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Some Syntactic Aspects of Lexical Anaphors in Select Munda Languages¹

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Abstract

This paper investigates several syntactic aspects of anaphors (reflexives and reciprocals) in Santali, Mundari and Ho (Munda languages). In this paper we intend to show that the verbal reflexivization strategy is an indigenous device and that the nominal reflexivization strategy is a form calqued from the neighbouring Indo-Aryan languages. The verbal reflexive device performs various other functions such as a detransitivizing marker, passive marker, and self-benefactive marker. The nominal reflexive is optional when the verbal reflexive is absent. Long-Distance Binding is not permitted when the anaphor occurs in a subcategorized position. Reciprocity is achieved through the infixation of a morpheme -pV- in the main verb, where the vowel V in -pV- harmonizes with the nucleus of the first syllable of the main verb. Some verbs have a special form when the verbal anaphor occurs.

Keywords: anaphora, pronouns, language comparison **ISO 693-3 codes:** sat, unr, hoc, mni, tel

0 Introduction

Reflexives and reciprocals, generally labelled as an aphors, have been a focus of study for a considerable period of time. In this paper, we discuss several syntactic aspects of anaphors in three select languages of the Munda subfamily of the Austro-Asiatic family. The languages chosen are: Santali, Mundari and Ho. Note that the use of the term 'anaphor' in this narrow sense is different here from the traditional use, but follows the terminology as generally used in generative grammar (Chomsky 1981).

0.1 Occurrence of anaphors in different language families

Subbarao (2012) presents an extensive study of anaphora in Dravidian, Indo-Aryan, Tibeto-Burman and some Austro-Asiatic languages. He shows that South Asian languages have both nominal and verbal anaphors and that the occurrence of either of these by themselves or together in a sentence is a language specific property. We give three examples to illustrate this. Manipuri

¹ We'd like to thank our language consultants Subodh Hansda and Sanat Hansda for providing data on Santali, Thakur Munda Prasad for providing data on Mundari and Pradip Bodro providing data for on Ho. These data were collected during our fieldtrips to Shantiniketan and Ranchi in 2011 by J. Mayuri and Ka:rumu:ri .V. Subba:ra:o. We are also thankful to Felix Rau and Paul Sidwell for their helpful comments.

(Tibeto-Burman) has a complex form of nominal reflexive as in (1a), Telugu (Dravidian) has a simplex form of nominal reflexive as in (1b) and Ho has a verbal reflexive as in (1c): 2

Mani	ipuri					
1a.	ai-na	i-sa-na	i-sa-bu		t ^h agat-i	
	I-nom	I-self-nom	I-self-acc		praise-fut	
	'I will prai	se myself.'				
Telu	gu					
1b.	pratiːvaːdi	-ki:	tanu		goppava:diga:	anipista:du
	every.fell		self.nom		great.person	appears
	'Every pe	rson thinks th	at he is gre	at.'		
Но						
1c.	am	arsi-re-m		nel-	ke- n -a	
	you	mirror-in-2s.	SAM	see-	pst- vr -[+fin]	
	-	yourself in the				

There are languages in the subcontinent that have both a complex (polymorphemic) form, as in the example (1a) above, and a simplex (monomorphemic) form of the nominal anaphor as in (1b). Both forms are permitted in a 'subcategorized position' (Chomsky 1965) (Subbarao 2012 for details). A verbal reflexive implies a morphosyntactic encoding of the verbal predicate itself, as illustrated by (1c). In Ho the detransitivizing marker -n- performs the function of a verbal reflexive.

A few Tibeto-Burman languages, (Ao, Tenyidie for example) have a homophonous form for a pronoun and an anaphor. Most of the Indo-Aryan languages - except Gujarati, Marathi and Sinhala - and some Tibeto-Burman languages have only the nominal form of anaphor. All Dravidian languages, except Malayalam and Toda, and many Tibeto-Burman languages and Khasi (Mon-Khmer) have both a nominal anaphor and a verbal anaphor. Most of the Munda languages have only a verbal anaphor as an indigenous device, and the nominal anaphor borrowed from the neighbouring Indo-Aryan languages.

