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Himalayan Linguistics

Deverbal nominalization in Brokpa

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ABSTRACT

This paper aims to provide a first description of deverbal nominalizers in Brokpa and the range of functions they carry. Brokpa exhibits four productive deverbal nominalizers as well as an unproductive one. They all form clausal nominalizations which can function as complement clauses or as modifiers of other nominals in the form of relative clauses. I argue that Brokpa allows three different types of relative clauses: pre-headed, post-headed and internally headed relative clauses. This paper furthermore shows that two nominalizers developed temporal reference and can now also function as finite tense markers.

KEYWORDS

Brokpa language, Trans-Himalayan languages, Tibetic language, nominalization, complement clauses, relative clauses

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*Deverbal nominalization in Brokpa**

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1 Introduction

This paper presents deverbal nominalization in Brokpa, a language of eastern Bhutan.¹ Nominalization is an operation creating a derived form with the grammatical category of a noun (cf. Comrie & Thompson 2007: 334).² In the context of the Trans-Himalayan language family, nominalization can be seen as one of its most characteristic features. These languages use nominalizers not only to derive lexical nouns, operating on the word level, but also to form different syntactic constructions operating on the clausal level (cf. Genetti 2011: 163). DeLancey (2002: 56) calls Matisoff's paper from 1972, where he shows that the morpheme *-ve* serves as a nominalizer, relativizer and subordinator in Lahu, as the beginning of this phenomenon's investigation. Subsequently, several linguists contributed to the study of nominalization in Trans-Himalayan languages, such as Bickel (1999); DeLancey (1999, 2002, 2011); Genetti et al. (2004); Genetti (2011); Noonan (1997, 2008).

Bickel (1999: 271) calls the pervasive use of nominalizers within Trans-Himalayan languages the Standard Sino-Tibetan Nominalization, pointing it out as a nearly universal tendency within the language family. The parallels between nominalization and relativization are especially consistent. DeLancey (2002: 56) describes this as follows:

The fundamental relativization pattern is the same throughout the family: relativization is a subspecies of clausal nominalization. The modifying clause is nominalized, and then stands in either a genitive or appositive relation to the head noun.

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¹ For general information about the Brokpa language and the Brokpa Documentation and Description Project as well as for the list of abbreviations and the transliteration of Written Tibetan used in this issue, see Gerber/Grollmann (this issue).

² Some scholars, as Comrie & Thompson (2007: 334), include operations which derive nouns from nouns, where no category change is involved, whereas others, as Payne (1997: 223), define nominalization as the process of deriving nouns exclusively from verbs or adjectives. In this article, nominalization is understood in the sense of Comrie & Thompson (2007: 334).

Brokpa is no exception within the language family, it also exhibits a pervasive use of nominalization. This paper treats the five Brokpa deverbal nominalizers, of which one is not productive anymore. In a first step, in section 2, the general structure of a deverbal nominalization is explained and the use of these nominalizations as complement clauses or relative clauses is illustrated. In the following section 3 to 7, the individual nominalizers will be treated separately. Section 8 presents a short summary of the main findings of this paper as well as an outlook of what questions should be further investigated within the topic of deverbal nominalization in Brokpa.

Besides deverbal nominalization, Brokpa also exhibits some instances of denominal nominalization. An example is the nominalizer *-tur*, which was found to act similar to an agentive nominalizer. A derivation with *-tur* denotes someone who performs a certain action, but with a noun as base: *sotur* ‘liar’ for example is derived from *so* ‘lie’. As these nominalizations are restricted to derivations, not forming complex constructions like complement clauses or relative clauses which are relevant to syntax, they are not discussed in this paper.

2 General Structure of Deverbal Nominalization in Brokpa

Brokpa exhibits four productive deverbal nominalizers as well as one which is not productive anymore. The four productive nominalizers are the agentive nominalizer *-gin*, the locative nominalizer *-sa*, the action nominalizer *-mi*³ and the past nominalizer *-pe*⁴. An overview of their main functions is given in Table 1. The nominalizer *-pa* is not productive as a deverbal nominalizer. It is nevertheless included in this article, as it plays a role in the diachronic development of nominalization in Brokpa.

Even though the above-mentioned nominalizers all have their own characteristics, the general structure of the nominalizations they form is the same. In this section the general structure of a deverbal nominalization in Brokpa is explained before each nominalizer and its specific features will be discussed in separate chapters.

Nominalizer	Function	Base	Gloss
<i>-gin</i>	agentive nominalizer	v.prs	NMLZ.AGT
<i>-sa</i>	location nominalizer	v.prs	NMLZ.LOC
<i>-mi</i>	action nominalizer	v.prs	NMLZ.ACT
<i>-pe</i>	past nominalizer	v.pst	NMLZ.PST

Table 1. Overview of productive deverbal nominalizers in Brokpa

In Brokpa, nominalizers suffix directly to a verb stem or a copula.⁵ The verb does not carry any additional markers besides the nominalizer. The agentive nominalizer *-gin*, the locative nominalizer *-sa* and the action nominalizer *-mi* suffix to the present/future stem of the verb, while

³ The action nominalizer exhibits an allomorphy between *-mi* and *-m*. See section 5 for more details.

