THE POSSESSIVE OF EXPERIENCE IN BELHARE

BALTHASAR BICKEL

1. INTRODUCTION¹

Bodily, emotional and cognitive states are likely to constitute a particular form class in linguistic coding. Well-known instances of this are dative subjects ('experiencer subjects') in South Asia (Masica 1976, Gupta & Tuladhar 1979, Verma & Mohanan 1990) or uncontrolled states/events ('experiential clauses') in Papuan languages (Reesink 1983, Foley 1986). What is common in such construction types is that the experiencing person (the one who feels or thinks) is marked as an oblique relation (in form of a case or verbal role marker). At the same time, however, the experiencer has subject properties to a certain degree. Depending on the language, the experiencer is treated like a regular subject (of intransitives and of active transitives) in cross-clausal coreference, verb agreement, reflexivisation, nominalisation, relativisation, and so on. The following examples are from Nepali² (Indo-Aryan; Wallace 1985:137) and Amele (Madang-Adalbert Range Stock; Roberts 1987:300), respectively. In both cases the experiencer, which is encoded as dative desinence in Nepali and as an undergoer marking affix in Amele, is accessible for cross-clausal same-subject marking:

(1) a. Din bhari dāurā kāṭ-era ma-lāī tirkha lāg-cha.
day full wood cut-SEQ.SS 1SG-DAT thirst strike-3SG.NPT
After cutting wood the whole day, I am getting thirsty.

I am indebted to the people of Belhārā and especially to Bimala Pa (Lekh Bahādur Rāī) for the generous hospitality and friendship which made all research possible. I also extend my thanks to William Foley and Sabine Stoll for most helpful discussions of an earlier draft and to Matthis Bickel, Eve Danziger, Sjors van Driem and Karen Ebert for help with the terminology and idiomaticity of experiences in English. All remaining flaws and mistakes are of course my own responsibility.

The research reported here was sponsored by the Deutsche Forschungsgemeinschaft in 1991 and by the Max-Planck-Gesellschaft in 1992 and 1993. Previous versions of this paper have been presented at the 13th Annual Conference of the Linguistic Society of Nepal in Kirtipur, Kāṭhmāṇḍū, 26–27 November 1992, and at the workshop 'From body to emotion and cognition' at the University of Cologne, 2–3 July 1993.

Nepali is transliterated according to indological tradition except that, following van Driem (1987), mute a is not written even if it is not deleted by a *virām*. In Himālayan languages 'c' and 'j' represent alveolar (e.g. in Belhare) or (lamino-)postalveolar (e.g. in Limbu or Nepali) affricates.

b. Ija bim-ig wen te-i-a.
 1SG come.up-1SG.SS hunger 1SG.U-3SG.A-TODAY'S.PT I came up and I became hungry.

Although dative subjects are typical for South Asia as a linguistic area, the Kiranti languages of eastern Nepal deviate from this pattern. Rather, these languages encode the experiencer as a possessor of the subject. The subject noun itself denotes an experience, or, more in line with Southeast Asian languages, the "receptacle or arena" (Matisoff 1986:8) where a physiological or psychological experience unfolds. The verb, which agrees with the noun, expresses the way in which the experiencer is affected. In some cases the verb is downgraded to an empty auxiliary. The pattern is illustrated by the following examples from Thulung (Western Kiranti; Allen 1975:99), Camling³ (Central Kiranti), Limbu (Eastern Kiranti; van Driem 1987, s.v. yu:ma?) and Belhare (also Eastern Kiranti). The past inflection is used here for present states because the lexical Aktionsart of the verbs involved includes not only a stative but also an inchoative reading. Thus, a literal translation of, say, example (5) would be 'her mind became hurt', which potentially implies that it still hurts. On a stative interpretation, the translation would be 'her mind was hurt' without possible implications about the subject's present state.

- (2) A-bhrem liūra. 1SG.POSS-laziness affected I am lazy.
- (3) M-bulma la-e. 3SG.POSS-anger AUX-PT He is angry.
- (4) A-lεm yuis-ε. 1SG.POSS-kidney activated-PT I don't have the courage.
- (5) U-niũa tug-he. 3SG.POSS-mind hurt-PT She feels offended.

I call this construction 'possessive of experience' construction. It does not seem to be widespread in the languages of the world. The only well-documented⁴ parallel I am aware of is found in some Papuan and Austronesian languages of New Guinea and Irian Jaya (see McElhanon 1975, 1977, 1992). As an alternative to the dative subject construction in example (1b), Amele has also possessive constructions like (6) (Roberts 1987:176). Example (7) is from Kâte (Finisterre-Huon Stock; McElhanon 1992:242) and (8) from Mangap Mbula (Austronesian; Bugenhagen 1990:202).

(6) Uqa gema-g be-i-a.
3SG liver-3SG.POSS come.up-3SG-TODAY'S.PT
He became angry.

3 I am indebted to Karen H. Ebert, Zürich, for giving me access to her work in progress.

Masica (1976:164) mentions that Persian has "a few expressions of puzzling structure involving adjectives + suffixed possessive pronouns + 3SG 'be': e.g. gorosn-am-e = 'hungry-my-is' = 'I'm hungry'." In a survey on experiencers in South Asia, Hook (1990:329) cites an example from Shina (Dardic; Pakistan) as involving a "genitive-of-experience": kitāp bodi paṛ-ē mei gaar val-ar-ēgi (book much read-and my dizziness bring-CAUS-3SG.F.PT) 'I felt dizzy from reading the book (so) much'.

- (7) Maŋ-ne biaŋke-ka?.
 thoracic.cavity-3SG.POSS be.well-3SG.PRES
 She is happy.
- (8) Ni-ŋ i-saana. body-1SG.POSS 3SG-go.bad I am exhausted.

In this paper I explore the possessive of experience in Belhare. In §2 I shall first define the construction and then (§3) discuss the lexical properties of the nouns and verbs involved. Section 4 is devoted to the syntactic properties of the possessive of experience. I shall demonstrate that the possessor in these constructions has subject properties. This is compared to the syntactic behaviour of the rare dative subject and unaccusative constructions that occur in Belhare (§5). Section 6 summarises the findings and puts them in a typological perspective.

