Two ways of suspending object agreement in Puma: between incorporation, antipassivization, and optional agreement

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1. Introduction

Kiranti languages typically have agreement with two arguments of transitive verbs, but it is also generally possible to suspend agreement with the object argument (which is in these languages a primary object in the sense of Dryer (1986, 2006), i.e. a grammatical relation aligning the sole object of monotransitives with the most goal-like argument of ditransitives). Sentences with object agreement and those without differ from each other not only in their semantics but also in many syntactic properties: it seems that in most Kiranti languages we are dealing here with two distinct syntactic structures and not simply with a case of optional agreement, i.e. a pattern where the presence of absence of agreement is found within exactly the same syntactic environment (with the same principles of case assignment and argument licensing) and responds exclusively to semantic and pragmatic parameters of discourse. However, there have so far been only very few detailed analyses of the relevant structures. Taking a closer look at Limbu and Belhare data (both Eastern Kiranti), respectively, Angdembe (1998) and Bickel (2003, 2004, 2006) find that constructions with suspended object agreement show typological similarities to both what is described as antipassivization in some languages and what is called object incorporation in other languages.

In this paper we analyze the syntax and semantics of suspended object agreement in Puma, a Southern Kiranti language.[1] The Puma data are particularly revealing because the language has two versions of suspended object agreement, one following the general Kiranti model, and one involving a dedicated prefix *kha-* which we gloss as an antipassive marker. We show that the two kinds of suspended object agreement in Puma share some crucial properties but that the one marked by *kha-* is typologically closer to antipassivization in other languages while the other (unmarked) shares more properties with incorporation and optional agreement.

After explaining the basic morphological set-up of the two constructions in Section 2, we first describe the syntax of the two constructions (Section 3) and then focus on the semantics and the usage of the construction in discourse (Section 4). In Section 5 we summarize our findings and compare the Puma constructions to what is known in other languages as incorporation, antipassivization and optional agreement.

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[1] ISO 639-3: pum. The data discussed here was collected with support from the Volkswagen Foundation, DOBES Program, Grant No. II/79 092 (2004-2009), which is gratefully acknowledged (see Gaenszle et al. 2005 for a first report on the project, and http://www.uni-leipzig.de/~ff/cpdp for further information on the project). For helful comments of an earlier draft, we thank Martin Haspelmath and two anonymous reviewers. Interlinear glossing follows the Leipzig Glossing Rules (http://www.eva.mpg.de/ lingua/files/morpheme.html), with the addition of ADD 'additive focus' and REP 'reportative'. Examples that are not provided with a text reference are elicited. All examples, whether from texts or elicitation, were double-checked by two of us (Prem Dhoj Rai, Shree Kumar Rai), who are native speakers. The texts and paradigms analyzed in this paper are deposited at the DOBES archive (http://www.mpi.nl/DOBES).

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Section 6 draws general conclusions from these findings for the typology of detransitivization.

2. Morphology

Puma verbs regularly agree with the sole argument of intransitives (S), the most agent-like argument of transitives (A) and the primary object (P) of transitives. Tables 1-3 contain sample past and nonpast indicative paradigms of simplex verbs (i.e. verbs with a single, non-bipartite, monomorphemic stem without any stem alternation beyond coronal augments that appear only before vowels).[2] Table 1 shows an intransitive verb (*phind-* 'jump'), while Tables 2 and 3 illustrate a transitive verb *(cind-* 'teach'), both with an augment *–d* that surfaces only in prevocalic position.

	Nonpast	**Past**
1s	*phinŋa* *pʌphinnʌŋ*	*phindoŋ* *pʌphinnʌŋ*
1di	*phinci* *pʌphincimin*	*phindaci* *pʌphindacimin*
1pi	*phindi* *pʌphindimin*	*phindanin* *pʌphindanimin*
1de	*phincika* *pʌphinciminka*	*phindacika* *pʌphindaciminka*
1pe	*phindika* *pʌphindiminka*	*phindaninka* *pʌphindaniminka*
2s	*tʌphin* *tʌphinnin*	*tʌphinda* *tʌphinden*
2d	*tʌphinci* *tʌphincimin*	*tʌphindaci* *tʌphindacimin*
2p	*tʌphindi* *tʌphindimin*	*tʌphindanin* *tʌphindanimin*
3s	*phin* *pʌphinnin*	*phinda* *pʌphinden*
3d	*pʌphinci* *pʌphincimin*	*pʌphindaci* *pʌphindacimin*
3p	*mʌphin* *nipʌphinnin*	*mʌphinda* *nipʌphinden*

Table 1: Affirmative and negative indicative paradigm of *phind-* 'jump'

[2] Puma distinguishes several stem classes, and we limit illustrations here to the simplest class. The analysis of stem classes and of complex (bipartite and compound) stems is beyond the scope of the current paper. In any event, there is no evidence that stem morphology interacts with the syntactic and semantic properties of suspended object agreement.