⁴ The past nominalizer actually consists of five allomorphs: *-te* ~ *-pe* ~ *-p^he* ~ *-le* ~ *-e*. See section 6 and Mittaz (this issue [b]) for more details.

⁵ For cases of nominalizers attaching to copulas see section 5.

the past nominalizer suffixes to the past stem.⁶ In (1) the agentive nominalizer *-gin* is suffixed to the present stem of the verb “eat” and in (2) the past nominalizer *-pe* is suffixed to the past stem of the verb “eat”.

- (1) *o mi sagin de: rinbu tuk*
ot mi sa-gin=di riŋbo tuk
 DEM.PROX person eat.PRS-NMLZ.AGT=DEF tall COP.EX.ACQ
 ‘The man who is eating is tall.’

- (2) *ŋa ɲeraŋ seŋgi nim korne samlotan deti*
ŋa ɲeraŋ se-pe=gi nima kor=ne
 1SG 1PL.INCL eat.PST-NMLZ.PST=GEN day about=ABL
sam-lo-tan te-pe
 think-return-do stay.PST-NMLZ.PST
 ‘I’m thinking about the day on which we ate fish.’

The nominalized verbs can take arguments of their own, thus forming a clausal nominalization. In some Trans-Himalayan languages, arguments of such a subordinated clause are marked differently from arguments in the main clause, for example with a genitive case. In Galo for example, the overt subject of a nominalized clause is always marked with the genitive (cf. Post 2011: 266). This is not the case in Brokpa: the arguments inside the clausal nominalization are marked in the same way as arguments in the main clause: an agentive subject of a nominalized transitive verb will be marked with the agentive case, a recipient with the dative and so on.⁷ See (3) for a nominalization including an agentive subject with agentive case marking and (4) for an action nominalization including a recipient in the dative.

- (3) *ɲe c^hoŋpe ja de: bombo tuk*
ɲe c^hoŋ-pe ja=di bombo tuk
 1SG.AGT bring-NMLZ.PST yak=DEF big COP.EX.ACQ
 ‘The yak that I brought is big.’

- (4) *ɲe k^hola termi kitab ɛik k^herco?*
ɲe k^ho=la ter-mi kitab=ɛik k^her-co?
 1SG.AGT 3SG.M=DAT give.PRS-NMLZ.ACT book=INDF take-PRS.EGO
 ‘I’m taking a book, which I will bring to him.’

In Brokpa, a clausal nominalization can have two syntactic functions: it can serve as a complement clause or as a relative clause. These two structures were found for all the productive nominalizers. Examples will be shown in the sections treating the individual nominalizers. Whereas there seems to be only one type of nominalized complement, one finds three types of relative clauses: pre-headed, post-headed and internally headed relative clauses. However, the basic structure of these

⁶ Some Brokpa verbs can show a maximum of three different stems: the present/future stem, the past stem and the imperative stem. See Mittaz (this issue [b]) for more details.

⁷ See Rufenacht (this issue) for an account on Brokpa case markers.

four constructions remains the same: a nominalizer is suffixed to a verb, which may take arguments of its own. Acting as a complement, this nominalization fills the argument slot of the verb of the main clause. As a relative clause, the nominalization modifies a nominal of the main clause. Compare the finite sentence (5) with a nominalization functioning as a complement in (6) and with a nominalization functioning as a relative clause in (7). Sentence (6) shows the following structure: $[ot\ ki=di]_{NP} [c^{him}\ na\eta=la\ t\epsilon in\ to\eta-gin]_{NP} [na]_{COP}$. The nominalized clause constitutes an argument on its own. In sentence (7) with the structure $[[c^{him}\ na\eta=la\ t\epsilon in\ to\eta-gin]_{RC}\ ki=di]_{NP} [ga\eta]_{NP} [na]_{COP}$, the nominalized clause serves as a modifier of another noun.

- (5) *ot ki di: c^{him} naηla tεintaje*
ot ki=di c^{him} naη=la tεin taη-pe
 DEM.PROX dog=DEF house inside=DAT urin do-NMLZ.PST
 ‘This dog urinated in the house.’

- (6) *ot ki di: c^{him} naηla tεintongin na*
ot ki=di c^{him} naη=la tεin toη-gin na
 DEM.PROX dog=DEF house inside=DAT urin do-NMLZ.PST COP.EQ.ASM
 ‘This dog is the one that urinated in the house.’
 lit: ‘This dog is the in-the-house-urinator.’

- (7) *c^{him} naηl tεintongin ki de gaη na*
c^{him} naη=la tεin toη-gin ki=di kaη na
 house inside=DAT urin do-NMLZ.PST dog=DEF which COP.EQ.ASM
 ‘Which one is the dog that urinated in the house?’

As we can see, a relative clause does not differ from a nominalized complement in its internal structure. They only differ in their syntactic function within the main clause. The most commonly found type of relative clause is the pre-headed relative clause. Like the post-headed relative clause, it is externally headed, which means that the nominal which a relative clause modifies is not overtly expressed as an argument within the relative clause, see sentence (8), which exhibits a pre-headed relative clause: $[[c^{he}\ \emptyset_i\ k^{ho}:-pe]_{RC}\ t\epsilon^{hu}=di]_{NP} [kate=la]_{NP}$. In this sentence, *tε^{hu}* ‘water’ is the subject of the main clause as well as the understood object of the relative clause, but only the subject of the main clause is overtly expressed, as there is a gap inside the relative clause.