Some of the prominent features that we will discuss are the following:

- 1. The indigenous device for manifesting anaphora is the *verbal device*. The detransitivizing marker -n- performs the function of a verbal reflexive. The verbal reciprocal is formed by infixing -pV- in the stem, where the vowel V in -pV- is a variable whose value is dependent on the nucleus of the initial syllable.
- 2. Santali, Mundari and Ho have a *simplex form* of the nominal anaphor either borrowed or calqued from the neighbouring superstrate Indo-Aryan languages such as Hindi, Sadri, and Bengali.
- 3. Constructions involving reflexive in a subcategorized position have a unique form of the verb stem where it occurs with a suffix -*sk* in Santali and -*en* in Mundari and Ho. The occurrence of such suffix is *optional*, while the occurrence of the verbal device (reflexive) is obligatory. Thus, it is the verbal device that functions as the primary device triggering reflexivity.
- 4. The verbal device does not occur in a non-subcategorized position. In such cases, the occurrence of the nominal reflexive is obligatory, when the verbal reflexive is absent.

The paper is organized as follows: Section 1 deals with the devices used for anaphoric reference. Section 2 provides the verbal morphology of anaphoric constructions. Section 3 lists the forms occurring as nominal anaphors. Section 4 discusses the multifarious nature of the verbal reflexive device. Section 5 focuses on the valence reducing function of the verbal reflexive *-n*. Section 6 deals with special verb forms in reflexive constructions. Section 7 discusses the structural dependency between the nominal and the verbal reflexive. Section 8 concerns itself with interactions between reflexivity and Long-Distance Binding. Section 9 discusses Exceptional Case

² The reflexive marking elements are in bold; co-reference is encoded by italics.

Marking (ECM). Section 10 focuses on the issue of the 'accusative marker' and the nominal reflexive in the three Munda languages under consideration. Section 11 discusses the formation of reciprocal constructions and the special verb forms for reciprocals, a unique feature found in the Santali, Mundari and Ho. Section 12 is the conclusion.

1. Devices used for anaphoric reference

Santali, Mundari and Ho have both *verbal* and *nominal anaphors*. While, the verbal reflexive *-n-* and the verbal reciprocal -pV- (see section 11 for details) are *the indigenous devices*, used primarily for anaphoric reference, the nominal reflexive is borrowed or calqued from the neighbouring contact languages such as Sadri, some of the dialects of Hindi-Urdu or Bengali with which these languages have been in intense contact for a long period of time. By indigenous devices, we mean that, these languages had only the verbal devices genetically, and they did not possess any nominal device. It is worth mentioning that a nominal reciprocal is absent in these languages.

In (2)-(4), -n- is the verbal reflexive and the entity in the argument position indicated in bold is a nominal reflexive. The nominal anaphor is optional, while the occurrence of the verbal device is obligatory.

Santali

2. $p \partial t^h u \partial k \partial$ **akote**-k ∂ student-pl **themselves**-SAM praise-pst-**vr**-[+fin] 'The students praised themselves.'

Но

dobro ajek²te arsi-rε nel-ke-n-a
 Dobro himself mirror-in see-pst-vr-[+fin]
 Dobro saw himself in the mirror.²

Mundari

4.	hən-kə	akəte	arsi-re-kɔ	nel-ke- n -a
	child-pl	themselves	mirror-in-SAM	see-pst-vr-[+fin]
	'The children	n saw themselves	s in the mirror.'	

2 Verb morphology of anaphoric constructions

The morphological parsing of a verb with a verbal reflexive is as follows:

main verb + tense + (verbal reflexive) + finite marker + (subject agreement marker).

A sentence having a verb with the morpheme alignment mentioned above is given in (5) from Santali³:

3 Form used as a nominal anaphor

In Santali, Mundari and Ho, the nominal reflexive is scarcely used. Hence, it was not possible to find the corresponding nominal anaphor for each of the personal pronoun as these languages use the verbal reflexive as the *primary device* to establish anaphoric reference. We provide the forms of the pronoun and their corresponding nominal reflexive in Tables (1)-(3). X is a variable that stands for the postposition that occurs with the nominal anaphor and the nature of the postposition depends on the structural or inherent case assigned by the predicate.