<table>
<tr><td></td><td>1s</td><td>1di</td><td>1pi</td><td>1de</td><td>1pe</td><td>2s</td><td>2d</td><td>2p</td><td>3s</td><td>3ns</td><td>ø</td></tr>
<tr><td>1s</td><td colspan="5" rowspan="5"></td><td>cinna
pʌcinnen</td><td>cinnaci
pʌcinnacimin</td><td>cinnanin
pʌcinnanimin</td><td>cinduŋ
pʌcinnʌŋ</td><td>cinduŋcʌŋ
pʌcinnʌŋcʌŋ</td><td>khacinŋa
khapʌcinnʌŋ</td></tr>
<tr><td>1di</td><td colspan="3" rowspan="3"></td><td colspan="3" rowspan="3"></td><td>cinci
pʌcincimin</td><td>cincici
pʌcincicimin</td><td>khacinci
khapʌcincimin</td></tr>
<tr><td>1pi</td><td>cindum
pʌcindummin</td><td>cindumcʌm
pʌcindumcʌmmin</td><td>khacindi
khapʌcindimin</td></tr>
<tr><td>1de</td><td rowspan="2">nitʌcin
nitʌcinnin</td><td>nitʌcinci
nitʌcincimin</td><td rowspan="2">nitʌcindi
nitʌcindimin</td><td>cincika
pʌcinciminka</td><td>cincicika
pʌcinciciminka</td><td>khacincika
khapʌcinciminka</td></tr>
<tr><td>1pe</td><td>nitʌcindi
nitʌcindimin</td><td>cindumka
pʌcindumminka</td><td>cindumcʌmka
pʌcindumcʌmminka</td><td>khacindika
khapʌcindiminka</td></tr>
<tr><td>2s</td><td>tʌcinŋa
tʌcinnʌŋ</td><td colspan="2" rowspan="3"></td><td colspan="2">khatʌcin
khatʌcinnin</td><td colspan="3" rowspan="3"></td><td>tʌcindi
tʌcindin</td><td>tʌcindici
tʌcindincin</td><td>khatʌcin
khatʌcinnin</td></tr>
<tr><td>2d</td><td>tʌcinŋacʌŋ
tʌcinnʌŋcʌmʌŋ</td><td colspan="2">khatʌcinci
khatʌcincimin</td><td>tʌcinci
tʌcincimin</td><td>tʌcincici
tʌcincicimin</td><td>khatʌcinci
khatʌcincimin</td></tr>
<tr><td>2p</td><td>tʌcinŋanʌŋ
tʌcinnʌŋnʌmʌŋ</td><td colspan="2">khatʌcindi
khatʌcindimin</td><td>tʌcindum
tʌcindummin</td><td>tʌcindumcʌm
tʌcindumcʌmmin</td><td>khatʌcindi
khatʌcindimin</td></tr>
<tr><td>3s</td><td>pʌcinŋa
pʌcinnʌŋ</td><td>khacin
khapʌcinnin</td><td>pʌcincika
pʌcinciminka</td><td>pʌcindika
pʌcindiminka</td><td>tʌcin
tʌcinnin</td><td>tʌcinci
tʌcincimin</td><td>tʌcindi
tʌcindimin</td><td>cindi
pʌcindin</td><td>cindici
pʌcindincin</td><td>khacin
khapʌcinnin</td></tr>
<tr><td rowspan="2">3d</td><td rowspan="2">pʌcinŋacʌŋ
pʌcinnʌŋcʌmʌŋ</td><td rowspan="2">khapʌcinci
khapʌcincimin</td><td colspan="2">nipʌcincika</td><td rowspan="2">nitʌcin
nitʌcinnin</td><td rowspan="2">nitʌcinci
nitʌcincimin</td><td rowspan="2">nitʌcindi
nitʌcindimin</td><td rowspan="2">pʌcinci
pʌcincimin</td><td rowspan="2">pʌcincici
pʌcincicimin</td><td rowspan="2">khapʌcinci
khapʌcincimin</td></tr>
<tr><td colspan="2">nipʌcinciminka</td></tr>
<tr><td rowspan="2">3p</td><td rowspan="2">nipʌcinŋa
nipʌcinnʌŋ</td><td rowspan="2">khamʌcin
khanipʌcinnin</td><td colspan="2">nipʌcindika</td><td rowspan="2">nitʌcindi
nitʌcindin</td><td rowspan="2">pʌcin
nipʌcindin</td><td rowspan="2">mʌcindici
nipʌcindincin</td><td rowspan="2">khamʌcin
khanipʌcinnin</td></tr>
<tr><td colspan="2">nipʌcindiminka</td></tr>
</table>

Table 2: Nonpast affirmative and negative indicative paradigm of *cind-* ‘teach’

	1s	1di	1pi	1de	1pe	2s	2d	2p	3s	3ns	ø
1s						*cinnaa* *pʌcinnen*	*cinnaaci* *pʌcinnaacimin*	*cinaanin* *pʌcinnaanimin*	*cinduŋ* *pʌcinnʌŋ*	*cinduŋcʌŋ* *pʌcinnʌŋcʌŋ*	*khacindoŋ* *khapʌcinnʌŋ*
1di									*cindaci* *pʌcindacimin*	*cindacici* *pʌcindacicimin*	*khacindaci* *khapʌcindacimin*
1pi									*cindum* *pʌcindummin*	*cindumcʌm* *pʌcindumcʌmmin*	*khacindanin* *khapʌcindanimin*
1de						*nitʌcinda*	*nitʌcindaci* *nitʌcindacimin*	*nitʌcindanin*	*cindacika* *pʌcindaciminka*	*cindacicika* *pʌcindacicimin ka*	*khacindacika* *khapʌcindaciminka*
1pe						*nitʌcinden*	*nitʌcindanin* *nitʌcindanimin*	*nitʌcindanimin*	*cindumka* *pʌcindumminka*	*cindumcʌmka* *pʌcindumcʌmminka*	*khacindaninka* *khapʌcindaniminka*
2s	*tʌcindoŋ* *tʌcinnʌŋ*		*khatʌcinda* *khatʌcinden*						*tʌcindi* *tʌcindin*	*tʌcindici* *tʌcindincin*	*khatʌcinda* *khatʌcinden*
2d	*tʌcindoŋcʌŋ* *tʌcinnʌŋcʌmʌŋ*		*khatʌcindaci* *khatʌcindacimin*						*tʌcindaci* *tʌcindacimin*	*tʌcindacici* *tʌcindacicimin*	*khatʌcindaci* *khatʌcindacimin*
2p	*tʌcindoŋnʌŋ* *tʌcinnʌŋnʌmʌŋ*		*khatʌcindanin* *khatʌcindanimin*						*tʌcindum* *tʌcindummin*	*tʌcindumcʌm* *tʌcindumcʌmmin*	*khatʌcindanin* *khatʌcindanimin*
3s	*pʌcindoŋ* *pʌcinnʌŋ*	*khacinda* *khapʌcinden*	*pʌcindacika* *pʌcindaciminka*	*pʌcindaninka* *pʌcindaniminka*		*tʌcinda* *tʌcinden*	*tʌcindaci* *tʌcindacimin*	*tʌcindanin* *tʌcindanimin*	*cindi* *pʌcindin*	*cindici* *pʌcindincin*	*khacinda* *khapʌcinden*
3d	*pʌcindoŋcʌŋ* *pʌcinnʌŋcʌmʌŋ*	*khapʌcindaci* *khapʌcindacimin*	*nipʌcindacika* *nipʌcindaciminka*			*nitʌcinda*	*nitʌcindaci* *nitʌcindacimin*	*nitʌcindanin*	*pʌcindaci* *pʌcindacimin*	*pʌcindacici* *pʌcindacicimin*	*khacindaci* *khapʌcindacimin*
3p	*nipʌcindoŋ* *nipʌcinnʌŋ*	*khʌmʌcinda* *khanipʌcinden*	*nipʌcindaninka* *nipʌcindaniminka*			*nitʌcinden*	*nitʌcindanin* *nitʌcindanimin*	*nitʌcindanimin*	*pʌcinda* *nipʌcindincin*	*mʌcindici* *nipʌcindincin*	*khamʌcinda* *khanipʌcinden*