- (8) *c^{he} k^{ho}:le tε^{hy} di kəl*
c^{he} k^{ho}:-pe tε^{hu}=di kate=la
 2SG.AGT boil-NMLZ.PST water=DEF where=DAT
 ‘Where [is] the water you boiled?’

A prenominal relative clause is occasionally marked with the genitive, as in (2) but this is optional and does not occur very frequently. However, when asked, the genitive marking was generally accepted by the informant. Post-headed relative clauses like (1) & (9) do not take any additional marking.

- (9) *ɛiŋ tʰoʈe pʰogin de: ʃiga:tuk*
ɛiŋ tʰo=je pʰok-gin=di ri-ga: tuk
 tree lightning=AGT hit-NMLZ.AGT=DEF fall.over-leave COP.EX.ACQ
 ‘The tree which was hit by lightning fell to the ground.’

So far, only very few examples of internally headed relative clauses have been recorded. These were formed exclusively with the past nominalizer *-pe*. Whether this is due to the lack of data or an actual restriction is unclear. Sentences (10) and (11) are two examples of internally headed relative clauses. They show that the basic Brokpa word order, which is SOV, is also kept in a relative clause. In both cases, the relativized nominal takes the role of the object within the relative clause and therefore stands after the subject.

- (10) *ne lakpa tʃhikpi dano suʃaji*
ne lakpa tʃhik-pe tano su jap-cina
 1SG.AGT hand burn-NMLZ.PST still pain do-PRS.ALLO
 ‘The hand that I burnt still hurts.’

- (11) *ne pər tonedi meragi ja? teʰam ʃaginba na*
ne pər ton-pe=di mera=gi ja teʰam
 1SG.AGT photo take.out-NMLZ.PST=DEF Merak=GEN yak mask.dance
jap-gin=ba na
 do-NMLZ.AGT=PL COP.EQ.ASM
 ‘[In] the photo I showed are the yak-dancers of Merak.’ [YD]

An alternative analysis of relative clause constructions might be possible with regard to post-headed relative clauses. DeLancey (cf. 1999: 246) discusses two arguments by Mazaudon (1978: 402) with regard to Lhasa Tibetan relative clause constructions, which can be adapted to the Brokpa data. One could argue that sentences like (1) and (9) are also of the internally headed type. But as the nominalized verb in (1) takes only one argument, the structure remains ambiguous. Looking at example (9) one might argue that the shared argument of the relative clause and the main clause, which is *ɛiŋ* ‘tree’, is topicalized inside the relative clause and the relative clause would therefore still be of the internally headed type. Following this line of thought, one would propose only two types of relative clauses: pre-headed relative clauses and internally headed relative clauses (cf. Mazaudon 1978: 402). DeLancey (1999: 246) argues in favor of three rather than two distinct relative clause constructions in Lhasa Tibetan, which are, like in Brokpa, pre-headed, post-headed and internally headed relative clauses. As it stands, Brokpa shows examples where the simplest analysis points to three different types of relative clauses. In line with DeLancey’s analysis of Lhasa Tibetan I therefore propose three types of relative clauses for Brokpa. I nevertheless acknowledge that many post-headed relative clauses like (1) are arguably ambiguous in their structure.

Many sentences, like (7) or (8), seem to point to appositional relative clauses rather than to embedded relative clauses. However, (1) implies that in a linear perspective, the relative clause stands within the noun phrase. In Brokpa *ot =di* can flank a noun phrase on both sides, expressing a definite entity. *ot* is a demonstrative pronoun and *=di* the definite article which occurs at the end of the noun phrase. In (1) the relative clause stands before *=di*, which implies that it is not just an apposition to *mi* ‘person’, but that it is embedded inside the noun phrase.

3 Agentive Nominalizer *-gin*

The morpheme *-gin* is used to form an agentive nominalization. Comrie & Thompson (2007: 336) define an agentive nominalization as an operation turning a verb *x* into a noun denoting ‘someone who does *x*’. However, the derived noun does not need to be a semantic agent per se. As an example Comrie & Thompson cite the English noun “hearer”, derived from the verb “to hear”, which results in an experiencer, not in an agent.⁸ The agentive nominalizer suffixes to the present stem of the verb, which can be seen in (1). An agentive nominalization can function as a complement clause in (12) or a relative clause in (13). An action does not need to be controlled or volitional in order to form an agentive nominalization. The verb *pru* ‘to fall’ for example, combines with *-gin* in (14). The person’s falling down is still unintentional.

- (12) *otiladi mejal k^hus c^honjinba dan jemal ni soba nam p^hregasin [...]*
oti=la=di meja=la k^hus c^hon-gin=ba dan
 DEM.PROX=DAT=DEF upwards=DAT load bring-NMLZ.AGT=PL and
jema=la ni so=ba nambu p^hre-ga:-sin
 downwards=DAT 1PL.EXCL yak.hybrid=PL together meet-leave-CVB1
 ‘At that point, when the ones bringing loads up and we with our dzos coming down met together [...].’ [YA]
 lit: ‘At that point, the from-below-load-carrying and we with our dzos coming down met together [...].’