³ The preverbal constituent is the subject itself as there is no other constituent preceding the verb. Hence, the subject agreement marker (SAM) occurs to the right of the subject itself.

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Table 1: Forms of nominal anaphors in S	Santalı
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Pronoun	gloss	reflexive	postposition (near, about, with etc.)	gloss
uni	he/she	ac^{γ}	-X	himself/herself
akэ	he/she they	аkэ	-X	themselves
-	-	a:prɛ	-X	self's

pronoun	gloss	reflexive	postposition (near, about, with etc.)	gloss
ae	he/she	ajek [?]	-X	himself/herself
an	Ι	ар	-X	myself
aben	you	aben	-X	yourself
akə	they	акэ	-X	themselves
ape	you (pl)	ape -ape	-X	yourselves
abu	we (incl)	abu -abu	-X	ourselves

Table 2: Forms of nominal anaphors in Ho

Table 3: Forms of anaphors in Mundari

pronoun	gloss	reflexive	postposition (near, about, with etc.)	gloss
akə	they	аkэ	-X	themselves
ae	he/she	aja?	-X	himself/herself
-	-	apna	-X	self's

The nominal reflexive *apna* (Mundari) in table 3 is borrowed from neighbouring Indo-Aryan languages.

4 Multifarious nature of the verbal reflexive device

The monomorphemic verbal reflexive -n- performs a variety of functions in the languages under discussion such as a verbal reflexive as in (6) and (8), a passive marker as in (7) and (8), an [-transitive] marker as in (9) and a self-benefactive as in (10b).

In the Santali example in (6) -n- is playing the role of a verbal reflexive marker:

6.	ophɛl	arsi-rɛ-j	μεl-ε- n -a
	Ophel	mirror-in-SAM	see-pst- vr -[+fin]
	'Ophel say	w himself in the mirror.	,

The Ho-example in (7) illustrates *-n-* as a *passive marker*

7. *pulis-ko-te kumbu sap-ja-n-a* police-pl-by thief catch-pst-**pass**-[+fin] 'The thief was caught by the police.'

Note that an example as in (8) "is ambiguous between a verbal reflexive reading and a passive reading." (Subbarao 2012:63).

Ho

8. pro_i sinbona-ta²a-re-m_i ema-ke-n-a you God-to-in-SAM give-pst-**vr/passive**-[+fin] 'You gave yourself to God.'/'You were given to God.'

Psychological predicates in South Asian languages are intransitive by nature and hence, they have monadic valence.⁴ Munda languages provide further evidence to substantiate this fact. An intransitive verb in these languages carries the morpheme *-n-*. In these languages it is the *[transitive]* marker that occurs with psych-predicates as illustrated by the Ho-example in $(9)^5$:

Но 9.

dobroaj-lona:ra:jo:-ka-n-aDobrohe/she-withanger-pst-[-tr]-[+fin]'Dobro is angry with him.''

There is another use for -n-, the [-transitive] marker as self-benefactive. Take the example in (10a), the verb *isin* 'cook' in Ho is [+transitive], and it takes the [+transitive] marker -d-.

Ho

10a. *un-kin-kin isin-akaw-d-a* they-dual-SAM cook-pst-[+**tr**]-[+fin] 'They (dual) cooked (something).'

In (10b), the marker -n- occurs contrary to the expected occurrence of [+transitive] marker -d-.

10b. *un-kin joma:g²-kin isin-akaw-n-a* they-dual food-SAM cook-pst-**self ben**-[+fin] 'They (dual) cooked food for themselves.'