Table 3: Past affirmative and negative indicative paradigm of *cind-* ‘teach’

Past and nonpast forms are neutralized in many cases, because the past tense suffix *–a* regularly deletes before vowels (e.g. *cind-a-i* > *cind-i* = *cind-i* 's/he teaches/taught him/her'). Older speakers tend to maintain a distinction in careful pronunciation (but not in fast speech) between past tense forms with long and/or low-tone vowels, such as [cindɔ̀ːŋ] 'I taught him/her' vs. [cindɔŋ] 'I teach her/him', or [cindɪ̀ː] 'S/he taught him/her' and short-vowelled nonpast forms like [cindɪ] 's/he teaches him/her', derived from assimilation of *–a* to the subsequent vowel, followed by merger with that vowel (i.e. **cind-a-u-ŋ* > *cinduuŋ* > *cinduːŋ*, **cind-a-i* > *cindii* > *cindiː*). (Length and tone play no role in the phonology of Puma elsewhere.) In this paper we follow the speech of the younger generation, which also represent the majority of our informants. Thus, when we translate neutralized forms as past, nonpast would often be equally appropriate, and vice-versa.

Table 4 summarizes a preliminary morpheme analysis, drawing in part on Stutz (2005). Position classes (numbered) are based exclusively on formal co-occurrence and sequencing constraints.

1	*kha-* '1nsP' or 'ANTIP'
2	*ni-* 'nsA/S'
3	*pʌ-* 'NEG' or '3S/A'
	tʌ- '2'
	mʌ- '3pS/A'
Stem	
1	*-a* 'PST; IMP'
	-na '1s>2'
	-ŋa '1sS/P.NPST'
	-oŋ '1sS/P.PST'
	-nʌŋ '1sNEG'
	-u ~ *-i* '3P'
2	*-ŋ* '1sA'
	-m '1/2pA'
	-i '1/2p' ~ *-nʌ* (_N) ~ *-nin* (V_) ~ *-ni* (V_N) ~ *-e* (after high V) or 'ns' (in 1>2 forms)
	-ci ~ *-cʌ* (_N)'d'
3	*-nin* 'NEG' (if directly after the stem)
	~ *-n* (after vowels)
	~ *-mʌ* (in 1sP forms)
	-en 'NEG.PST' (from *–a-in* 'PST')
4	*-ci* '3nsP' ~ *-cʌ* (_N) ~ *-cin* (after *–in* 'NEG')
5	*-ŋ* '1s' (copy suffix triggered by *ʌ/a*-suffixes)
	-m '1pA' (copy suffix triggered by *ʌ/a*-suffixes)
6	*-min* 'd/pNEG'
7	*-ka* 'e'

Table 4. Affix analysis of simplicia (indicative mood only)

The last columns in the transitive paradigms in Tables 2 and 3 contain the forms with suspended object agreement (identified as such by 'ø' in the object agreement header). These forms are identical to intransitive inflection, except for the presence of the prefix

kha-. The prefix *kha-* can also be dropped, but only if there is an overt object NP in the clause (most typically, with inanimate semantics). This is shown by the following example, with the verb *lamma* 'to search, look for'.

(1) a. *samen / doromen lam-u-ŋ.*
someone something search-3sP-1sA

'I looked for someone/something.' (e.g. to help me work on this)

b. *kha-lam-oŋ.*
ANTIP-search-1sS.PST

'I looked for someone/people.'

c. *doromen lam-oŋ.*
something search-1sS.PST

'I looked for something/stuff.'

Example (1a) is an active transitive form, (1b) is a form with suspended object agreement and the prefix *kha-* (equivalent to the forms in last column of Table 3). The form in (1c) is the same but lacks the prefix; instead of the prefix, there is an object NP *doromen* 'something'. In either case, the forms with suspended object agreement are identical with regular intransitive forms, as becomes evident when comparing the last column of Tables 2 and 3 with the forms in Table 1.

In the following we discuss the syntactic and semantic properties of the two forms illustrated by (1b) and (1c). We refer to suspended object agreement with a *kha*-prefix as the '*kha*-detransitive' and to suspended object agreement without this prefix as the 'ø-detransitive'.

3. Syntax

With transitively inflected verb forms, the A argument is obligatorily assigned ergative case in Puma. The P argument is assigned dative case. Dative case (*-lai*[3]) is obligatory for the most goal-like argument of ditransitives, but it is banned from the least goal-like argument of ditransitives (typically, themes); with monotransitives, dative case is optional, but the odds for case marking are higher for human than non-human, animate than inanimate, and definite than indefinite arguments — thus following a pattern roughly similar to well-known instances of differential object marking from South Asia to Turkish and Spanish.