- (13) *ote ja tamgingi migi korne lobe*
oti ja tam-gin=gi mi=gi kor=ne
 DEM.PROX yak herd-NMLZ.AGT=GEN person=GEN about=ABL
loφ a
 say.IMP INJ
 ‘Tell me something about this [one], the person that is herding yaks!’

- (14) *pra? tsemal prugin ode eilina*
pra tse-ma=la pru-gin oti ei-pe
 cliff top-down=DAT fall.off-NMLZ.AGT DEM.PROX die-NMLZ.PST
na
 COP.EQ.ASM
 ‘The one who fell from the cliff died.’

If arguments of the verb are included in the agentive nominalization, it can either be the subject or the object. Typically, the object and not the subject is overtly expressed in the agentive nominalization, as the referent of the whole nominalization is already understood to be the subject

⁸ Payne (1997: 226) uses the term agent nominalization to refer to a nominalization turning a verb into an agent of said verb. To my understanding, this would exclude nouns derived from non-agentive verbs, meaning verbs which do not take an argument with the semantic role of agent. However, the terms agent nominalization and agentive nominalization seem to be used synonymously in the relevant literature. In this paper, Comrie & Thompson’s definition will be adopted, as it fits the Brokpa data better.

of the action. Sentence (13) is such an example. The object, *ja* ‘yak’, is expressed within the relative clause, whereas the subject, *mi* ‘person’, is gapped. In one specific construction the agent can be expressed inside an agentive nominalization, but only if it is an inanimate agent. If this is the case, the noun phrase modified by the nominalizer is a patient. Examples of such a construction are (15) and (16). In (15), the noun phrase modified by the agentive nominalization is the dog. The agent, i.e. the water, is expressed in the subordinated nominalized clause by being marked with the agentive.

- (15) *tɛyɟe kʰerʈogin ki de: tsamathoŋ*
tɛʰu=ɟe kʰer-ʈo-gin ki=di tsa:-ma-tʰoŋ
 water=AGT take-go.PRS-NMLZ.AGT dog=DET search-NEG-perceive
 ‘[We] couldn’t find the dog that was carried away by the water.’
- (16) *ɛiŋ tʰoɕe pʰoginde: ʂiga:tuk̄*
ɛiŋ tʰo=ɟe pʰok-gin=di ri-ga: tuk
 tree lightning=AGT hit-NMLZ.AGT=DET fall.over-leave COP.EX.ACQ
 ‘The tree that was hit by lightning fell to the ground.’

As mentioned above, only inanimate referents can occur as agents in an agentive nominalization clause. A sentence like “The tree that was hit by me fell to the ground” similar to sentence (16) is formed using the past nominalizer *-pe* instead of *-gin* as in (17). This might be because the agentive marking on an animate referent is unambiguous or at least more natural compared to an agentive marking on an inanimate agent and does not need a redundant marking with *-gin*.

- (17) *ɲe pʰoɕe ɛiŋ de: ʂiga:tuk̄*
ɲe pʰok-pe ɛiŋ=di ri-ga: tuk
 1SG.AGT hit-NMLZ.PST tree=DET fall.over-leave COP.EX.ACQ
 ‘The tree that I hit fell to the ground.’

Some other Tibetic Languages have a form similar to *-gin* which can be traced back to Classical Tibetan (CT) *mkhan*⁹. We find it for example in Lhasa Tibetan, Chocha-ngachakha or Kyirong Tibetan.¹⁰ In Classical Tibetan, *mkhan* was a deverbal nominalizer which formed an agent or a person who was experienced in the respective activity (cf. Schwieger 2009: 252). The semantic description would also fit the Brokpa form, but no sound changes would account for a change from a voiceless aspirated plosive to a voiced unaspirated plosive. The so far discovered sound changes affecting voicedness only involve a change from voiced to voiceless, see Rüfenacht & Waldis (this issue). Furthermore, lexemes with a diachronic voiceless aspirated plosive are synchronically still voiceless aspirated, as the following examples show: *kha* ‘mouth’ > *kʰa* ‘mouth’; *kho* 3.SG.M > *kʰo* 3.SG.M. Another possible source of Brokpa *-gin* might be the Classical Tibetan form *kyin* and its allomorphs, which marked progressive when occurring in combination with a “Zustand oder Seinsverb” and

⁹ All forms from Classical Tibetan occurring in this paper were taken from Jäschke (1881).

¹⁰ See DeLancey (2003: 276) for Lhasa Tibetan, Huber (2003: 3–6) for Kyirong Tibetan and Tournadre & Rigzin (2015: 71) for Chocha-ngachakha.

formed converbs when suffixing to the verb stem without an additional copula (cf. Schwieger 2009: 244). At present, no definite answer can be given in respect to the origins of Brokpa *-gin*.

4 Location Nominalizer *-sa*

The suffix *-sa* is used to form location nominalizations. A location nominalization with *-sa* requires the present/future stem of verbs, as can be seen in sentence (19). Location nominalizations can function as complements (18) as well as relative clauses (19).

- (18) *ŋa tʰerij lycasane tɛiti*
ŋa tʰerij lu jap-sa=ne tɛi-pe
 1SG Tshering song do-NMLZ.LOC=ABL go.PST-NMLZ.PST
 ‘I went [away] from the place where Tshering is singing.’