However, -n- in (10b) does not function as a valence reducer, but functions as selfbenefactive. Thus, (10b) is an example where the form of the verb *isin* 'cook' indicates that it is syntactically [-transitive] but is semantically [+transitive] in nature.⁶

5 -n- functioning as an anti-causative / valence reducer

The phenomenon of valence reduction is demonstrated through the syntactic minimal pairs in (11a), (11b), (12a), (12b), (13a) and (13b), respectively. Santali (11a) contains a transitive verb and thereby, it carries a transitive marker *-d-*. However, (11b) is detransitivized into an anti-causative/medio-passive. A similar phenomenon is also observed in Ho as in (12a) and (12b) and Mundari as in (13a) and (13b). In Dravidian, Tibeto-Burman and Mon-Khmer languages too, the verbal reflexive functions as a valence reducer (see Subbarao 2012: 91 for details).

Santali

- 11a. $baha_i$ $duwar-\varepsilon_i$ $j^hi:c^2-k\varepsilon-d-a$ Baha door-SAM open-pst-[+tr] - [+fin] 'Baha opened the door.'
- 11b. duwar $j^hi:c^2 \cdot \epsilon \cdot n \cdot (j)a$ door open-pst- [-tr] -[+fin] 'The door opened.'

Но

12a. sumi silpin kesek²-ke-**d**-a Sumi door close-pst-[+tr] -[+fin] 'Sumi closed the door.'

⁴ For evidence in support of this claim, see Subbarao 2012.

⁵ For further details see Mayuri *et al* 2014.

⁶ This construction is similar to the non-nominative subject construction in Indo-Aryan and Dravidian where the predicate is [-transitive] syntactically but is semantically [+transitive] in nature (Subbarao 2012: 177-178).

12b. silpin ajak²-te kesek²-je-**n**-a door self-by close-pst-[-**tr**]-[+fin] 'The door closed by itself.'

Mundari

- 13a. (ap)duwarnik²-ke-d-a-p(I)dooropen- pst-[+tr]-[+fin]-SAM'I opened the door.''I
- 13b. *duwər nijə-ka-n-a* door open-pst-**[-tr]**-[+fin] 'The door opened.'

6 Special verb forms in reflexive constructions

As mentioned earlier, Santali, Mundari and Ho have a special verb form,⁷ when the verb carries a verbal reflexive. Santali verb roots are marked by the verbal suffix $-2k^{2}-\theta$, Mundari and Ho by *-en-*. Thus, it is a unique feature of these languages to have distinct verb stem to denote reflexivity as in (14), (15) and (16). A list of verbs with such verbal morphology is provided in tables (4), (5) and (6) below. However, irrespective of the presence of the special form, it is the verbal reflexive *-n-* that manifests reflexivity⁹. Moreover, the unique verbal reflexive suffix $-2k^{2}-e^{n}$ may be dropped¹⁰ without effecting the grammaticality.

Santali

14.	in	arsi-rɛ-ɲ	реl()k) - ka-n-a
	I	mirror-in-SAM	look(refl)-pres-vr-[+fin]
	'I an	n looking at myself in the	mirror.'

Mundari

15.hon-koako-tearsi-renel(en)-ke-n-achild-plthey-accmirror-insee(refl)-pst-vr-[+fin]'The children saw themselves in the mirror.'

Ho

16.	dəbrə	aj ajte	gojen/gok² (en) -ja-n-a
	Dobro	himself	kill(refl)- pst-vr-[+fin]
	'Dobro k	tilled himself.'	

The following tables provide a list of the verbs and their special forms.

Table 4: List of verb stems in Santali

verb	gloss	reflexive	gloss
nel	see	pel-ək'	to see oneself
эl	write	əl-ək²	to write to oneself
ЕТ	give	em-ək?	to give oneself
goc	kill	guj-uk	to kill oneself
(Ghos	sh 2008:7	70)	

⁷ The special form of the verb occurs only when the verbal anaphor occurs. Thus, the special form of the verb does *not* occur when the verbal reflexive functions like a detransitivizer or as a "*self benefactive marker*". A similar situation is found in Santali, Mundari and Ho.

⁸ According to Ghosh (2010: 88), -*sk* in Santali functions both as a passive and a reflexive. *sk* is marked as middle voice by Neukom (2001: 64) and he also says, "the suffix –*sk* loses its vowel after stems ending in a vowel, eg., *idi* 'take' + -*sk*'-> *idi*-*k*' 'be taken'. Santali also has a verbal suffix -*foy* indicating medio-passive (Ghosh 2008: 70. The nature of the morpheme -*foy* requires to be investigated further.