(2) a. *ŋa-a yoŋni(-lai) tup-u-ŋ.*
1s-ERG friend(-DAT) meet- 3sP-1sA

'I met a/the/my friend.'

[3] It is possible that the dative case marker is borrowed from Nepali *-lāī,* which has the same form and function.

b. *ŋa-a yoŋni-lai chetkuma(*-lai) itd-u-ŋ.*
1s-ERG friend-DAT clan.sister(*-DAT) give-3sP-1sA
'I gave a/my sister to a/my friend (in marriage).'

While case assignment is differential, the agreement morphology of transitively inflected verb forms always follows a primary object pattern, aligning the sole object of monotransitives always with the most goal-like argument of ditransitives.

With detransitive forms, case assignment and agreement follow the syntax of intransitive clauses: agreement is exclusively with the A argument, and the A argument is obligatorily assigned the (zero-marked) nominative case. The behavior of the P argument is different for ø-detransitives and *kha*-detransitives. We discuss the two structures in turn.

3.1 The ø-detransitive

While dative-marking of objects is optional in transitive clauses, as shown by (3a), with ø-detransitive forms, the P argument obligatorily appears in the (zero-marked) nominative case; the dative is ungrammatical here, as shown by (3b):

(3) a. *khim(-lai) copp-u-ŋ.*
house-DAT look.NPST-3sP-1sA
'I look at the/a house.'

b. *khim(*-lai) cop-ŋa.*
house (-DAT)look-1sS.NPST
'I see houses.' or 'I do house-seeing.' (in general, does not entail the existence of a specific house that the speaker has in mind)

The object is obligatory in ø-detransitives: as shown by the following example, the object cannot be dropped under any pragmatic condition. This is in contrast with regular transitive clauses, where all arguments are syntactically optional.

(4) a. *ŋa reḍio en-ŋa.*
1s radio hear-1sS.NPST
'I do radio-hearing.' (in general, does not entail the existence of a specific radio that the speaker has in mind)

b. **ŋa en-ŋa.*
1s hear-1sS.NPST
Intended: 'I hear something.'

The absence of a nonzero case affix, obligatory appearance, and the translation might suggest that the object is incorporated in these examples. However, unlike in what one would expect under incorporation, the object need not be adjacent to the verb:

(5) a. *ŋa khim cop-ŋa.*
1s house look-1sS.NPST

b. *khim ŋa cop-ŋa.*
house 1s look-1sS.NPST

Both: 'I looked at houses.'

Both versions here are equally grammatical, and there is only a slight difference in information structure, so that in (5b) *khim* 'house' is more topical than in (5a).

If the pragmatics allow it, it is possible to relativize on the detransitivized object argument. Again, this would be unexpected under classical incorporation (although see Hermelink 1992 for a very unusual case of relativization on incorporated arguments). Example (6a) shows relativization on a detransitivized object; for comparison, (6b) and (6c) illustrate relativization on a transitive object and on the A argument of a detransitivized clause, respectively:

(6) a. [[*uŋ-yoŋni khip=ku*] *kitap*] [*novel*].
1sPOSS-friend [3sS-]read=NMLZ book novel

'The kind of book my friend reads is novels.'

b. [[*uŋ-yoŋni-a khipd-i=ku*] *kitap*] [*novel*].
1sPOSS-friend-ERG [3sA-]read-3sP=NMLZ book novel

'The (specific) book my friend reads is a novel.'

c. [[*novel khip=ku*] *uŋ-yoŋni*] [*tʌkku*].
novel [3sS-]read=NMLZ 1sPOSS-friend DEM

'This is my friend who reads novels.'

Suspended agreement cuts semantic entailments to an individuated, enumerable object referent (cf. Section 4 below), and so the translation of a relative construction in (6a) needs to include a 'kind of' notion, with generic reference. Example (6b) is the corresponding active transitive construction, where the relativized NP has entails an indidual existing referent. The data in (6c) show that under detransitivization, the agent (now realized as an S argument) is still also a possible target of relativization. Since the referential status of this argument does not differ from the one in transitive clauses, no 'kind of' relation is entailed.

In line with its positional freedom, the object argument retains full-fledged NP status: unlike what is known from Limbu (Angdembe 1998: 20) and Belhare (Bickel 2006: 166ff) detransitivization, the object argument can be freely expanded by adjectival modifiers, as attested by the following example:

(7) *ŋa kʌheppaŋ khim cop-ŋa.*
1s big house look-1sS.NPST

'I look at big houses.'

With ditransitive verbs, only direct objects (i.e. the least goal-like object argument) can be detransitivized:

(8) a. *gai-lai ghasa itd-u-ŋ.*
cow-DAT grass give-3sP-1sA
'I gave the cow grass.'

b. *gai-lai ghasa itd-oŋ.*
cow-DAT grass give-1sS.PST
'I gave grass to the cow.'

c. **ghasa gai itd-oŋ.*
grass cow give-1sS.PST
Intended: 'I gave cows grass.'

(8a) represents a standard ditransitive structure. In (8b), the theme argument *ghasa* 'grass' is ø-detransitivized: it is obligatory and has non-specific reference. (8c) is ungrammatical because it is not possible to ø-detransitivize the primary object (the most goal-like argument) *gai* 'cow'. Thus, the relevant grammatical relation for the purpose of detransitivization aligns monotransitive objects with ditransitive themes (direct-object alignment). This is in contrast to agreement in non-detransitived clauses, which is governed by a grammatical relation aligning monotransitive objects with ditransitive goals (primary-object alignment). (Case marking follows either a primary or a direct object pattern, depending on the referential status of the monotransitive object; cf. above.)