The abbreviations used are:

A	actor	NOML	nominaliser
ADD	additive	NPT	non-past
CAUS	causal (case)	NS	non-singular
CIT	citation form	PERF	perfect
COM	comitative	POSS	possessive
CONTR	contrastive	PT	past
COP	copula	Q	interrogative
DIR	directive	REP	report marker
DISC	discovery	RES	resultative
DL	dual	S	subject of intransitives
EXC	exclusive	SEQ	sequential
F	feminine	SIM	simultaneous
ID	identifier	SS	same subject
IMPERS	impersonal	SUB	subjunctive
INC	inclusive	TEL	telic
INV	inverse	U	undergoer
IPFV	imperfective	(X)	eideme motivated by
M	masculine		meaning (category) X
MED	mediative	I, II, III, etc.	noun class labels

2. THE POSSESSIVE OF EXPERIENCE AND ITS DIAGNOSIS

The test that identifies a possessive of experience and separates it from ordinary possessives is found in a construction that renders 'as if' statements. In these constructions, the verb appears in the subjunctive past, marked by -a (as in example (9a)), or in the subjunctive non-past, signalled by zero (as in (9b)).

- (9) a. Namnin khar-a-ŋ-ha-e?wa lui-?-ŋa.
 last.year go-SUB.PT-EXC-NOML-like feel-NPT-EXC
 It seems to me as if I went last year. (but I am not sure any more)
 - b. Cippa nus-i-ha-e?wa lu-het-na.
 a.bit cure-1PL-NOML-like feel-IPFV-EXC
 I think it is getting better. (lit. I feel like one who is getting better.)

In example (9b), the person marker -i, literally a sign for first person plural inclusive,⁵ has impersonal reference. It is a general rule in Belhare to use inclusive markers for impersonal reference. For instance, (10) can be used with reference to speaker and addressee as well as with non-specific reference.

(10) Lik-ma ka-ŋ-piu-?-ni.
enter-CIT INC.U-3NS.A-allow-NPT-NEG
They don't allow us to enter. or: Entering is not allowed.

The impersonal use of the first person plural inclusive marker -i in example (9b) has been generalised with uncontrollable predicates such as weather expressions (11a) or, indeed, statements about bodily or emotional states with a possessive of experience (11b, c):

- (11) a. Wet ta-i-ha-e?wa cog-yu. rain rain-IMPERS-NOML-like do-NPT It looks as if it is raining.
 - b. A-hi hond-i-ha-e?wa lu-het-na.

 1SG.POSS-shit appear-IMPERS-NOML-like feel-IPFV-EXC
 It is as if I had to shit.
 - c. A-niũa tug-i-ha-e[?]wa lu-het-na. 1SG.POSS-mind hurt-IMPERS-NOML-like feel-IPFV-EXC It feels like I am sad.

The use of -i in (11) contradicts all agreement rules unless -i is synchronically analysed as a specialised marker for impersonal reference. The distribution of this marker serves as syntactic test for possessive of experience constructions: a possessor is in 'experience function' if and only if it is compatible with impersonal -i in the construction type exemplified by (11).

3. LEXICAL CHARACTERISTICS

The definition of the possessive of experience in the preceding section identifies the range of expressions collected in the following table. It is these terms that are used in possessive of experience constructions. In brackets I indicate the rough translation that would appear if a possessive of experience construction were to be put into English. For instance, *uniũa habhe*, literally 'his mind began to cry', translates idiomatically as 'he feels sorry, pity, sympathetic' or 'he is desperate (about all the things he has to do)'. Notice that I do not attempt here any full-fledged semantic analysis. A detailed inquiry into Belhare emotion semantics would presuppose anthropological analyses far beyond the scope of this chapter.

In the table some nouns are compatible with more than one verb. Along with, say, aniũa tahe (literally 'my mind became positively activated'), which denotes a state of happiness and joy, there is aniũa tise (literally 'my mind became pleased') which implies an object towards which the good feeling is directed, that is something that I like. I have classified the terms according to verbal valences. First, there are valence fields with body parts, or more accurately 'parts of a person'. Next come fields that include body products (such as breath, sweat and excrements) and more and more purely experiential phenomena ('psychological')

5 See Bickel (1995) for a morpheme analysis of Belhare verb inflection.

Also from a cross-linguistic perspective, person is "a better candidate for the unique beginner in this domain" than body (Wilkins 1996:271).

experiences such as envy, detestation or fear as much as 'physiological' ones such as nausea, thirst or hunger).

TABLE: VERBS AND NOUNS IN THE BELHARE POSSESSIVE OF EXPERIENCE CONSTRUCTION

	thotma 'stiff'	laŋ 'leg, foot', muk 'arm, hand', sakmari 'neck'		
parts of a person	suma 'to itch'	niũa 'mind' ('fed up'), laŋ 'leg, foot', muk 'arm, hand', and other person parts		
	papma 'tangled'			
	munma 'to forget'	niũa 'mind'		
	tima 'pleased')		
	hapma 'to cry'	niũa 'mind' ('to feel sorry, pity, sympathetic, desperate')		
	rima 'to spin'	nin 'personality' ('dizzy, plastered'), thona 'decency, wisdom' ('plastered, disoriented, misbehaving')		
	ama 'to fall'	laua 'vital soul' ('sick and troubled' because of a shock, fear or anger)		
cts	khaama 'satiated'	phok 'belly'		
	thomma 'distended'			
	yuma 'sleepy'	mik 'eye'		
	yama 'to pity')		
	simma 'to tingle, paresthetic'	lan 'leg, foot', muk 'hand, arm' ('to be asleep' or 'to have pins and needles')		
	tonma 'aroused'	li 'penis', si 'vagina'		
	limma 'taste-sensitive'	mun 'mouth'		
	tukma 'to hurt'	niũa 'mind' ('offended, sad'), sua 'muscles (as a whole)' ('tired [of working, walking]'), phok 'belly', khawa 'wound', mik 'eye', tanghek 'head', yam 'body' ('sick'), nari 'nose' (also 'feel like a cuckold'), and other person parts		
	tama 'activated; to come'	niũa 'mind' ('pleased, happy'), sua 'muscles (as a whole)' ('relaxation after effort'), dasa 'bad luck', leppha 'tongue' ('know to talk'), sakma 'breath' ('relief after danger')		
products	pama 'to grow'	sakma 'breath' ('exhausted'), nari 'nose' ('fed up; stuck up')		
body	honna 'perceptible, to appear'	sakma 'breath' ('relief after danger'), hakliũa 'sweat' ('hot') khakmarak 'mucus', chepma 'urine' ('need to urinate'), hi 'shit' ('need to shit'), lalik 'sperm', phipma 'fart', mi?wa 'tears', khawa 'wound', chiat 'spit' ('need to spit; despise'), bal 'power', remsumik 'envy', yokma 'embarrassment, fear, shameful joy'		
	katma 'activated; to come up'	hikikpa 'hiccup', gauppa 'burp', hagamba 'yawn', hakchiña 'sneeze', cipma 'detest', kipma ~ kitma 'fear', suma 'weariness, tiredness', pepma 'nausea', rek ~ ris 'anger', lamma 'appetite', salamma 'appetite for meat', iŋalamma 'appetite for beer', ŋoñsima 'shame', man 'honour (of deities/ancestors)'		
nce	luma 'perceptible'	waepma 'thirst', sak 'hunger		
experiences	pokma 'to rise'	chom 'desire'		
ex	uŋma 'to come down'	retma 'laughter' ('have to laugh')		
	lama 'to return'	cik 'detest' (archaic)		

Half of the nouns are ordinary lexemes that also appear outside the construction. This holds for most person-part terms including *niũa* 'mind' as in example (12), *thona* 'decency, wisdom' as in (13) and *niŋ* 'personality; name' as in (14).