⁹ -n- and -en- are used to indicate reflexivity (Burrows 1980: 73, Deeney 1975: 12) in Ho. The verbal reflexive functions as a passive marker too in Ho. (Subbarao2012).

¹⁰ Optionality is indicated by parentheses.

Table 5: List of verb stems in Mundari

verb	gloss	reflexive	gloss
5	to put on	5	to put on oneself
lel	to see	lel-en	to see oneself
(Anderson: 2007: 46, Ghosh 2008: 129)			

Table 6: List of verb stems in Ho

verb	gloss	reflexive	gloss	
em	to give	em-en	to give oneself	
tam	to strike	tam-en	to strike oneself	
atom	to move	atom-en	to move oneself	
bai	to make	bai-n	to make for oneself	
abung	to wash	abung-en	to wash oneself	
dul	to pour	dul-en	to pour over oneself	
(Burrows 1980:73)				

7 The structural dependency between the nominal and the verbal reflexive

In the following sections, we present evidence how the nominal reflexives occurring in a subcategorized or in a non-subcategorised position relate to presence/absence of the verbal reflexive.

7.1 The structural dependency between the nominal reflexive occurring in a subcategorized position and the verbal reflexive

In Santali, Mundari and Ho, the presence of a nominal reflexives is obligatory, when the verbal reflexive is absent as in (17a), (18a) and (19a). However, it is optional,¹¹ when the verbal reflexive is present as in (17b), (18b) and (19b).

Santali

Danta				
17a.	child- pl	themselves	<i>arsi-rɛ</i> mirror-in lves in the mirro	see-pst-[+tr] -[+fin] -SAM
17b.	child- pl	themselves	<i>arsi-rɛ</i> mirror-in ves in the mirror	see-pst-vr-[+fin]-SAM
Mund	lari			
18a.	hən-kə _i	akəte _i	arsi-re-kɔ	lel-ke -d -a
			mirror-in-SAM wes in the mirror	see-pst-[+tr]-[+fin]
18b	hon-ko:	(akəte);	arsi-re-ko	lel-ke -n -a
100.	child-pl	themselves	mirror-in-SAM	<i>lel-ke-n-a</i> see-pst-vr-[+fin]
			ves in the mirror	
Но				
19a.			arsi-re	
	Dobro	himself	mirror-in	see-pst-[+tr]-[+fin]-SAM
	'Dobro saw	himself in the	mirror.'	

¹¹ The optionality of the nominal entity is depicted parenthetically.

19b. <i>dobro_i</i>	(ajɛk²te) _i	arsi-re	nɛl-ke- n -a-j
Dobro	himself	mirror-in	see-pst-vr-[+fin]-SAM
'Dobro sa	w himself in th	e mirror.'	÷

7.2 The structural dependency between the nominal reflexive in a non-subcategorized position and the verbal reflexive

When the nominal reflexive occurs in a non-subcategorized position, the verbal reflexive is not permitted as is illustrated in (20)-(22). The non-occurrence of verbal reflexive is due to the fact that the transitivity of the predicate is unaltered and thus, the transitive marker -d-/-d- takes precedence over the verbal reflexive. Since reflexivity is not manifested in the verb, co-reference has to be encoded through the presence of a nominal reflexive (in italics).

Santali

20.	<i>hɔpna_i</i> Hopna	<i>ac²-so:rrɛ</i> himself-near two snakes near]	<i>bin-kin_j-</i> snake-di himself.'			kɛ -d- ɛ _j -(j)a pst-[+ tr]-(DAM-[+fin]
Mun 21.	<i>somri</i> Somri	<i>aj-ak²</i> herself-gen a snake beside		-in	<i>mijan</i> one	<i>biŋ</i> snake	<i>lel-ke-q-a</i> see-pst -[+tr] -[+fin]
Ho 22.	<i>asai</i> Asai 'Asai saw a	<i>ajɛk²-japak²-r</i> himself-near a snake near hin	-in	<i>mijal</i> one	k²/mɔjak²	<i>biŋ</i> snake	nel-ke -q -a see-pst -[+tr] -[+fin]