- (19) *kʰo ʈosagi preŋ de ephi na*
kʰo ʈo-sa=gi preaŋ=di ephi na
 3SG.M go.PRS-NMLZ.LOC=GEN hut=DET DEM.DIST COP.EQ.ASM
 ‘The small hut he is going to is over there.’

A location nominalization functioning as a pre-headed relative clause as in (19) is often followed by a genitive, even though the genitive can be omitted without any change in meaning. The genitive can also appear in this position when using other nominalizers, but it appears more frequently in combination with the location nominalizer. The source of Brokpa *-sa* is quite straightforward. It is a reflex of Classical Tibetan *sa*, which, in CT, was used as a location nominalizer besides its function as a free form meaning ‘earth/place’ (cf. Schwieger 2009: 326).

5 Action Nominalizer *-mi*

The suffix *-mi* is used to form action nominalizations as well as to mark future tense in finite sentences. The action nominalizer suffixes to the present/future stem of the verb, which is evident in (20), where *-mi* is suffixed to the present stem of *sa* ‘eat’. Action nominalizations can function as complements (21) as well as relative clauses (22).

- (20) *nasi preaŋla (tea ot) tea tein eo-cina koŋa samigiton*
na:si preaŋ=la tea tein eo-cina koŋa
 yak.herder hut=DAT bird often put-PRS.ALLO egg
sa-mi=gi ton
 eat.PRS-NMLZ.ACT=GEN reason
 ‘At the yak-herder’s place, chickens are often kept for eating the eggs.’ [FA]

- (21) *ki duŋmide: nekap eɛen manda*
ki duŋ-mi=di nekap eɛen manda
 dog beat-NMLZ.ACT=DEF idea good COP.EQ.NEG.ALLO
 ‘This beating the dog is not a good idea.’
- (22) *ɛiŋ gimi (gi) sɔli de: tor tuk̄*
ɛiŋ gi-mi (=gi) sɔle=di tor tuk
 tree fell-NMLZ.ACT (=GEN) saw=DEF be. lost COP.EX.ACQ
 ‘The saw for cutting down trees is lost.’
 lit: ‘The saw that cuts trees is lost.’

Note that the genitive, *ton* ‘reason’ or *tondala* ‘in order to’ or even a combination of genitive plus a variant of “reason/in order to” often occur in combination with a modifying action nominalization. Sentences (20) and (23) are examples of such constructions. In (20) the action nominalization *koŋa sami* ‘eating eggs’ is subordinated to *ton* ‘reason’ through the genitive. In some sentences where we do not find some form of “reason/ in order to”, the semantics of purpose still seems to come through, like in (22) or (24). A possible translation for (24) would also be ‘I’m taking a book in order to bring it to him’. Whether this is because of the general semantics of an action nominalization or whether it comes from a possible original structure where the action nominalization always stood subordinated to the noun *ton* ‘reason’ is unclear. In any case, it seems that the semantics of *-mi* is a little less straightforward compared to the nominalizers *-gin* or *-sa*.

- (23) *ŋa khurkhermi dondala oth ɛiŋ tupco?*
ŋa k^hur-k^her-mi tonda=la oti
 1SG carry-take-NMLZ.ACT in.order.to=DAT DEM.PROX
ɛiŋ tup-co?
 tree cut.apart-PRS.EGO
 ‘I cut this tree apart in order to carry it away.’
- (24) *ŋɛ k^hola termi kitab ɛik k^herco?*
ŋɛ k^ho=la ter-mi kitab=ɛik k^her-co?
 1SG.AGT 3SG.M=DAT give.PRS-NMLZ.ACT book=INDF take-PRS.EGO
 ‘I’m taking a book, which I will give to him.’

In some texts one finds *-m* suffixed to copulas which stand at the end of a whole clause after a conjugated verb, as in (25). These clauses also serve as a complement, like other action nominalizations. I therefore assume that *-m* is an allomorph of *-mi*. The distribution of this allomorphy could be motivated by the choice of host, with verb stems selecting *-mi* and copulas *-m*. In one text, one also finds instances where *-m* suffixes to a verb which has present tense marking (26). However, since the present tense ending *-cina* was diachronically a non-finite marker plus a copula (see Mittaz this issue [b]), this can be regarded as another instance of *-mi* being suffixed to a copula. In a negated sentence, this construction is more clearly visible, as the verb takes the ending *-ki* plus the negative copula *mena*. Therefore, *-mi* seems to be able to suffix to copulas as well as to bare verb roots.