- (12) a. Niũa-lo mun dhup-ma khe-yu. mind-COM talk talk-CIT must-NPT One has to make up one's mind.
 - b. *U-niũa* ri-yu, ri-sa-bu cai-t-u: "emu-gari 3SG.POSS-mind turn-NPT turn-SS-REP eat-NPT-3U how-ABL omakg-e tʌrkari-e yum thikka aĩ-t-u?"... lentil.sauce-LOC vegetable-LOC salt correctly pour.in-NPT-3U He thought it over and over as he ate: "How does he put the right amount of salt into the dāl and the vegetable?"...
 - c. Un-chik-ŋaha niũa-cha adhero-bu lis-e.
 3-NS-GEN mind-ADD dark-REP be-PT
 And also their minds became grim.
 - d. N-niũa-e emu mii-ka? 2SG.POSS-mind-LOC how think-NPT.2 What do you think about that?
- (13) a. Na u-thona ŋ-wa-ni.

 DEM 3SG.POSS-decency NEG-be-NEG
 This one has no sense of decency.
 - b. N-thona yunn-ha-e?wa ceg-a ai!
 2SG.POSS-decency be-NOML-LIKE speak-IMP.SG EMPH
 Speak like a decent person!
- (14) A-niŋ ser-he-m-ga!
 1SG.POSS-personality kill-PT.3U-2PL.A-2
 You got on my nerves!

Among person-part terms only yam 'body' cannot be used outside the possessive of experience construction. It has become something of a negative polarity item and is specialised for a 'sick body'. Etymologically, yam seems to derive from a general term for 'body' as still attested in closely related Limbu (van Driem 1987). Most terms for body products occur outside the construction. Exceptions are hagamba 'yawn', hikikpa 'hiccup' and gauppa 'burp', but at least two of these (hikikpa and gauppa) are derived from ideophones (from hikik and gauk respectively). As for the experiential terms, it is only waepma 'thirst', sak 'hunger', bal 'power' and lamma 'appetite' (including its derivatives salamma and inalamma for specific kinds of appetite or hunger) that are used outside the possessive of experience construction, for instance in the following clause.

(15) Waepma-a si-hai-?-ŋa. thirst-CAUS die-TEL-NPT-EXC I will die of thirst.

Taken together, the nouns in the table make up a 'category squish'. The property of being subcategorised for the experience function increases from top to bottom. At the top of the

table there are ordinary nouns. The terms at the bottom are specific experience terms, most of which are only used in possessive of experience constructions.

3.1 LEXICAL COMPOSITION

With nouns that are not strictly subcategorised for the experience function, the experiential meaning is clarified by the constructional meaning of the possessive of experience. In addition to this, the specific lexical structure signals experiential meaning. This works in several ways (see Matisoff 1986), which I propose to organise in terms of a major division between compositional and non-compositional collocations.

In non-compositional collocations, the verb, or 'psycho-mate' (Matisoff 1986), occurs with only one noun and is 'morphanic' in Matisoff's sense. This is the case for tima 'pleased', munma 'to forget', khatma 'satiated', thomma 'distended', yuma 'sleepy', yama 'to pity' and limma 'to have the sensation of taste, to be taste-sensitive'. The noun does not add information that is not already contained in the verb. The noun stands, however, in a relation to a full-fledged lexical item. The nouns used in example (16) also occur with the lexical meaning 'mind' (niũa), 'stomach, belly' (phok), 'eye' (mik) or 'mouth' (mun).

- (16) a. Na u-niũa muĩ-kha ma?i.

 DEM 3SG.POSS-mind forget-NPT.NOML person
 He is a forgetful person.
 - b. A-phok khas-e. 1SG.POSS-stomach satiated-PT I have had enough.
 - c. A-mik yus-e. 1SG.POSS-eye sleepy-PT I am sleepy.
 - d. A-mik ya-yu. 1SG.POSS-eye pity-PT I feel pity (so I can't kill).
 - e. M-mun lim-yu i?
 2SG.POSS-mouth taste.sensitive-NPT Q
 Can you taste anything? (to somebody who is having a cold)

I have called such signs 'eidemes' (Bickel 1995). They are semantically empty but potentially related to full morphemes. On an alternative analysis (suggested by Reh (1993) for Lwo languages in eastern Africa), the nouns are analysed as case markers for indicating an experiencer role. This analysis is not convincing for Belhare since the number of nouns in collocations like (16) is not much lower than the number of collocations itself. This would be case allomorphy beyond a reasonable degree. Moreover, non-compositional collocations are rather rare in Belhare. In contrast to the pattern in (16), the following collocation types are compositional. The types are distinguished mainly by whether it is the noun (type i.a and i.b) or the verb (type ii.a and ii.b) that has a general, rather than a specifically experiential meaning. A third type (iii) is represented by figurative collocations built on metaphors and metonymies.

Type (i.a) In one pattern there is a general noun and a specialised 'psycho-mate', that is a verb subcategorised for a possessive of experience. In these collocations, the semantic contribution of the noun is to localise the experience. The experience itself is denoted by the verb. This is the case with *tukma* 'to hurt', *thotma* 'stiff', *tonma* 'aroused, horny', *suma* 'to itch and *simma* 'to tingle, to have the sensation of paresthesia' (as one is 'having pins and needles' in the leg or arm), for instance:

- (17) a. *Unchi-sua-bu* tuk-khar-e.
 3NS.POSS-muscles-REP hurt-TEL-PT
 They became tired (of walking).
 - b. A-phok tug-he. 1SG.POSS-belly hurt-PT My stomach aches.
 - c. A-laŋ thot-khar-e.
 1SG.POSS-leg stiff-TEL-PT
 My leg muscles became stiff.
 - d. N-li toĩ-yu i? 2SG.POSS-penis aroused-NPT Q Do you get an erection?
 - e. A-lan sims-e.

 1SG.POSS-leg paresthetic-PT
 My leg is asleep.
 - f. A-niũa su-yu. 1SG.POSS-mind itch-NPT I am fed up.