8 Reflexivity and Long-Distance Binding

Long-Distance Binding refers to 'the coindexation of an anaphor in a lower clause with an antecedent in a higher clause *outside* its minimal clausal domain. Such coindexation is an apparent violation of Principle A of the Binding principles.' (Subbarao 2012:75), following Chomsky (1981, 1986). Factors that, among others, influence Long-Distance Binding are the following:

- 1. whether an anaphor occurs in a subcategorized position or not,
- 2. whether the anaphor is complex nominal form (polymorphemic), and
- 3. whether the anaphor occurs in a non-finite embedded clause or not.

Factor (i) is relevant: Long-Distance Binding is *not* permitted when the nominal anaphor occurs in a *subcategorized position* as in Santali (23a) and permitted when the nominal anaphor occurs in a *non-subcategorized position* as in (23b). A similar restriction is obeyed in Mundari as in (24a) and (24b), and in Ho too as in (25a) and (25b).

Santali Anaphor in a <i>subc</i>	ategorized position	on			
23a. [məntri _i	gidrə _j	$[PRO_j$	<i>ac²tɛ∗_{i/j}</i> self.acc		e] metak [?] -de-a] tell-[+tr]-[+fin]
'The minis	ter _i asked the cl	hild _j to pr	raise self _{*i/j} .'	_	
Anaphor in a non-	subcategorized p	osition			
23b. [$baha_i$]	$arel_j [PRO_{i/j}]$	ac [?] i/j	-lagid [?] ca	i: benaw	re] metak²-de-a]
Baha	Arel	self-	for te	a make	tell-[+tr]-[+fin]
'Baha _i ask	ed Arel _j to make	e some tea	a for self _{i/j} .'		

Mundari

Anaphor in a *subcategorized position*

24a. [somra_i sugar_j-ke [PRO_j ajak^{γ}_{*i/j}-ba:re-re barai-mente] kajej-tan-a] Somra Sugad-acc self-about-in praise-comp tell-pres-[+fin] 'Somra_i asks Sugad_i to praise self_{*i/j}.'

Anaphor in a non-subcategorized position

24b.	[somra _i	sugad-ke _j	$[PRO_{i/j}]$	aj-lagid _{i/j}	caːha	baj-mente]	kajije-kan-a]
	Somra	Sugad-acc		self-for	tea	make-comp	tell-pres-[+fin]
	'Somra _i a	isks Sugad _i to	o make te	a for self _{i/i} .'			

Ho .

Anap	hor in a <i>sub</i> e	categorized posit	tion		
25a.	[mɔntrii	hən-kə-tej	[PROj	ajak ² te * _{i/j}	sahraːo]-ici-ke-d-a]
	Minister	child-pl- by		self	praise-caus-pst-[+tr]-[+fin]
	'The mini	ster _i made the o	children _j j	praise themsel	ves* _{i/j} .'

Anaphor in a non-subcategorized position

25b.	[dəbrə _i	sumi-ke _j	mita-di-(j)a	$[PRO_{i/j}]$	aj _{i/j} -lagid?	caːj	bajimɛ]]
	Dobro	Sumi-dat	tell-[+tr]-[+fin]		self-for	tea	make
'Dobro _i asked Sumi _j to make tea for self _{i/j} .'							

These examples underscore the fact it is the subcategorized position of the anaphor that is significant and, not the morphological complexity of the predicate.

9 Exceptional Case Marking (ECM)

ECM (Exceptional Case Marking) is a phenomenon that involves the case marking of the subject of the embedded clause by the verb of the matrix clause. This phenomenon is observed in all the South Asian languages, except optionally in Telugu (Dravidian), Dumi (Tibeto-Burman), Kashmiri (Indo-Aryan) (Subbarao 2012: 144-146).

The following examples are illustrative.

Santali

26a.	[baha _i	$[(ac^{?})-ac^{?}-t\epsilon_{i}$	adi	cɛhraː-e]	monɛk²-a]
	Baha	self-self-acc	a lot	pretty-SAM	considers-[+fin]
	'Baha cor	nsiders herself p	retty.'		