3.2 The *kha*-detransitive

Whereas the ø-detransitive requires an overt object NP, the *kha*-detransitive bans overt objects. At the same time, the *kha*-form requires that the object referent be human. Thus, the only possible *kha*-detransitive of (9a) is one without any overt object NP but with human object semantics, as shown in (9b):

(9) a. *ŋa-a kho-lai enn-u-ŋ.*
1s-ERG 3s-DAT hear.NPST-3sP-1sA
'I hear him/her.'

b. *ŋa (*kho(lai) / *tokku(lai) / *mʌnna(lai) / *baja(lai)) kha-en-ŋa.*
1s 3s(DAT) DEM(DAT) person(DAT) song(DAT) ANTIP-hear-1sS.NPST
'I hear someone/people.', *not:* * 'I hear something.'

Since the *kha*-detransitive is specialized for human semantics, the ø-detransitive is most commonly used 'elsewhere', i.e. with non-human semantics (as per Pāṇinī's Law). But this does not mean that the ø-detransitive is incompatible with human objects. If the speaker wishes to be more specific about the nature of the human objects referenced by a detransitive form, a ø-detransitive will be used:

(10) *thoroŋ-cha tat-oŋ.*
male-offspring bring-1sS.PST

'I brought some young man/men.' (e.g. to help me work on this)

Accordingly, *khatatoŋ* 'I brought someone/people' is essentially equivalent to *mʌnna tatoŋ* (with the generic noun *mʌnna* 'human being, person'), but *khatatoŋ* is preferred by speakers, and we have the impression that it would be far more common in discourse (pending statistical analysis).

The opposite constraint on overt object NPs found in the two forms of detransitives is paralleled by other opposite properties. First, while ø-detransitives allow relativization on the detransitivized object argument (cf. the data in (6) above), this is impossible with *kha*-detransitives:

(11) a. *[[*uŋ-pʌkka kha-ɖhe=ku*] *mʌnna*] [*tʌkku*].
1sPOSS-eB ANTIP-[3sS-]beat=NMLZperson DEM

Intended: 'These are the kind of people that my brother beats up.'

b. [[*uŋ-pʌkka-a ɖheɖh-i=ku*] *mʌnna*] [*tʌkku*].
1sPOSS-eB-ERG [3sA-]beat[-3sP]=NMLZ person DEM

'This is the person that my brother beats up.'

c. [[*kha-ɖhe=ku*] *uŋ-pʌkka*] [*tʌkku*].
ANTIP-[3sS-]beat=NMLZ 1sPOSS-eB DEM

'This is my brother who beats up people.'

The only possibility to relativize on the object is with an active transitive construction, as in (11b). (11c) illustrates relativization on the agent of a detranstive clause, for comparison.

Second, we noted above that ø-detransitives can only be applied to theme arguments of ditransitives (cf. the data in (8) above). *Kha*-detransitives, by contrast, can only be applied to goal arguments of ditransitives, thus following a primary-object (rather than direct-object) pattern:

(12) a. *yoŋni-lai chetkuma itd-u-ŋ.*
friend-DAT clan.sister give-3sP-1sA

'I gave my sister to a friend (in marriage).'

b. *chetkuma kha-itd-oŋ.*
clan.sister ANTIP-give-1sS.PST

'I gave away my sister (to someone/people).'

c. **yoŋni(-lai) kha-itd-oŋ.*
friend(-DAT) ANTIP-give-1sS.PST

Intended: 'I gave someone/people/some sister to a friend.'

The sentence in (12a) has a regular ditransitive syntax. (12b) is a *kha*-detransitive derived from it. Here, the theme argument is retained while the goal NP is deleted, and the sentence entails a non-enumerable or generic goal ('to someone, to people'). (12c) is

ungrammatical because the detransitivized and therefore deleted argument would have to be the theme rather than the overt goal argument.[4]

4. Semantics

With regard to the semantics, we find no evidence that the two detransitive structures differ beyond the fact that (i) the *kha*-antipassive is limited to human arguments, and (ii) the ø-detransitive but not the *kha*-detransitive allows lexical specification of the detransitivized object. Both structures share the semantic property of deleting any entailment to the cardinality of referents and are thus generally used for non-enumerable or generic reference, as we explain in the following.

In standard intransitive or transitive clauses, Puma agreement desinences are neutral as to the referential status of the arguments they are triggered by. Specifically, agreement markers can be coindexed with specific-reference NPs just as well as with indefinite pronouns and generic expressions.[5] This is true of all agreement markers alike. We first discuss this with data for A-agreement, then for P-agreement.

Consider the following data, where the verb form is transitive and shows third person singular A agreement (which is zero-marked, cf. Tables 2 and 3):

(13) a. *khokku-a khaŋ-i.*
3s-ERG [3sA-]see-3sP

'S/he saw it.'

b. *samen-a khaŋ-i (koina kʌ-khaŋ pʌ-sin-nʌŋ).*
someone-ERG [3sA-]see-3sP [PST] but ACT.PTCP-seeNEG-know-1sNEG

'Someone saw it (but I don't know the one who saw it).'

c. *sa(men)-a=cha pʌ-khaŋ-i-n.*
anyone-ERG=ADD NEG-[3sA-]see-3sP-NEG

'Nobody saw it.'

d. *ʌk-poŋ-a pʌ-khaŋ-i-n.*
one-HUM.CLF-ERG NEG-[3sA-]see-3sP-NEG

'Someone did not see it.'

e. *ŋapoŋ-a jhara=ku sind-i.*
shaman-ERG all=EMPH [3sA-]know-3sP [PST]

'The (known) shaman knows everything' *or:* 'A shaman knows everything.'