Another example of this type is the experience verb *luma* 'perceptible'. However, this verb combines with nouns that are lexically experiential, albeit not strictly subcategorised for an experience function. This is the case with *waepma* 'thirst' and *sak* 'hunger', for instance:

(18) N-waepma lus-e i?
2SG.POSS-thirst perceptible-PT Q
Are you thirsty?

Collocations with general nouns and specialised experience verbs seem to be the common collocation type also in Southeast Asian languages as discussed by Matisoff (1986).

Type (i.b) The next type is similar to the preceding one except that the verb's experience meaning is part of a polysemy structure. As a consequence, the noun helps construct the experience function insofar as it disambiguates the verb. The verbs tama and katma, for instance, are systematically ambiguous between an experiential meaning 'activated in a positive way, perceptible' and a motion meaning 'to come (from an unknown place)' and 'to come up', respectively. The meanings are disambiguated by the property of motion verbs to require a special allomorph of the imperfective marker in the non-past. With tama and katma in the experiential reading, the imperfective is formed by the regular suffix -het, just as with any other verb. Like all experiential verbs, the aspect of katma (as well as of tama) is ambiguous between inchoative and stative (see example (19a)). This contrasts with the case when the verbs are taken in their motion meaning. In this use they behave morphologically like any other motion verb and require the special suffix -ket to mark imperfective aspect in

the non-past. In agreement with other motion verbs, there is no ambiguity in the aspectual interpretation of the form, as in (19b).

- (19) a. *U-salamma* katd-het.

 3SG.POSS-appetite.for.meat activated-IPFV
 He is (getting) hungry for the meat.
 - b. Kat-ket.come.up-IPFVShe is coming up.

Moreover, the experiental meaning of *tama* in (20a) and (20b) is independently established by its use in (21a) and (21b), where the verb means 'activated, enabled'.

- (20) a. A-niũa ta-he.
 1SG.POSS-mind activated-PT
 I am pleased.
 - b. A-sua ta-he.
 1SG.POSS-muscles activated-PT
 I felt relaxation (after effort).
- (21) a. Rin n-tai-?-ni.
 language NEG-activated-NPT-NEG
 He cannot speak. (of a mute person)
 - b. Nepali-cha ta-yu.
 N.-ADD activated-NPT
 He also speaks Nepali.

The verb *honma* 'to appear; perceptible' has a similar polysemy structure and often refers to the mere perceptibility of a body product:

- (22) a. A-hakliũa hond-he.
 1SG.POSS-sweat perceptible-PT
 I am hot.
 - b. A-sakma hond-he.
 1SG.POSS-breath perceptible-PT
 I felt relief (after danger).
 - c. A-chepma hond-he.
 1SG.POSS-urine perceptible-PT
 I have to urinate.

In other cases, however, the meaning deviates from this pattern and *honma* is to be taken in its more common meaning 'to appear'. The following examples imply that the body product is already visible.

- (23) a. A-lalik hond-he.
 1SG.POSS-sperm appear-PT
 I came (sexually).
 - b. U-mi⁹wa hond-he.
 3SG.POSS-tear appear-PT
 She cries.

c. Hab-i-cha mi[?]wa ŋ-hoĩ-[?]-ni. cry-1PL-ADD tear NEG-appear-NPT-NEG Even when we cry, there are no tears.

Notice that, in contrast to *katma* and *tama*, the experience meaning of *honma* cannot be predicted by the possessive of experience construction. The pattern in both (22) and (23) is of possessive of experience constructions, yet *honma* means 'perceptible' in (22) and 'to appear' in (23).

Type (ii.a) As noted above, some nouns are strictly subcategorised for the experience function. In these cases, the verbal 'psycho-mate' has a general meaning. This is the mirrorimage effect of what we observed with general nouns and specialised verbs, that is in the collocation type (i). The verbs *pokma* 'to rise', *honma* 'to appear' and *lama* 'to return', are used with nouns having intrinsically an experience meaning, for instance:

- (24) a. Khat-ma a-chom pog-yu. go-CIT 1SG.POSS-desire rise-NPT I would like to go.
 - b. *U-remsumik* hond-he. 3SG.POSS-envy appear-PT He is jealous.
 - c. *U-yokma*3SG.POSS-embarrassment appear-PT

 He's embarrassed. (said of a child who has found a big amount of money and is embarrassed about it; can also be said of somebody being intimidated)

The noun laua 'vital soul' in the expression ulaua arhe, literally 'his soul fell', is a borderline case. On one hand, the noun is virtually restricted to this collocation and therefore seems
to designate directly the experience of the (both psychological and physiological) sickness
one is believed to have after a shock (due to a physical accident or due to sudden fear or
anger). On the other hand, in Belhare psychology laua is often talked of as a full-fledged
person part, which would rather suggest that the experience meaning is generated by
metonymy (cf. the lexical composition type (iii) discussed below). On such an account, the
experience of sickness is referred to by the affected person part.

Type (ii.b) Experiential nouns also collocate with verbs that have themselves a strictly experiential meaning. With respect to the semantic characteristics of the noun this is a subtype of the preceding collocation structure. It is observed with *katma*, which denotes the mere presence or activation of an experience (if it is not used as a motion verb; see above). In an expression such as in example (25), then, the semantic contribution of the verb is very low.

(25) A-suma kar-he.
1SG.POSS-weariness activated-PT
I am tired out.

This last type is well represented in Camling, where most possessive of experience constructions involve a specialised experience noun and a semantically empty auxiliary as

See Hardman (n.d.) for an elaborate discussion of similar psychological categories among the Lohorung, a linguistically closely related Kiranti group. On the concept of falling (ama) involved here, cf. Bickel (1996).

psycho-mate. In example (3) above (*mbulma lae* 'he is angry') *la-* merely serves to host inflection. Outside such collocations, *la-* functions as auxiliary with loan-words that are integrated into Camling by derivational means, for example *mil-ba la-* (agree-INTEGRATOR AUX-) from Nepali *milnu* 'to agree'.

Type (iii) In the preceding types the experiential meaning of the possessive of experience constructions follows at least partly from the experiential meaning of one of its constituents, viz. of the verb (type i), of the noun (type ii.a) or of both (type ii.b). This is different from the following phenomenon, which, following a suggestion by McElhanon (1975), can be called 'idiom generation'. Here, the experience meaning is an effect only of the possessive of experience construction itself. It is not pre-established by lexical semantics. Examples involve the verbs hapma 'to cry', pama 'to grow', papma 'tangled', tukma 'to hurt', rima 'to spin' and honma 'to appear':

- (26) a. *U-niũa* hab-yu.

 3SG.POSS-mind cry-NPT

 He is desperate.
 - b. *U-nari* pas-e.