Mundari

26b.	[somri _i	[(aj [?])-aj [?] - t ɛ _i	ti∴vi∶-re	duraŋ-tante]	ajum-ke-d-a]
	Somri	self-self-acc	T.V-in	singing-while	see-pst-[+tr]-[+fin]
	'Somri sav	v herself singing o	on T.V.'		_

Ho

26c.	[asai _i	$[(ajak^{?})-ajak^{?}-t\varepsilon_{i}$	hosijər-ɛ]	manati/baintana-tan-a]
	Asai	self-self-acc	clever-SAM	consider-pres-[+fin]
'Asai considers herself clever.'				_

In (26a) in Santali, the form $ac^2 - ac^2 - te$ occurs in a case-marked position where the matrix verb exceptionally case marks the derived object. If the postposition -te in $ac^2 - ac^2 - te$ is treated as an emphatic, a [+transitive] verb such as $monek^2$ 'consider' would lack a direct object in the derived structure, which is a clear violation of the Theta Criterion (Chomsky 1981). Hence, $ac^2 - ac^2$ has to be treated as a reflexive and the postposition -te has to be treated as an accusative case marker. A similar structure can also be found in Mundari (26b) and (26c) above.

10 A note on the 'accusative marker' and the nominal reflexive in Santali, Mundari and Ho

The nominal reflexive ac^2 in Santali, aj in Mundari and ajak in Ho are calculated on the pattern of the nominal anaphor in contact Indo-Aryan languages. The postposition -te in Santali and -te in Mundari and Ho performs several functions.

- 1. It functions like the instrumental postposition 'with, by' when it occurs with a noun such as ca:ku 'knife' (Santali).
- 2. When the postposition $-te/-t\varepsilon$ follows the reflexive in a subcategorized position such as the direct object, it functions like an accusative marker. In ECM constructions too, it functions like an accusative marker as in (26).

Our analysis of treating the marker $-te/-t\varepsilon$ is in contrast to the normally-held view that Santali, Mundari and Ho do not have an accusative marker. Evidence for our claim comes from the following fact. In the ECM construction, if $-te/-t\epsilon$ is treated as an emphatic marker, it is difficult to explain why either a reduplicated or a simplex form of the nominal anaphor which functions like an emphatic occurs in a position that is case-marked by the matrix verb.

Some supporting evidence comes from Psych (psychological)-predicates:

With Psych (psychological)-predicates, when the argument is coindexed with the subject, an anaphor (reflexive) occurs in a subcategorized position, it is locative case-marked in Santali (27), instrumental case-marked in Mundari (28) and Ho (29). In Mundari and Ho, it is the postposition te that imparts the interpretation of 'with'.

Santali

27

7.	upəl	aːprɛ-cetaːnrɛ	bejaːr-aka-n-a-ε
	Upəl	self-on	angry-pst-[-tr] -[+fin] -SAM
	'Upel wa	is angry/ upset with	herself.'

Mundari

28.	somra	apna-te-ge	naraj-men-a-e
	Somra	herself-with-emph	anger-is-[+fin] -SAM
	'Somro	is angry with herself.'	

Ho

```
29.
               ajɛk-te
                                 kurkure/ra:gua-ka-n-a
     sumi
               herself-with
     Sumi
                                 anger-pst-[-tr]-[+fin]
     'Sumi was angry with herself.'
```

11 Reciprocals

The languages under discussion (and this holds more generally for the Munda languages) do not have nominal reciprocals. It is a special feature of these languages to have the verb stem itself manifesting reciprocity through verbal reciprocal infixation. The verb also carries -n- in it which indicates that the marker -n- in (30) functions as a detransitivizer/valence reducer, as illustrated in the Santali example (30) from Minegishi and Murmu (2001: 104):

Santali

30.	unkin -kin	ø	da: -pa: -l-ka: -n -a
	they.dual-dual		hit.1-vrec-hit.2-pst-[-tr]-[+fin]
	'They (two of the	em) we	re hitting each other.'