The A expression in (13a) is a personal pronoun with specific reference, while in (13b) and (13c), it is an indefinite pronoun. Singular number agreement in the verb and absence of a nonsingular suffix on the pronoun entail that there is exactly one A referent in all three examples. In (13a) the identity of this referent is presupposed. In (13b), by contrast,

[4] The sentence would be grammatical if *yoŋni* 'friend' (without dative case) would be analyzed as the theme argument, resulting in the pragmatically odd reading 'I gave a friend to someone/people'.
[5] The pronominal system of Puma is described in Sharma (Gautam) et al. (2005).

the referent's identity may or may not be known (or deemed relevant) to the speaker, i.e. the sentence could be felicitously continued by *koina kʌkhaŋ pʌsinnʌŋ* 'but I don't know who saw it' (unlike (13a), which could not be continued in this way). Negation, as in (13c), has scope over the indefinite negative polarity pronoun *sa(men)=cha*. As a result, the sentence denies the existence of any A referent. This is in minimal opposition to (13d), where the numeral *ʌkpoŋa* 'one' is outside the scope of negation so that the sentence asserts the existence of a specific referent identifiable for the speaker. In (13e), the A referent can either be understood as an individual referent or as a generic expression refering not to any specific shaman, but to the kind of people who are shamans.

The following set of data illustrates P-agreement under various referential conditions. In all forms, P-agreement is third person singular, which has zero exponence in several negative forms (cf. the paradigms in Tables 2 and 3).

(14) a. *khokku-lai lam-u-ŋ.*
3s-DAT search-3sP-1sA
'I looked for him/her.'

b. *samen lam-u-ŋ (koina pʌ-dhit-nʌŋ).*
someone search-3sP-1sA but NEG-find-1sNEG
'I looked for someone (but didn't find anyone).'

c. *sa(men)=cha pʌ-lam-nʌŋ.*
anyone=ADD NEG-search-1sNEG
'I didn't look for anyone.'

d. *ʌk-poŋ pʌ-lam-nʌŋ (bʌɖɖhe kʌ-poŋ)*
one-HUM.CLF NEG-search-1sNEG many DET-HUM.CLF
'I did not search for one person (but for several).'

e. *neta-lai tupd-u-ŋ.*
leader-DAT know-3sP-1sA [NPST]
'I understand the leader' *or:* 'I understand the nature of leaders.'

In (14a) the P-agreement trigger is a third person singular object pronoun with specific reference. In (14b), the trigger is an indefinite pronoun. The sentence is appropriate, for example, when the speaker was looking for someone to help him on a certain task (or for someone to hire for a certain job). Thus, the indefinite pronoun can have non-specific reference, and a result, the sentence can be felicitously continued by *koina pʌdhitnʌŋ* 'but I didn't find anyone', in parallel to what we observed for indefinite pronouns in A-function in (13) above. Also in parallel with this, negation has scope over the negative polarity indefinite pronoun *sa(men)=cha* in (14c). In (14d), the numeral *ʌkpoŋ* 'one' is outside the scope of negation, and thus entails the existence of an (albeit non-specific) referent. (14e) illustrates the use of a generic expression as the object NP triggering P-agreement: *neta* 'leader, politician' is in the singular (as shown by the absence of a nonsingular affix and by triggering singular P-agreement on the verb) and can either be

understood as refering to an individual or to the kind denoted by the expression (the characteristics associated with *neta*).

Thus, active agreement morphology is neutral as to the referential status of the agreement-triggering A or P expression. The only entailment that is necessarily made in all contexts is to number: all examples in (13) and (14) entail that, if there is a referent, there is *at most one* or, in case of generics, *at most one kind*. (With dual and plural agreement, the respective entailment is to *at most two* and to *more than two* possible referents.) The number specification entailed by P-agreement in active morphology is precisely what distinguishes these forms from detransitive forms: a detransitive form signals that the cardinality of the set of object referents is unknown. Accordingly, a detransitived clauses is true if the set is empty just as well as if it is filled by any non-specified number of referents.

Thus, a sentence like (14b) forms a minimal pair with the following *kha*-detransitive:

(15) *kha-lam-oŋ* (*koina kha-pʌ-dhit-nʌŋ*).
ANTIP-search-1sS.PST but ANTIP-NEG-find-1sNEG [PST]
'I looked for someone/people (but didn't find any(one)).'

While (14b) entails that I looked for at most one person, (15) is neutral as to whether I looked for one or several persons. By blocking an entailment to a specific cardinality of referents, the detransitive form leaves it open whether there exists a referent satisfying the argument position defined by the predicate (here, a referent that was being looked for) and if there is one, how many referents would satisfy this position. The active form with an indefinite pronoun in (14b) can be used in the same way, as we noted above, but it is also suitable in a context where the speaker does have a specific existing referent in mind.

The following minimal pair shows the same contrast for nonhuman objects and the ø-detransitive:

(16) a. *doromen lam-u-ŋ* (*koina pʌ-dhit-nʌŋ*).
something search-3sP-1sA but NEG-find-1sNEG
'I looked for something (but didn't find anything).' (e.g. anything that would help me do what I need to do)

b. *doromen lam-oŋ* (*koina pʌ-dhit-nʌŋ*).
something search-1sS.PST but NEG-find-1sNEG
'I looked for something/stuff (but didn't find anything).' (e.g. anything that would help me do what I need to do)

The sentence in (16a) has active transitive morphology, the one (16b) represents a ø-detransitive. The active form entails that, if there is an object referent, there is at most one, but the sentence is semantically neutral as to whether there is a specific referent that the speaker has in mind or not. As with the *kha*-detransitive, the ø-detransitive blocks the entailment to any number specification, and as a consequence also to any specific referent. As a result, (16b) can only be used if the speaker wishes to leave open both number and existence of the object referent.

These semantic effects find ample illustration in language use. The first example shows how a *kha*-detransitive is used to leave open the number and existence of object referents:

(17) *uŋ-bo uŋ-palo oha* ((gesturing)) *kha-cop-oŋ, beŋ pʌtti ʌkta*
1s-GEN 1sPOSS-turn like.this ANTIP-look-1sS.PST left side one

makcʌk~cʌk=ku bura khok-pa yuŋ-a-ŋa. (LH_M.363)
black~REDUPL=NMLZ old.man old-M [3sS-]be-PST-IPFV

'And then I, on my turn, looked (ANTIP) at the people like this ((gesturing)), and, on the left side, there was an old black man.'