- (25) *oni k^hoŋ ruspa=di t^hoŋenam mat^hoŋenam maεe*
oni k^hoŋ ruspa=di t^hoŋ-pe na-mi
 and.then 3PL bone=DEF perceive-NMLZ.PST COP.EQ.ASM-NMLZ.ACT
ma-t^hoŋ-pe na-mi ma-εe
 NEG-perceive-NMLZ.PST COP.EQ.ASM-NMLZ.ACT NEG-know
 ‘I don’t know whether they saw the skeleton or not.’ [YS]

- (26) *oni kho lamga oteins tosin kho kaŋjo oteins lam jal tejaŋ tojinam [...]*
kājo k^hwe piru tsoεado
oni k^ho lamga ja=la oteins to-sin k^ho kaŋjo
 and.then 3SG.M path up=DAT thus go.PRS-CVB1 3SG.M all
oteins lamga ja=la teiaŋ to-cina-mi kaŋjo
 thus path up=DAT how go.PRS-PRS.ALLO-NMLZ.ACT all
k^hoe pidju tso-εak tuk
 3SG.M.AGT video make-put.PST COP.EX.ACQ
 ‘While he’s traveling up the path, he filmed everything, how [they] are traveling up the path [...].’ [KT]

An action nominalization serving as a relative clause can also express a future action as in (27). In this case, it can not occur together with past reference. If *saŋ* ‘tomorrow’ is replaced with *taŋ* ‘yesterday’ in (27), the sentence would be ungrammatical.

- (27) *saŋ ŋajam p^hremi mi de k^ho na*
saŋ ŋa ŋambu p^hre-mi mi=di k^ho na
 tomorrow 1SG together meet-NMLZ.ACT person=DET 3SG.M COP.EQ.ASM
 ‘He is the person that will meet with me tomorrow.’

The suffix *-mi* was also found to function as a finite verb marker expressing future tense. If used with either third person in declarative and interrogative sentences or first person in interrogative sentences *-mi* is combined with the copula *na* as in (28).¹¹ How *-mi* differs from the future tense marker *-co* could not be investigated so far.

- (28) *k^hoe luk[̄] pomna*
k^hoe luk po-mi na
 3SG.M.AGT sheep call-NMLZ.ACT COP.EQ.ASM
 ‘He will call the sheep.’

An interesting construction can be formed with the combination of a verb plus *-mi* followed by *jap* ‘to do’. This expresses an event that should have occurred but that in the end did not take place, as in (29). Sometimes, this construction occurs in a sentence where an attempt is made which could not be executed, like in (30). Verb compounds with *jap* ‘to do’ are usually built from a noun plus the

¹¹ See Funk (this issue [b]) for an account of Brokpa copulas and Mittaz (this issue [b]) for more details on the use of *na* as an auxiliary in tense marking.

verb “to do” as for example *lu jap* ‘to sing’, which consists of *lu* ‘song’ plus *jap* ‘to do’. It is therefore assumed that *-mi* also acts as an action nominalizer in this construction.

- (29) *taŋ ɲe capmi cape leaka de ot na*
taŋ ɲe jap-mi leaka=di ot na
 yesterday 1SG.AGT do-NMLZ.ACT work=DEF DEM.PROX COP.EQ.ASM
 ‘This is the work that I was supposed to do yesterday [but I didn’t do it].’

- (30) *on tsul tonmi jasin tonmat^hoɸe*
oni tsu=la ton-mi jap-sin
 and.then here=DAT take.out-NMLZ.AGT do=CVB1
ton-ma-t^hop-pe
 take.out-NEG-achieve-NMLZ.PST
 ‘[We] tried to pull [him] back towards us, [but] we couldn’t pull [him] out.’ [YA]

In Dzongkha, a closely related language, one also finds a form *-mi*, which can form an action nominalization or an agentive/patient nominalization besides its existence as a free standing word meaning ‘person’ (cf. Tshering & van Driem 2019: 408–413). Here, it seems obvious that the nominalizer developed out of the lexical noun. Going back to Brokpa, we also find the word *mi* ‘person’, but no agentive nominalization using *-mi*, which seems to imply that *-mi* was further grammaticalized from an agentive to an action nominalizer.

6 Past Nominalizer *-pe*

The morpheme *-pe* forms nominalizations with past reference. Before explaining the functions of Brokpa *-pe* in more detail, some remarks concerning its phonological form are necessary. The nominalizer *-pe* exhibits a considerable amount of allomorphy. Its different allomorphs are *-te* ~ *-pe* ~ *-p^he* ~ *-le* ~ *-e*. Some questions remain as to the exact form of the vowel, this issue will be addressed below. Mittaz (this issue [b]) examines *-pe* functioning as a finite verb marker and treats this allomorphy in greater detail. She identifies *-pe* as the underlying form and comes to the conclusion that the allomorphy in the initial is explicable only in diachronic terms. Looking at CT verbs which often show syllable final consonants that Brokpa lost, Mittaz notes that the allomorphy seems to be determined by these former syllable final consonants. The vowel seems to vary freely between *e* ~ *i* (Mittaz, this issue [b]).

I argue that *-pe* originated from the fusion of the nominalizer *-pa* plus genitive *=i*. In Classical Tibetan, a prenominal modifier was marked by the genitive. At that stage, *pa* was the default nominalizer, occurring very frequently (cf. Schwieger 2009: 156). As prenominal modifiers were often nominalized clauses, the combination *pa + i* was quite frequent. I assume that in Brokpa, such a construction existed as well and got monophthongized and reanalyzed at some point, resulting in a morpheme separate from *-pa*. Today we find *-pa* as well as *-pe* in Brokpa, but *-pa* does not productively function as a deverbal nominalizer. Except for one instance of a deverbal nominalization (see section 7), only instances of denominal nominalizations with *-pa* are found. As will be shown below, *-pe* most

often occurs in nominalizations which have a modifying purpose, i.e. function as a relative clause. This is exactly the position in which Classical Tibetan *pa + i* is found.