 3SG.POSS-nose grow-PT
 She became stuck up.
 - c. A-niũa pap-khar-e.
 1SG.POSS-mind tangled-TEL-PT
 My thoughts became tangled.
 - d. Han-chi-nari n-tuu-?-ni i? 2-DL.POSS-nose NEG-hurt-NPT-NEG Q Don't you feel like cuckolds?
 - e. N-niŋ ri-yu.
 2SG.POSS-personality spin-NPT
 You will be drunk.
 - f. *U-chiat* kolo hoĩ-yu.

 3SG.POSS-spit CONTR appear-NPT
 But he despises it.

In none of these instances are there independent grounds on which the verb could be assigned a specific experience meaning. The verb *tukma* 'to hurt' does have a general experience meaning (see example (17b) above), but in (26d) it is part of a metaphorical idiom and is not to be taken in its literal meaning. Notice that idiom generation is not restricted to metaphorical derivations as in (26a) to (26e). In some cases, the idiom is generated by a metonymic shift from the physical phenomenon that frequently goes with a certain emotion to the emotion itself. This is exemplified by (26f).

This figurative type of collocation is not so common in Belhare, nor indeed in Kiranti languages in general. Also Limbu seems to rely only occasionally on idiom generation. An example was given in (4). Together with (27), it seems to exhaust the possibilities (van Driem 1987, s.v. somma? and tinma?, respectively).

(27) a. Ku-na-m soπ-ε. 3SG.POSS-face-ABS ooze.down-PT He is frowning.

- b. Kε-dhe[?]l sour-ε.
 2SG.POSS-spit ooze.down-PT
 You're drooling.
- c. Kε-le:-n tiŋd-ε-i:?
 2SG.POSS-penis-ABS flower-PT-Q
 Do you have an erection?

In contrast to this, possessive of experience construction in Papuan and Austronesian languages involve mainly constructional metaphors and metonymies, based on complex culture-specific ways of creating idioms (McElhanon 1975, 1977).

3.2 A NOTE ON SEMANTIC FLUCTUATION BETWEEN VERB AND NOUN

Whether the terms in the table denote parts of a person, body products or experiences, they are all treated the same way and are compatible with the possessive of experience construction. Not surprisingly then, there is some historical fluctuation between these notional sub-domains. We have already observed yam, originally 'body', which has become a negative polarity item restricted to a sick body. The noun does not designate the experience itself since the 'mate' is a specialised experience verb, tukma 'to hurt'. Other person-part terms are reanalysed as part of experience nouns. An example is remsumik 'envy' which derives from remsu 'envy' and mik 'eye'. The first part is still attested in the word for the 'other wife of one's father' (in polygamy), remsuma, where -ma is related to the common teknonymic marker for women, and in a collocation with hitma 'to look':

(28) Remsu ka-ŋ-hi?-yu. envy INC.U-3NS.A-look-NPT They envy us.

A look at related neighbouring languages shows that such fluctuation is not uncommon also in linguistic history. In closely related Limbu, for instance, the idiomaticity of 'feeling sleepy' is distributed differently from Belhare. In Belhare the construction is non-compositional. The subject noun (mik) is a term eidemically related to a body part (mik 'eye') and the verb is a fully specialised experience term yuma 'sleepy', as in example (29a). In the compositional Limbu expression (29b), there is a general verb yuma? 'to experience' and an experience noun (mi?) denoting 'sleepiness' (van Driem 1987; s.v. yuma?). Limbu mi? is still related to the body part mik 'eye' by way of paronymy.

- (29) a. Belhare: A-mik yus-e.
 1SG.POSS-eye sleepy-PT
 I am sleepy.
 - b. Limbu: A-mi? yuːs-ε.
 1SG.POSS-sleepiness activated-PT I am sleepy.

The Limbu body-part term *mik* itself appears again with polysemous *yama?* 'tickled, feel tickled, ticklish; horrified' (van Driem 1987, see *mik yama?*) in example (30).

(30) Ku-mik yars-ε. 3SG.POSS-eye horrified-PT She was horrified to see it. Here, the noun is assigned an experience function both by the verbal mate and the constructional meaning of the possessive of experience.

Whereas in Limbu it is the noun that has become specialised, in Belhare it is the verb. This is corroborated by the fact that in Belhare *yuma* still has another meaning than 'sleepy', which is slightly closer to its more general Limbu counterpart *yuma?* 'to experience'. In collocations like (31a) and generally in negation (31b), the verb means 'to experience sleep', which can mean to be asleep (31a) or to be able to sleep (31b).

- (31) a. A-mik yu-ma yur-he.

 1SG.POSS-eye experience.sleep-CIT enough-PT
 I have slept enough.
 - b. A-mik-to n-yu-at-ni.
 1SG.POSS-eye-ID NEG-experience.sleep-PT-NEG I couldn't sleep.

4. POSSESSORS AS SUBJECTS

The preceding examples suggest that the possessed noun phrase as a whole is the subject of the clause. This is evidenced by third person singular agreement (marked by zero) in all instances. In other respects, however, it is the possessor in the experiential noun phrase that functions as subject. I use the term subject here in a standard definition, which assumes a clustering of subject properties. A noun phrase has subject properties if it is syntactically treated like the single argument of an intransitive clause and the actor of a transitive clause. In the following I shall explore the subject properties of the possessive of experience.

4.1 Same-subject constructions

The clause linkage suffix -sa requires that the subject of the subsequent clause is the same as the current one (cf. Bickel 1993 and 1995). In example (32) it is not possible to have the storyteller as the one who is freed from lice.

(32) Katha mas-sa un-na un sik set-pi-yakt-he. story tell-SS 3-ERG 3 louse kill-BEN-IPFV-PT-3U She was delousing her when telling a story.

In clauses linked by -sa, the actor cannot be resumed by a subsequent undergoer, as in (33a), but only by an actor, as in (32), or the single argument of an intransitive verb, as in (33b, c).

- (33) a.*Un-na chis-sa yeti lui-t-u-ga?
 3-ERG meet-SS what tell-NPT-3U-2
 What will you say to him when he finds you?
 - b. Min-cek-pa pii-sa ap-khai?-ŋe.
 NEG-say-LOC run-SS come.across-TEL-RES
 He has came over here running and without telling anybody.
 - c. Hap-sa hap-sa a-nucha ta-he.
 weep-SS weep-SS 1SG.POSS-younger.sibling come-PT
 My younger brother came crying.

This notion of co-reference is also satisfied by a possessor of experience as in example (34).

(34) Hap-sa hap-sa a-niũa tug-he. weep-SS weep-SS 1SG.POSS-mind hurt-PT I was sad and cried.