In this example, the existence of object referents, a group of people at a recruitment place, is known from the previous discourse. What the *kha*-detransitive (antipassive) form suggests, is that the speaker did not look at any specific number or at any specific individual in this group — he simply scanned the group with no particular focus, until he zooms in on *ʌkta makcʌkcʌk=ku bura khokpa* 'one black old man'.

While in (17) we know from the context that there are object referents, the detransitive form is also commonly used in contexts where the existence of such referents is not guaranteed (as we saw already in the elicited example (15) above), or whether this is precisely at stake in the current conversation or narrative. This is the case in the following example:

(18) *pʌŋ akhani ohyatni kha-cop-a=ni. kʌ-nana-ci Toŋwama*
and.then hither thither ANTIP-look-PST-REP 3sPOSS-eS-ns T.

Khiwama-ci-ya-tnikha-cop-a=ni, sa=cha metdʌŋyaŋ-ci=ni.
Kh.-ns-ACROSS-ALL ANTIP-[3sS-]look-PST=REP anyone=ADD NEG.EXIST.PST-d-REP

tonpʌŋ=na khap-ma puss-i=ni. khap-a-ŋa khap-a-ŋa
then.after=TOP weep-INF begin-3sP[PST]=REP [3sS-]weep-PST-IPFV [3sS-]weep-PST-IPFV

khaɖo=ni, kʌ-ʈaŋkoŋ-di-tni kha-cop-a. ʌk-ta ŋaksi,
when=REP 3sPOSS-pillow-UP-ALL ANTIP-[3sS-]look-PST one-CLF banana

ʌk-ta berucha, ʌk-ta bechukyuŋaŋa=ni (folk_tale.056ff.DR)
one-CLF small.sickle one-CLF ginger PST.EXIST=REP

'Then he looked (ANTIP) hither and thither (for them). He looked (ANTIP) in the direction of his sisters Toŋwama and Khiwama's place, (but) there wasn't any one of them! Then he started to cry. As he was crying and crying, he looked (ANTIP) up towards the pillow (having them in mind): there was one banana, one small sickle, and ginger (which the two had left for him).'

The *kha*-detransitives here are based on the verb *cop-* 'look at, watch (intentionally)' and entail that the number and existence of the object referent are unknown; all that is known is the direction of the looking, as indicated by the allative NPs *akhani ohyatni* 'hither and thither', *Toŋwama Khiwamaciyatni* 'towards Toŋwama and Khiwama's place', and

kʌʧaŋkoŋditni ‘towards his pillow’. Therefore it is perfectly natural to continue *khacopa* ‘he looked for them’ by *sacha metdʌŋyaŋci* ‘there wasn’t any one of the two’ in line 2.[6] Note that an appropriate translation of *khacopa* into English has to resort here to ‘he looked *for* them’ (which in Puma would actually be *lamaci*, as found in (14) above), because in English *he looked at people* or *he watched the people* necessarily entails the existence of object referents and could not be felicitously continued by ‘there wasn’t anyone’.

The following example contains the verb *lam-* ‘to search’, and in line with its semantics, the directional specification is less specific than with *cop-* before:

(19) *tʌpʌgʌri Hetchakuwa jhara khim hut-do-tni kha-lam-a=ni*
then H. all house inside-LOC-ALL ANTIP-[3sS-]search-PST=REP

tana mudhi wadin bechuk masit dhit-i=ni. (folk_tale.170f)
PTCL ashes chicken.egg ginger black.lentil find-3sP=REP

‘Then Hetchakuwa searched inside the whole house (for people) (but instead) he found ashes, chicken eggs, ginger and black lentils.

Here, the *kha*-detransitive *khalama* entails that the subject looked for human beings — of any number — all over the house; from the narrative context it becomes clear that he does this in order to make sure that no one will see him when he escapes from the place he is kept.

While in the preceding examples, the existence of the object referent is uncertain, under negation the existence of any number of referents is denied:

(20) *tonpʌŋ ʌk chem kha-pʌ-tok-en=ni.* (folk_tale.186)
then one moment ANTIP-NEG-[3sS-]be.able.to.see-NEG.PST=REP

‘Then, for a moment, she could not see anyone.’

(21) *ʌkwada kʌphekwa=cha kha-pʌ-it-nin=ku min-oŋ.* (LH_M.124)
ever money=ADD ANTIP-NEG-[3sS-]give-NEG=NMLZ think-1sS.PST

‘I thought he would never give money to anyone.’

In (20), the *kha*-detransitive presupposes the non-existence of a monotransitive human object, while in (21) it refers to the primary object of a ditransitive verb, confirming the observation on object alignment made in Section 3.2 above.

Since detransitive forms entail unknown cardinality and existence of the object argument, they are also compatible with generic reference. Like the object argument of detransitives, generic expressions are characterized by non-specified cardinality, but in addition, they entail that the generic concept could in principle be instantiated by an exemplar (within a given universe of discourse). Thus, the following sentence, for

[6] The partitional ‘any one of the two’ readings results from combining the singular subject expression *sacha* ‘anyone’ with the dual subject agreement form *-ci* on the verb, following a general principle of Tibeto-Burman agreement syntax (see Bickel 2000).

example, entails that that subject married, i.e. there must be a *khimhoŋma* 'wife', but no specific referent is presupposed or mentioned in the context:

(22) *khimhoŋma* *tat-a=ni* (folk_tale.247)
wife [3sS-]bring-PST=REP
'He married.'