From a phonological perspective, the fusion of nominalizer plus genitive yielding */-pe/* is easily acceptable, as [e] lies between [a] and [i] when it comes to tongue height. Today, a combination of word final /a/ plus genitive still results in a vowel with the same phonetic properties. The word *napa* ‘fisher’ for example becomes [nape] in sentence (31). This is why */-pe/* is chosen as the underlying form. Of course, this is only acceptable if, as is argued in this paper, the variation between *pe ~ pi* is indeed free and no other argument in favor of one vowel is found.

- (31) *ote na bombo sungingi nape miŋ miɛt*
oti na bombo sun-gin=gi napa=gi miŋ
 DEM.PROX fish fish catch-NMLZ.AGT=GEN fisher=DET name
mi-ɛe
 NEG.FUT-know
 ‘I don’t know the name of the fisher that caught the big fish.’

The morpheme *-pe* is used to form nominalizations with past reference as well as to mark past tense on finite verbs. The past nominalizer suffixes to the past stem of verbs, as can be seen in (2) in section 2. While (32) shows a nominalization functioning as a nominal complement, (33) exhibits a pre-headed relative clause. It seems that *-pe* usually forms non-subject relativizations, meaning that the coreferential argument of the main clause and the relative clause is usually the object of the relative clause, not its subject. In this respect it stands in contrast to *-gin*, which normally relativizes subjects. However, the data also show examples of subject relativization, where *-gin* and *-pe* can be exchanged, as in sentences (34) and (35). This might be possible if the past action is focussed, but this could not be ascertained. For now, it can be said that nominalizations with *-pe* are in the majority of cases non-subject relativizations.

- (32) *k^hoe laɸepa dɪ so na*
k^hoe lap-pe=ba=di so na
 3SG.M.AGT say-NMLZ.PST=PL=DEF lie COP.EQ.ASM
 ‘The things that he said were lies.’

- (33) *ni detɪ ju de: tɕuŋkuɛi tuŋ*
ni te-pe ju=di tɕuŋku=ɛik tuŋ
 1PL.INCL stay.PST-NMLZ.PST village=DET small=INDF COP.EX.PST
 ‘The village that we stayed [at] was [a] small one.’

- (34) *taŋ ŋajam p^hretɪ mide: ot na*
taŋ ŋa nambu p^hre-pe mi=di ot
 yesterday 1SG together meet-NMLZ.PST person=DEF DEM.PROX
na
 COP.EQ.ASM
 ‘This is the person that met with me yesterday.’

- (35) *taŋ ŋajam p^hregin mi de: ot na*
taŋ ŋa ŋambu p^hre-gin mi=di ot
 yesterday 1SG together meet-NMLZ.AGT person=DEF DEM.PROX
na
 COP.EQ.ASM
 ‘This is the person that met with me yesterday.’

As a finite verb marker, *-pe* indicates a completed past action. Parallel to future tense marking with *-mi* (section 5), *-pe* combines with all forms of person and number, but if used with either third person in declarative and interrogative sentences or first person in interrogative sentences *-pe* is combined with the copula *na*. Sentences (36) and (37) show the difference in marking. This combination of *-pe* with *na* does not occur in relative clauses, irrespective of person or number.

- (36) *tea thuŋsini daŋ go:mito sepe*
tea i^huŋ-sin-pe daŋ gom=gi to se-pe
 tea drink-finish-NMLZ.PST and evening=GEN food eat.PST-NMLZ.PST
 ‘After drinking tea [we] ate dinner.’

- (37) *k^hoŋŋe luk setina*
k^hoŋŋe=je luk se-pe na
 3PL=AGT sheep kill-NMLZ.PST COP.EQ.ASM
 ‘They killed a sheep.’

7 Unproductive Deverbal Nominalizer *-pa*

The nominalizer *-pa* is not a productive deverbal nominalizer anymore. Only one instance of deverbal nominalization with *-pa* has been found so far: *c^himŋuŋpa* ‘house-sitting person’. This is a clausal nominalization including the object, *c^him* ‘house’, as an argument of the verb *ŋuŋ* ‘to guard’. In its function as a deverbal nominalizer, *-pa* behaves like the agentive nominalizer *-gin*, as it forms a nominalization denoting the person who performs the action of the nominalized verb. As described in section 6, the past nominalizer *-pe* developed from a fusion of the CT nominalizer *pa* with the genitive *=i*. I assume that the once very productive nominalizer *pa* was replaced step by step by the more recent nominalizers *-gin*, *-sa* and *-pe*. The term *c^himŋuŋpa* is a lexicalized instance which has been in use for some time. The informant described a *c^himŋuŋpa* as someone who guarded the house of a neighbor or relative while they were away herding their yaks. This occurred frequently, as the Brokpas once relied heavily on the breeding of yaks for their livelihood. Even though *-pa* is not productive anymore as a deverbal nominalizer, it can form other derivations. In the following paragraphs, additional functions of *-pa* are illustrated.