Inverting the sequence does not alter this finding:

- (35) a. U-hakchiũa kas-sa khim rak-lamma hond-he. 3SG.POSS-cough come.up-SS house interior-MED appear-PT She came out of the house coughing.
 - b. A-sak lu-sa imm-har-e-ŋa.

 1SG.POSS-hunger feel-SS sleep-TEL-PT-EXC
 Though hungry, I fell asleep.
 - c. A-ppa la-har-e, un, u-ris kas-sa? 1SG.POSS-father return-TEL-PT Q 3SG.POSS-anger come.up-SS My father went back angrily, didn't he?

Also in Camling a possessive of experience can be monitored by same-subject marking.

(36) I-homa i-homa pa-dhit-aci-na
one-mana one-mana INV-find-DL-SEQ

Kic-sikha la-sa pa-tat-aci-ko raicha.
3NS.POSS-joy AUX-SS INV-bring-DL-NOML DISC
They found one more here and one more there and harrily brought the

They found one mana here and one mana there and happily brought them (home).

The same goes for the Papuan language Amele (Roberts 1987:300):

(37) Ija tataw-ig ija am-i wal-do-i-a.
1SG SIM.stand-1SG.SS 1SG eye-1SG.POSS spin-3SG-3SG-TODAY'S.PT
As I stood I became dizzy.

4.2 TRANSITIVE VERB AGREEMENT

It goes without saying that, in transitive clauses, a possessor does usually not trigger verb agreement. A transitive verb agrees with the macro-roles (cf. Foley & Van Valin 1984) of actor ('A') and undergoer ('U'), which are defined as the most agentive and the least agentive arguments, respectively. In transitive verb agreement the possessive of experience shows interesting behaviour. Some experience constructions, such as niũa tima 'happy', kitma katma 'afraid' and cipma katma 'to detest', allow transitivisation. The semantic effect is that the source of the experience is referred to by specific determination:

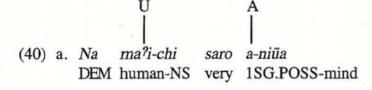
(38) a. Cia a-niũa ti-yu. tea 1SG.POSS-mind pleased-NPT I like tea.

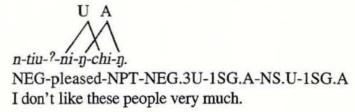
> b. Cia a-niũa tiu-t-u-ŋ. tea 1SG.POSS-mind pleased-NPT-3U-1SG.A I like this tea.

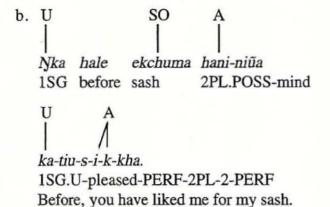
The syntactic effect is that it is the possessor that agrees with the verbal actor affix. This is in parallel with a regular transitive paraphrase kii?tuŋ:

(39) A-kipma kai?-t-u-ŋ. cf. kii?-t-u-ŋ
1SG.POSS-fear bring.up-NPT-3U-1SG.A
I am afraid of him. cf. kii?-t-u-ŋ
fear-NPT-3U-1SG.A
I fear him

The undergoer is a regular undergoer and not the possessed noun. This is evidenced by number agreement in examples like (40a). The possessed noun is also not a secondary object. In example (40b) the slot for the secondary object, abbreviated as 'SO', is filled by another argument, *ekchuma* 'sash'. It follows that the possessor, realised by the possessive prefix a- in (40a) and the proclitic *hani* in (40b), functions as actor.







Possessor agreement in transitives seems to occur also in Limbu, as the following example (van Driem 1987, s.v. lunma) suggests.

(41) An-dzum-in sar?rik a-luŋma hirpt-u-ŋ.
1SG.POSS-friend-ABS very 1SG.POSS-liver yearn-3U-1SG.A
I miss my friend very much.

The intransitive counterpart of (41) is (42) (s.v. luŋma himma?).

(42) Sar?rik a-luŋma him.
very 1SG.POSS-liver yearn
I am extremely overwhelmed by the grief of separation, by nostalgia.

There are, however, also other examples suggesting that in Limbu this subject property is not as pervasive as in Belhare (van Driem 1987, s.v. *ninwa tama*?).

(43) A-niŋwa kɛ-das-u.
1SG.POSS-mind 2-reach.upward-3U
You please me.

Constructions like (43), where the experience noun phrase functions as undergoer, do not seem to occur in Belhare.

4.3 RECIPROCAL FORMATION AND NOMINALISATION

Two other constructions in which the possessive of experience has subject properties are reciprocal formation and nominalisation.

Reciprocal formation involves two actors who are in an identical relation to the predicate. An example is (44a). The same construction can be formed from possessive of experience expressions. For this to be possible the possessor must be treated like an actor, as in (44b).

- (44) a. Mit-ka-mit ca-i! think-REC-think AUX-1PL Let's think of each other!
 - b. Un-chik niũa ti-ga-ti n-cai-chi.
 3-NS mind pleased-REC-pleased 3NS-AUX-DU They love each other.

Like most Kiranti languages, Belhare has a means to derive nominals referring to the actor argument ('A') of transitive (example (45a)) or to the single argument ('S') of intransitive verbs (example (45b)).

- (45) a. cama ka-thuk-pa food NOML.S/A-cook-M a cook
 - Ka-lik-pa.
 NOML.S/A-enter-M
 The one who went into (the house).

The derivative ka- is not sensitive to the specific semantic role that the subject of intransitives plays. Unlike a *nomen agentis* form, ka- is not restricted to agentive subjects but derives nominals referring to any type of subject, including also themes (46).

- (46) a. Hene ka-yuŋ-ma-ga? where NOML.S/A-be-F-2 Where are you (woman) from? (lit. Where (are) you a female dweller from?)
 - Ka-pikg-a-ba.
 NOML.S/A-fall-downwards-M
 The one who fell down.

Thus, the form involves the notion of subject in the strict sense, which combines the semantically general single argument of intransitives with the actor of transitives. It is only undergoer arguments of transitive verbs that are excluded: *kathukpa* in (45a) cannot refer to the food being cooked. This notion of subject is also satisified by possessors of experience. As example (47) illustrates, they can be made the referent of the *ka*-form:

(47) Unchi-ris ka-kat-pa-chi-ŋa n-seŋs-e.
3NS.POSS-anger NOML.S/A-come.up-M-NS-ERG 3NS.A-tear-PT.3U
Those who got angry (about the results) tore down (the announcement).

Also in Limbu verbal nouns can be formed from possessive of experience constructions. The copula *corkma*? in the following example (van Driem 1987:66; s.v. *tukma*?) indicates a subjective or temporary ascription:

(48) A-laŋ kε-duk-pa coik. 1SG.POSS-leg NOML-hurt-M COP There is something wrong with my leg.