The following examples of *kha*-detransitives imply that the object argument is a generic human being. Within the given universe of discourse (here, mythology), the generic concepts could in principle be instantiated, but no such instantiation is sought for by the speaker and it is indeed not relevant for the development of the discourse:

(23) *ronabhetma* *kha-kʌ-ca-ma* (myth_orph.127b)
evil.woman ANTIP-ACT.PTCP-eat-F
'an evil female man-eater (ANTIP)'

(24) *cabha, masa, ŋanwa, bhʌisuma, dhiwama, hwaku,*
tiger bear bee big.red.bee hornet [3sS-]walk-PST=NMLZ
kha-kep=ku, kha-kha=ku, kha-ca=ku. (myth_orph.205)
ANTIP-[3sS-]sting=NMLZ ANTIP-[3sS-]bite=NMLZ ANTIP-[3sS-]eat=NMLZ
'Tiger, bear, bee, the kind [of animal] that stings (people), that bites (people), that eats (people).'

The participle marked by *kʌ-* in (23) refers to someone female (*-ma*) who eats human beings, i.e. a man-eater, and no specific referent is intended. Likewise, in (24), the nominalized *kha*-forms refer to animals that sting, bite or eat people in general.

5. Typological comparison

Table 5 summarizes the syntactic and semantic properties of the two constructions, as discussed in the previous sections. The properties that they share are suspension of object agreement, intransitive case assignment, and unknown cardinality. In all other regards, the two structures differ.

	ø-detransitive	*kha*-detransitive
Object agreement	none	
Case on A-argument	nominative	
Overt object NP	obligatory	banned
Relativization on object argument	possible	impossible
Objects that can be detransitivized	direct objects	primary objects
Semantics of object argument	(no constraint)	human
Reference	non-specified cardinality	

Table 5: Properties of the two detransitive constructions in Puma

Puma ø-detransitives share most properties with comparable structures known in other Kiranti languages, except that unlike in Limbu and Belhare, they allow expansion of object NPs by adjectival modification. The *kha*-detransitive has no parallel that we would know of in any Kiranti language. It is unique both in having a dedicated mophological marker and in banning the appearance of overt object NPs.

Outside the Kiranti family, ø-detransitives can be typologically compared to both what is known as incorporation and as optional-agreement patterns. With incorporation structures, they share the property of requiring an overt object and the property of nonspecific reference, but they differ from (at least the best known) incorporation structures in all other respects, specifically, in allowing objects to float away from the verb stem and in allowing relativization on the object argument. The fact that objects of ø-detransitives can move away form the verb stem is also in line with the fact that there is no evidence that the object would form a single grammatical (let alone phonological) word with the verb stem (e.g. no verbal prefix would ever be found preceding an object noun). Puma ø-detransitives are similar to optional-agreement patterns insofar as the object retains the syntactic properties of a full-fledged NP (with positional freedom and the possibility of adjectival modification) and insofar as it can be relativized on. Ø-detransitives differ from optional-agreement insofar as some crucial aspects of the syntax change: objects become obligatory, and they can no longer bear case. In addition, the A argument can no longer appear in the ergative.

Kha-detransitives are different from both incorporation and optional agreement structures since they ban overt objects. *Kha*-detranstives can be best compared to what is called antipassive in some languages. What they share with antipassives in other languages is affixal marking and a strictly intransitive syntax in terms case assignment and relativization possibilities. They differ from antipassives in other languages in the fact that they obligatorily delete objects, and that the object must have non-specific reference; in many languages, the demoted object of an antipassive is allowed to surface in an oblique case.

Table 6 summarizes these findings by comparing the two Puma detransitives to the properties that are commonly associated with antipassives (‘ANTIP’), incorporation (‘INCORP’) and optional agreement patterns (‘OPT.AGR’). Note that that we use the term ‘commonly’ here in a very impressionistic sense, informed by how the notions in the table are typically used in the literature; it is not based on a quantitative typological survey of constructions with the properties listed across many languages.

	ø-DETRANS	*kha*-DETRANS	ANTIP	INCORP	OPT.AGR
P is adjacent to verb	no	n/a	no	yes	no
P and verb in one word	no	n/a	no	yes	no
P is obligatory	yes	no	no	yes	no
P is deleted	no	yes	?	no	no
P is a full-fledged NP	yes	n/a	yes	?	yes
Relativization on P	yes	no	yes	?	yes
Regular P-case on P	no	n/a	no	no	yes
Transitive A-case on A	no	no	no	no	yes
Suspended P-agreement	yes	yes	yes	yes	yes
Generic P or P with unknown cardinality	yes	yes	no	yes	?

Table 6: Typological comparison[7] ('?' = true in some languages)

6. Conclusions

All languages have constructions that are unique to them, and the goal of typological comparison is not so much to equate language-specific constructions as the same across languages (thereby reducing diversity) but to show, with some precision, in which regards constructions share properties and in which regards they do not share properties across languages (thereby measuring diversity). Notions like 'antipassive' (or 'incorporation', or whatever) are usually meant to imply a whole set of properties at the same time (e.g. the ones in Table 6 above), and when calling constructions in different languages all 'antipassives', we expect them to share this set of properties to a substantial degree (while perhaps still differing in other properties).

The Puma constructions analyzed in this paper do not share the whole set of properties one usually associates with either antipassivization, incorporation or optional agreement, but they are not totally different from any one of these either. As shown in Table 6, they share some specific properties, but not others. Without a large-scale typological survey, we do not know whether the Puma patterns are rare or even unique; it could also be the case that our expectations of what is common and our cross-linguistic notions thereof are premature, and that there is much more diversity in how specific syntactic and semantic properties combine in individual languages.

[7] All properties in Table 6 are meant to be defined in terms of language-internal contrasts, e.g. 'P is obligatory' means that P is obligatory in the construction under review *by contrast to* other constructions in the same language, where P is not obligatory. When P is always obligatory, this is obviously not a property of the construction under review, but a more general property of the syntax of this language.

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