On the other hand, if the marker -n- is interpreted as a detransitivizer, then, we observe that the detransitivizer and the reciprocal infix together impart reciprocity, a phenomenon not found thus far in any South Asian language that we know of.

In reciprocal verbs, the reciprocal infix -pV- is placed immediately after the first syllable of the root verb. The vowel V in -pV- indicates the position of occurrence of the vowel that harmonizes with the vowel of the first syllable of the verb stem as in tables (7)-(9) below. For

convenience, the morphological parsing of the root verb has special glossing. For example, in Ho ti is glossed as 'pour.1' which is the first part of the reciprocal verb, pi as 'vrec' and l as 'pour.2', the second part of the reciprocal verb.

Table 7	/
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Но			
verb	gloss	reciprocal	gloss
capada	to slap	c a -p a -pada	'slap1-vrec-slap2'
til	to pour	t i -p i -l	'pour1-vrec-pour2'

Table 8

Santa	li		
verb	gloss	reciprocal	gloss
dal	'beat'	d a -p a -l	'beat1-vrec-beat2'
εт	'give'	ε -p ε -m	'give1-vrec-give2'

Table 9

Mundari			
verb	gloss	reciprocal	gloss
эl	to write	з-pɔ-l	'write1-vrec-write2'
nel	to see	n e -pe-l	'see1-vrec-see2'

Note that the detransitivizing marker -n- appears in reciprocal constructions, as in the Santali (31b), and likewise in Mundari (32b), and Ho (33b).

Santali

31a.	<i>arɛl</i> Arel 'Arel saw Ba	<i>baha-ε</i> Baha-SAM ha.'	nɛl-aka-d-ɛ- see-pst-[+tr]	a]-OAM-[+fin]
31b.	<i>arɛl</i> Arel 'Arel and Bal	<i>a:r</i> and ha saw each oth	<i>baha:</i> Baha her.'	<i>pɛ-pɛ-l-aka-n-a-kin</i> see.1-vrec-see.2-pst-[-tr] -[+fin]-SAM
Mun 32a.	dari <i>gangu</i> Gangu 'Gangu kiss	Asai-acc	¥ 0	
32b.	<i>gangu</i> Gangu 'Gangu and	<i>ondo</i> and Asai kissed e	<i>asai</i> Asai ach other.'	<i>cə-pə-rəp-ja-n-a</i> kiss.1-vrec-kiss.2-pst-[-tr]-[+fin]
Ho 33a.	<i>somra</i> Somra	<i>somri-kɛ</i> Somri-acc	<i>ica-ke-d-a</i> pinch-pst-[+	-tr]-[+fin]
33b.	<i>somra</i> Somra Somra and So	<i>at</i> and omri pinched e	<i>somri</i> Somri ach other.'	<i>i-pi-ca-ja-n-a</i> pinch.1-vrec-pinch.2 -pst-[-tr]-[+fin]

12 Conclusion

In this paper, we have discussed some specific syntactic aspects of anaphors in Santali, Mundari and Ho. The indigenous devices for anaphora are the verbal reflexive and the verbal

reciprocal. Nominal reflexives also exist, however, they are either borrowed from neighbouring Indo-Aryan languages or they are calqued forms. It is a special feature of these languages to have the reciprocal infixed in the root verb. The languages do not possess nominal reciprocals. These languages have special forms of root verbs when a verbal reflexive occurs. The nominal reflexive and a verbal reflexive have structural dependency. Further, the Long-Distance Binding is sensitive to the subcategorized or non-subcategorized position of the nominal anaphor.

Glosses and abbreviations

[+fin] : finite	OAM : Object Agreement Marker
[+tr] : transitive	pass : passive
[-tr] : intransitive	pl : plural
AA: Austro-Asiatic	pst: past
acc : accusative	SAM : Subject Agreement Marker
caus: causative	self ben: self benefactive
dat: dative	Sg : Singular
DR : Dravidian	TB: Tibeto-Burman
refl: reflexive	vr: verbal reflexive
IA: Indo-Aryan	vrec: verbal reciprocal
incl: inclusive	-

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