5. ALTERNATIVES: UNDERGOERS OF EXPERIENCE AND UNACCUSATIVES

The diagnostic used to identify the possessive of experience also finds resonance in some expressions that look like dative subject constructions. The small set of such constructions in example (49), which I refer to as 'undergoer of experience' constructions, takes the generalised impersonal agreement marker -i just as a possessive of experience does (example (50)). The constructions are for the most part in syntactic parallelism with Nepali, since dative noun phrases in Nepali regularly correspond to undergoer affixes in Belhare. The only difference is the ergative case marking on the stimulus. The verb setma, which appears in example (49d) in the forms kasei?ni 'it doesn't make us drunk' and kase?yu 'it makes us drunk', derives from setma 'to kill' but behaves syntactically differently from its etymon.

- (49) a. Khalamba-ŋa mai-lab-he. cf. Nep. Ma-lāī rughā lāg-yo. cold-ERG 1SG.U-catch-PT 1SG-DAT cold strike-3SG.PT I have got a cold.
 - b. Cuŋ-ŋa mai-tar-he. cf. Nep. Ma-lāi jvaro ā-yo. fever-ERG 1SG.U-bring-PT 1SG-DAT fever come-3SG.PT I have got fever.
 - c. A-chepma-a mai-lett-he.
 1SG.POSS-urine-ERG 1SG.U-urge-PT
 I had to urinate.
 - d. Iŋa-ŋa ka-sei-?-ni, rʌksi-a
 beer-ERG INC.U-make.drunk-NPT-NEG liquor-ERG
 ka-se?-yu.
 INC.U-make.drunk-NPT
 You don't get drunk from beer but from liquor.
- (50) Cuŋ-ŋa (mai-)tar-i-ha-e[?]wa lu-het-na. fever-ERG (1SG.U-)bring-IMPERS-NOML-like feel-IPFV-EXC I feel as if I have got fever.

In the construction type (50) it is possible, although not very common, to inflect the verb for the undergoer. This confirms the observation in $\S 2$ that -i is indeed reanalysed as an impersonal marker.

Like possessives of experience, the undergoers of experience in example (49) have subject properties to a certain extent. Verbal nouns with subject reference are derived without problems (see (51)). As was shown in the preceding section, regular undergoers cannot be taken as the referent of *ka*-derivations.

- (51) a. cuŋ-ŋa ka-tat-pa fever-ERG NOML.S/A-bring-M one who has fever
 - b. chepma-a ka-let-pa urine-ERG NOML.S/A-urge-M one who has to urinate
 - c. Ka-set-pa-chi he-llen ŋ-khar-e?
 NOML.S/A-make.drunk-M-NS where-DIR 3NS-go-PT
 Where did the drunkards go?

Same-subject constructions are more restricted. They are grammatical (52a) but the same-subject form in -sa optionally inflects for the undergoer (52b, c). This results in a kind of anticipatory reference marking. Such marking is not possible if the undergoer is not an experiencer but in another semantic role. A regular transitive verb like *luma* 'to tell' has either a same-subject affix in -sa or it is inflected for person, number and role. The two paradigms are in complementary distribution.

- (52) a. Cuŋ-ŋa tas-sa-ro Dhankuta tas-e-ŋ.
 fever-ERG bring-SS-ID Dhankuṭā reach-PT.3U-1SG.A
 I reached Dhankuṭā although I indeed had this fever.
 - b. Cuŋ-ŋa mai-tas-sa Dhankuta tas-e-ŋ. fever-ERG 1SG.U-bring-SS Dhankuṭā reach-PT.3U-1SG.A
 - cf. *mai-lu-sa 1SG.U-tell-SS telling me Although I had fever I reached Dhankuṭā.
 - c. A-chepma-a mai-les-sa yun-he-ŋa. 1SG.POSS-urine-ERG 1SG.U-urge-SS sit-PT-EXC I sat having to urinate.

The anticipatory inflection on same-subject forms suggests that Belhare undergoers have less subject properties than possessors of experience. Obviously the latter have enough referential prominence to be unambiguously monitored as subjects in clause linkage. They do not invite anticipatory inflection as a clarifying device.

Another alternative to possessive of experience constructions is unaccusative verbs. These verbs denote experiences such as *luma* 'perceptible, felt', *tama* 'activated, enabled', *khanma* 'nice, beautiful, good', *suma* 'sour', *khikma* 'bitter', *limma* 'delicious, tasty' or *kuma* 'warm, hot'. Although intransitively inflected, they are subcategorised both for the experiencer and the experienced thing (the 'stimulus'). Both arguments qualify as absolutives (marked by zero). Therefore, clauses may be ambiguous. Topicalisation, although more often associated with the experiencer than with the stimulus, does not preclude ambiguity:

(53) Na(-na) khikt-he-bu.

DEM(-TOP) bitter-PT-REP

This one is bitter. or: To this one it tastes bitter.

From the point of view of verb agreement, it is the stimulus noun phrase that counts as subject:

153

(54) Ŋka hakliũa lus-e. 1SG sweat perceptible-PT I am hot.

Yet in other respects the experiencer argument has subject properties. In cross-clausal same-subject marking it is the experiencer that is treated as subject:

(55) Hakliũa lu-sa thaṇṇ-har-e-ṇa. sweat perceptible-SS go.up-TEL-PT-EXC I started to climb up in the heat.

Unlike undergoers of experience the experiencer argument of unaccusatives is referentially prominent enough to be treated as subject. Anticipatory inflection does not appear.

In verbal noun derivation, the experiencer argument is treated like actors and the single argument of ordinary intransitives (cf. examples in (45) and (46) above), that is like a subject:

(56) Na (caleppa) ka-khik-pa m-pi-n-an-u-m!

DEM bread NOML.S/A-bitter-M NEG-give-NEG-IMP.PL-3U-2PL.A

Don't give any more to this one to whom (the bread) tastes bitter!

This syntactic association of experiencers with the subject is in line with the claim in Role and Reference Grammar that experiencers are likely to group with the actor macrorole, whereas stimulus or theme nominals cluster with undergoer roles (Van Valin 1993:44).

