts in Korku and Sora (viz. the suffixes of set I, I diregard the set II here, as I believe they are a recent innovation in Sora). The subject suffixes are either suffigated to the main predicate or to the word that is directly preverbal to the main predicate (cf. a type 5 clitic in the typology of Klavans 1982; Klavans 1985; see also the subsequent discussion in Smith & Johnson 2000: 401-402; Peterson 2001). The languages differ as to when these two positions are used. A summary of the contexts of preverbal vs. postverbal attachment is given in Table 4.

(21) Santali (Kherwarian, Neukom 2001: 113-114, 146-150)
Unmarked position of subject marking is on the preverbal constituent (a), except when there is no preverbal constituent (b) and in imperatives (c).

   a. *ba-**ko***   *badae-a*
     NEG-**3PL**   know-IND
     'They don't know.'

   b. *met-a-pe-kan-a-**ɲ***
     say-APPL-2SG.O-IPFV-IND-**1SG**
     'I tell you.'

   c. *masɛ*   *mit'*   *ghəri*   *dɔhɔ-ɲɔ̃g-eɲ-**pe**!*
     PTCL   one   moment   put down-litle-1SG.O-**2PL**
     'Put me down for a moment!'

(22) Kharia (Peterson in press)
Subject suffixes are postverbal (a), except with sentential negation, in which the subject marking comes immediately preverbal, suffigated onto the negation (b).

   a. *am-bar*   *hokaɽ-te* *yo-te-**bar***
     2-2.HON   3SG-OBL see-PAST-**2.HON**
     'You (polite) saw him/her.'

   b. *am-bar*   *hokaɽ-te* *um-**bar***   *yo-te*
     2-2.HON   3SG-OBL NEG-**2.HON** see-PAST
     'you (polite) did not see him/her'

(23) Sora (Biligiri 1965b: 233)
Person suffixes are only used for subject cross-reference in impersonal predicates.

   a. *dɛ-l-**iñ***
     become-PAST-**1SG**
     'I became.'

(24) Gutob (N.H. Zide 1997: 317-323)
Subject marking is enclitic to the verb, see (a), except in case of one of the following preverbal elements, when the person marker is enclitic to this preverbal element:
– some WH-pronouns *ũdoj* 'when', *monoʔ* 'where', *maŋ* 'why', see (b)
– some adverbs *eke* 'here', *aʔ* 'now', *begi* 'quickly', *dapre* 'afterwards'

    a. *jom-lai   bu-oʔ-**NIŋ***
       name-ACC   beat-PAST-**1SG**
       'I will beat up Jom.'
    b. *NIŋ   ũdoj-**NIŋ**   sorpei-oʔ-beʔ-tu*
       1SG   when-**1SG**   hand over-PAST-AUX-FUT
       'When will/do I hand over (the girl to the tiger)?'

(25) Korku (Bhattacharya 1975: 145; Anderson & Zide 2001: 20)
Person suffixes are only used for subject cross-reference in locational predicates.

    a. *ura-**iñ***
       house-**1SG**
       'I am in the house.'
    b. *di-kiñ   Sikag-òn-**kiñ***
       3SG-3DL   Chicago-LOC-**3DL**
       'They-2 are in Chicago.'

(26) Remo/Bonda (Fernandez 1983: 20-25)
Person suffixes are always used for subject cross-reference.

    a. *layk-t-**iñ***
       sit-NON.PAST-**1SG**
       'I sit.'

Table 4. Position of suffixal set when used for subject reference

LANGUAGE	PREVERBAL POSITION	POSTVERBAL POSITION
Kherwari	always, except:	with imperatives and with one-verb sentences
Kharia	after negation	all other contexts
Gutob	after interrogative words; after certain adverbs	all other contexts
Sora	never	only with impersonal verbs
Korku	never	only with locative predicates
Remo/Bonda	never	all verbs

In the light of the typological survey presented above, the situation in Kharia and Gutob seems to reflect an older situation of the morphological attachment of person marking.