Many words containing *-pa* can not be segmented into smaller meaningful parts anymore. Examples include body parts like *latpa* ‘brain’, *k^holokpa* ‘knee’ or *eiŋba* ‘neck’. However, three distinct productive derivational patterns using *-pa* are attested. First, the suffix *-pa* may be used to form nouns with a human referent denoting membership or affiliation. Second, the suffix *-pa* is used to derive ordinal numerals. Lastly, some adjectives are derived from verbs using the suffix *-pa*.

The first kind of derivation, resulting in a human referent, typically specifies a person's origin or occupation. In this way, *merakpa* 'person from Merak' is derived from the place name Merak and *napa* 'fisher' from *na* 'fish'. More examples are listed in Table 2 below. The last two instances in Table 2 consist of more than monomorphemic base plus *-pa*. For example, *pomteikpa* 'only child (female)' consists of the noun phrase *pom teik* 'one girl' plus the suffix *-pa*. The suffix *-pa* seems thus to be able to nominalize noun phrases as well. However, it does not seem to be very productive in this function as the two examples in Table 2 are the only ones collected.

Derived Word		Base	
<i>dukpa</i>	'Bhutanese'	<i>duk</i>	'Bhutan'
<i>εapa</i>	'hunter'	<i>εa</i>	'meat'
<i>napa</i>	'fisher'	<i>na</i>	'fish'
<i>te^hampa</i>	'chams-dancer'	<i>te^ham</i>	'chams-dance'
<i>sopa</i>	'carpenter'	<i>so</i>	'beautiful thing?'
<i>dakpa</i>	'postman'	<i>dak</i>	?
<i>puteikpa</i>	'only child (male)'	<i>pu teik</i>	'one child (male)'
<i>pomteikpa</i>	'only child (female)'	<i>pomo teik</i>	'one child (female)'

Table 2. Derivation wit *-pa* denoting membership or affiliation

The second kind of derivation using *-pa* derives ordinal numerals from cardinal numerals. The cardinal numeral forms the base to which *-pa* is suffixed, as can be seen in the following example: from the cardinal numerals *ni* 'two' and *sum* 'three', the ordinal numerals *nipa* 'second' and *sumpa* 'third' are formed. This is a regular process except for the ordinal "first". The first cardinal numeral in Brokpa is *teik*, but the first ordinal is *tanpa* and not **teikpa*.

The morpheme *-pa* is not exclusively used to derive nouns. We also find some instances of adjectives containing this morpheme, e.g. *ts^hikpa* 'hot', *tsokpa* 'dirty' or *ninba* 'old'. These are presumably examples of diachronically deverbal derivations. However, further research needs to prove this point, as so far most of these presumable verbs have not been attested independently. The base of *ts^hikpa*, *ts^hik* 'to burn', as in (38), is an example of a Brokpa verb functioning independently as well as serving as the base of a derivation.

- (39) *saragi c^him ts^higatuk*
sara=gi c^him ts^hi-ga: tuk
 Sara=GEN house burn-leave COP.EX.ACQ
 'Sara's house got burned.'

Whether these above-mentioned derivational patterns are different functions of one morpheme, or single functions of several homophone morphemes is unclear at the moment. Note however, that *-pa* shows an allomorphy between *-pa* and *-ba* when deriving adjectives from nouns, which is not the case for the other derivations. As already mentioned above, Brokpa *-pa* can be traced back to CT *pa*, which had a number of functions, among them the derivation of nouns describing

“Zugehörigkeit oder Besitz”; the derivation of ordinal numbers and the nominalization of phrases or clauses to form verbal arguments (cf. Schwieger 2009: 290–292).

8 Discussion

This paper discussed the different Brokpa deverbal nominalizers, the structures of the nominalized clauses they form and the functions that such a nominalized clause can have within a sentence. It was shown that the agentive nominalizer *-gin*, the location nominalizer *-sa*, the action nominalizer *-mi* and the past nominalizer *-pe* form productive clausal nominalizations which can serve as complement clauses or relative clauses. I argued that Brokpa shows three different types of relative clauses, pre-headed, post-headed and internally headed relative clauses. While the structure of pre-headed as well as internally headed relative clauses are straightforward, the structure of post-headed relative clauses may be ambiguous.

While the agentive nominalizer *-gin* and the location nominalizer *-sa* are neutral with regard to temporal specifications, *-pe* forms nominalizations with a past and non-subject reference and can also be used as a finite tense marker with past reference. The action nominalizer *-mi* has in some cases a connotation of future tense when used in a nominalization that acts as a relative clause. Parallel to the past nominalizer, the action nominalizer can also be used as a finite tense marker, denoting future reference. The unproductive nominalizer *-pa* was diachronically used to form clausal nominalizations following the general pattern described in this paper. However, it lost this function as a clausal nominalizer. Synchronically *-pa* is still used to form different derivations on the word level.

A probable etymology was given for all the described nominalizers, either in form of a reflex from Classical Tibetan or from another closely related Tibetic language. Some smaller issues remain unclear, for example the difference between the two future tense markers *-coʔ* and *-mi*, the circumstances in which *-pe* may be used as a subject relativizer or the etymology of the agentive nominalizer *-gin*. Future research may shed light on these open questions. As the data presented in this paper stem from a single speaker of Brokpa, data from additional speakers will prove valuable in order to verify the analysis here presented.

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