6. SUMMARY AND CONCLUSIONS

The possessive of experience construction in Belhare involves nouns denoting parts of a person, body products and experiences. They are ordered along a continuum of decreasing subcategorisation for an 'experience' function. If the collocation is lexically compositional, the experience meaning results from five different patterns: (type i.a) general nouns with specialised monosemous experience verbs or with (type i.b) polysemous experience verbs, (type ii.a) specialised experience nouns with general or with (type ii.b) experience verbs, and (type iii) idiom generation. Idiom generation is remarkably rare in the Kirant when compared to similar constructions in Papuan and Austronesian languages, where 'body-image expressions' prevail (see McElhanon 1977, Bugenhagen 1990). In Belhare, and probably in the Kirant in general, it is more common to express experiences by specific experiential terms. This is even the more interesting because syntactically, experiential terms like remsumik 'envy' or lamma 'appetite' are treated like ordinary person-part terms such as tanghek 'head' or niũa 'mind' and body-product expressions such as hakliũa 'sweat' or hi 'shit'. From this one could have expected experiences to be coded more in the figurative manner of idiom generation. Historically, however, it seems that constructional metaphors and metonymies were more common. Evidence for this are experiential verbs like tama 'activated in a positive way' and honma 'perceptible' that are still closely related to general verbs for coming and appearing.

Except for intransitive agreement, the possessive of experience functions as a subject. Experiencers belong to what Bally (1926) called "la sphère personelle", which gives them a high degree of referential prominence or empathy. The linguistic problem of experiencers is to code them as such but to grant them at the same time the grammatical prominence a true person deserves. This often gives rise to subject properties clustering with oblique

experiencers. This is well testified by dative subject constructions. It can also be observed with what is called possessor promotion or raising in the literature (see, for instance, Bally 1926 and Seiler 1983). Two examples of this often discussed phenomenon may suffice here. In both cases, one (example (57)) from Vedic (Seiler 1983:42) and one (example (58)) from Yimas (Lower Sepik; Foley 1991:301), the possessor of an experiencing body part, that is the ultimate experiencer, surfaces as a dative argument.

- (57) yố mẽ kukṣĩ sutásomaḥ pṛṇāti REL 1SG.DAT belly.ACC having.pressed.the.soma fills who has pressed the soma and fills (with it) my belly
- (58) Narwa wa-ŋa-kwalca-t.
 penis.IX.SG IX.SG.S-1SG.DAT-arise-PERF
 I have an erection.

In apparently rare cases, experiencing possessors are also promoted to subject. This is known from the Bantu language Haya (Hyman 1977, Seiler 1983:46). To this gallery of promoted experiencing possessors, we may now add the subject properties of the Belhare possessive of experience. It is yet another instance of the widespread and well-known propensity of human language to give a privileged status to the 'sphère personelle'.

REFERENCES

- Allen, Nicholas J., 1975, Sketch of Thulung grammar. Cornell University East Asia Papers No.6. Ithaca, N.Y.: Cornell University.
- Bally, Charles, 1926, L'expression des idées de sphère personelle et de solidarité dans les langues indo-européennes. In F. Frankhauser and J. Jud, eds Festschrift Louis Gauchat. Aarau: Sauerländer.
- Bickel, Balthasar, 1993, Belhare subordination and the theory of topic. In Karen H. Ebert, ed. Studies in clause linkage. Arbeiten des Seminars für Allgemeine Sprachwissenschaft No.12. Zürich: ASAS-Verlag.
 - 1995, In the vestibule of meaning: transitivity inversion as a morphological phenomenon. Studies in Language 19:73-127.
 - 1996, Spatial operations in deixis, cognition, and culture: where to orient oneself in Belhare. In Jan Nuyts and Eric Pederson, eds Language and conceptualization, 46-83. Cambridge: Cambridge University Press.
- Bugenhagen, Robert D., 1990, Experiential constructions in Mangap-Mbula. Australian Journal of Linguistics 10/2:183-215.
- Driem, George van, 1987, A grammar of Limbu. Berlin: Mouton.
- Foley, William A., 1986, The Papuan languages of New Guinea. Cambridge: Cambridge University Press.
 - 1991, The Yimas language of New Guinea. Stanford: Stanford University Press.
- Foley, William A. and Robert D. Van Valin, Jr., 1984, Functional syntax and universal grammar. Cambridge: Cambridge University Press.
- Gupta, Sagar Mal and Jyoti Tuladhar, 1979, Dative subject constructions in Hindi, Nepali and Marathi and Relational Grammar. Contributions to Nepalese Studies 7:119-153.
- Hardman, Charlotte E., n.d., Conformity and self-expression: a study of the Lohorung Rai of East Nepal. PhD dissertation, School of Oriental and African Studies, London.

- Hook, Peter Edwin, 1990, Experiencers in South Asian languages: a gallery. In Verma and Mohanan, eds.
- Hyman, Larry M., 1977, The syntax of body parts. In Ernest Rugwa Byarushengo, Alessandro Duranti and Larry M. Hyman, eds Haya grammatical structure: phonology, grammar, discourse, 99-117. Southern California Occasional Papers in Linguistics No.6. Los Angeles: University of Southern California.
- Masica, Colin P., 1976, Defining a linguistic area: South Asia. Chicago: Chicago University Press.
- Matisoff, James A., 1986, Hearts and minds in South-East Asian languages and English: an essay in the comparative lexical semantics of psycho-collocations. *Cahiers de linguistique asie-orientale* 15:5-57.
- McElhanon, K.A., 1975, Idiomaticity in a Papuan (non-Austronesian) language. Kivung 8:103-44.
 - 1977, Body image expressions in Irianese and Papua New Guinean languages. Irian 6:3-27. 1992, On the concept of person. In Tom Dutton, Malcolm Ross and Darrell Tryon, eds The language game: papers in memory of Donald C. Laycock. PL, C-110.
- Reesink, Ger P., 1983, Switch reference and topicality hierarchies. Studies in Language 7:215-246.
- Reh, Mechthild, 1993, Zur Versprachlichung mentaler Erfahrung in Lwo-Sprachen. Paper presented at the workshop 'From body to emotion and cognition', Universität zu Köln, 2-3 July 1993.
- Roberts, John R., 1987, Amele. London: Croom Helm.
- Seiler, Hansjakob, 1983, Possession as an operational dimension of language. Tübingen: Narr.
- Van Valin, Robert D., Jr., 1993, A synopsis of Role and Reference Grammar. In: Robert D. Van Valin, Jr., ed. Advances in role and reference grammar. Amsterdam: Benjamins.
- Verma, Manindra K. and Karavannur Puthanvettil Mohanan, eds, 1990, Experiencer subjects in South Asian languages. Stanford: CSLI.
- Wallace, William D., 1985, Subjects and subjecthood in Nepali: an analysis of Nepali clause structure and its challenges to Relational Grammar and Government & Binding. PhD dissertation, University of Illinois, Urbana-Champaign.
- Wilkins, David, 1996, Natural tendencies of semantic change and the search for cognates. In Mark Durie and Malcolm Ross, eds The comparative method reviewed. New York: Oxford University Press.