The usage of person affixes in the various Munda languages is summarised in Table 5. Two generalisations are proposed on the basis of this table. First, the presence of person prefixes (which were argued above to be innovations) is clearly related to the absence of

subject suffixes. The two problematic cases are Korku and Sora, that almost never use the suffixes for subject (as indicated by the brackets in the table), but do not have innovated subject prefixes. Sora innovated new subject circumfixes but Korku did nothing – this being the main exception for this first generalisation. Second, the usage of the suffixes for object cross-reference is clearly related to the absence of suffixes for subject cross-reference. The two problematic cases being the Kherwarian languages and Gataʔ. The Kherwarian languages developed a strict distribution of position to distinguish between subject and object suffixes, and in this way managed to use the suffixes for both subject and object, a structure not attested in any other Munda language. In constrast, Gataʔ does not give any indication that it ever has had person suffixes. It might have been the case, but then they are lost without a trace. It seems better to assume that Gataʔ developed the person prefixes without any prior loss of person suffixes – an indication being that the prefixes are strongly alike to the reconstructed suffixal set for Proto-Munda.

Table 5. Summary of person affixation in Munda

	OBJECT SUFFIXES	SUBJECT SUFFIXES	SUBJECT PREFIXES
Korku	+	(+)	−
Kherwari	+	+	−
Kharia	−	+	−
Juang	+	−	+
Parengi/Gorum	+	−	+
Sora*	+	(+)	−
Gutob	−	+	−
Remo/Bonda	−	+	−
Gataʔ	−	−	+

* The circumfixes consisting of the set II suffixes together with the prefixes
are disregarded here. I consider them to be a recent innovation.

From this summary, a speculative development of person affixes in the Munda languages can be given. This development does not fit in completely with the current historical-comparative hypotheses fo relatedness, based mainly on lexical and phonological evidence. Still, I would like to pursue the reconstruction of the person affixes as a separate branch of evidence: if it fits in with the lexical and phonological evidence, no more need to be said. If there are discrepancies, then further investigation is needed as to where these discrepancies come from: maybe there have been independent parallell developments, or there has been contact induced influence between languages from different branches, or the lexical/phonological evidence might be open to a new interpretation.

An important watershed appears to be whether a language has developed object suffixes or not. This separates the Gutob-Remo-Gta branch plus Kharia from the rest. They all did not develop object suffixes from the shared affixal person set. Within these languaes, Gataʔ used the person markers as prefixes, the others used them as suffixes. Gutob en Kharia show variation in the placement of the suffixes (either preverbal or

postverbal), while Remo/Bonda regularised its subjectsuffixes as strictly postverbal. Clearly, Kharia is the odd one out in this group.

Among those languages the developed object suffixes, Korku is the only that does not show any sign of a separate subject affixation. All others did develop subject marking in some way. The Kherwarian languages show one options: they used the same markers as already in use for the object marking. The other languages, Sora, Parengi/Gorum and Juang all three (separately) developed new subject prefixes.

Table 6. Usage of the Proto-Munda affixes from Table 1, compared with the Munda family structure.

AFFIX FORM/FUNCTION			LANGUAGE	FAMILY STRUCTURE
are prefixes			GATAʔ	Gutob-Remo-Gta
are suffixes	mark subject	are postverbal	REMO/BONDA	
		are partly preverbal	GUTOB	
			KHARIA	Central Munda
	mark object	with new subject affixes	JUANG	
			PARENGI/GORUM	Sora-Gorum
			SORA	
		and also mark subject	KHERWARI	North Munda
		without subject affixes	KORKU	

The diachronic development of bound person marking in Munda can tentatively be summarised as follows:

(27) Tentative development of Munda person affixation

− Originally there were no bound person markers.
− Gataʔ represents a separate development, using prefixes.
− Gutob and Kharia show rests of the oldest stage of variably subject person enclitics, in which the attachment depends on the presence of particular elements in the sentence.
− Remo/Bonda represents a straightforward regularisation of subject suffixes.
− All other languages regularised the reference of the enclitics to object reference, using different ways to re-invent subject reference.
− Among these, Kherwari represents the most conservative structure, using the suffixes for both subject and object, though with different kinds of hosts.

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